47° North Draft SEIS

Cle Elum, WA

TRANSPORTATION ANALYSIS

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TENW

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1. Introduction

This technical transportation analysis in support of the SEIS describes the transportation setting of the 47° North site and adjacent 25-acre property and evaluates potential impacts on the transportation system of the following two Alternatives:

- Alternative 5 (No Action Alternative) – the Approved Bullfrog Flats Master Site Plan
- Alternative 6 – the Proposed 47° North Master Site Plan Amendment

These two SEIS Alternatives are compared to future 'Baseline' conditions that include continued growth in background traffic without development of the site and are also compared to each other.

1.1 Approach

The following provides some history of the project, and describes the scope of work for the traffic analysis, the traffic modeling methodology, the different time periods evaluated, and development and trip generation under the two SEIS Alternatives (compared to future 'Baseline' conditions).

1.2 History and Process

Development is currently proposed on an 824-acre portion of the site now called 47° North, and development is contemplated on an adjacent 25-acre property.

Transportation impacts associated with the development of the 1,100-acre Bullfrog Flats property were evaluated in the 2002 Cle Elum UGA EIS. The Bullfrog Flats Master Plan and approved Development Agreement were based on Alternative 5 from the 2002 Cle Elum UGA FEIS, which is referred to in this SEIS document as FEIS Alternative 5 – the Original Bullfrog Flats Master Site Plan. The project Applicant is currently proposing development on an 824-acre portion of the Bullfrog Flats site, and New Suncadia is contemplating development on an adjacent 25-acre property[1]; both properties are evaluated in this SEIS as Alternative 6 – Proposed 47° North Master Site Plan Amendment. SEIS Alternative 5 is the Approved Bullfrog Flats Master Site Plan, updated to reflect current conditions and applicable regulations. SEIS Alternative 5 is compared to the Applicant's current proposal – SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment). Transportation impacts of both of these Alternatives are also compared to future 'Baseline' conditions that represent a scenario with no development on the site and adjacent property.

Mitigation measures identified in the 2002 Cle Elum UGA FEIS were used to develop the conditions of approval in the 2002 Development Agreement for the Bullfrog Flats project. The

[1] No development is proposed on the adjacent property at this time. However, hypothetical development of the property is studied in the SEIS in order to understand the potential impacts of this development, including the cumulative impacts together with development of 47° North and other vested projects in the City. While speculative, development assumptions for the commercial site have been generated for analysis purposes.

mitigation measures identified in this SEIS address the specific impacts of SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment and the contemplated adjacent commercial development), using the 2002 Cle Elum UGA FEIS mitigation measures and Development Agreement conditions of approval for reference. The mitigation measures identified in this SEIS will be used to develop new conditions of approval in a new or updated Development Agreement for the 47° North project. Pro rata responsibilities for identified mitigation projects are also estimated for 47º North and potential commercial development.

It should also be noted that mitigation related to intersection improvements necessary to comply with adopted level of service (LOS) standards are identified based on anticipated future year (e.g., 2025, 2031, and 2037) LOS results during the weekday summer PM peak hour only. Improvements to mitigate intersections anticipated to operate at non-compliant LOS during the Friday and Sunday PM peak hours during peak summer conditions were not identified because it is not standard traffic engineering practice to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

1.3 Study Scope

The scope of the SEIS transportation analysis was based on several items including: (1) 2002 Cle Elum UGA FEIS scope of work; (2) public and agency comments received during the SEIS scoping process for 47° North; (3) project trip generation estimates; (4) information about existing transportation conditions; and (5) consultation[2] with staff from the City of Cle Elum, Kittitas County, and WSDOT. Based on these inputs, a specific scope of work was established to evaluate the transportation impacts of SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment).

Traffic analyses typically focus on key intersections that would experience additional traffic from a proposed action. Based on scoping inputs, a total of 27 study intersections were identified, plus the proposed site accesses on Bullfrog Road and SR 903 to serve the proposed development. The identified study intersections are generally consistent with the study intersections evaluated in the 2002 Cle Elum FEIS for the Bullfrog Flats site and include intersections on Bullfrog Road and SR 903, the I-90 interchange intersections, intersections in downtown Cle Elum, as well as intersections in Roslyn and Ronald. The initially identified study intersections were modified slightly based on Draft SEIS scoping comments from the stakeholders (City, County, and WSDOT) to reflect current intersections in Ronald and Roslyn, additional intersections in the City of Cle Elum, and modified site access locations under the SEIS Alternatives.

Future traffic volume forecasts with and without the proposed action were developed by Fehr & Peers, a transportation consultant under contract with the City of Cle Elum. The traffic modeling methodology and forecasts are explained in greater detail in **Section 1.4**.

The time periods selected for the detailed analysis are described in **Section 1.5**.

[2] Several meetings and email communication occurred with the EIS consulting team and the 3 agencies to discuss study intersections, time periods, and development years which informed the transportation scope of work.

1.4 Traffic Modeling

Future traffic volumes in the study area (described in **Section 2.1**) were forecasted by Fehr & Peers; the firm had previously developed traffic forecasts for the Kittitas County comprehensive plan. The traffic forecasting process incorporated and updated a travel demand model that had been developed and refined for other recent Kittitas County projects. A memorandum describing the methodology and assumptions used by Fehr & Peers for the traffic volume forecasting is provided in **Appendix A.**

Future 'Baseline' traffic volumes were developed for years 2025, 2031, and 2037 for the weekday, Friday, and Sunday PM peak hours at the 27 study intersections. The 'Baseline' traffic forecasts represent peak summer conditions and are based on assumed overall growth in Cle Elum and Kittitas County, continued buildout of Suncadia in the county, and future traffic growth from the approved City Heights and Cle Elum Pines residential developments in the City.

The Fehr & Peers traffic model was also used to distribute and assign traffic generated by SEIS Alternatives 5 and 6 to the transportation system for future years 2025, 2031, and 2037 based on project buildout projections and trip generation estimates for the proposed land uses. For the specific trip assignments, project access points under the SEIS Alternatives were added to the traffic model. Note that both SEIS Alternative 5 and SEIS Alternative 6 include a proposed Connector Road between Bullfrog Road and SR 903 through the project site.

The site access assumptions and traffic model distributions for SEIS Alternatives 5 and 6 are illustrated in the Fehr & Peers traffic forecasting memo provided in **Appendix A.** Future year 2025, 2031, and 2037 traffic forecasts are also provided for the three different time periods used in the traffic analysis, which include weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour for future summer peak conditions.

Both SEIS Alternatives 5 and 6 include a proposed Connector Road between Bullfrog Road and SR 903 through the site. Several aspects of the modeling assumptions for the Connector Road should be noted. The traffic forecast modeling provided by Fehr & Peers for SEIS Alternative 6 (see **Appendix A**) did not assign any background, non-project traffic to use the new Connector Road to travel between Bullfrog Road and SE 903; only internal project trips for 47° North and the commercial parcel are assumed to use the Connector Road in the SEIS transportation analysis. The traffic model assumes that, other things being equal, drivers would choose the fastest route available. Drivers would continue to use Bullfrog Road and SR 903 because legal speed limits on Bullfrog Road and SR 903 are higher than the speed limit for the Connector Road (based on its road classification), and six internal access road would connect 47° North neighborhoods to the Connector Road, which would also tend to slow traffic.

Given these current model parameters, the Connector Road appears to be underutilized and may not be performing the functions it was intended to accomplish, i.e., relieving some traffic congestion on Bullfrog Road and SR 903. The 3-lane design of the road also reflects this intended function and assumes greater use by off-site traffic. Because the Connector Road

was considered to be a design feature of the 47° North Master Site Plan, it is included in, and cannot be extracted from or modified within, the existing traffic forecasting model. The model assumptions could be revised, however, to forecast how traffic would respond to a different internal road alignment and/or design, and to increase reliance on other site access points. These questions and potential options will be reconsidered during subsequent discussions and the public review process for the DSEIS.

1.5 Consideration of Time Periods for Traffic Analysis

Traffic patterns and travel characteristics in the study area vary daily, monthly and throughout the year due to seasonal variation in recreation travel, day of week traffic fluctuations, and peak hour variations.

Peak Summer

To be consistent with the previous 2002 Cle Elum UGA EIS traffic analysis for Bullfrog Flats, peak summer season traffic was evaluated for this SEIS. The City of Cle Elum, Kittitas County, and WSDOT utilize "monthly normalization factors" (MNF) when estimating future traffic conditions for comprehensive planning purposes. These factors are based on the recognition that traffic volumes in the study area vary monthly based on recreation travel and seasonal factors, which result in the understanding that peak summer travel (July and August) differs from non-summer travel.

Based on traffic volume data obtained from WSDOT, summer peak traffic volumes (July and August) in the vicinity are approximately 30% higher than the average annual traffic volumes.[3]

Monthly traffic fluctuations have occurred for many years and are not a recent trend; they were occurring to some extent at the time of the previous EIS in 2002. So while traffic volumes in the study area have grown since the 2002 Cle Elum UGA FEIS, the proportional monthly distribution of traffic is assumed to have remained relatively similar for purposes of analysis based on the travel patterns identified from the historic traffic recorder on I-90. As such, evaluation of peak summer conditions in this study is consistent with the peak summer evaluation conducted in the 2002 Cle Elum UGA FEIS.

Daily Traffic Variation and Peak Times of the Day

During the peak summer season, the daily variation in traffic on roadways in the vicinity of the 47° North site is generally higher on Fridays and Sundays. This is a result of the use of second homes located within the Suncadia development, other recreational amenities in the area, and the higher level of traffic on I-90 through Cle Elum on Fridays and weekends during the peak summer months. Historic traffic volumes and discussions with City, County, and WSDOT staff indicate that County roads and City streets experience higher levels of traffic on Fridays and Sundays when traffic congestion and delays occur on the I-90 mainline and vehicles use County and City roadways as a means to bypass the congestion. As a result,

[3] WSDOT 2019 monthly ADT at Permanent Traffic Recorder (PTR) B-04 which is located on I-90 between the Bullfrog Road interchange (Exit 80) and the W 1st Street (Cle Elum) interchange (Exit 84).

higher travel volumes on local streets result in longer delays at intersections during the peak summer months (July and August) on Fridays and Sundays. Therefore, this SEIS evaluates traffic conditions for 3 separate time periods during peak summer conditions:

- Weekday PM peak hour (highest one hour volumes between 3:00 and 6:00 p.m.)
- Friday PM peak hour (highest one hour volumes between 2:00 and 4:00 p.m.)
- Sunday PM peak hour (highest one hour volumes between 3:00 and 5:00 p.m.)

The selection of these time periods is discussed further in **Section 2.5**. Note that the Friday PM peak hour occurs earlier than the weekday PM peak hour as a result of Suncadia and other recreational visitors in the study area travelling to their destination early Friday afternoons during the peak summer months in order to take full advantage of the weekend.

Forecast Years with Development Phases

Development of the 47° North project and the adjacent possible commercial development under SEIS Alternative 6 will occur in phases. Based on the scoping process for this SEIS traffic analysis described previously, three development years were evaluated:

- **Year 2025** – represents near-term development of initial project phase, and generally consistent with local agency six-year capital plans.
- **Year 2031** – represents interim year at the approximate mid-point of buildout of SEIS Alternative 6. Note that under SEIS Alternative 6, the project is anticipated to build out by year 2028, which would be between the 2025 and 2031 analysis years; commercial uses on the adjacent property included in this alternative would continue to develop until 2037. Therefore, year 2031 includes buildout of the 47° North residential and recreational uses plus additional increments of commercial use and background growth.
- **Year 2037** – represents a future year consistent with the current planning horizon of City of Cle Elum and Kittitas County Comprehensive Plans. Year 2037 includes the cumulative buildout of 47° North residential and recreational uses together with the commercial uses on the adjacent property, as well as additional increments of background growth.

All three development years are evaluated in detail with respect to identifying traffic impacts of SEIS Alternative 5 (Approved Bullfrog Flats Master Site Plan) and SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment), and developing mitigation measures for each of the development years. Similar to FEIS Alternative 5, buildout of SEIS Alternative 5 is assumed to occur over a 30-year period, which is beyond the 2037 horizon year used in the traffic analysis. For comparisons to SEIS Alternative 6 in 2037, it should be noted that only the portion of the SEIS Alternative 5 development that would occur by 2037 is included. The traffic impacts of SEIS Alternatives 5 and 6 in 2025, 2031, and 2037 were also compared to future 'Baseline' conditions to provide an understanding of how traffic impacts compare to future conditions with no development on the site.

1.6 Description of Alternatives

Two alternatives are studied in this SEIS: SEIS Alternative 5 (No Action Alternative) – the Approved Bullfrog Flats Master Site Plan, and SEIS Alternative 6 – Proposed 47° North Master Site Plan Amendment.

These two SEIS Alternatives are compared to future 'Baseline' conditions that include continued growth in background traffic without development of the Bullfrog Flats/47° North site. **Table 1** provides a land use summary of the two SEIS Alternatives in 2037, as well as a comparison to the estimated development of FEIS Alternative 5, the Original Bullfrog Flats Master Site Plan, by 2037 based on the best available information from the FEIS. Further description of the SEIS Alternatives is provided after the table.

Table 1
LAND USE SUMMARY of SEIS ALTERNATIVES

	Alternative		
	FEIS Alt. 5 [1]	**SEIS Alt. 5 [1]**	**SEIS Alt. 6 [2]**
Residential Uses:	Units [3]	Units [3]	Units [3]
- Single Family	685 DU	587 DU	527 DU
- Multi-Family	524 DU	524 DU	180 DU
- RV Resort	-	-	627 occ sites
Total	*1,209 DU*	*1,161 DU*	*1,334*
Commercial Uses:	Units	Units	Units
- Business Park	610,000 sf	490,000 sf	-
- Supermarket			45,000 sf
- Retail & Restaurant			45,000 sf
- Medical Office			60,000 sf
Total	*610,000 sf*	*490,000 sf*	*150,000 sf*

Source: 2002 UGA EIS; Sun Communities, 2019.

1) The full buildout of land use for FEIS Alt 5 and SEIS Alt 5 is the same (1,334 residential units and 950,000 sf business park) and is anticipated to occur over a 30-year period. Therefore to estimate the FEIS Alt 5 development expected to occur by 2037, the 20-year land use assumptions documented in the FEIS are shown. To estimate the SEIS Alt 5 development expected to occur by 2037, partial buildout was identified.
2) Full build out of SEIS Alt 6 is anticipated to be complete by 2037.
3) DU = dwelling unit, occ sites = occupied sites, sf = square feet.

Buildout of SEIS Alternative 5 is anticipated to occur over a 30-year period; therefore as shown in **Table 1**, partial buildout of 1,161 of the total 1,334 residential units and 490,000 sf of the total 950,000 sf of the commercial business park were identified to occur by 2037.

Buildout of 47° North under SEIS Alternative 6, which includes 707 residential units and 627 RV Resort sites, is anticipated to occur over an 8-year period and built out prior to 2031. The 150,000 sf of commercial use on the adjacent commercial property is assumed to be developed more slowly than the 47° North development, and built out prior to 2037.

The following provides a summary of the land use assumptions and development year for each of the alternatives: FEIS Alternative 5, SEIS Alternative 5, and SEIS Alternative 6:

FEIS Alternative 5 Land Use by Year:

By 2025 = 788 residential units, 100,000 sf business park (FEIS 5-year land use)
By 2031 = 957 residential units, 270,000 sf business park (FEIS 10-year land use)
By 2037 = 1,209 residential units, 610,000 sf business park (FEIS 20-year land use)

SEIS Alternative 5 Land Use by Year:

By 2025 = 788 residential units, 70,000 sf business park
By 2031 = 957 residential units, 245,000 sf business park
By 2037 = 1,161 residential units, 490,000 sf business park

SEIS Alternative 6 Land Use by Year:

By 2025 = 444 residential units, 627 RV sites, 15,000 sf commercial
By 2031 = 707 residential units, 627 RV sites, 75,000 sf commercial
By 2037 = 707 residential units, 627 RV sites, 150,000 sf commercial

Detailed trip generation estimates for SEIS Alternative 5 and SEIS Alternative 6 are included in subsequent sections of this report (see **Section 3.4** and **Section 3.16**). However, a summary of the SEIS Alternative 5 and SEIS Alternative 6 trip generation by use (residential vs. commercial) and by development year (2025, 2031, and 2037) is provided in **Table 2** below.

Table 2
SEIS ALTERNATIVE 6 vs. SEIS ALTERNATIVE 5
TOTAL TRIP GENERATION SUMMARY BY USE

	TOTAL Net New Trip Generation											
	Weekday and Friday PM Peak Hour						**Sunday PM Peak Hour**					
	SEIS Alt 5 [1]			SEIS Alt 6 [2]			SEIS Alt 5 [1]			SEIS Alt 6 [2]		
Year	Bullfrog Flats	Business Park	**Total**	47° North	Commercial	**Total**	Bullfrog Flats	Business Park	**Total**	47° North	Commercial	**Total**
2025	536	67	**603**	501	79	**580**	577	3	**580**	485	21	**506**
2031	653	184	**837**	646	366	**1,012**	703	10	**713**	603	401	**1,004**
2037	798	326	**1,124**	614	611	**1,225**	841	20	**861**	574	438	**1,012**

1) SEIS Alternative 5 includes trips from the business park development that is part of the Approved Master Site Plan.
2) SEIS Alternative 6 includes trips from the separate commercial property adjacent to 47° North.

Year 2025. The total net new trip generation estimates for SEIS Alternative 5 and SEIS Alternative 6 are relatively similar. This is because in year 2025 the SEIS Alternative 5 residential use (788 units) is estimated to generate a similar number of trips as the SEIS Alternative 6 residential use (444 units) and RV site use (627 sites). Similarly, in 2025 the SEIS

Alternative 5 business park use (70,000 sf) is estimated to generate a similar number of trips as the SEIS Alternative 6 commercial use (15,000 sf of restaurant/retail).

Year 2031. The total net new trip generation estimates for SEIS Alternative 6 are approximately 20 percent higher than SEIS Alternative 5 for the weekday and Friday peak hours, and approximately 40 percent higher for Sunday PM peak hour. This is because in year 2031, although the residential use in SEIS Alternative 5 (957 units) is anticipated to generate a similar number of trips as the SEIS Alternative 6 residential use (707 units) and RV site use (627 sites), the SEIS Alternative 6 commercial use (75,000 sf grocery/retail/restaurant) is anticipated to generate a higher number of trips than the SEIS Alternative 5 commercial use (245,000 sf business park), particularly during the Sunday PM peak hour.

Year 2037. The total net new trip generation estimates for SEIS Alternative 5 and SEIS Alternative 6 are relatively similar for the weekday and Friday PM peak hours, but the SEIS Alternative 6 trip generation estimate is approximately 18 percent higher for the Sunday PM peak hour. This is because in year 2037, although the residential use in SEIS Alternative 5 (1,161 units) is anticipated to generate a higher number of trips than the SEIS Alternative 6 residential use (707 units) and RV site use (627 sites) during the weekday, Friday, and Sunday PM peak hours, the SEIS Alternative 6 commercial use (150,000 sf grocery/retail/restaurant/medical office) is anticipated to generate a significantly higher number of trips than the SEIS Alternative 5 commercial use (490,000 sf business park), particularly during the Sunday PM peak hour.

1.7 SEIS Alternatives vs. FEIS Alternative 5 Trip Generation

Table 3 provides a comparison of the total net new trip generation estimates for FEIS Alternative 5 and the SEIS Alternatives for the weekday and Sunday PM peak hours by development year. The land uses assumed for each Alternative and development year are detailed in **Section 1.6** above.

Table 3
TRIP GENERATION COMPARISON of FEIS ALTERNATIVE 5 vs. SEIS ALTERNATIVES 5 AND 6

	TOTAL Net New Trip Generation					
	Weekday PM Peak Hour [1]			Sunday PM Peak Hour		
Year	FEIS Alt 5 [2]	SEIS Alt 5 [2]	SEIS Alt 6 [3]	FEIS Alt 5 [2]	SEIS Alt 5 [2]	SEIS Alt 6 [3]
2025	701	603	580	530	580	506
2031	966	837	1,012	652	713	1,004
2037	1,485	1,124	1,225	869	861	1,012

1) The FEIS did not evaluate a Friday PM peak hour.
2) FEIS Alternative 5 and SEIS Alternative 5 include trips from the business park development that is part of the Approved Master Site Plan.
3) SEIS Alternative 6 includes trips from the separate commercial property adjacent to 47° North.

As shown in **Table 3**, for the weekday PM peak hour, the SEIS Alternative 5 trip generation is lower than the FEIS Alternative 5 trip generation as a result of development year land use assumptions (specifically the reduced size of business park assumed to be built out by 2025, 2031, and 2037) and updated trip generation methodology that was used for SEIS Alternative 5. The Sunday PM peak hour trip generation estimates are similar between FEIS Alternative 5 and SEIS Alternative 5 because the business park is estimated to generate a minimal number of trips on Sundays. The trip generation differences between SEIS Alternative 5 and SEIS Alternative 6 were discussed in greater detail in **Section 1.6**.

1.8 SEIS Alternatives Comparison to 'Baseline' Conditions

Comparing the traffic impacts of new SEIS Alternatives 5 and 6 to the previous 2002 Cle Elum UGA FEIS Alternative 5 would not be informative, due to the time that has passed and the changes in background conditions that have occurred since the 2002 Cle Elum UGA FEIS analysis was prepared. Traffic conditions are much different than 20 years ago due to ongoing development in Kittitas County, growth in background traffic, continued growth in recreation travel during peak summer months, and diversion of traffic from I-90 through the study area during peak travel times. SEIS Alternative 5 represents the 2002 approved project updated to reflect current conditions and provides a valid means of comparison.

In order to provide a more meaningful comparison of SEIS Alternative 5 (Approved Bullfrog Flats Master Site Plan) and SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment), the analysis considers future 'Baseline' traffic conditions without either of the alternatives which is a reflection of background traffic growth since 2002.

Future 'Baseline' scenarios for years 2025, 2031, and 2037 were developed to establish conditions that account for traffic growth that has occurred in the study area since the 2002 Cle Elum UGA FEIS, as well as a reasonable estimate of future traffic without any development on the Bullfrog Flats site or 47° North site and adjacent 25-acre property. Comparing both SEIS Alternatives 5 and 6 to 'Baseline' conditions helps establish the relative traffic impact of the added project traffic in the future.

In this SEIS traffic analysis, 'Baseline' traffic volumes and intersection LOS are presented for the years 2025, 2031, and 2037, and then compared to traffic volumes and intersection LOS results with SEIS Alternatives 5 and 6.

Additionally, short-term (*Transportation Improvement Program*) and long-term (*Comprehensive Plan*) planning documents from WSDOT, Kittitas County, and the City of Cle Elum were researched to establish an understanding of any planned improvements that should be incorporated into future 'Baseline' transportation conditions without either SEIS Alternative 5 or 6. Note that no future short-term or long-term transportation improvements were identified at any of the study intersections from any of the three agencies' transportation planning documents (see **Section 2.2**).

2. Affected Environment

This section describes existing transportation conditions in the affected environment, as well as future 'Baseline' conditions without development on the site but continued growth in background traffic unrelated to the project site. This section addresses the existing and future roadway network, existing and future 'Baseline' peak hour traffic volumes, and existing and future 'Baseline' intersection level of service (LOS).

2.1 Study Area

The 47° North site is served by I-90 to the south, Bullfrog Road to the northwest and west and SR 903 (2nd Street) to the northeast. The existing transportation study area and roadway network providing access to the site is shown on **Figure 1**. The study intersections evaluated in this SEIS transportation analysis were identified and agreed upon by all stakeholders including the City of Cle Elum, WSDOT, and Kittitas County. The 27 study intersections and their corresponding jurisdiction are as follows (see also **Figure 1**):

1. Bullfrog Road / I-90 Eastbound Ramps – WSDOT
2. Bullfrog Road / I-90 Westbound Ramps – WSDOT
3. Bullfrog Road / Tumble Creek Drive – Kittitas County
4. Bullfrog Road / Suncadia Trail – Kittitas County
5. Bullfrog Road / Firehouse Road – Kittitas County
6. Bullfrog Road / W 2nd Street (SR 903) – WSDOT
7. Denny Ave / W 2nd Street (SR 903) – WSDOT
8. Ranger Station Road / Miller Avenue / W 2nd Street (SR 903) – WSDOT
9. N Pine Street / W 2nd Street (SR 903) – WSDOT
10. Douglas Munro Blvd / Ranger Station Road – Cle Elum
11. Douglas Munro Blvd / W 1st Street – Cle Elum
12. Pine Street / W 1st Street – Cle Elum
13. N Stafford Avenue / W 2nd Street (SR 903) – WSDOT
14. S Cle Elum Way / Stafford Avenue / W 1st Street – Cle Elum
15. N Oakes Avenue / W 2nd Street (SR 903) – WSDOT
16. N Oakes Avenue / W 1st Street (SR 903) – WSDOT
17. Pennsylvania Ave / 2nd Street – Cle Elum
18. Pennsylvania Ave / 1st Street (SR 903) – WSDOT
19. Oakes Avenue / I-90 Westbound Off-Ramp – WSDOT
20. Oakes Avenue / I-90 Eastbound On-Ramp – WSDOT
21. SR 903 / Pennsylvania Avenue – WSDOT
22. SR 903 / Pacific Avenue – WSDOT
23. Rock Rose Drive / Morrel Road / SR 903 – WSDOT
24. SR 903 / SR 903 Ramp (SUNDAY ONLY) – WSDOT
25. White Road Interchange / I-90 Westbound Ramps (SUNDAY ONLY) – WSDOT
26. White Road Interchange / I-90 Eastbound Ramps (SUNDAY ONLY) – WSDOT
27. SR 970 / SR 970 Ramp (SUNDAY ONLY) – WSDOT

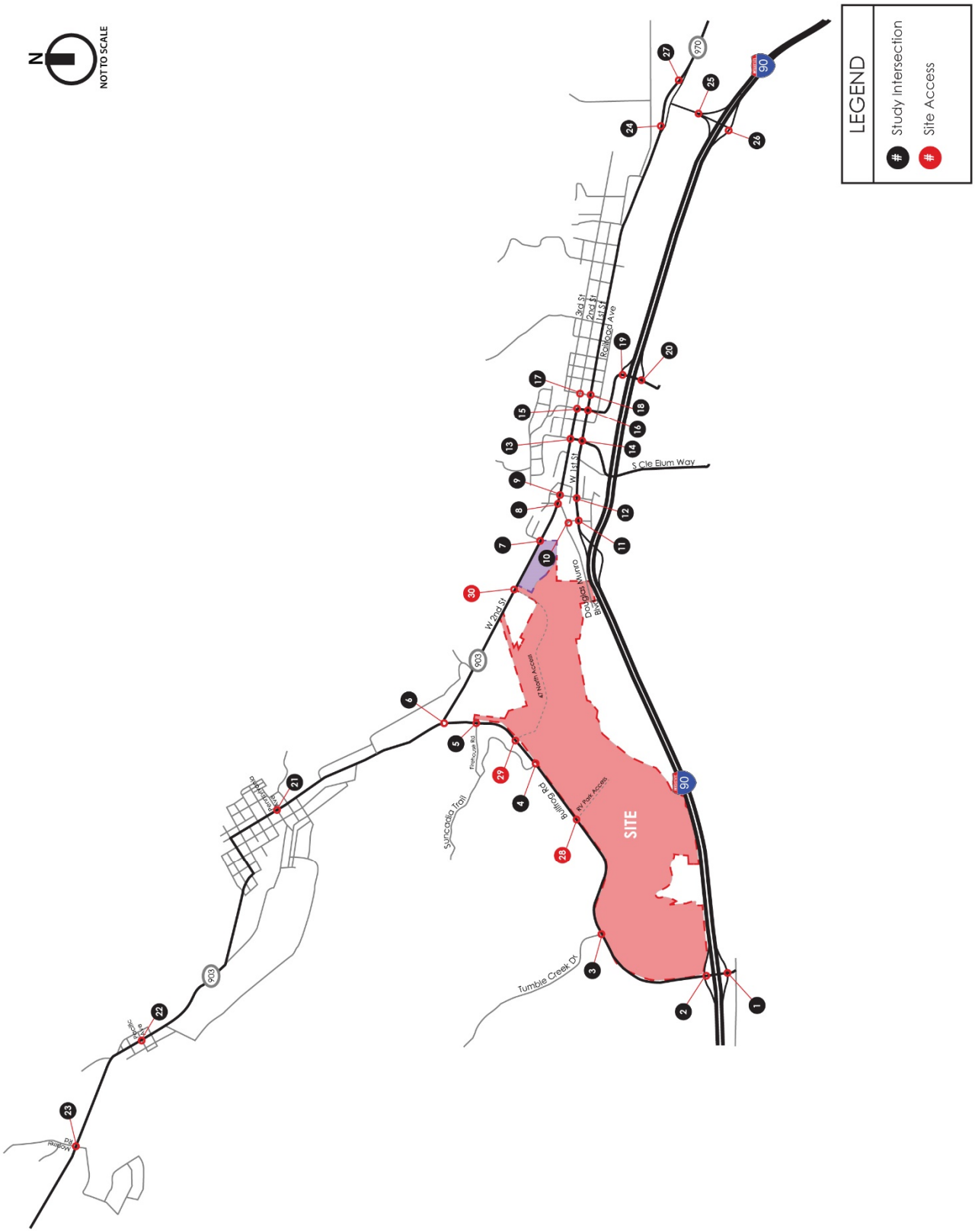


Figure 1: Project Site Vicinity and Study Intersections

As noted previously, as part of the scoping process the stakeholders (City, County, and WSDOT) decided that several study intersections evaluated in the 2002 Cle Elum UGA FEIS should be removed from the SEIS study as they were no longer considered relevant several new study intersections were added.

Additionally, based on scoping discussions with the stakeholders (City of Cle Elum, Kittitas County, and WSDOT), it was decided that study intersections #24-27 would be evaluated for the Sunday PM peak hour time period only. This decision was made because intersections #24-27 experience higher volumes on Sundays during the summer peak months as a result of vehicles travelling westbound on I-90 using the White Road interchange to bypass congestion on I-90 through the Cle Elum vicinity.

2.2 Roadway Network

The following two sections describe the existing and future 'Baseline' roadway networks.

Existing Roadway Network

The key roadways that serve the transportation study area and the project site are summarized in **Table 4**. Roadway characteristics are described in terms of orientation, arterial classification, number of lanes, posted speed limits, parking, and non-motorized facilities. The relationship of these roadways to the project site is shown in **Figure 1.**

Table 4
EXISTING STUDY AREA ROADWAY NETWORK SUMMARY

Roadway (Jurisdiction)	Orientation	Arterial Classification	# of Travel Lanes	Posted Speed (mph)	Parking	Sidewalks / Bicycle Facilities
I-90 (WSDOT)	E-W	Interstate	4	60-70	No	No / No
Bullfrog Rd (Kittitas County)	NE-SW	Major Collector	2	35-50	No	No / No
SR 903 / W 2nd Street (WSDOT)	E-W	Major Collector	2	25-45	Inter-mittent	Intermittent / No
W 1st Street (Cle Elum)	E-W	Major Collector	2	25	No	No / No
Pine St (Cle Elum)	N-S	Local	2	25	No	No / No
Douglas Munro Blvd (Cle Elum)	NE-SW	Local	2	25	No	Intermittent / No
Pennsylvania Ave (Cle Elum)	N-S	Local	2	25	Both Sides	Yes / No
Cle Elum Way (Cle Elum)	N-S	Major Collector	2-3	25	No	Intermittent / No
Oakes Ave (WSDOT / Cle Elum)	N-S	Major Collector	2-3	25	No	Intermittent / No
Pennsylvania Ave (Roslyn)	NE-SW	Local	2	25	Both Sides	Yes / No

Within the project study area, Bullfrog Road, SR 903, and S Cle Elum Way are designated as Truck Routes. W 1st Street and S Cle Elum Way south of W 1st Street are also classified as Truck Routes. The following describes existing roads in the project site vicinity in more detail.

Interstate 90 (I-90) is an east-west interstate freeway. In the project vicinity, I-90 consists of two travel lanes in each direction with a posted speed limit of 70 mph (60 mph for trucks). Paved shoulders exist on both sides of the highway. In the vicinity of Cle Elum there are two full-diamond interchanges with I-90 at Bullfrog Road (Exit 80), and White Road (Exit 85) and two half-diamond interchanges with I-90 at W 1st Street (Exit 84 West) and Oakes Ave (Exit 84 East). The I-90 interchange at Bullfrog Road provides primary access to the Suncadia resort and the cities of Ronald and Roslyn to the northwest.

Bullfrog Road is a NE-SW major collector consisting of two travel lanes (one in each direction) and a posted speed limit of 35 to 50 mph. Bullfrog Road provides access to the Suncadia resort from an interchange with I-90 and also provides access to the cities of

Ronald and Roslyn. Paved shoulders exist on both sides of Bullfrog Road. No sidewalks are present on Bullfrog Road.

State Route 903 (SR 903) is also referred to as W 2nd Street and W 1st Street in Cle Elum. SR 903 is a NW to SE major connector roadway that connects from the I-90/SR 970/SR 903 interchange at White Road to the City of Roslyn. SR 903 consists of one travel lane in each direction with intermittent paved shoulders. The speed limit on SR 903 in the City of Cle Elum is 25 mph and increases to 45 mph west of Denny Ave. Sidewalk exists along the south side of SR 903 between Stafford Ave and Ranger Station Road and an unpaved trail exists along the south side of SR 903 between Ranger Station Road and the Cle Elum-Roslyn Schools site.

W 1st Street west of S Cle Elum Way (Stafford Street) and to I-90 is classified as a Major Collector that connects I-90 at Exit 84 (west) with the Cle Elum core commercial area via Oakes Ave. The road has two travel lanes with a center turn lane between Douglas Munro Blvd and Pine Street, and in town between S Cle Elum Way and Montgomery Ave. The posted speed is 25 mph. The road has sidewalks on both sides in town and crosswalks at several of the signalized and unsignalized intersections.

Future 'Baseline' Road Network

A review of the following transportation planning documents indicated that there are no planned capacity improvements anticipated to be constructed prior to year 2025 within the study area:

- City of Cle Elum *Six-Year 2020-2025 Transportation Improvement Program*
- Kittitas County *Six-Year 2020-2025 Transportation Improvement Program*
- WSDOT *2020-2023 Statewide Transportation Improvement Program*

Therefore, the future year roadway network for the 2025 'Baseline' analysis is assumed to be consistent with the existing roadway network.

The future year roadway network for the 2031 and 2037 'Baseline' analysis is also assumed to be consistent with the existing roadway network since a review of the following long-range transportation planning documents indicated that there are no long-range transportation capacity improvements anticipated to be constructed by 2031 or 2037:

- City of Cle Elum *Transportation Element of the Comprehensive Plan* (May 2019)
- Kittitas County *Transportation Element Comprehensive Plan* (June 2019)
- WSDOT *Washington Transportation Plan 2035*

Cle Elum. The City's *Transportation Element* does not include any new roadway or intersection capacity improvements, and is limited to storm drain improvements, sidewalk improvements, pedestrian/trail improvements, and roadway maintenance. However, looking beyond the current 2037 planning horizon, the *Plan* (page 31) notes that "if improvements are not completed in the core (i.e. the downtown commercial core) of Cle Elum, and if

development is allowed to occur at the pace currently anticipated[4], LOS on the City's roadway system will fail at one location (#1 – Bullfrog Rd/I-90 EB Ramps) by 2040." Please refer to the Draft SEIS section 3.9 on ***Housing, Population and Employment*** for a discussion of City population targets and forecasts. The Plan also identifies the need for development regulations to provide a means by which new development will contribute to the necessary improvements.

Kittitas County. The Kittitas County *Transportation Element* includes a total of $127.4 million in potential projects for their 20-year planning horizon to 2038. About one-third is allocated for capacity enhancements, and two-thirds for maintenance. While the Plan lists several goals and policies, it does not identify specific projects or locations of future improvements.

WSDOT. According to WSDOT's Corridor Sketch Initiative for Corridor 368 – SR 903 from SR 970 to Bullfrog Road, the future function of SR 903 in the vicinity study area is expected to remain the same with no changes planned.

I-90 was recently widened and expanded to six lanes on the eastern portion of Snoqualmie Pass. Phase 4 of the I-90 Snoqualmie Pass East project has funding to widen I-90 to the Lake Easton interchange by 2029. The other WSDOT project funded on I-90 includes bridge deck repairs of the existing bridges over the Yakima River about two miles east of Cle Elum which are scheduled to be complete in 2020. Potential widening of I-90 through the Cle Elum vicinity is not currently identified in WSDOT's long-range transportation plan.

2.3 Non-Motorized Facilities

Existing Non-Motorized Facilities

Most east-west streets in the Cle Elum commercial core area have sidewalks on both sides. Roads on the east and west ends outside of the core area have no or intermittent sidewalks. The City's Transportation Element of the Comprehensive Plan has identified several projects to improve sidewalks, Americans with Disabilities (ADA) ramps, and multi-purpose pathways. Bullfrog Road has gravel shoulders and SR 903 outside of the City of Cle Elum commercial core area has limited paved shoulders. There are no designated bicycle lanes or paths along public roads in the study area.

The Coal Mine Trail is a multi-use trail connecting the Cle Elum commercial core area to the Roslyn/Ronald area. Progress Path Trail extends from Ranger Station Road to the Cle Elum-Roslyn Schools site. The John Wayne Pioneer Trail, which is part of the Iron Horse State Park, parallels I-90, and has an access point at the I-90 Exit 84 on Bullfrog Road; the trail is 110 miles long from North Bend to west of the Columbia River. There are also trails that can be used by residents, visitors, and the public in the Suncadia resort. Horseback riding, hiking, and snowmobiling occur on dirt roads throughout the 47° North site. Easements are now in place for use of the site and certain trails by the adjacent Horse Park.

[4] The City's Transportation Element estimates future year traffic volumes using a 2.5% flat annual growth rate plus the trip generation of planned development in locations.

Future 'Baseline' Non-Motorized Facilities

Future non-motorized facilities are anticipated to remain similar to existing with the exception that City of Cle Elum has some sidewalk improvements in the City business core, as well as some pedestrian/trail improvements planned.

2.4 Transit Service

Existing Transit Service

The City of Cle Elum and Kittitas County do not operate local bus service in the study area.

According to the Transportation Element of City's Comprehensive Plan, regional bus service is provided by Greyhound Bus Lines with the closest terminal in Ellensburg. The Central Washington Airporter Shuttle provides a service to Sea-Tac Airport with a stop in Cle Elum.

The Kittitas County Connector is a free bus service between Ellensburg and Upper Kittias County operated by HopeSource and Central Transit.

HopeSource demand response transportation services are also available in the City of Cle Elum area to provide prioritized services for senior medical and nutrition, and social services. HopeSource services provide mobility between Cle Elum and Ellensburg.

People for People is a private non-profit organization that provides demand response services to eligible elderly and handicapped citizens in the greater Cle Elum area.

Future 'Baseline' Transit Service

Future transit services are anticipated to remain similar to existing conditions.

2.5 Traffic Volumes

Existing Traffic Volumes

Existing (2019) traffic volumes at the 27 study intersections were based on counts collected by All Traffic Data in August and December 2019. Traffic volumes were collected in August 2019 at study intersections #1-20 and #25-27 to represent typical peak summer conditions. Volumes collected in December 2019 at study intersections #21-24, which were added in response to SEIS scoping comments, were increased by 64 percent to estimate peak summer conditions. [5]

Existing traffic volumes were collected for the following three time periods:

- Weekday PM peak period (3:00 to 6:00 p.m.)
- Friday PM peak period (2:00 to 4:00 p.m.)
- Sunday PM peak period (3:00 to 5:00 p.m.)

[5] Based on 2018 AWDT to AADT Conversion Factors in the WSDOT Short Count Factoring Guide (June 2019).

These time periods were established in the traffic scoping process and were selected based on a review of historical traffic data. These time periods are intended to represent the typical peak time periods during peak summer conditions between Memorial Day weekend (end May) and Labor Day weekend (early September). The highest one-hour volumes from each peak period were used for analysis.

The existing weekday PM peak hour traffic volumes are included in **Appendix B** as **Figure 2**, the existing Friday PM peak hour traffic volumes are illustrated in **Figure 3,** and the existing Sunday PM peak hour traffic volumes are illustrated in **Figure 4**. All the traffic volumes shown in **Figures 2-4** of **Appendix B** represent the peak summer period.

Future 'Baseline' Traffic Volumes

The future 'Baseline' traffic volumes without any development on the 47° North site were provided by Fehr & Peers, the City's transportation consultant. The 'Baseline' traffic volumes were provided for years 2025, 2031, and 2037 for the weekday, Friday, and Sunday PM peak hours at the 27 study intersections. A memorandum detailing the methodology and assumptions used by Fehr & Peers for the traffic volume forecasting is provided in **Appendix A.** The 'Baseline' traffic forecasts from Fehr & Peers represent peak summer conditions, and include anticipated housing and employment growth in Cle Elum and Kittitas County, continued buildout of Suncadia, and traffic growth from the vested City Heights and Cle Elum Pines developments (see Draft SEIS Section 3.9, **Housing, Population, and Employment**, for details on the assumed population growth from these projects).

Table 5 summarizes the calculated average annual growth rate at the study intersections between each of the analysis periods (2019 to 2025, 2025 to 2031, and 2031 to 2037) and for each of the time periods studied (weekday PM peak, Friday PM peak, and Sunday PM peak, during summer peak period) based on the 'Baseline' traffic volumes provided by Fehr & Peers.

Table 5
BACKGROUND GROWTH SUMMARY FOR 'BASELINE' CONDITIONS

	Average Annual Growth Rate at Study Intersections (Peak Summer Conditions)		
Years	Weekday PM Peak Hour	Friday PM Peak Hour	Sunday PM Peak Hour
2019 to 2025	5.8%	5.6%	3.7%
2025 to 2031	3.0%	3.0%	2.6%
2031 to 2037	2.6%	2.5%	2.6%

As shown in **Table 5**, the forecast 'Baseline' traffic volumes show that the average annual background growth in traffic volumes at the study intersections is anticipated to be between 2 and 6 percent per year depending on the time period evaluated. The average annual growth rates from 2019 to 2025 are higher than the growth rates between 2025 and 2037 for all

periods studied (Weekday PM peak, Friday PM peak, and Sunday PM peak during the peak summer period).

In general the traffic growth projections used in this SEIS traffic analysis for future 'Baseline' conditions (2 to 6 percent) are higher than the traffic growth projections identified in the Kittitas County Travel Demand Model used for their Comprehensive Plan update. This is because Fehr and Peers updated the Kittitas County Travel Demand Model to reflect updated land use information (in coordination with the City of Cle Elum) including housing and employment forecasts and additional development of Suncadia and City Heights) and also to reflect a roadway network that included all study intersections in order to develop traffic volume forecasts for this SEIS traffic analysis. **Appendix A** provides more detailed information regarding traffic volume forecasting**.**

The 'Baseline' traffic forecasts represent peak summer conditions and are based on growth in Cle Elum and Kittitas County, continued buildout of the Suncadia resort, and additional traffic growth from the City Heights mixed use and Cle Elum Pines residential developments.

The future year 2025 'Baseline' traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 5**, **Figure 6**, and **Figure 7**, respectively. The future year 2031 'Baseline' traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 8**, **Figure 9**, and **Figure 10**, respectively. The future year 2037 'Baseline' traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 11**, **Figure 12**, and **Figure 13**, respectively.

2.6 Intersection LOS

Level of service (LOS) generally refers to the degree of congestion on a roadway or intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS. At signalized intersections, LOS A represents free-flow conditions (motorists experience little or no delays), and LOS F represents forced-flow conditions where motorists experience an average delay greater than 80 seconds per vehicle.

The LOS reported for signalized intersections represents the average control delay (seconds/vehicle) and can be reported for the overall intersection, for each approach, and for each lane group (additional volume-to-capacity (V/C) ratio criteria apply to lane group LOS only). The LOS reported at stop-controlled intersections is based on the average control delay and can be reported for each controlled minor approach, controlled minor lane group, controlled major-street movement, and for the overall intersection at all-way stop-controlled intersections (additional V/C ratio criteria apply to lane group or movement LOS only).

Table 6 outlines the current *Highway Capacity Manual (HCM)* 6th Edition LOS criteria for signalized and stop-controlled intersections based on these methodologies.

Table 6
LOS CRITERIA FOR SIGNALIZED AND STOP-CONTROLLED INTERSECTIONS[1]

SIGNALIZED INTERSECTIONS			STOP-CONTROLLED INTERSECTIONS		
	LOS by Volume-to Capacity (V/C) Ratio[2]			LOS by Volume-to Capacity (V/C) Ratio[3]	
Control Delay (sec/veh)	**≤ 1.0**	**> 1.0**	**Control Delay (sec/veh)**	**≤ 1.0**	**> 1.0**
≤ 10	A	F	≤ 10	A	F
> 10 to ≤ 20	B	F	> 10 to ≤ 15	B	F
> 20 to ≤ 35	C	F	> 15 to ≤ 25	C	F
> 35 to ≤ 55	D	F	> 25 to ≤ 35	D	F
> 55 to ≤ 80	E	F	> 35 to ≤ 50	E	F
> 80	F	F	> 50	F	F

1. Highway Capacity Manual, Transportation Research Board, 6th Edition, 2016.
2. For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.
3. For two-way stop-controlled intersections, the LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop-controlled intersections. For approach-based and intersection-wide assessments at all-way stop-controlled intersections, LOS is solely defined by control delay.

LOS calculations for intersections were based on methodology and procedures outlined in the current (6th Edition) of the *Highway Capacity Manual* using Synchro 10 traffic analysis software for signalized and stop-controlled intersections, and Sidra 8 analysis software for roundabouts. Existing signal timing used in the analysis was provided by the City of Cle Elum.

The City of Cle Elum's *Transportation Element of the Comprehensive Plan* (May 2019) identifies a standard of LOS C for City streets. There are two state routes in the vicinity, Interstate 90, and State Route 903, for which the LOS standard established by WSDOT is LOS D since both roadways are considered urban. The *Kittitas County Comprehensive Plan* (June 2019) identifies LOS D as the minimum acceptable LOS for intersections in urban growth areas and LOS C as the minimum acceptable LOS for intersections in rural areas. Bullfrog Road is considered to have a LOS D standard by the County.

Existing Intersection LOS

Intersection LOS analyses were conducted at the study intersections for existing (2019) conditions during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour during the summer peak period.

Table 7 summarizes the existing LOS during the three time periods evaluated for peak summer conditions. Study intersections currently operating at non-compliant LOS (LOS D, E, or F for City intersections, and LOS E or F for Kittitas County and WSDOT intersections) are shown in BOLD text in **Table 7**. The detailed LOS reports are included in **Appendix C**. The LOS results are discussed in detail following the tables.

Table 7
EXISTING (2019) INTERSECTION LOS SUMMARY

		Existing Conditions (Summer Peak)					
		Weekday PM Peak Hour		Friday PM Peak Hour		Sunday PM Peak Hour	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized							
14. S Cle Elum Way / Stafford / W 1st St	C	B	10.2	B	12.8	B	11.2
16. N Oakes Ave / W 1st St (SR 903)	D	A	7.9	A	9.6	A	13.1
18. Pennsylvania Ave / 1st St (SR 903)	D	A	6.0	A	5.4	A	7.8
Roundabout							
4. Bullfrog Rd / Suncadia Trail	D	A	4.4	A	5.4	B	12.2
6. Bullfrog Rd / W 2nd St (SR 903)	D	A	5.3	A	7.0	B	13.6
All-Way Stop-Controlled							
17. Pennsylvania Ave / 2nd St	C	A	8.4	A	8.4	A	8.2
Two-Way Stop-Controlled [2]							
1. Bullfrog Rd / I-90 EB Ramps	D	B	12.0	C	16.0	B	10.6
2. Bullfrog Rd / I-90 WB Ramps	D	A	9.6	B	11.9	B	10.1
3. Bullfrog Rd / Tumble Creek Dr	D	B	11.2	B	11.7	C	20.1
5. Bullfrog Rd / Firehouse Rd	D	B	11.9	B	13.1	C	20.0
7. Denny Ave / W 2nd St (SR 903)	D	B	13.6	C	15.4	C	21.6
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	C	16.4	C	22.4	**E**	**35.8**
9. N Pine St / W 2nd St (SR 903)	D	B	13.4	C	19.9	D	29.5
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.7	A	8.2	A	7.3
11. Douglas Munro Blvd / W 1st St	C	**D**	**33.1**	**F**	**90.4**	**D**	**29.2**
12. Pine St / W 1st St	C	**D**	**27.8**	**D**	**30.7**	**E**	**35.0**
13. N Stafford Ave / W 2nd St (SR 903)	D	C	16.6	C	19.1	**F**	**51.6**
15. N Oakes Ave / W 2nd St (SR 903)	D	B	13.0	B	13.9	D	33.9
19. Oakes Ave / I-90 EB Off-Ramp	D	A	8.9	A	9.0	B	11.3
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	B	12.5	B	10.2	B	11.0
22. SR 903 / Pacific Ave	D	A	9.8	A	9.2	A	9.5
23. Rock Rose Rd / Morrel Rd / SR 903	D	A	9.5	A	9.0	A	9.5
24. SR 903 / SR 903 Ramp	D	*Only analyzed for Sunday PM peak hour*				**F**	**> 100**
25. White Road I/C / I-90 WB Ramps	D	*Only analyzed for Sunday PM peak hour*				B	13.7
26. White Road I/C / I-90 EB Ramps	D	*Only analyzed for Sunday PM peak hour*				A	9.0
27. SR 970 / SR 970 Ramp	D	*Only analyzed for Sunday PM peak hour*				**F**	**59.4**

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. BOLD indicates does not meet LOS standard.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Weekday Summer PM Peak Hour. As shown in **Table 7**, all study intersections currently operate at an acceptable LOS during the weekday summer PM peak hour, with the exception of the following two-way stop-controlled intersections:

- #11 - Douglas Munro Blvd / W 1st Street – LOS D
- #12 - Pine Street / W 1st Street – LOS D

Friday Summer PM Peak Hour. As shown in **Table 7**, all study intersections currently operate at an acceptable LOS during the Friday summer PM Peak hour, with the exception of the following two-way stop-controlled intersections:

- #11 - Douglas Munro Blvd / W 1st Street – LOS F
- #12 - Pine Street / W 1st Street – LOS D

Sunday Summer PM Peak Hour. As shown in **Table 7**, all study intersections currently operate at an acceptable LOS during the Sunday PM peak hour, with the exception of the following two-way stop-controlled intersections:

- #8 - Ranger Station Rd / Miller Ave / W 2nd Street – LOS E
- #11 - Douglas Munro Blvd / W 1st Street – LOS D
- #12 - Pine Street / W 1st Street – LOS E
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F
- #24 - SR 903 / SR 903 Ramp – LOS F
- #27 - SR 970 / SR 970 Ramp – LOS F

Future 'Baseline' Intersection LOS

Intersection LOS analyses were conducted at the 27 study intersections for peak summer 'Baseline' conditions in 2025, 2031, and 2037 during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour.

Future 'Baseline' analysis results at the study intersections are summarized in **Table 8** for the weekday PM peak hour, **Table 9** for the Friday PM peak hour, and **Table 10** for the Sunday peak hour during the peak summer period. Study intersections forecast to operate at non-compliant LOS (LOS D, E, or F for City intersections and LOS E or F for Kittitas County and WSDOT intersections) are shown in **BOLD** text in the tables. The detailed LOS reports are included in **Appendix C**. The LOS results are discussed in detail following the tables.

In general, the LOS results indicate that for 'Baseline' conditions without the SEIS project alternatives, there would be traffic congestion throughout the City, primarily at two-way stop-controlled intersections and I-90 ramps; conditions would continue to deteriorate over time if no improvements are made, and would be most congested on summer weekends.

Note that mitigation related to intersection improvements necessary to comply with adopted LOS standards are identified based on anticipated future year LOS results during the weekday summer PM peak hour only. Improvements to mitigate intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

Table 8
FUTURE 'BASELINE' INTERSECTION LOS SUMMARY – WEEKDAY PM PEAK HOUR (SUMMER)

		Weekday PM Peak Hour Conditions (Summer Peak)					
		Year 2025 'Baseline'		Year 2031 'Baseline'		Year 2037 'Baseline'	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized							
14. S Cle Elum Way / Stafford / W 1st St	C	B	11.5	B	12.8	B	13.8
16. N Oakes Ave / W 1st St (SR 903)	D	B	10.4	B	11.7	B	15.9
18. Pennsylvania Ave / 1st St (SR 903)	D	A	7.6	A	8.0	A	9.1
Roundabout							
4. Bullfrog Rd / Suncadia Trail	D	A	5.1	A	5.9	A	7.3
6. Bullfrog Rd / W 2nd St (SR 903)	D	A	6.2	A	6.9	A	7.7
All-Way Stop-Controlled							
17. Pennsylvania Ave / 2nd St	C	A	9.6	B	11.9	C	16.8
Two-Way Stop-Controlled [3]							
1. Bullfrog Rd / I-90 EB Ramps	D	B	13.0	C	17.0	D	27.3
2. Bullfrog Rd / I-90 WB Ramps	D	B	10.6	B	12.7	C	19.4
3. Bullfrog Rd / Tumble Creek Dr	D	B	12.4	C	16.3	C	24.8
5. Bullfrog Rd / Firehouse Rd	D	B	11.5	B	11.8	B	11.9
7. Denny Ave / W 2nd St (SR 903)	D	C	16.6	C	20.1	D	25.8
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	D	26.1	**E**	**47.8**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	C	18.1	C	23.5	D	27.4
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.7	A	7.9	A	8.4
11. Douglas Munro Blvd / W 1st St	C	**E**	**46.2**	**F**	**74.7**	**F**	**> 100**
12. Pine St / W 1st St	C	**D**	**27.9**	**D**	**27.9**	**E**	**35.2**
13. N Stafford Ave / W 2nd St (SR 903)	D	**E**	**46.7**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	D	33.9	**E**	**45.0**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	C	20.3	B	10.2	B	10.8
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	19.3	C	22.1	D	25.4
22. SR 903 / Pacific Ave	D	B	12.0	B	14.5	C	17.2
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.7	B	11.2	B	12.2

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Table 9
FUTURE 'BASELINE' INTERSECTION LOS SUMMARY – FRIDAY PM PEAK HOUR (SUMMER)

		Friday PM Peak Hour Conditions (Summer Peak)					
		Year 2025 'Baseline'		Year 2031 'Baseline'		Year 2037 'Baseline'	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized							
14. S Cle Elum Way / Stafford / W 1st St	C	B	15.5	B	17.5	B	19.1
16. N Oakes Ave / W 1st St (SR 903)	D	B	13.3	B	15.1	C	20.9
18. Pennsylvania Ave / 1st St (SR 903)	D	A	7.7	A	8.9	B	10.5
Roundabout							
4. Bullfrog Rd / Suncadia Trail	D	A	7.2	B	10.1	B	14.9
6. Bullfrog Rd / W 2nd Street (SR 903)	D	A	8.2	A	9.6	B	11.0
All-Way Stop-Controlled							
17. Pennsylvania Ave / 2nd St	C	A	9.5	B	12.3	C	20.2
Two-Way Stop-Controlled [3]							
1. Bullfrog Rd/I-90 EB Ramps	D	C	23.5	**F**	**> 100**	**F**	**> 100**
2. Bullfrog Rd / I-90 WB Ramps	D	C	15.9	**E**	**41.5**	**F**	**> 100**
3. Bullfrog Rd / Tumble Creek Dr	D	B	12.5	C	17.3	C	24.6
5. Bullfrog Rd / Firehouse Rd	D	B	12.2	B	12.5	B	12.5
7. Denny Ave / W 2nd Street (SR 903)	D	C	19.6	D	25.0	**E**	**36.3**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	**F**	**62.6**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	D	30.5	**F**	**77.5**	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	8.2	A	8.6	A	9.5
11. Douglas Munro Blvd / W 1st St	C	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**E**	**38.1**	**E**	**42.5**	**F**	**54.0**
13. N Stafford Ave / W 2nd St (SR 903)	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	C	24.7	**F**	**95.1**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	A	9.8	B	10.2	B	11.1
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	20.0	C	23.4	D	34.4
22. SR 903 / Pacific Ave	D	B	11.6	B	13.9	C	16.0
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.7	B	10.9	B	12.5

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Table 10
FUTURE 'BASELINE' INTERSECTION LOS SUMMARY – SUNDAY PM PEAK HOUR (SUMMER)

		Sunday PM Peak Hour Conditions (Summer Peak)					
		Year 2025 'Baseline'		Year 2031 'Baseline'		Year 2037 'Baseline'	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized							
14. S Cle Elum Way / Stafford / W 1st St	C	B	13.9	B	15.7	B	16.9
16. N Oakes Ave / W 1st St (SR 903)	D	B	17.1	C	21.2	D	45.0
18. Pennsylvania Ave / 1st St (SR 903)	D	A	9.2	A	9.8	B	10.6
Roundabout							
4. Bullfrog Rd / Suncadia Trail	D	B	13.7	C	20.9	**F**	**57.4**
6. Bullfrog Rd / W 2nd Street (SR 903)	D	C	18.6	C	24.9	**E**	**35.1**
All-Way Stop-Controlled							
17. Pennsylvania Ave / 2nd St	C	A	8.5	B	10.1	B	12.9
Two-Way Stop-Controlled [3]							
1. Bullfrog Rd/I-90 EB Ramps	D	B	11.9	C	15.3	C	19.7
2. Bullfrog Rd / I-90 WB Ramps	D	B	10.6	B	12.4	C	18.5
3. Bullfrog Rd / Tumble Creek Dr	D	C	22.2	D	32.7	**F**	**63.3**
5. Bullfrog Rd / Firehouse Rd	D	C	22.5	C	22.1	D	25.7
7. Denny Ave / W 2nd Street (SR 903)	D	C	23.4	D	29.6	**E**	**43.9**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	**F**	**56.6**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	**F**	**60.1**	**F**	**> 100**	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.4	A	7.6	A	7.9
11. Douglas Munro Blvd / W 1st St	C	**E**	**46.7**	**F**	**83.2**	**F**	**> 100**
12. Pine St / W 1st St	C	**E**	**49.6**	**E**	**48.5**	**F**	**54.3**
13. N Stafford Ave / W 2nd St (SR 903)	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	**F**	**91.6**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	B	14.4	C	18.1	**E**	**35.3**
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	17.2	C	22.5	D	28.3
22. SR 903 / Pacific Ave	D	B	12.0	B	13.3	C	16.6
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.6	B	11.1	B	12.1
24. SR 903 / SR 903 Ramp	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
25. White Road I/C / I-90 WB Ramps	D	C	15.7	C	23.9	**F**	**52.5**
26. White Road I/C / I-90 EB Ramps	D	A	9.4	B	10.1	B	11.1
27. SR 970 / SR 970 Ramp	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Weekday Summer PM Peak Hour. As shown in **Table 8**, all study intersections are anticipated to operate at an acceptable LOS during the weekday PM peak hour in 2025, 2031, and 2037 with the following exceptions:

- #8 - Ranger Station Rd / Miller Ave / W 2nd Street (SR 903) – LOS E by 2031
- #11 - Douglas Munro Blvd / W 1st Street – LOS E by 2025
- #12 - Pine Street / W 1st Street – LOS D by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS E by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS E by 2031

Friday Summer PM Peak Hour. As shown in **Table 9**, the following intersections are expected to operate at non-compliant LOS for future 'Baseline' conditions:

- #1 - Bullfrog Rd / I-90 EB Ramps – LOS F by 2031
- #2 - Bullfrog Rd / I-90 WB Ramps – LOS E by 2031
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS E by 2037
- #8 - Ranger Station Rd / Miller Ave / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine St / W 2nd St (SR 903) – LOS F by 2031
- #11 - Douglas Munro Blvd / W 1st Street – LOS F by 2025
- #12 - Pine Street / W 1st Street – LOS E by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS F by 2031

Sunday Summer PM Peak Hour. As shown in **Table 10**, the following intersections are expected to operate at non-compliant LOS for future 'Baseline' conditions:

- #3 - Bullfrog Rd / Tumble Creek – LOS F by 2037
- #4 - Bullfrog Rd / Suncadia Trail – LOS F by 2037
- #6 - Bullfrog Rd / W 2nd St (SR 903) – LOS E by 2037
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS E by 2037
- #8 - Ranger Station Rd / Miller Ave / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine St / W 2nd St (SR 903) – LOS F by 2025
- #11 - Douglas Munro Blvd / W 1st Street – LOS E by 2025
- #12 - Pine Street / W 1st Street – LOS E by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS F by 2025
- #19 - Oakes Ave / I-90 EB off-ramp – LOS E by 2037
- #24 - SR 903 / SR 903 Ramp – LOS F by 2025
- #25 - White Road I/C & I-90 WB Ramps – LOS F by 2037
- #27 - SR 970 / SR 970 Ramp – LOS F by 2025

Therefore, even without the project alternatives, some changes to the City of Cle Elum and Kittitas County roadway network would be necessary in the future to achieve intersection operations better than LOS E during the weekday PM summer peak hour. However, no planned improvements are currently identified in the short-term (TIP) or long-term

(Comprehensive Plan) transportation planning documents for the City of Cle Elum, Kittitas County, or WSDOT.

2.7 Collision History and Traffic Safety

Collisions at the study intersections were reviewed and summarized for the most recent five-year period data was available – from January 1, 2015 to December 31, 2019. Collision data was provided by the Washington State Department of Transportation (WSDOT). Summaries of the total and annual average collisions are provided in **Table 11**.

As shown in **Table 11**, all study intersections experienced an average of 1.0 or fewer collisions per year over the 5-year period from 2015 to 2019, with exception to the following:

Bullfrog Road / I-90 WB Ramps (#2) experienced an average of 1.20 collisions per year

Douglas Munro Blvd / W 1st St (#11) experienced an average of 1.8 collisions per year

Pennsylvania Ave / 1st St (#18) experienced an average of 1.8 collisions per year

Table 11
COLLISION DATA SUMMARY (2015 TO 2019)

	Collisions by Year						
Study Intersection	2015	2016	2017	2018	2019	5-Year Total Collisions	Average Annual Collisions
Signalized							
14. S Cle Elum Way / Stafford / W 1st St	0	1	2	0	0	3	0.60
16. N Oakes Ave / W 1st St (SR 903)	3	1	1	0	0	5	1.00
18. Pennsylvania Ave / 1st St (SR 903)	1	3	1	3	1	9	1.80
Roundabout							
4. Bullfrog Rd / Suncadia Trail	0	0	1	0	0	1	0.20
6. Bullfrog Rd / W 2nd Street (SR 903)	1	0	1	0	1	3	0.60
All-Way Stop-Controlled							
17. Pennsylvania Ave / 2nd St	0	0	0	0	1	1	0.20
Two-Way Stop-Controlled							
1. Bullfrog Rd / I-90 EB Ramps	0	0	1	0	0	1	0.20
2. Bullfrog Rd / I-90 WB Ramps	0	2	0	2	2	6	1.20
3. Bullfrog Rd / Tumble Creek Dr	0	0	0	0	0	0	0.00
5. Bullfrog Rd / Firehouse Rd	0	0	0	0	0	0	0.00
7. Denny Ave / W 2nd Street (SR 903)	1	0	0	1	0	2	0.40
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	0	1	0	0	2	3	0.60
9. N Pine St / W 2nd St (SR 903)	0	0	0	0	0	0	0.00
10. Douglas Munro Blvd / Ranger Sta Rd	0	0	0	0	1	1	0.20
11. Douglas Munro Blvd / W 1st St	2	1	4	1	1	9	1.80
12. Pine St / W 1st St	2	0	0	1	2	5	1.00
13. N Stafford Ave / W 2nd St (SR 903)	0	0	0	0	0	0	0.00
15. N Oakes Ave / W 2nd St (SR 903)	1	1	0	0	0	2	0.40
19. Oakes Ave / I-90 EB Off-Ramp	0	0	0	0	1	1	0.20
20. Oakes Ave / I-90 EB On-Ramp	1	0	1	0	0	2	0.40
21. SR 903 / E Pennsylvania Ave	0	0	0	0	0	0	0.00
22. SR 903 / Pacific Ave	0	0	0	0	0	0	0.00
23. Rock Rose Rd / Morrel Rd / SR 903	0	0	0	0	0	0	0.00
24. SR 903 / SR 903 Ramp	0	0	1	0	2	3	0.60
25. White Road I/C / I-90 WB Ramps	0	2	0	0	0	2	0.40
26. White Road I/C / I-90 EB Ramps	0	0	0	0	0	0	0.00
27. SR 970 / SR 970 Ramp	2	0	1	0	0	3	0.60

3. Impacts of the Alternatives

3.1 Description of Alternatives

2002 Cle Elum UGA EIS

Transportation impacts associated with the development of the Bullfrog Flats property were evaluated previously in the 2002 Cle Elum UGA EIS. The Bullfrog Flats Master Plan and approved Development Agreement were based on Alternative 5 of the 2002 Cle Elum UGA FEIS, which is referred to in this document as FEIS Alternative 5 - the Original Bullfrog Flats Master Site Plan.

2020 SEIS

The project Applicant is currently proposing development on an 824-acre portion of the Bullfrog Flats site which is being evaluated as SEIS Alternative 6 – Proposed 47° North Master Site Plan Amendment. In this transportation analysis, transportation impacts of SEIS Alternative 5 (Approved Bullfrog Flats Master Site Plan) and SEIS Alternative 6 are compared to each other and also compared to future 'Baseline' conditions that represent a scenario with no development on the site.

Mitigation measures described in **Section 4** in this report are identified to mitigate transportation impacts of SEIS Alternatives 5 and 6, and will be used to develop project-specific conditions of approval in a new or updated Development Agreement for the 47° North project.

SEIS Alternative 5 – Approved Bullfrog Flats Master Site Plan

SEIS Alternative 5 presents an updated analysis of the previous FEIS Alternative 5 (Original Bullfrog Master Site Plan) based on updated trip generation rates and analysis years, and current regulations. This updated scenario is referred to in this document as SEIS Alternative 5 and provides an alternative against which to compare the impacts associated with the Applicant's current proposal (SEIS Alternative 6 – Proposed 47° North Master Site Plan Amendment).

The analysis addresses conditions with SEIS Alternative 5 in years 2025, 2031, and 2037. Roadway network, traffic volumes, intersection LOS, and site access/circulation were evaluated for this alternative. The results of the intersection LOS analysis can be compared to future 'Baseline' conditions (also in 2025, 2031, and 2037), which were included previously in this report.

SEIS Alternative 5 includes a mix of single family and multi-family residential uses, recreational uses, and a business park. A breakdown of the land use assumptions for SEIS Alternative 5 by year 2037 were provided previously in **Table 1**, which also includes a comparison to SEIS Alternative 6 and the previous FEIS Alternative 5.

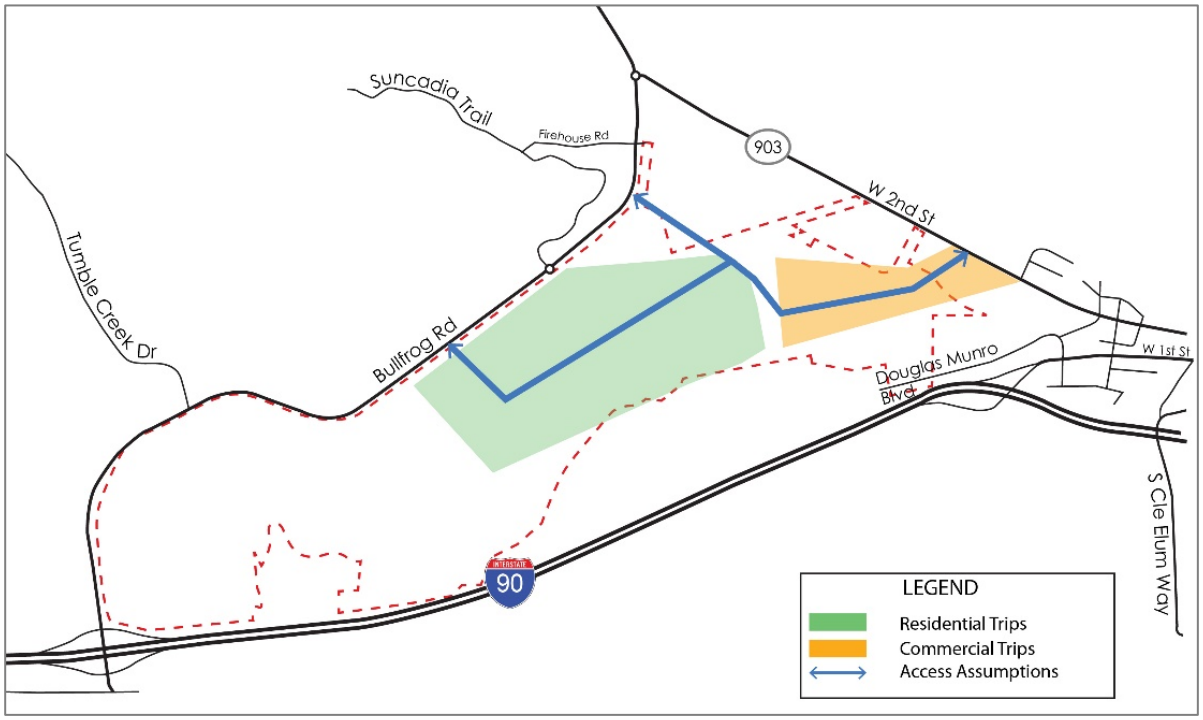
As part of the traffic scoping discussions with the City and EIS consulting team, buildout assumptions for SEIS Alternative 5 were established for the future year 2025, 2031, and 2037 analysis years. The detailed number of residential units and amount of business park use assumed for each of the three analysis years is provided on the next page in **Table 12**. Note that buildout of SEIS Alternative 5 is anticipated to occur over a 30-year timeframe with full buildout by 2051. For the purpose of the traffic analysis and comparison to SEIS Alternative 6, only the portion of SEIS Alternative 5 that would be built by 2037 is included; trip generation is described in greater detail in **Section 3.4**.

3.2 Roadway Network for SEIS Alternative 5

The roadway network for SEIS Alternative 5 was assumed to be the same as existing and 'Baseline' conditions (as identified in the Affected Environment section) since City, County and WSDOT transportation plans do not identify any funded roadway improvements that will be completed by 2037 within the study area.

3.3 Site Access and Circulation for SEIS Alternative 5

For SEIS Alternative 5, access to the Bullfrog Flats site was assumed to occur via two new access roads onto Bullfrog Road, and one new access roadway onto SR 903. The new access roads were assumed to be interconnected within the Bullfrog Flats site. The access assumptions and site access locations for SEIS Alternative 5 are shown below and also illustrated in the Fehr & Peers memorandum included in **Appendix A**.



3.4 Project Trip Generation for SEIS Alternative 5

The gross weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour trip generation estimates for SEIS Alternative 5 were based on methodologies documented in the Institute of Transportation Engineers (ITE) *Trip Generation* Manual (10th edition). Adjustments to the gross trip generation of the proposed uses were made to account for internal trips. Note that no adjustments to the gross trip generation based on ITE were made to account for the summer peak period.

Internal trips are made by people making multiple stops within a development without generating new trips onto the adjacent street system. The internal trip reductions for the proposed residential and commercial uses were estimated based on the established methodology in the current ITE *Trip Generation Handbook* (3rd Edition).

The net new trips associated with SEIS Alternative 5 were determined by subtracting the internal trips from the gross trip generation. **Table 12** summarizes the net new trip generation estimates for SEIS Alternative 5 for the weekday, Friday, and Sunday PM peak hours in future years 2025, 2031, and 2037. The detailed trip generation calculations are provided in **Appendix D**. It should be noted that the trip generation estimates for SEIS Alternative 5 are the same for the weekday PM peak hour and the Friday PM peak hour since Friday is considered to be a weekday per ITE methodology.

Table 12
SEIS ALTERNATIVE 5 TRIP GENERATION SUMMARY

		SEIS Alternative 5 Net New Trip Generation [1]					
		Weekday and Friday PM Peak Hour			Sunday PM Peak Hour		
Year	Land Use / Size	In	Out	Total	In	Out	Total
2025	319 Single Family Residential Units 469 Multi-Family Residential Units 70,000 SF Business Park	351	252	603	297	283	580
2031	433 Single Family Residential Units 524 Multi-Family Residential Units 245,000 SF Business Park	449	388	837	366	347	713
2037	587 Single Family Residential Units 524 Multi-Family Residential Units 490,000 SF Business Park	570	554	1124	445	416	861

SF = Square Feet

1) Trip generation estimates for SEIS Alternative 5 include only the residential and speculative commercial uses and do not include the amenity/adventure center use, the community recreation center use, or affordable housing use.

Note that the SEIS Alternative 5 trip generation estimates summarized in **Table 12** include a portion of the development of the business park parcel within the Bullfrog Flats site, which was based on input from the EIS consulting team and Applicant. Since buildout of SEIS

Alternative 5 is anticipated to occur over a 30-year period, only 1,161 of the total 1,334 residential units and 490,000 sf of the total 950,000 sf of business park were included in the year 2037 traffic analysis.

Table 13 includes a summary of the breakdown of residential versus commercial weekday PM peak hour net new trip generation for SEIS Alternative 5 by analysis year. As shown, the commercial development is estimated to account for 11 to 29 percent of the total SEIS Alternative 5 trip generation between 2025 and 2037.

Table 13
SEIS ALTERNATIVE 5 WEEKDAY TRIP GENERATION SUMMARY OF RESIDENTIAL vs. COMMERCIAL TRIPS

	SEIS Alternative 5 Net New Weekday PM Peak Hour Trip Generation		
Year	Residential Trips (%)	Commercial Trips (%)	TOTAL TRIPS (%)
2025	536 (89%)	67 (11%)	60 (100%)
2031	653 (78%)	184 (22%)	837 (100%)
2037	798 (71%)	326 (29%)	1,124 (100%)

3.5 Project Trip Distribution and Assignment for SEIS Alternative 5

Fehr & Peers provided SEIS Alternative 5 project trip assignment volumes for future years 2025, 2031, and 2037 for the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour at the 27 study intersections and the following three site access intersections:

28. Bullfrog Road / West Site Access
29. Bullfrog Road / East Site Access
30. SR 903 (W 2nd St) / Site Access

Appendix A includes a memorandum from Fehr & Peers that documents the methodology and assumptions used for the trip distribution and assignment forecasting and provides separate trip distribution figures for inbound and outbound SEIS Alternative 5 project trips. Note that the SEIS Alternative 5 trip distribution and project trip assignment is the same for weekday and Friday PM peak hour conditions.

The year 2025 SEIS Alternative 5 project trip assignment for the weekday, Friday, and Sunday PM peak hours is included in **Appendix B** as **Figure 14**, **Figure 15**, and **Figure 16**, respectively. The year 2031 SEIS Alternative 5 project trip assignment for the weekday, Friday, and Sunday PM peak hours is included in **Appendix B** as **Figure 17**, **Figure 18**, and **Figure 19**, respectively. The year 2037 SEIS Alternative 5 project trip assignment for the weekday, Friday, and Sunday PM peak hours is included in **Appendix B** as **Figure 20**, **Figure 21**, and **Figure 22**, respectively.

3.6 Future Year Traffic Volumes with SEIS Alternative 5

Future year 2025, 2031, and 2037 traffic volumes with SEIS Alternative 5 were developed by adding the 'Baseline' traffic volumes (see **Figures 5 to 13** in **Appendix B**) to the SEIS Alternative 5 trip assignment (see **Figures 14 to 22** in **Appendix B**).

Year 2025 with SEIS Alternative 5 traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 23**, **Figure 24**, and **Figure 25**, respectively. Year 2031 with SEIS Alternative 5 traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 26**, **Figure 27**, and **Figure 28**, respectively. Year 2037 with SEIS Alternative 5 traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 29**, **Figure 30**, and **Figure 31**, respectively.

All traffic volumes illustrated in the **Figures** are representative of the summer peak period.

3.7 Future Intersection LOS with SEIS Alternative 5

Intersection LOS analyses were conducted at the 27 study intersections for future years 2025, 2031, and 2037 with SEIS Alternative 5 during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all during the peak summer period. Note that LOS analyses at intersections #24-27 were only completed for the Sunday PM peak hour time period; this decision was based on scoping discussions with the City, County, and WSDOT, and due to higher volumes experienced at those intersections on Sundays during the summer peak.

Future years 2025, 2031, and 2037 with SEIS Alternative 5 LOS analyses results at the study intersections are summarized in **Table 14** for the weekday PM peak hour, **Table 15** for the Friday PM peak hour, and **Table 16** for the Sunday peak hour, all during the summer peak period. Year 2025, 2031, and 2037 'Baseline' LOS results are also presented in each table for comparison purposes. Study intersections forecast to operate at non-compliant LOS (LOS D, E, or F for City intersections and LOS E or F for Kittitas County and WSDOT intersections) are shown in **BOLD** text in the tables. The detailed LOS reports are included in **Appendix C**. The LOS results are discussed in detail following the tables.

Potential improvements are identified for study intersections forecast to operate at non-compliant LOS during the weekday summer PM peak hour with SEIS Alternative 5 to meet the adopted LOS standards in **Section 4** (Mitigation Measures). Improvements to mitigate intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

In general, the LOS results shown in **Tables 14 through 16** indicate that similar to future 'Baseline' conditions, with SEIS Alternative 5 there would be traffic congestion throughout the City, primarily at two-way stop-controlled intersections and the I-90 ramps; congestion is anticipated to be highest on summer weekends and would be expected to continue to deteriorate over time if no improvements are made.

Table 14
SEIS ALTERNATIVE 5 INTERSECTION LOS SUMMARY – WEEKDAY PM PEAK HOUR (SUMMER)

		Weekday PM Peak Hour Conditions (Summer Peak)											
		Year 2025				Year 2031				Year 2037			
		'Baseline'		With SEIS Alt 5		'Baseline'		With SEIS Alt 5		'Baseline'		With SEIS Alt 5	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized													
14. S Cle Elum Way / Stafford / W 1st St	C	B	11.5	B	12.1	B	12.8	B	13.6	B	13.8	B	14.7
16. N Oakes Ave / W 1st St (SR 903)	D	B	10.4	B	10.9	B	11.7	B	12.8	B	15.9	C	21.4
18. Pennsylvania Ave / 1st St (SR 903)	D	A	7.6	A	7.8	A	8.0	A	8.8	A	9.1	B	11.2
Roundabout													
4. Bullfrog Rd / Suncadia Trail	D	A	5.1	A	5.4	A	5.9	A	6.5	A	7.3	A	8.5
6. Bullfrog Rd / W 2nd St (SR 903)	D	A	6.2	A	6.6	A	6.9	A	7.6	A	7.7	A	8.8
All-Way Stop-Controlled													
17. Pennsylvania Ave / 2nd St	C	A	9.6	B	10.3	B	11.9	B	14.4	C	16.8	**D**	**25.8**
Two-Way Stop-Controlled [3]													
1. Bullfrog Rd / I-90 EB Ramps	D	B	13.0	B	14.8	C	17.0	C	23.3	D	27.3	**F**	**63.5**
2. Bullfrog Rd / I-90 WB Ramps	D	B	10.6	B	11.5	B	12.7	C	15.2	C	19.4	D	33.7
3. Bullfrog Rd / Tumble Creek Dr	D	B	12.4	B	13.9	C	16.3	C	20.7	C	24.8	**E**	**46.4**
5. Bullfrog Rd / Firehouse Rd	D	B	11.5	B	11.9	B	11.8	B	12.8	B	11.9	B	14.0
7. Denny Ave / W 2nd St (SR 903)	D	C	16.6	C	23.6	C	20.1	**E**	**36.4**	D	25.8	**F**	**78.1**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	D	26.1	**F**	**> 100**	**E**	**47.8**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	C	18.1	D	34.2	C	23.5	**F**	**78.5**	D	27.4	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.7	A	7.9	A	7.9	A	8.2	A	8.4	A	8.9
11. Douglas Munro Blvd / W 1st St	C	**E**	**46.2**	**F**	**56.1**	**F**	**74.7**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**D**	**27.9**	**D**	**30.6**	**D**	**27.9**	**D**	**31.5**	**E**	**35.2**	**E**	**45.9**
13. N Stafford Ave / W 2nd St (SR 903)	D	**E**	**46.7**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	D	33.9	D	32.9	**E**	**45.0**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	C	20.3	A	9.9	B	10.2	B	10.4	B	10.8	B	11.4
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	19.3	C	21.2	C	22.1	D	25.3	D	35.6	**F**	**67.1**
22. SR 903 / Pacific Ave	D	B	12.0	B	12.7	B	14.5	C	15.7	C	17.2	C	19.5
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.7	B	10.8	B	11.2	B	11.5	B	12.2	B	12.6

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Table 15
SEIS ALTERNATIVE 5 INTERSECTION LOS SUMMARY – FRIDAY PM PEAK HOUR (SUMMER)

		Friday PM Peak Hour Conditions (Summer Peak)											
		Year 2025				Year 2031				Year 2037			
		'Baseline'		With SEIS Alt 5		'Baseline'		With SEIS Alt 5		'Baseline'		With SEIS Alt 5	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized													
14. S Cle Elum Way / Stafford / W 1st St	C	B	15.5	B	16.2	B	17.5	B	18.5	B	19.1	C	20.3
16. N Oakes Ave / W 1st St (SR 903)	D	B	13.3	B	14.2	B	15.1	B	16.5	C	20.9	D	41.8
18. Pennsylvania Ave / 1st St (SR 903)	D	A	7.7	A	8.6	A	8.9	B	10.7	B	10.5	B	13.5
Roundabout													
4. Bullfrog Rd / Suncadia Trail	D	A	7.2	A	7.8	B	10.1	B	11.7	B	14.9	C	19.8
6. Bullfrog Rd / W 2nd St (SR 903)	D	A	8.2	A	8.9	A	9.6	B	11.0	B	11.0	B	13.1
All-Way Stop-Controlled													
17. Pennsylvania Ave / 2nd St	C	A	9.5	B	10.2	B	12.3	B	15.0	C	20.2	**D**	**32.8**
Two-Way Stop-Controlled [3]													
1. Bullfrog Rd / I-90 EB Ramps	D	C	23.5	D	33.8	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
2. Bullfrog Rd / I-90 WB Ramps	D	C	15.9	C	19.2	**E**	**41.5**	**F**	**85.8**	**F**	**> 100**	**F**	**> 100**
3. Bullfrog Rd / Tumble Creek Dr	D	B	12.5	B	14.2	C	17.3	C	22.8	C	24.6	**E**	**49.6**
5. Bullfrog Rd / Firehouse Rd	D	B	12.2	B	12.9	B	12.5	B	13.6	B	12.5	B	13.8
7. Denny Ave / W 2nd St (SR 903)	D	C	19.6	D	28.9	D	25.0	**E**	**48.4**	**E**	**36.3**	**F**	**> 100**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	**F**	**62.6**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	D	30.5	**F**	**83.0**	**F**	**77.5**	**F**	**> 100**	D	32.5	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	8.2	A	8.5	A	8.6	A	9.0	A	9.5	B	10.3
11. Douglas Munro Blvd / W 1st St	C	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**E**	**38.1**	**E**	**43.8**	**E**	**42.5**	**F**	**54.4**	**F**	**54.0**	**F**	**92.4**
13. N Stafford Ave / W 2nd St (SR 903)	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	C	24.7	**E**	**47.7**	**F**	**95.1**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	A	9.8	B	10.0	B	10.2	B	10.6	B	11.1	B	11.8
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	20.0	C	22	C	23.4	D	26.7	D	34.4	**E**	**45.1**
22. SR 903 / Pacific Ave	D	B	11.6	B	12.1	B	13.9	B	14.9	C	16	C	17.9
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.7	B	10.7	B	10.9	B	11.2	B	12.5	B	12.9

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Table 16
SEIS ALTERNATIVE 5 INTERSECTION LOS SUMMARY – SUNDAY PM PEAK HOUR (SUMMER)

		Sunday PM Peak Hour Conditions (Summer Peak)											
		Year 2025				Year 2031				Year 2037			
		'Baseline'		With SEIS Alt 5		'Baseline'		With SEIS Alt 5		'Baseline'		With SEIS Alt 5	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized													
14. S Cle Elum Way / Stafford / W 1st St	C	B	13.9	B	14.8	B	15.7	B	16.8	B	16.9	B	18.4
16. N Oakes Ave / W 1st St (SR 903)	D	B	17.1	B	18.5	C	21.2	C	24.9	D	45.0	**E**	**55.1**
18. Pennsylvania Ave / 1st St (SR 903)	D	A	9.2	B	11.0	A	9.8	B	12.6	B	10.6	B	12.9
Roundabout													
4. Bullfrog Rd / Suncadia Trail	D	B	13.7	C	15.3	C	20.9	D	26.3	**F**	**57.4**	**F**	**73.5**
6. Bullfrog Rd / W 2nd St (SR 903)	D	C	18.6	C	21.7	C	24.9	D	31.7	**E**	**35.1**	**E**	**49.0**
All-Way Stop-Controlled													
17. Pennsylvania Ave / 2nd St	C	A	8.5	A	8.9	B	10.1	B	11.1	B	12.9	C	15.1
Two-Way Stop-Controlled [3]													
1. Bullfrog Rd / I-90 EB Ramps	D	B	11.9	B	13.4	C	15.3	C	19.0	C	19.7	D	29.3
2. Bullfrog Rd / I-90 WB Ramps	D	B	10.6	B	11.0	B	12.4	B	13.6	C	18.5	C	24.7
3. Bullfrog Rd / Tumble Creek Dr	D	C	22.2	D	25.8	D	32.7	**E**	**43.4**	**F**	**63.3**	**F**	**> 100**
5. Bullfrog Rd / Firehouse Rd	D	C	22.5	C	24.4	C	22.1	C	24.1	D	25.7	D	29.0
7. Denny Ave / W 2nd St (SR 903)	D	C	23.4	D	33.1	D	29.6	**E**	**48.1**	**E**	**43.9**	**F**	**> 100**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	**F**	**56.6**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	**F**	**60.1**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.4	A	7.6	A	7.6	A	7.8	A	7.9	A	8.3
11. Douglas Munro Blvd / W 1st St	C	**E**	**46.7**	**F**	**60.7**	**F**	**83.2**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**E**	**49.6**	**F**	**57.6**	**E**	**48.5**	**F**	**58.9**	**F**	**54.3**	**F**	**72.3**
13. N Stafford Ave / W 2nd St (SR 903)	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	**F**	**91.6**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	B	14.4	C	15.2	C	18.1	C	19.8	**E**	**35.3**	**E**	**43.6**
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	17.2	C	19.1	C	22.5	D	26.1	D	28.3	**E**	**35.3**
22. SR 903 / Pacific Ave	D	B	12	B	12.4	B	13.3	B	13.9	C	16.6	C	17.5
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.6	B	10.8	B	11.1	B	11.4	B	12.1	B	12.5
24. SR 903 / SR 903 Ramp	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
25. White Road I/C / I-90 WB Ramps	D	C	15.7	C	16.1	C	23.9	D	25.3	**F**	**52.5**	**F**	**58.9**
26. White Road I/C / I-90 EB Ramps	D	A	9.4	A	9.4	B	10.1	B	10.2	B	11.1	B	11.3
27. SR 970 / SR 970 Ramp	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Weekday Summer PM Peak Hour. As shown in **Table 14**, the following study intersections are anticipated to operate at non-compliant LOS[6] during the weekday PM summer peak hour as a result of the additional traffic generated by SEIS Alternative 5:

- #1 - Bullfrog Road / I 90 EB Ramps – LOS F by 2037
- #3 - Bullfrog Road / Tumble Creek – LOS E by 2037
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS E by 2031
- #8 - Ranger Station Rd / Miller Ave / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine Street / W 2nd Street (SR 903) – LOS F by 2031
- #17 - Pennsylvania / 2nd Street – LOS D by 2037
- #21 - Pennsylvania Ave / N 1st Street (SR 903) in Roslyn – LOS F by 2037

The following study intersections are anticipated to operate at non-compliant LOS[6] during the weekday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 5:

- #11 - Douglas Munro Blvd / W 1st Street – LOS E by 2025
- #12 - N Pine Street / W 1st Street – LOS D by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS E by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS E by 2031

Friday Summer PM Peak Hour. As shown in **Table 15**, the following study intersections are anticipated to operate at non-compliant LOS[6] during the Friday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5:

- #3 - Bullfrog Rd / Tumble Creek Dr – LOS E by 2037
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS E by 2031
- #8 - Ranger Station Rd / Miller / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine Street / W 2nd Street (SR 903) – LOS F by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS E by 2025
- #17 - Pennsylvania / W 2nd Street – LOS D by 2037
- #21 - Pennsylvania Ave / N 1st Street (SR 903) in Roslyn – LOS E by 2037

The following study intersections are anticipated to operate at non-compliant LOS during the Friday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 5:

- #1 - Bullfrog Road / I 90 EB Ramps – LOS F by 2031
- #2 - Bullfrog Rd / I-90 WB Ramps – LOS E by 2031
- #11 - Douglas Munro Blvd / W 1st Street – LOS F by 2025
- #12 - N Pine Street / W 1st Street by 2025 – LOS E by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F by 2025

[6] Kittitas County and WSDOT standard is LOS D and City of Cle Elum standard is LOS C. Thus, non-compliant LOS is defined as LOS E/F at Kittitas County and WSDOT intersections and LOS D/E/F at City of Cle Elum intersections.

Sunday Summer PM Peak Hour. As shown in **Table 16**, the following study intersections are anticipated to operate at non-compliant LOS[6] during the Sunday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5:

- #3 – Bullfrog Rd / Tumble Creek Dr – LOS E by 2031
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS E by 2031
- #16 - N Oakes Ave / W 1e Street (SR 903) – LOS E by 2037
- #21 - Pennsylvania Ave / N 1st Street (SR 903) in Roslyn – LOS E by 2037

The following study intersections are anticipated to operate at non-compliant LOS during the Sunday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 5:

- #4 - Bullfrog Rd / Suncadia Trail – LOS F by 2037
- #6 - Bullfrog Rd / W 2nd St (SR 903) – LOS E by 2037
- #8 - Ranger Station Rd / Miller / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine Street / W 2nd Street (SR 903) – LOS F by 2025
- #11 - Douglas Munro Blvd / W 1st Street – LOS E by 2025
- #12 - N Pine Street / W 1st Street by 2025 – LOS E by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS F by 2025
- #19 - Oakes Ave / I-90 EB off-ramp – LOS E by 2037
- #24 - SR 903 / SR 903 Ramp – LOS F by 2025
- #25 - White Road I/C & I-90 WB Ramps – LOS F by 2037
- #27 - SR 907 / SR 907 Ramp – LOS F by 2025

3.8 Future Site Access LOS with SEIS Alternative 5

LOS analyses were conducted at the three site access intersections for future years 2025, 2031, and 2037 with SEIS Alternative 5 during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all during the peak summer period.

Future years 2025, 2031, and 2037 with SEIS Alternative 5 LOS analysis results at the site access intersections are summarized in **Table 17** for the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all for the summer peak period. The LOS analysis for the site access locations assumes that all site access locations would be two-way stop-controlled with the major street (Bullfrog Road and SR 903) freeflow. Site access intersections forecast to operate at non-compliant LOS (LOS E or F) are shown in BOLD text in the table.

Site access intersections forecast to operate at non-compliant LOS during the weekday summer PM peak hour with SEIS Alternative 5 are identified for potential improvements to meet the adopted LOS standards in **Section 4** (Mitigation Measures). Specific improvements to mitigate site access intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice, and would not be cost effective to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

Table 17
SEIS ALTERNATIVE 5 SITE ACCESS LOS SUMMARY [1]

		Future Conditions With SEIS Alternative 5 (Summer Peak)					
		Year 2025		Year 2031		Year 2037	
Site Access Intersection [1]	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
WEEKDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	B	14.0	C	18.6	D	32.3
29. Bullfrog Road / New Connector Road	D	B	11.3	B	12.5	B	13.7
30. SR 903 / New Connector Road	D	C	16.1	D	27.5	**F**	**> 100**
FRIDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	C	19.0	D	33.1	**F**	**83.5**
29. Bullfrog Road / New Connector Road	D	B	13.7	C	15.3	C	16.9
30. SR 903 / New Connector Road	D	C	17.8	**E**	**38.9**	**F**	**> 100**
SUNDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	D	32.2	**F**	**70.0**	**F**	**> 100**
29. Bullfrog Road / New Connector Road	D	C	23.1	D	28.3	**E**	**42.4**
30. SR 903 / New Connector Road	D	C	18.4	**F**	**58.2**	**F**	**> 100**

1. LOS analysis at site access intersections assumes two-way stop control with major roadway (Bullfrog Road and SR 903) being free flow.

Weekday Summer PM Peak Hour. As shown in **Table 17**, during the weekday summer PM peak hour with SEIS Alternative 5, the site access intersection of SR 903/New Connector Road (#30) is anticipated to operate at non-compliant LOS[7] (LOS F) by 2037.

Friday Summer PM Peak Hour. As shown in **Table 17**, during the Friday summer PM peak hour with SEIS Alternative 5, the site access intersection of Bullfrog Road/RV Resort Access (#28) is anticipated to operate at non-compliant LOS (LOS F) by 2037 and SR 903/New Connector Road (#30) is anticipated to operate at LOS E by 2031.

Sunday Summer PM Peak Hour. As shown in **Table 17**, during the Sunday summer PM peak hour with SEIS Alternative 5, the site access intersections of Bullfrog Road/RV Resort Access (#28) and SR 903/New Connector Road (#30) are anticipated to operate at non-compliant LOS (LOS F) by 2031. Additionally, the site access intersection of Bullfrog Road/New Connector Road (#29) is anticipated to operate at LOS E by 2037.

[7] Kittitas County and WSDOT LOS standard is LOS D and City of Cle Elum LOS standard is LOS C. Therefore, non-compliant LOS is defined as LOS E/F at Kittitas County and WSDOT intersections and LOS D/E/F at City of Cle Elum intersections.

3.9 Construction Impacts with SEIS Alternative 5

SEIS Alternative 5 would result in temporary construction-related traffic impacts over the buildout period of the project, which is expected to last 30 years (through 2051). Grading activities would be required for construction of roadways, parking and building pad elevations. Approximately 644,000 cubic yards (CY) of cut and 420,000 CY of fill material would be required for development of the SEIS Alternative 5 (the same as FEIS Alternative 5). The project would strive to balance the cut and fill quantities as much as possible, which would minimize truck traffic, but would still result in some export of material. It is estimated that between 200 and 400 trucks per month would be generated during the initial grading period of the project which is expected to last several months.

Off-site transport of materials would typically be hauled during the day. Truck traffic would utilize new or temporary site access roads to Bullfrog Road and SR 903, and routed to either SR 903 or to/from I-90 via Bullfrog Road.

The destination of hauled material would depend on the amount of cut or fill material needed for the site, as well as regional soil needs at the time of construction. All excavation and disposal would be in accordance with local agency codes and permit requirements. The number of trucks and intensity of activity will be established through a Construction Management Plan.

Construction impacts would generally include: traffic associated with construction workers, deliveries and removal of materials by truck-trailer units, and parking associated with construction workers. In general, vehicle traffic generated by the construction activity is anticipated to be less than the vehicle traffic generated by the SEIS Alternative 5 development. However, depending on construction activity, there is a potential that during some years of development, the combined total construction activity for later phases coupled with development traffic from earlier phases could be temporarily higher than with the buildout condition.

The Applicant would be required to prepare a Construction Management Plan prior to beginning construction to minimize construction traffic impacts. A traffic monitoring plan could also be developed to manage traffic levels at the site access locations, and determine if traffic levels with construction are higher than evaluated for the project buildout. If so, additional mitigation measures could be implemented to reduce construction or general traffic levels.

Haul route agreements and truck routes would be established in coordination with the City of Cle Elum, WSDOT, and Kittitas County, as necessary, depending on the off-site location(s) where haul material would be transported.

3.10 Safety Impacts with SEIS Alternative 5

With increased traffic generated by SEIS Alternative 5, increased traffic volumes on area roadways may result in moderate increases in collisions.

Improvements have been identified as mitigation measures at several study intersections (see **Section 4)** including widening for merge/refuge lanes, all-way stop control, and signalization are expected to improve traffic safety.

3.11 Transit Impacts with SEIS Alternative 5

There are no known planned improvements to public transportation service in the area. However, since SEIS Alternative 5 would bring new jobs and new residents to the vicinity, it is recommended that Cle Elum and Kittitas County evaluate and identify additional local services, including the potential for additional transit service and/or expanded transportation choices. With additional funding, it is possible that the free Kittitas County Connector that currently runs between Ellensburg and Upper Kittitas County could add stops within the Bullfrog Flats development.

3.12 Non-Motorized Circulation Impacts with SEIS Alternative 5

New trails and sidewalks would be provided throughout the site, and would connect with SR 903 and Bullfrog Road.

3.13 School Impacts with SEIS Alternative 5

Development of SEIS Alternative 5 will add residential units which is expected to create additional vehicular demand between the site and the Cle Elum and Roslyn Schools site on SR 903 for both parents and buses during the morning and afternoon peak periods.

This increased school traffic along with increased traffic on SR 903 adjacent to the schools as a result of SEIS Alternative 5 may cause additional delays for vehicles and buses using the school driveway(s) on SR 903. However, traffic volumes on SR 903 are lower when school is in session (September to June) than during peak summer months (July and August) when traffic levels are highest on SR 903 and other local roads.

The traffic analysis conducted in this study evaluated traffic impacts during the summer period when school traffic is minimal. School-related traffic impacts are typically greatest during the weekday AM peak hours between 7:00 and 9:00 a.m. which was not included in this study.

SEIS Alternative 6 – Proposed 47° North Master Site Plan Amendment

SEIS Alternative 6 represents the Applicant's proposed revisions to the approved Bullfrog Flats Master Site Plan (SEIS Alternative 5), and includes phased development of a mix of residential dwelling units, an RV resort, and open space/recreational facilities. SEIS Alternative 6 would provide a total of 707 residential units, as well as 627 RV sites in a RV resort under the Proposed 47° North Master Site Plan Amendment.

Additionally, and as part of SEIS Alternative 6, Suncadia is retaining a portion of the property along SR 903 and intends to develop it for commercial use in the future. The traffic analysis for SEIS Alternative 6 includes a mix of retail, restaurant, supermarket, and medical office use that could be developed on the future commercial site. The potential commercial development is not part of the 47º North Master Site Plan but is included in the SEIS to provide a more complete picture of possible cumulative impacts. A breakdown of the land use assumptions at full buildout for SEIS Alternative 6 were provided previously in **Table 1**, which also includes a comparison to SEIS Alternative 5 and the previous FEIS Alternative 5.

The phased buildout assumptions for SEIS Alternative 6 were provided by the Applicant for the 47° North site and by New Suncadia for the commercial site for the future year scenarios in 2025, 2031, and 2037. The detailed number of residential units and RV resort sites, and amount of commercial use for each of the three analysis years is provided in **Table 18**.

The analysis for SEIS Alternative 6 addresses conditions in 2025, 2031, and 2037 for the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all during the peak summer period. The roadway network, traffic volumes, intersection LOS, and site access/circulation are documented for this alternative. The results of the intersection LOS analysis are compared to the 'Baseline' results.

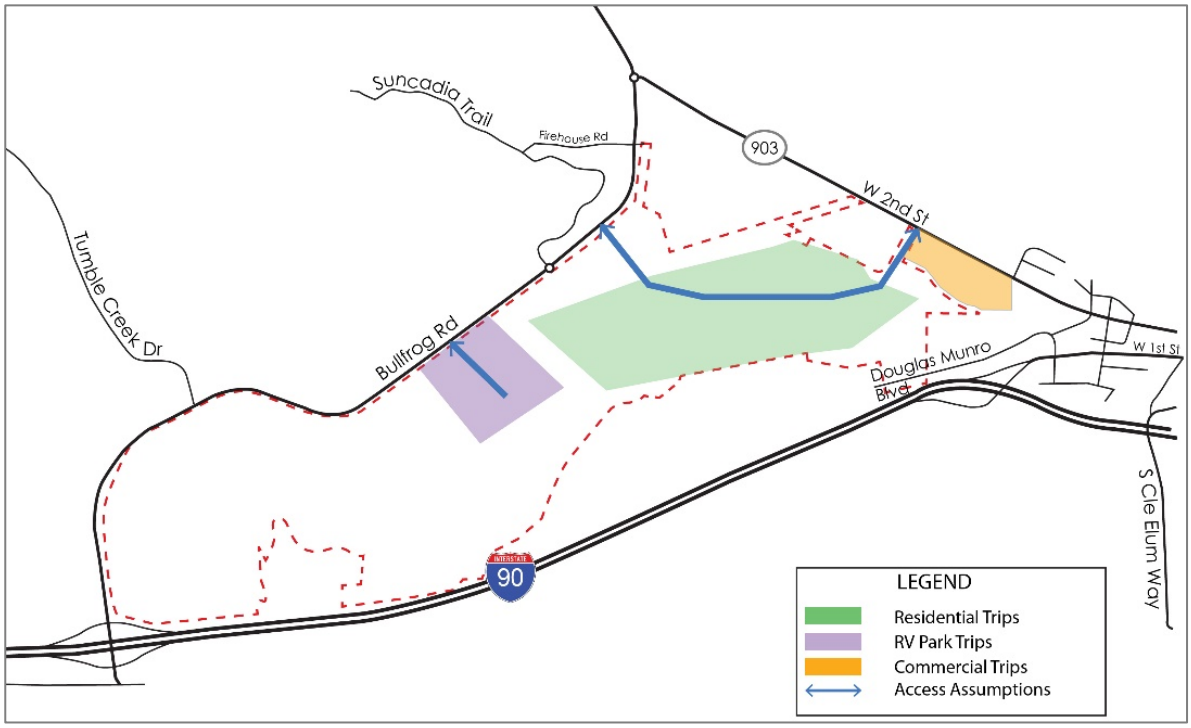
3.14 Roadway Network for SEIS Alternative 6

The roadway network for SEIS Alternative 6 was assumed to be the same as existing and 'Baseline' conditions (as identified in the Affected Environment section) since no funded roadway improvements by the City, County or WSDOT are identified to be completed by 2037 within the study area.

3.15 Site Access and Circulation for SEIS Alternative 6

The site plan for SEIS Alternative 6 includes a new Connector Road through the site that provides access between Bullfrog Road and SR 903. This Connector Road would provide access to the residential areas as well as the commercial development. The Connector Road has been identified as a public collector road with 70-foot right-of-way, two 14-foot wide travel lanes in each direction and a 12-foot wide center two-way left-turn lane. One side of the road would have a 21-foot wide landscaped clear zone and the other side a 5-foot asphalt path with 3-foot landscaped clear area between road and sidewalk. The posted speed is anticipated to be between 25-30 mph.

A separate access is identified further south on Bullfrog Road that will provide exclusive access to the RV resort. The access assumptions and site access locations for SEIS Alternative 6 are shown below and also illustrated in the Fehr & Peers memorandum included in **Appendix A**.



It should be noted that the traffic forecast modeling provided by Fehr & Peers for SEIS Alternative 6 (see **Appendix A**) did not assign any background, non-project traffic to use the new Connector Road to travel between Bullfrog Road and SE 903; only internal project trips for 47° North and the commercial parcel are assumed to use the Connector Road. The traffic model assumes that drivers would choose the fastest route available and would continue to use Bullfrog Road and SR 903 because legal speed limits on Bullfrog Road and SR 903 are higher than the speed limit for the Connector Road (based on its road classification), and internal access roads that would connect 47° North neighborhoods to the Connector Road, which would also tend to slow traffic.

Given these current model parameters, the Connector Road appears to be underutilized and may not be performing the functions it was intended to accomplish, i.e., relieving some traffic congestion on Bullfrog Road and SR 903. The 3-lane design of the road also reflects this intended function and assumes greater use by off-site traffic. Because the Connector Road was considered to be a design feature of the 47° North Master Site Plan, it is included in, and cannot be extracted from or modified within the existing traffic forecasting model. The model assumptions could be revised, however, to forecast how traffic would respond to a different internal road alignment and/or design, and to increase reliance on other site access points. These potential options will be reconsidered during the public review process for the Draft SEIS.

3.16 Project Trip Generation for SEIS Alternative 6

The gross weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour trip generation estimates during the summer peak period for SEIS Alternative 6 were based on methodology documented in the Institute of Transportation Engineers (ITE) *Trip Generation* Manual (10th edition). The trip generation estimates for the RV resort are based on occupied sites; for the purpose of this traffic analysis the RV resort was assumed to be 100% occupied during the summer peak season. Adjustments to the gross trip generation of the proposed uses were made to account for internal and pass-by trips.

Internal trips are made by people making multiple stops within a development without generating new trips onto the adjacent street system. The internal trip reductions for the proposed residential and commercial uses were based on the established methodology in the current ITE *Trip Generation Handbook* (3rd Edition).

Pass-by trips are trips that are already on the adjacent roadways and make an intermediate stop at the proposed use on the way to their primary destination (e.g., on the way from work to home). These trips are not new to the adjacent road network but are accounted for at the project site access points. The pass-by trip adjustments were applied to the proposed retail uses based on information and methodology provided in the current ITE *Trip Generation Handbook* (3rd Edition).

The net new trips associated with SEIS Alternative 6 were determined by subtracting the pass-by and internal trips from the gross trip generation. **Table 18** summarizes the total net new trip generation estimates for SEIS Alternative 6 for the weekday, Friday, and Sunday PM peak hours during the summer peak period in future years 2025, 2031, and 2037. The detailed trip generation calculations are provided in **Appendix E**. It should be noted that the trip generation estimates for SEIS Alternative 6 are the same for the weekday PM peak hour and the Friday PM peak hour since Friday is considered to be a weekday per ITE methodology.

Table 18
SEIS ALTERNATIVE 6 TRIP GENERATION SUMMARY

		SEIS Alternative 6 Net New Total Trip Generation [1]					
		Weekday and Friday PM Peak Hour			Sunday PM Peak Hour		
Year	Land Use / Size	In	Out	Total	In	Out	Total
2025	264 Single Family Residential units 180 Multi-Family Residential units 627 RV Resort sites 8,500 SF Retail [2] 6,500 SF Restaurant [2]	366	214	580	260	246	506
2031	527 Single Family Residential units 180 Multi-Family Residential units 627 RV Resort sites 45,000 SF Supermarket [2] 17,000 SF Retail [2] 13,000 SF Restaurant [2]	620	392	1,012	514	490	1,004
2037	527 Single Family Residential units 180 Multi-Family Residential units 627 RV Resort sites 45,000 SF Supermarket [2] 25,000 SF Retail [2] 20,000 SF Restaurant [2] 60,000 SF Medical Office [2]	686	539	1,225	520	492	1,012

SF = Square Feet,

1. Trip generation estimates for SEIS Alternative 6 include only the RV, residential, and speculative commercial uses and do not include the amenity/adventure center use, the community recreation center use, or affordable housing use.
2. Uses associated with the speculative development of the 25-acre commercial property.

It should be noted that the SEIS Alternative 6 trip generation estimates summarized in **Table 18** above include the speculative development of the commercial parcel on the adjacent 25-acre property.

Table 19 below includes a summary of the breakdown of residential versus commercial weekday PM summer peak hour net new trip generation for SEIS Alternative 6 by analysis year. As shown, the commercial development is estimated to account for 13 to 50 percent of the total SEIS Alternative 6 trip generation between 2025 and 2037 (full buildout).

Table 19
SEIS ALTERNATIVE 6 WEEKDAY TRIP GENERATION SUMMARY -- 47° NORTH vs. COMMERCIAL TRIPS

	SEIS Alternative 6 Net New Weekday PM Peak Hour Trip Generation				
	47° North Trips				
Year	RV Resort Trips (%)	Residential Trips (%)	SUBTOTAL (%)	Commercial Site Trips (%)	TOTAL TRIPS (%)
2025	161 (28%)	340 (59%)	501 (87%)	79 (13%)	580 (100%)
2031	142 (14%)	504 (50%)	646 (64%)	366 (36%)	1,012 (100%)
2037	135 (11%)	479 (39%)	614 (50%)	611 (50%)	1,225 (100%)

3.17 Project Trip Distribution and Assignment for SEIS Alternative 6

Fehr & Peers provided SEIS Alternative 6 project trip assignment volumes for future years 2025, 2031, and 2037 for the weekday PM peak hour, Friday PM peak hour, and Sunday peak hour at the 27 study intersections and the following three site access intersections:

28. Bullfrog Road / RV Resort Access
29. Bullfrog Road / New Connector Road
30. SR 903 (W 2nd St) / New Connector Road

Appendix A includes a memorandum from Fehr & Peers that documents the methodology and assumptions used for the trip distribution and assignment forecasting, and provides separate trip distribution figures for inbound and outbound SEIS Alternative 6 project trips. Note that the SEIS Alternative 6 trip distribution and project trip assignment is the same for weekday and Friday PM peak hour conditions.

Year 2025 SEIS Alternative 6 project trip assignment for the weekday, Friday, and Sunday PM peak hours is included in **Appendix B** as **Figure 32**, **Figure 33**, and **Figure 34**, respectively. Year 2031 SEIS Alternative 6 project trip assignment for the weekday, Friday, and Sunday PM peak hours is included in **Appendix B** as **Figure 35**, **Figure 36**, and **Figure 37**, respectively. Year 2037 SEIS Alternative 6 project trip assignment for the weekday, Friday, and Sunday PM peak hours is included in **Appendix B** as **Figure 38**, **Figure 39**, and **Figure 40**, respectively.

3.18 Future Year Traffic Volumes with SEIS Alternative 6

Future year 2025, 2031, and 2037 traffic volumes with SEIS Alternative 6 were developed by adding the 'Baseline' traffic volumes (see **Figures 5 to 13 in Appendix B**) to the SEIS Alternative 6 trip assignments (see **Figures 32 to 40** in **Appendix B**).

Year 2025 with SEIS Alternative 6 traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 41**, **Figure 42**, and **Figure 43**, respectively. Year 2031 with SEIS Alternative 6 traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 44**, **Figure 45**, and **Figure 46**, respectively. Year 2037 with SEIS Alternative 6 traffic volumes for the weekday, Friday, and Sunday PM peak hours are included in **Appendix B** as **Figure 47**, **Figure 48**, and **Figure 49**, respectively. All traffic volumes illustrated in the figures are representative of the summer peak period.

3.19 Future Year Intersection LOS with SEIS Alternative 6

Intersection LOS analyses were conducted at the 27 study intersections for future years 2025, 2031, and 2037 with SEIS Alternative 6 during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all during the peak summer period. It should be noted that LOS analyses at intersections #25-27 were only completed for the Sunday PM peak hour time period, the same as under SEIS Alternative 5.

Future years 2025, 2031, and 2037 with SEIS Alternative 6 LOS analysis results at the study intersections are summarized in **Table 20** for the weekday PM peak hour, **Table 21** for the Friday PM peak hour, and **Table 22** for the Sunday PM peak hour, all for the summer peak period. Year 2025, 2031, and 2037 'Baseline' and with SEIS Alternative 5 LOS results are also presented in **Table 20 to Table 22** for comparison purposes. Study intersections forecast to operate at non-compliant LOS (LOS D, E, or F for City intersections and LOS E or F for Kittitas County and WSDOT intersections) are shown in BOLD text in the tables. The detailed LOS reports are included in **Appendix C**. The LOS results are discussed in detail following the tables.

Study intersections forecast to operate at non-compliant LOS during the weekday summer PM peak hour with SEIS Alternative 6 are identified for potential improvements to meet the adopted LOS standards in **Section 4** (Mitigation Measures). Specific improvements to mitigate intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice, and would not be cost effective, to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

In general, the LOS results shown in **Tables 20 through 22** indicate that similar to future 'Baseline' conditions, with SEIS Alternative 6 there would be traffic congestion throughout the City, primarily at two-way stop-controlled intersections and the I-90 ramps; congestion is anticipated to be highest on summer weekends and would be expected to continue to deteriorate over time if no improvements are made.

Table 20
SEIS ALTERNATIVE 6 INTERSECTION LOS SUMMARY – WEEKDAY PM PEAK HOUR (SUMMER)

		Weekday PM Peak Hour Conditions (Summer Peak)																	
		Year 2025						Year 2031						Year 2037					
		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized																			
14. S Cle Elum Way / Stafford / W 1st St	C	B	11.5	B	12.1	B	12	B	12.8	B	13.6	B	13.7	B	13.8	B	14.7	B	14.6
16. N Oakes Ave / W 1st St (SR 903)	D	B	10.4	B	10.9	B	10.8	B	11.7	B	12.8	B	13.0	B	15.9	C	21.4	C	21.1
18. Pennsylvania Ave / 1st St (SR 903)	D	A	7.6	A	7.8	A	7.5	A	8.0	A	8.8	A	8.6	A	9.1	B	11.2	B	10.7
Roundabout																			
4. Bullfrog Rd / Suncadia Trail	D	A	5.1	A	5.4	A	5.6	A	5.9	A	6.5	A	7.5	A	7.3	A	8.5	B	10.3
6. Bullfrog Rd / W 2nd St (SR 903)	D	A	6.2	A	6.6	A	6.8	A	6.9	A	7.6	A	8.0	A	7.7	A	8.8	A	9.7
All-Way Stop-Controlled																			
17. Pennsylvania Ave / 2nd St	C	A	9.6	B	10.3	B	10.1	B	11.9	B	14.4	B	14.3	C	16.8	**D**	**25.8**	C	20.6
Two-Way Stop-Controlled [3]																			
1. Bullfrog Rd / I-90 EB Ramps	D	B	13.0	B	14.8	C	15.3	C	17.0	C	23.3	D	30.4	D	27.3	**F**	**63.5**	**F**	**> 100**
2. Bullfrog Rd / I-90 WB Ramps	D	B	10.6	B	11.5	B	11.7	B	12.7	C	15.2	C	16.9	C	19.4	D	33.7	**E**	**42.1**
3. Bullfrog Rd / Tumble Creek Dr	D	B	12.4	B	13.9	B	13.9	C	16.3	C	20.7	C	23.9	C	24.8	**E**	**46.4**	**F**	**61.1**
5. Bullfrog Rd / Firehouse Rd	D	B	11.5	B	11.9	B	12.5	B	11.8	B	12.8	B	13.4	B	11.9	B	14.0	B	14.0
7. Denny Ave / W 2nd St (SR 903)	D	C	16.6	C	23.6	C	23.3	C	20.1	**E**	**36.4**	**E**	**38.1**	D	25.8	**F**	**78.1**	**F**	**65.5**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	D	26.1	**F**	**> 100**	**F**	**95.7**	**E**	**47.8**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	C	18.1	D	34.2	D	33.3	C	23.5	**F**	**78.5**	**F**	**> 100**	D	27.4	**F**	**> 100**	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.7	A	7.9	A	7.9	A	7.9	A	8.2	A	8.3	A	8.4	A	8.9	A	9.0
11. Douglas Munro Blvd / W 1st St	C	**E**	**46.2**	**F**	**56.1**	**F**	**56.1**	**F**	**74.7**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**D**	**27.9**	**D**	**30.6**	**D**	**30.4**	**D**	**27.9**	**D**	**31.5**	**D**	**32.9**	**E**	**35.2**	**E**	**45.9**	**F**	**51.7**
13. N Stafford Ave / W 2nd St (SR 903)	D	**E**	**46.7**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	D	33.9	D	32.9	D	33.3	**E**	**45.0**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	C	20.3	A	9.9	A	9.8	B	10.2	B	10.4	B	10.6	B	10.8	B	11.4	B	11.3
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	19.3	C	21.2	C	21.7	C	22.1	D	25.3	D	29.3	D	25.4	**E**	**35.6**	**E**	**42.6**
22. SR 903 / Pacific Ave	D	B	12.0	B	12.7	B	12.8	B	14.5	C	15.7	C	16.8	C	17.2	C	19.5	C	22.2
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.7	B	10.8	B	11.0	B	11.2	B	11.5	B	11.9	B	12.2	B	12.6	B	13.2

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Table 21
SEIS ALTERNATIVE 6 INTERSECTION LOS SUMMARY – FRIDAY PM PEAK HOUR (SUMMER)

		Friday PM Peak Hour Conditions (Summer Peak)																	
		Year 2025						Year 2031						Year 2037					
		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized																			
14. S Cle Elum Way / Stafford / W 1st St	C	B	15.5	B	16.2	B	16.1	B	17.5	B	18.5	B	18.6	B	19.1	C	20.3	C	20.2
16. N Oakes Ave / W 1st St (SR 903)	D	B	13.3	B	14.2	B	14.0	B	15.1	B	16.5	B	16.7	C	20.9	D	41.8	C	27.9
18. Pennsylvania Ave / 1st St (SR 903)	D	A	7.7	A	8.6	A	8.3	A	8.9	B	10.7	A	9.9	B	10.5	B	13.5	B	12.8
Roundabout																			
4. Bullfrog Rd / Suncadia Trail	D	A	7.2	A	7.8	A	8.1	B	10.1	B	11.7	C	15.0	B	14.9	C	19.8	D	31.4
6. Bullfrog Rd / W 2nd St (SR 903)	D	A	8.2	A	8.9	A	8.0	A	9.6	B	11.0	B	11.5	B	11.0	B	13.1	B	14.8
All-Way Stop-Controlled																			
17. Pennsylvania Ave / 2nd St	C	A	9.5	B	10.2	B	10.1	B	12.3	B	15.0	B	14.7	C	20.2	**D**	**32.8**	**D**	**26.5**
Two-Way Stop-Controlled [3]																			
1. Bullfrog Rd / I-90 EB Ramps	D	C	23.5	D	33.8	**E**	**36.7**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
2. Bullfrog Rd / I-90 WB Ramps	D	C	15.9	C	19.2	C	19.4	**E**	**41.5**	**F**	**85.8**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
3. Bullfrog Rd / Tumble Creek Dr	D	B	12.5	B	14.2	B	14.2	C	17.3	C	22.8	D	28.0	C	24.6	**E**	**49.6**	**F**	**71.7**
5. Bullfrog Rd / Firehouse Rd	D	B	12.2	B	12.9	B	13.4	B	12.5	B	13.6	B	14.3	B	12.5	B	13.8	B	14.7
7. Denny Ave / W 2nd St (SR 903)	D	C	19.6	D	28.9	D	28.3	D	25.0	**E**	**48.4**	**F**	**52.3**	**E**	**36.3**	**F**	**> 100**	**F**	**> 100**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	**F**	**62.6**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	D	30.5	**F**	**83.0**	**F**	**81.5**	**F**	**77.5**	**F**	**> 100**	**F**	**> 100**	D	32.5	**F**	**> 100**	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	8.2	A	8.5	A	8.5	A	8.6	A	9.0	A	9.1	A	9.5	B	10.3	B	10.4
11. Douglas Munro Blvd / W 1st St	C	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**E**	**38.1**	**E**	**43.8**	**E**	**43.4**	**E**	**42.5**	**F**	**54.4**	**F**	**57.3**	**F**	**54.0**	**F**	**92.4**	**F**	**> 100**
13. N Stafford Ave / W 2nd St (SR 903)	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	C	24.7	**E**	**47.7**	**E**	**48.0**	**F**	**95.1**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	A	9.8	B	10.0	A	9.9	B	10.2	B	10.6	B	10.6	B	11.1	B	11.8	B	11.7
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	20.0	C	22	C	22.8	C	23.4	D	26.7	D	31.2	D	34.4	**E**	**45.1**	**F**	**64.3**
22. SR 903 / Pacific Ave	D	B	11.6	B	12.1	B	12.2	B	13.9	B	14.9	C	16.0	C	16	C	17.9	C	20.1
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.7	B	10.7	B	10.8	B	10.9	B	11.2	B	11.7	B	12.5	B	12.9	B	13.6

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Table 22
SEIS ALTERNATIVE 6 INTERSECTION LOS SUMMARY – SUNDAY PM PEAK HOUR (SUMMER)

		Sunday PM Peak Hour Conditions (Summer Peak)																	
		Year 2025						Year 2031						Year 2037					
		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6	
Study Intersection	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
Signalized																			
14. S Cle Elum Way / Stafford / W 1st St	C	B	13.9	B	14.8	B	14.7	B	15.7	B	16.8	B	17.3	B	16.9	B	18.4	B	18.4
16. N Oakes Ave / W 1st St (SR 903)	D	B	17.1	B	18.5	B	18.0	C	21.2	C	24.9	C	25.5	D	45.0	**E**	**55.1**	**E**	**56.5**
18. Pennsylvania Ave / 1st St (SR 903)	D	A	9.2	B	11.0	B	10.5	A	9.8	B	12.6	B	11.2	B	10.6	B	12.9	B	13.3
Roundabout																			
4. Bullfrog Rd / Suncadia Trail	D	B	13.7	C	15.3	C	15.7	C	20.9	D	26.3	**E**	**37.0**	**F**	**57.4**	**F**	**73.5**	**F**	**90.2**
6. Bullfrog Rd / W 2nd St (SR 903)	D	C	18.6	C	21.7	C	22.4	C	24.9	D	31.7	**E**	**40.4**	**E**	**35.1**	**E**	**49.0**	**F**	**60.7**
All-Way Stop-Controlled																			
17. Pennsylvania Ave / 2nd St	C	A	8.5	A	8.9	A	8.9	B	10.1	B	11.1	B	10.9	B	12.9	C	15.1	B	14.7
Two-Way Stop-Controlled [3]																			
1. Bullfrog Rd / I-90 EB Ramps	D	B	11.9	B	13.4	B	13	C	15.3	C	19.0	C	20.9	C	19.7	D	29.3	D	32.3
2. Bullfrog Rd / I-90 WB Ramps	D	B	10.6	B	11.0	B	11	B	12.4	B	13.6	B	14.5	C	18.5	C	24.7	D	26.9
3. Bullfrog Rd / Tumble Creek Dr	D	C	22.2	D	25.8	D	26.1	D	32.7	**E**	**43.4**	**F**	**57.7**	**F**	**63.3**	**F**	**> 100**	**F**	**> 100**
5. Bullfrog Rd / Firehouse Rd	D	C	22.5	C	24.4	D	25.1	C	22.1	C	24.1	D	25.7	D	25.7	D	29.0	D	29.7
7. Denny Ave / W 2nd St (SR 903)	D	C	23.4	D	33.1	D	31.4	D	29.6	**E**	**48.1**	**F**	**56.6**	**E**	**43.9**	**F**	**> 100**	**F**	**> 100**
8. Ranger Sta Rd / Miller / W 2nd (SR 903)	D	**F**	**56.6**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
9. N Pine St / W 2nd St (SR 903)	D	**F**	**60.1**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
10. Douglas Munro Blvd / Ranger Sta Rd	C	A	7.4	A	7.6	A	7.6	A	7.6	A	7.8	A	7.9	A	7.9	A	8.3	A	8.4
11. Douglas Munro Blvd / W 1st St	C	**E**	**46.7**	**F**	**60.7**	**F**	**58.0**	**F**	**83.2**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
12. Pine St / W 1st St	C	**E**	**49.6**	**F**	**57.6**	**F**	**72.3**	**E**	**48.5**	**F**	**58.9**	**F**	**56.3**	**F**	**54.3**	**F**	**72.3**	**F**	**65.8**
13. N Stafford Ave / W 2nd St (SR 903)	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
15. N Oakes Ave / W 2nd St (SR 903)	D	**F**	**91.6**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
19. Oakes Ave / I-90 EB Off-Ramp	D	B	14.4	C	15.2	C	15.0	C	18.1	C	19.8	C	20.2	**E**	**35.3**	**E**	**43.6**	**E**	**44.0**
20. Oakes Ave / I-90 EB On-Ramp	D	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
21. SR 903 / E Pennsylvania Ave	D	C	17.2	C	19.1	C	19.2	C	22.5	D	26.1	D	30.7	D	28.3	**E**	**35.3**	**E**	**45.1**
22. SR 903 / Pacific Ave	D	B	12.0	B	12.4	B	12.3	B	13.3	B	13.9	B	14.5	C	16.6	C	17.5	C	18.6
23. Rock Rose Rd / Morrel Rd / SR 903	D	B	10.6	B	10.8	B	10.7	B	11.1	B	11.4	B	11.5	B	12.1	B	12.5	B	12.8
24. SR 903 / SR 903 Ramp	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**
25. White Road I/C / I-90 WB Ramps	D	C	15.7	C	16.1	C	16.0	C	23.9	D	25.3	D	25.9	**F**	**52.5**	**F**	**58.9**	**F**	**60.0**
26. White Road I/C / I-90 EB Ramps	D	A	9.4	A	9.4	A	9.4	B	10.1	B	10.2	B	10.3	B	11.1	B	11.3	B	11.3
27. SR 970 / SR 970 Ramp	D	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**	**F**	**> 100**

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle.
2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

Weekday Summer PM Peak Hour. As shown in **Table 20**, the following study intersections are anticipated to operate at non-compliant LOS[8] during the weekday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 6:

- #1 - Bullfrog Road / I-90 EB Ramps – LOS F by 2037
- #2 - Bullfrog Road / I-90 WB Ramps – LOS E by 2037
- #3 - Bullfrog Road / Tumble Creek – LOS F by 2037
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS E by 2031
- #8 - Ranger Station Rd / Miller Ave / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine Street / W 2nd Street (SR 903) – LOS F by 2031
- #21 - Pennsylvania Ave / N 1st Street (SR 903) in Roslyn – LOS E by 2037

The following study intersections are anticipated to operate at non-compliant LOS[8] during the weekday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 6:

- #11 - Douglas Munro Blvd / W 1st Street – LOS E by 2025
- #12 - N Pine Street / W 1st Street – LOS D by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS E by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS E by 2031

Comparing SEIS Alternatives 5 and 6, there are two intersections that have different LOS results that would trigger non-compliant LOS during the weekday summer PM peak hour.

- #2 – Bullfrog Rd / I-90 WB Ramps – LOS E with SEIS Alternative 6 only in 2031
- #17 – Pennsylvania Ave / W 2nd Street – LOS D with SEIS Alternative 5 only in 2031

Friday Summer PM Peak Hour. As shown in **Table 21**, the following study intersections are expected to operate at non-compliant LOS[8] during the Friday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 6:

- #1 - Bullfrog Rd / I-90 EB Ramps – LOS E by 2025
- #3 - Bullfrog Rd / Tumble Creek Dr – LOS F by 2037
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS F by 2031
- #9 - N Pine Street / W 2nd Street (SR 903) – LOS F by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS E by 2025
- #17 - Pennsylvania Ave / 2nd Street – LOS D by 2037
- #21 - Pennsylvania Ave / N 1st Street (SR 903) in Roslyn – LOS F by 2037

[8] Kittitas County and WSDOT LOS standard is LOS D and City of Cle Elum LOS standard is LOS C. Therefore, non-compliant LOS is defined as LOS E/F at Kittitas County and WSDOT intersections and LOS D/E/F at City of Cle Elum intersections.

The following study intersections are anticipated to operate at non-compliant LOS during the Friday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 6:

- #2 - Bullfrog Rd / I-90 WB Ramps – LOS E by 2031
- #8 - Ranger Station Rd / Miller / W 2nd Street (SR 903) – LOS F by 2025
- #11 - Douglas Munro Blvd / W 1st Street – LOS F by 2025
- #12 - N Pine Street / W 1st Street by 2025 – LOS E by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F by 2025

Comparing SEIS Alternatives 5 and 6, there are two intersections that have different LOS results that would trigger non-compliant LOS during the weekday Friday PM peak hour.

- #1 – Bullfrog Rd / I-90 EB Ramps – LOS E with SEIS Alternative 6 only in 2025

Sunday Summer PM Peak Hour. As shown in **Table 22**, the following study intersections are expected to operate at non-compliant LOS during the Sunday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 6:

- #3 - Bullfrog Rd / Tumble Creek Dr – LOS F by 2031
- #4 - Bullfrog Rd / Suncadia Trail – LOS E by 2031
- #6 - Bullfrog Rd / W 2nd Street (SR 903) – LOS E by 2031
- #7 - Denny Ave / W 2nd Street (SR 903) – LOS F by 2031
- #16 - N Oakes Ave / W 1st Street (SR 903) – LOS E by 2037
- #21 - Pennsylvania Ave / N 1st Street (SR 903) in Roslyn – LOS E by 2037

The following study intersections are anticipated to operate at non-compliant LOS during the Sunday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 6:

- #8 - Ranger Station Rd / Miller / W 2nd Street (SR 903) – LOS F by 2025
- #9 - N Pine Street / W 2nd Street (SR 903) – LOS F by 2025
- #11 - Douglas Munro Blvd / W 1st Street – LOS E by 2025
- #12 - N Pine Street / W 1st Street by 2025 – LOS E by 2025
- #13 - N Stafford Ave / W 2nd Street (SR 903) – LOS F by 2025
- #15 - N Oakes Ave / W 2nd Street (SR 903) – LOS F by 2025
- #19 - Oakes Ave / I-90 EB Off-Ramp – LOS E by 2037
- #24 - SR 903 / SR 903 Ramp – LOS F by 2025
- #25 - White Road I/C / I-90 WB Ramps – LOS F by 2037
- #27 - SR 907 / SR 907 Ramp – LOS F by 2025

Comparing SEIS Alternatives 5 and 6, there are two intersections that have different LOS results that would trigger non-compliant LOS during the Sunday summer PM peak hour.

- #4 – Bullfrog Rd / Suncadia Trail – LOS E with SEIS Alternative 6 only in 2037
- #6 – Bullfrog Rd / W 2nd Street (SR 903) – LOS E with SEIS Alternative 6 only in 2037

3.19 Future Year Site Access LOS with SEIS Alternative 6

LOS analyses were conducted at the three site access intersections for future years 2025, 2031, and 2037 with SEIS Alternative 6 during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all during the peak summer period.

Future years 2025, 2031, and 2037 with SEIS Alternative 6 LOS analysis results at the site access intersections are summarized in **Table 23** for the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all for the summer peak period. The LOS analysis for the site access locations assumes that all site access locations would be two-way stop-controlled with the major street (Bullfrog Road and SR 903) freeflow. Site access intersections forecast to operate at non-compliant LOS (LOS E or F) are shown in BOLD text in the table.

Site access intersections forecast to operate at non-compliant LOS during the weekday summer PM peak hour with SEIS Alternative 6 are identified for potential improvements to meet the adopted LOS standards in **Section 4** (Mitigation Measures). Specific improvements to mitigate site access intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice, and would not be cost effective to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

Table 23
SEIS ALTERNATIVE 6 SITE ACCESS LOS SUMMARY [1]

		Future Conditions With SEIS Alternative 6 (Summer Peak)					
		Year 2025		Year 2031		Year 2037	
Site Access Intersection [1]	LOS Standard	LOS[1]	Delay[1]	LOS[1]	Delay[1]	LOS[1]	Delay[1]
WEEKDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	C	16.6	C	24.0	D	28.6
29. Bullfrog Road / New Connector Road	D	B	13.5	C	16.2	C	23.2
30. SR 903 / New Connector Road	D	**F**	**55.9**	**F**	**> 100**	**F**	**> 100**
FRIDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	D	25.2	**F**	**53.7**	**F**	**65.1**
29. Bullfrog Road / New Connector Road	D	C	16.2	C	24.8	D	34.7
30. SR 903 / New Connector Road	D	**F**	**82.6**	**F**	**> 100**	**F**	**> 100**
SUNDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	**E**	**48.9**	**F**	**> 100**	**F**	**> 100**
29. Bullfrog Road / New Connector Road	D	D	29.4	**F**	**> 100**	**F**	**> 100**
30. SR 903 / New Connector Road	D	**F**	**89.7**	**F**	**> 100**	**F**	**> 100**

1. LOS analysis at site access intersections assumes two-way stop control with major roadway (Bullfrog Road and SR 903) being free flow.

Weekday Summer PM Peak Hour. As shown in **Table 23**, during the weekday summer PM peak hour with SEIS Alternative 6, the site access intersection of SR 903/New Connector Road (#30) is anticipated to operate at non-compliant LOS[9] (LOS F) by 2025.

Friday Summer PM Peak Hour. As shown in **Table 23**, during the Friday summer PM peak hour with SEIS Alternative 6, the site access intersection of Bullfrog Road/RV Resort Access (#28) is anticipated to operate at non-compliant LOS (LOS F) by 2031 and SR 903/New Connector Road is anticipated to operate at LOS F by 2025.

Sunday Summer PM Peak Hour. As shown in **Table 23**, during the Sunday summer PM peak hour with SEIS Alternative 6, the site access intersections of Bullfrog Road/RV Resort Access (#28) and SR 903/New Connector Road (#30) are anticipated to operate at non-compliant LOS (LOS E and LOS F respectively) by 2025. Additionally, the site access intersection of Bullfrog Road/New Connector Road (#29) is anticipated to operate at non-compliant LOS (LOS F) by 2031.

[9] Kittitas County and WSDOT LOS standard is LOS D and City of Cle Elum LOS standard is LOS C. Therefore, non-compliant LOS is defined as LOS E/F at Kittitas County and WSDOT intersections and LOS D/E/F at City of Cle Elum intersections.

3.20 Construction Impacts with SEIS Alternative 6

SEIS Alternative 6 would result in temporary construction-related traffic impacts over the buildout of the project, which is expected to last 17 years (through 2037), with buildout of the residential and recreational components expected to last 7 years (through 2028). The buildout period would be shorter and more condensed than under SEIS Alternative 5 which is assumed to build out by 2050.

On-site grading for SEIS Alternative 6 would include an estimated 252,000 cubic yards (cy) of cut, and 308,000 cy of fill. Fill material, utility backfill, and road base would be imported from approved off-site sources. Approximately 99,000 cy of cut and 2,000 cy of fill could be required for future commercial development on the adjacent property.

The project would strive to balance the cut and fill quantities as much as possible, which would minimize trucks traffic, but some truck traffic is expected for the additional need for fill. Assuming about 12 cy capacity for a truck, the material importing activities would generate about 200 truck trips per month; this is comparable to the lower end of the truck trips estimated during construction of SEIS Alternative 5.

Off-site transport of materials would typically be hauled during daytime hours. Truck traffic would utilize new or temporary site access roads to Bullfrog Road and SR 903, and routed to either SR 903 or to/from I-90 via Bullfrog Road.

The destination of hauled material would depend on the amount of cut or fill material needed for the site, as well as regional soil needs at the time of construction. All excavation and disposal would be in accordance with local agency codes and permit requirements. The number of trucks and intensity of activity will be established and monitored through a Construction Management Plan.

Construction impacts would generally include: traffic associated with construction workers, deliveries and removal of materials by truck-trailer units, and parking associated with construction workers. In general, vehicle traffic generated by the construction activity is anticipated to be less than vehicle traffic generated by the SEIS Alternative 6 development. However, depending on construction activity, there is a potential that during some years of development, the combined total construction activity for later phases coupled with development traffic from earlier phases could be temporarily higher than with the buildout condition.

The Applicant would prepare a Construction Management Plan prior to beginning construction to minimize construction traffic impacts. A traffic monitoring plan could also be developed to manage traffic levels at the site access locations, and determine if traffic levels with construction are higher than evaluated for the project buildout. If so, additional mitigation measures could be implemented to reduce construction or general traffic levels.

Haul route agreements and truck routes would be established in coordination with the City of Cle Elum, WSDOT, and Kittitas County, as necessary, depending on the off-site location(s) where haul material would be transported.

3.21 Safety Impacts with SEIS Alternative 6

With increased traffic generated by SEIS Alternative 6, increased traffic volumes on area roadways may result in moderate increases in collisions.

Improvements identified as mitigation measures at several study intersections (see **Section 4)** include widening for merge/refuge lanes, all-way stop control, and signalization. These improvements are expected to improve traffic safety.

3.22 Transit Impacts with SEIS Alternative 6

There are no known planned improvements to public transportation service in the area. However, since SEIS Alternative 6 would bring new jobs and new residents to the vicinity, it is recommended that Cle Elum and Kittitas County evaluate and identify additional local services, including the potential for additional transit service and/or expanded transportation choices. With additional funding, it is possible that the free Kittitas County Connector that currently runs between Ellensburg and Upper Kittitas County could add stops within the 47° North development.

3.23 Non-Motorized Circulation Impacts with SEIS Alternative 6

An approximately 6-mile network of trails and sidewalks would be provided throughout the site, including: hike/bike, equestrian, and golf cart paths. These trails would generally be located around the periphery of the proposed development, and would connect to on-site development, as well as to existing off-site trails in several locations (e.g., to the trails in Suncadia to the north, the Coal Mines Trail to the northeast, and the Horse Park to the south).

Sidewalks located along one side of the on-site road connecting SR-903 and Bullfrog Road would also offer opportunities for non-motorized circulation. A total of approximately five miles of combined trails and one mile of sidewalks would be provided.

3.24 School Impacts with SEIS Alternative 6

Development of 47° North will add residential units which is expected to create additional parent-generated school traffic onto SR 903 and Bullfrog Road. Additional bus trips are also expected on SR 903 transporting school children between the schools and the 47° North development.

Increased traffic on SR 903 adjacent to the Cle Elum and Roslyn Schools site as a result of SEIS Alternative 6 may cause additional delays for vehicles and buses using the school driveway(s) on SR 903. However, traffic volumes on SR 903 are lower when school is in session (September to June) than during peak summer months (July and August) when traffic levels are highest on SR 903 and other local roads.

The traffic analysis conducted in this study evaluated traffic impacts during weekday summer when school traffic is not generated. School-related traffic impacts are typically greatest during the weekday AM peak hours between 7:00 and 9:00 a.m. which was not included in this study.

4. Mitigation Measures

This section identifies potential off-site improvements necessary to mitigate the adverse transportation impacts of the SEIS Alternatives. Where significant impacts from construction and operation of the SEIS Alternatives cannot be mitigated by known mitigation measures, significant unavoidable adverse impacts are noted in **Section 5**.

The potential mitigation measures identified in this SEIS address impacts of SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment) using the 2002 Cle Elum UGA FEIS mitigation measures and Development Agreement conditions of approval for reference. Mitigation measures include: (1) pro-rata share contributions towards intersection improvements necessary to address future LOS deficiencies as a result of either background traffic growth or SEIS Alternative 6 project traffic, and (2) a monitoring plan to identify timing and pro-rata share of future intersection improvements. The potential mitigation measures identified in this SEIS will be further defined in the Final SEIS, and the proportionate share and timing of the mitigation measures will be used to develop new conditions of approval in a new or updated Development Agreement for the 47° North project.

Note that mitigation related to intersection improvements necessary to comply with adopted LOS standards are identified based on anticipated future year LOS results during the weekday summer PM peak hour only. Improvements to mitigate intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice to mitigate for traffic conditions that only occur for a few hours a week during the summer months.

4.1 Previous FEIS Alternative 5 Mitigation Measures

Attachment B to the *Bullfrog UGA Development Agreement* (October 2002) identifies several measures and conditions of approval required to mitigate transportation impacts of the previous FEIS Alternative 5. These conditions were developed to mitigate the environmental impacts of the Bullfrog Flats Master Site Plan and arose from the *Trendwest Properties: Cle Elum UGA Final EIS* (March 2002) and various other approval processes for the project.

A summary of the transportation mitigation measures identified in the *Bullfrog UGA Development Agreement Conditions of Approval* and the current status is provided in **Table 24**. **Table 24** also provides a summary of FEIS Alternative 5 mitigation measures that would apply to SEIS Alternatives 5 or 6 (as shown in **Table 25**).

Table 24
SUMMARY OF MITIGATION MEASURES FOR FEIS ALTERNATIVE 5 [1]

Location	Transportation Conditions of Approval from Bullfrog Flats DA			Applies to SEIS Alt. 5	Applies to SEIS Alt. 6
	DA Condition of Approval #	Improvement	Status		
--	83	Construct all on-site transportation facilities		✓	✓
--	84	Site access limited to 3 locations on SR 903 and Bullfrog Road		✓	✓
S Cle Elum Way / W 1st Street	85a	Pay pro-rata share for signal	Signal completed	-	-
N Oakes Ave / W 1st Street	85b	Pay pro-rata share for signal	Signal completed[2]	-	-
Bullfrog Rd / W 2nd Street (SR 903)	85c	Pay pro-rata share for signal	Roundabout completed	-	-
W 2nd Street / N Stafford Ave	85d	Add turn lanes and/or signal		✓	✓
Pine Street / W 1st Street	85e	Add EB and WB left-turn lanes	Completed[2]	-	-
Bullfrog Rd / W 2nd Street (SR 903)	85f	Pay pro-rata share for road realignment	Completed	-	-
Bullfrog Rd / I-90 Eastbound off-ramp	85g	Pay pro-rata share to change stop sign to Bullfrog Road		✓	✓
--	86	Contribute pro-rata share at all off-site locations based on *Monitoring Program*		✓	✓
--	92	Monitoring program		✓	✓

1) Per *Bullfrog Flats UGA Development Agreement Conditions of Approval* (2002).
2) Improvements were completed by the City of Cle Elum.

4.2 Methodology for Determining Proportionate Shares

Table 25 later in this section identifies improvements that would be necessary to mitigate off-site study intersections forecast to operate at non-compliant LOS in future years 2025, 2031, or 2037 without or with SEIS Alternative 6 during the weekday summer PM peak hour. For all off-site transportation mitigation measures identified in this SEIS, pro-rata share is also estimated in **Table 25** for the 47° North project trips relative to the other components of the total future forecast traffic volumes including commercial use project trips and/or background traffic growth.

For intersections where improvements would be needed to meet adopted LOS standards based on forecast 'Baseline' conditions (without SEIS Alternatives 5 or 6), the pro-rata share for SEIS Alternative 6 is calculated by dividing the total weekday PM peak hour project traffic associated with SEIS Alternative 6 by the total forecast future weekday PM peak hour traffic volumes with SEIS Alternative 6.

For intersections where improvements would be needed to meet adopted LOS standards based on forecast conditions with SEIS Alternative 6, the pro-rata share calculations are separated for improvements required by 2031 versus improvements required by 2037. For intersections where improvements would be needed by 2031 with SEIS Alternative 6, the pro-rata share for the 47° North development only is calculated by applying the estimated percentage of 47° North trip generation versus the commercial use trip generation (see **Table 19**) for the appropriate development year (2025 or 2031) to the total SEIS Alternative 6 pro-rata share.

For intersections where improvements would be needed by 2037, there would be no pro-rata share for 47° North since the project is anticipated to be built out before 2031; therefore 100% of the pro-rata share would be for the commercial parcel.

4.3 Mitigation Measures for 'Baseline' Conditions

As shown in **Table 25,** based on the analysis presented in this SEIS, several study intersections are anticipated to operate at a non-compliant LOS under future weekday summer PM peak hour 'Baseline' conditions (without SEIS Alternatives 5 or 6) but no improvements have been identified at these intersections in the City of Cle Elum *Transportation Element*.

For these intersections where improvements would be needed based on forecast 'Baseline' conditions (without SEIS Alternatives 5 or 6), the 47° North project would contribute a pro-rata share towards intersection improvements since additional traffic would be added by the project. Intersection improvements necessary to mitigate forecast non-compliant 'Baseline' LOS such as widening for turn lanes and/or traffic signalization, and timing of these improvements, will be incorporated into a new or updated Development Agreement between the project Applicant and the City of Cle Elum.

4.4 Mitigation Measures for SEIS Alternative 5 – Approved Bullfrog Flats Master Site Plan

Based on the analysis presented in this SEIS, additional mitigation measures would be necessary for SEIS Alternative 5 when compared to the 2002 Development Agreement. This is due to the change in 'Baseline' traffic conditions, and anticipated growth in traffic projected for the vicinity area.

Intersection improvements to mitigate future non-compliant LOS with SEIS Alternative 5 are shown in **Table 25**. As shown in **Table 25**, the mitigation measures for SEIS Alternative 5 are anticipated to be similar to the mitigation measures identified for SEIS Alternative 6, which are described in the next section. This is due to the fact that the development amounts and weekday PM peak hour trip generation estimates for SEIS Alternative 5 and SEIS Alternative 6 are similar in the time periods analyzed; the RV sites proposed in SEIS Alternative 6 have approximately the same trip generation as the multi-family residential units from SEIS Alternative 5.

Note that the only intersection not shown in **Table 25** that would require intersection improvements with SEIS Alternative 5 (but not with SEIS Alternative 6) to comply with LOS standards is #17 – Pennsylvania Ave / 2nd Street which is anticipated to operate at LOS D in 2037 during the weekday PM peak hour with SEIS Alternative 5.

4.5 Mitigation Measures for SEIS Alternative 6 – Proposed 47° North Master Site Plan Amendment

Based on the analysis presented for SEIS Alternative 6, potential measures necessary to mitigate impacts of SEIS Alternative 6 include some of the same measures identified in the previous 2002 Cle Elum UGA FEIS and *Bullfrog UGA Development Agreement*, as well as new or additional measures required as a result of anticipated background traffic growth in the 'Baseline' condition, and additional traffic from the SEIS Alternative 6 residential, RV, and commercial uses.

Table 25 summarizes identified mitigation measures at off-site study intersections for SEIS Alternative 6, and also includes a preliminary estimate of the pro-rata share from the 47° North (residential and RV uses) and the commercial parcel based on forecast future traffic volumes with SEIS Alternative 6 during the year in which mitigation is necessary to maintain acceptable LOS (i.e. 2025, 2031, or 2037). For intersections where improvements would be needed by 2037, there would be no pro-rata share for 47° North since the project is anticipated to be built out before 2031; therefore 100% of the pro-rata share would be for the commercial parcel.

The pro-rata shares summarized in **Table 25** are preliminary estimates based on future traffic forecasts; the final pro-rata share percentages for the 47° North development and Commercial parcel are anticipated to be confirmed with the future Monitoring Program to be

established in a new or updated Development Agreement. The detailed pro-rata share calculations are included in **Appendix F**.

Additionally, although improvements to mitigate future non-compliant LOS at study intersections with SEIS Alternative 6 during the weekday PM peak hour for peak summer conditions have been preliminarily identified in **Table 25**, the specific mitigation to be constructed and the timing of the mitigation is anticipated to be further refined based on input and evaluation from the project Applicant and the City of Cle Elum, also with potential input from other stakeholders (Kittitas County and WSDOT) as necessary. The final mitigation measures and timing of the mitigation is anticipated to be established in the new or updated Development Agreement for the 47° North development. Other factors that may be considered by the stakeholders in determining the specific improvement and timing as part of a new or updated Development Agreement may include right-of-way acquisition, engineering criteria and feasibility, and cost.

It should be noted that the mitigation measures identified in **Table 25** are intended to mitigate the anticipated weekday PM peak hour conditions during the peak summer months. Specific improvements to mitigate intersections anticipated to operate at non-compliant LOS during the Friday and Sunday summer PM peak hours during the peak summer conditions were not identified because it is not standard traffic engineering practice to mitigate for traffic conditions that only occur for a few hours a week during the summer months. However, improvements identified to mitigate weekday PM peak hour non-compliant LOS during peak summer conditions will also improve conditions during Friday and Sunday PM peak hour conditions during both the peak summer and non-summer time periods.

Table 25
SUMMARY OF MITIGATION MEASURES FOR SEIS ALTERNATIVE 6

Off-Site Study Intersection	First Estimated Year Improvement Required (Forecast LOS)	Identified Improvement to Mitigate LOS Deficiency [1]	Mitigation Required with SEIS Alt 5?	Estimated Pro-Rata Share [2]		
				Back-ground Share [3]	SEIS Alt 6 Share	
					47° North	Commercial Parcel
IMPROVEMENTS NEEDED FOR 'BASELINE'/BACKGROUND CONDITIONS						
#11 – Douglas Munro Blvd / W 1st Street	2025 (LOS E)	Traffic Signal	--	96.7%	2.9%	0.4%
#12 – N Pine St / W 1st Street	2025 (LOS D)	Traffic Signal	--	97.4%	2.3%	0.3%
#13 – N Stafford Ave / W 2nd Street (SR 903)	2025 (LOS E)	Traffic Signal	--	80.7%	16.8%	2.5%
#15 – N Oakes Ave / W 2nd Street (SR 903)	2031 (LOS E)	Traffic Signal	--	81.8%	11.6%	6.6%
IMPROVEMENTS NEEDED FOR CONDITIONS WITH SEIS ALTERNATIVE 6 [4]						
By Year 2031:						
#8 – Ranger Sta Rd / Miller Ave / W 2nd St (SR 903)	2025 (LOS F)	Traffic Signal	Yes	n/a	87%	13%
#7 – Denny Ave / W 2nd Street (SR 903)	2031 (LOS E)	Refuge/merge lane on SR 903	Yes	n/a	64%	36%
#9 – N Pine Street / W 2nd Street (SR 903)	2031 (LOS F)	Traffic Signal	Yes	n/a	64%	36%
By Year 2037: [5]						
#1 – Bullfrog Road / I-90 EB Ramps	2037 (LOS F) [4]	Traffic Signal	Yes	n/a	0%	100%
#2 – Bullfrog Road / I-90 WB Ramps	2037 (LOS E)	Traffic Signal	No	n/a	0%	100%
#3 – Bullfrog Road / Tumble Creek Dr	2037 (LOS F)	Refuge/merge lane on Bullfrog Rd	Yes	n/a	0%	100%
#21 – Pennsylvania Ave / 1st Street (SR 903)	2037 (LOS E)	All-Way Stop	Yes	n/a	0%	100%

1) Improvement needed to mitigate non-compliant LOS during weekday PM peak hour; with improvement the intersection LOS would meet standard.
2) Estimated pro-rata share for 47° North and commercial parcel are preliminary estimates and will be adjusted based on a future Monitoring Program.
3) Share of future traffic volume growth associated with background traffic growth not specifically from SEIS Alternatives 5 or 6.
4) Mitigation not triggered by 'Baseline' conditions, but triggered by traffic generated by SEIS Alternative 6 (47° North and/or commercial parcel).
5) 47° North is anticipated to be built out by 2031. Therefore pro-rata share of mitigation triggered by SEIS Alt 6 in 2037 is 100% to the commercial parcel.
6) City of Cle Elum *Transportation Element of Comprehensive Plan* identifies this intersection will require improvements by 2040 to meet LOS standard of LOS D or better.

Mitigation Measures for 'Baseline' Conditions

The following off-site study intersections are anticipated to operate at a non-compliant LOS[10] under future weekday summer PM peak hour 'Baseline' conditions in 2025 or 2031:

- **#11 – Douglas Munro Blvd / W 1st Street** is anticipated to operate at LOS E in 2025 under 'Baseline' conditions without SEIS Alternatives 5 or 6. The identified improvement is a traffic signal.

- **#12 – N Pine Street / W 1st Street** is anticipated to operate at LOS D in 2025 under 'Baseline' conditions without SEIS Alternatives 5 or 6. The identified improvement is a traffic signal.

- **#13 – N Stafford Street / W 2nd Street (SR 903)** is anticipated to operate at LOS E in 2025 under 'Baseline' conditions without SEIS Alternatives 5 or 6. The identified improvement is a traffic signal.

- **#15 – N Oakes Ave / W 2nd Street (SR 903)** is anticipated to operate at LOS E in 2031 under 'Baseline' conditions without SEIS Alternatives 5 or 6. The identified improvement is a traffic signal.

Mitigation Measures for Year 2025 with SEIS Alternative 6

The following off-site study intersection is anticipated to operate at a non-compliant LOS[10] under future weekday summer PM peak hour conditions in 2025 with SEIS Alternative 6:

- **#8 - Ranger Station Rd / Miller Ave / W 2nd Street (SR 903)** is anticipated to operate at LOS F in 2025 with SEIS Alternative 6. The identified improvement is a traffic signal.

Mitigation Measures for Year 2031 with SEIS Alternative 6

The following off-site study intersections are anticipated to operate at a non-compliant LOS[10] under future weekday summer PM peak hour conditions in 2031 with SEIS Alternative 6:

- **#7 - Denny Ave / W 2nd Street (SR 903)** is anticipated to operate at LOS E in 2031 with SEIS Alternative 6. The identified improvement is widening of SR 903 to provide a refuge/merge lane for left-turns from Denny Ave onto SR 903.

- **#9 - N Pine Street / W 2nd Street (SR 903)** is anticipated to operate at LOS F in 2031 with SEIS Alternative 6. The identified improvement is a traffic signal.

[10] Kittitas County and WSDOT LOS standard is LOS D and City of Cle Elum LOS standard is LOS C. Therefore, non-compliant LOS is defined as LOS E/F at Kittitas County and WSDOT intersections and LOS D/E/F at City of Cle Elum intersections.

Mitigation Measures for Year 2037 with SEIS Alternative 6

The following off-site study intersections are anticipated to operate at a non-compliant LOS[10] under future weekday summer PM peak hour conditions in 2037 with SEIS Alternative 6:

- **#1 - Bullfrog Road / I-90 EB Ramps** is anticipated to operate at LOS F in 2037 with SEIS Alternative 6. The identified improvement is a traffic signal.

- **#2 - Bullfrog Road / I-90 WB Ramps** is anticipated to operate at LOS E in 2037 with SEIS Alternative 6. The identified improvement is a traffic signal.

- **#3 - Bullfrog Road / Tumble Creek Dr** is anticipated to operate at LOS F in 2037 with SEIS Alternative 6. The identified improvement is a refuge/merge lane on Bullfrog Road for left-turns from Tumble Creek Dr.

- **#21 - Pennsylvania Ave / 1st Street (SR 903) in Roslyn** is anticipated to operate at LOS E in 2037 with SEIS Alternative 6. The identified improvement is an all-way stop.

Site Access Mitigation Measures

The 47° North development will construct new on-site roadways and intersections at access points to Bullfrog Flats and SR 903 (public roads) to City of Cle Elum standards, or standards included in the new or updated Development Agreement with the City. The 47° North development will also ensure that design of the new on-site roadways meets minimum requirements for emergency vehicle access and school bus access.

Based on the results of the weekday PM peak hour LOS analysis documented in **Table 25**, the traffic control at the new 47° North site access points on Bullfrog Road and SR 903 is proposed as follows:

- **#28 – Bullfrog Road / RV Resort Access** is anticipated to operate at an acceptable LOS during the weekday PM peak hour in 2025, 2031, and 2037 with SEIS Alternative 6 as a side street stop-controlled intersection with the RV Resort Access being stop-controlled.

- **#29 – Bullfrog Road / New Connector Road** is anticipated to operate at an acceptable LOS during the weekday PM peak hour in 2025, 2031, and 2037 with SEIS Alternative 6 as a side street stop-controlled intersection with the New Connector Road being stop-controlled.

- **#30 - SR 903 / New Connector Road** is anticipated to operate at LOS F during the weekday PM peak hour in 2025, 2031, and 2037 with SEIS Alternative 6 as a side street stop-controlled intersection. The identified mitigation is a traffic signal with widening on SR 903 to accommodate a westbound left-turn lane.

4.6 Other Mitigation Measures

Traffic Monitoring Program

The 47° North development would prepare and implement a traffic monitoring program as part of a new or updated Development Agreement. It is expected that the traffic monitoring program would be similar in format and function to the previously established program documented in the 2002 Bullfrog Flats Development Agreement (Condition 92). The monitoring program would be coordinated with the City in cooperation with Kittitas County and WSDOT. The traffic monitoring program would have the following objectives:

A. Document traffic volumes at key locations (roadways and/or intersections) in the local transportation network that would be impacted by traffic generated by the 47° North development.
B. Separate traffic volumes at key locations by background traffic, 47° North development traffic, and traffic associated with development of the commercial parcel.
C. Establish the methodology by which to determine the timing and pro-rata share financial contributions for implementing transportation improvements required for mitigation.

The specific details of the traffic monitoring program, including the number of phases of monitoring, appropriate timing of phases of monitoring (i.e., at defined development years or relative to percent or number of units constructed), time periods to be counted, key locations to be counted, and reporting requirements will be coordinated with the City as part of the new or updated 47° North Development Agreement.

Construction Management Plan

The 47° North development should prepare a Construction Management Plan prior to beginning construction to minimize construction traffic impacts. Truck routes and haul route agreements for construction-related traffic would be established in coordination with the City of Cle Elum, Kittitas County, and WSDOT, as necessary. Additionally, provisions should be made in the new or updated Development Agreement between the project Applicant and City of Cle Elum for restoration of road surfaces damaged by construction traffic, if any.

Trail System and Sidewalks

The 47° North development would provide a 6-mile network of trails and sidewalks throughout the site, including: hike/bike, equestrian, and golf cart paths. These trails would generally be located around the periphery of the proposed development, and would connect to on-site development, as well as to existing off-site trails in Suncadia to the north, the Coal Mines Trail to the northeast, and the Horse Park to the south). Sidewalks would also be provided along one side of the on-site road connecting SR-903 and Bullfrog Road for non-motorized circulation.

5. Significant Unavoidable Adverse Impacts

Proposed development under SEIS Alternatives 5 and 6 would increase traffic volumes and congestion on area roadways (e.g., in the City, County, and on state facilities such as SR 903, SR 907, and I-90); this is an unavoidable effect of urban development. The LOS analysis indicates that several of the studied intersections would exceed LOS standards during the PM summer peak hours in the future analysis years with the additional traffic generated by the SEIS Alternatives; some of these intersections would also exceed the LOS standards without the projects due to continued growth in background traffic, without the projects. The mitigation measures listed above would offset or reduce the significant adverse impacts under SEIS Alternative 6. These measures will be refined in the Final SEIS to represent the project's proportional share of required improvement measures more accurately. The measures will ultimately be included in a new or updated Development Agreement between the Applicant and the City.

APPENDIX A

Fehr & Peers Traffic Forecasting Memo

FEHR PEERS

Memorandum

Date: July 2, 2020

To: Ben Annen, HLA

From: Daniel Dye & Simon Zhang, Fehr & Peers

Subject: 47° North (Bullfrog Flats) Traffic Forecasts

SE19-0680.00

This memo documents the methodology used for traffic volume forecasting for the 47° North development in Cle Elum, Kittitas County, Washington. This forecasting utilizes a previous travel demand model developed and refined for other Kittitas County projects.

The intent of the traffic volume forecasting is to provide an update to the Supplemental Environmental Impact Statement for the 47° North (formerly Bullfrog Flats) development located to the west of Cle Elum. Land use information for Cle Elum and the surrounding areas were updated based on a workshop with City Staff on August 2nd, 2019. Additional updates to the growth rate for Suncadia and City Heights were incorporated in the model in spring 2020. Fehr & Peers calibrated and updated the travel model to forecast traffic volumes at study intersections.

Model Calibration

A Kittitas County Travel Demand Model was created by PTV in 2007 using Visum software. The model represents the weekday PM peak hour period and includes the entire county. Fehr & Peers updated the model in 2017 for the City of Ellensburg and Kittitas County Comprehensive Plan Updates. The model was also updated for use on the Upper Kittitas County Task Force project in 2019. The model has a 2017 base year and a forecast horizon year of 2035. For the 47° North project specifically, Fehr & Peers updated land use information and edited the roadway network to include all study intersections identified in the project scope. On August 2nd, 2019, Fehr & Peers facilitated a half-day workshop with City of Cle Elum and HLA staff to review the 2037 land use information for the study area, including housing for single family and multi-family, employment for retail, industrial, recreation, etc. Land use growth was reallocated to the appropriate analysis zones based on City input at this workshop. Additional information on the rate of housing development for Suncadia and City Heights was incorporated in the future year travel models in Spring 2020.

Results from the base year model were compared against 2019 weekday PM traffic counts provided by TENW for calibration. Parameters including speed limits, capacity and centroid connections were updated as necessary to ensure the model produces similar traffic patterns as existing condition.

Overall, the model overestimates the volumes on W 2nd Street and underestimates the volumes on W 1st Street. In order to calibrate the model, the capacity and speed limit of W 2nd Street roads were reduced so that more vehicles will use W 1st Street. This calibrated model was found to accurately reflect existing volumes and travel patterns. This calibrated model was used as the basis for future year models.

Background Growth

Fehr & Peers prepared traffic forecasts for the following buildout years:

- 2025 (Concurrency Horizon)
- 2031 (Interim Year)
- 2037 (Full Buildout)

2025 and 2031 land use inputs were interpolated based on model results from 2017 and updated 2037 scenarios, assuming a constant rate of development each year. Specific pipeline developments

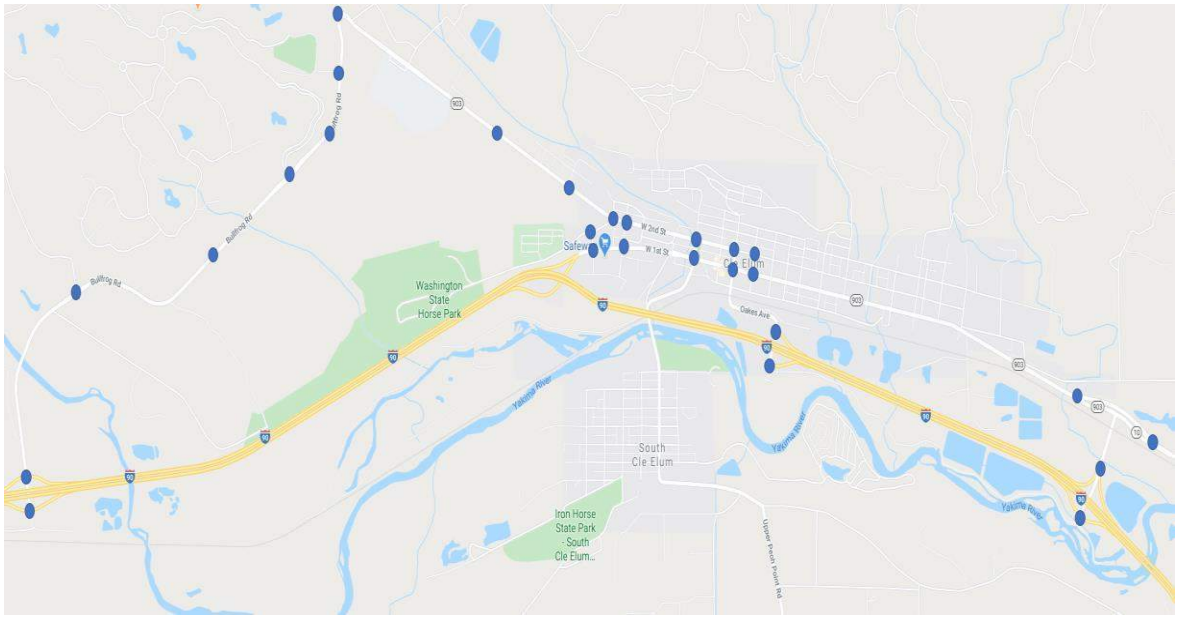
- Overall land use growth in Cle Elum was based on Kittitas County growth estimates and was distributed per Cle Elum Staff direction, but single family home growth is considerably higher than included in the Kittitas County Comprehensive Plan due to pipeline growth in the Cle Elum area.
- For Suncadia, the rate of development was based on historical building permit data. An annual average of 63 single-family units were added to the Suncadia area to reflect historical levels of development.
- For City Heights, 48 single-family units are anticipated to be built annually.
- Cle Elum Pines was assigned an additional 80 single-family units over the planning horizon, or about 4.5 homes annually.

Total entering traffic volumes for the study intersection are expected to increase approximately 3-5% per year during the analysis horizon. This is driven by increased development throughout the Cle Elum and larger Kittitas County area.

Fehr & Peers provided intersection forecasts for 30 study intersections (see **Figure 1**) for the following time periods:

- Weekday PM peak hour
- Friday PM peak hour
- Sunday PM peak hour

Figure 1: Study Intersections



Fehr & Peers utilized the standard forecasting process of applying the difference method to forecast future turning movement volumes. The difference method applies modeled growth to existing actual turning movement counts to provide more certainty in forecasts than simply using model volumes without existing data. This method was used for forecasting weekday volumes. For Friday and Sunday volumes, a ratio of existing Friday or Sunday volumes to existing weekday volumes was used. This allows for use of the weekday PM travel model to forecast Friday and Sunday volumes using the existing traffic volume relationships between different days of the week.

Project Trip Modeling

Alternatives

Two project alternatives were modeled:

1. Alternative 5 represented the preferred alternative completed previously.
2. Alternative 6 is a new proposal created as part of this FEIS process.

Trip generation calculations were provided by TENW and checked for reasonableness by Fehr & Peers. Two additional 2037 model runs were executed to analyze trip distribution and trip assignments under each project alternative. Trip generation summaries and access assumptions for both alternatives are shown below in **Table 1** and **Table 2**. Friday trip generation is identical to weekday trip generation and is therefore omitted.

Table 1: Trip Generation Summary for Alternative 5

Scenario	Land Use Assumption	Weekday PM Peak Hour			Sunday Peak Hour		
		In	Out	Total	In	Out	Total
Year 2025	319 single family 469 multi family 70,000 SF business park	351	252	603	297	283	580
Year 2031	433 single family 524 multi family 245,000 SF business park	449	388	837	366	347	713
Year 2037	587 single family 524 multi family 490,000 SF business park	570	554	1124	445	416	861

Source: TENW, 2019

Table 2: Trip Generation Summary for Alternative 6

Scenario	Land Use Assumption	Weekday PM Peak Hour			Sunday Peak Hour		
		In	Out	Total	In	Out	Total
Year 2025	264 single family 180 multi family 627 RV sites 8,500 SF retail 6,500 SF restaurant	366	214	580	260	246	506
Year 2031	527 single family 180 multi family 627 RV sites 45,000 SF grocery store 17,000 SF retail 13,000 SF restaurant	620	392	1,012	514	490	1,004
Year 2037	527 single family 180 multi family 627 RV sites 45,000 SF grocery store 25,000 SF retail 20,000 SF restaurant 60,000 SF medical office	686	539	1,225	520	492	1,012

Source: TENW, 2019

Trip Distribution and Assignment

Figure 2 and **Figure 3** show the planned land use areas and access points for each alternative. The internal roadway network and project access points were added to the travel demand model. Trips were distributed out to the transportation network and study areas based on the travel demand model calculations along with professional engineering judgement. The engineering judgement was based on knowledge of the area, expected travel patterns for different land use types, and knowledge of the roadway network.

These distributions largely remain the same amongst each alternative, but there are differences between the alternatives due to changes in land use, year of buildout, and different travel patterns depending on the day of the week. For example, Alternative 5 included a business park which would have similar travel patterns to office land use, while Alternative 6 includes retail, restaurants, and a grocery store that have different travel patterns than an office. For Alternative 6, adjustments were made to the 2025 and 2031 buildout year trip distributions to account for the phased development of commercial property. Adjustments were also made to account for the recreational nature of travel in the Cle Elum area by adjusting distributions between days of the week.

The trip distributions are shown as an attachment to this document. Rounding in these figures may cause some numbers to appear not to add up exactly. The trip distributions vary between years and alternatives due to changes in land use and the phasing of different types of development. The distributions are included as follows:

1. Alt 5 Inbound-Represents the inbound weekday and Friday trip distribution for Alternative 5 across all years.
2. Alt 5 Outbound-Represents the outbound weekday and Friday trip distribution for Alternative 5 across all years.
3. Alt 6 Inbound-Represents the inbound weekday and Friday trip distribution for Alternative 6 only for 2037.
4. Alt 6 Outbound-Represents the outbound weekday and Friday trip distribution for Alternative 6 only for 2037.
5. 2025 Alt 6 Inbound-Represents the inbound weekday and Friday trip distribution for Alternative 6 only for 2025. The phasing of retail development changes trip distribution patterns across the study years.
6. 2025 Alt 6 Outbound-Represents the outbound weekday and Friday trip distribution for Alternative 6 only for 2025. The phasing of retail development changes trip distribution patterns across the study years.
7. 2031 Alt 6 Inbound-Represents the inbound weekday and Friday trip distribution for Alternative 6 only for 2031. The phasing of retail development changes trip distribution patterns across the study years.

8. 2031 Alt 6 Outbound-Represents the outbound weekday and Friday trip distribution for Alternative 6 only for 2031. The phasing of retail development changes trip distribution patterns across the study years.
9. Alt 5 Sunday-Represents the inbound and outbound trip distribution for Alternative 5 on Sunday. Because the Sunday scenario represents a midday condition, travel is expected to be balanced between inbound and outbound distributions.
10. Alt 6 Sunday-Represents the inbound and outbound trip distribution for Alternative 6 on Sunday. Because the Sunday scenario represents a midday condition, travel is expected to be balanced between inbound and outbound distributions.

Figure 2: 47° North Trip Access Assumptions for Alternative 5

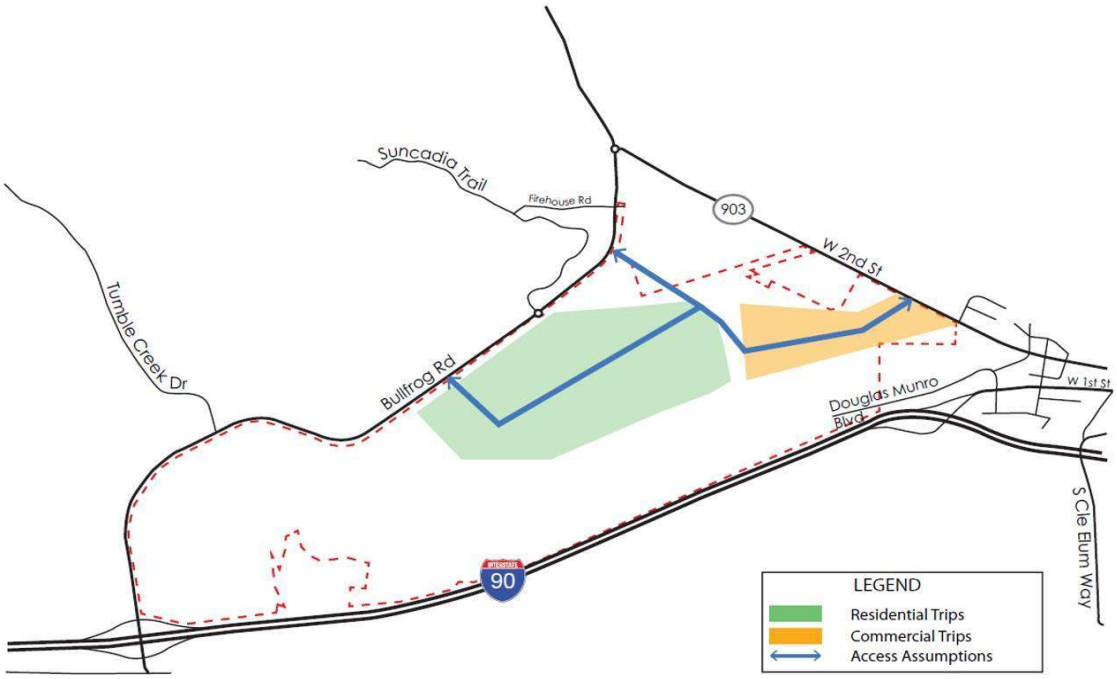
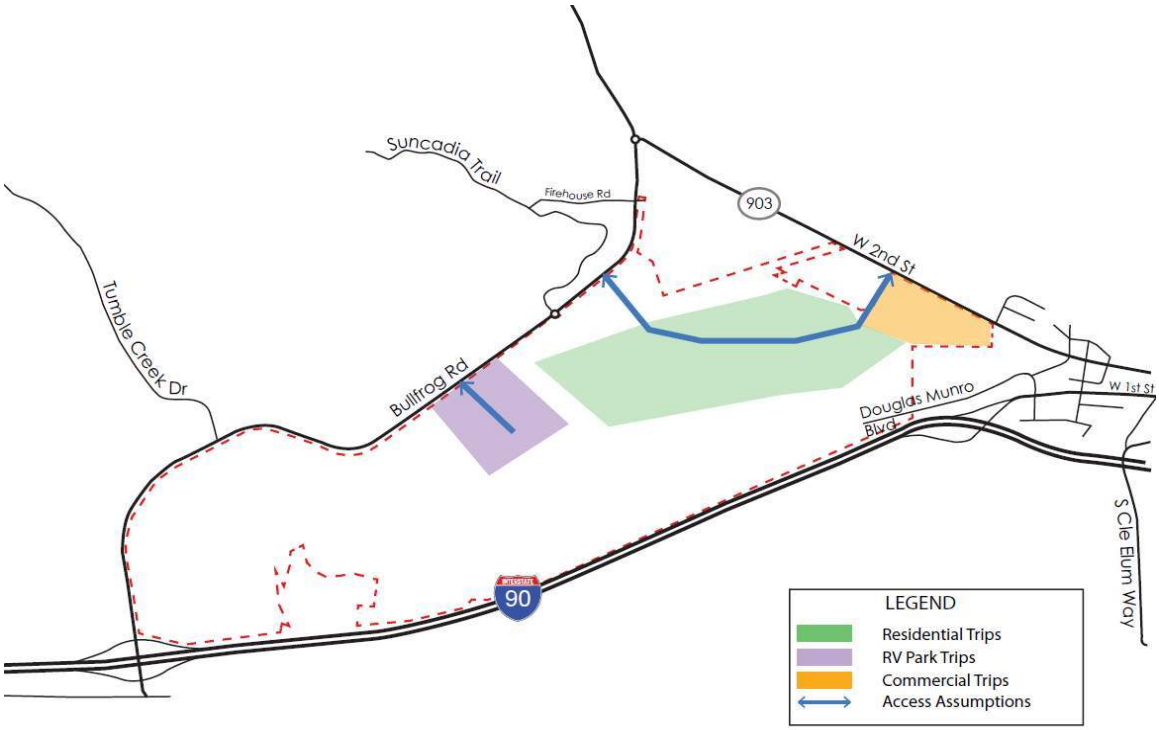


Figure 3: 47° North Trip Access Assumptions for Alternative 6



Once trip distribution calculations were completed and reviewed by TENW, project trips were assigned to each study intersection. These project trips were provided to TENW for each turning movement at each study intersection. These project trips can be added to the background traffic forecasts to analyze traffic operations with forecasted project trips.

ALT 5 INBOUND

1%
0%
Ronald
0.5%
903
3%
Roslyn
0.5%
2%
S 1st St
3%
903
Swiftwater Cellars
10%
3%
3%
3%
6%
12%
6%
903
3%
58%
Safeway
W 2nd St
W 1st St
Cle Elum
27%
1%
Bullfrog Rd
26%
15%
6%
Washington
State
Horse Park
2%
90
10%
903
4%
South
Cle Elum
15%
90
10%
90
903
11%
5%
90
Yakima River
Upper Peoh Point Rd

ALT 5 OUTBOUND

3%

Ronald

0.5%

0.5%

903

Roslyn

1%

3%

S 1st St

7%

903

Swiftwater Cellars

15%

2%

2%

4%

9%

Bullfrog Rd

13%

903

1%

62%

1%

17%

4%

11%

Bullfrog Rd

Safeway

2%

W 2nd St

W 1st St

Cle Elum

36%

Washington State Horse Park

90

8%

903

903

9%

4%

South Cle Elum

90

7%

90

9%

Yakima River

Upper Peoh Point Rd

3%

ALT 6 INBOUND

5%
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Ronald
903
5%
Roslyn
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3%
S 1st St
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903
20%
4%
4%
Swiftwater Cellars
3%
25%
12%
Bullfrog Rd
903
10%
40%
44%
Safeway
W 2nd St
W 1st St
Cle Elum
22%
6%
2%
Bullfrog Rd
29%
7%
Washington
State
Horse Park
2%
90
8%
903
903
5%
3%
South
Cle Elum
90
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90
4%
19%
Yakima River
Upper Peoh Point Rd

ALT 6 OUTBOUND

3%

Ronald

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903

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Roslyn

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4%

S 1st St

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903

17%

5%

4%

6%

16%

Bullfrog Rd

10%

10%

903

55%

58%

Safeway

W 2nd St

W 1st St

Cle Elum

36%

2%

16%

Bullfrog Rd

4%

5%

2%

Washington State Horse Park

90

7%

903

903

5%

5%

South Cle Elum

8%

90

6%

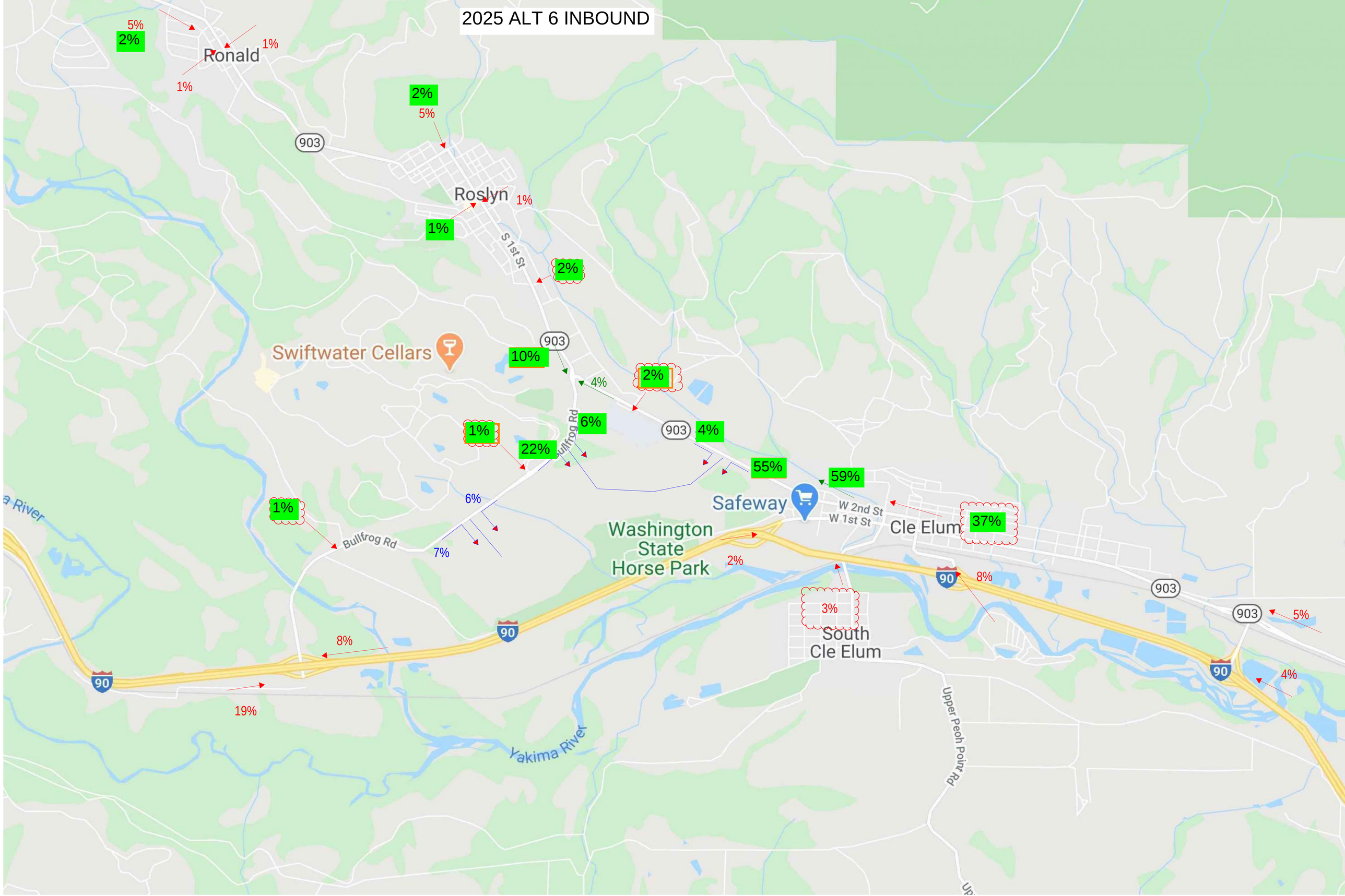
90

3%

Yakima River

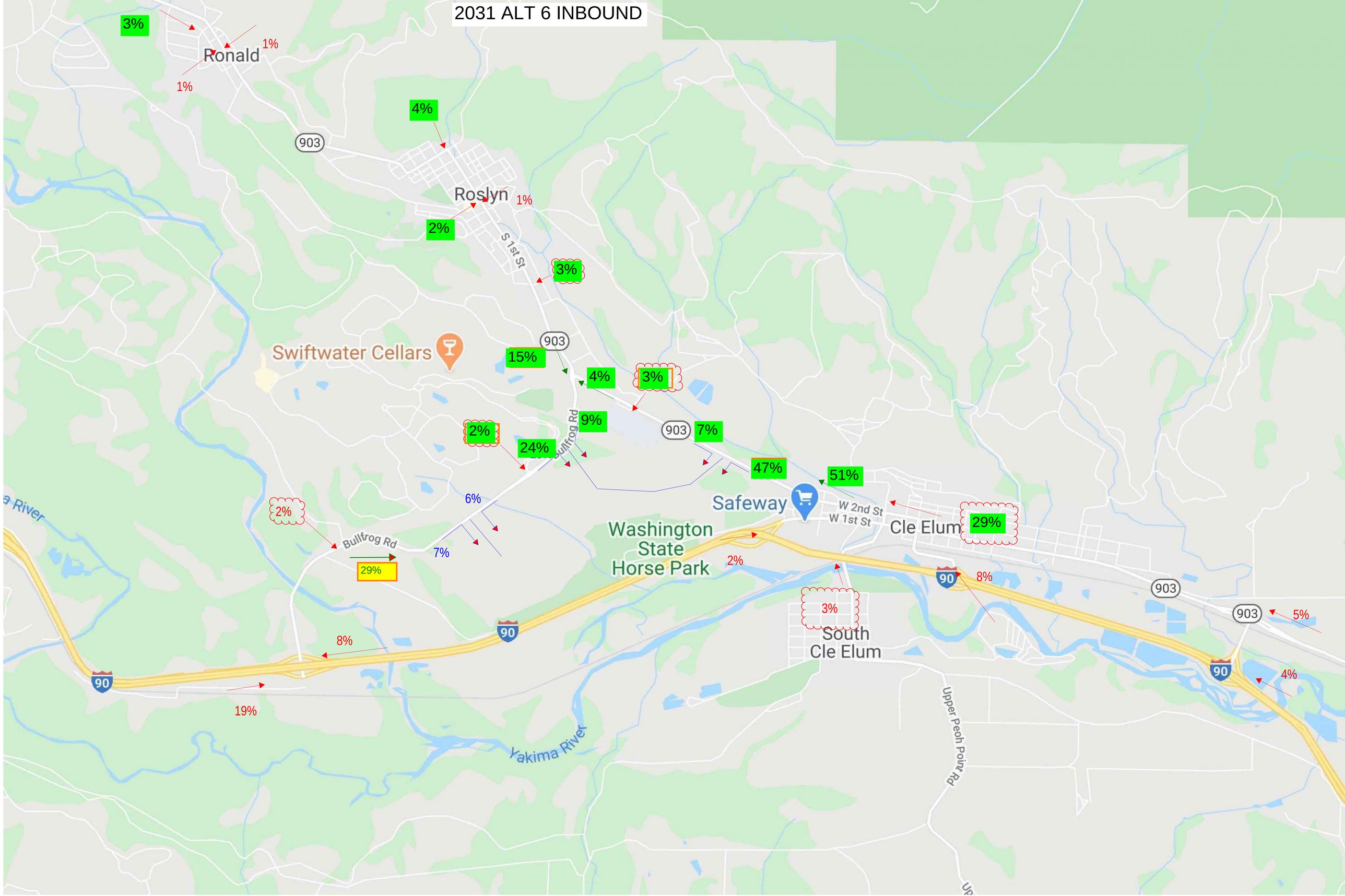
Upper Peoh Point Rd

2025 ALT 6 INBOUND



2025 ALT 6 OUTBOUND

3%
0.5%
0.5%
Ronald
903
1%
Roslyn
2%
2%
S 1st St
4%
903
Swiftwater Cellars
13%
2%
3%
7%
4%
903
6%
16%
62%
65%
Bullfrog Rd
2%
16%
4%
5%
Safeway
W 2nd St
W 1st St
Cle Elum
43%
Washington State Horse Park
2%
90
5%
7%
903
903
5%
8%
90
90
6%
South Cle Elum
Yakima River
Upper Peoh Point Rd
3%


2031 ALT 6 INBOUND
3%
Ronald
1%
1%
903
4%
Roslyn
1%
2%
S 1st St
3%
903
Swiftwater Cellars
15%
4%
3%
9%
903
7%
2%
24%
Bullfrog Rd
47%
51%
6%
Safeway
W 2nd St
W 1st St
Cle Elum
29%
2%
Bullfrog Rd
29%
7%
Washington
State
Horse Park
2%
90
8%
903
3%
South
Cle Elum
903
5%
90
90
4%
19%
8%
Yakima River
Upper Peoh Point Rd

2031 ALT 6 OUTBOUND

3%
0.5%
0.5%
Ronald
903
1%
Roslyn
2%
3%
S 1st St
5%
903
Swiftwater Cellars
15%
3%
3%
8%
5%
16%
Bullfrog Rd
903
8%
59%
62%
Safeway
W 2nd St
W 1st St
Cle Elum
40%
2%
16%
4%
5%
Washington State Horse Park
90
7%
903
903
5%
5%
South Cle Elum
90
8%
90
6%
3%
Yakima River
Upper Peoh Point Rd

ALT 5 Sunday

3%

0.5%

0.5%

Ronald

903

Roslyn

1%

3%

S 1st St

4%

903

12%

2%

2%

Swiftwater Cellars

4%

9%

11%

Bullfrog Rd

903

2%

60%

5%

13%

21%

1%

Bullfrog Rd

Safeway

2%

W 2nd St

W 1st St

Cle Elum

32%

Washington State Horse Park

90

9%

903

903

10%

4%

South Cle Elum

8%

90

12%

90

Yakima River

Upper Peoh Point Rd

ALT 6 Sunday

4%

Ronald

0.5%

0.5%

903

2%

Roslyn

2%

4%

S 1st St

5%

903

Swiftwater Cellars

18%

4%

4%

6%

11%

20%

Bullfrog Rd

903

10%

48%

50%

5%

6%

2%

Bullfrog Rd

Safeway

W 2nd St

W 1st St

Cle Elum

27%

2%

Washington State Horse Park

90

8%

903

903

5%

14%

90

90

4%

South Cle Elum

7%

Yakima River

Upper Peoh Point Rd

4%

APPENDIX B

Figures

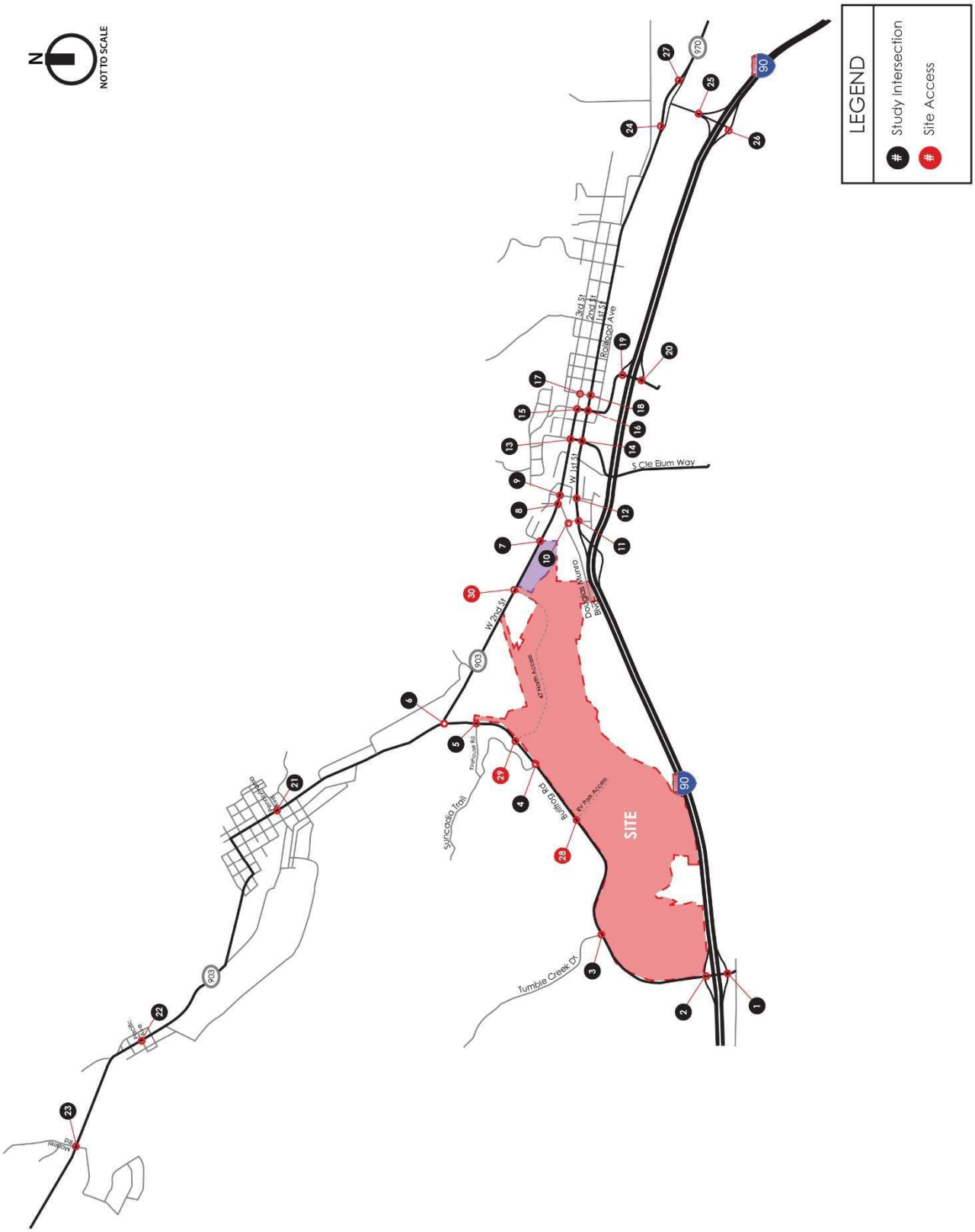


Figure 1: Project Site Vicinity and Study Intersections

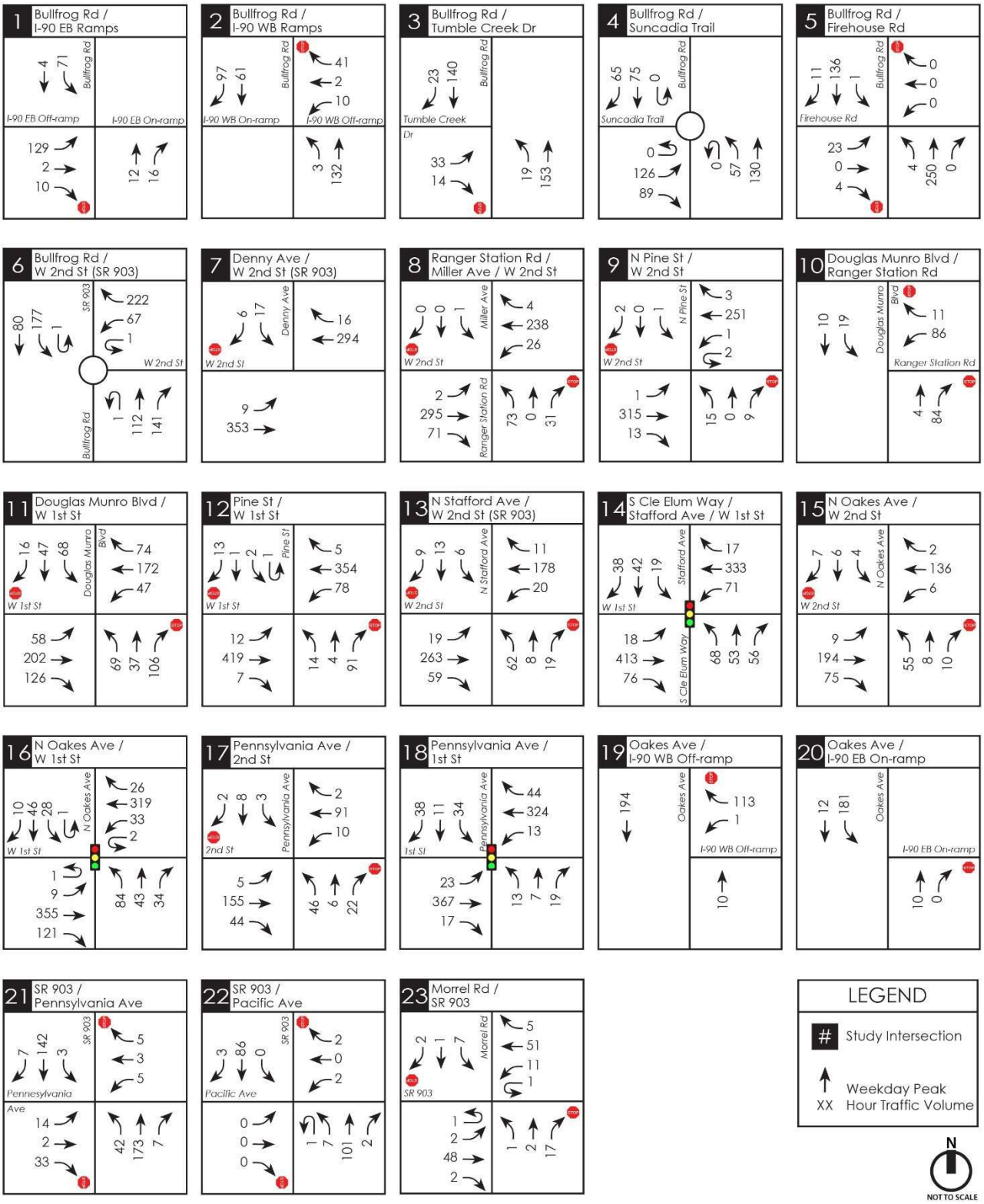


Figure 2: 2019 Existing Weekday PM Peak Hour Traffic Volumes

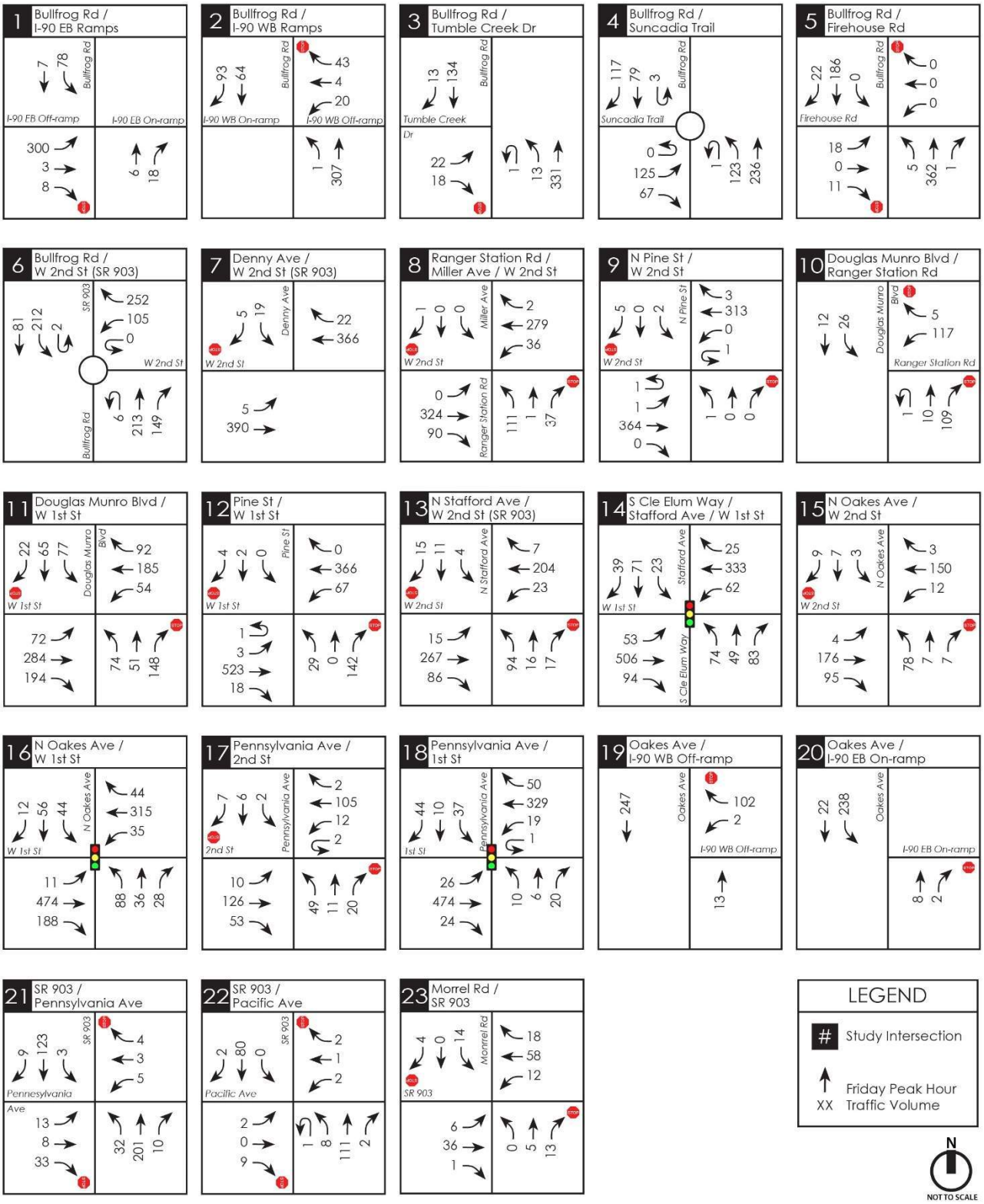


Figure 3: 2019 Existing Friday Peak Hour Traffic Volumes

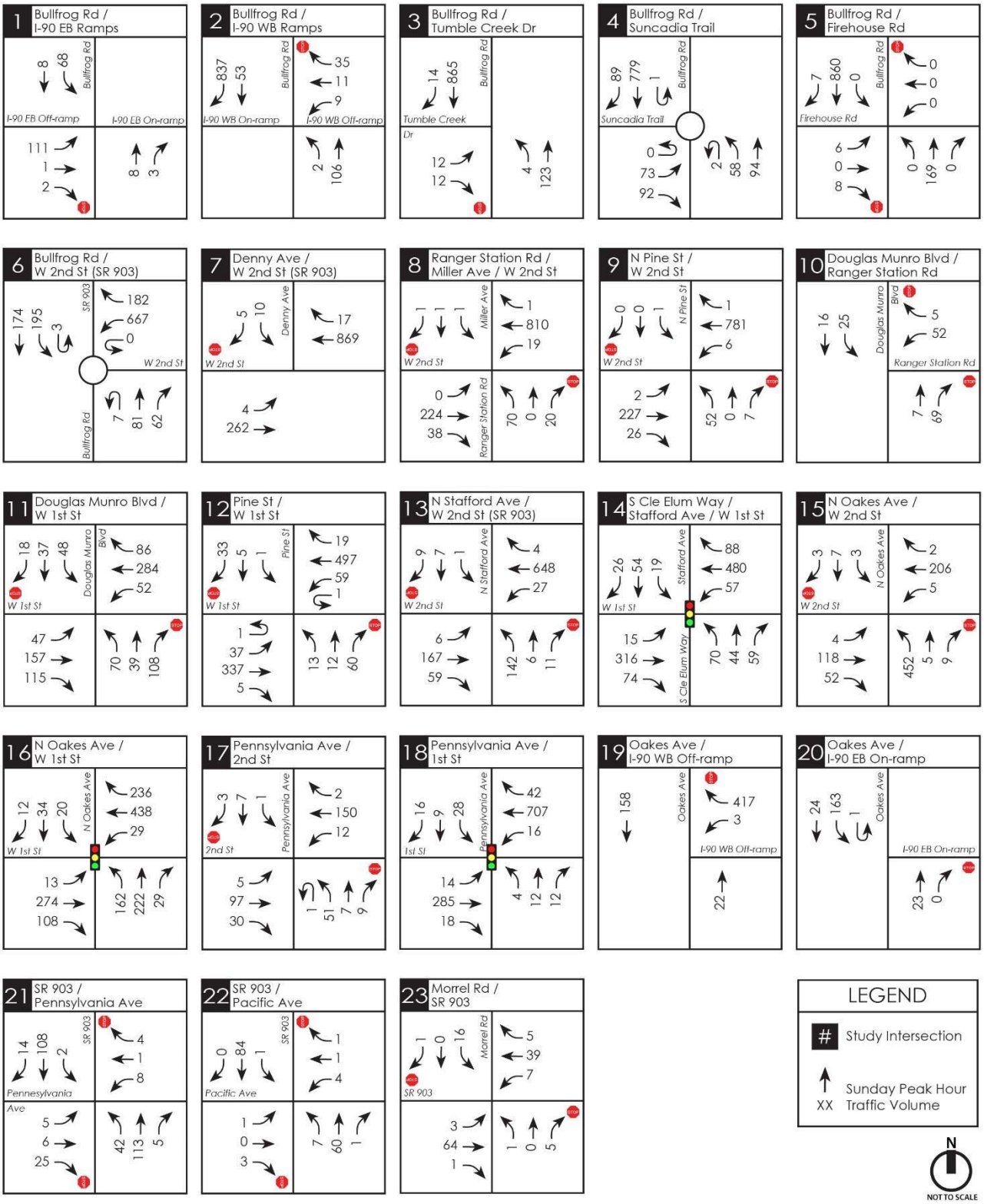


Figure 4: 2019 Existing Sunday Peak Hour Traffic Volumes (Page 1)

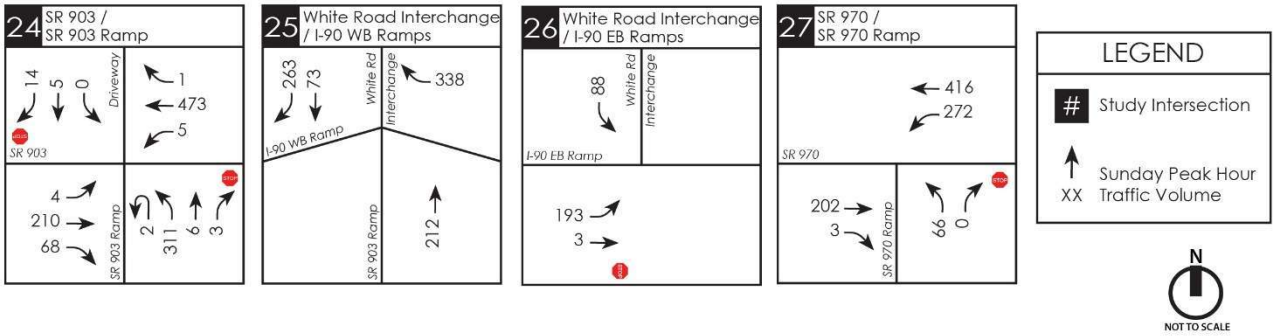


Figure 4: 2019 Existing Sunday Peak Hour Traffic Volumes (Page 2)

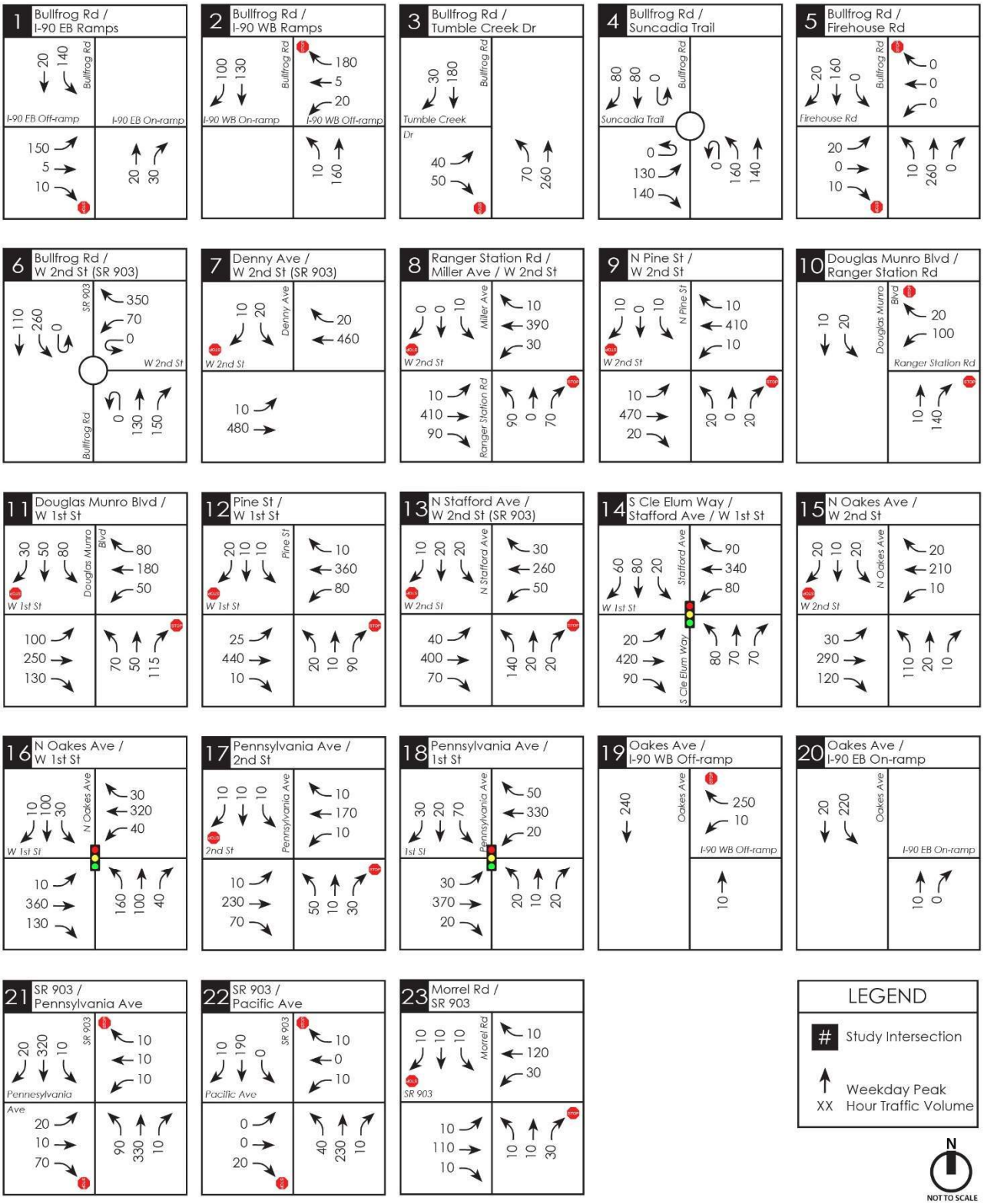


Figure 5: 2025 Baseline Weekday PM Peak Hour Traffic Volumes

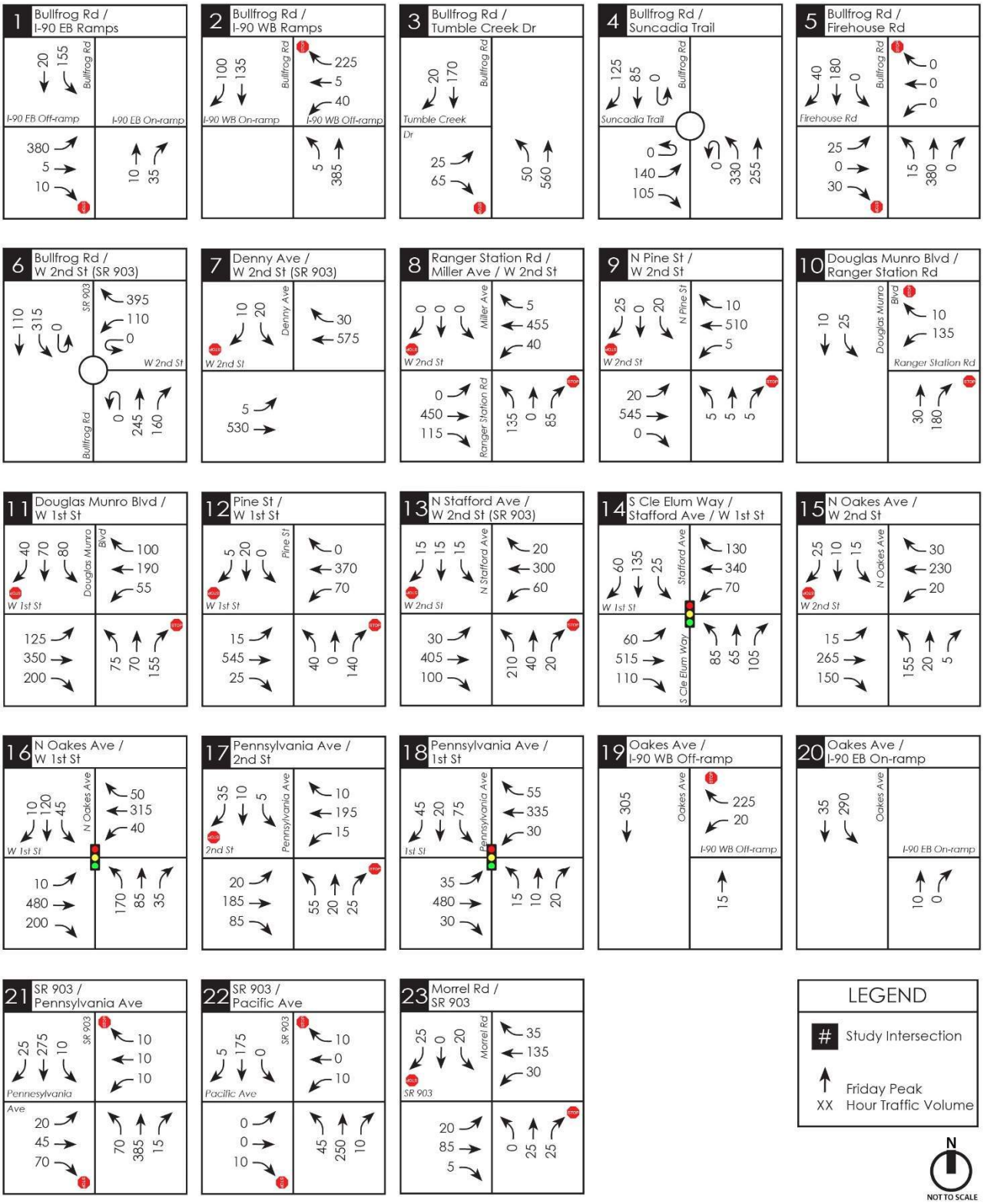


Figure 6: 2025 Baseline Friday PM Peak Hour Traffic Volumes

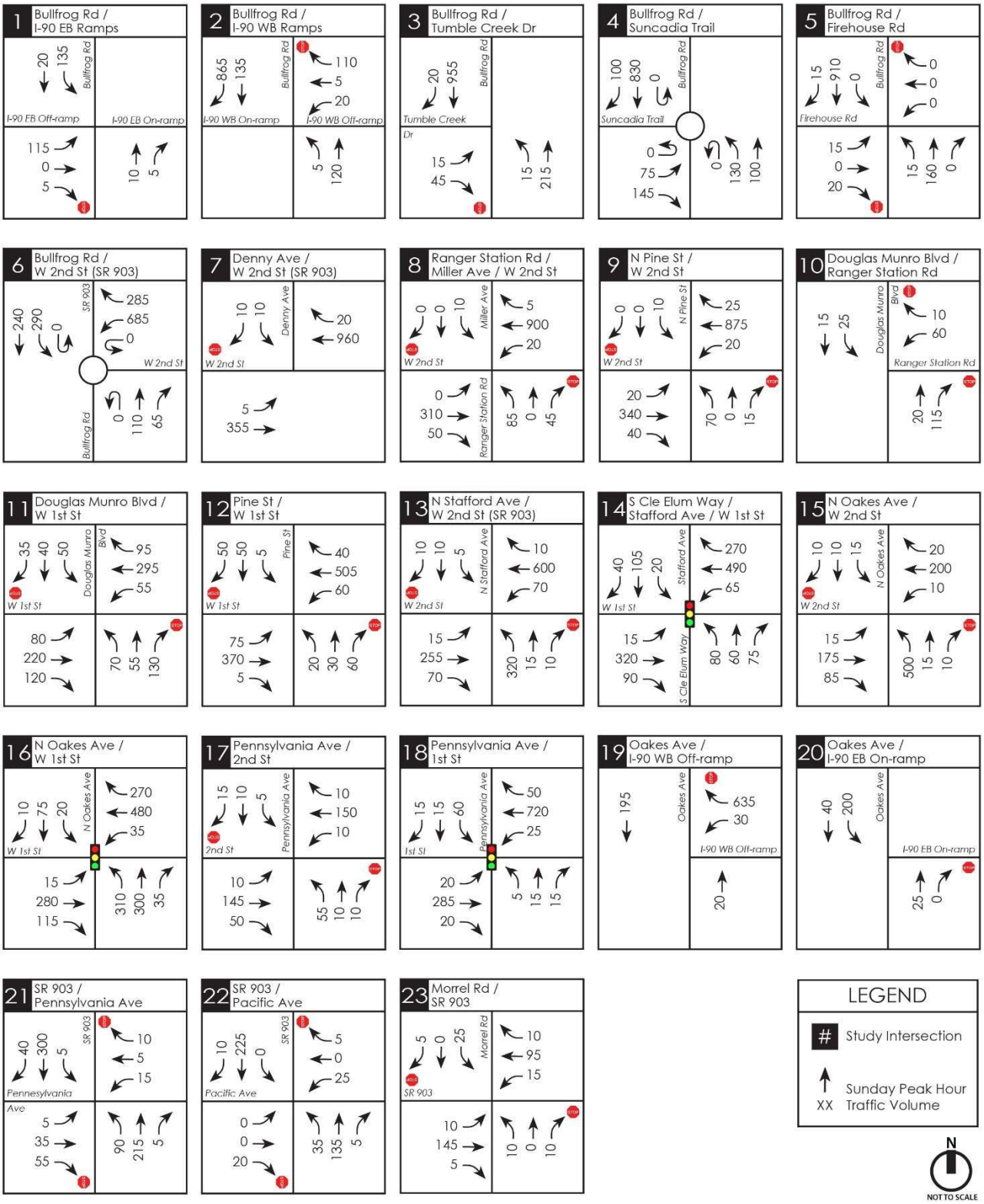


Figure 7: 2025 Baseline Sunday Peak Hour Traffic Volumes (Page 1)

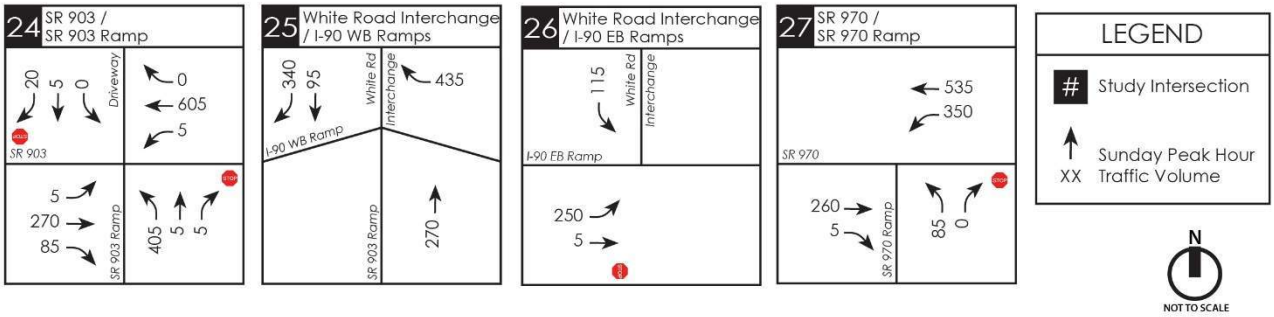


Figure 7: 2025 Baseline Sunday Peak Hour Traffic Volumes (Page 2)

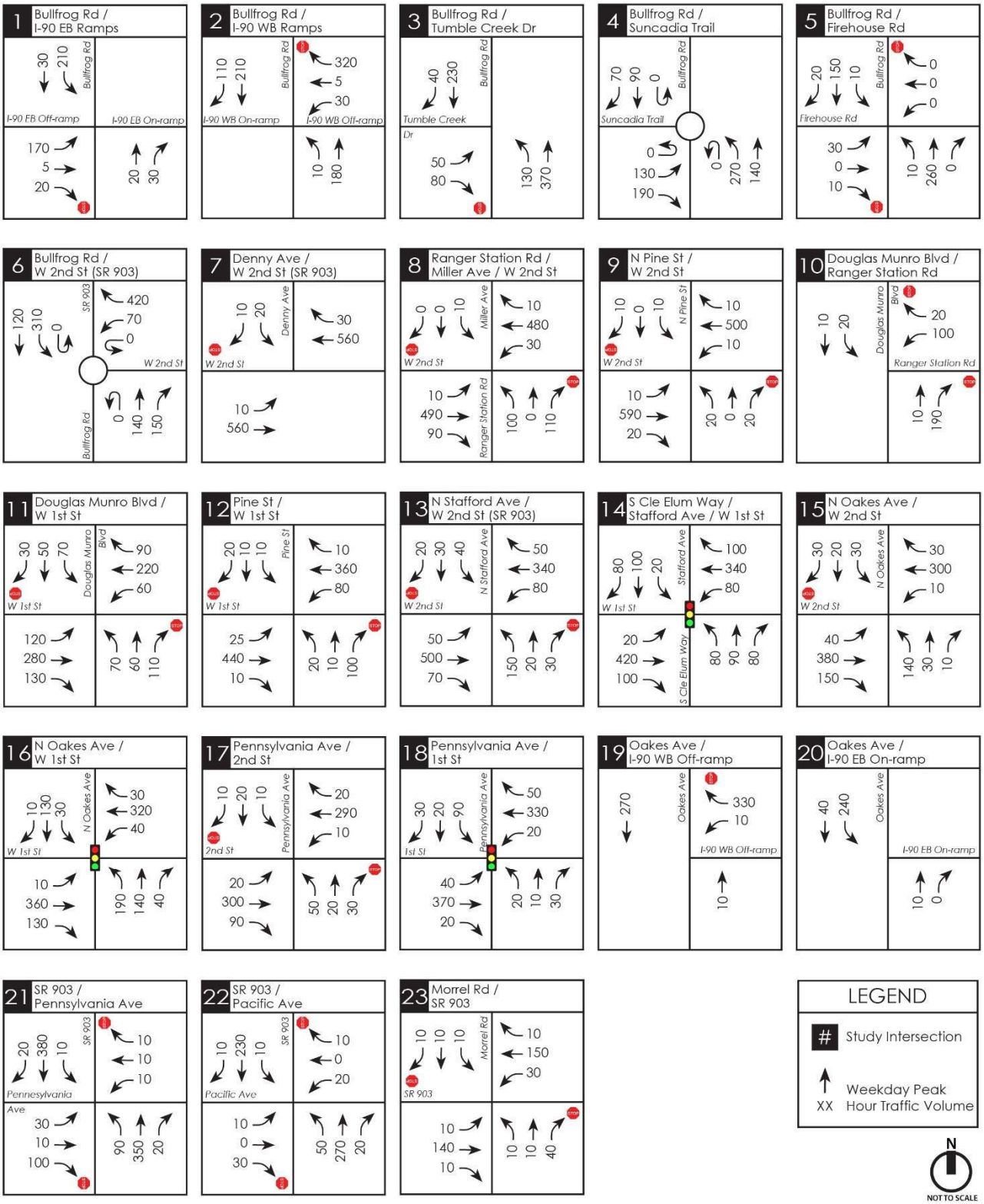


Figure 8: 2031 Baseline Weekday PM Peak Hour Traffic Volumes

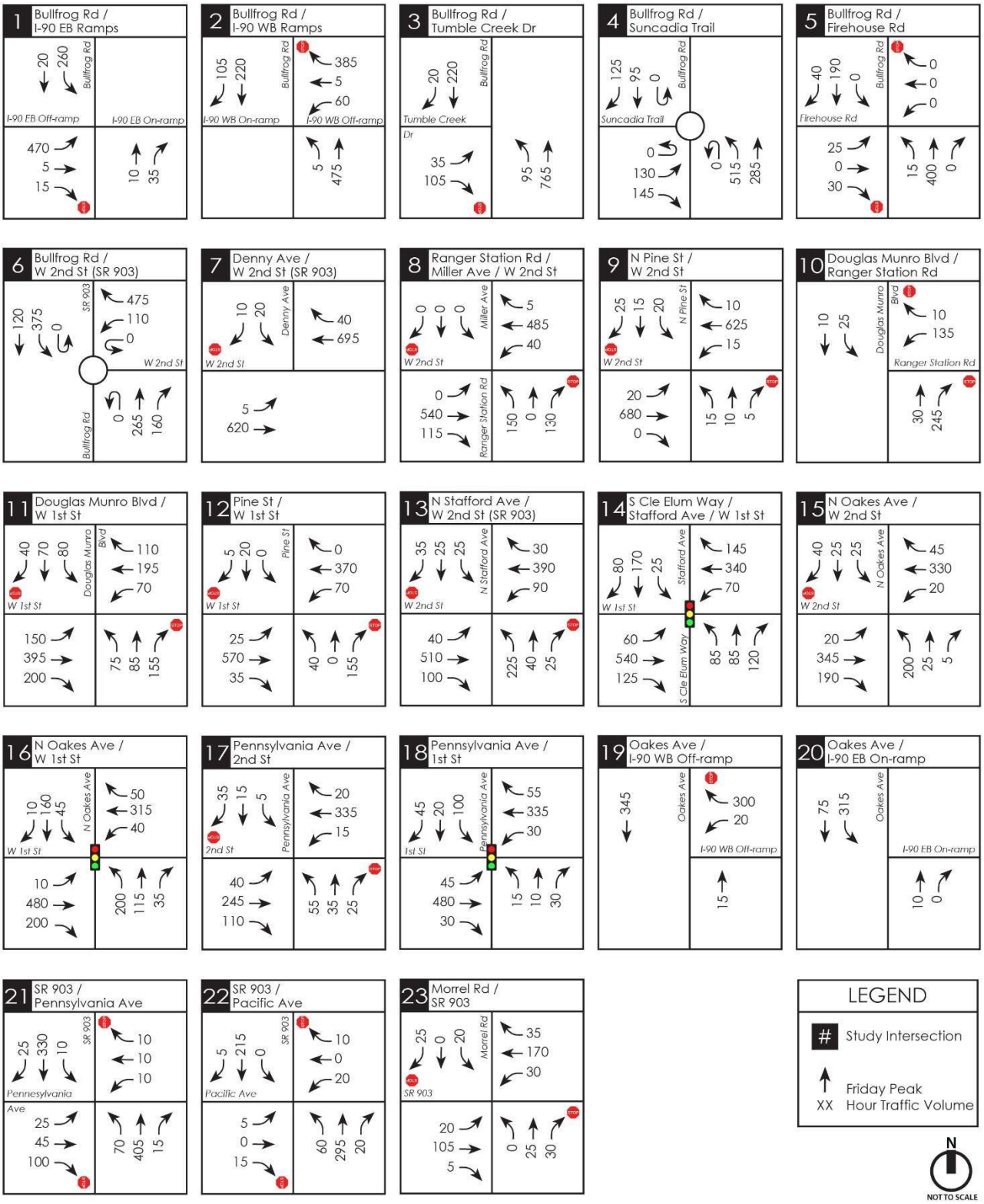


Figure 9: 2031 Baseline Friday PM Peak Hour Traffic Volumes

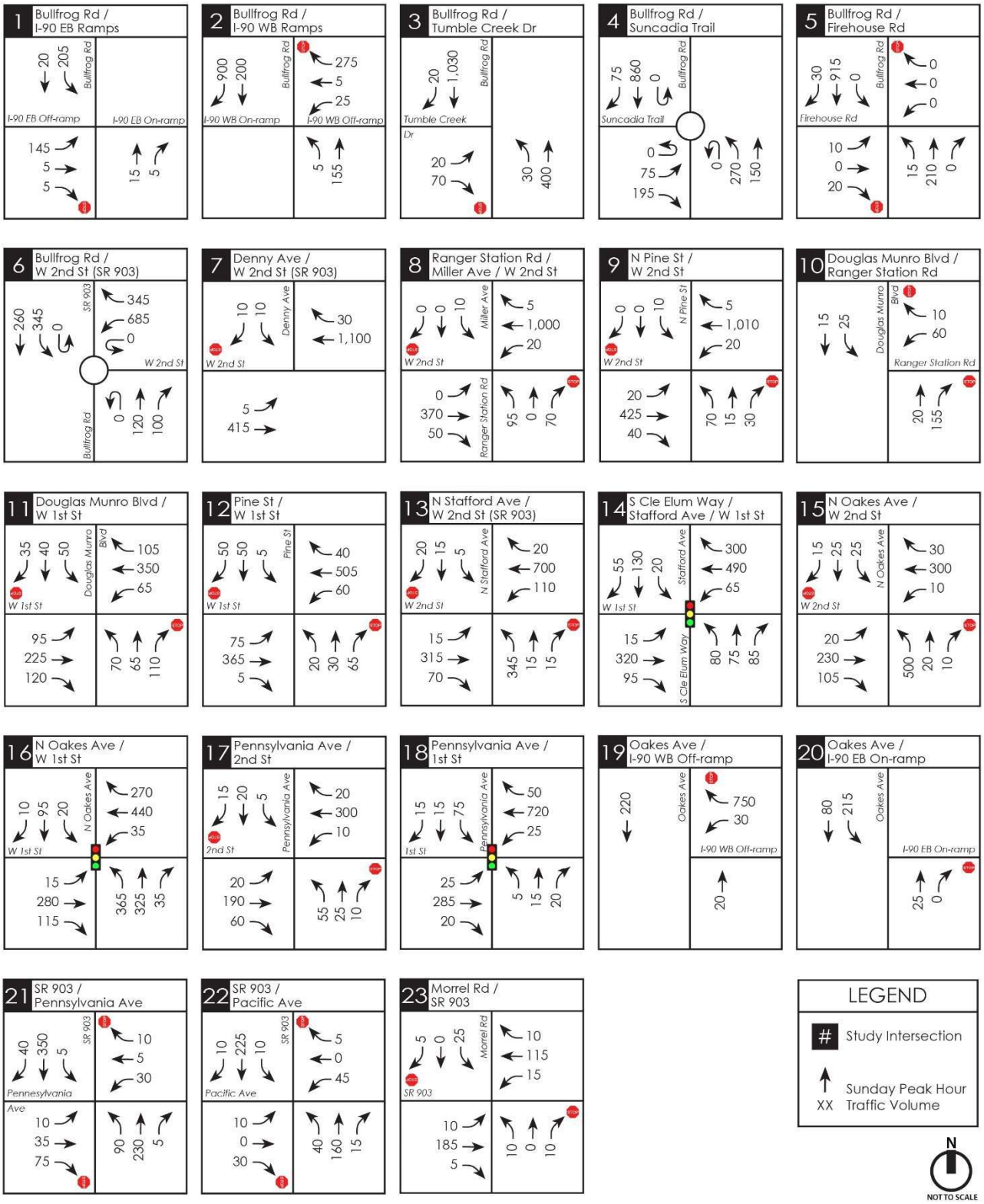


Figure 10: 2031 Baseline Sunday Peak Hour Traffic Volumes (Page 1)

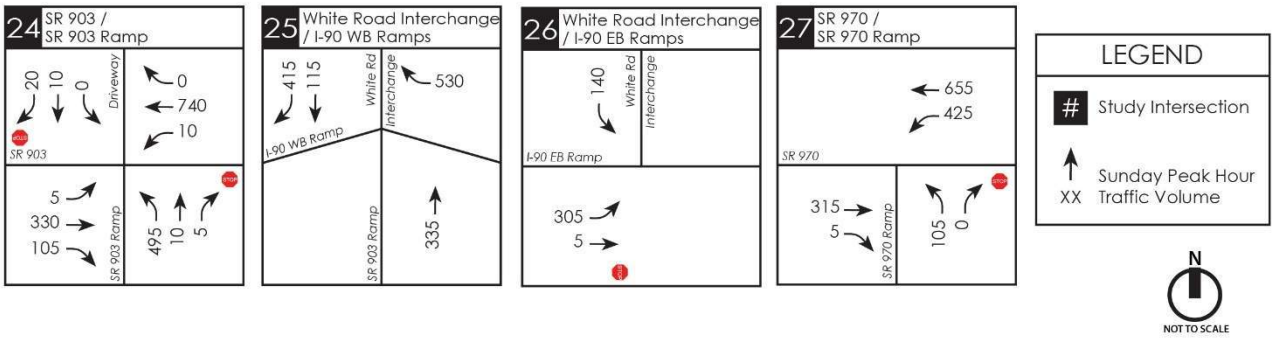


Figure 10: 2031 Baseline Sunday Peak Hour Traffic Volumes (Page 2)

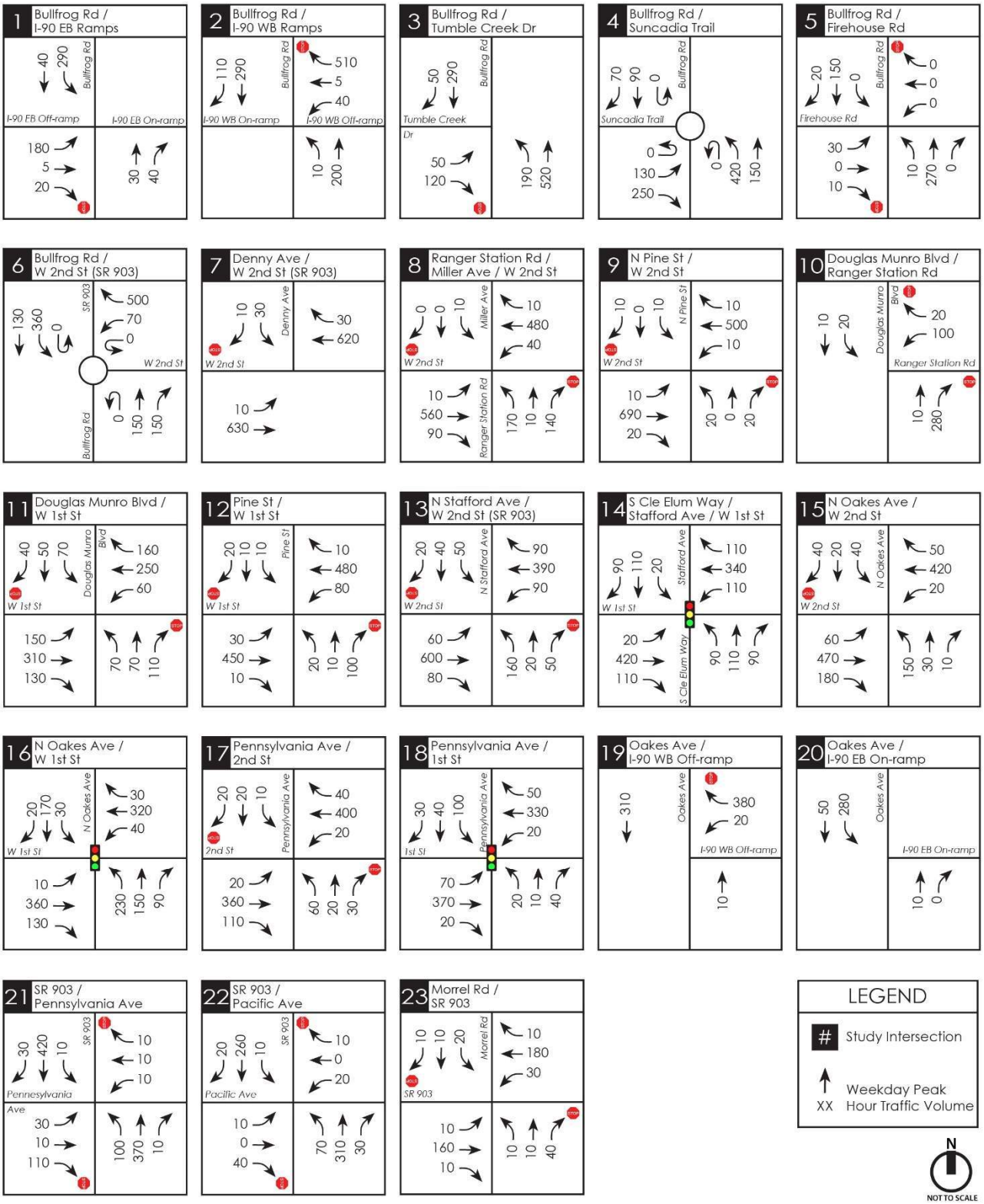


Figure 11: 2037 Baseline Weekday PM Peak Hour Traffic Volumes

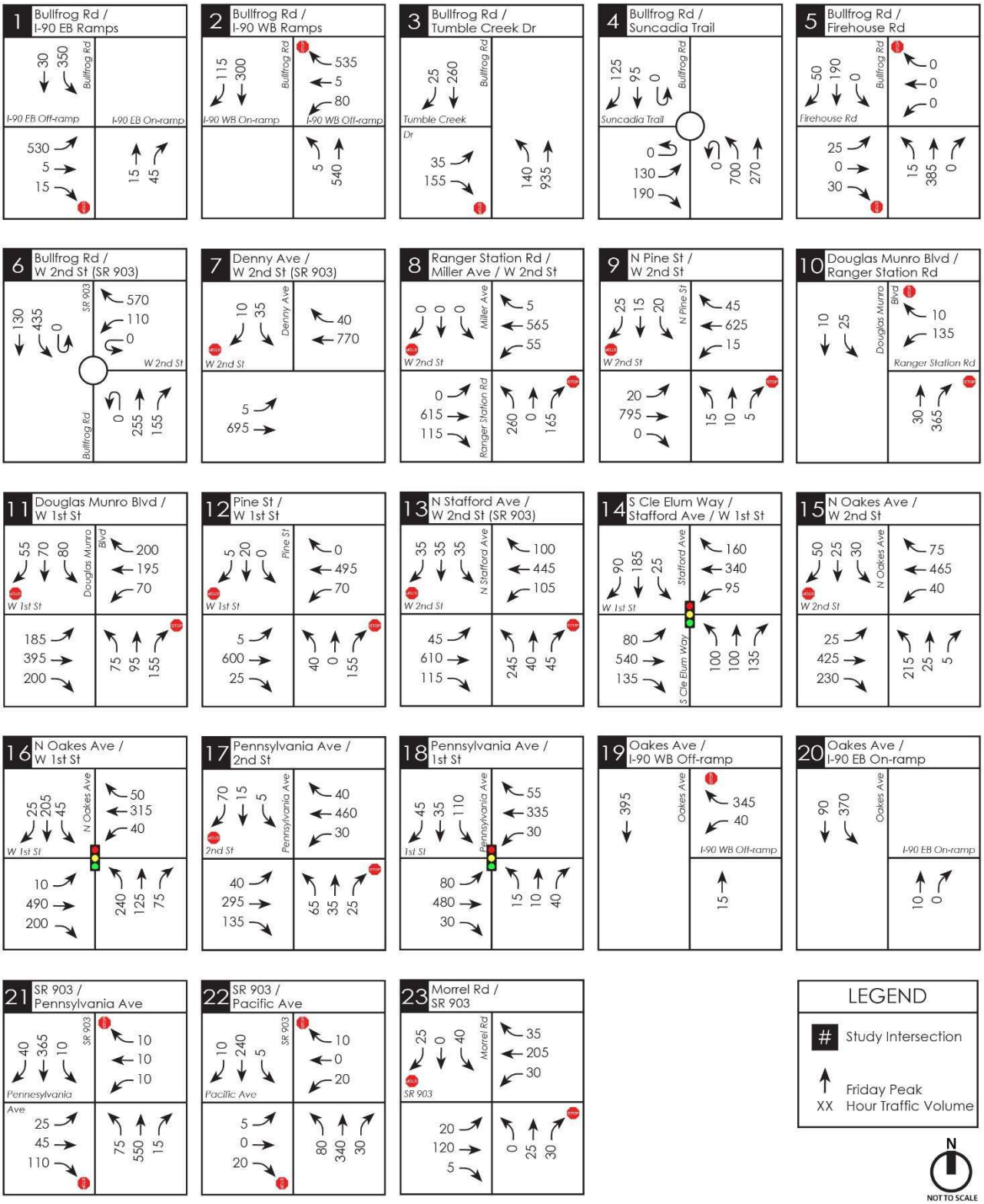


Figure 12: 2037 Baseline Friday PM Peak Hour Traffic Volumes

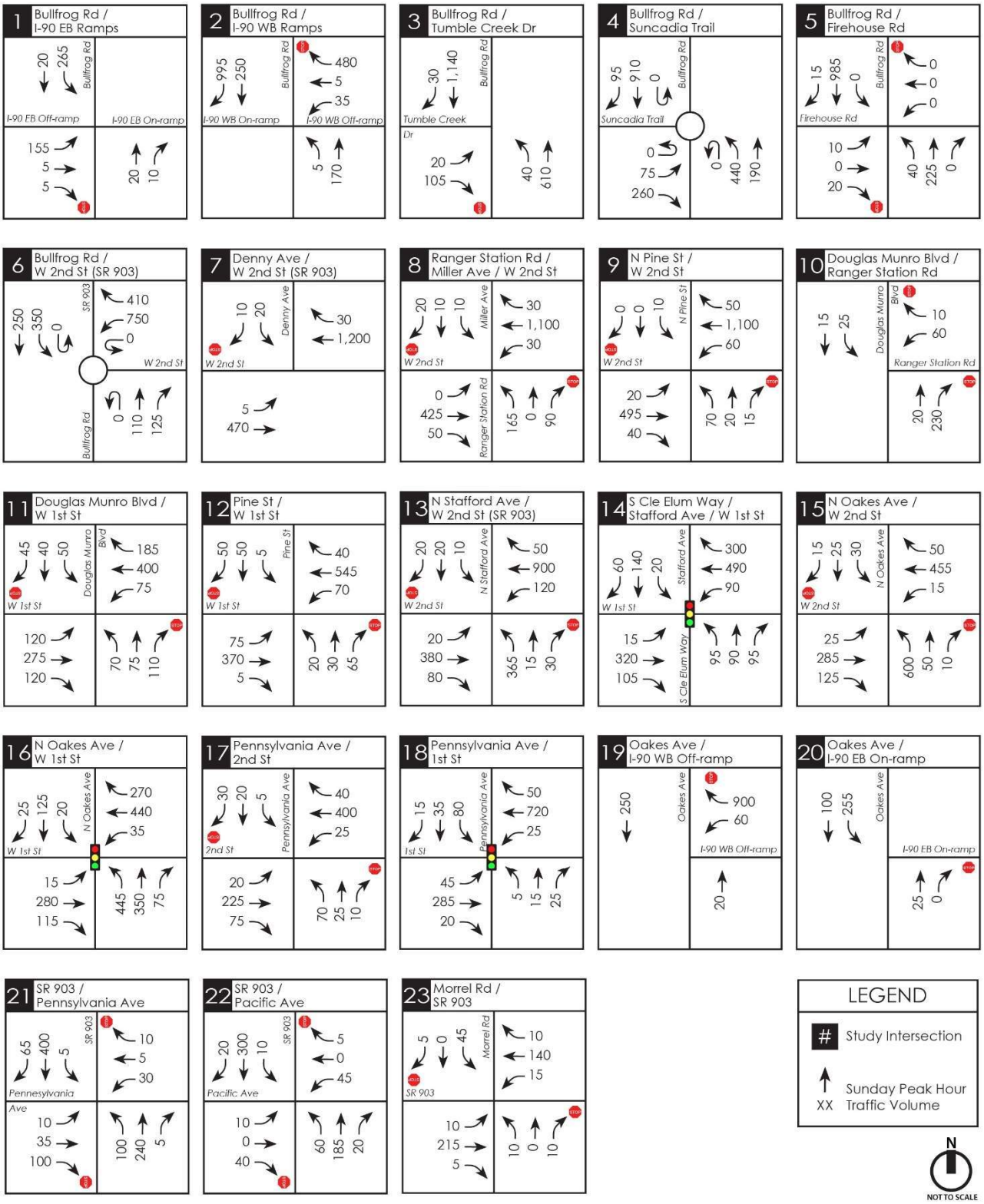


Figure 13: 2037 Baseline Sunday Peak Hour Traffic Volumes (Page 1)

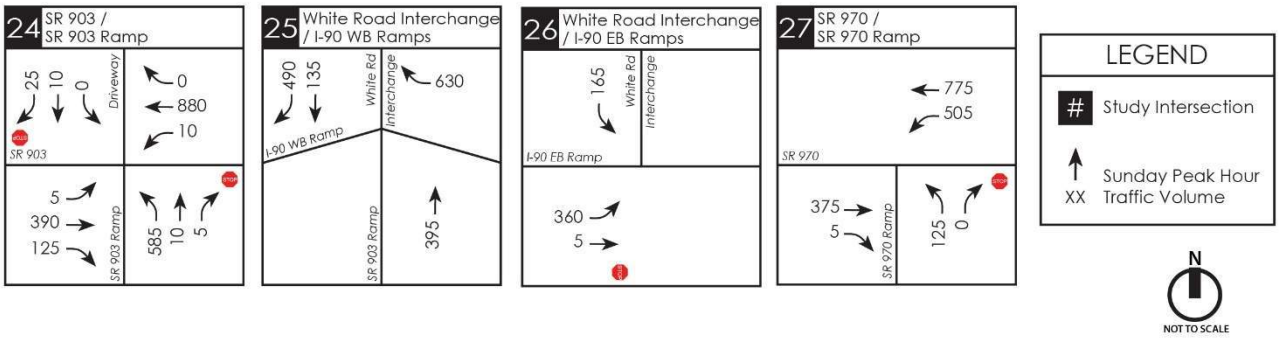


Figure 13: 2037 Baseline Sunday Peak Hour Traffic Volumes (Page 2)

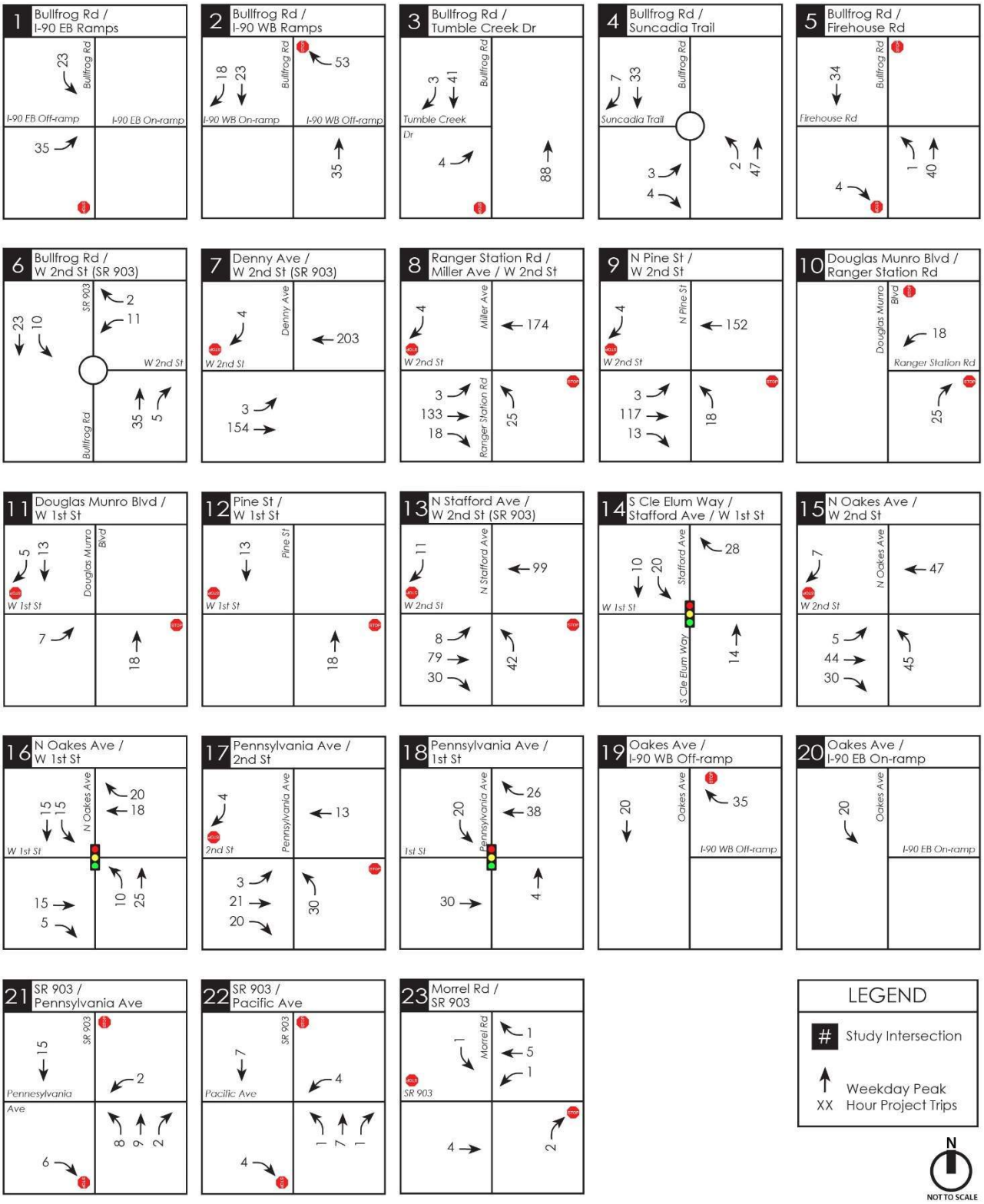


Figure 14: 2025 Weekday PM Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

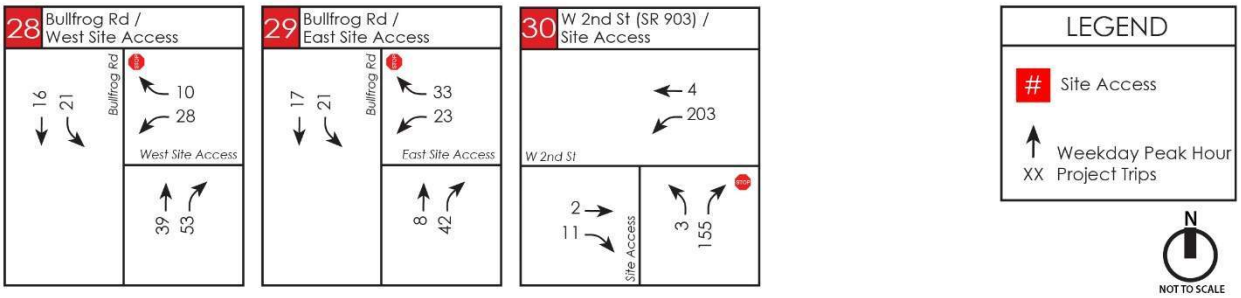


Figure 14: 2025 Weekday PM Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

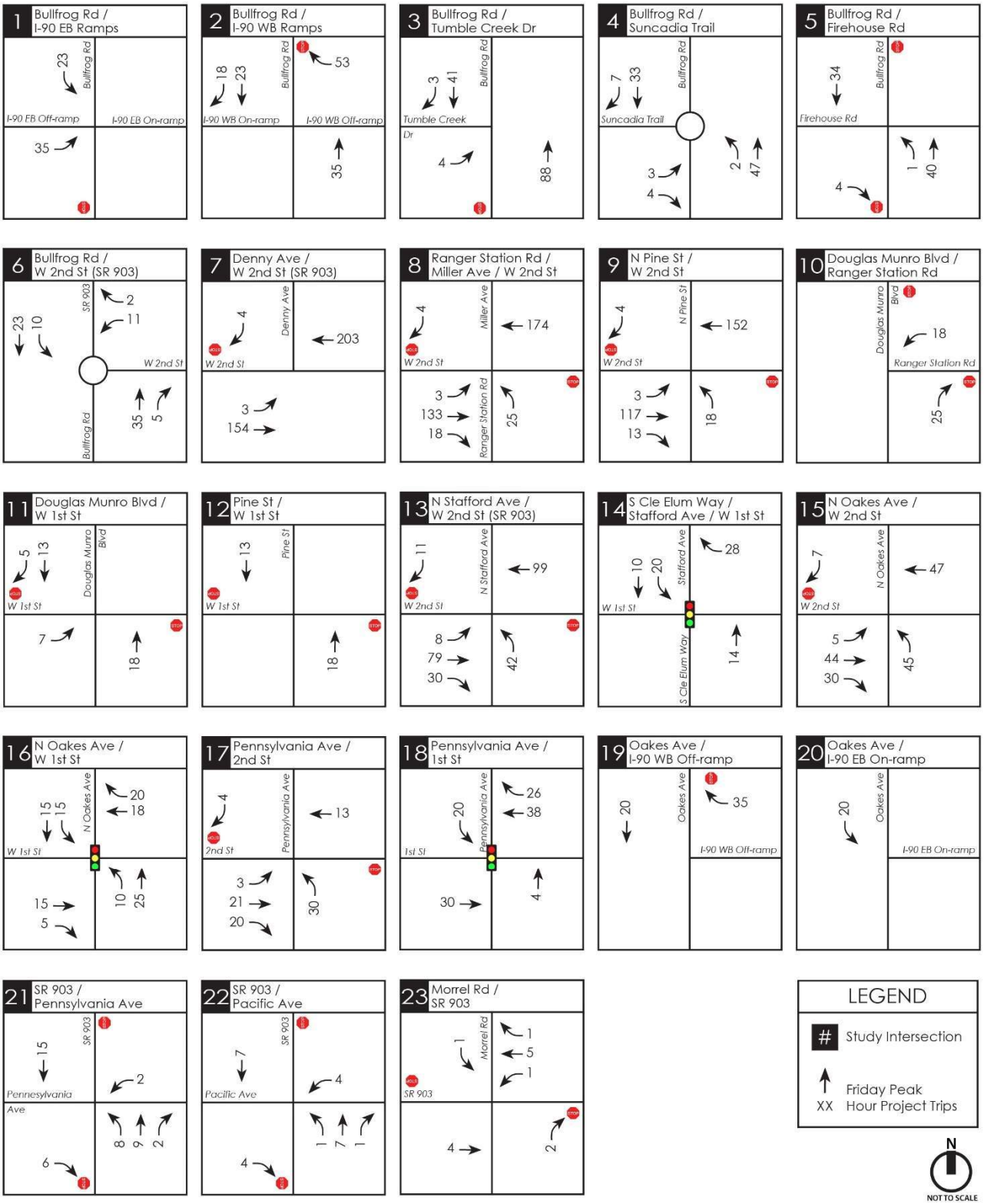


Figure 15: 2025 Friday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

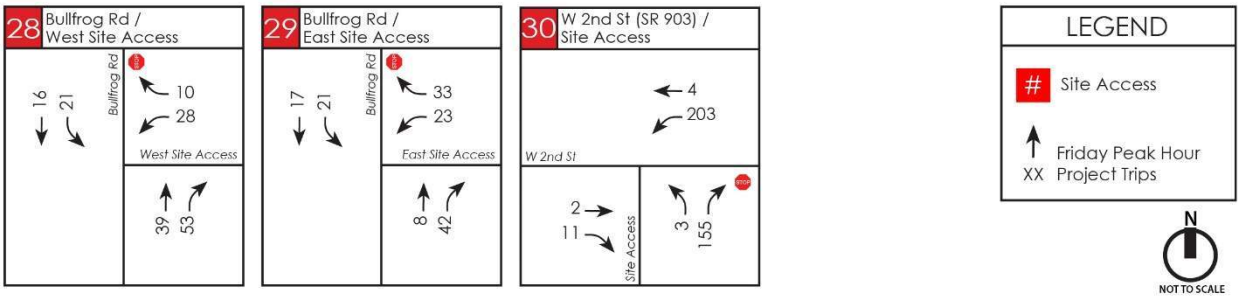


Figure 15: 2025 Friday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

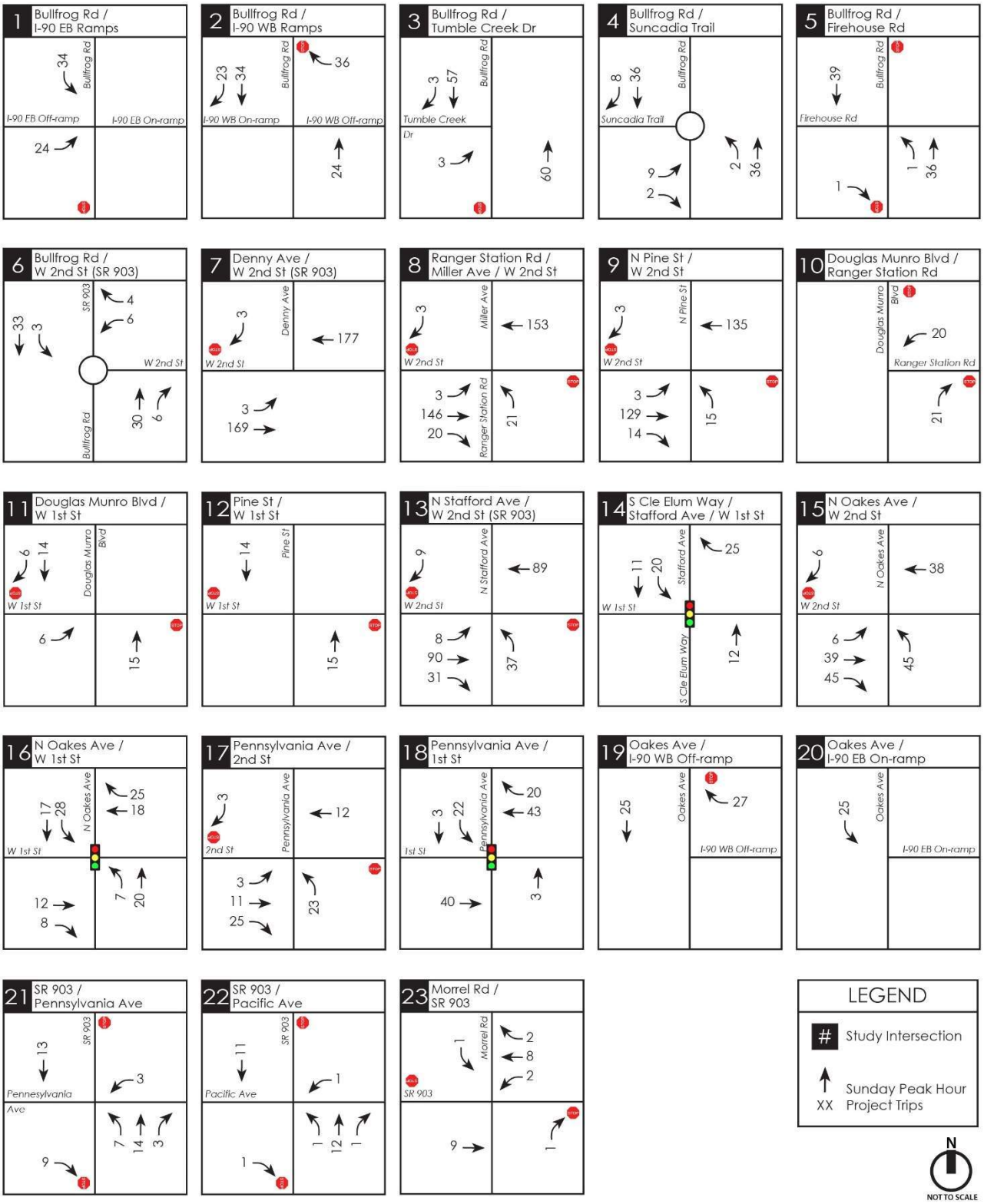


Figure 16: 2025 Sunday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

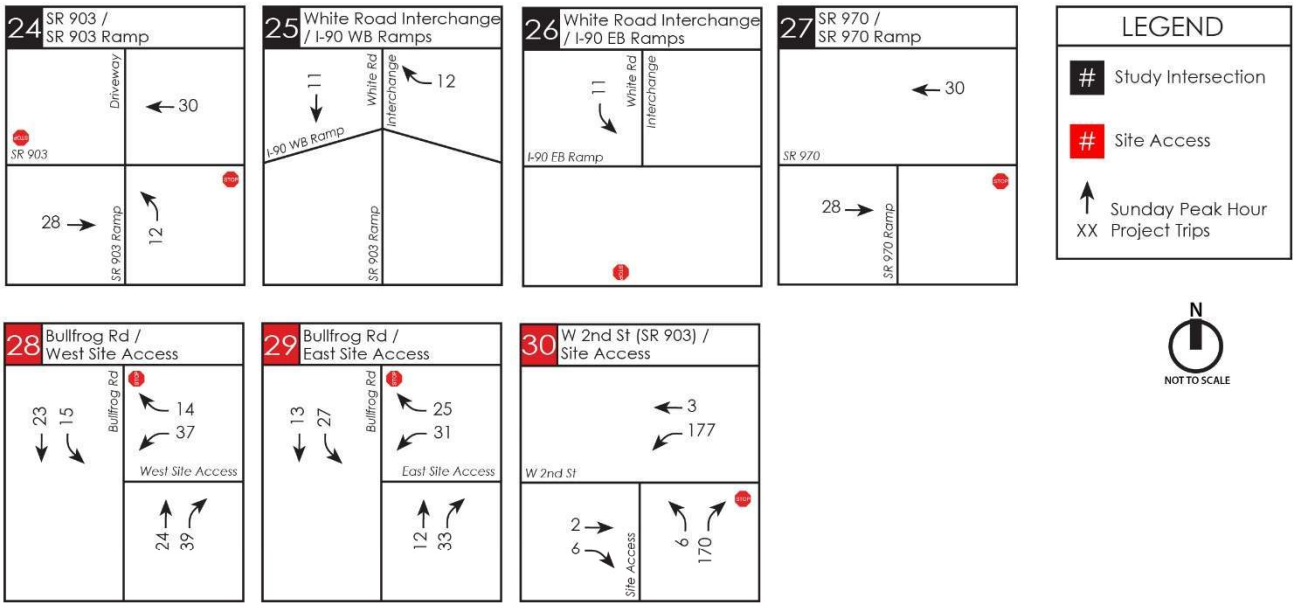


Figure 16: 2025 Sunday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

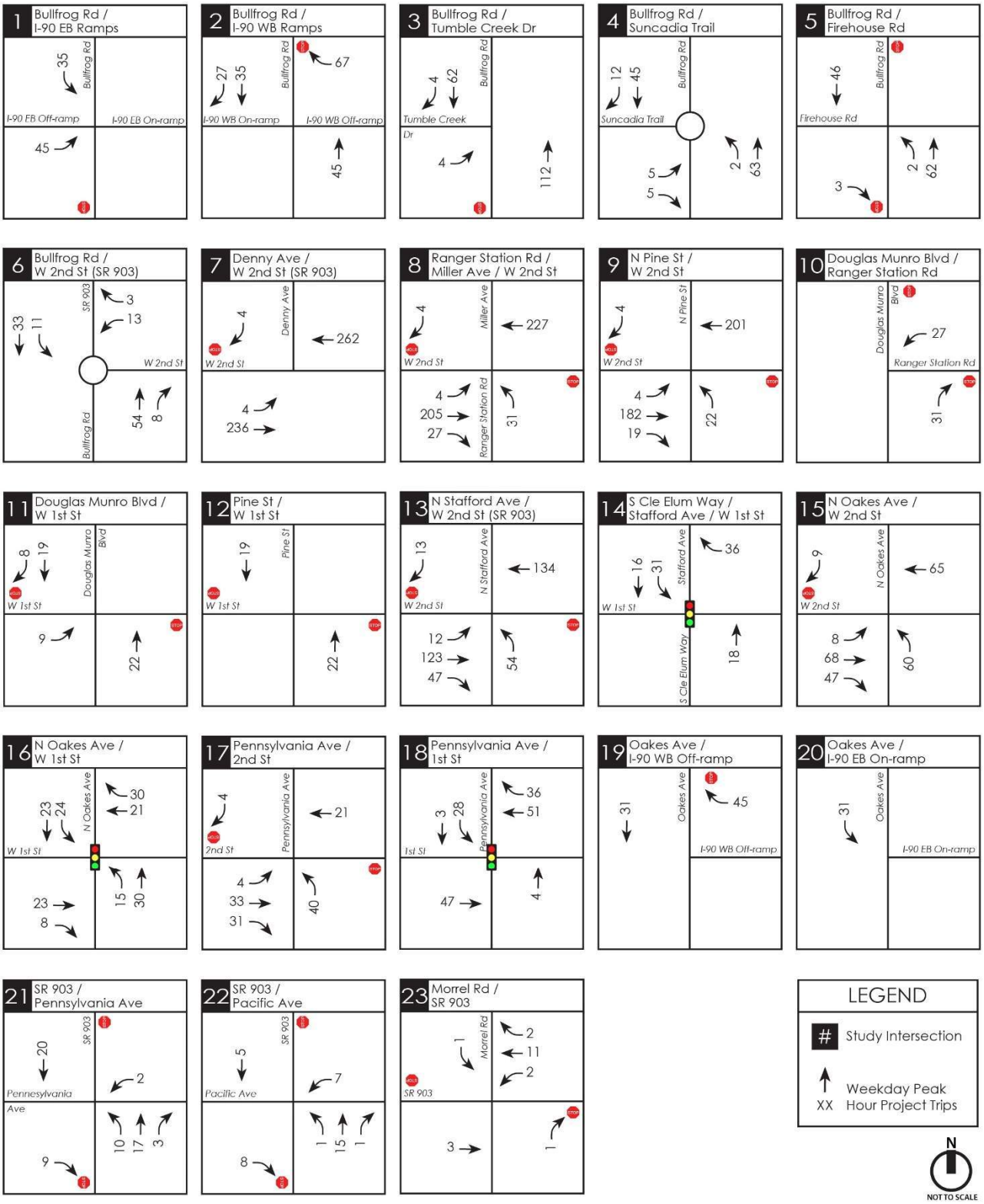


Figure 17: 2031 Weekday PM Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

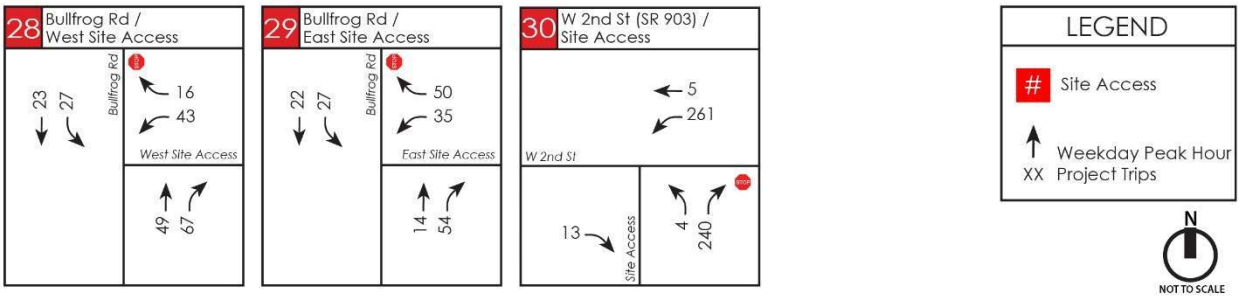


Figure 17: 2031 Weekday PM Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

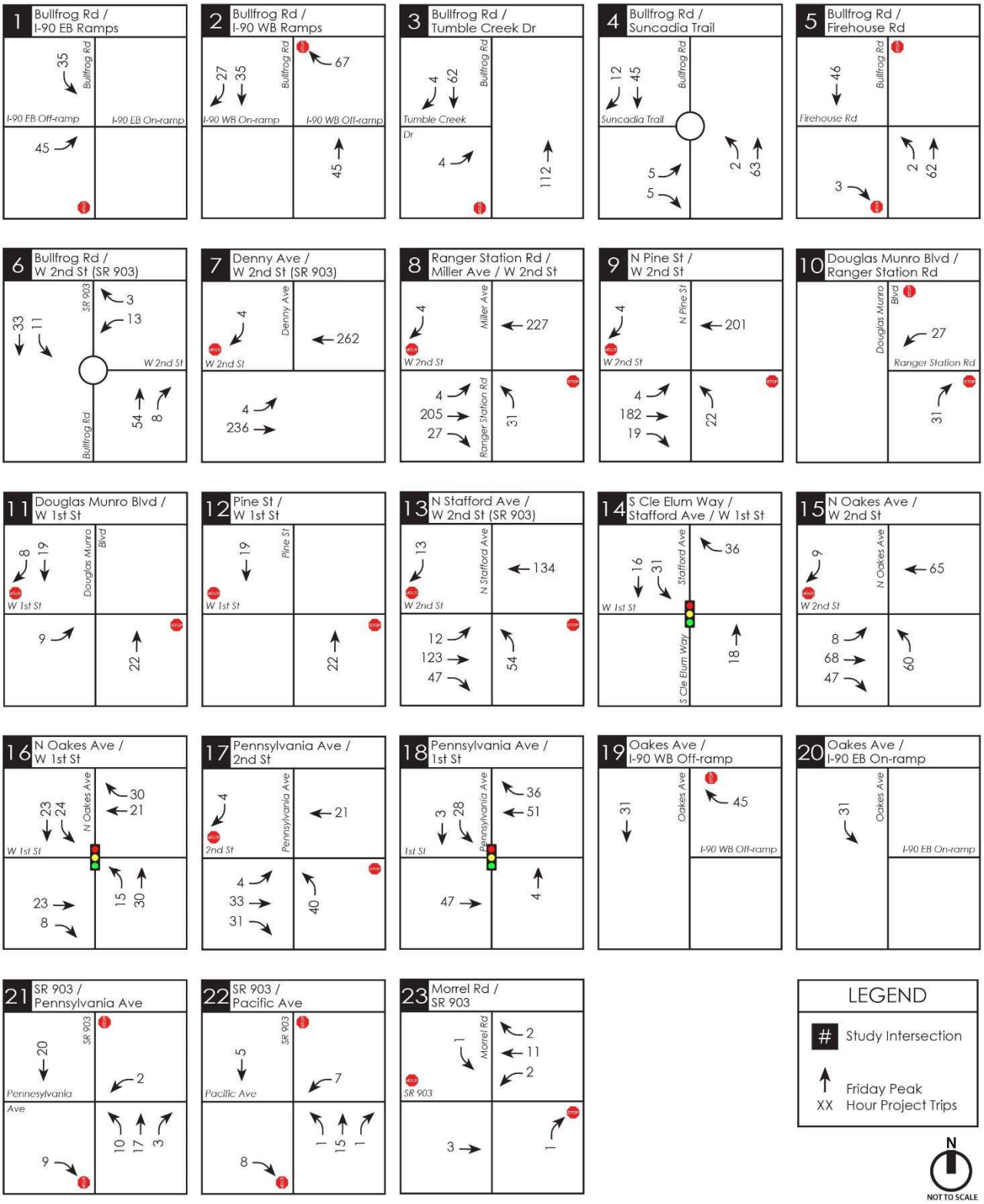


Figure 18: 2031 Friday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

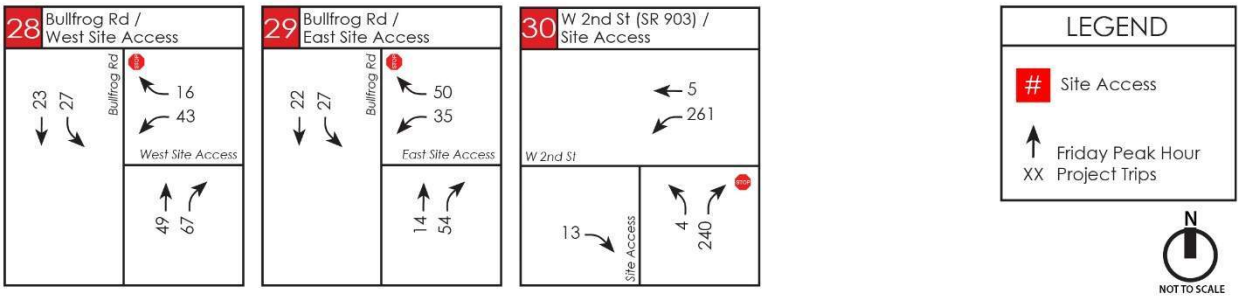


Figure 18: 2031 Friday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

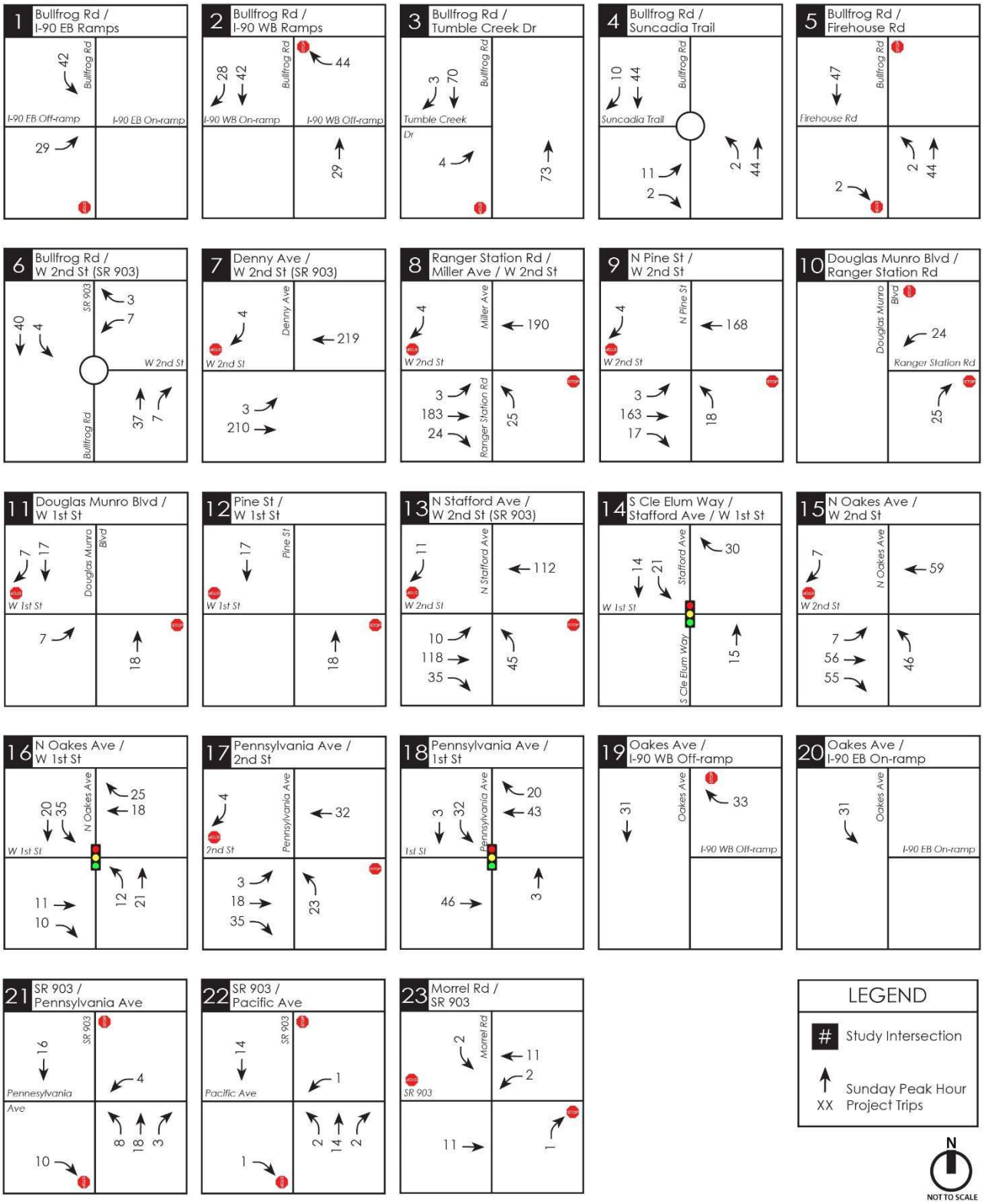


Figure 19: 2031 Sunday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

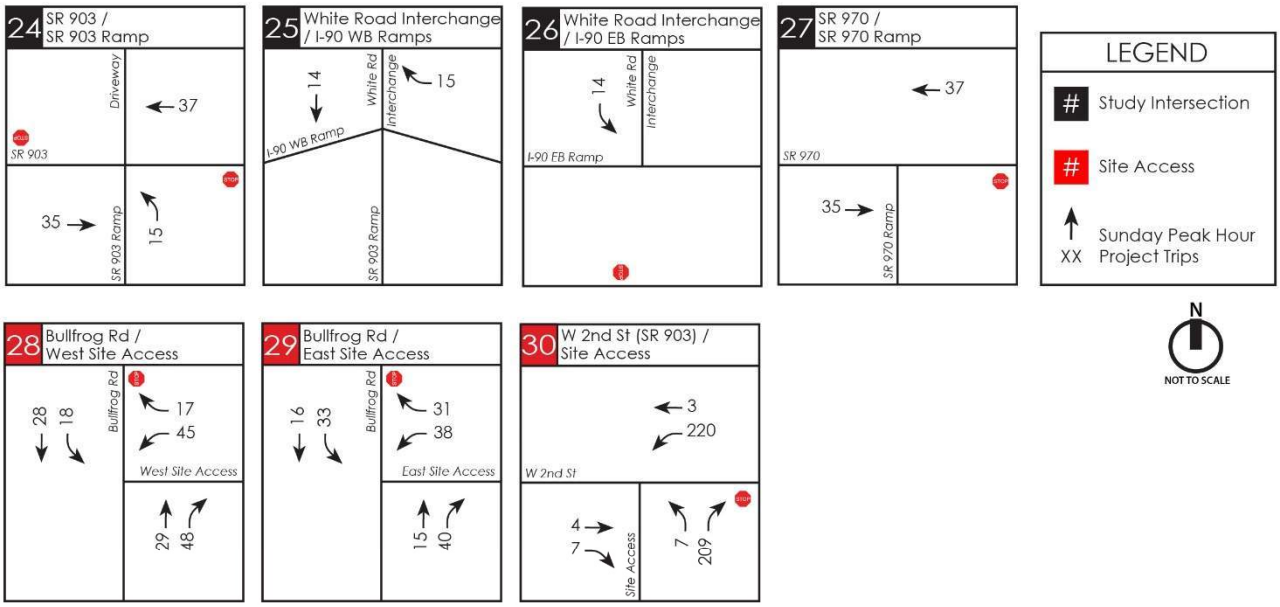


Figure 19: 2031 Sunday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

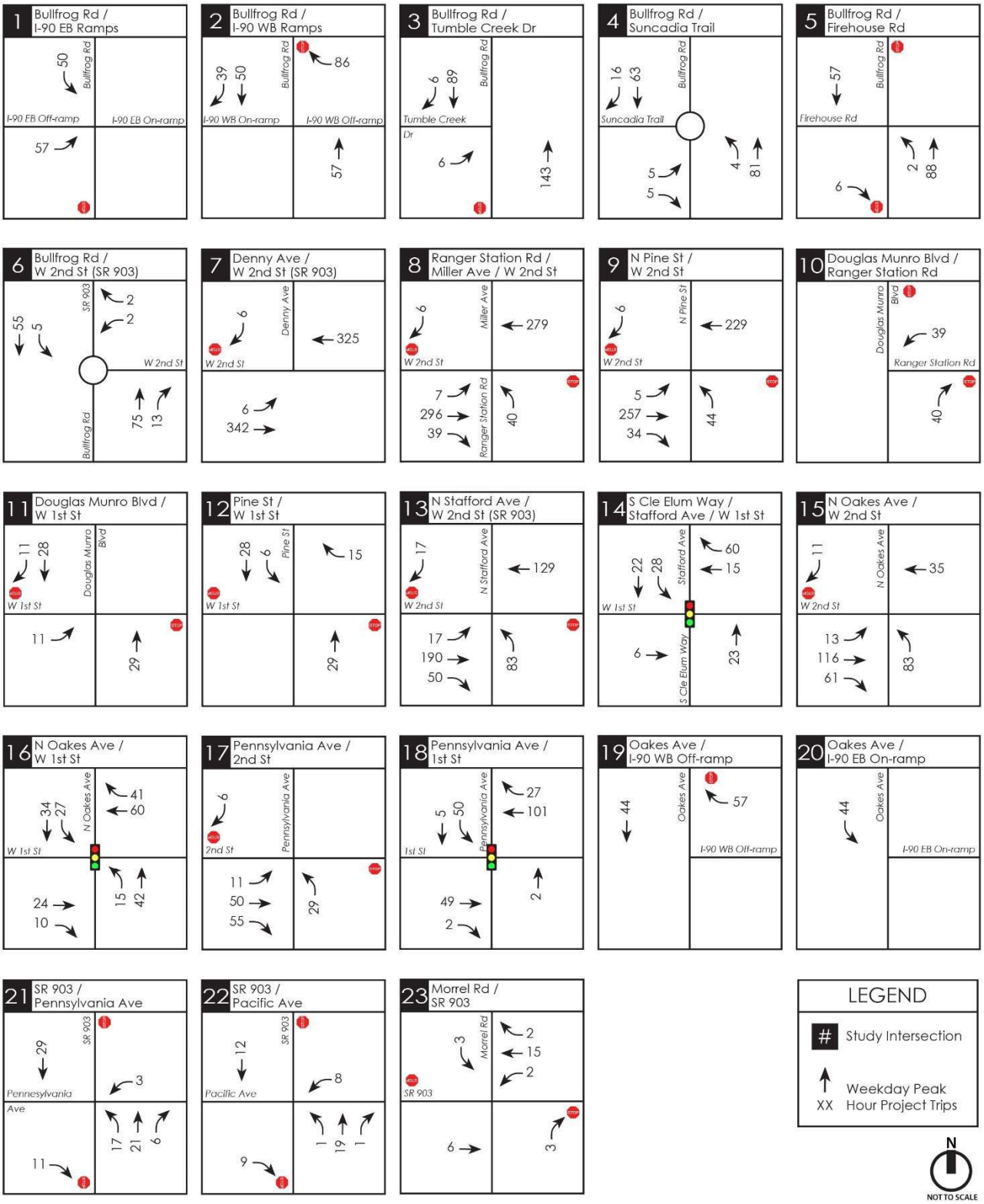


Figure 20: 2037 Weekday PM Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

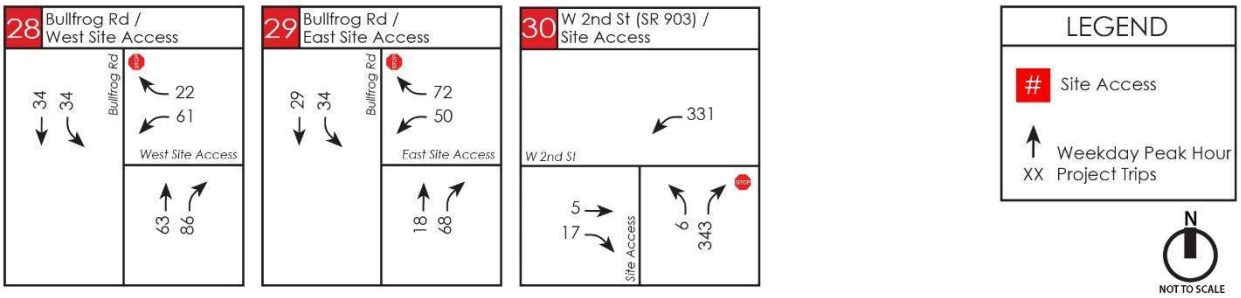


Figure 20: 2037 Weekday PM Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

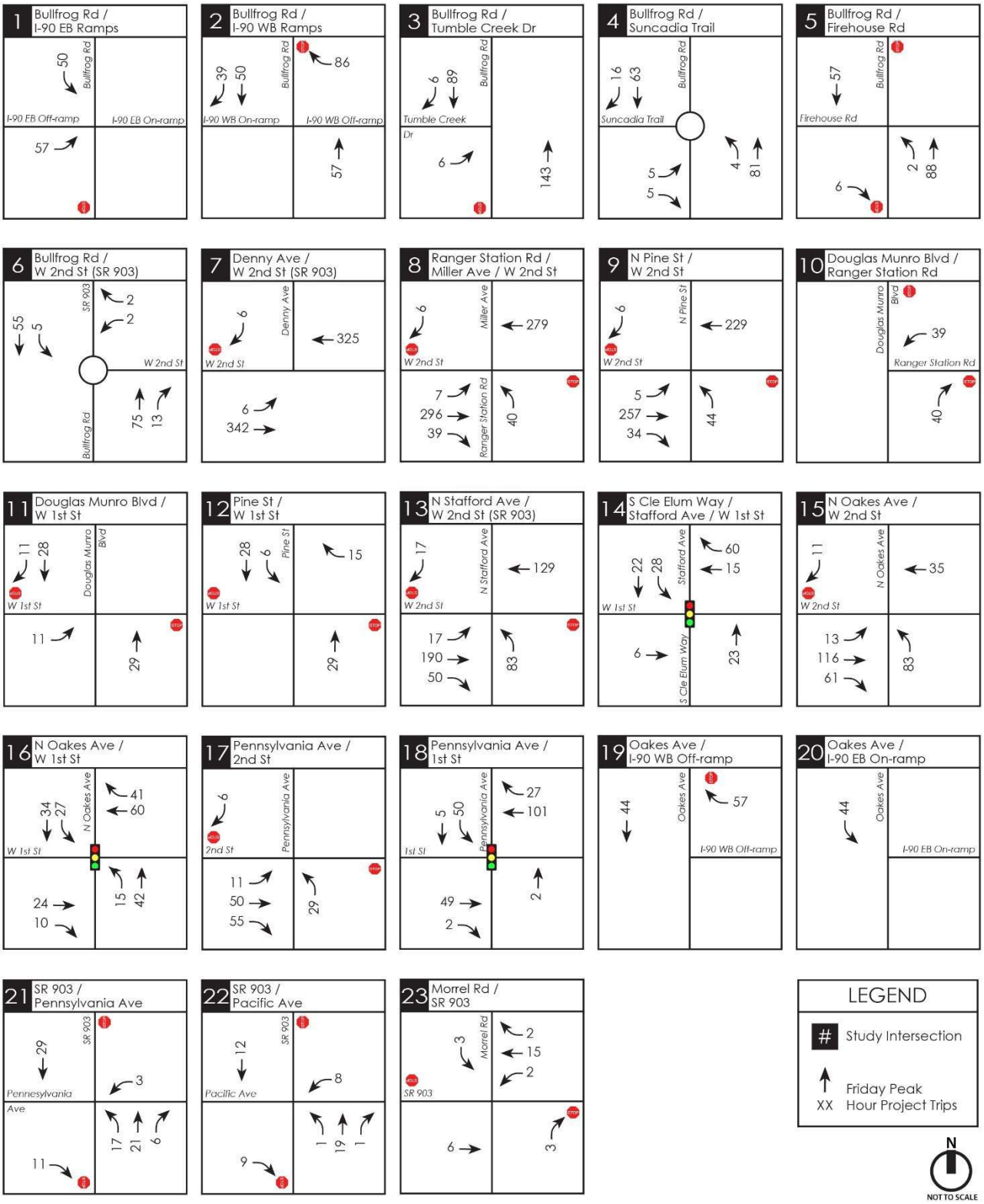


Figure 21: 2037 Friday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

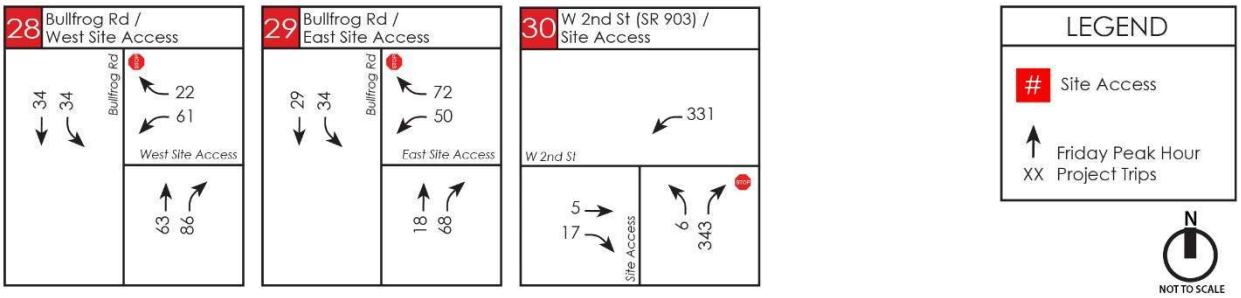


Figure 21: 2037 Friday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

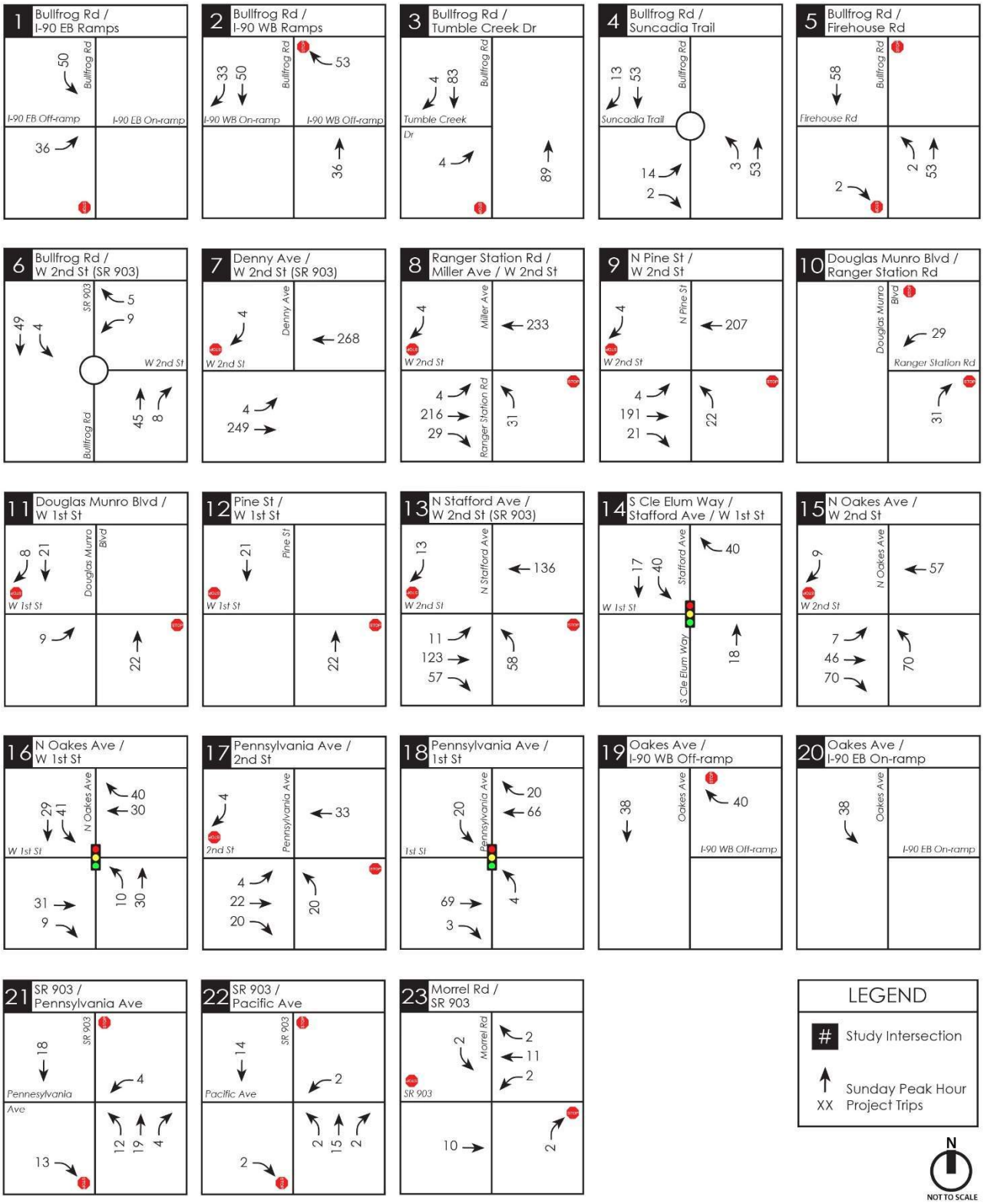


Figure 22: 2037 Sunday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 1)

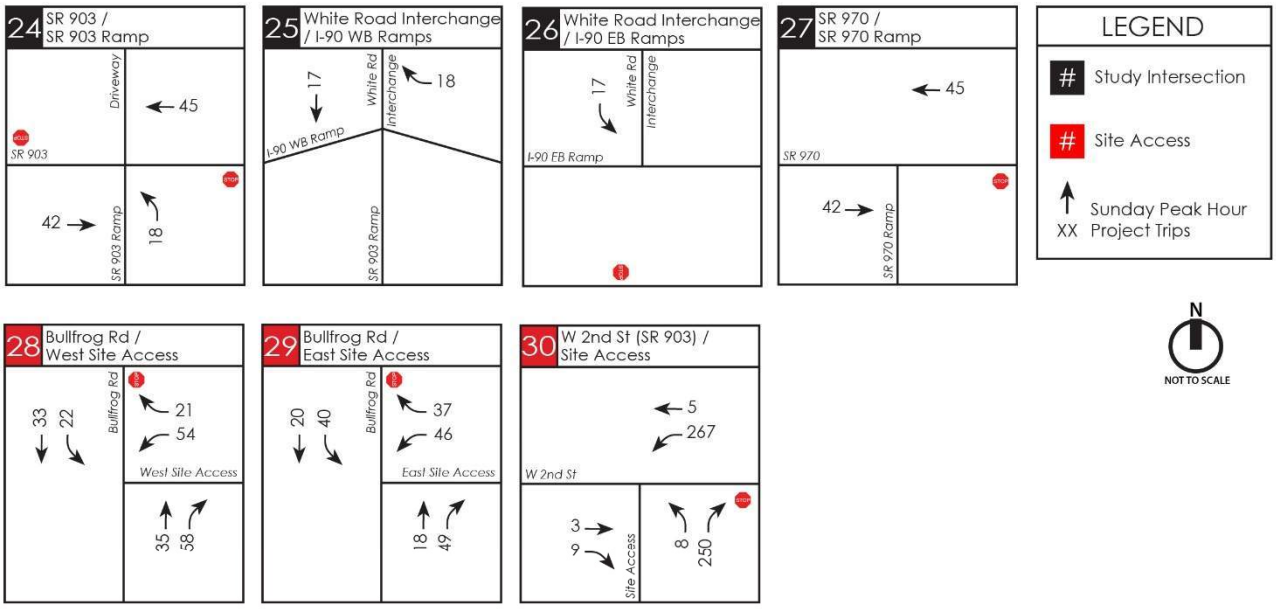


Figure 22: 2037 Sunday Peak Hour Trip Assignment - SEIS Alternative 5 (Page 2)

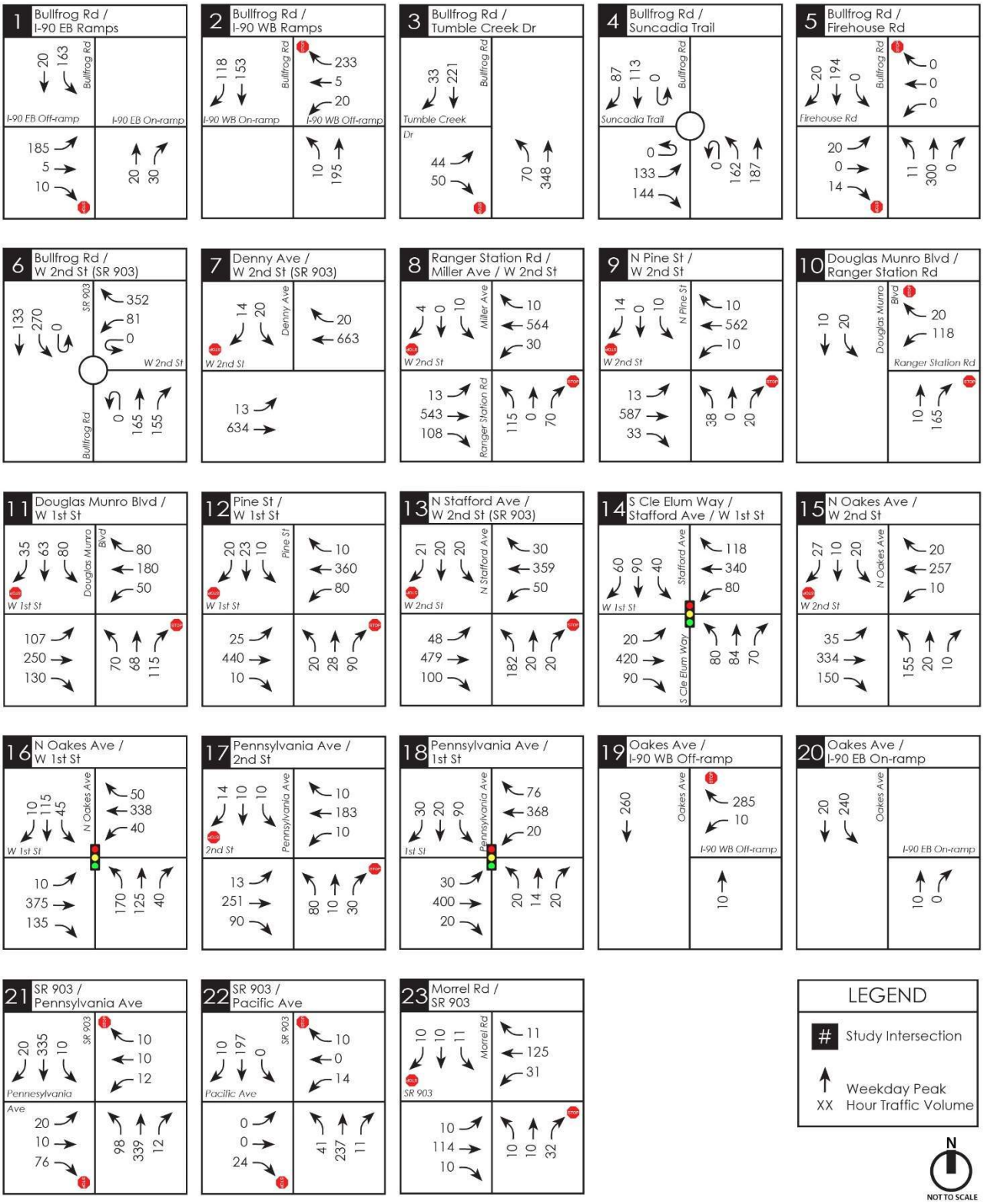


Figure 23: 2025 Weekday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

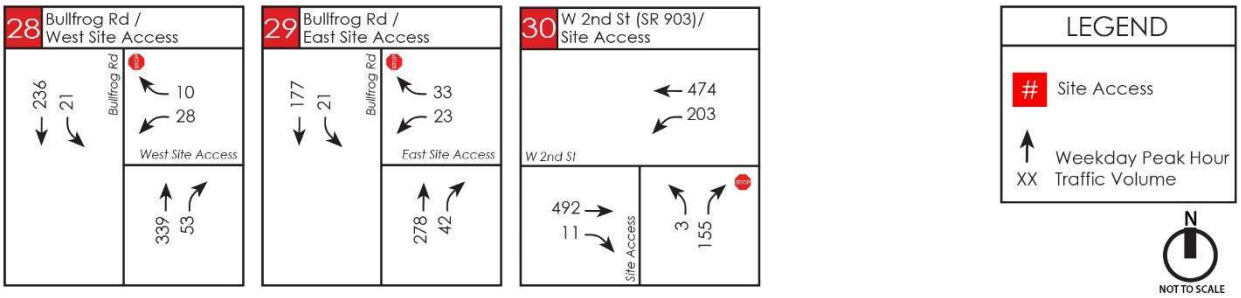


Figure 23: 2025 Weekday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

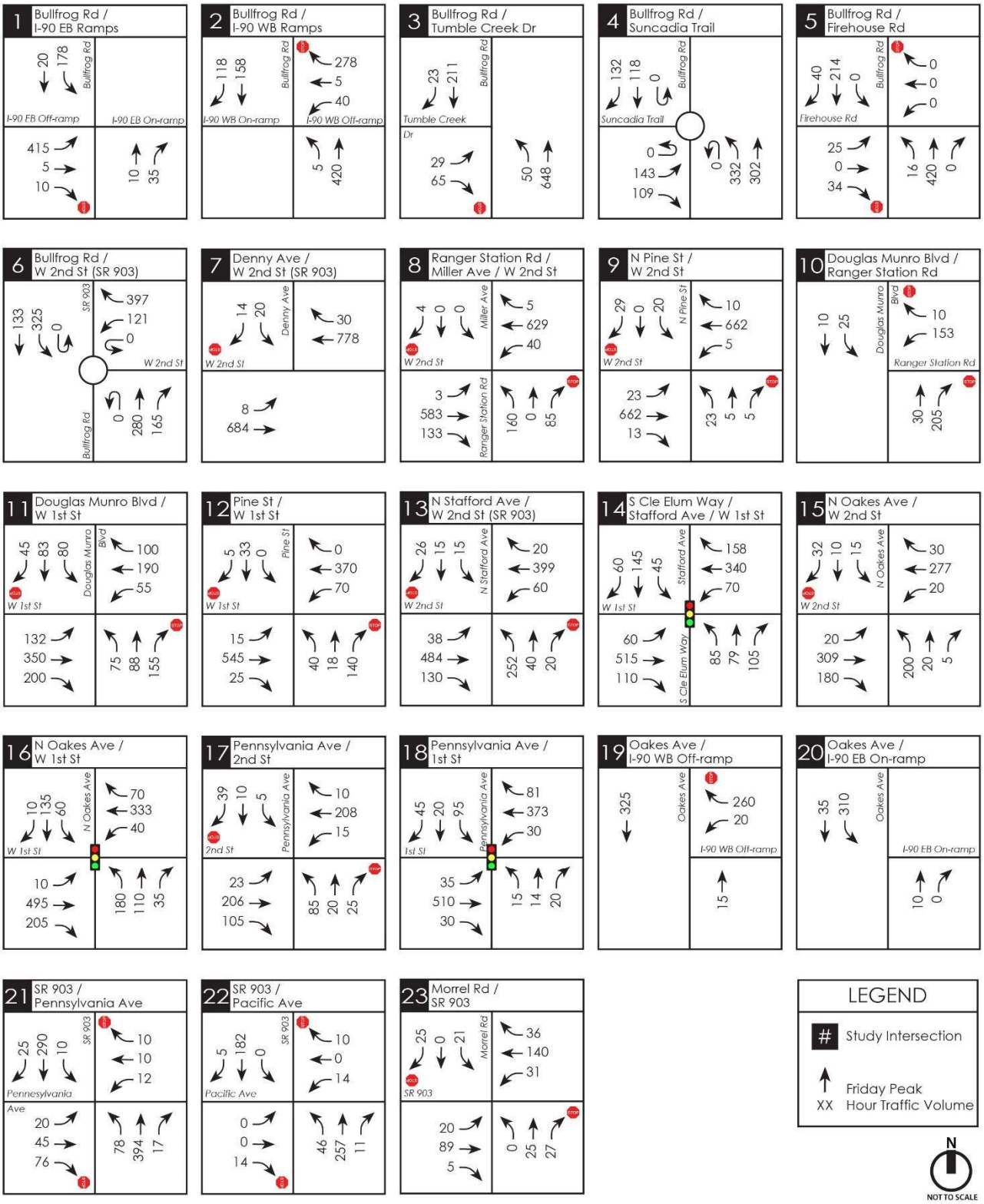


Figure 24: 2025 Friday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

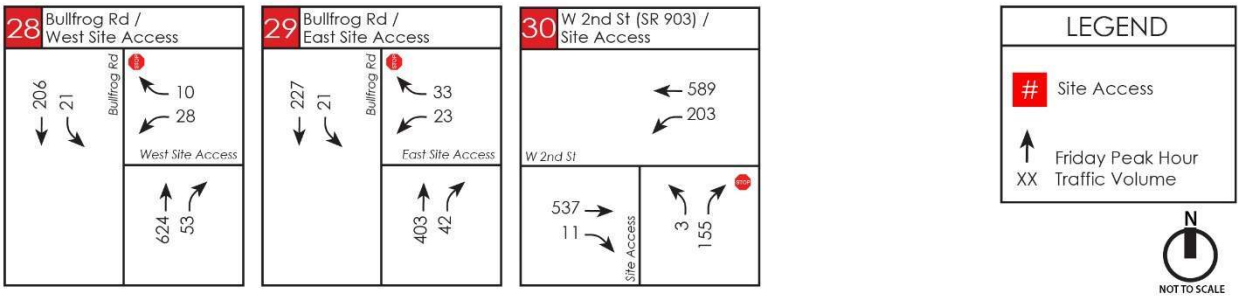


Figure 24: 2025 Friday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

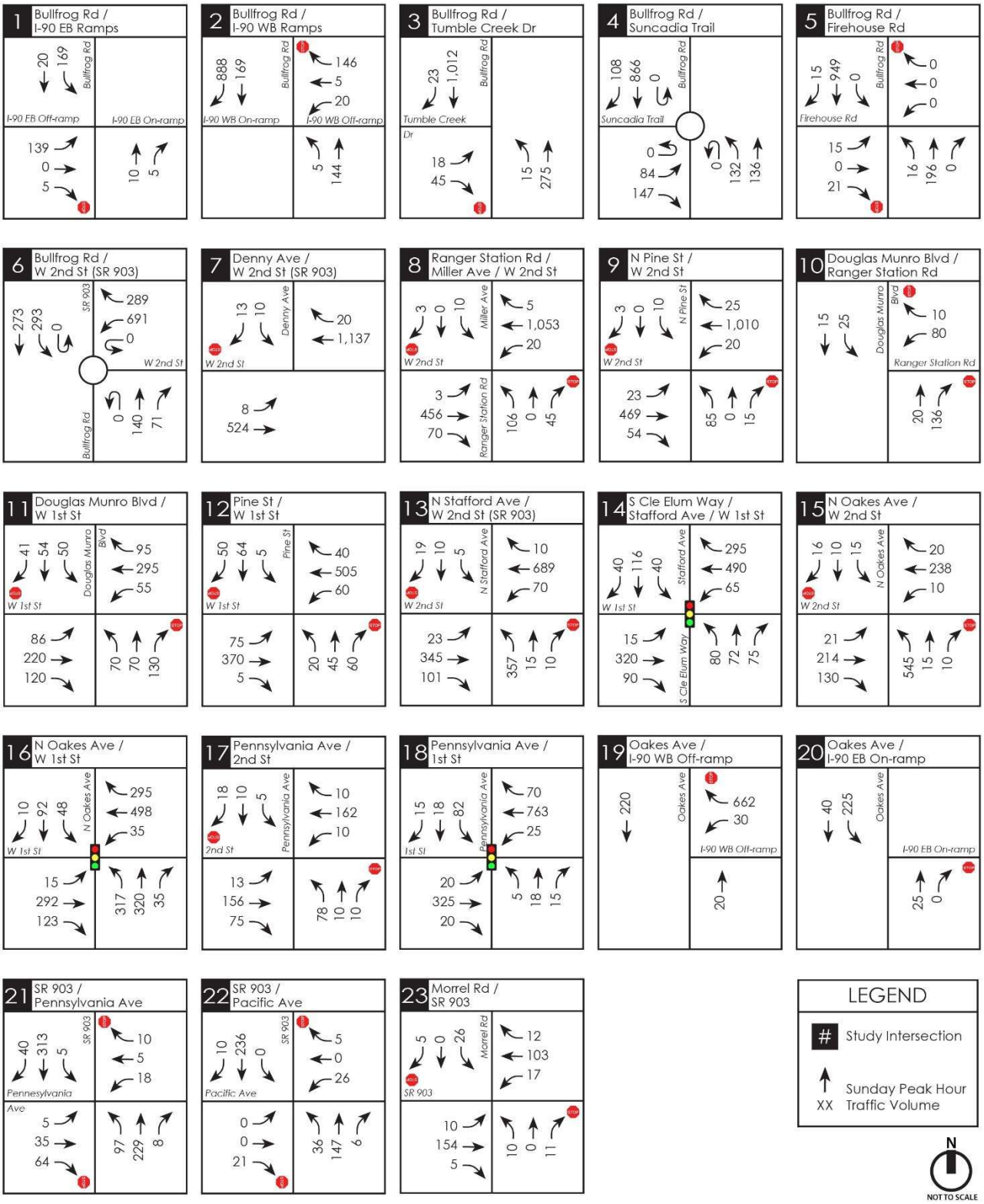


Figure 25: 2025 Sunday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

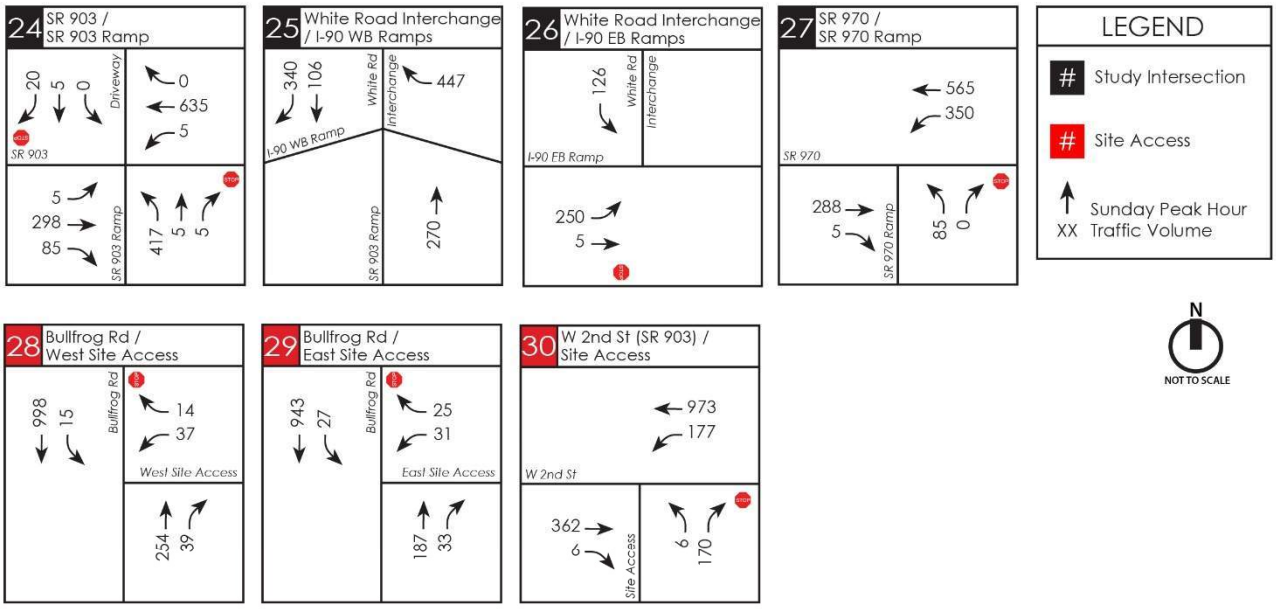


Figure 25: 2025 Sunday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

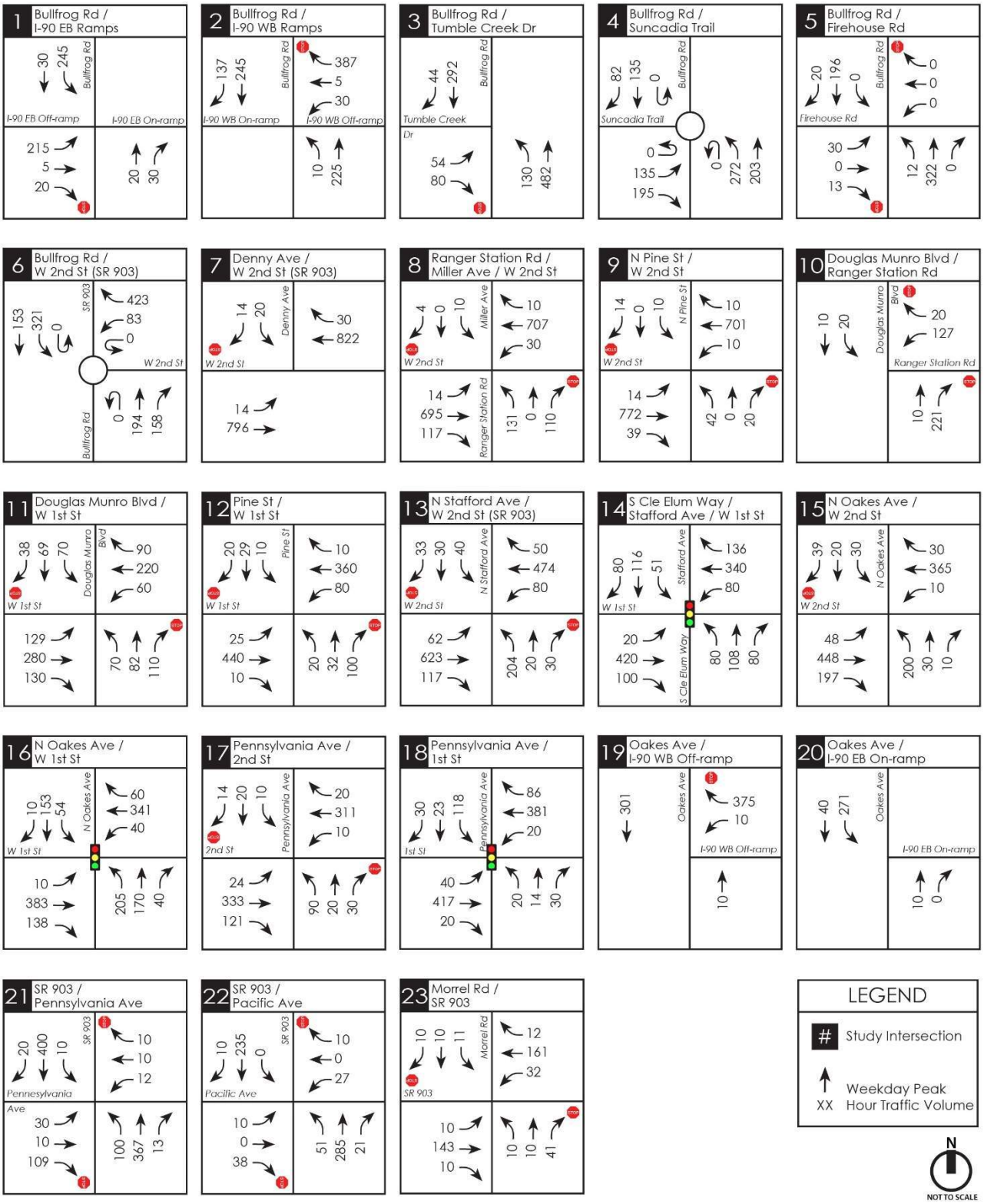


Figure 26: 2031 Weekday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

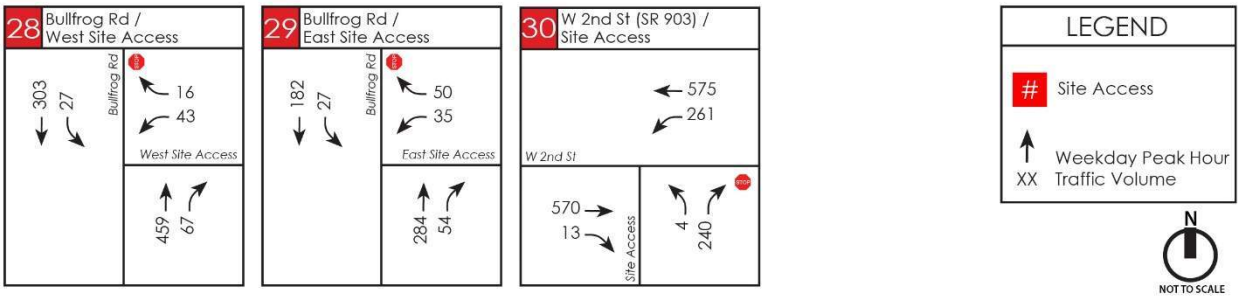


Figure 26: 2031 Weekday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

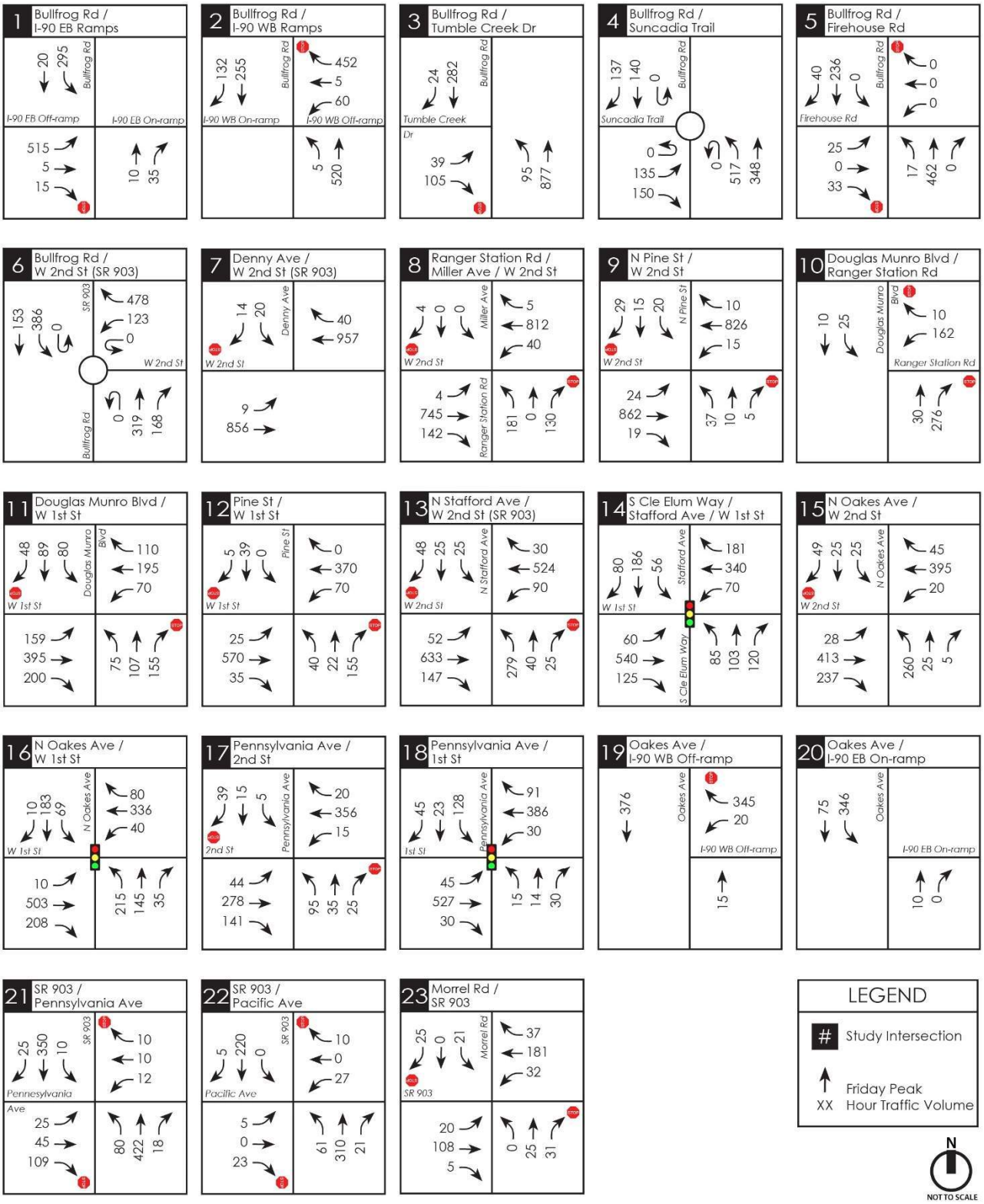


Figure 27: 2031 Friday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

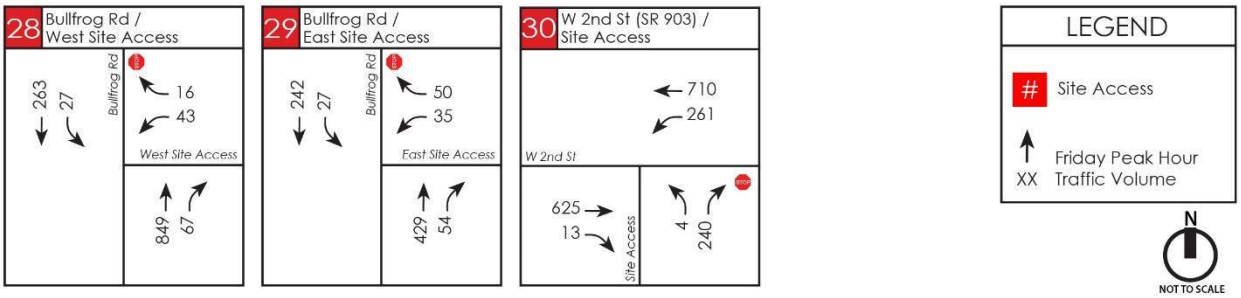


Figure 27: 2031 Friday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

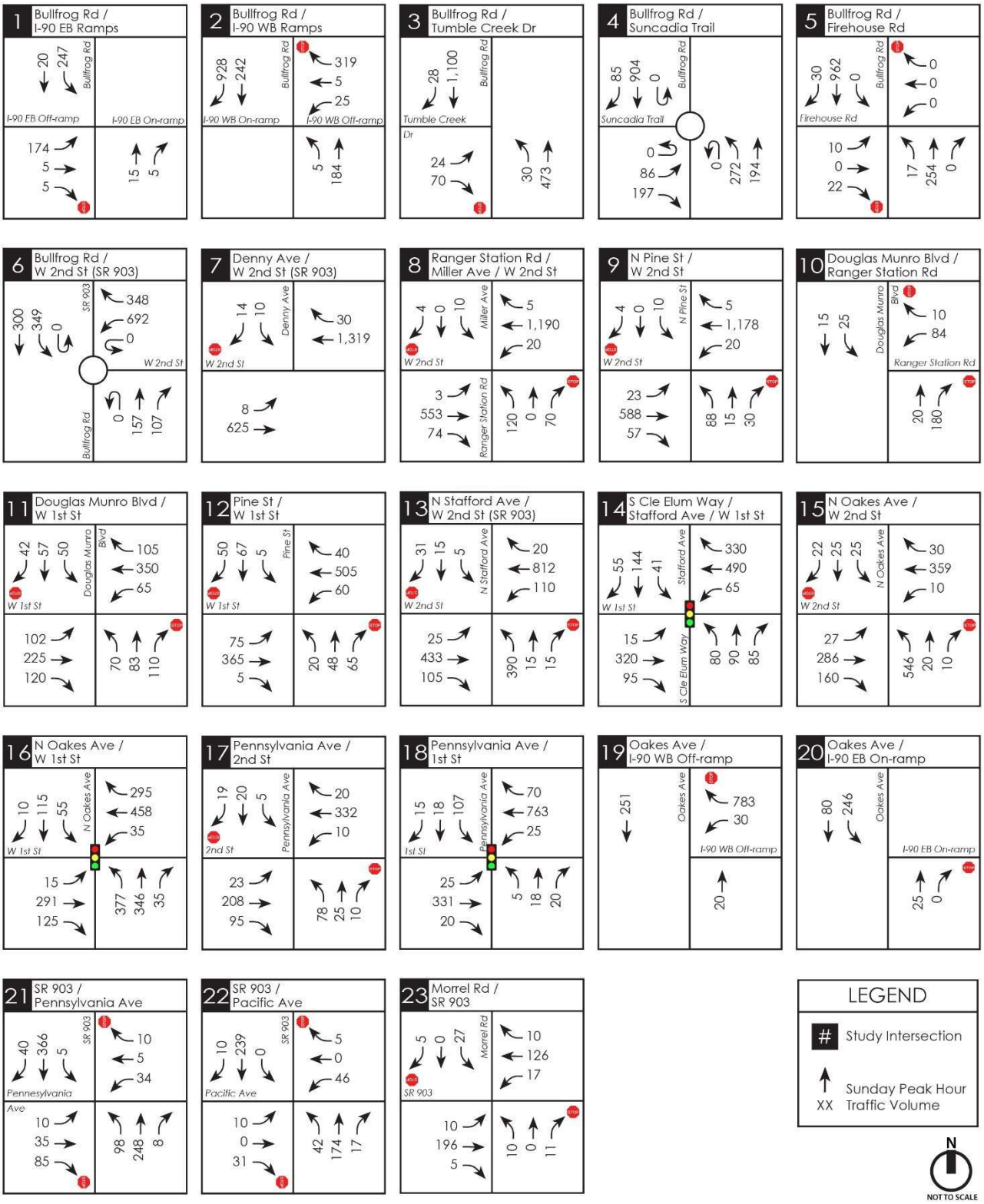


Figure 28: 2031 Sunday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

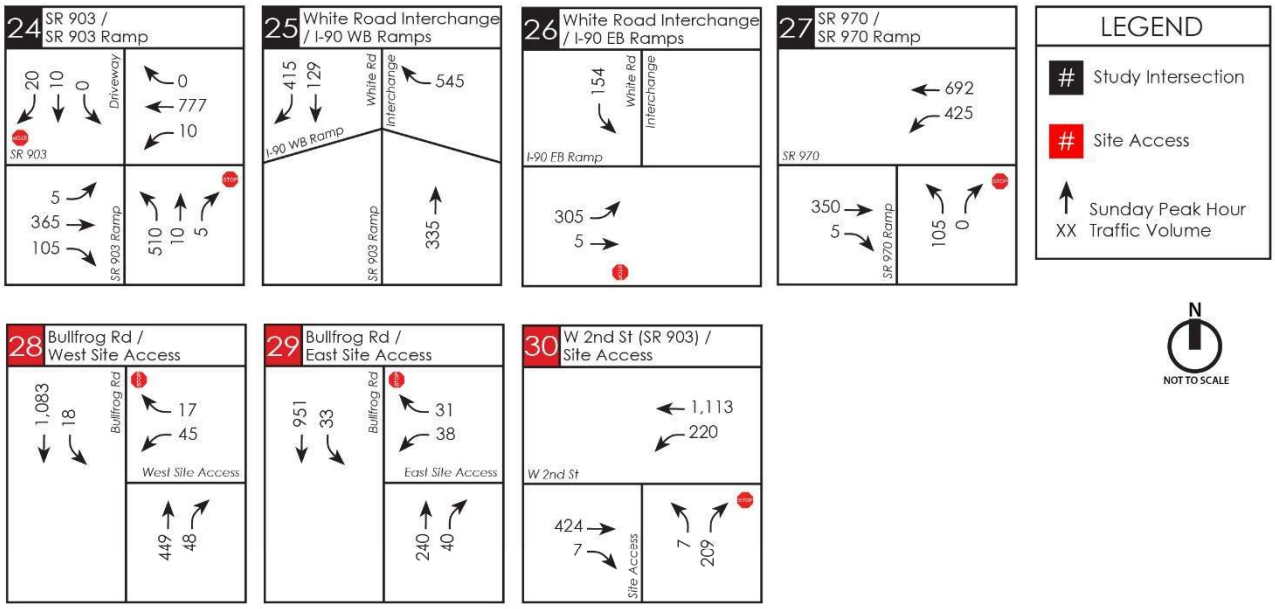


Figure 28: 2031 Sunday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

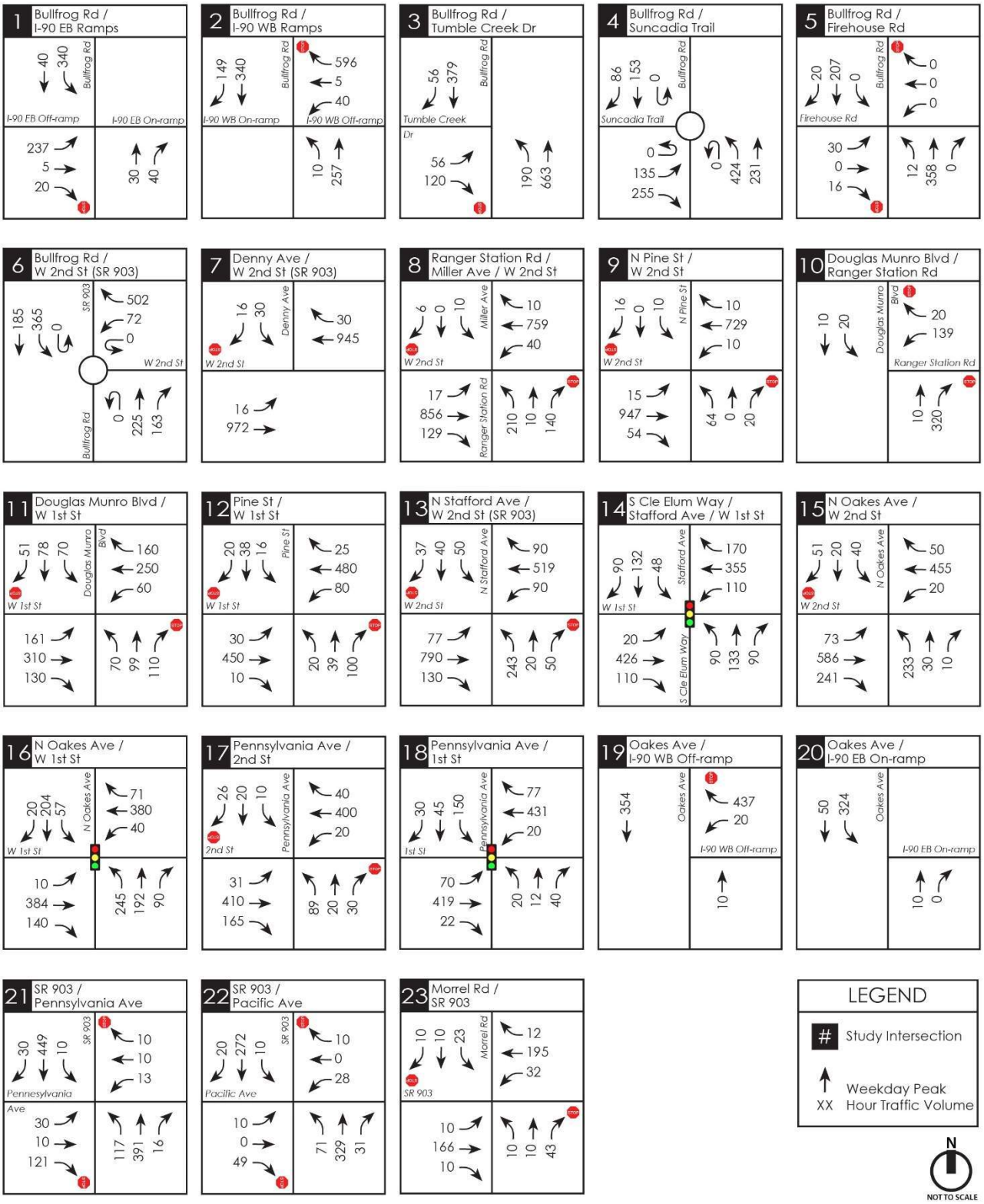


Figure 29: 2037 Weekday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

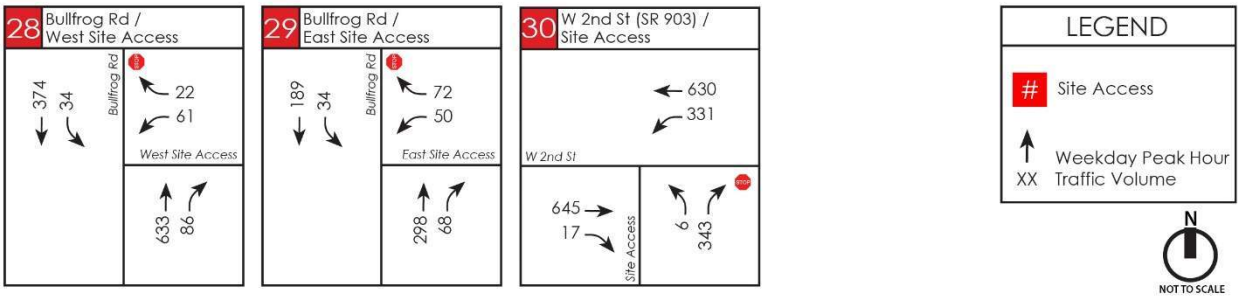


Figure 29: 2037 Weekday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

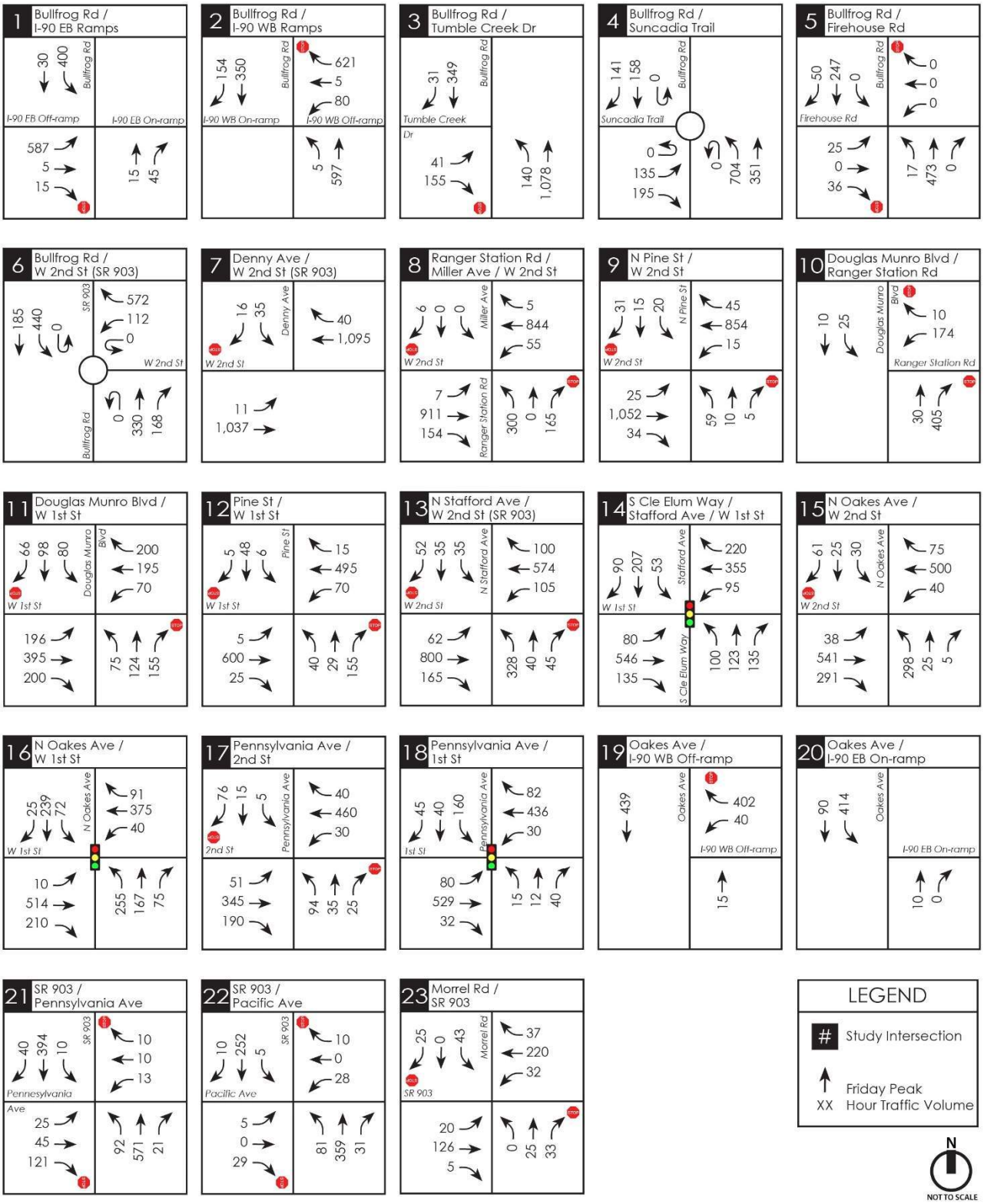


Figure 30: 2037 Friday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 1)

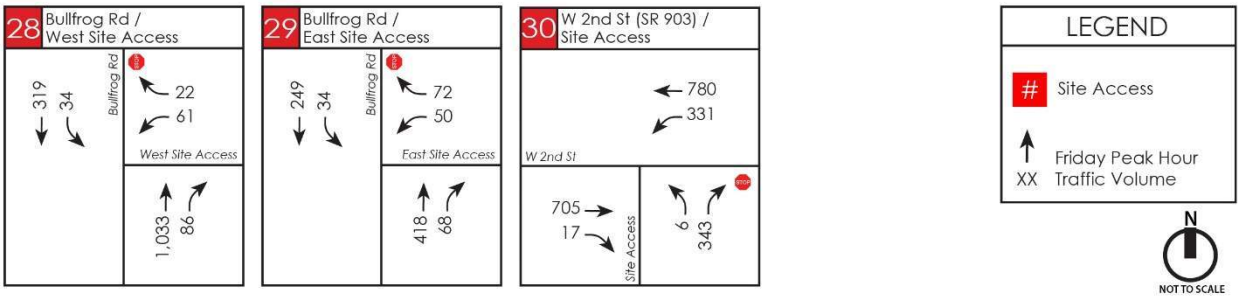


Figure 30: 2037 Friday PM Peak Traffic Volumes with SEIS Alternative 5 (Page 2)

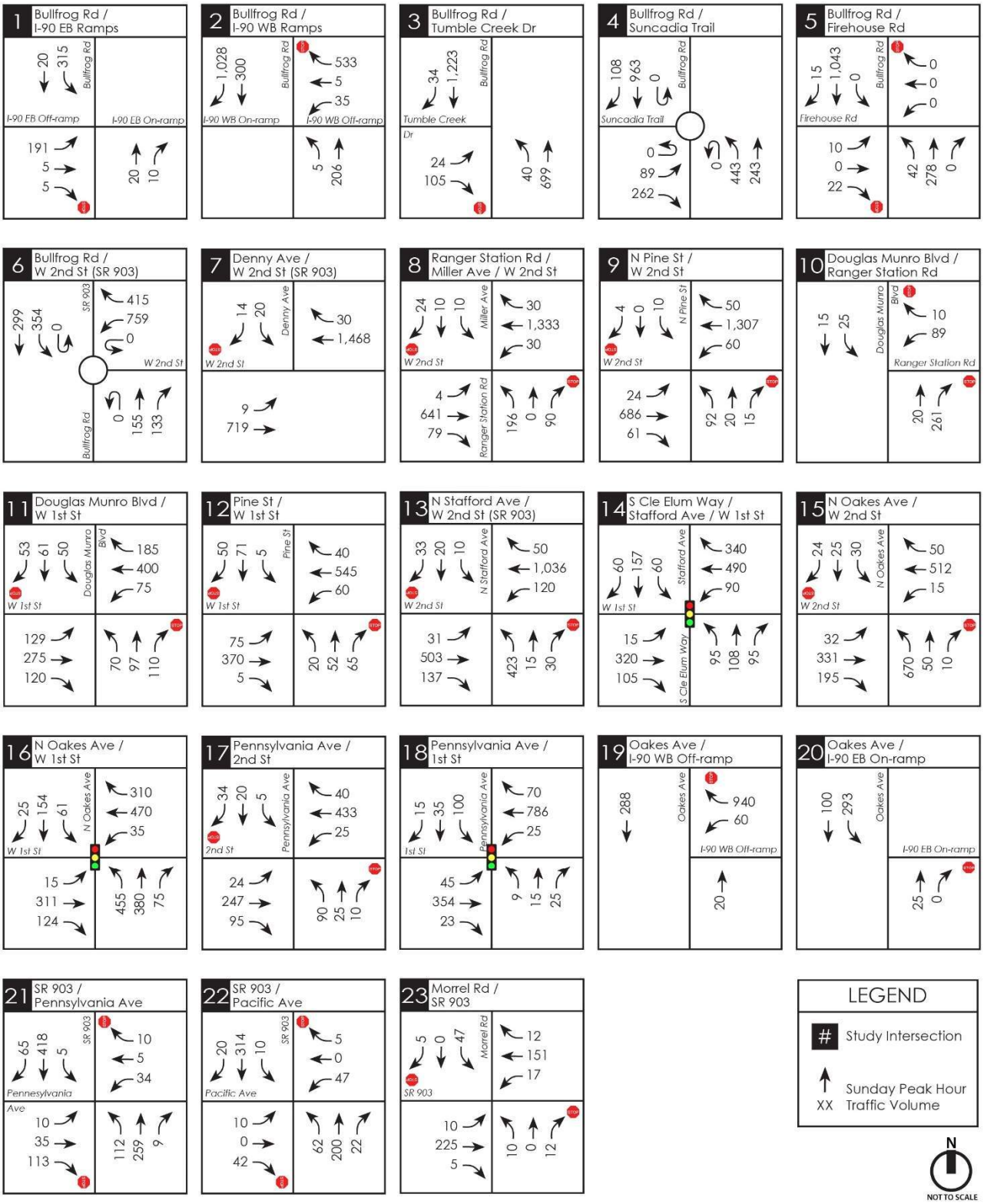


Figure 31: 2037 Sunday Peak Hour Traffic Volumes with SEIS Alternative 5 (Page 1)

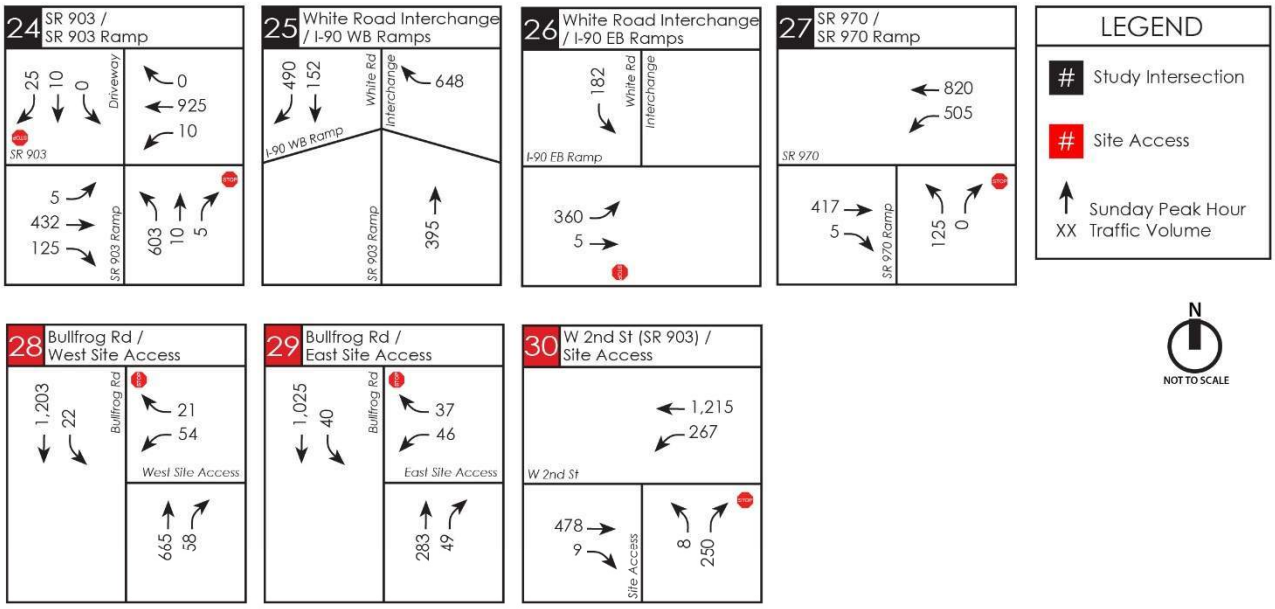


Figure 31: 2037 Sunday Peak Hour Traffic Volumes with SEIS Alternative 5 (Page 2)

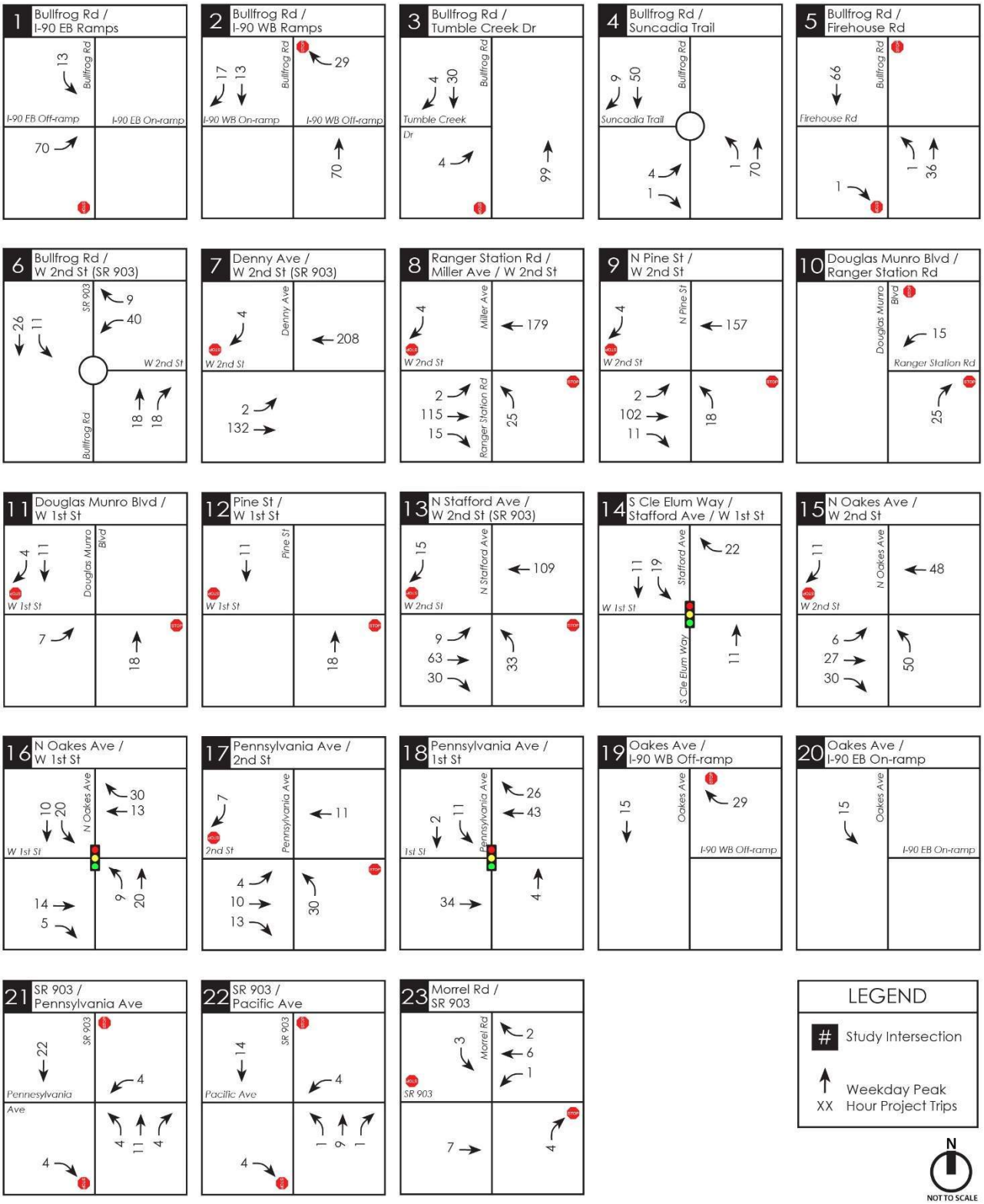


Figure 32: 2025 Weekday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

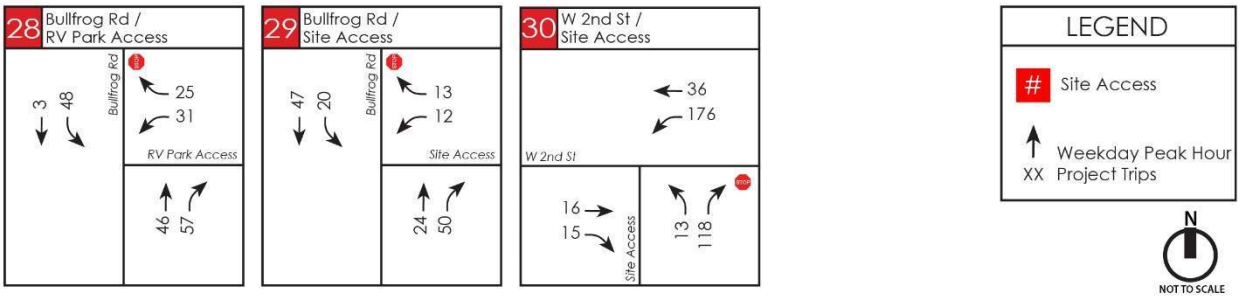


Figure 32: 2025 Weekday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

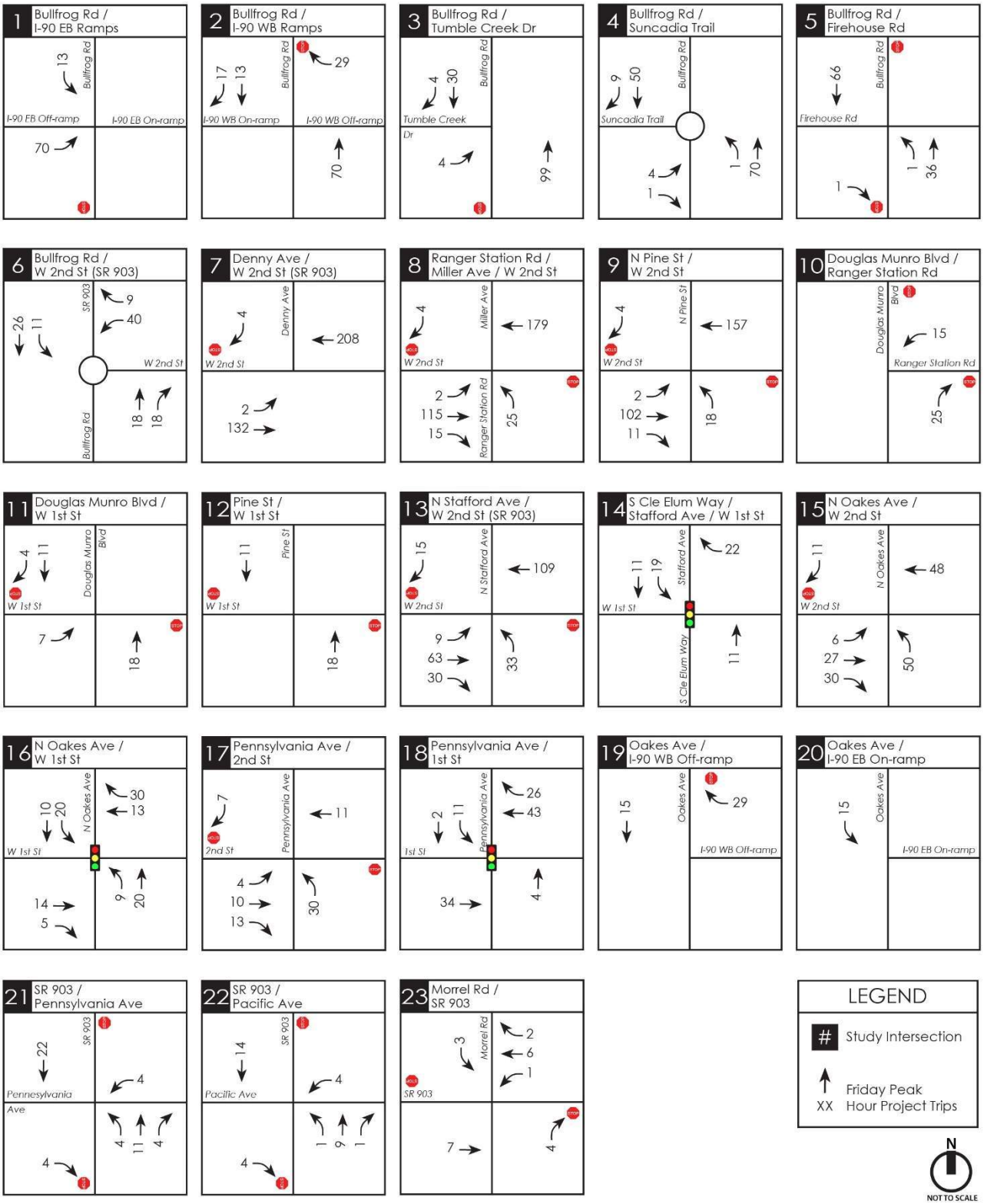


Figure 33: 2025 Friday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

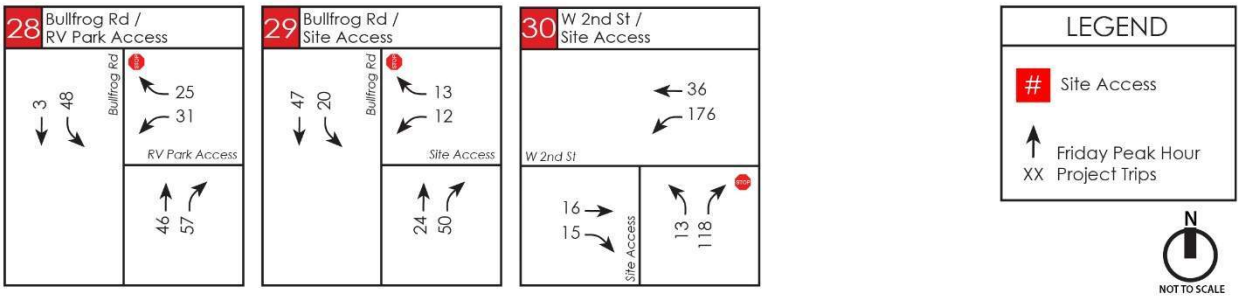


Figure 33: 2025 Friday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

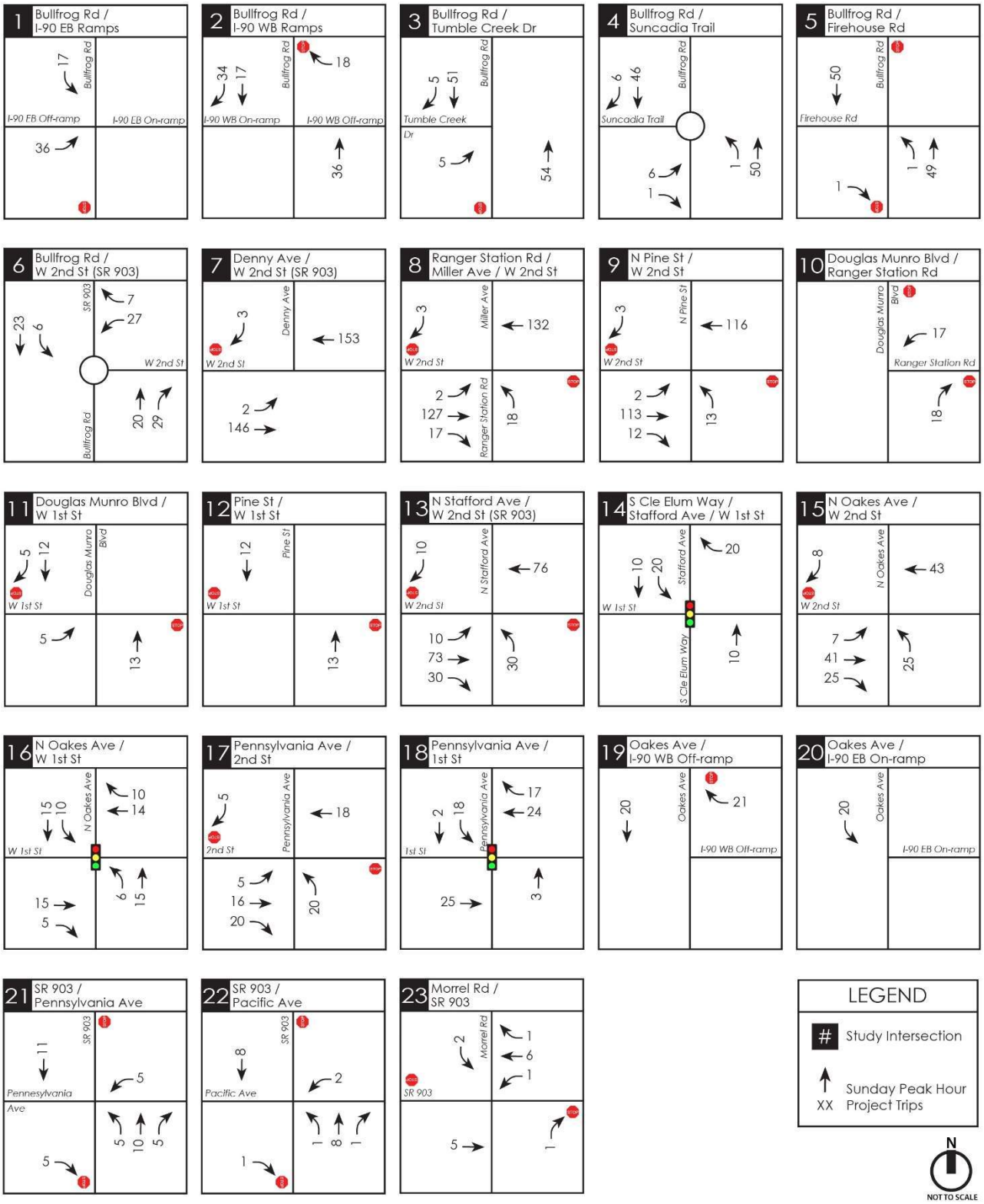


Figure 34: 2025 Sunday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

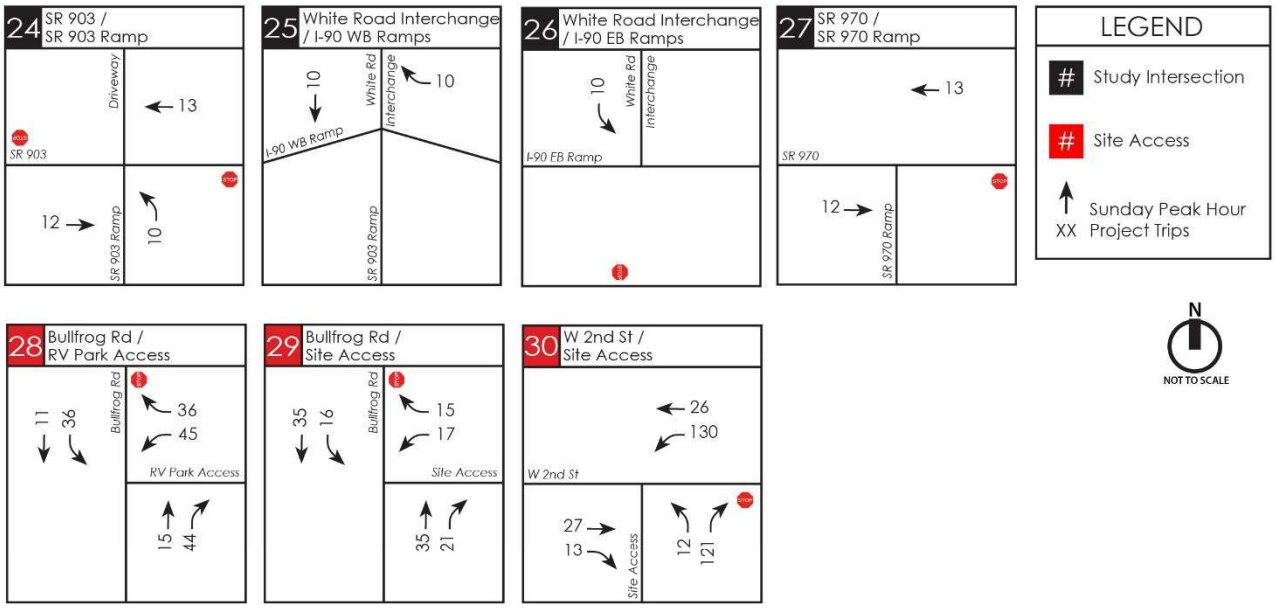


Figure 34: 2025 Sunday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

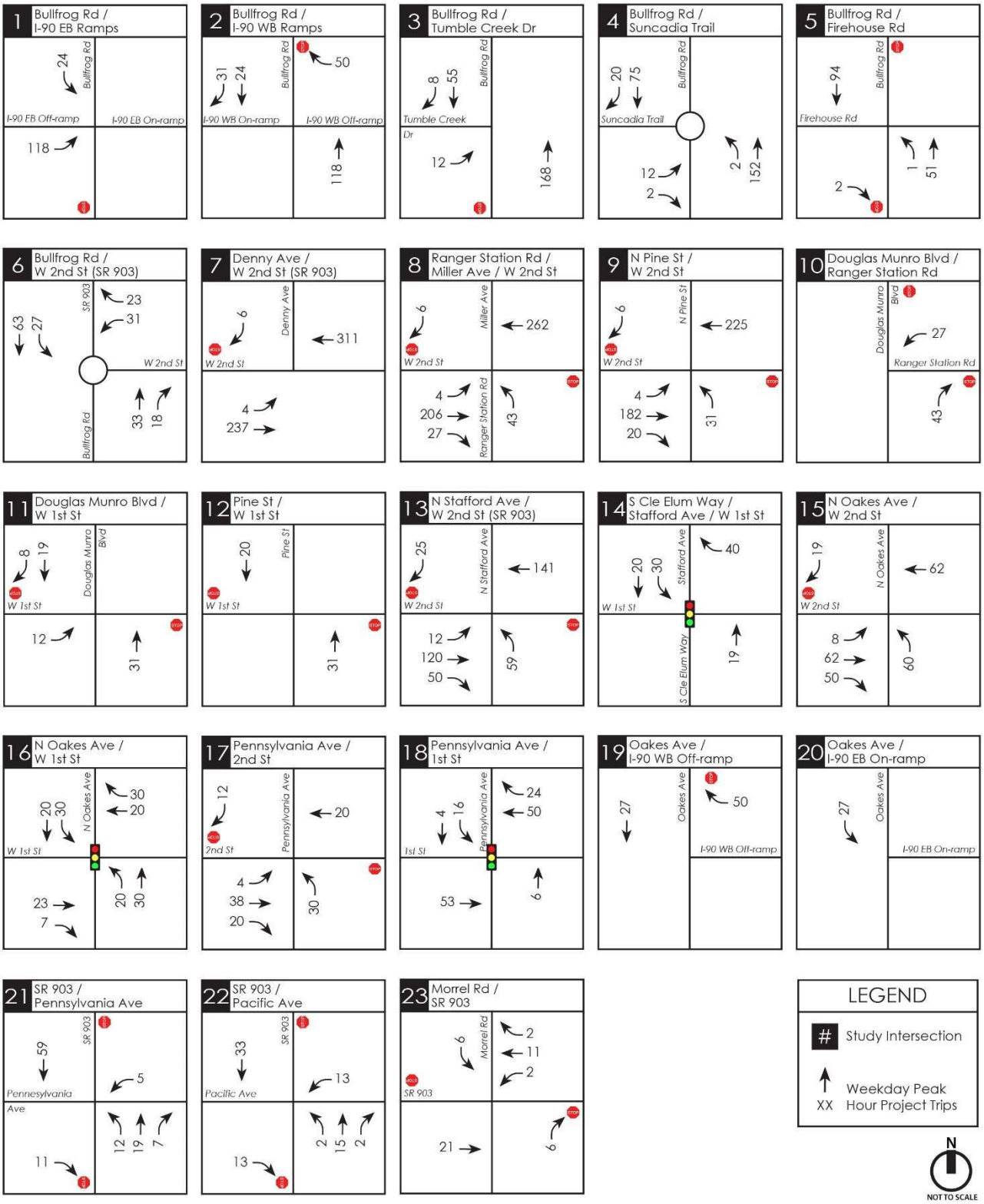


Figure 35: 2031 Weekday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

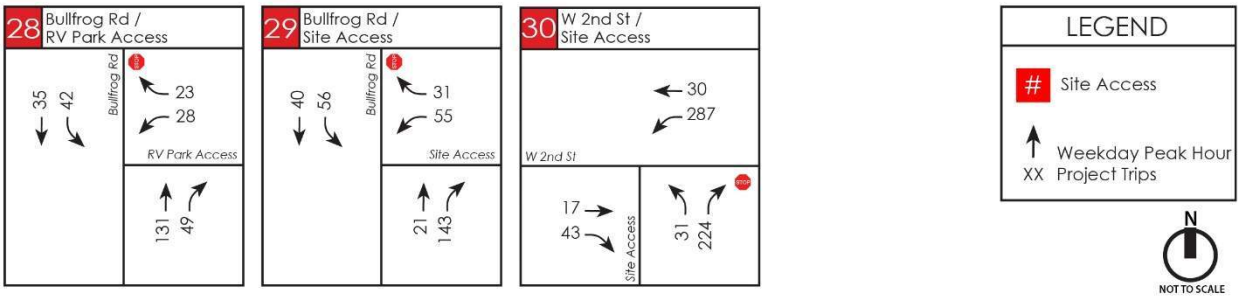


Figure 35: 2031 Weekday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

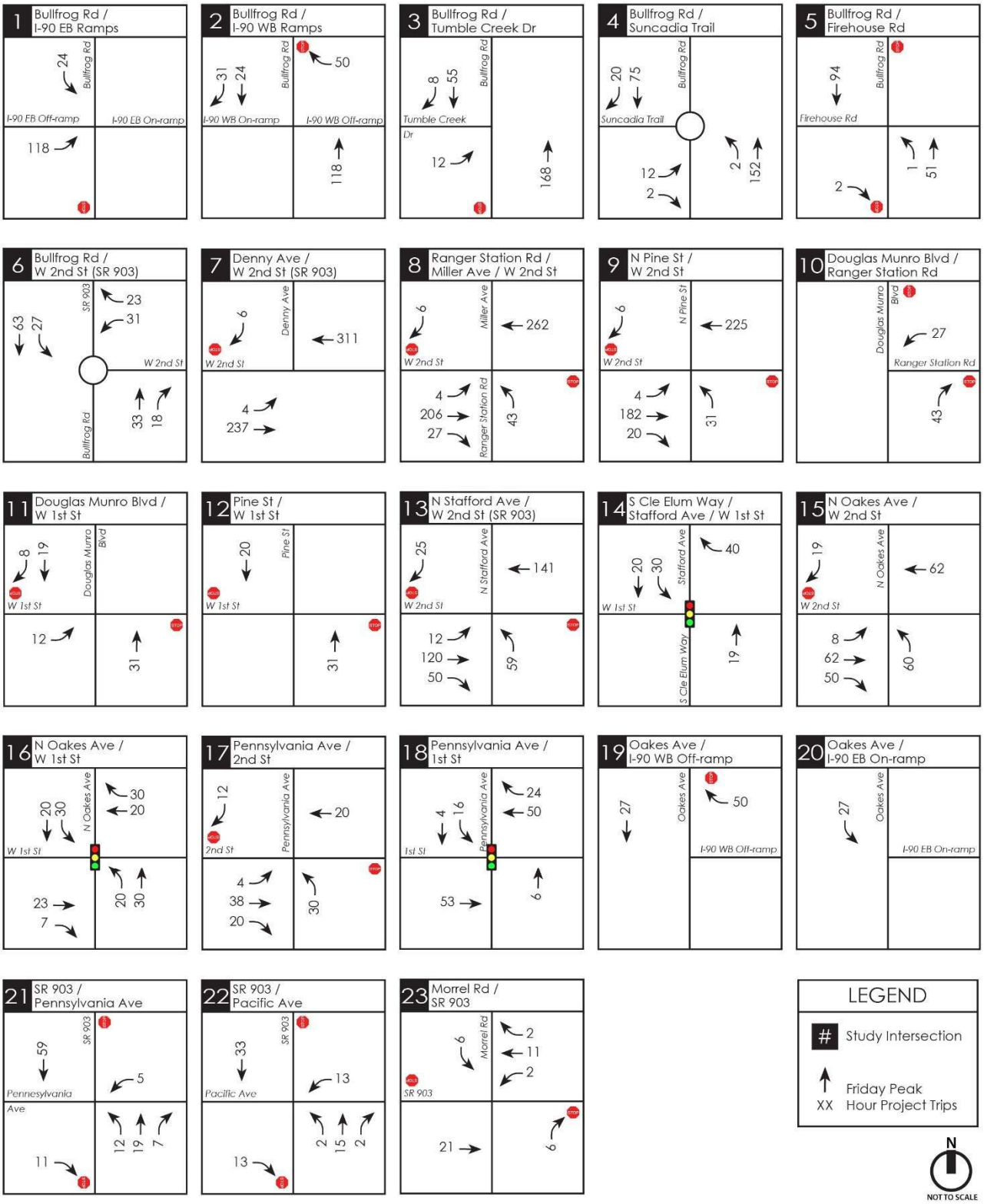


Figure 36: 2031 Friday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

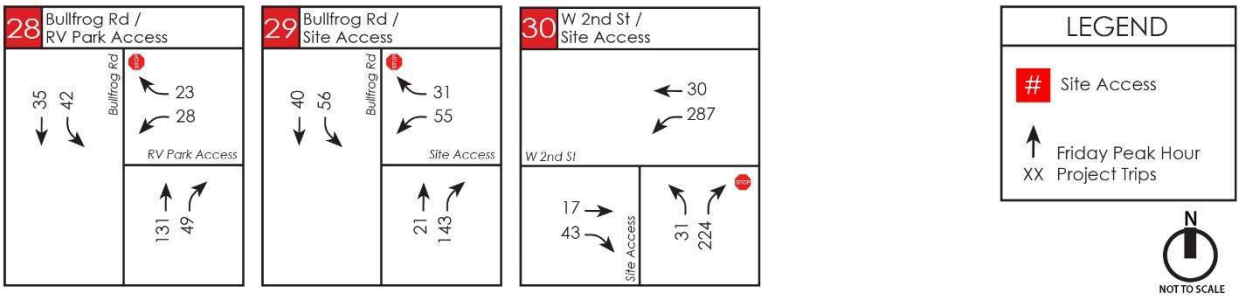


Figure 36: 2031 Friday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

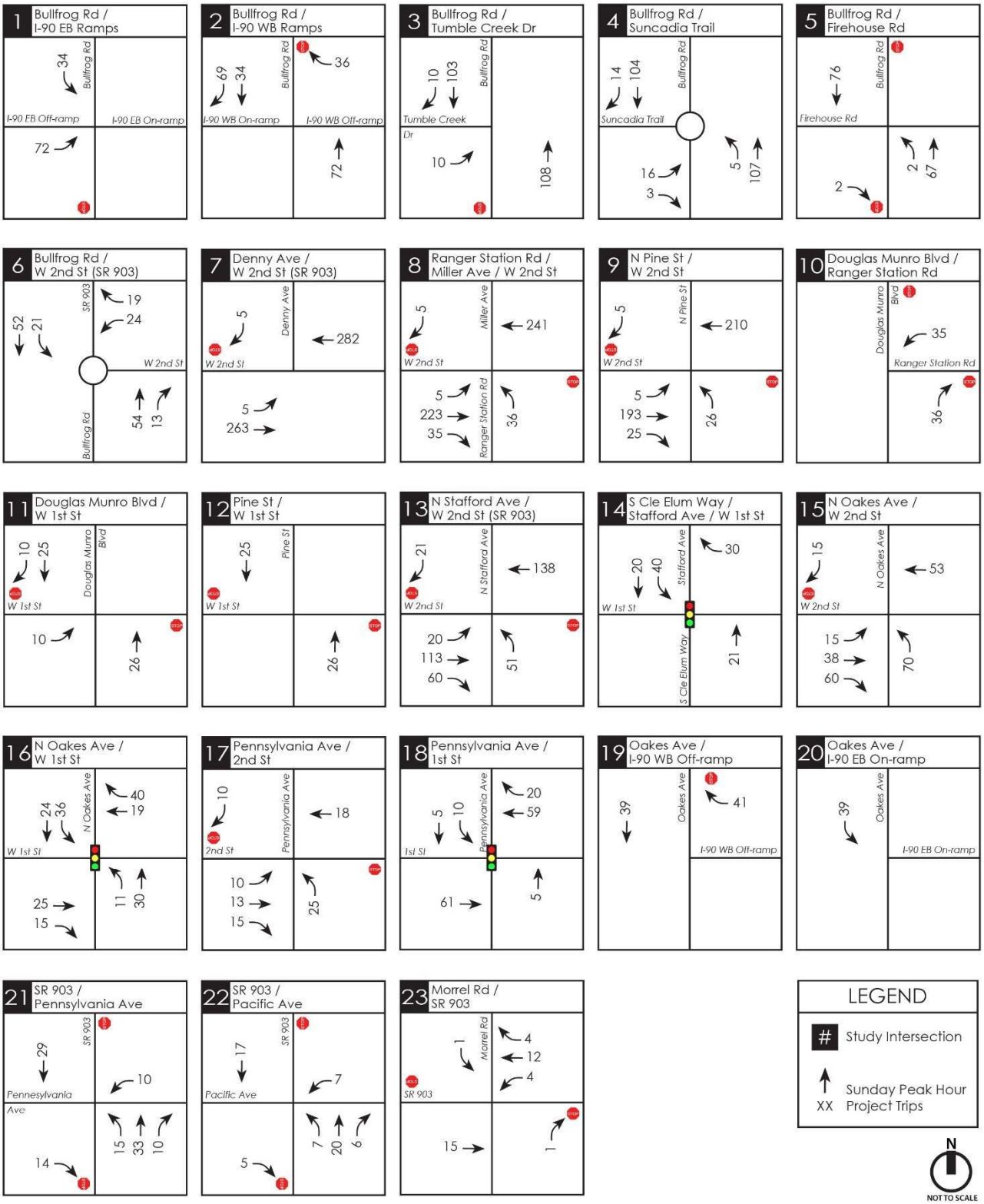


Figure 37: 2031 Sunday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

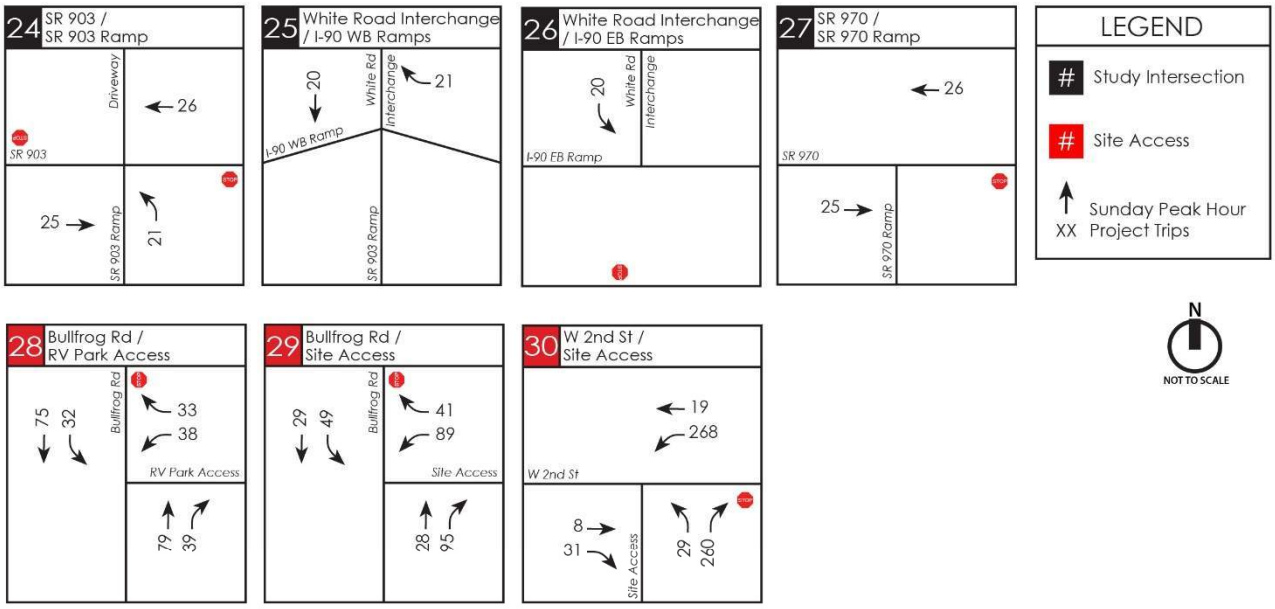


Figure 37: 2031 Sunday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

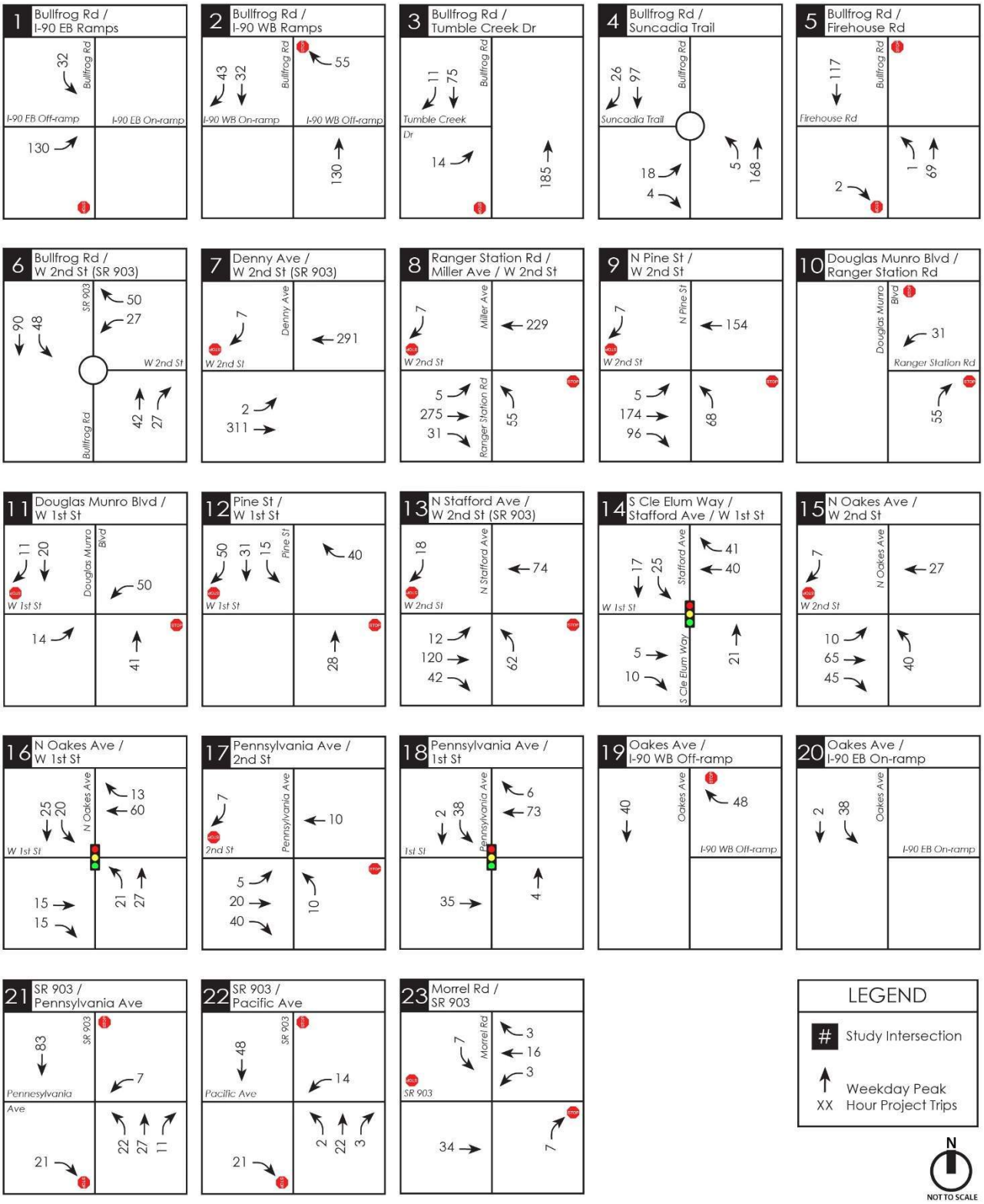


Figure 38: 2037 Weekday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

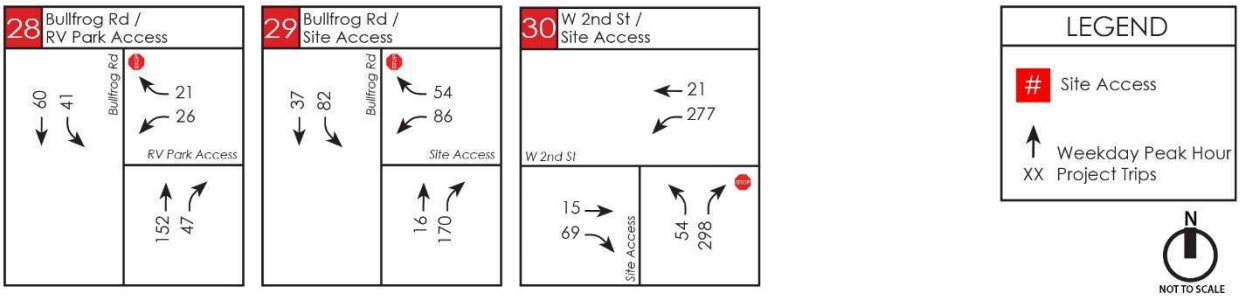


Figure 38: 2037 Weekday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

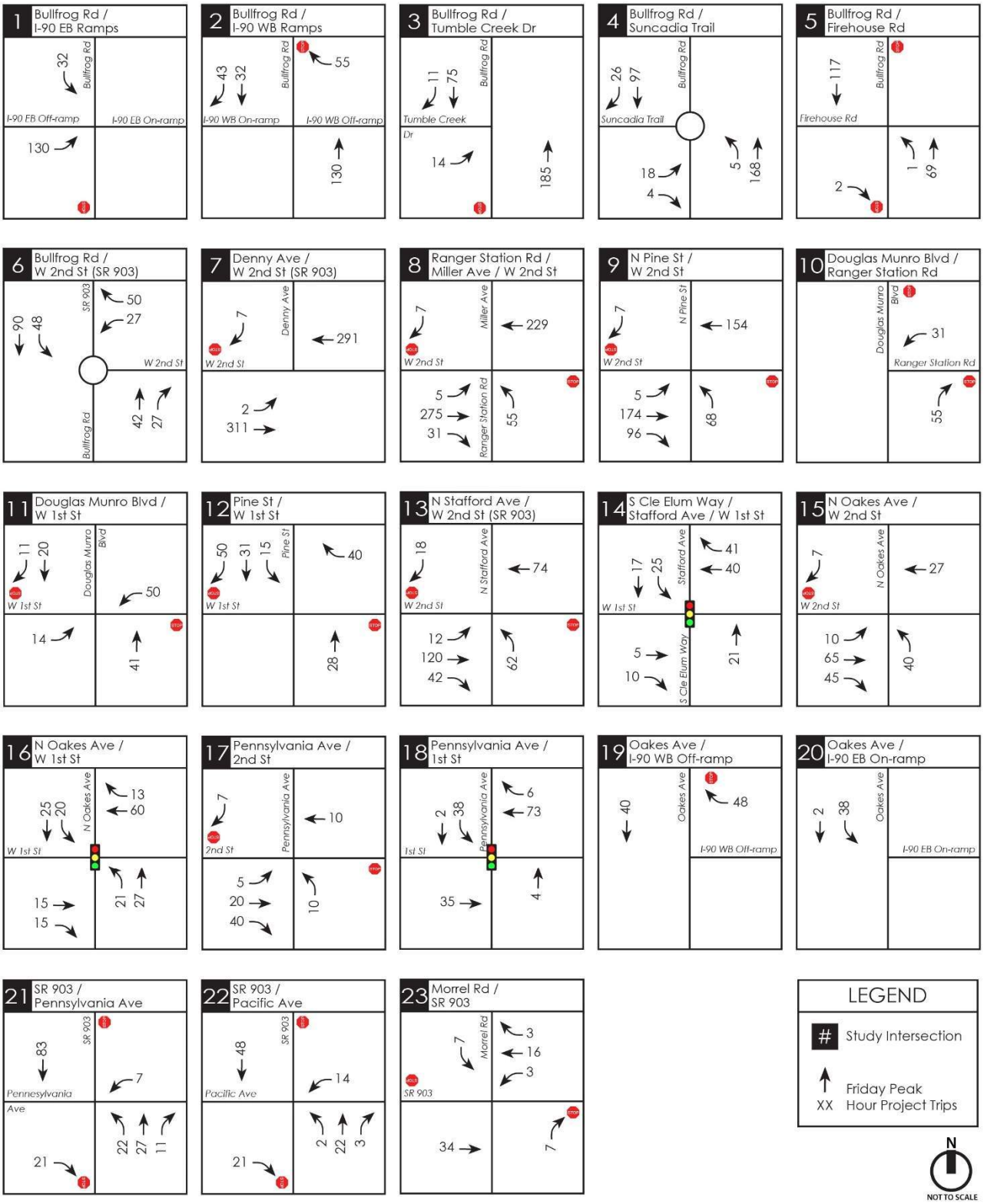


Figure 39: 2037 Friday Peak Hour Trip Assignment - SEIS Alternative 6 (Page 1)

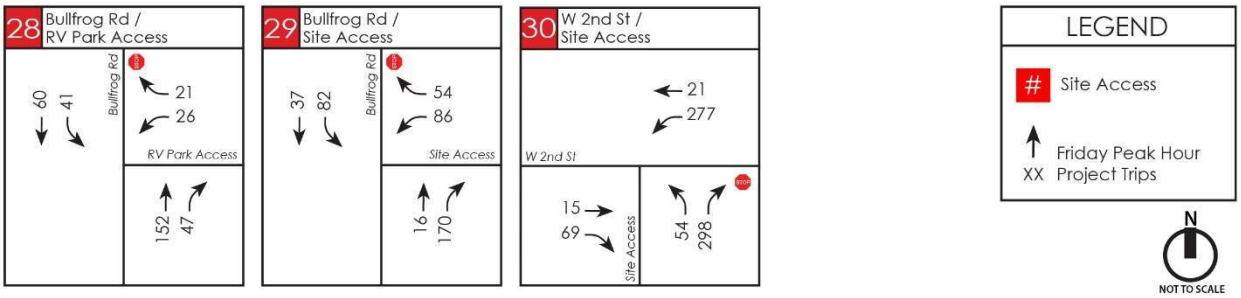


Figure 39: 2037 Friday Peak Hour Trip Assignment - SEIS Alternative 6 (Page 2)

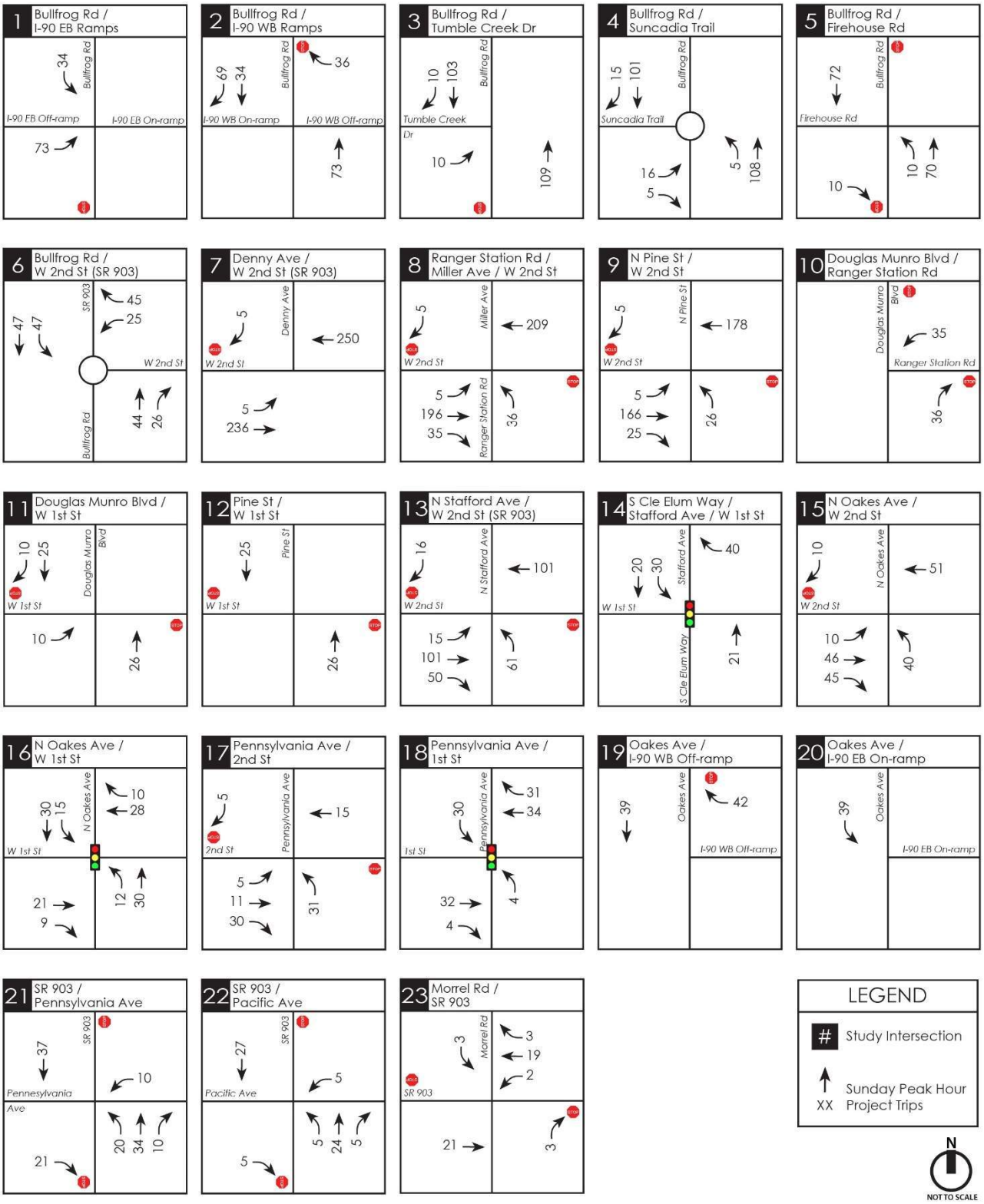


Figure 40: 2037 Sunday PM Peak Trip Assignment - SEIS Alternative 6 (Page 1)

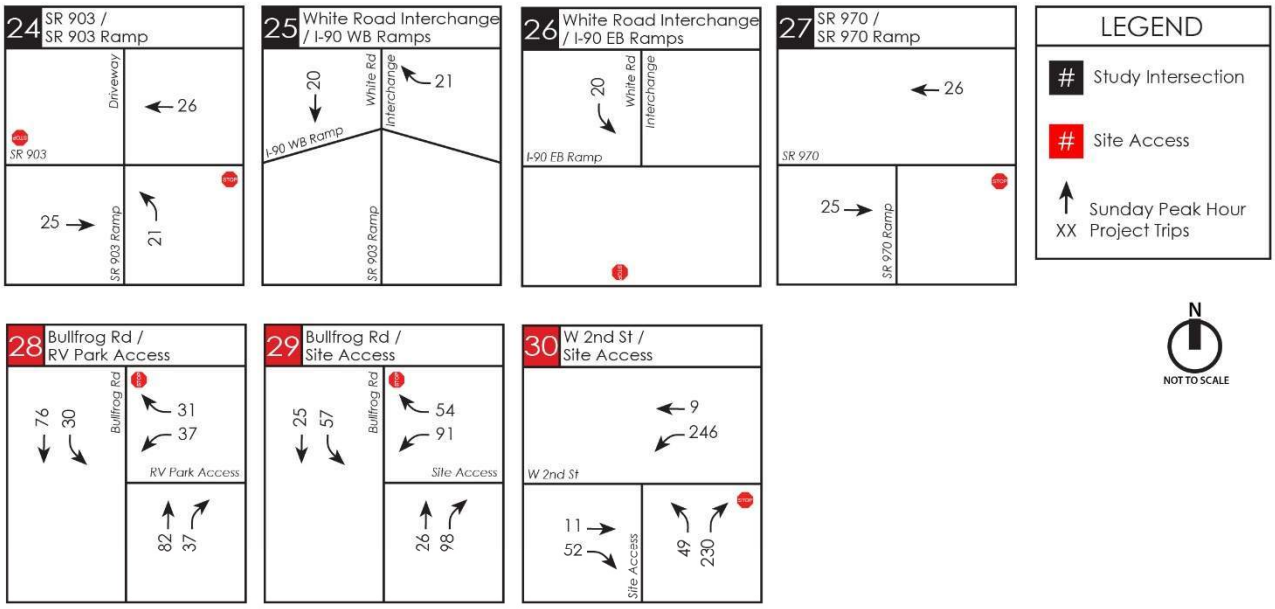


Figure 40: 2037 Sunday PM Peak Trip Assignment - SEIS Alternative 6 (Page 2)

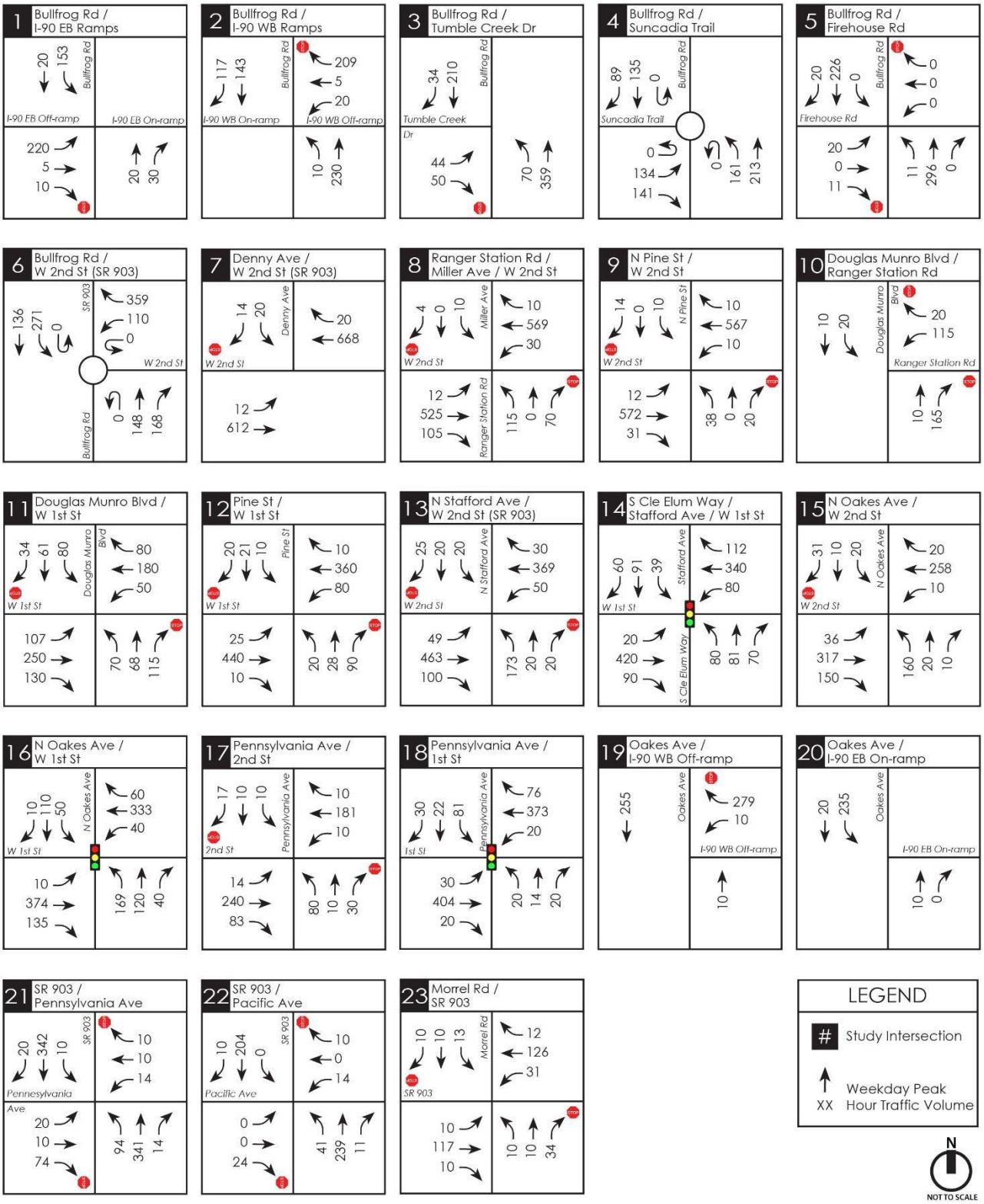


Figure 41: 2025 Weekday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

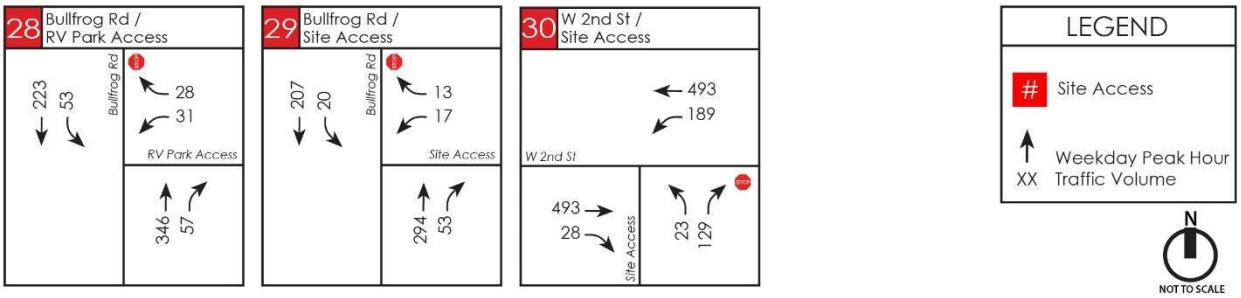


Figure 41: 2025 Weekday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

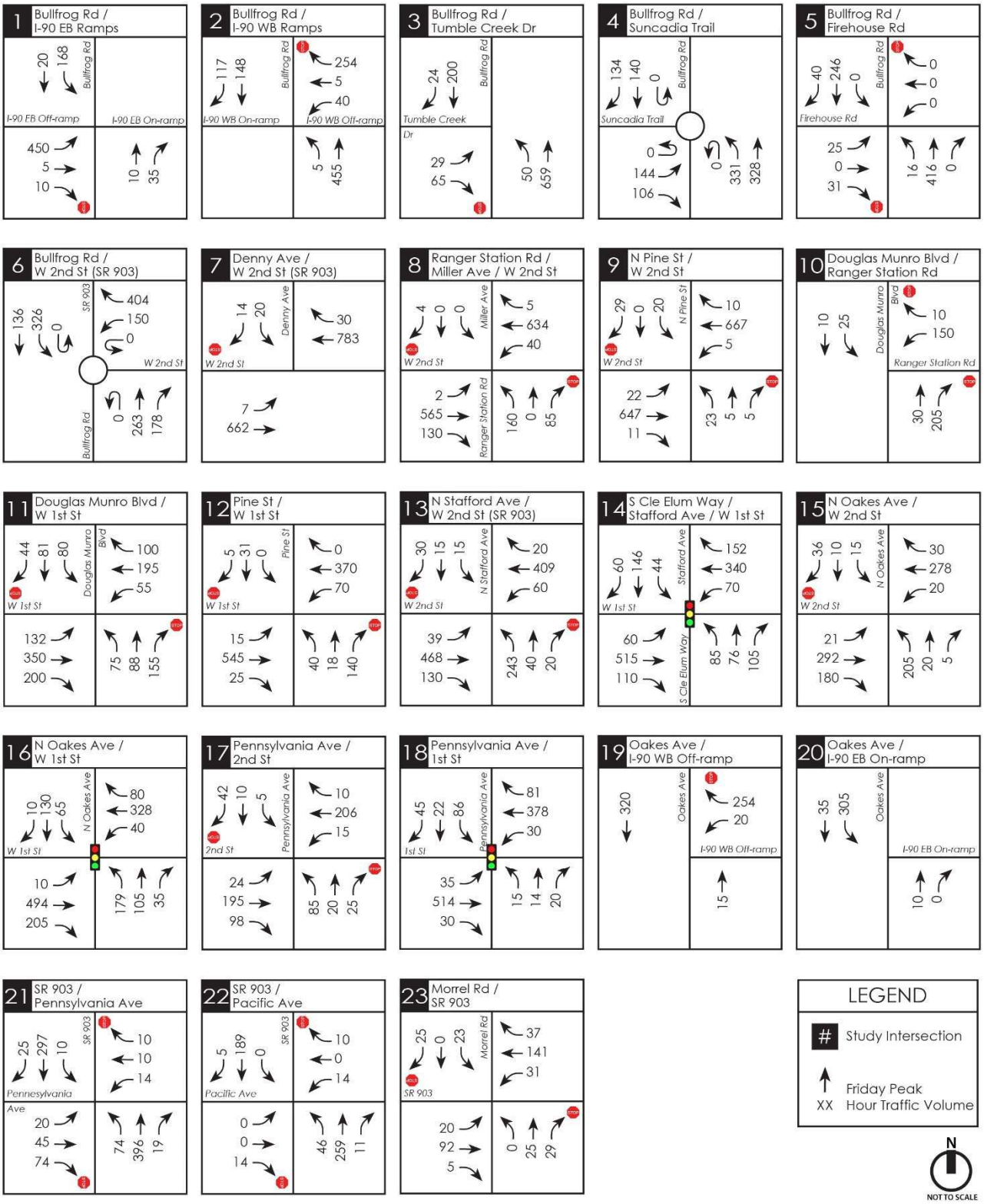


Figure 42: 2025 Friday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

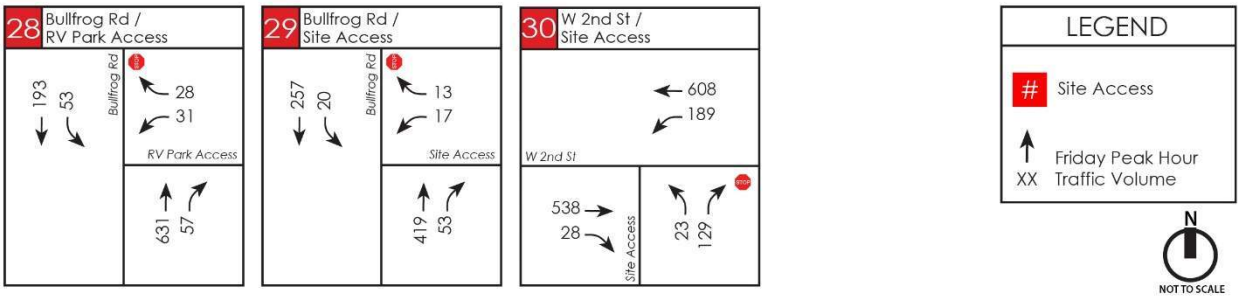


Figure 42: 2025 Friday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

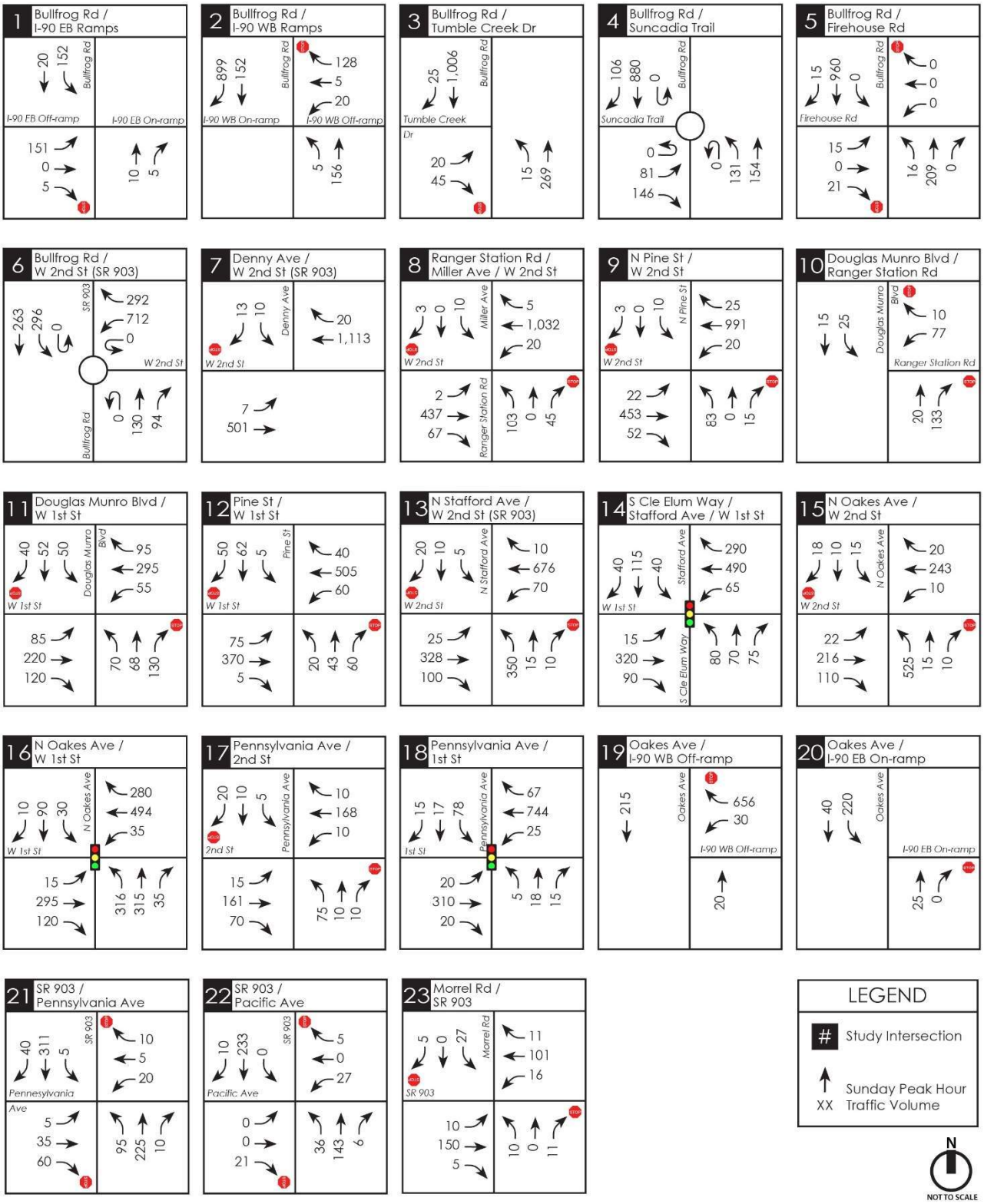


Figure 43: 2025 Sunday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

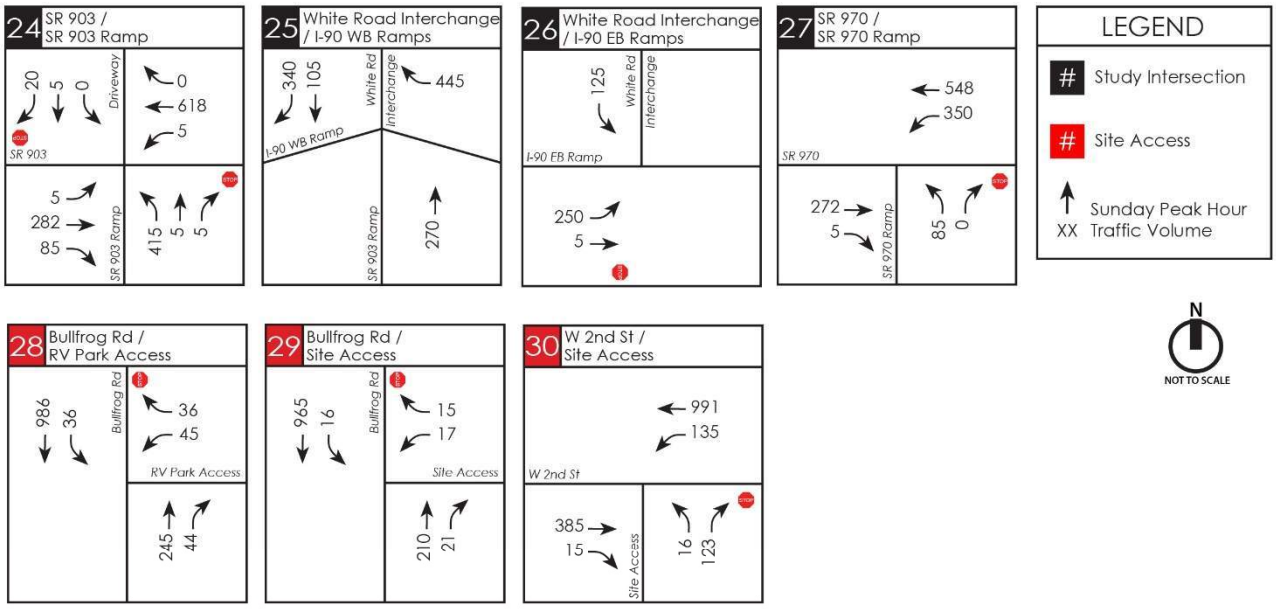


Figure 43: 2025 Sunday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

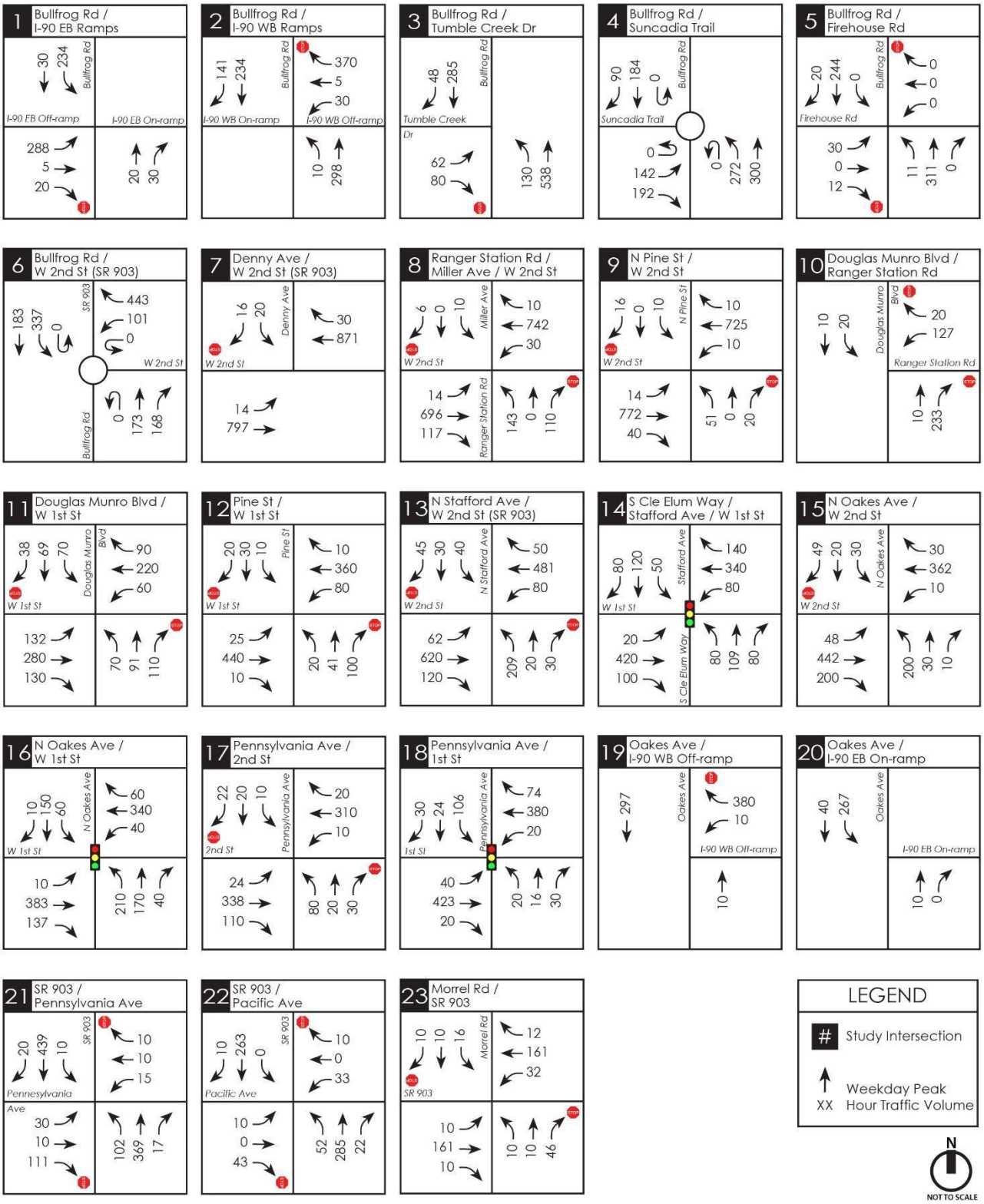


Figure 44: 2031 Weekday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

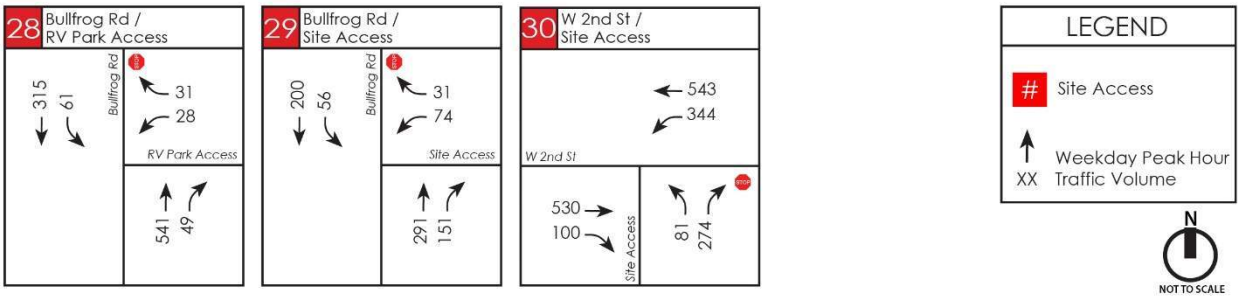


Figure 44: 2031 Weekday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

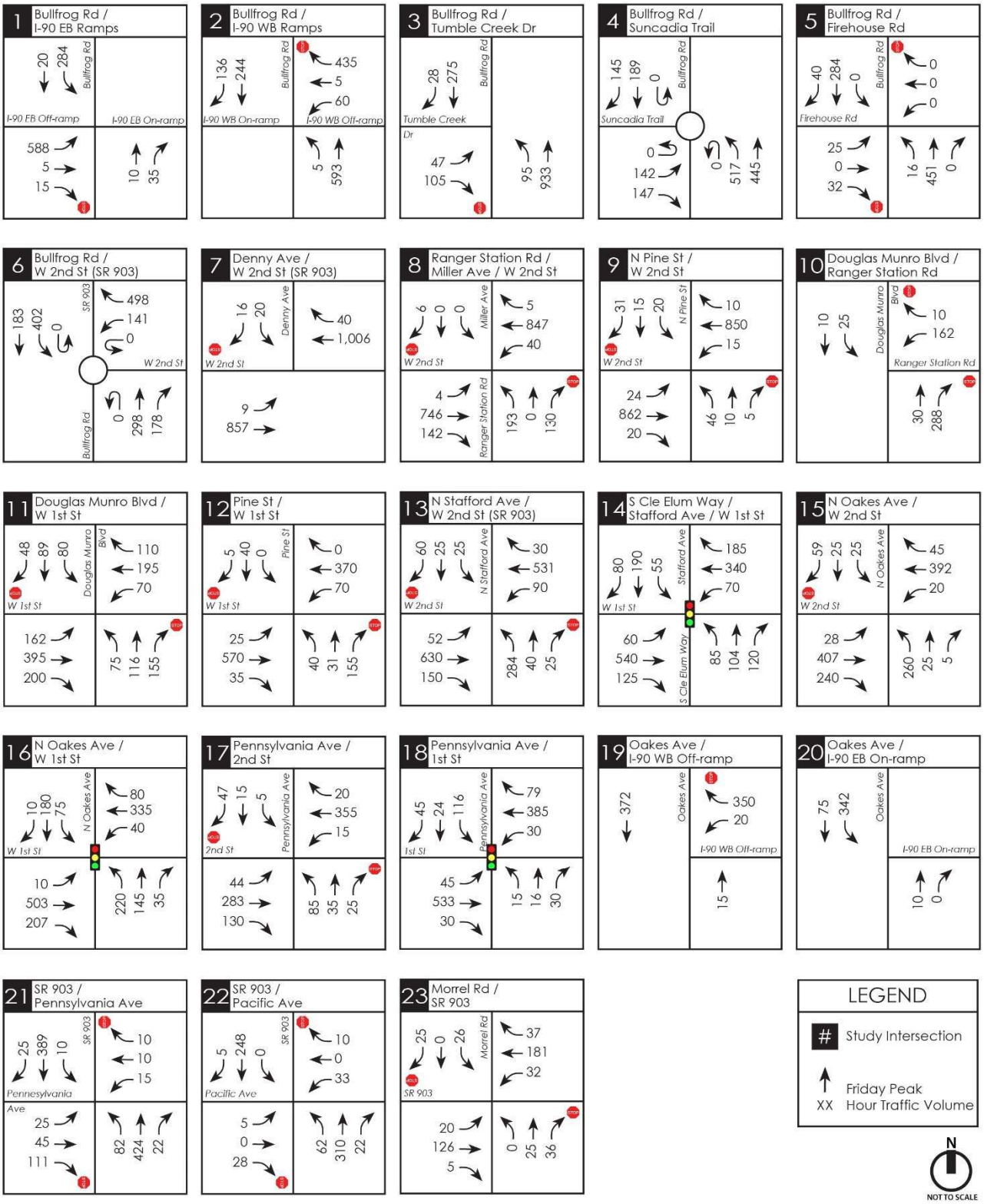


Figure 45: 2031 Friday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

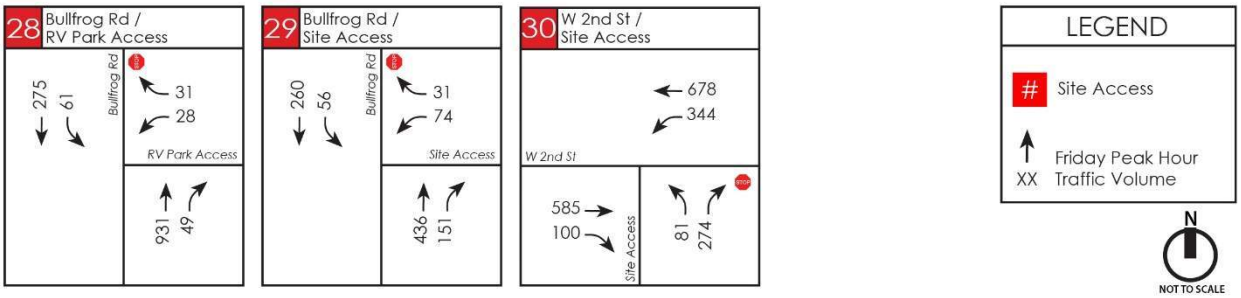


Figure 45: 2031 Friday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

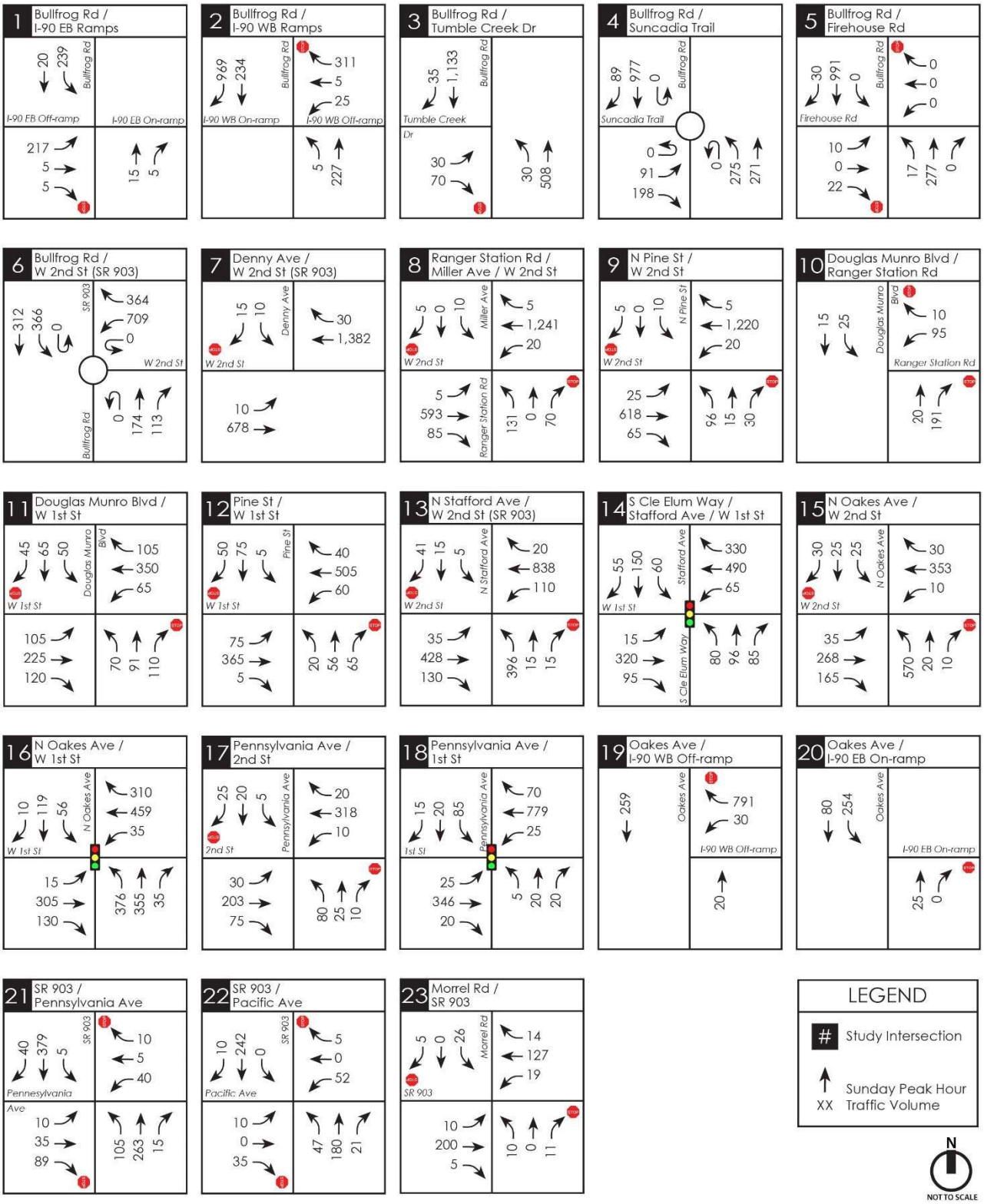


Figure 46: 2031 Sunday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

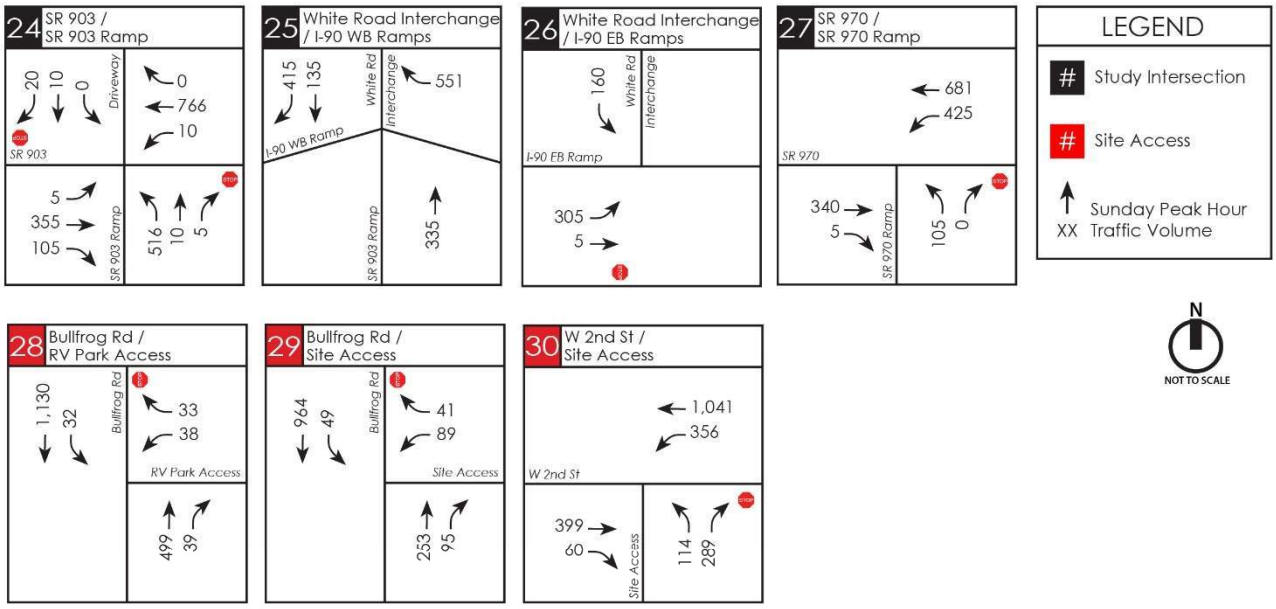


Figure 46: 2031 Sunday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

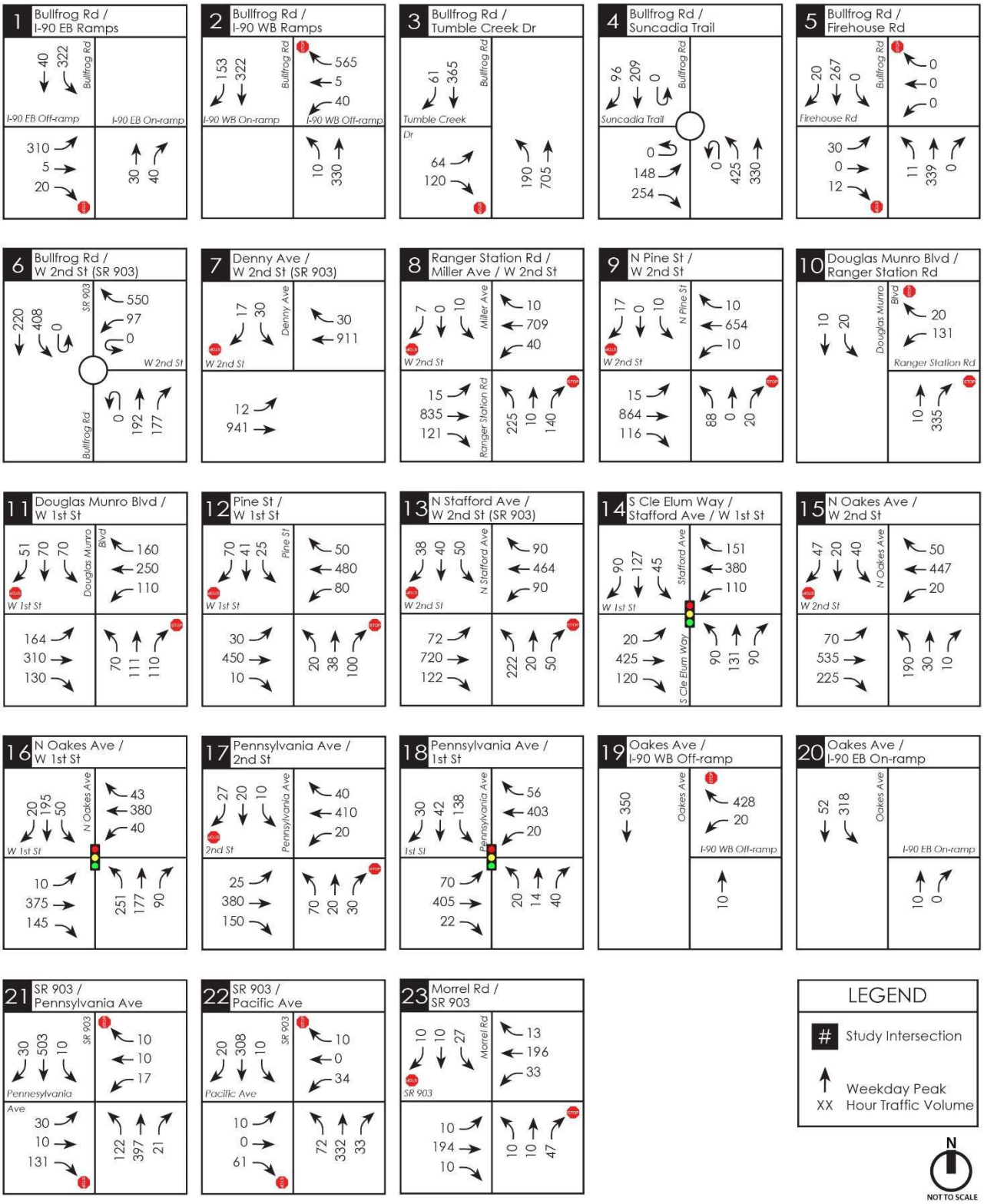


Figure 47: 2037 Weekday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

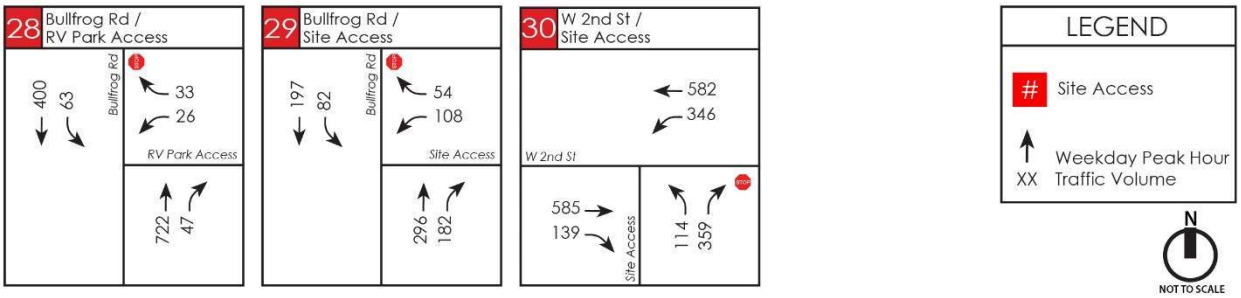


Figure 47: 2037 Weekday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

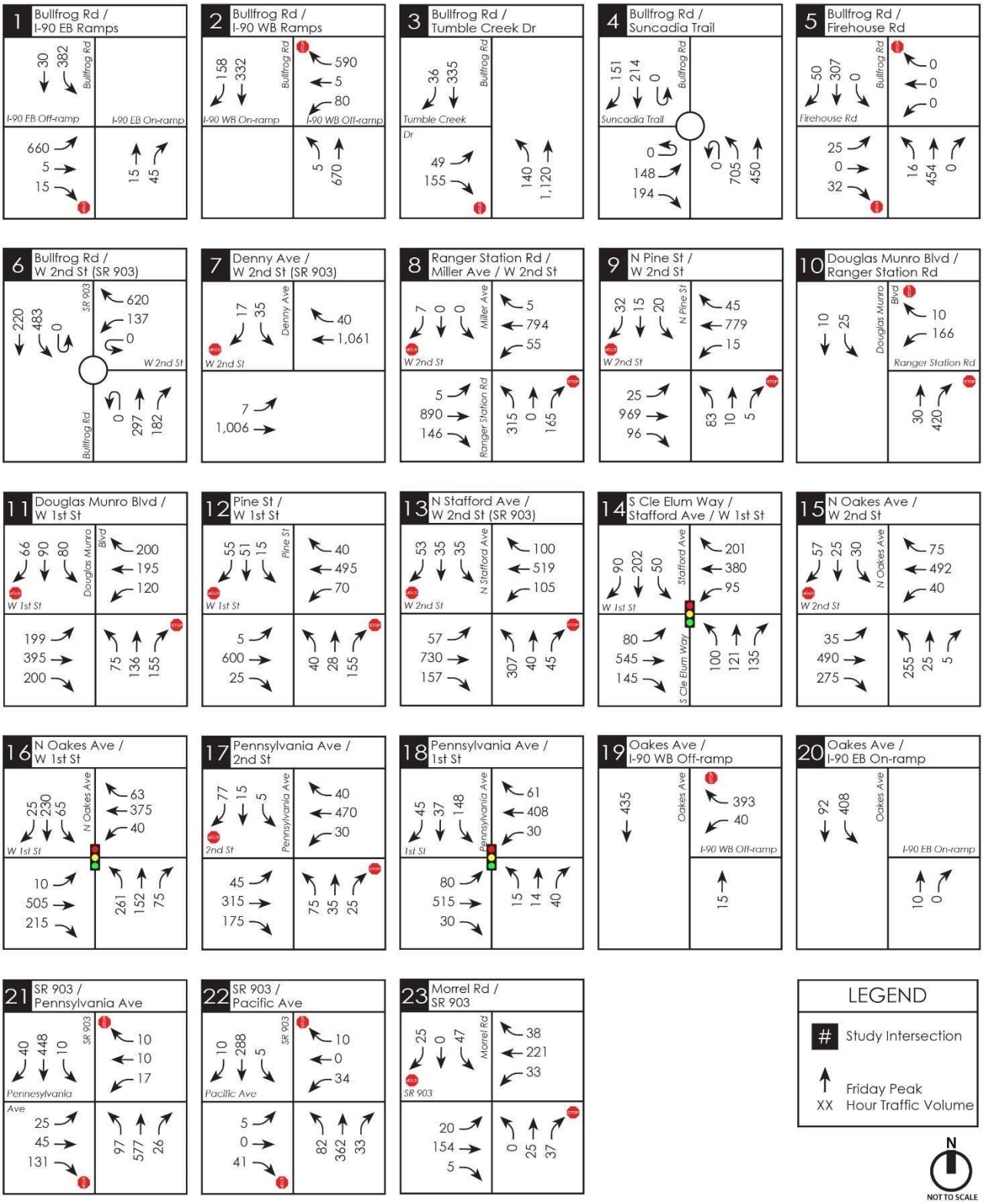


Figure 48: 2037 Friday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

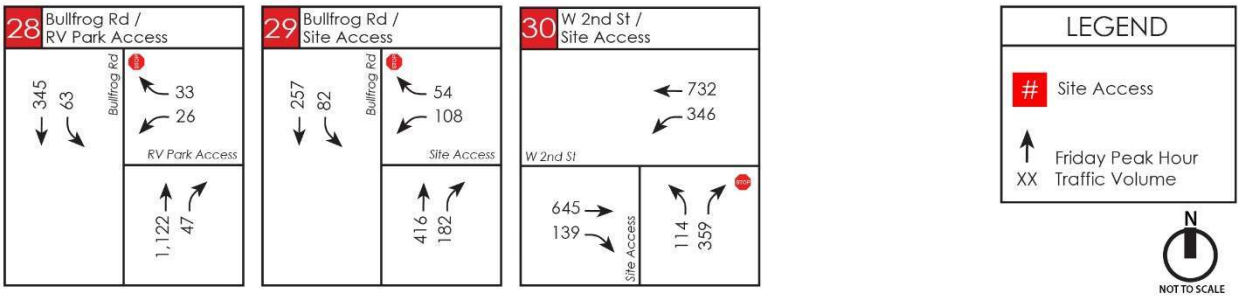


Figure 48: 2037 Friday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

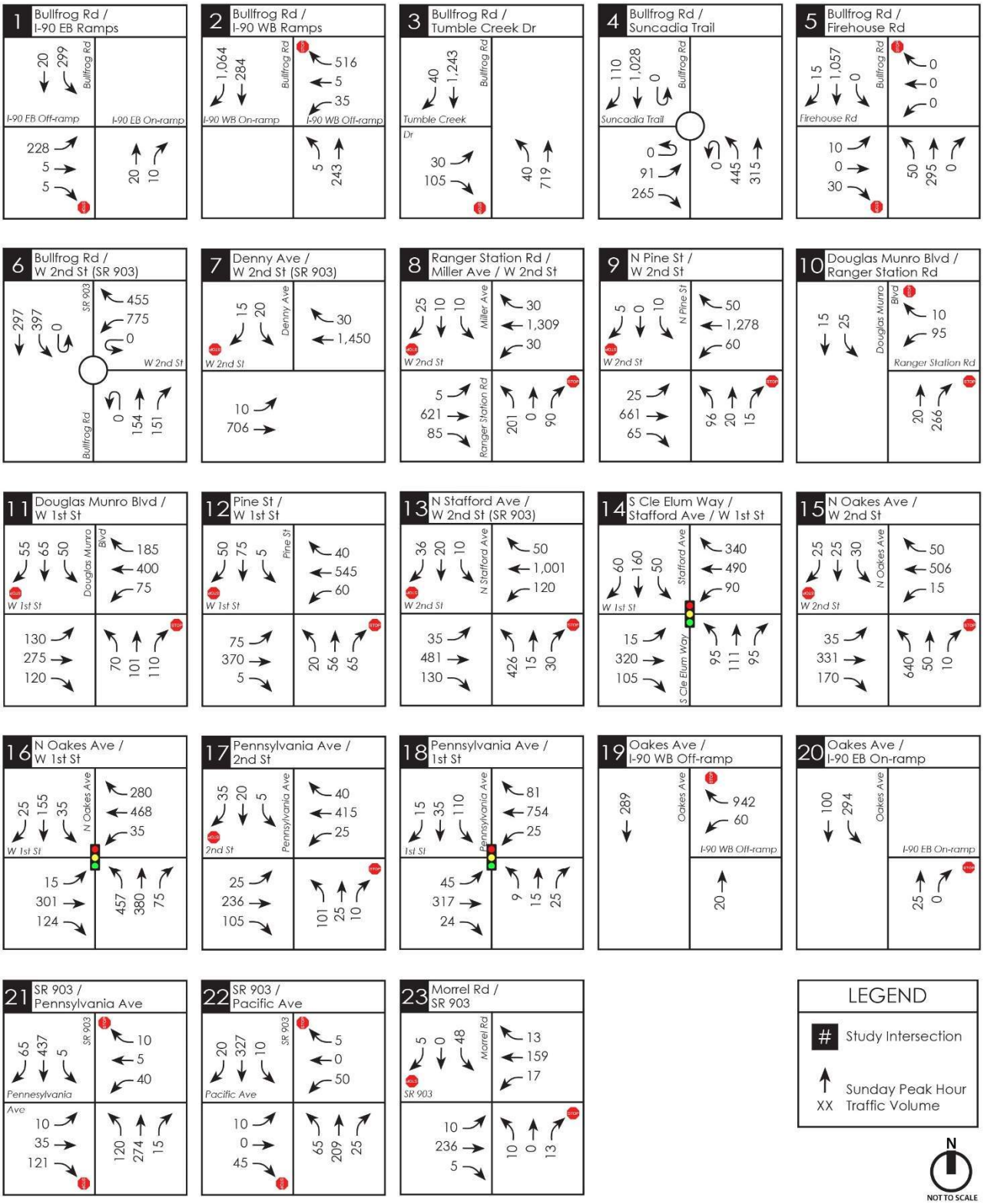


Figure 49: 2037 Sunday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 1)

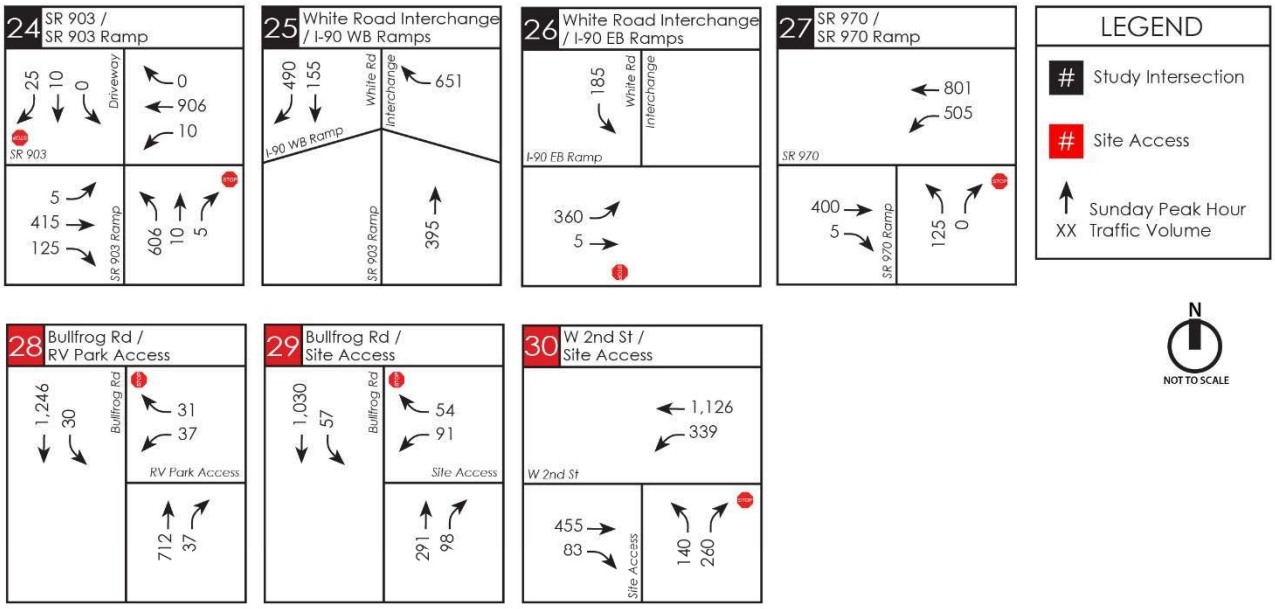
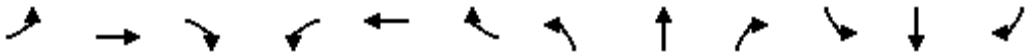


Figure 49: 2037 Sunday PM Peak Traffic Volumes with SEIS Alternative 6 (Page 2)

APPENDIX C

Detailed LOS Results

2019 Existing Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	2	10	0	0	0	0	12	16	71	4	0
Future Volume (vph)	129	2	10	0	0	0	0	12	16	71	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles (%)	1%	0%	40%	0%	0%	0%	0%	0%	0%	3%	25%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

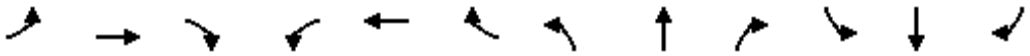
Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	129	2	10	0	0	0	0	12	16	71	4	0
Future Vol, veh/h	129	2	10	0	0	0	0	12	16	71	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	1	0	40	0	0	0	0	0	0	3	25	0
Mvmt Flow	184	3	14	0	0	0	0	17	23	101	6	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	237	248	6	-	0	0	40	0	0
Stage 1	208	208	-	-	-	-	-	-	-
Stage 2	29	40	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.5	6.6	-	-	-	4.13	-	-
Critical Hdwy Stg 1	5.41	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.66	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	753	658	976	0	-	-	1563	-	0
Stage 1	829	734	-	0	-	-	-	-	0
Stage 2	996	866	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	704	0	976	-	-	-	1563	-	-
Mov Cap-2 Maneuver	704	0	-	-	-	-	-	-	-
Stage 1	829	0	-	-	-	-	-	-	-
Stage 2	931	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0	7.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	718	1563	-
HCM Lane V/C Ratio	-	-	0.281	0.065	-
HCM Control Delay (s)	-	-	12	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	10	2	41	3	132	0	0	61	97
Future Volume (vph)	0	0	0	10	2	41	3	132	0	0	61	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	0%	50%	2%	0%	4%	0%	0%	5%	2%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

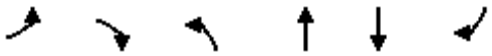
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	2	41	3	132	0	0	61	97
Future Vol, veh/h	0	0	0	10	2	41	3	132	0	0	61	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	50	2	0	4	0	0	5	2
Mvmt Flow	0	0	0	11	2	47	3	152	0	0	70	111

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	284	339	152	181	0	-	-	-	0	
Stage 1	158	158	-	-	-	-	-	-	-	
Stage 2	126	181	-	-	-	-	-	-	-	
Critical Hdwy	6.4	7	6.22	4.1	-	-	-	-	-	
Critical Hdwy Stg 1	5.4	6	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	6	-	-	-	-	-	-	-	
Follow-up Hdwy	3.5	4.45	3.318	2.2	-	-	-	-	-	
Pot Cap-1 Maneuver	710	512	894	1407	-	0	0	-	-	
Stage 1	875	684	-	-	-	0	0	-	-	
Stage 2	905	668	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	709	0	894	1407	-	-	-	-	-	
Mov Cap-2 Maneuver	709	0	-	-	-	-	-	-	-	
Stage 1	873	0	-	-	-	-	-	-	-	
Stage 2	905	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1407	-	850	-	-
HCM Lane V/C Ratio	0.002	-	0.072	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	33	14	19	153	140	23
Future Volume (vph)	33	14	19	153	140	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	18%	7%	5%	3%	1%	9%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

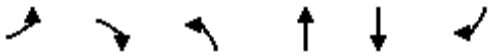
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	14	19	153	140	23
Future Vol, veh/h	33	14	19	153	140	23
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	18	7	5	3	1	9
Mvmt Flow	38	16	22	174	159	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	390	172	185	0	-	0
Stage 1	172	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.58	6.27	4.15	-	-	-
Critical Hdwy Stg 1	5.58	-	-	-	-	-
Critical Hdwy Stg 2	5.58	-	-	-	-	-
Follow-up Hdwy	3.662	3.363	2.245	-	-	-
Pot Cap-1 Maneuver	584	859	1372	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	575	859	1372	-	-	-
Mov Cap-2 Maneuver	575	-	-	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	782	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1372	-	638	-	-
HCM Lane V/C Ratio	0.016	-	0.084	-	-
HCM Control Delay (s)	7.7	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	126	89	57	130	75	65
Future Volume (vph)	126	89	57	130	75	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	6%	3%	7%	3%	3%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

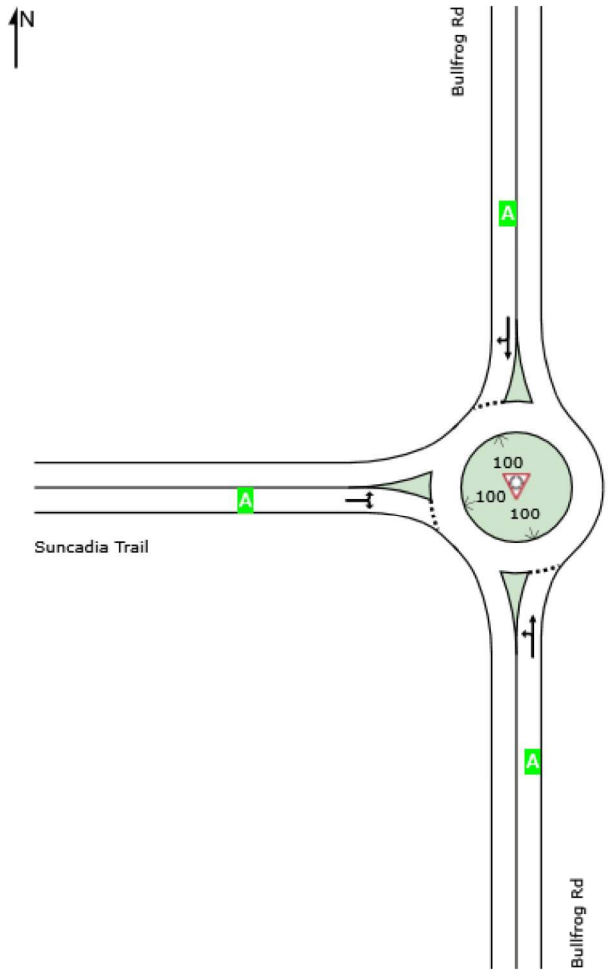
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2019 Existing - Weekday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2019 Existing - Weekday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

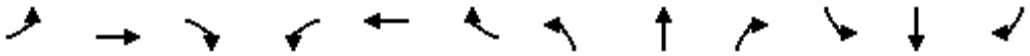
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	199	4.3	1145	0.174	100	4.7	LOS A	0.8	20.7	Full	1600	0.0	0.0
Approach	199	4.3		0.174		4.7	LOS A	0.8	20.7				
North: Bullfrog Rd													
Lane 1[d]	149	2.1	1264	0.118	100	3.8	LOS A	0.5	13.7	Full	1600	0.0	0.0
Approach	149	2.1		0.118		3.8	LOS A	0.5	13.7				
West: Suncadia Trail													
Lane 1[d]	229	4.7	1212	0.189	100	4.6	LOS A	0.9	23.2	Full	1600	0.0	0.0
Approach	229	4.7		0.189		4.6	LOS A	0.9	23.2				
Intersection	577	3.9		0.189		4.4	LOS A	0.9	23.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	0	4	0	0	0	4	250	0	1	136	11
Future Volume (vph)	23	0	4	0	0	0	4	250	0	1	136	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	9%	0%	0%	0%	0%	0%	25%	4%	0%	0%	7%	18%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	0	4	0	0	0	4	250	0	1	136	11
Future Vol, veh/h	23	0	4	0	0	0	4	250	0	1	136	11
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	9	0	0	0	0	0	25	4	0	0	7	18
Mvmt Flow	25	0	4	0	0	0	4	272	0	1	148	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	437	437	155	438	443	272	161	0	0	272	0	0
Stage 1	157	157	-	280	280	-	-	-	-	-	-	-
Stage 2	280	280	-	158	163	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.5	6.2	7.1	6.5	6.2	4.35	-	-	4.1	-	-
Critical Hdwy Stg 1	6.19	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4	3.3	3.5	4	3.3	2.425	-	-	2.2	-	-
Pot Cap-1 Maneuver	518	516	896	532	512	772	1290	-	-	1303	-	-
Stage 1	829	772	-	731	683	-	-	-	-	-	-	-
Stage 2	712	683	-	849	767	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	515	513	895	527	509	772	1289	-	-	1303	-	-
Mov Cap-2 Maneuver	515	513	-	527	509	-	-	-	-	-	-	-
Stage 1	825	770	-	728	680	-	-	-	-	-	-	-
Stage 2	709	680	-	844	765	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	0	0.1	0.1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1289	-	-	550	-	1303	-	-
HCM Lane V/C Ratio	0.003	-	-	0.053	-	0.001	-	-
HCM Control Delay (s)	7.8	0	-	11.9	0	7.8	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	1	67	222	1	112	141	1	177	80
Future Volume (vph)	1	67	222	1	112	141	1	177	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			35				35
Link Distance (ft)		3799			1103				660
Travel Time (s)		57.6			21.5				12.9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	2%	0%	3%	6%	0%	3%	0%
Shared Lane Traffic (%)									
Sign Control		Yield			Yield				Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

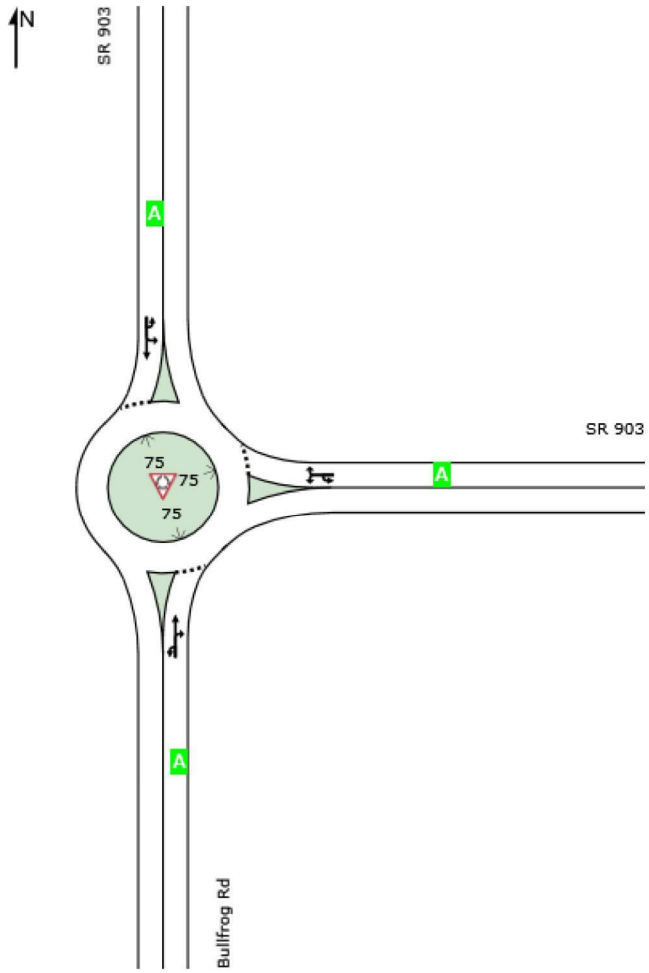
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2019 Existing - Weekday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2019 Existing - Weekday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

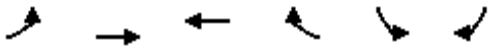
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	267	4.4	1083	0.247	100	5.6	LOS A	1.2	30.9	Full	1600	0.0	0.0
Approach	267	4.4		0.247		5.6	LOS A	1.2	30.9				
East: SR 903													
Lane 1[d]	305	2.8	1184	0.258	100	5.4	LOS A	1.3	33.9	Full	1600	0.0	0.0
Approach	305	2.8		0.258		5.4	LOS A	1.3	33.9				
North: SR 903													
Lane 1[d]	272	2.3	1247	0.218	100	4.8	LOS A	1.1	28.0	Full	1600	0.0	0.0
Approach	272	2.3		0.218		4.8	LOS A	1.1	28.0				
Intersection	844	3.1		0.258		5.3	LOS A	1.3	33.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	353	294	16	17	6
Future Volume (vph)	9	353	294	16	17	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	6%	0%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

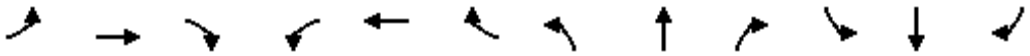
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	353	294	16	17	6
Future Vol, veh/h	9	353	294	16	17	6
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	6	0	2	0	0
Mvmt Flow	10	380	316	17	18	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	333	0	-	0	725	328
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1238	-	-	-	395	718
Stage 1	-	-	-	-	737	-
Stage 2	-	-	-	-	681	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1238	-	-	-	391	716
Mov Cap-2 Maneuver	-	-	-	-	391	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	681	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1238	-	-	-	444
HCM Lane V/C Ratio	0.008	-	-	-	0.056
HCM Control Delay (s)	7.9	0	-	-	13.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	295	71	26	238	4	73	0	31	1	0	0
Future Volume (vph)	2	295	71	26	238	4	73	0	31	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	6%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

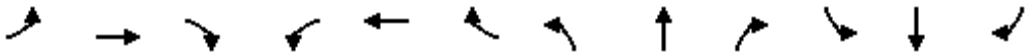
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	295	71	26	238	4	73	0	31	1	0	0
Future Vol, veh/h	2	295	71	26	238	4	73	0	31	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	2	314	76	28	253	4	78	0	33	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	390	0	0	668	669	352	684	705	256
Stage 1	-	-	-	-	-	-	356	356	-	311	311	-
Stage 2	-	-	-	-	-	-	312	313	-	373	394	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1320	-	-	1180	-	-	375	381	696	365	363	788
Stage 1	-	-	-	-	-	-	666	633	-	704	662	-
Stage 2	-	-	-	-	-	-	703	661	-	652	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1320	-	-	1180	-	-	366	370	696	340	352	787
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	370	-	340	352	-
Stage 1	-	-	-	-	-	-	665	632	-	703	643	-
Stage 2	-	-	-	-	-	-	683	642	-	620	608	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	16.4	15.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	426	1320	-	-	1180	-	-	340
HCM Lane V/C Ratio	0.26	0.002	-	-	0.023	-	-	0.003
HCM Control Delay (s)	16.4	7.7	0	-	8.1	0	-	15.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	315	13	3	251	3	15	0	9	1	0	2
Future Volume (vph)	1	315	13	3	251	3	15	0	9	1	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	0%	44%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	315	13	3	251	3	15	0	9	1	0	2
Future Vol, veh/h	1	315	13	3	251	3	15	0	9	1	0	2
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	5	0	0	2	0	0	0	44	0	0	0
Mvmt Flow	1	339	14	3	270	3	16	0	10	1	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	273	0	0	357	0	0	631	631	350	631	637	272
Stage 1	-	-	-	-	-	-	352	352	-	278	278	-
Stage 2	-	-	-	-	-	-	279	279	-	353	359	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.64	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.696	3.5	4	3.3
Pot Cap-1 Maneuver	1302	-	-	1213	-	-	396	401	608	396	398	772
Stage 1	-	-	-	-	-	-	669	635	-	733	684	-
Stage 2	-	-	-	-	-	-	732	683	-	668	631	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1302	-	-	1208	-	-	392	398	606	388	395	772
Mov Cap-2 Maneuver	-	-	-	-	-	-	392	398	-	388	395	-
Stage 1	-	-	-	-	-	-	666	632	-	732	682	-
Stage 2	-	-	-	-	-	-	728	681	-	657	628	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	13.4	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	452	1302	-	-	1208	-	-	580
HCM Lane V/C Ratio	0.057	0.001	-	-	0.003	-	-	0.006
HCM Control Delay (s)	13.4	7.8	0	-	8	0	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	19	10	86	11	4	84
Future Volume (vph)	19	10	86	11	4	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	9%	25%	2%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

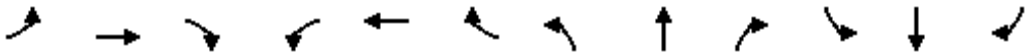
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	10	86	11	4	84
Future Vol, veh/h	19	10	86	11	4	84
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	9	25	2
Mvmt Flow	22	12	100	13	5	98
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.2	8	7.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	5%	0%	89%
Vol Thru, %	0%	66%	11%
Vol Right, %	95%	34%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	88	29	97
LT Vol	4	0	86
Through Vol	0	19	11
RT Vol	84	10	0
Lane Flow Rate	102	34	113
Geometry Grp	1	1	1
Degree of Util (X)	0.114	0.037	0.134
Departure Headway (Hd)	4.013	3.959	4.283
Convergence, Y/N	Yes	Yes	Yes
Cap	881	893	832
Service Time	2.092	2.035	2.335
HCM Lane V/C Ratio	0.116	0.038	0.136
HCM Control Delay	7.6	7.2	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.1	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	202	126	47	172	74	69	37	106	68	47	16
Future Volume (vph)	58	202	126	47	172	74	69	37	106	68	47	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	10%	2%	4%	6%	1%	4%	3%	2%	2%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

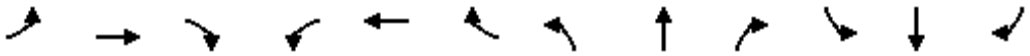
Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	202	126	47	172	74	69	37	106	68	47	16
Future Vol, veh/h	58	202	126	47	172	74	69	37	106	68	47	16
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	10	2	4	6	1	4	3	2	2	0	0
Mvmt Flow	64	222	138	52	189	81	76	41	116	75	52	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	271	0	0	363	0	0	792	797	295	834	826	232
Stage 1	-	-	-	-	-	-	422	422	-	335	335	-
Stage 2	-	-	-	-	-	-	370	375	-	499	491	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.14	6.53	6.22	7.12	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.53	-	6.12	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.53	-	6.12	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.536	4.027	3.318	3.518	4	3.3
Pot Cap-1 Maneuver	1304	-	-	1185	-	-	305	318	744	288	310	812
Stage 1	-	-	-	-	-	-	605	587	-	679	646	-
Stage 2	-	-	-	-	-	-	646	615	-	554	552	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1303	-	-	1182	-	-	238	288	741	201	281	810
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	288	-	201	281	-
Stage 1	-	-	-	-	-	-	574	556	-	645	617	-
Stage 2	-	-	-	-	-	-	553	587	-	411	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	1.3	20.8	26
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	253	741	1303	-	-	1182	-	-	201	337
HCM Lane V/C Ratio	0.46	0.157	0.049	-	-	0.044	-	-	0.372	0.205
HCM Control Delay (s)	30.8	10.8	7.9	-	-	8.2	-	-	33.1	18.4
HCM Lane LOS	D	B	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	2.3	0.6	0.2	-	-	0.1	-	-	1.6	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	419	7	78	354	5	14	4	91	3	1	13
Future Volume (vph)	12	419	7	78	354	5	14	4	91	3	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	6%	0%	3%	6%	0%	7%	0%	4%	50%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

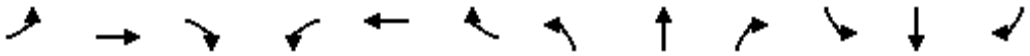
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	419	7	78	354	5	14	4	91	3	1	13
Future Vol, veh/h	12	419	7	78	354	5	14	4	91	3	1	13
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	6	0	3	6	0	7	0	4	50	0	0
Mvmt Flow	13	466	8	87	393	6	16	4	101	3	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	404	0	0	476	0	0	1079	1076	472	1124	1077	404
Stage 1	-	-	-	-	-	-	498	498	-	575	575	-
Stage 2	-	-	-	-	-	-	581	578	-	549	502	-
Critical Hdwy	4.1	-	-	4.13	-	-	7.17	6.5	6.24	7.6	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.5	-	6.6	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.5	-	6.6	5.5	-
Follow-up Hdwy	2.2	-	-	2.227	-	-	3.563	4	3.336	3.95	4	3.3
Pot Cap-1 Maneuver	1166	-	-	1081	-	-	192	221	588	148	221	651
Stage 1	-	-	-	-	-	-	545	548	-	428	506	-
Stage 2	-	-	-	-	-	-	491	504	-	443	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1160	-	-	1079	-	-	173	200	587	112	200	646
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	200	-	112	200	-
Stage 1	-	-	-	-	-	-	538	541	-	421	462	-
Stage 2	-	-	-	-	-	-	439	461	-	360	538	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.5	14.9	16.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	178	587	1160	-	-	1079	-	-	327
HCM Lane V/C Ratio	0.112	0.172	0.011	-	-	0.08	-	-	0.058
HCM Control Delay (s)	27.8	12.4	8.1	-	-	8.6	-	-	16.7
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0.6	0	-	-	0.3	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	263	59	20	178	11	62	8	19	6	13	9
Future Volume (vph)	19	263	59	20	178	11	62	8	19	6	13	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	7%	3%	0%	2%	0%	3%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱			↕	
Traffic Vol, veh/h	19	263	59	20	178	11	62	8	19	6	13	9
Future Vol, veh/h	19	263	59	20	178	11	62	8	19	6	13	9
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	7	3	0	2	0	3	0	0	0	0	0
Mvmt Flow	20	283	63	22	191	12	67	9	20	6	14	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	203	0	0	347	0	0	611	603	316	610	628	199
Stage 1	-	-	-	-	-	-	356	356	-	241	241	-
Stage 2	-	-	-	-	-	-	255	247	-	369	387	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.527	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1381	-	-	1223	-	-	404	416	729	409	402	847
Stage 1	-	-	-	-	-	-	659	633	-	767	710	-
Stage 2	-	-	-	-	-	-	747	706	-	655	613	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1381	-	-	1222	-	-	376	400	728	380	386	845
Mov Cap-2 Maneuver	-	-	-	-	-	-	376	400	-	380	386	-
Stage 1	-	-	-	-	-	-	646	621	-	753	696	-
Stage 2	-	-	-	-	-	-	708	692	-	616	601	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.8	15.1	13.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	376	586	1381	-	-	1222	-	-	466
HCM Lane V/C Ratio	0.177	0.05	0.015	-	-	0.018	-	-	0.065
HCM Control Delay (s)	16.6	11.5	7.6	0	-	8	0	-	13.3
HCM Lane LOS	C	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.2	0	-	-	0.1	-	-	0.2

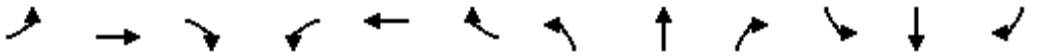
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	413	76	71	333	17	68	53	56	19	42	38
Future Volume (vph)	18	413	76	71	333	17	68	53	56	19	42	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	7%	3%	3%	6%	0%	2%	4%	5%	5%	5%	3%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 68.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





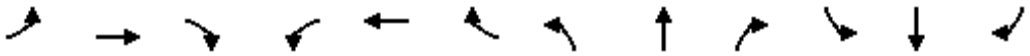
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	413	76	71	333	17	68	53	56	19	42	38
Future Volume (veh/h)	18	413	76	71	333	17	68	53	56	19	42	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1900	1796	1796	1856	1811	1811	1870	1841	1841	1826	1826	1826
Adj Flow Rate, veh/h	21	475	87	82	383	20	78	61	64	22	48	44
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	7	7	3	6	6	2	4	4	5	5	5
Cap, veh/h	722	1033	189	580	1194	62	254	130	136	223	139	127
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	997	1477	270	841	1706	89	1301	821	861	1233	876	803
Grp Volume(v), veh/h	21	0	562	82	0	403	78	0	125	22	0	92
Grp Sat Flow(s),veh/h/ln	997	0	1747	841	0	1795	1301	0	1682	1233	0	1678
Q Serve(g_s), s	0.5	0.0	9.2	3.1	0.0	5.6	3.7	0.0	4.4	1.1	0.0	3.2
Cycle Q Clear(g_c), s	6.2	0.0	9.2	12.3	0.0	5.6	6.8	0.0	4.4	5.5	0.0	3.2
Prop In Lane	1.00		0.15	1.00		0.05	1.00		0.51	1.00		0.48
Lane Grp Cap(c), veh/h	722	0	1223	580	0	1256	254	0	266	223	0	266
V/C Ratio(X)	0.03	0.00	0.46	0.14	0.00	0.32	0.31	0.00	0.47	0.10	0.00	0.35
Avail Cap(c_a), veh/h	722	0	1223	580	0	1256	557	0	659	510	0	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	0.0	4.3	7.0	0.0	3.8	27.4	0.0	24.8	27.3	0.0	24.3
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.5	0.0	0.7	1.0	0.0	1.8	0.3	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.7	0.6	0.0	1.7	1.2	0.0	1.8	0.3	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.0	0.0	5.6	7.5	0.0	4.4	28.3	0.0	26.6	27.6	0.0	25.4
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		583			485			203			114	
Approach Delay, s/veh		5.5			5.0			27.3			25.8	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		14.9		50.0		14.9				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		11.2		7.5		14.3		8.8				
Green Ext Time (p_c), s		4.7		0.7		3.5		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	194	75	6	136	2	55	8	10	4	6	7
Future Volume (vph)	9	194	75	6	136	2	55	8	10	4	6	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	7%	5%	17%	3%	0%	2%	0%	0%	25%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	9	194	75	6	136	2	55	8	10	4	6	7
Future Vol, veh/h	9	194	75	6	136	2	55	8	10	4	6	7
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	7	5	17	3	0	2	0	0	25	0	0
Mvmt Flow	10	209	81	6	146	2	59	9	11	4	6	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	148	0	0	293	0	0	440	433	258	444	472	148
Stage 1	-	-	-	-	-	-	273	273	-	159	159	-
Stage 2	-	-	-	-	-	-	167	160	-	285	313	-
Critical Hdwy	4.1	-	-	4.27	-	-	7.12	6.5	6.2	7.35	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.35	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.35	5.5	-
Follow-up Hdwy	2.2	-	-	2.353	-	-	3.518	4	3.3	3.725	4	3.3
Pot Cap-1 Maneuver	1446	-	-	1188	-	-	527	519	786	487	493	904
Stage 1	-	-	-	-	-	-	733	688	-	792	770	-
Stage 2	-	-	-	-	-	-	835	769	-	675	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1446	-	-	1185	-	-	510	510	780	467	485	903
Mov Cap-2 Maneuver	-	-	-	-	-	-	510	510	-	467	485	-
Stage 1	-	-	-	-	-	-	725	680	-	786	765	-
Stage 2	-	-	-	-	-	-	815	764	-	649	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	12.5	11.3
HCM LOS			B	B

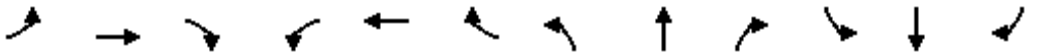
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	510	631	1446	-	-	1185	-	-	593
HCM Lane V/C Ratio	0.116	0.031	0.007	-	-	0.005	-	-	0.031
HCM Control Delay (s)	13	10.9	7.5	0	-	8.1	0	-	11.3
HCM Lane LOS	B	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	355	121	35	319	26	84	43	34	29	46	10
Future Volume (vph)	10	355	121	35	319	26	84	43	34	29	46	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	6%	9%	9%	3%	0%	11%	2%	6%	4%	7%	0%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





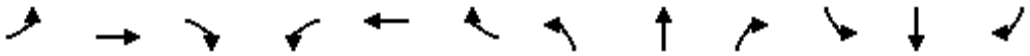
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	355	121	35	319	26	84	43	34	29	46	10
Future Volume (veh/h)	10	355	121	35	319	26	84	43	34	29	46	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1811	1811	1767	1856	1856	1737	1870	1870	1841	1796	1796
Adj Flow Rate, veh/h	11	378	129	37	339	28	89	46	36	31	49	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	6	6	9	3	3	11	2	2	4	7	7
Cap, veh/h	848	822	280	597	1077	89	254	124	97	241	181	41
Arrive On Green	0.71	0.71	0.71	1.00	1.00	1.00	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1029	1161	396	842	1521	126	1240	872	683	1289	1276	286
Grp Volume(v), veh/h	11	0	507	37	0	367	89	0	82	31	0	60
Grp Sat Flow(s),veh/h/ln	1029	0	1557	842	0	1647	1240	0	1555	1289	0	1563
Q Serve(g_s), s	0.2	0.0	8.5	0.6	0.0	0.0	4.1	0.0	2.9	1.3	0.0	2.1
Cycle Q Clear(g_c), s	0.2	0.0	8.5	9.0	0.0	0.0	6.2	0.0	2.9	4.2	0.0	2.1
Prop In Lane	1.00		0.25	1.00		0.08	1.00		0.44	1.00		0.18
Lane Grp Cap(c), veh/h	848	0	1102	597	0	1166	254	0	221	241	0	222
V/C Ratio(X)	0.01	0.00	0.46	0.06	0.00	0.31	0.35	0.00	0.37	0.13	0.00	0.27
Avail Cap(c_a), veh/h	848	0	1102	597	0	1166	377	0	376	370	0	378
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.97	0.00	0.97	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.6	0.0	3.8	0.9	0.0	0.0	25.7	0.0	23.3	25.2	0.0	23.0
Incr Delay (d2), s/veh	0.0	0.0	1.3	0.2	0.0	0.7	0.3	0.0	0.4	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.0	0.0	0.0	0.2	1.2	0.0	1.0	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.6	0.0	5.1	1.1	0.0	0.7	26.0	0.0	23.7	25.3	0.0	23.2
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		518			404			171			91	
Approach Delay, s/veh		5.0			0.7			24.9			23.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.0		13.0		47.0		13.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		10.5		6.2		11.0		8.2				
Green Ext Time (p_c), s		3.9		0.1		2.7		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			7.9									
HCM 6th LOS			A									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	155	44	10	91	2	46	6	22	3	8	2
Future Volume (vph)	5	155	44	10	91	2	46	6	22	3	8	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	14%	10%	2%	0%	7%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

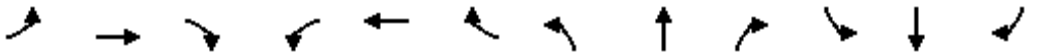
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	155	44	10	91	2	46	6	22	3	8	2
Future Vol, veh/h	5	155	44	10	91	2	46	6	22	3	8	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	7	14	10	2	0	7	0	0	0	0	0
Mvmt Flow	5	165	47	11	97	2	49	6	23	3	9	2
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.3	8.3	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	62%	2%	10%	23%
Vol Thru, %	8%	76%	88%	62%
Vol Right, %	30%	22%	2%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	204	103	13
LT Vol	46	5	10	3
Through Vol	6	155	91	8
RT Vol	22	44	2	2
Lane Flow Rate	79	217	110	14
Geometry Grp	1	1	1	1
Degree of Util (X)	0.103	0.248	0.138	0.018
Departure Headway (Hd)	4.697	4.12	4.519	4.67
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	764	875	796	767
Service Time	2.717	2.133	2.534	2.693
HCM Lane V/C Ratio	0.103	0.248	0.138	0.018
HCM Control Delay	8.3	8.5	8.3	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1	0.5	0.1

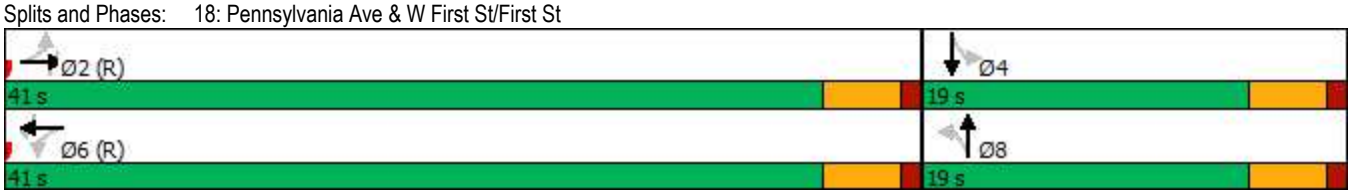


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	367	17	13	324	44	13	7	19	34	11	38
Future Volume (vph)	23	367	17	13	324	44	13	7	19	34	11	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1618	0	1805	1608	0	0	1752	1384	0	1753	1411
Flt Permitted	0.528			0.516				0.800			0.764	
Satd. Flow (perm)	962	1618	0	976	1608	0	0	1436	1354	0	1388	1366
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			21				27			41
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	4%	5%	0%	0%	4%	5%	8%	0%	5%	3%	9%	3%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	413	0	14	395	0	0	22	20	0	49	41
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	47.2	47.2		47.2	47.2			10.6	47.2		10.6	47.2
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.18	0.79		0.18	0.79
v/c Ratio	0.03	0.32		0.02	0.31			0.09	0.02		0.20	0.04
Control Delay	5.3	4.8		5.4	5.3			18.8	2.5		21.1	2.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.3	4.8		5.4	5.3			18.8	2.5		21.1	2.5
LOS	A	A		A	A			B	A		C	A
Approach Delay		4.9			5.4			11.1			12.6	
Approach LOS		A			A			B			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	

Intersection Signal Delay: 6.0 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	113	10	0	0	194
Future Volume (vph)	1	113	10	0	0	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	10%	20%	0%	0%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	113	10	0	0	194
Future Vol, veh/h	1	113	10	0	0	194
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	98	98	98	98	98	98
Heavy Vehicles, %	0	10	20	0	0	9
Mvmt Flow	1	115	10	0	0	198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	208	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.4	6.3	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.39	-	-	-	-
Pot Cap-1 Maneuver	785	1048	-	0	0	-
Stage 1	1018	-	-	0	0	-
Stage 2	840	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	785	1048	-	-	-	-
Mov Cap-2 Maneuver	785	-	-	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	840	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1045	-
HCM Lane V/C Ratio	-	0.111	-
HCM Control Delay (s)	-	8.9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	181	12
Future Volume (vph)	0	0	10	0	181	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	20%	0%	8%	17%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

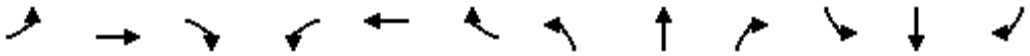
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	181	12
Future Vol, veh/h	0	0	10	0	181	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	20	0	8	17
Mvmt Flow	0	0	10	0	189	13

Major/Minor	Minor2		Major2	
Conflicting Flow All	391	13	0	0
Stage 1	391	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.2	4.18	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.3	2.272	-
Pot Cap-1 Maneuver	518	1073	-	-
Stage 1	577	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1073	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	2	33	5	3	5	42	173	7	3	142	7
Future Volume (vph)	14	2	33	5	3	5	42	173	7	3	142	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	3%	14%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

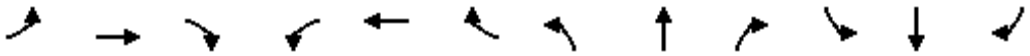
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	2	33	5	3	5	42	173	7	3	142	7
Future Vol, veh/h	14	2	33	5	3	5	42	173	7	3	142	7
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	3	14
Mvmt Flow	17	2	41	6	4	6	52	214	9	4	175	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	540	539	203	557	539	245	195	0	0	236	0	0
Stage 1	199	199	-	336	336	-	-	-	-	-	-	-
Stage 2	341	340	-	221	203	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	456	452	843	444	452	799	1390	-	-	1343	-	-
Stage 1	807	740	-	682	645	-	-	-	-	-	-	-
Stage 2	678	643	-	786	737	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	424	422	825	396	422	779	1375	-	-	1326	-	-
Mov Cap-2 Maneuver	424	422	-	396	422	-	-	-	-	-	-	-
Stage 1	764	730	-	644	610	-	-	-	-	-	-	-
Stage 2	632	608	-	734	727	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	12.5	1.5	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1375	-	-	630	497	1326	-	-
HCM Lane V/C Ratio	0.038	-	-	0.096	0.032	0.003	-	-
HCM Control Delay (s)	7.7	0	-	11.3	12.5	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	2	0	2	8	101	2	0	86	3
Future Volume (vph)	0	0	0	2	0	2	8	101	2	0	86	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	50%	0%	0%	0%	2%	0%	0%	2%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

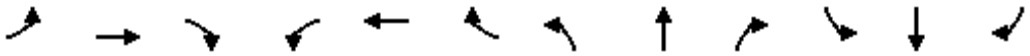
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	2	0	2	8	101	2	0	86	3
Future Vol, veh/h	0	0	0	2	0	2	8	101	2	0	86	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	50	0	0	0	2	0	0	2	0
Mvmt Flow	0	0	0	2	0	2	9	117	2	0	100	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	239	239	102	238	239	118	103	0	0	119	0	0
Stage 1	102	102	-	136	136	-	-	-	-	-	-	-
Stage 2	137	137	-	102	103	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.6	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.95	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	719	666	959	627	666	939	1502	-	-	1482	-	-
Stage 1	909	815	-	765	788	-	-	-	-	-	-	-
Stage 2	871	787	-	799	814	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	714	662	959	624	662	939	1502	-	-	1482	-	-
Mov Cap-2 Maneuver	714	662	-	624	662	-	-	-	-	-	-	-
Stage 1	904	815	-	760	783	-	-	-	-	-	-	-
Stage 2	864	782	-	799	814	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.8	0.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1502	-	-	-	750	1482	-	-
HCM Lane V/C Ratio	0.006	-	-	-	0.006	-	-	-
HCM Control Delay (s)	7.4	0	-	0	9.8	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	48	2	12	51	5	1	2	17	7	1	2
Future Volume (vph)	3	48	2	12	51	5	1	2	17	7	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.5

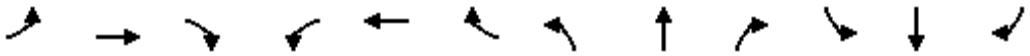
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	48	2	12	51	5	1	2	17	7	1	2
Future Vol, veh/h	3	48	2	12	51	5	1	2	17	7	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	2	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	3	56	2	14	59	6	1	2	20	8	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	65	0	0	58	0	0	155	156	57	164	154	62
Stage 1	-	-	-	-	-	-	63	63	-	90	90	-
Stage 2	-	-	-	-	-	-	92	93	-	74	64	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1550	-	-	1559	-	-	816	740	1015	805	741	1009
Stage 1	-	-	-	-	-	-	953	846	-	922	824	-
Stage 2	-	-	-	-	-	-	920	822	-	940	846	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1550	-	-	1559	-	-	806	732	1015	781	733	1009
Mov Cap-2 Maneuver	-	-	-	-	-	-	806	732	-	781	733	-
Stage 1	-	-	-	-	-	-	951	844	-	920	817	-
Stage 2	-	-	-	-	-	-	908	815	-	917	844	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.3	8.8	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	965	1550	-	-	1559	-	-	812
HCM Lane V/C Ratio	0.024	0.002	-	-	0.009	-	-	0.014
HCM Control Delay (s)	8.8	7.3	0	-	7.3	0	-	9.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

2019 Existing Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	3	8	0	0	0	0	6	18	78	7	0
Future Volume (vph)	300	3	8	0	0	0	0	6	18	78	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles (%)	1%	0%	13%	0%	0%	0%	0%	17%	17%	21%	43%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

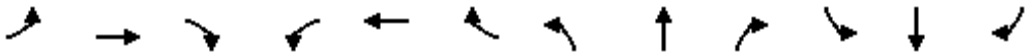
Intersection	
Int Delay, s/veh	13.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	300	3	8	0	0	0	0	6	18	78	7	0
Future Vol, veh/h	300	3	8	0	0	0	0	6	18	78	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	1	0	13	0	0	0	0	17	17	21	43	0
Mvmt Flow	380	4	10	0	0	0	0	8	23	99	9	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	227	238	9	-	0	0	31	0	0
Stage 1	207	207	-	-	-	-	-	-	-
Stage 2	20	31	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.5	6.33	-	-	-	4.31	-	-
Critical Hdwy Stg 1	5.41	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.417	-	-	-	2.389	-	-
Pot Cap-1 Maneuver	763	666	1041	0	-	-	1467	-	0
Stage 1	830	734	-	0	-	-	-	-	0
Stage 2	1005	873	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	711	0	1041	-	-	-	1467	-	-
Mov Cap-2 Maneuver	711	0	-	-	-	-	-	-	-
Stage 1	830	0	-	-	-	-	-	-	-
Stage 2	937	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	0	7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	717	1467	-
HCM Lane V/C Ratio	-	-	0.549	0.067	-
HCM Control Delay (s)	-	-	16	7.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	3.4	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	4	43	1	307	0	0	64	93
Future Volume (vph)	0	0	0	20	4	43	1	307	0	0	64	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	40%	0%	7%	100%	1%	0%	0%	16%	2%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

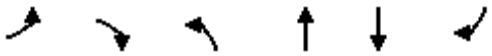
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	4	43	1	307	0	0	64	93
Future Vol, veh/h	0	0	0	20	4	43	1	307	0	0	64	93
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	40	0	7	100	1	0	0	16	2
Mvmt Flow	0	0	0	23	5	49	1	353	0	0	74	107

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	483	536	353	181	0	-	-	-	0
Stage 1	355	355	-	-	-	-	-	-	-
Stage 2	128	181	-	-	-	-	-	-	-
Critical Hdwy	6.8	6.5	6.27	5.1	-	-	-	-	-
Critical Hdwy Stg 1	5.8	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.86	4	3.363	3.1	-	-	-	-	-
Pot Cap-1 Maneuver	480	454	680	970	-	0	0	-	-
Stage 1	633	633	-	-	-	0	0	-	-
Stage 2	812	754	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	480	0	680	970	-	-	-	-	-
Mov Cap-2 Maneuver	480	0	-	-	-	-	-	-	-
Stage 1	632	0	-	-	-	-	-	-	-
Stage 2	812	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	970	-	601	-	-
HCM Lane V/C Ratio	0.001	-	0.128	-	-
HCM Control Delay (s)	8.7	0	11.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	22	18	14	331	134	13
Future Volume (vph)	22	18	14	331	134	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	9%	17%	15%	1%	5%	8%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

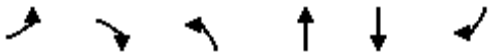
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	18	14	331	134	13
Future Vol, veh/h	22	18	14	331	134	13
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	9	17	15	1	5	8
Mvmt Flow	25	21	16	380	154	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	574	162	169	0	-	0
Stage 1	162	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Critical Hdwy	6.49	6.37	4.25	-	-	-
Critical Hdwy Stg 1	5.49	-	-	-	-	-
Critical Hdwy Stg 2	5.49	-	-	-	-	-
Follow-up Hdwy	3.581	3.453	2.335	-	-	-
Pot Cap-1 Maneuver	469	845	1333	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	463	845	1333	-	-	-
Mov Cap-2 Maneuver	463	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	654	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1333	-	581	-	-
HCM Lane V/C Ratio	0.012	-	0.079	-	-
HCM Control Delay (s)	7.7	-	11.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	125	67	124	236	79	117
Future Volume (vph)	125	67	124	236	79	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	6%	2%	1%	4%	3%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

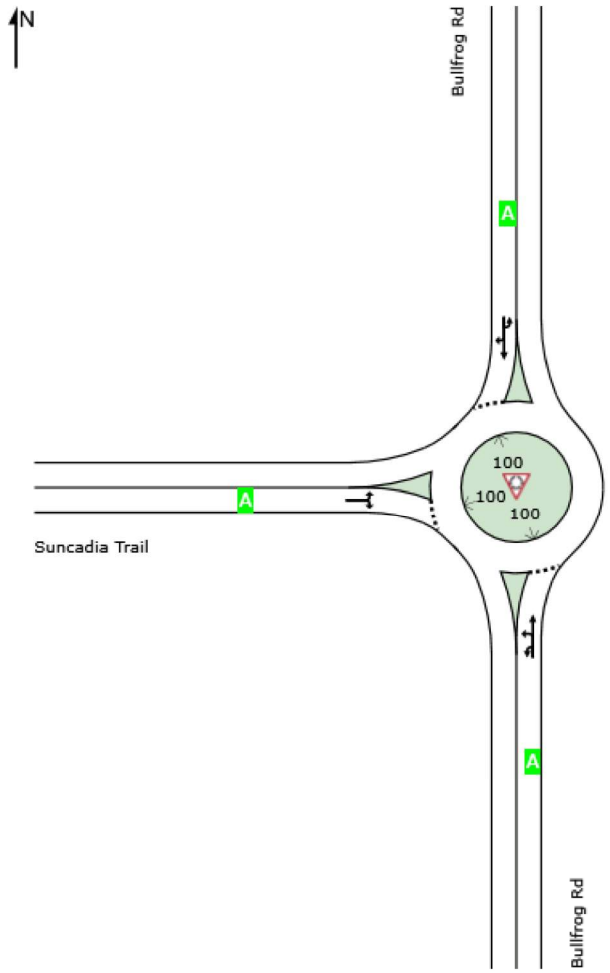
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2019 Existing - Friday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2019 Existing - Friday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

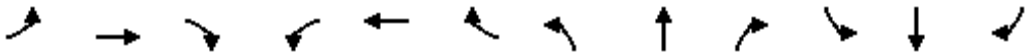
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	391	1.4	1176	0.333	100	6.2	LOS A	1.9	47.6	Full	1600	0.0	0.0
Approach	391	1.4		0.333		6.2	LOS A	1.9	47.6				
North: Bullfrog Rd													
Lane 1[d]	216	3.5	1159	0.187	100	4.7	LOS A	0.9	22.6	Full	1600	0.0	0.0
Approach	216	3.5		0.187		4.7	LOS A	0.9	22.6				
West: Suncadia Trail													
Lane 1[d]	209	4.2	1204	0.173	100	4.5	LOS A	0.8	21.0	Full	1600	0.0	0.0
Approach	209	4.2		0.173		4.5	LOS A	0.8	21.0				
Intersection	816	2.7		0.333		5.4	LOS A	1.9	47.6				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	0	11	0	0	0	5	362	1	0	186	22
Future Volume (vph)	18	0	11	0	0	0	5	362	1	0	186	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	11%	0%	0%	0%	0%	0%	0%	2%	0%	0%	3%	9%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	0	11	0	0	0	5	362	1	0	186	22
Future Vol, veh/h	18	0	11	0	0	0	5	362	1	0	186	22
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	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	11	0	0	0	0	0	0	2	0	0	3	9
Mvmt Flow	20	0	12	0	0	0	6	402	1	0	207	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	634	634	219	640	646	403	231	0	0	403	0	0
Stage 1	219	219	-	415	415	-	-	-	-	-	-	-
Stage 2	415	415	-	225	231	-	-	-	-	-	-	-
Critical Hdwy	7.21	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.21	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.21	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.599	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	379	399	826	391	393	652	1349	-	-	1167	-	-
Stage 1	763	726	-	619	596	-	-	-	-	-	-	-
Stage 2	597	596	-	782	717	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	377	397	826	384	391	652	1349	-	-	1167	-	-
Mov Cap-2 Maneuver	377	397	-	384	391	-	-	-	-	-	-	-
Stage 1	758	726	-	615	592	-	-	-	-	-	-	-
Stage 2	593	592	-	770	717	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1349	-	-	475	-	1167	-	-
HCM Lane V/C Ratio	0.004	-	-	0.068	-	-	-	-
HCM Control Delay (s)	7.7	0	-	13.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	105	252	213	149	214	81
Future Volume (vph)	105	252	213	149	214	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	2%	1%	6%	5%	3%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

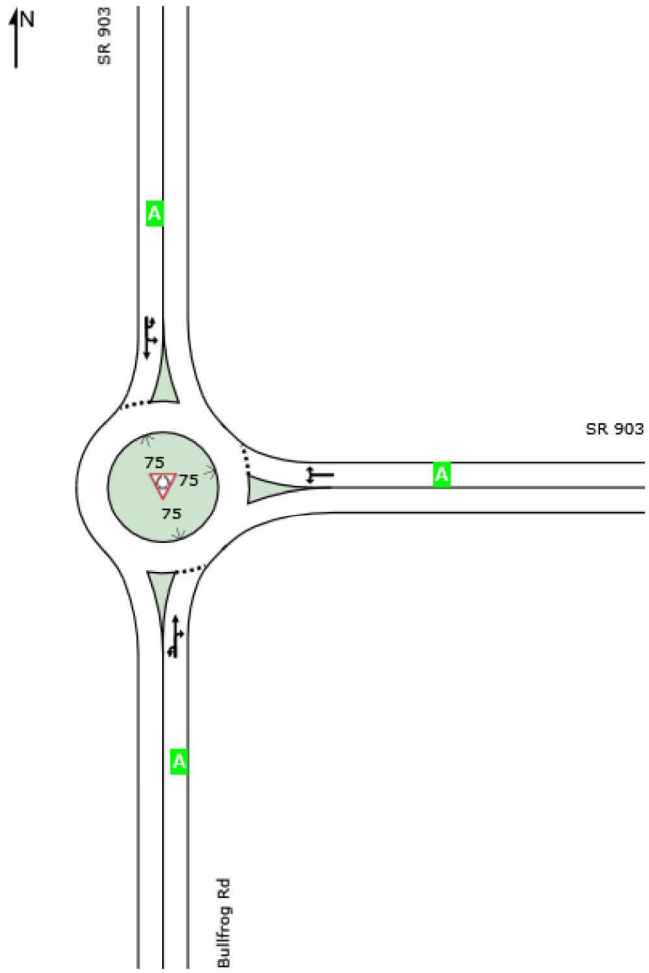
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2019 Existing - Friday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2019 Existing - Friday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

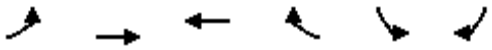
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	404	3.2	1039	0.389	100	7.6	LOS A	2.2	55.3	Full	1600	0.0	0.0
Approach	404	3.2		0.389		7.6	LOS A	2.2	55.3				
East: SR 903													
Lane 1[d]	392	2.8	1044	0.376	100	7.4	LOS A	2.1	52.8	Full	1600	0.0	0.0
Approach	392	2.8		0.376		7.4	LOS A	2.1	52.8				
North: SR 903													
Lane 1[d]	324	4.4	1162	0.279	100	5.7	LOS A	1.4	37.2	Full	1600	0.0	0.0
Approach	324	4.4		0.279		5.7	LOS A	1.4	37.2				
Intersection	1121	3.4		0.389		7.0	LOS A	2.2	55.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	390	366	22	19	5
Future Volume (vph)	5	390	366	22	19	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	3%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

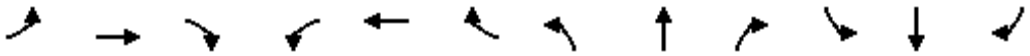
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	390	366	22	19	5
Future Vol, veh/h	5	390	366	22	19	5
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	4	3	0	0	0
Mvmt Flow	5	424	398	24	21	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	422	0	-	0	844	417
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	434	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1148	-	-	-	336	640
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	658	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1148	-	-	-	334	636
Mov Cap-2 Maneuver	-	-	-	-	334	-
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	658	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1148	-	-	-	371
HCM Lane V/C Ratio	0.005	-	-	-	0.07
HCM Control Delay (s)	8.2	0	-	-	15.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	324	90	36	279	2	111	1	37	0	0	1
Future Volume (vph)	0	324	90	36	279	2	111	1	37	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	5%	2%	3%	3%	0%	1%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

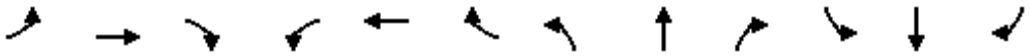
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	324	90	36	279	2	111	1	37	0	0	1
Future Vol, veh/h	0	324	90	36	279	2	111	1	37	0	0	1
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	5	2	3	3	0	1	0	0	0	0	0
Mvmt Flow	0	338	94	38	291	2	116	1	39	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	293	0	0	436	0	0	758	758	390	774	804	292
Stage 1	-	-	-	-	-	-	389	389	-	368	368	-
Stage 2	-	-	-	-	-	-	369	369	-	406	436	-
Critical Hdwy	4.1	-	-	4.13	-	-	7.11	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.227	-	-	3.509	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1280	-	-	1118	-	-	325	339	663	318	319	752
Stage 1	-	-	-	-	-	-	637	612	-	656	625	-
Stage 2	-	-	-	-	-	-	653	624	-	626	583	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1280	-	-	1114	-	-	313	324	660	289	305	752
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	324	-	289	305	-
Stage 1	-	-	-	-	-	-	634	610	-	656	599	-
Stage 2	-	-	-	-	-	-	625	598	-	588	581	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.9	22.4	9.8
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	360	1280	-	-	1114	-	-	752
HCM Lane V/C Ratio	0.431	-	-	-	0.034	-	-	0.001
HCM Control Delay (s)	22.4	0	-	-	8.3	0	-	9.8
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.1	0	-	-	0.1	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	364	0	1	313	3	1	0	0	2	0	5
Future Volume (vph)	2	364	0	1	313	3	1	0	0	2	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
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
Heavy Vehicles (%)	0%	6%	0%	0%	4%	0%	100%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	364	0	1	313	3	1	0	0	2	0	5
Future Vol, veh/h	2	364	0	1	313	3	1	0	0	2	0	5
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	6	0	0	4	0	100	0	0	0	0	0
Mvmt Flow	2	375	0	1	323	3	1	0	0	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	327	0	0	380	0	0	713	713	382	709	712	326
Stage 1	-	-	-	-	-	-	384	384	-	328	328	-
Stage 2	-	-	-	-	-	-	329	329	-	381	384	-
Critical Hdwy	4.1	-	-	4.1	-	-	8.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	4.4	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1244	-	-	1190	-	-	246	360	670	352	360	720
Stage 1	-	-	-	-	-	-	481	615	-	689	651	-
Stage 2	-	-	-	-	-	-	519	650	-	645	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1243	-	-	1184	-	-	243	357	666	350	357	719
Mov Cap-2 Maneuver	-	-	-	-	-	-	243	357	-	350	357	-
Stage 1	-	-	-	-	-	-	478	611	-	687	650	-
Stage 2	-	-	-	-	-	-	515	649	-	642	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	19.9	11.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	243	1243	-	-	1184	-	-	553
HCM Lane V/C Ratio	0.004	0.002	-	-	0.001	-	-	0.013
HCM Control Delay (s)	19.9	7.9	0	-	8	0	-	11.6
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	26	12	117	5	11	109
Future Volume (vph)	26	12	117	5	11	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	2%	0%	20%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

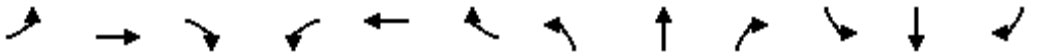
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	26	12	117	5	11	109
Future Vol, veh/h	26	12	117	5	11	109
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	2	0	20	1
Mvmt Flow	33	15	146	6	14	136
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	8.6	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	9%	0%	96%
Vol Thru, %	0%	68%	4%
Vol Right, %	91%	32%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	120	38	122
LT Vol	11	0	117
Through Vol	0	26	5
RT Vol	109	12	0
Lane Flow Rate	150	48	152
Geometry Grp	1	1	1
Degree of Util (X)	0.174	0.056	0.187
Departure Headway (Hd)	4.176	4.212	4.426
Convergence, Y/N	Yes	Yes	Yes
Cap	864	854	799
Service Time	2.18	2.222	2.521
HCM Lane V/C Ratio	0.174	0.056	0.19
HCM Control Delay	8.1	7.5	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.2	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	284	194	54	185	92	74	51	148	77	65	22
Future Volume (vph)	72	284	194	54	185	92	74	51	148	77	65	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	6%	6%	2%	7%	8%	0%	4%	4%	1%	3%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

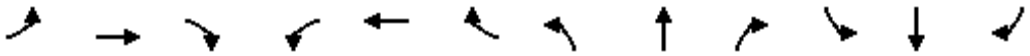
Intersection	
Int Delay, s/veh	16.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	284	194	54	185	92	74	51	148	77	65	22
Future Vol, veh/h	72	284	194	54	185	92	74	51	148	77	65	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	2	7	8	0	4	4	1	3	5	5
Mvmt Flow	77	305	209	58	199	99	80	55	159	83	70	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	298	0	0	514	0	0	976	978	410	1036	1033	249
Stage 1	-	-	-	-	-	-	564	564	-	365	365	-
Stage 2	-	-	-	-	-	-	412	414	-	671	668	-
Critical Hdwy	4.16	-	-	4.17	-	-	7.14	6.54	6.21	7.13	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.55	-
Follow-up Hdwy	2.254	-	-	2.263	-	-	3.536	4.036	3.309	3.527	4.045	3.345
Pot Cap-1 Maneuver	1241	-	-	1026	-	-	228	248	644	209	230	782
Stage 1	-	-	-	-	-	-	507	505	-	652	618	-
Stage 2	-	-	-	-	-	-	613	590	-	444	452	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1241	-	-	1026	-	-	149	219	644	116	204	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	219	-	116	204	-
Stage 1	-	-	-	-	-	-	476	474	-	612	583	-
Stage 2	-	-	-	-	-	-	494	556	-	277	424	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	1.4	41.8	57.1
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	171	644	1241	-	-	1026	-	-	116	251
HCM Lane V/C Ratio	0.786	0.247	0.062	-	-	0.057	-	-	0.714	0.373
HCM Control Delay (s)	76.7	12.4	8.1	-	-	8.7	-	-	90.4	27.6
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	5.2	1	0.2	-	-	0.2	-	-	3.9	1.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	523	18	67	366	0	29	0	142	0	2	4
Future Volume (vph)	4	523	18	67	366	0	29	0	142	0	2	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	100%	3%	0%	0%	4%	0%	7%	0%	4%	0%	50%	75%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

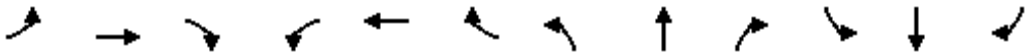
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	523	18	67	366	0	29	0	142	0	2	4
Future Vol, veh/h	4	523	18	67	366	0	29	0	142	0	2	4
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	100	3	0	0	4	0	7	0	4	0	50	75
Mvmt Flow	4	545	19	70	381	0	30	0	148	0	2	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	382	0	0	568	0	0	1099	1089	559	1159	1098	390
Stage 1	-	-	-	-	-	-	567	567	-	522	522	-
Stage 2	-	-	-	-	-	-	532	522	-	637	576	-
Critical Hdwy	5.1	-	-	4.1	-	-	7.17	6.5	6.24	7.1	7	6.95
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.5	-	6.1	6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.5	-	6.1	6	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.563	4	3.336	3.5	4.45	3.975
Pot Cap-1 Maneuver	793	-	-	1014	-	-	186	217	525	174	175	525
Stage 1	-	-	-	-	-	-	500	510	-	542	460	-
Stage 2	-	-	-	-	-	-	522	534	-	469	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	792	-	-	1010	-	-	170	200	523	118	161	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	170	200	-	118	161	-
Stage 1	-	-	-	-	-	-	496	505	-	539	428	-
Stage 2	-	-	-	-	-	-	476	497	-	335	429	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	17.3	17.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	170	523	792	-	-	1010	-	-	299
HCM Lane V/C Ratio	0.178	0.283	0.005	-	-	0.069	-	-	0.021
HCM Control Delay (s)	30.7	14.6	9.6	-	-	8.8	-	-	17.3
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	1.2	0	-	-	0.2	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	267	86	23	204	7	94	16	17	4	11	15
Future Volume (vph)	15	267	86	23	204	7	94	16	17	4	11	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
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
Heavy Vehicles (%)	0%	4%	11%	0%	3%	0%	6%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	267	86	23	204	7	94	16	17	4	11	15
Future Vol, veh/h	15	267	86	23	204	7	94	16	17	4	11	15
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
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, %	0	4	11	0	3	0	6	0	0	0	0	0
Mvmt Flow	16	281	91	24	215	7	99	17	18	4	12	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	223	0	0	374	0	0	643	632	330	645	674	221
Stage 1	-	-	-	-	-	-	361	361	-	268	268	-
Stage 2	-	-	-	-	-	-	282	271	-	377	406	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.16	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.554	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1358	-	-	1196	-	-	381	400	716	388	379	824
Stage 1	-	-	-	-	-	-	649	629	-	742	691	-
Stage 2	-	-	-	-	-	-	716	689	-	649	601	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1357	-	-	1194	-	-	353	384	714	355	363	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	353	384	-	355	363	-
Stage 1	-	-	-	-	-	-	638	618	-	730	674	-
Stage 2	-	-	-	-	-	-	674	672	-	606	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.8	17.4	12.7
HCM LOS			C	B

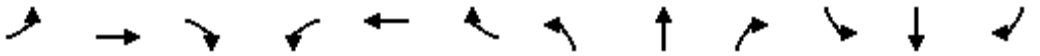
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	353	504	1357	-	-	1194	-	-	502
HCM Lane V/C Ratio	0.28	0.069	0.012	-	-	0.02	-	-	0.063
HCM Control Delay (s)	19.1	12.7	7.7	0	-	8.1	0	-	12.7
HCM Lane LOS	C	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.1	0.2	0	-	-	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	506	94	62	333	25	74	49	83	23	71	39
Future Volume (vph)	53	506	94	62	333	25	74	49	83	23	71	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	4%	7%	5%	3%	8%	4%	6%	8%	9%	7%	3%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 85.3	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

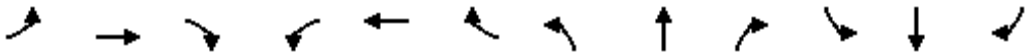




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	506	94	62	333	25	74	49	83	23	71	39
Future Volume (veh/h)	53	506	94	62	333	25	74	49	83	23	71	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1826	1856	1856	1841	1811	1811	1767	1796	1796
Adj Flow Rate, veh/h	55	527	98	65	347	26	77	51	86	24	74	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	4	4	5	3	3	4	6	6	9	7	7
Cap, veh/h	724	1069	199	516	1208	91	237	109	184	209	197	109
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1007	1508	280	780	1704	128	1240	598	1008	1168	1078	597
Grp Volume(v), veh/h	55	0	625	65	0	373	77	0	137	24	0	115
Grp Sat Flow(s),veh/h/ln	1007	0	1789	780	0	1832	1240	0	1606	1168	0	1675
Q Serve(g_s), s	1.8	0.0	13.3	3.5	0.0	6.3	4.9	0.0	6.5	1.6	0.0	5.1
Cycle Q Clear(g_c), s	8.1	0.0	13.3	16.8	0.0	6.3	10.1	0.0	6.5	8.1	0.0	5.1
Prop In Lane	1.00		0.16	1.00		0.07	1.00		0.63	1.00		0.36
Lane Grp Cap(c), veh/h	724	0	1268	516	0	1299	237	0	294	209	0	306
V/C Ratio(X)	0.08	0.00	0.49	0.13	0.00	0.29	0.33	0.00	0.47	0.11	0.00	0.38
Avail Cap(c_a), veh/h	724	0	1268	516	0	1299	452	0	573	412	0	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	0.0	5.5	9.3	0.0	4.5	34.9	0.0	31.1	34.7	0.0	30.5
Incr Delay (d2), s/veh	0.2	0.0	1.4	0.5	0.0	0.6	1.1	0.0	1.6	0.2	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	4.5	0.6	0.0	2.2	1.6	0.0	2.6	0.5	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.2	0.0	6.9	9.8	0.0	5.1	36.1	0.0	32.7	34.9	0.0	31.3
LnGrp LOS	A	A	A	A	A	A	D	A	C	C	A	C
Approach Vol, veh/h		680			438			214			139	
Approach Delay, s/veh		6.9			5.8			33.9			31.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.0	20.2	65.0	20.2
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	60.4	30.4	60.4	30.4
Max Q Clear Time (g_c+I1), s	15.3	12.1	18.8	10.1
Green Ext Time (p_c), s	5.8	1.4	3.3	0.7

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	176	95	12	150	3	78	7	7	3	7	9
Future Volume (vph)	4	176	95	12	150	3	78	7	7	3	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	1%	10%	8%	1%	0%	4%	0%	0%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	4	176	95	12	150	3	78	7	7	3	7	9
Future Vol, veh/h	4	176	95	12	150	3	78	7	7	3	7	9
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	1	10	8	1	0	4	0	0	0	0	0
Mvmt Flow	4	193	104	13	165	3	86	8	8	3	8	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	170	0	0	299	0	0	459	451	249	458	502	171
Stage 1	-	-	-	-	-	-	255	255	-	195	195	-
Stage 2	-	-	-	-	-	-	204	196	-	263	307	-
Critical Hdwy	4.1	-	-	4.18	-	-	7.14	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.272	-	-	3.536	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1420	-	-	1229	-	-	509	507	795	516	474	878
Stage 1	-	-	-	-	-	-	745	700	-	811	743	-
Stage 2	-	-	-	-	-	-	793	742	-	747	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1417	-	-	1227	-	-	489	497	792	497	465	875
Mov Cap-2 Maneuver	-	-	-	-	-	-	489	497	-	497	465	-
Stage 1	-	-	-	-	-	-	741	697	-	807	733	-
Stage 2	-	-	-	-	-	-	765	732	-	728	662	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.6	13.5	11.2
HCM LOS			B	B

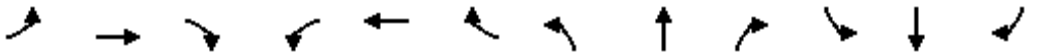
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	489	611	1417	-	-	1227	-	-	606
HCM Lane V/C Ratio	0.175	0.025	0.003	-	-	0.011	-	-	0.034
HCM Control Delay (s)	13.9	11	7.5	0	-	8	0	-	11.2
HCM Lane LOS	B	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	474	188	35	315	44	88	36	28	44	56	12
Future Volume (vph)	11	474	188	35	315	44	88	36	28	44	56	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
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
Heavy Vehicles (%)	0%	4%	1%	3%	3%	0%	3%	8%	7%	5%	13%	8%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





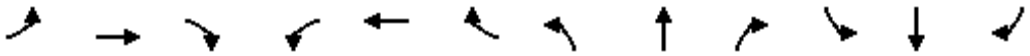
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	474	188	35	315	44	88	36	28	44	56	12
Future Volume (veh/h)	11	474	188	35	315	44	88	36	28	44	56	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1841	1856	1856	1856	1856	1781	1781	1826	1707	1707
Adj Flow Rate, veh/h	11	489	194	36	325	45	91	37	29	45	58	12
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	4	4	3	3	3	3	8	8	5	13	13
Cap, veh/h	851	832	330	502	1062	147	223	116	91	225	172	35
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1019	1123	446	750	1432	198	1320	833	653	1304	1235	256
Grp Volume(v), veh/h	11	0	683	36	0	370	91	0	66	45	0	70
Grp Sat Flow(s),veh/h/ln	1019	0	1569	750	0	1631	1320	0	1486	1304	0	1491
Q Serve(g_s), s	0.2	0.0	15.0	1.0	0.0	0.0	5.0	0.0	3.0	2.4	0.0	3.2
Cycle Q Clear(g_c), s	0.2	0.0	15.0	16.0	0.0	0.0	8.2	0.0	3.0	5.4	0.0	3.2
Prop In Lane	1.00		0.28	1.00		0.12	1.00		0.44	1.00		0.17
Lane Grp Cap(c), veh/h	851	0	1163	502	0	1209	223	0	206	225	0	207
V/C Ratio(X)	0.01	0.00	0.59	0.07	0.00	0.31	0.41	0.00	0.32	0.20	0.00	0.34
Avail Cap(c_a), veh/h	851	0	1163	502	0	1209	401	0	406	400	0	407
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.98	0.00	0.98	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.5	0.0	4.5	2.2	0.0	0.0	32.9	0.0	29.1	31.5	0.0	29.2
Incr Delay (d2), s/veh	0.0	0.0	1.9	0.3	0.0	0.6	0.4	0.0	0.3	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.9	0.1	0.0	0.2	1.6	0.0	1.1	0.8	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.6	0.0	6.4	2.4	0.0	0.6	33.3	0.0	29.4	31.7	0.0	29.5
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		694			406			157			115	
Approach Delay, s/veh		6.3			0.8			31.7			30.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.1		14.9		60.1		14.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		17.0		7.4		18.0		10.2				
Green Ext Time (p_c), s		5.9		0.2		2.9		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	126	53	14	105	2	49	11	20	2	6	7
Future Volume (vph)	10	126	53	14	105	2	49	11	20	2	6	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	4%	0%	2%	0%	4%	9%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

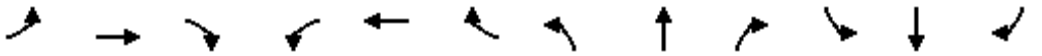
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	126	53	14	105	2	49	11	20	2	6	7
Future Vol, veh/h	10	126	53	14	105	2	49	11	20	2	6	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	1	4	0	2	0	4	9	5	0	0	0
Mvmt Flow	11	140	59	16	117	2	54	12	22	2	7	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.3	8.4	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	61%	5%	12%	13%
Vol Thru, %	14%	67%	87%	40%
Vol Right, %	25%	28%	2%	47%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	189	121	15
LT Vol	49	10	14	2
Through Vol	11	126	105	6
RT Vol	20	53	2	7
Lane Flow Rate	89	210	134	17
Geometry Grp	1	1	1	1
Degree of Util (X)	0.116	0.242	0.164	0.021
Departure Headway (Hd)	4.708	4.141	4.38	4.508
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	869	820	794
Service Time	2.731	2.155	2.397	2.534
HCM Lane V/C Ratio	0.117	0.242	0.163	0.021
HCM Control Delay	8.4	8.5	8.3	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.9	0.6	0.1

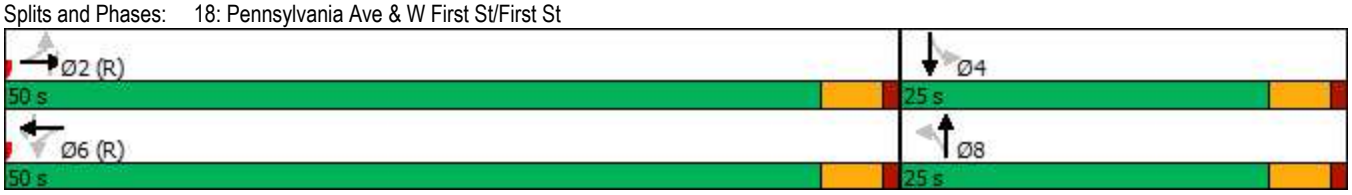


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	474	24	20	329	50	10	6	20	37	10	44
Future Volume (vph)	26	474	24	20	329	50	10	6	20	37	10	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1612	1645	0	1805	1637	0	0	1735	1454	0	1786	1454
Flt Permitted	0.534			0.462				0.816			0.761	
Satd. Flow (perm)	902	1645	0	872	1637	0	0	1455	1408	0	1401	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			19				22			44
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	12%	3%	4%	0%	2%	2%	10%	0%	0%	3%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	503	0	20	383	0	0	16	20	0	47	44
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	61.7	61.7		61.7	61.7			11.1	61.7		11.1	61.7
Actuated g/C Ratio	0.82	0.82		0.82	0.82			0.15	0.82		0.15	0.82
v/c Ratio	0.04	0.37		0.03	0.28			0.07	0.02		0.23	0.04
Control Delay	3.7	3.8		4.7	4.5			24.9	2.5		28.6	2.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	3.7	3.8		4.7	4.5			24.9	2.5		28.6	2.1
LOS	A	A		A	A			C	A		C	A
Approach Delay		3.8			4.5			12.4			15.8	
Approach LOS		A			A			B			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	

Intersection Signal Delay: 5.4 Intersection LOS: A
Intersection Capacity Utilization 65.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	102	13	0	0	247
Future Volume (vph)	2	102	13	0	0	247
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles (%)	0%	8%	0%	0%	0%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	102	13	0	0	247
Future Vol, veh/h	2	102	13	0	0	247
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	78	78	78	78	78	78
Heavy Vehicles, %	0	8	0	0	0	4
Mvmt Flow	3	131	17	0	0	317

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	334	17	0	-	-	-
Stage 1	17	-	-	-	-	-
Stage 2	317	-	-	-	-	-
Critical Hdwy	6.4	6.28	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.372	-	-	-	-
Pot Cap-1 Maneuver	665	1045	-	0	0	-
Stage 1	1011	-	-	0	0	-
Stage 2	743	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	665	1045	-	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	743	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1034	-
HCM Lane V/C Ratio	-	0.129	-
HCM Control Delay (s)	-	9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	8	2	238	22
Future Volume (vph)	0	0	8	2	238	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	0%	0%	0%	0%	5%	0%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

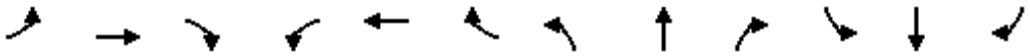
Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	8	2	238	22
Future Vol, veh/h	0	0	8	2	238	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	5	0
Mvmt Flow	0	0	11	3	313	29

Major/Minor	Minor2		Major2	
Conflicting Flow All	655	29	0	0
Stage 1	655	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	388	1052	-	-
Stage 1	466	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1052	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s	8.5	
HCM LOS	A	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	1052	-	-
HCM Lane V/C Ratio	0.013	-	-
HCM Control Delay (s)	8.5	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	4	17	3	2	2	16	101	5	2	62	5
Future Volume (vph)	7	4	17	3	2	2	16	101	5	2	62	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	2%	0%	0%	3%	0%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

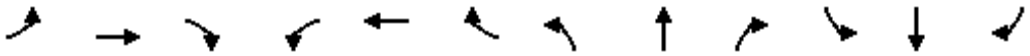
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	4	17	3	2	2	16	101	5	2	62	5
Future Vol, veh/h	7	4	17	3	2	2	16	101	5	2	62	5
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
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	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	3	2	0	0	3	0
Mvmt Flow	7	4	18	3	2	2	17	105	5	2	65	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	259	242	96	253	242	151	83	0	0	123	0	0
Stage 1	85	85	-	155	155	-	-	-	-	-	-	-
Stage 2	174	157	-	98	87	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.13	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.227	-	-	2.2	-	-
Pot Cap-1 Maneuver	698	663	966	704	663	901	1508	-	-	1477	-	-
Stage 1	928	828	-	852	773	-	-	-	-	-	-	-
Stage 2	833	772	-	913	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	660	638	940	662	638	864	1489	-	-	1459	-	-
Mov Cap-2 Maneuver	660	638	-	662	638	-	-	-	-	-	-	-
Stage 1	906	817	-	832	754	-	-	-	-	-	-	-
Stage 2	795	753	-	878	816	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	10.2	1	0.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	801	701	1459	-	-
HCM Lane V/C Ratio	0.011	-	-	0.036	0.01	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.7	10.2	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	1	1	1	5	56	1	0	40	1
Future Volume (vph)	1	0	5	1	1	1	5	56	1	0	40	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	22%	0%	0%	0%	13%	2%	0%	0%	4%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

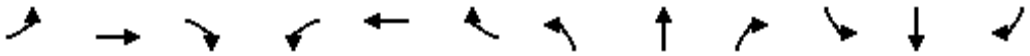
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	5	1	1	1	5	56	1	0	40	1
Future Vol, veh/h	1	0	5	1	1	1	5	56	1	0	40	1
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	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	22	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	0	6	1	1	1	6	68	1	0	49	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	132	131	50	134	131	69	50	0	0	69	0	0
Stage 1	50	50	-	81	81	-	-	-	-	-	-	-
Stage 2	82	81	-	53	50	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.1	6.5	6.2	4.23	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.5	4	3.3	2.317	-	-	2.2	-	-
Pot Cap-1 Maneuver	845	763	964	842	763	1000	1489	-	-	1545	-	-
Stage 1	968	857	-	932	832	-	-	-	-	-	-	-
Stage 2	931	832	-	965	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	841	760	964	834	760	1000	1489	-	-	1545	-	-
Mov Cap-2 Maneuver	841	760	-	834	760	-	-	-	-	-	-	-
Stage 1	964	857	-	928	829	-	-	-	-	-	-	-
Stage 2	925	829	-	959	857	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.2	0.6	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	941	854	1545	-	-
HCM Lane V/C Ratio	0.004	-	-	0.008	0.004	-	-	-
HCM Control Delay (s)	7.4	0	-	8.9	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	18	1	6	29	9	0	3	7	7	0	2
Future Volume (vph)	3	18	1	6	29	9	0	3	7	7	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	3%	100%	0%	0%	0%	0%	0%	15%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

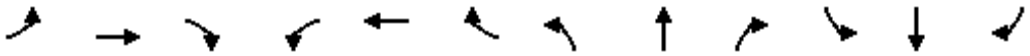
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	18	1	6	29	9	0	3	7	7	0	2
Future Vol, veh/h	3	18	1	6	29	9	0	3	7	7	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	3	100	0	0	0	0	0	15	0	0	0
Mvmt Flow	4	21	1	7	34	11	0	4	8	8	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	22	0	0	85	89	22	90	84	40
Stage 1	-	-	-	-	-	-	30	30	-	54	54	-
Stage 2	-	-	-	-	-	-	55	59	-	36	30	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.35	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.435	3.5	4	3.3
Pot Cap-1 Maneuver	1576	-	-	1607	-	-	906	805	1019	900	810	1037
Stage 1	-	-	-	-	-	-	992	874	-	963	854	-
Stage 2	-	-	-	-	-	-	962	850	-	985	874	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1576	-	-	1607	-	-	899	799	1019	885	804	1037
Mov Cap-2 Maneuver	-	-	-	-	-	-	899	799	-	885	804	-
Stage 1	-	-	-	-	-	-	989	871	-	960	851	-
Stage 2	-	-	-	-	-	-	956	847	-	970	871	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	1	8.9	9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	941	1576	-	-	1607	-	-	915
HCM Lane V/C Ratio	0.013	0.002	-	-	0.004	-	-	0.012
HCM Control Delay (s)	8.9	7.3	0	-	7.2	0	-	9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

2019 Existing Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1	2	0	0	0	0	8	3	68	8	0
Future Volume (vph)	111	1	2	0	0	0	0	8	3	68	8	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

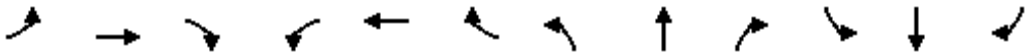
Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	111	1	2	0	0	0	0	8	3	68	8	0
Future Vol, veh/h	111	1	2	0	0	0	0	8	3	68	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	131	1	2	0	0	0	0	9	4	80	9	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	180	182	9	-	0	0	13	0	0
Stage 1	169	169	-	-	-	-	-	-	-
Stage 2	11	13	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.5	6.2	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	812	716	1079	0	-	-	1619	-	0
Stage 1	863	763	-	0	-	-	-	-	0
Stage 2	1015	889	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	771	0	1079	-	-	-	1619	-	-
Mov Cap-2 Maneuver	771	0	-	-	-	-	-	-	-
Stage 1	863	0	-	-	-	-	-	-	-
Stage 2	964	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0	6.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	775	1619	-
HCM Lane V/C Ratio	-	-	0.173	0.049	-
HCM Control Delay (s)	-	-	10.6	7.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	9	11	35	2	106	0	0	53	837
Future Volume (vph)	0	0	0	9	11	35	2	106	0	0	53	837
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

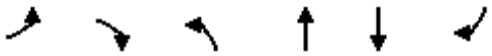
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	9	11	35	2	106	0	0	53	837
Future Vol, veh/h	0	0	0	9	11	35	2	106	0	0	53	837
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	1
Mvmt Flow	0	0	0	10	12	38	2	114	0	0	57	900

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	625	1075	114	957	0	-	-	-	0
Stage 1	118	118	-	-	-	-	-	-	-
Stage 2	507	957	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	452	221	944	727	-	0	0	-	-
Stage 1	912	802	-	-	-	0	0	-	-
Stage 2	609	339	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	451	0	944	727	-	-	-	-	-
Mov Cap-2 Maneuver	451	0	-	-	-	-	-	-	-
Stage 1	909	0	-	-	-	-	-	-	-
Stage 2	609	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	727	-	771	-	-
HCM Lane V/C Ratio	0.003	-	0.077	-	-
HCM Control Delay (s)	10	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	12	4	123	865	14
Future Volume (vph)	12	12	4	123	865	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	8%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

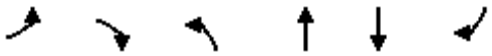
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	12	4	123	865	14
Future Vol, veh/h	12	12	4	123	865	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	8	0	0	0	1	0
Mvmt Flow	13	13	4	135	951	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1102	959	966	0	-	0
Stage 1	959	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.48	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	228	314	721	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	227	314	721	-	-	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	361	-	-	-	-	-
Stage 2	870	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	721	-	264	-	-
HCM Lane V/C Ratio	0.006	-	0.1	-	-
HCM Control Delay (s)	10	-	20.1	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	73	92	60	94	779	89
Future Volume (vph)	73	92	60	94	779	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

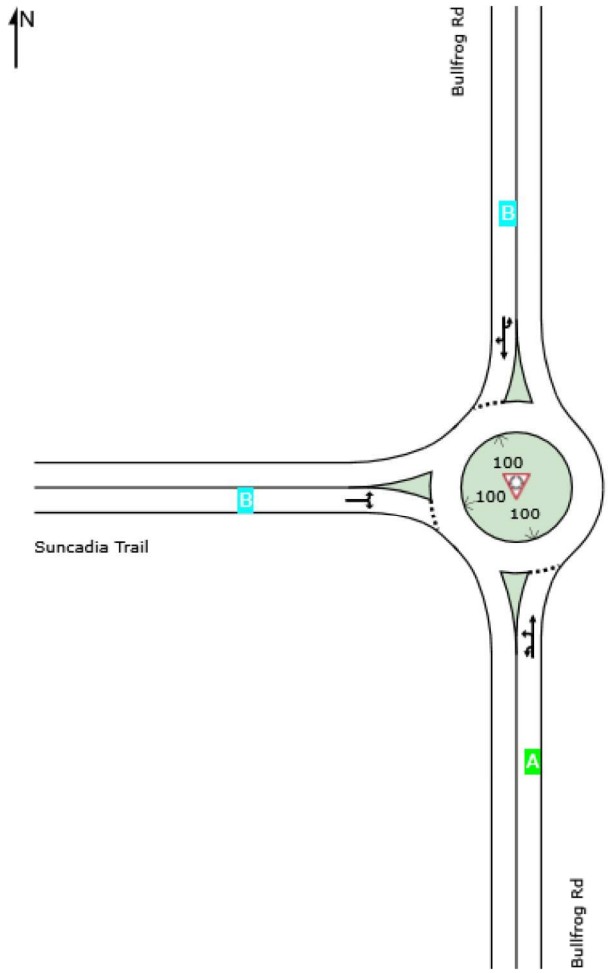
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2019 Existing - Sunday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	B	B	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2019 Existing - Sunday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

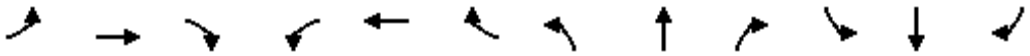
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	167	0.6	1263	0.133	100	3.9	LOS A	0.6	15.6	Full	1600	0.0	0.0
Approach	167	0.6		0.133		3.9	LOS A	0.6	15.6				
North: Bullfrog Rd													
Lane 1[d]	945	1.1	1276	0.740	100	14.1	LOS B	9.6	243.3	Full	1600	0.0	0.0
Approach	945	1.1		0.740		14.1	LOS B	9.6	243.3				
West: Suncadia Trail													
Lane 1[d]	179	0.0	574	0.313	100	10.7	LOS B	1.4	34.3	Full	1600	0.0	0.0
Approach	179	0.0		0.313		10.7	LOS B	1.4	34.3				
Intersection	1291	0.9		0.740		12.3	LOS B	9.6	243.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	0	8	0	0	0	0	169	0	0	860	7
Future Volume (vph)	6	0	8	0	0	0	0	169	0	0	860	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
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
Heavy Vehicles (%)	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	8	0	0	0	0	169	0	0	860	7
Future Vol, veh/h	6	0	8	0	0	0	0	169	0	0	860	7
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	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	17	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	6	0	8	0	0	0	0	174	0	0	887	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1065	1065	891	1069	1068	174	894	0	0	174	0	0
Stage 1	891	891	-	174	174	-	-	-	-	-	-	-
Stage 2	174	174	-	895	894	-	-	-	-	-	-	-
Critical Hdwy	7.27	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.27	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.27	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.653	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	188	224	344	201	223	875	767	-	-	1415	-	-
Stage 1	317	363	-	833	759	-	-	-	-	-	-	-
Stage 2	794	759	-	338	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	188	224	344	196	223	875	767	-	-	1415	-	-
Mov Cap-2 Maneuver	188	224	-	196	223	-	-	-	-	-	-	-
Stage 1	317	363	-	833	759	-	-	-	-	-	-	-
Stage 2	794	759	-	330	362	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	767	-	-	254	-	1415	-	-
HCM Lane V/C Ratio	-	-	-	0.057	-	-	-	-
HCM Control Delay (s)	0	-	-	20	0	0	-	-
HCM Lane LOS	A	-	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	667	182	81	62	198	174
Future Volume (vph)	667	182	81	62	198	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Confl. Peds. (#/hr)	1					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

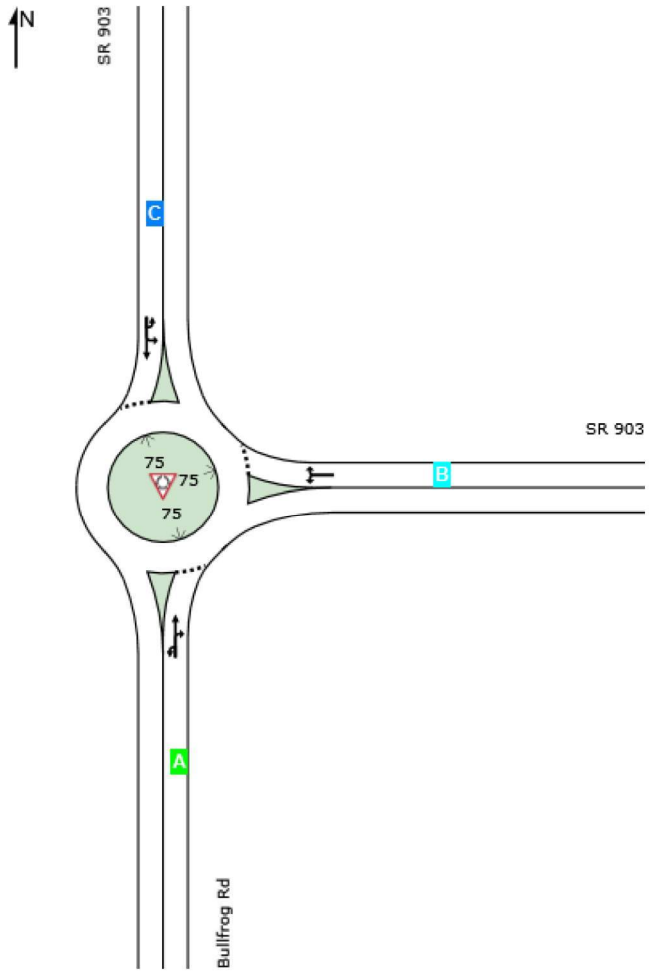
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2019 Existing - Sunday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	B	C	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2019 Existing - Sunday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

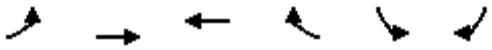
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	160	0.0	1112	0.144	100	4.5	LOS A	0.7	16.5	Full	1600	0.0	0.0
Approach	160	0.0		0.144		4.5	LOS A	0.7	16.5				
East: SR 903													
Lane 1[d]	903	1.0	1237	0.730	100	14.0	LOS B	8.7	218.0	Full	1600	0.0	0.0
Approach	903	1.0		0.730		14.0	LOS B	8.7	218.0				
North: SR 903													
Lane 1[d]	396	0.3	658	0.602	100	16.4	LOS C	4.7	116.8	Full	1600	0.0	0.0
Approach	396	0.3		0.602		16.4	LOS C	4.7	116.8				
Intersection	1459	0.7		0.730		13.6	LOS B	8.7	218.0				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	262	869	17	10	5
Future Volume (vph)	4	262	869	17	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

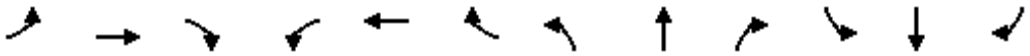
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	262	869	17	10	5
Future Vol, veh/h	4	262	869	17	10	5
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	4	273	905	18	10	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	928	0	-	0	1200	919
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	281	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	745	-	-	-	206	332
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	741	-	-	-	203	330
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	21.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	741	-	-	-	233
HCM Lane V/C Ratio	0.006	-	-	-	0.067
HCM Control Delay (s)	9.9	0	-	-	21.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	224	38	19	810	1	70	0	20	1	1	1
Future Volume (vph)	0	224	38	19	810	1	70	0	20	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	10%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

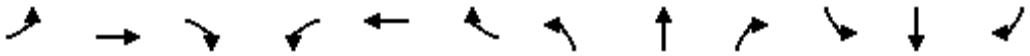
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	224	38	19	810	1	70	0	20	1	1	1
Future Vol, veh/h	0	224	38	19	810	1	70	0	20	1	1	1
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	0	1	0	1	0	10	0	0	0
Mvmt Flow	0	233	40	20	844	1	73	0	21	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	845	0	0	276	0	0	1142	1141	256	1149	1161	845
Stage 1	-	-	-	-	-	-	256	256	-	885	885	-
Stage 2	-	-	-	-	-	-	886	885	-	264	276	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.11	6.5	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.509	4	3.39	3.5	4	3.3
Pot Cap-1 Maneuver	800	-	-	1299	-	-	178	202	764	177	197	366
Stage 1	-	-	-	-	-	-	751	699	-	342	366	-
Stage 2	-	-	-	-	-	-	341	366	-	746	685	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	800	-	-	1295	-	-	172	196	762	168	191	366
Mov Cap-2 Maneuver	-	-	-	-	-	-	172	196	-	168	191	-
Stage 1	-	-	-	-	-	-	749	697	-	342	355	-
Stage 2	-	-	-	-	-	-	329	355	-	726	683	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	35.8	21.9
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	800	-	-	1295	-	-	216
HCM Lane V/C Ratio	0.451	-	-	-	0.015	-	-	0.014
HCM Control Delay (s)	35.8	0	-	-	7.8	0	-	21.9
HCM Lane LOS	E	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	2.1	0	-	-	0	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	227	26	6	781	1	52	0	7	1	0	0
Future Volume (vph)	2	227	26	6	781	1	52	0	7	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%	2%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	227	26	6	781	1	52	0	7	1	0	0
Future Vol, veh/h	2	227	26	6	781	1	52	0	7	1	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	1	0	2	0	0	0	0	0
Mvmt Flow	2	239	27	6	822	1	55	0	7	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	823	0	0	270	0	0	1096	1096	257	1095	1109	823
Stage 1	-	-	-	-	-	-	261	261	-	835	835	-
Stage 2	-	-	-	-	-	-	835	835	-	260	274	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.12	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.518	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	816	-	-	1305	-	-	191	215	787	193	211	377
Stage 1	-	-	-	-	-	-	744	696	-	365	386	-
Stage 2	-	-	-	-	-	-	362	386	-	749	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	816	-	-	1300	-	-	189	212	784	190	208	377
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	212	-	190	208	-
Stage 1	-	-	-	-	-	-	739	691	-	364	383	-
Stage 2	-	-	-	-	-	-	359	383	-	740	682	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	29.5	24.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	816	-	-	1300	-	-	190
HCM Lane V/C Ratio	0.299	0.003	-	-	0.005	-	-	0.006
HCM Control Delay (s)	29.5	9.4	0	-	7.8	0	-	24.1
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	0



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	16	52	5	7	69
Future Volume (vph)	25	16	52	5	7	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	8%	0%	0%	0%	14%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

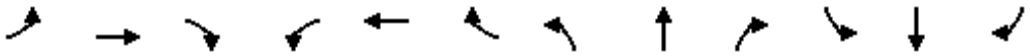
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	16	52	5	7	69
Future Vol, veh/h	25	16	52	5	7	69
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	8	0	0	0	14	3
Mvmt Flow	27	17	56	5	8	74
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.2	7.6	7.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	9%	0%	91%
Vol Thru, %	0%	61%	9%
Vol Right, %	91%	39%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	76	41	57
LT Vol	7	0	52
Through Vol	0	25	5
RT Vol	69	16	0
Lane Flow Rate	82	44	61
Geometry Grp	1	1	1
Degree of Util (X)	0.086	0.049	0.073
Departure Headway (Hd)	3.791	3.992	4.26
Convergence, Y/N	Yes	Yes	Yes
Cap	937	893	839
Service Time	1.847	2.035	2.295
HCM Lane V/C Ratio	0.088	0.049	0.073
HCM Control Delay	7.2	7.2	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.2	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	157	115	52	284	86	70	39	108	48	37	18
Future Volume (vph)	47	157	115	52	284	86	70	39	108	48	37	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	2%	2%	1%	4%	1%	3%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

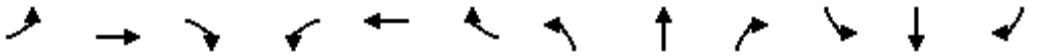
Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	157	115	52	284	86	70	39	108	48	37	18
Future Vol, veh/h	47	157	115	52	284	86	70	39	108	48	37	18
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	3	2	2	1	4	1	3	2	0	0	0
Mvmt Flow	49	164	120	54	296	90	73	41	113	50	39	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	386	0	0	284	0	0	801	816	224	848	831	342
Stage 1	-	-	-	-	-	-	322	322	-	449	449	-
Stage 2	-	-	-	-	-	-	479	494	-	399	382	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.11	6.53	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.509	4.027	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1184	-	-	1278	-	-	304	310	815	284	307	705
Stage 1	-	-	-	-	-	-	692	649	-	593	576	-
Stage 2	-	-	-	-	-	-	570	545	-	631	616	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1184	-	-	1278	-	-	248	285	815	205	282	704
Mov Cap-2 Maneuver	-	-	-	-	-	-	248	285	-	205	282	-
Stage 1	-	-	-	-	-	-	664	622	-	569	552	-
Stage 2	-	-	-	-	-	-	494	522	-	487	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	1	19.7	22.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	260	815	1184	-	-	1278	-	-	205	351
HCM Lane V/C Ratio	0.437	0.138	0.041	-	-	0.042	-	-	0.244	0.163
HCM Control Delay (s)	29.2	10.1	8.2	-	-	7.9	-	-	28.1	17.2
HCM Lane LOS	D	B	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	2.1	0.5	0.1	-	-	0.1	-	-	0.9	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	337	5	60	497	19	13	12	60	1	5	33
Future Volume (vph)	38	337	5	60	497	19	13	12	60	1	5	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	2%	2%	5%	0%	0%	5%	0%	0%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

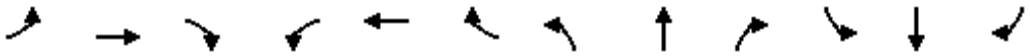
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	337	5	60	497	19	13	12	60	1	5	33
Future Vol, veh/h	38	337	5	60	497	19	13	12	60	1	5	33
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
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, %	0	1	0	2	2	5	0	0	5	0	0	3
Mvmt Flow	43	383	6	68	565	22	15	14	68	1	6	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	589	0	0	391	0	0	1208	1199	388	1227	1191	578
Stage 1	-	-	-	-	-	-	474	474	-	714	714	-
Stage 2	-	-	-	-	-	-	734	725	-	513	477	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.1	6.5	6.25	7.1	6.5	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.5	4	3.345	3.5	4	3.327
Pot Cap-1 Maneuver	996	-	-	1168	-	-	161	187	654	157	189	514
Stage 1	-	-	-	-	-	-	575	561	-	425	438	-
Stage 2	-	-	-	-	-	-	415	433	-	548	559	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	994	-	-	1166	-	-	134	168	653	122	170	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	168	-	122	170	-
Stage 1	-	-	-	-	-	-	549	536	-	406	412	-
Stage 2	-	-	-	-	-	-	357	407	-	458	534	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.9	18.2	15.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	148	653	994	-	-	1166	-	-	383
HCM Lane V/C Ratio	0.192	0.104	0.043	-	-	0.058	-	-	0.116
HCM Control Delay (s)	35	11.2	8.8	-	-	8.3	-	-	15.6
HCM Lane LOS	E	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	0.3	0.1	-	-	0.2	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	167	59	27	648	4	142	6	11	1	7	9
Future Volume (vph)	6	167	59	27	648	4	142	6	11	1	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	2%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	167	59	27	648	4	142	6	11	1	7	9
Future Vol, veh/h	6	167	59	27	648	4	142	6	11	1	7	9
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	3	2	0	1	0	1	0	0	0	0	0
Mvmt Flow	6	174	61	28	675	4	148	6	11	1	7	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	687	0	0	238	0	0	965	963	210	968	991	689
Stage 1	-	-	-	-	-	-	220	220	-	741	741	-
Stage 2	-	-	-	-	-	-	745	743	-	227	250	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.11	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.509	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	916	-	-	1341	-	-	235	258	835	235	248	449
Stage 1	-	-	-	-	-	-	785	725	-	411	426	-
Stage 2	-	-	-	-	-	-	408	425	-	780	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	909	-	-	1337	-	-	216	245	831	218	235	444
Mov Cap-2 Maneuver	-	-	-	-	-	-	216	245	-	218	235	-
Stage 1	-	-	-	-	-	-	776	717	-	404	408	-
Stage 2	-	-	-	-	-	-	377	407	-	755	696	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.3	47.5	17.3
HCM LOS			E	C

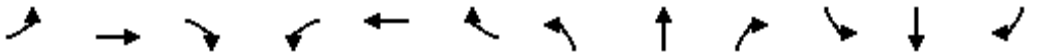
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	216	451	909	-	-	1337	-	-	311
HCM Lane V/C Ratio	0.685	0.039	0.007	-	-	0.021	-	-	0.057
HCM Control Delay (s)	51.6	13.3	9	0	-	7.8	0	-	17.3
HCM Lane LOS	F	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	4.3	0.1	0	-	-	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	316	74	57	480	88	70	44	59	19	54	26
Future Volume (vph)	15	316	74	57	480	88	70	44	59	19	54	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	3%	2%	3%	0%	1%	2%	0%	0%	2%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 91	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





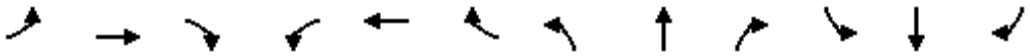
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	316	74	57	480	88	70	44	59	19	54	26
Future Volume (veh/h)	15	316	74	57	480	88	70	44	59	19	54	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1870	1856	1856	1885	1870	1870	1900	1870	1870
Adj Flow Rate, veh/h	16	329	77	59	500	92	73	46	61	20	56	27
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	3	3	1	2	2	0	2	2
Cap, veh/h	617	1108	259	754	1152	212	209	100	133	187	164	79
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	838	1465	343	979	1524	280	1318	726	963	1301	1189	573
Grp Volume(v), veh/h	16	0	406	59	0	592	73	0	107	20	0	83
Grp Sat Flow(s),veh/h/ln	838	0	1808	979	0	1805	1318	0	1689	1301	0	1762
Q Serve(g_s), s	0.6	0.0	6.1	1.7	0.0	10.3	4.6	0.0	5.0	1.2	0.0	3.7
Cycle Q Clear(g_c), s	10.9	0.0	6.1	7.9	0.0	10.3	8.3	0.0	5.0	6.3	0.0	3.7
Prop In Lane	1.00		0.19	1.00		0.16	1.00		0.57	1.00		0.33
Lane Grp Cap(c), veh/h	617	0	1367	754	0	1364	209	0	233	187	0	243
V/C Ratio(X)	0.03	0.00	0.30	0.08	0.00	0.43	0.35	0.00	0.46	0.11	0.00	0.34
Avail Cap(c_a), veh/h	617	0	1367	754	0	1364	414	0	496	389	0	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	0.0	3.3	4.6	0.0	3.8	37.5	0.0	34.3	37.2	0.0	33.8
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.2	0.0	1.0	1.4	0.0	2.0	0.4	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.9	0.4	0.0	3.2	1.6	0.0	2.2	0.4	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	3.9	4.8	0.0	4.8	38.9	0.0	36.3	37.6	0.0	34.9
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	C
Approach Vol, veh/h		422			651			180			103	
Approach Delay, s/veh		4.0			4.8			37.4			35.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	70.0	16.5	70.0	16.5
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	65.4	25.4	65.4	25.4
Max Q Clear Time (g_c+I1), s	12.9	10.3	12.3	8.3
Green Ext Time (p_c), s	3.2	1.0	5.5	0.6

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	118	52	5	206	2	452	5	9	3	7	3
Future Volume (vph)	4	118	52	5	206	2	452	5	9	3	7	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	25%	2%	2%	0%	1%	0%	2%	0%	0%	0%	14%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	118	52	5	206	2	452	5	9	3	7	3
Future Vol, veh/h	4	118	52	5	206	2	452	5	9	3	7	3
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	25	2	2	0	1	0	2	0	0	0	14	0
Mvmt Flow	4	120	53	5	210	2	461	5	9	3	7	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	212	0	0	174	0	0	382	378	149	384	403	211
Stage 1	-	-	-	-	-	-	156	156	-	221	221	-
Stage 2	-	-	-	-	-	-	226	222	-	163	182	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.12	6.5	6.2	7.1	6.64	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.64	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.518	4	3.3	3.5	4.126	3.3
Pot Cap-1 Maneuver	1233	-	-	1415	-	-	576	557	903	578	518	834
Stage 1	-	-	-	-	-	-	846	772	-	786	699	-
Stage 2	-	-	-	-	-	-	777	723	-	844	727	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	1414	-	-	564	552	901	564	513	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	564	552	-	564	513	-
Stage 1	-	-	-	-	-	-	842	768	-	783	696	-
Stage 2	-	-	-	-	-	-	763	720	-	826	723	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	33.2	11.4
HCM LOS			D	B

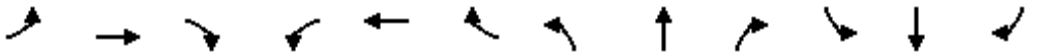
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	564	735	1233	-	-	1414	-	-	576
HCM Lane V/C Ratio	0.818	0.019	0.003	-	-	0.004	-	-	0.023
HCM Control Delay (s)	33.9	10	7.9	0	-	7.6	0	-	11.4
HCM Lane LOS	D	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	8.2	0.1	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	274	108	29	438	236	162	222	29	20	34	12
Future Volume (vph)	13	274	108	29	438	236	162	222	29	20	34	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	2%	3%	1%	1%	3%	1%	0%	0%	6%	0%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

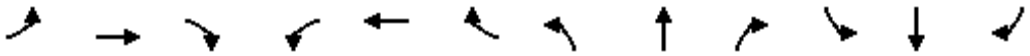




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	274	108	29	438	236	162	222	29	20	34	12
Future Volume (veh/h)	13	274	108	29	438	236	162	222	29	20	34	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1856	1885	1885	1856	1885	1885	1900	1811	1811
Adj Flow Rate, veh/h	13	280	110	30	447	241	165	227	30	20	35	12
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	3	1	1	3	1	1	0	6	6
Cap, veh/h	612	799	314	668	720	388	316	298	39	145	235	80
Arrive On Green	0.70	0.70	0.70	1.00	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	764	1147	450	983	1033	557	1325	1464	193	1130	1154	396
Grp Volume(v), veh/h	13	0	390	30	0	688	165	0	257	20	0	47
Grp Sat Flow(s),veh/h/ln	764	0	1597	983	0	1590	1325	0	1657	1130	0	1549
Q Serve(g_s), s	0.5	0.0	8.8	0.4	0.0	0.0	10.5	0.0	13.2	1.5	0.0	2.2
Cycle Q Clear(g_c), s	0.5	0.0	8.8	9.2	0.0	0.0	12.8	0.0	13.2	14.7	0.0	2.2
Prop In Lane	1.00		0.28	1.00		0.35	1.00		0.12	1.00		0.26
Lane Grp Cap(c), veh/h	612	0	1113	668	0	1108	316	0	337	145	0	315
V/C Ratio(X)	0.02	0.00	0.35	0.04	0.00	0.62	0.52	0.00	0.76	0.14	0.00	0.15
Avail Cap(c_a), veh/h	612	0	1113	668	0	1108	452	0	506	260	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.97	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.2	0.0	5.5	0.6	0.0	0.0	34.7	0.0	33.8	40.7	0.0	29.5
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.0	2.1	0.5	0.0	1.6	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.8	0.0	0.0	0.7	3.4	0.0	5.4	0.4	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.3	0.0	6.3	0.8	0.0	2.1	35.2	0.0	35.4	40.9	0.0	29.5
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	C
Approach Vol, veh/h		403			718			422			67	
Approach Delay, s/veh		6.3			2.1			35.3			32.9	
Approach LOS		A			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.2		22.8		67.2		22.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		10.8		16.7		11.2		15.2				
Green Ext Time (p_c), s		3.1		0.1		6.6		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			13.1									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	97	30	12	150	2	52	7	9	1	7	3
Future Volume (vph)	5	97	30	12	150	2	52	7	9	1	7	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

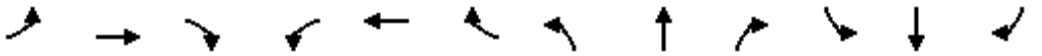
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	97	30	12	150	2	52	7	9	1	7	3
Future Vol, veh/h	5	97	30	12	150	2	52	7	9	1	7	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	2	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	5	104	32	13	161	2	56	8	10	1	8	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	8.4	8.2	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	76%	4%	7%	9%
Vol Thru, %	10%	73%	91%	64%
Vol Right, %	13%	23%	1%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	132	164	11
LT Vol	52	5	12	1
Through Vol	7	97	150	7
RT Vol	9	30	2	3
Lane Flow Rate	73	142	176	12
Geometry Grp	1	1	1	1
Degree of Util (X)	0.095	0.164	0.209	0.015
Departure Headway (Hd)	4.679	4.157	4.267	4.538
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	768	866	846	790
Service Time	2.697	2.17	2.267	2.559
HCM Lane V/C Ratio	0.095	0.164	0.208	0.015
HCM Control Delay	8.2	8	8.4	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	0.8	0

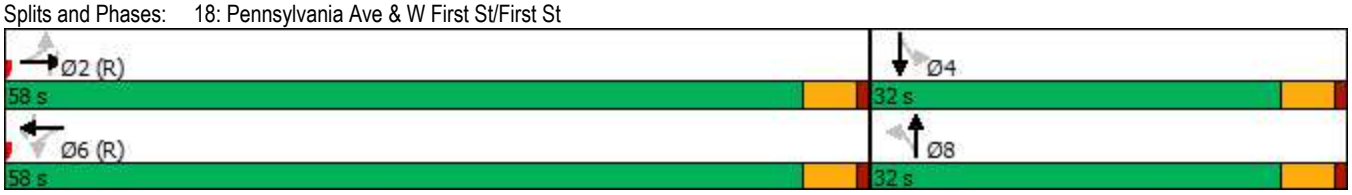


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	285	18	16	707	42	4	12	12	28	9	16
Future Volume (vph)	14	285	18	16	707	42	4	12	12	28	9	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1805	1660	0	1805	1662	0	0	1877	1454	0	1832	1454
Flt Permitted	0.313			0.564				0.935			0.769	
Satd. Flow (perm)	594	1660	0	1064	1662	0	0	1774	1416	0	1455	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			6				18			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	325	0	17	805	0	0	17	13	0	40	17
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	75.9	75.9		75.9	75.9			11.9	75.9		11.9	75.9
Actuated g/C Ratio	0.84	0.84		0.84	0.84			0.13	0.84		0.13	0.84
v/c Ratio	0.03	0.23		0.02	0.57			0.07	0.01		0.21	0.01
Control Delay	3.7	2.9		4.6	8.2			30.8	2.4		34.4	2.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	3.7	2.9		4.6	8.2			30.8	2.4		34.4	2.6
LOS	A	A		A	A			C	A		C	A
Approach Delay		3.0			8.2			18.5			24.9	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	

Intersection Signal Delay: 7.8 Intersection LOS: A
Intersection Capacity Utilization 78.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	417	22	0	0	158
Future Volume (vph)	3	417	22	0	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	33%	2%	5%	0%	0%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	417	22	0	0	158
Future Vol, veh/h	3	417	22	0	0	158
Conflicting Peds, #/hr	0	0	0	1	1	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	88	88	88	88	88	88
Heavy Vehicles, %	33	2	5	0	0	3
Mvmt Flow	3	474	25	0	0	180

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	205	25	0	-	-	-
Stage 1	25	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.73	6.22	-	-	-	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.318	-	-	-	-
Pot Cap-1 Maneuver	719	1051	-	0	0	-
Stage 1	923	-	-	0	0	-
Stage 2	782	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	719	1051	-	-	-	-
Mov Cap-2 Maneuver	719	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	782	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1048	-
HCM Lane V/C Ratio	-	0.455	-
HCM Control Delay (s)	-	11.3	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	2.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	23	0	164	24
Future Volume (vph)	0	0	23	0	164	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	1%	4%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

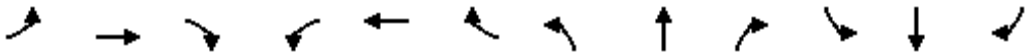
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	23	0	164	24
Future Vol, veh/h	0	0	23	0	164	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	1	4
Mvmt Flow	0	0	28	0	200	29

Major/Minor	Minor2		Major2	
Conflicting Flow All	429	29	0	0
Stage 1	429	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.11	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.209	-
Pot Cap-1 Maneuver	521	1052	-	-
Stage 1	587	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1052	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	6	25	8	1	4	42	113	5	2	108	14
Future Volume (vph)	5	6	25	8	1	4	42	113	5	2	108	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

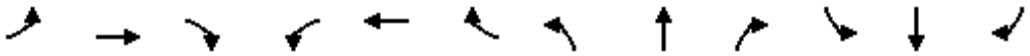
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	6	25	8	1	4	42	113	5	2	108	14
Future Vol, veh/h	5	6	25	8	1	4	42	113	5	2	108	14
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
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, %	0	0	0	0	0	0	0	0	0	0	3	0
Mvmt Flow	5	6	27	9	1	4	45	120	5	2	115	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	388	362	148	371	367	159	145	0	0	130	0	0
Stage 1	142	142	-	218	218	-	-	-	-	-	-	-
Stage 2	246	220	-	153	149	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	574	569	904	589	565	892	1450	-	-	1468	-	-
Stage 1	866	783	-	789	726	-	-	-	-	-	-	-
Stage 2	762	725	-	854	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	531	539	883	543	535	862	1429	-	-	1461	-	-
Mov Cap-2 Maneuver	531	539	-	543	535	-	-	-	-	-	-	-
Stage 1	824	771	-	758	698	-	-	-	-	-	-	-
Stage 2	710	697	-	813	766	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	11	2	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1429	-	-	737	612	1461	-	-
HCM Lane V/C Ratio	0.031	-	-	0.052	0.023	0.001	-	-
HCM Control Delay (s)	7.6	0	-	10.2	11	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	3	4	1	1	7	60	1	1	84	0
Future Volume (vph)	1	0	3	4	1	1	7	60	1	1	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

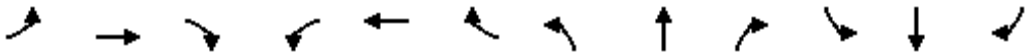
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	3	4	1	1	7	60	1	1	84	0
Future Vol, veh/h	1	0	3	4	1	1	7	60	1	1	84	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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	3	4	1	1	8	65	1	1	90	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	175	174	90	176	174	66	90	0	0	66	0	0
Stage 1	92	92	-	82	82	-	-	-	-	-	-	-
Stage 2	83	82	-	94	92	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	792	723	973	791	723	1003	1518	-	-	1549	-	-
Stage 1	920	823	-	931	831	-	-	-	-	-	-	-
Stage 2	930	831	-	918	823	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	786	719	973	785	719	1003	1518	-	-	1549	-	-
Mov Cap-2 Maneuver	786	719	-	785	719	-	-	-	-	-	-	-
Stage 1	915	822	-	926	827	-	-	-	-	-	-	-
Stage 2	923	827	-	914	822	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.5	0.8	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1518	-	-	918	802	1549	-	-
HCM Lane V/C Ratio	0.005	-	-	0.005	0.008	0.001	-	-
HCM Control Delay (s)	7.4	0	-	8.9	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	64	1	7	39	5	1	0	5	16	0	1
Future Volume (vph)	3	64	1	7	39	5	1	0	5	16	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

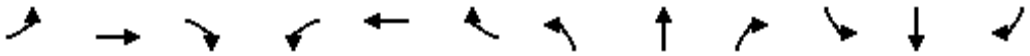
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	64	1	7	39	5	1	0	5	16	0	1
Future Vol, veh/h	3	64	1	7	39	5	1	0	5	16	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	74	1	8	45	6	1	0	6	18	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	51	0	0	75	0	0	146	148	75	148	145	48
Stage 1	-	-	-	-	-	-	81	81	-	64	64	-
Stage 2	-	-	-	-	-	-	65	67	-	84	81	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1568	-	-	1537	-	-	827	747	992	825	750	1027
Stage 1	-	-	-	-	-	-	932	832	-	952	846	-
Stage 2	-	-	-	-	-	-	951	843	-	929	832	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1568	-	-	1537	-	-	822	742	992	816	745	1027
Mov Cap-2 Maneuver	-	-	-	-	-	-	822	742	-	816	745	-
Stage 1	-	-	-	-	-	-	930	830	-	950	842	-
Stage 2	-	-	-	-	-	-	945	839	-	922	830	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1	8.8	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	959	1568	-	-	1537	-	-	826
HCM Lane V/C Ratio	0.007	0.002	-	-	0.005	-	-	0.024
HCM Control Delay (s)	8.8	7.3	0	-	7.4	0	-	9.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	210	68	5	473	1	313	6	3	0	5	14
Future Volume (vph)	4	210	68	5	473	1	313	6	3	0	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	0%	1%	0%	4%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	61.8

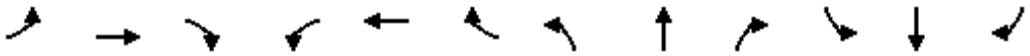
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	210	68	5	473	1	313	6	3	0	5	14
Future Vol, veh/h	4	210	68	5	473	1	313	6	3	0	5	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	1	3	0	1	0	4	0	0	0	0	0
Mvmt Flow	4	236	76	6	531	1	352	7	3	0	6	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	532	0	0	312	0	0	837	826	274	831	864	532
Stage 1	-	-	-	-	-	-	282	282	-	544	544	-
Stage 2	-	-	-	-	-	-	555	544	-	287	320	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.14	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.536	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1046	-	-	1260	-	-	~ 284	310	770	291	294	551
Stage 1	-	-	-	-	-	-	721	681	-	527	522	-
Stage 2	-	-	-	-	-	-	513	522	-	725	656	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1046	-	-	1260	-	-	~ 269	306	770	282	290	551
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 269	306	-	282	290	-
Stage 1	-	-	-	-	-	-	717	678	-	524	518	-
Stage 2	-	-	-	-	-	-	489	518	-	711	653	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	210.6	13.5
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	271	1046	-	-	1260	-	-	445
HCM Lane V/C Ratio	1.335	0.004	-	-	0.004	-	-	0.048
HCM Control Delay (s)	210.6	8.5	0	-	7.9	0	-	13.5
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	18.6	0	-	-	0	-	-	0.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	338	0	212	0	0	73	263
Future Volume (vph)	0	0	0	0	0	338	0	212	0	0	73	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	5%	0%	0%	10%	2%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

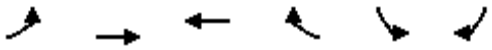
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	338	0	212	0	0	73	263
Future Vol, veh/h	0	0	0	0	0	338	0	212	0	0	73	263
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	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, %	0	0	0	0	0	3	0	5	0	0	10	2
Mvmt Flow	0	0	0	0	0	384	0	241	0	0	83	299

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	-	-	241	-	0	-	-	-	0	
Stage 1	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	
Critical Hdwy	-	-	6.23	-	-	-	-	-	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-	
Pot Cap-1 Maneuver	0	0	795	0	-	0	0	-	-	
Stage 1	0	0	-	0	-	0	0	-	-	
Stage 2	0	0	-	0	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	-	0	795	-	-	-	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-	
Stage 1	-	0	-	-	-	-	-	-	-	
Stage 2	-	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	795	-	-
HCM Lane V/C Ratio	-	0.483	-	-
HCM Control Delay (s)	-	13.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	2.7	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	193	3	0	0	88	0
Future Volume (vph)	193	3	0	0	88	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	5%	33%	0%	0%	8%	0%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	193	3	0	0	88	0
Future Vol, veh/h	193	3	0	0	88	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	5	33	0	0	8	0
Mvmt Flow	227	4	0	0	104	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	9.2	8.6
HCM LOS	A	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	196	88
LT Vol	193	88
Through Vol	3	0
RT Vol	0	0
Lane Flow Rate	231	104
Geometry Grp	1	1
Degree of Util (X)	0.279	0.138
Departure Headway (Hd)	4.363	4.786
Convergence, Y/N	Yes	Yes
Cap	812	754
Service Time	2.454	2.786
HCM Lane V/C Ratio	0.284	0.138
HCM Control Delay	9.2	8.6
HCM Lane LOS	A	A
HCM 95th-tile Q	1.1	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	202	3	272	416	66	0
Future Volume (vph)	202	3	272	416	66	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	2%	0%	2%	0%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	6.5

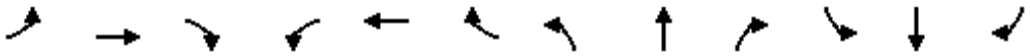
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	202	3	272	416	66	0
Future Vol, veh/h	202	3	272	416	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	0	2	0	2	0
Mvmt Flow	227	3	306	467	74	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	230	0	1308	229
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	1079	-
Critical Hdwy	-	-	4.12	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1338	-	176	815
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	326	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1338	-	136	815
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	251	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	59.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	136	-	-	1338	-
HCM Lane V/C Ratio	0.545	-	-	0.228	-
HCM Control Delay (s)	59.4	-	-	8.5	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	2.7	-	-	0.9	-

2025 Baseline Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	5	10	0	0	0	0	20	30	140	20	0
Future Volume (vph)	150	5	10	0	0	0	0	20	30	140	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

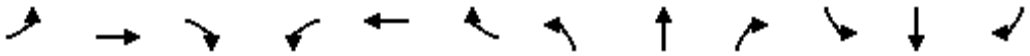
Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	5	10	0	0	0	0	20	30	140	20	0
Future Vol, veh/h	150	5	10	0	0	0	0	20	30	140	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	150	5	10	0	0	0	0	20	30	140	20	0

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	335	350	20			-	0	0	50	0	0
Stage 1	300	300	-			-	-	-	-	-	-
Stage 2	35	50	-			-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24			-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-			-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336			-	-	-	2.236	-	-
Pot Cap-1 Maneuver	656	571	1052			0	-	-	1544	-	0
Stage 1	747	662	-			0	-	-	-	-	0
Stage 2	982	849	-			0	-	-	-	-	0
Platoon blocked, %							-	-		-	
Mov Cap-1 Maneuver	596	0	1052			-	-	-	1544	-	-
Mov Cap-2 Maneuver	596	0	-			-	-	-	-	-	-
Stage 1	747	0	-			-	-	-	-	-	-
Stage 2	892	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0	6.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	613	1544	-
HCM Lane V/C Ratio	-	-	0.269	0.091	-
HCM Control Delay (s)	-	-	13	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	5	180	10	160	0	0	130	100
Future Volume (vph)	0	0	0	20	5	180	10	160	0	0	130	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

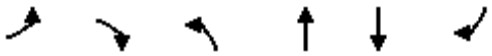
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	5	180	10	160	0	0	130	100
Future Vol, veh/h	0	0	0	20	5	180	10	160	0	0	130	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	20	5	180	10	160	0	0	130	100

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	360	410	160	230	0	-	-	-	0
Stage 1	180	180	-	-	-	-	-	-	-
Stage 2	180	230	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	635	528	880	1326	-	0	0	-	-
Stage 1	846	747	-	-	-	0	0	-	-
Stage 2	846	710	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	630	0	880	1326	-	-	-	-	-
Mov Cap-2 Maneuver	630	0	-	-	-	-	-	-	-
Stage 1	839	0	-	-	-	-	-	-	-
Stage 2	846	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1326	-	846	-	-
HCM Lane V/C Ratio	0.008	-	0.242	-	-
HCM Control Delay (s)	7.7	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	50	70	260	180	30
Future Volume (vph)	40	50	70	260	180	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

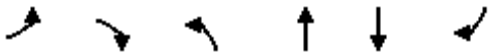
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	50	70	260	180	30
Future Vol, veh/h	40	50	70	260	180	30
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	40	50	70	260	180	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	595	195	210	0	-	0
Stage 1	195	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	446	814	1349	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	423	814	1349	-	-	-
Mov Cap-2 Maneuver	423	-	-	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1349	-	577	-	-
HCM Lane V/C Ratio	0.052	-	0.156	-	-
HCM Control Delay (s)	7.8	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	140	160	140	80	80
Future Volume (vph)	130	140	160	140	80	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

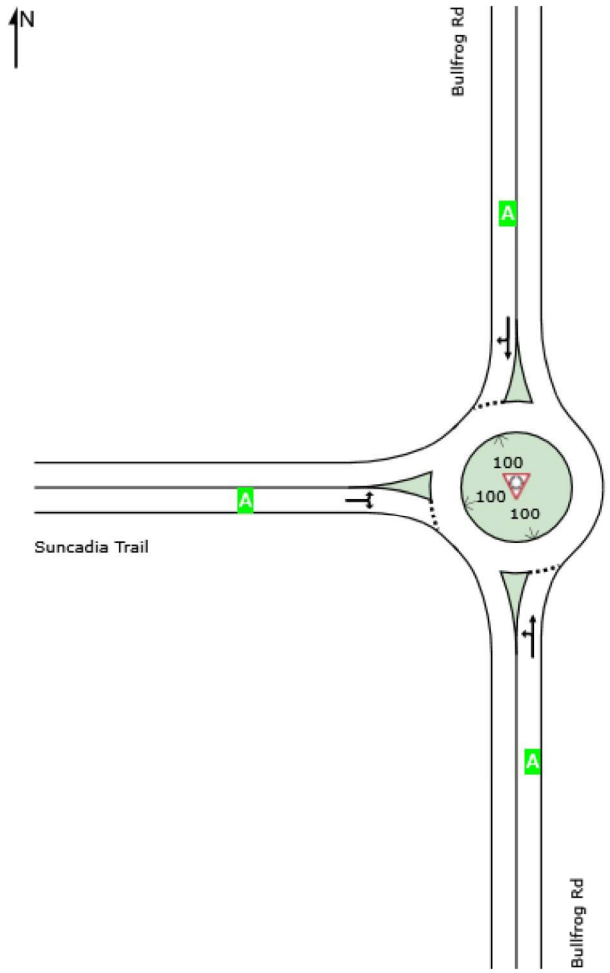
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2025 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2025 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

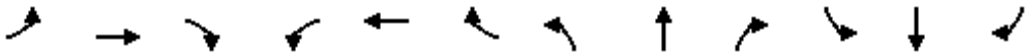
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	300	4.3	1151	0.261	100	5.5	LOS A	1.3	33.9	Full	1600	0.0	0.0
Approach	300	4.3		0.261		5.5	LOS A	1.3	33.9				
North: Bullfrog Rd													
Lane 1[d]	160	2.1	1140	0.140	100	4.4	LOS A	0.6	16.2	Full	1600	0.0	0.0
Approach	160	2.1		0.140		4.4	LOS A	0.6	16.2				
West: Suncadia Trail													
Lane 1[d]	270	4.7	1213	0.223	100	4.9	LOS A	1.1	28.4	Full	1600	0.0	0.0
Approach	270	4.7		0.223		4.9	LOS A	1.1	28.4				
Intersection	730	4.0		0.261		5.1	LOS A	1.3	33.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	0	10	0	0	0	10	260	0	0	160	20
Future Volume (vph)	20	0	10	0	0	0	10	260	0	0	160	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	0	10	0	0	0	10	260	0	0	160	20
Future Vol, veh/h	20	0	10	0	0	0	10	260	0	0	160	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	20	0	10	0	0	0	10	260	0	0	160	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	451	451	171	455	461	260	181	0	0	260	0	0
Stage 1	171	171	-	280	280	-	-	-	-	-	-	-
Stage 2	280	280	-	175	181	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	510	496	860	519	500	784	1382	-	-	1304	-	-
Stage 1	819	748	-	731	683	-	-	-	-	-	-	-
Stage 2	716	670	-	832	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	506	492	859	510	496	784	1381	-	-	1304	-	-
Mov Cap-2 Maneuver	506	492	-	510	496	-	-	-	-	-	-	-
Stage 1	812	747	-	725	678	-	-	-	-	-	-	-
Stage 2	710	665	-	822	753	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1381	-	-	586	-	1304	-	-
HCM Lane V/C Ratio	0.007	-	-	0.051	-	-	-	-
HCM Control Delay (s)	7.6	0	-	11.5	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	350	130	150	260	110
Future Volume (vph)	70	350	130	150	260	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

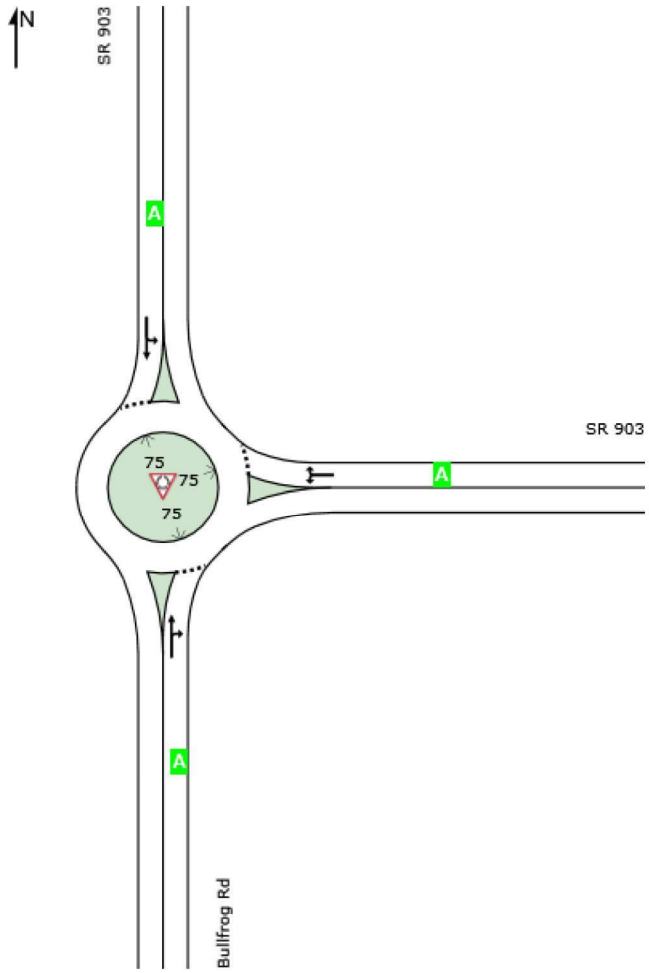
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2025 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2025 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

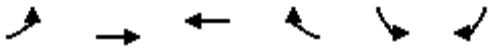
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	280	4.3	1009	0.278	100	6.3	LOS A	1.3	34.8	Full	1600	0.0	0.0
Approach	280	4.3		0.278		6.3	LOS A	1.3	34.8				
East: SR 903													
Lane 1[d]	420	2.8	1169	0.359	100	6.6	LOS A	2.1	52.8	Full	1600	0.0	0.0
Approach	420	2.8		0.359		6.6	LOS A	2.1	52.8				
North: SR 903													
Lane 1[d]	370	2.3	1253	0.295	100	5.5	LOS A	1.6	41.7	Full	1600	0.0	0.0
Approach	370	2.3		0.295		5.5	LOS A	1.6	41.7				
Intersection	1070	3.0		0.359		6.2	LOS A	2.1	52.8				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	480	460	20	20	10
Future Volume (vph)	10	480	460	20	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

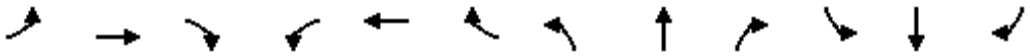
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	480	460	20	20	10
Future Vol, veh/h	10	480	460	20	20	10
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	10	480	460	20	20	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	480	0	-	0	970	473
Stage 1	-	-	-	-	470	-
Stage 2	-	-	-	-	500	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1062	-	-	-	283	595
Stage 1	-	-	-	-	633	-
Stage 2	-	-	-	-	613	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1062	-	-	-	279	593
Mov Cap-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	16.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1062	-	-	-	339
HCM Lane V/C Ratio	0.009	-	-	-	0.088
HCM Control Delay (s)	8.4	0	-	-	16.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	410	90	30	390	10	90	0	70	10	0	0
Future Volume (vph)	10	410	90	30	390	10	90	0	70	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

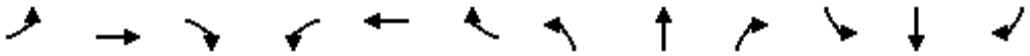
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	410	90	30	390	10	90	0	70	10	0	0
Future Vol, veh/h	10	410	90	30	390	10	90	0	70	10	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	410	90	30	390	10	90	0	70	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	400	0	0	500	0	0	931	935	455	965	975	396
Stage 1	-	-	-	-	-	-	475	475	-	455	455	-
Stage 2	-	-	-	-	-	-	456	460	-	510	520	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1143	-	-	1059	-	-	249	267	609	236	253	658
Stage 1	-	-	-	-	-	-	574	561	-	589	572	-
Stage 2	-	-	-	-	-	-	588	569	-	550	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1143	-	-	1059	-	-	240	254	609	201	241	657
Mov Cap-2 Maneuver	-	-	-	-	-	-	240	254	-	201	241	-
Stage 1	-	-	-	-	-	-	567	554	-	582	551	-
Stage 2	-	-	-	-	-	-	566	549	-	481	529	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	26.1	23.8
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	327	1143	-	-	1059	-	-	201
HCM Lane V/C Ratio	0.489	0.009	-	-	0.028	-	-	0.05
HCM Control Delay (s)	26.1	8.2	0	-	8.5	0	-	23.8
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2.6	0	-	-	0.1	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	470	20	10	410	10	20	0	20	10	0	10
Future Volume (vph)	10	470	20	10	410	10	20	0	20	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	470	20	10	410	10	20	0	20	10	0	10
Future Vol, veh/h	10	470	20	10	410	10	20	0	20	10	0	10
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	10	470	20	10	410	10	20	0	20	10	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	420	0	0	494	0	0	944	944	484	945	949	415
Stage 1	-	-	-	-	-	-	504	504	-	435	435	-
Stage 2	-	-	-	-	-	-	440	440	-	510	514	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	1123	-	-	1070	-	-	228	247	553	244	262	642
Stage 1	-	-	-	-	-	-	523	517	-	604	584	-
Stage 2	-	-	-	-	-	-	568	553	-	550	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1123	-	-	1066	-	-	220	240	551	231	255	642
Mov Cap-2 Maneuver	-	-	-	-	-	-	220	240	-	231	255	-
Stage 1	-	-	-	-	-	-	515	509	-	597	577	-
Stage 2	-	-	-	-	-	-	552	546	-	524	530	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	18.1	16.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	314	1123	-	-	1066	-	-	340
HCM Lane V/C Ratio	0.127	0.009	-	-	0.009	-	-	0.059
HCM Control Delay (s)	18.1	8.2	0	-	8.4	0	-	16.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.2



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	100	20	10	140
Future Volume (vph)	20	10	100	20	10	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

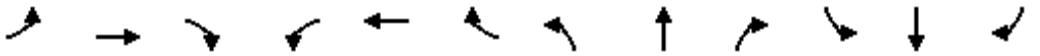
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	100	20	10	140
Future Vol, veh/h	20	10	100	20	10	140
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	100	20	10	140
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.3	8.2	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	7%	0%	83%
Vol Thru, %	0%	67%	17%
Vol Right, %	93%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	150	30	120
LT Vol	10	0	100
Through Vol	0	20	20
RT Vol	140	10	0
Lane Flow Rate	150	30	120
Geometry Grp	1	1	1
Degree of Util (X)	0.153	0.034	0.146
Departure Headway (Hd)	3.663	4.057	4.371
Convergence, Y/N	Yes	Yes	Yes
Cap	962	872	817
Service Time	1.751	2.132	2.417
HCM Lane V/C Ratio	0.156	0.034	0.147
HCM Control Delay	7.4	7.3	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.1	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	250	130	50	180	80	70	50	115	80	50	30
Future Volume (vph)	100	250	130	50	180	80	70	50	115	80	50	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

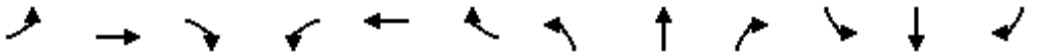
Intersection	
Int Delay, s/veh	10.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	100	250	130	50	180	80	70	50	115	80	50	30
Future Vol, veh/h	100	250	130	50	180	80	70	50	115	80	50	30
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	100	250	130	50	180	80	70	50	115	80	50	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	383	0	0	879	879	319	920	904	222
Stage 1	-	-	-	-	-	-	518	518	-	321	321	-
Stage 2	-	-	-	-	-	-	361	361	-	599	583	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1280	-	-	1165	-	-	267	285	719	253	278	820
Stage 1	-	-	-	-	-	-	539	532	-	693	653	-
Stage 2	-	-	-	-	-	-	655	624	-	490	500	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1279	-	-	1162	-	-	197	251	716	164	244	818
Mov Cap-2 Maneuver	-	-	-	-	-	-	197	251	-	164	244	-
Stage 1	-	-	-	-	-	-	495	489	-	638	624	-
Stage 2	-	-	-	-	-	-	555	597	-	340	460	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	1.3	26.2	32.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	216	716	1279	-	-	1162	-	-	164	331
HCM Lane V/C Ratio	0.556	0.161	0.078	-	-	0.043	-	-	0.488	0.242
HCM Control Delay (s)	40.7	11	8.1	-	-	8.2	-	-	46.2	19.3
HCM Lane LOS	E	B	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	3	0.6	0.3	-	-	0.1	-	-	2.3	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	440	10	80	360	10	20	10	90	10	10	20
Future Volume (vph)	25	440	10	80	360	10	20	10	90	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

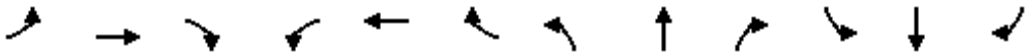
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	440	10	80	360	10	20	10	90	10	10	20
Future Vol, veh/h	25	440	10	80	360	10	20	10	90	10	10	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	25	440	10	80	360	10	20	10	90	10	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	452	0	0	1040	1032	447	1075	1032	373
Stage 1	-	-	-	-	-	-	497	497	-	530	530	-
Stage 2	-	-	-	-	-	-	543	535	-	545	502	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1162	-	-	1093	-	-	206	230	605	194	229	664
Stage 1	-	-	-	-	-	-	549	540	-	525	520	-
Stage 2	-	-	-	-	-	-	519	519	-	515	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1091	-	-	178	207	604	147	206	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	207	-	147	206	-
Stage 1	-	-	-	-	-	-	536	527	-	511	479	-
Stage 2	-	-	-	-	-	-	455	479	-	421	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	16	20.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	604	1156	-	-	1091	-	-	272
HCM Lane V/C Ratio	0.16	0.149	0.022	-	-	0.073	-	-	0.147
HCM Control Delay (s)	27.9	12	8.2	-	-	8.6	-	-	20.5
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0.5	0.1	-	-	0.2	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	400	70	50	260	30	140	20	20	20	20	10
Future Volume (vph)	40	400	70	50	260	30	140	20	20	20	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	400	70	50	260	30	140	20	20	20	20	10
Future Vol, veh/h	40	400	70	50	260	30	140	20	20	20	20	10
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	40	400	70	50	260	30	140	20	20	20	20	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	290	0	0	471	0	0	908	906	436	910	926	277
Stage 1	-	-	-	-	-	-	516	516	-	375	375	-
Stage 2	-	-	-	-	-	-	392	390	-	535	551	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1249	-	-	1091	-	-	256	276	620	258	271	767
Stage 1	-	-	-	-	-	-	542	534	-	650	621	-
Stage 2	-	-	-	-	-	-	633	608	-	533	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1249	-	-	1090	-	-	219	249	619	217	245	766
Mov Cap-2 Maneuver	-	-	-	-	-	-	219	249	-	217	245	-
Stage 1	-	-	-	-	-	-	518	510	-	621	587	-
Stage 2	-	-	-	-	-	-	569	575	-	474	496	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.2	40	21.5
HCM LOS			E	C

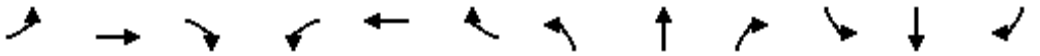
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	219	355	1249	-	-	1090	-	-	268
HCM Lane V/C Ratio	0.639	0.113	0.032	-	-	0.046	-	-	0.187
HCM Control Delay (s)	46.7	16.4	8	0	-	8.5	0	-	21.5
HCM Lane LOS	E	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.8	0.4	0.1	-	-	0.1	-	-	0.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	90	80	340	90	80	70	70	20	80	60
Future Volume (vph)	20	420	90	80	340	90	80	70	70	20	80	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 70.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





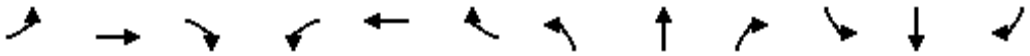
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	90	80	340	90	80	70	70	20	80	60
Future Volume (veh/h)	20	420	90	80	340	90	80	70	70	20	80	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	90	80	340	90	80	70	70	20	80	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	638	978	210	580	942	249	247	158	158	246	181	136
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	927	1445	310	868	1391	368	1237	850	850	1227	975	731
Grp Volume(v), veh/h	20	0	510	80	0	430	80	0	140	20	0	140
Grp Sat Flow(s),veh/h/ln	927	0	1755	868	0	1759	1237	0	1700	1227	0	1707
Q Serve(g_s), s	0.6	0.0	8.9	3.1	0.0	7.0	4.1	0.0	4.9	1.0	0.0	4.9
Cycle Q Clear(g_c), s	7.6	0.0	8.9	12.0	0.0	7.0	9.0	0.0	4.9	5.9	0.0	4.9
Prop In Lane	1.00		0.18	1.00		0.21	1.00		0.50	1.00		0.43
Lane Grp Cap(c), veh/h	638	0	1188	580	0	1191	247	0	316	246	0	317
V/C Ratio(X)	0.03	0.00	0.43	0.14	0.00	0.36	0.32	0.00	0.44	0.08	0.00	0.44
Avail Cap(c_a), veh/h	638	0	1188	580	0	1191	486	0	644	482	0	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.3	0.0	4.9	7.7	0.0	4.6	28.2	0.0	24.2	26.8	0.0	24.2
Incr Delay (d2), s/veh	0.1	0.0	1.1	0.5	0.0	0.9	1.1	0.0	1.4	0.2	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.8	0.6	0.0	2.2	1.3	0.0	2.0	0.3	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	0.0	6.1	8.2	0.0	5.5	29.3	0.0	25.6	27.0	0.0	25.6
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		530			510			220			160	
Approach Delay, s/veh		6.1			5.9			26.9			25.8	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		17.1		50.0		17.1				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		10.9		7.9		14.0		11.0				
Green Ext Time (p_c), s		4.2		1.1		3.8		1.3				

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	290	120	10	210	20	110	20	10	20	10	20
Future Volume (vph)	30	290	120	10	210	20	110	20	10	20	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	30	290	120	10	210	20	110	20	10	20	10	20
Future Vol, veh/h	30	290	120	10	210	20	110	20	10	20	10	20
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	30	290	120	10	210	20	110	20	10	20	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	230	0	0	413	0	0	669	663	358	670	713	221
Stage 1	-	-	-	-	-	-	413	413	-	240	240	-
Stage 2	-	-	-	-	-	-	256	250	-	430	473	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1309	-	-	1135	-	-	373	383	689	365	352	809
Stage 1	-	-	-	-	-	-	618	595	-	755	700	-
Stage 2	-	-	-	-	-	-	751	702	-	596	552	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1309	-	-	1132	-	-	344	367	684	333	337	808
Mov Cap-2 Maneuver	-	-	-	-	-	-	344	367	-	333	337	-
Stage 1	-	-	-	-	-	-	598	575	-	732	693	-
Stage 2	-	-	-	-	-	-	714	695	-	547	534	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	18.9	14.3
HCM LOS			C	B

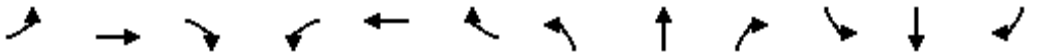
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	344	434	1309	-	-	1132	-	-	437
HCM Lane V/C Ratio	0.32	0.069	0.023	-	-	0.009	-	-	0.114
HCM Control Delay (s)	20.3	13.9	7.8	0	-	8.2	0	-	14.3
HCM Lane LOS	C	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.3	0.2	0.1	-	-	0	-	-	0.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	360	130	40	320	30	160	100	40	30	100	10
Future Volume (vph)	10	360	130	40	320	30	160	100	40	30	100	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





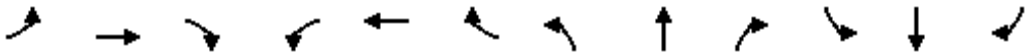
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	360	130	40	320	30	160	100	40	30	100	10
Future Volume (veh/h)	10	360	130	40	320	30	160	100	40	30	100	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	360	130	40	320	30	160	100	40	30	100	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	742	713	258	531	947	89	319	239	96	291	323	32
Arrive On Green	0.63	0.63	0.63	1.00	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	988	1132	409	898	1503	141	1218	1088	435	1215	1469	147
Grp Volume(v), veh/h	10	0	490	40	0	350	160	0	140	30	0	110
Grp Sat Flow(s),veh/h/ln	988	0	1541	898	0	1644	1218	0	1523	1215	0	1616
Q Serve(g_s), s	0.2	0.0	10.3	0.8	0.0	0.0	7.6	0.0	4.7	1.3	0.0	3.4
Cycle Q Clear(g_c), s	0.2	0.0	10.3	11.1	0.0	0.0	11.0	0.0	4.7	6.0	0.0	3.4
Prop In Lane	1.00		0.27	1.00		0.09	1.00		0.29	1.00		0.09
Lane Grp Cap(c), veh/h	742	0	971	531	0	1036	319	0	335	291	0	355
V/C Ratio(X)	0.01	0.00	0.50	0.08	0.00	0.34	0.50	0.00	0.42	0.10	0.00	0.31
Avail Cap(c_a), veh/h	742	0	971	531	0	1036	345	0	368	318	0	391
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.00	0.92	0.96	0.00	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.1	0.0	6.0	1.5	0.0	0.0	24.2	0.0	20.1	22.7	0.0	19.6
Incr Delay (d2), s/veh	0.0	0.0	1.7	0.3	0.0	0.8	0.5	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.0	0.1	0.0	0.2	2.1	0.0	1.6	0.4	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	0.0	7.7	1.8	0.0	0.8	24.7	0.0	20.4	22.8	0.0	19.8
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	B
Approach Vol, veh/h		500			390			300			140	
Approach Delay, s/veh		7.7			0.9			22.7			20.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.3		17.7		42.3		17.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		12.3		8.0		13.1		13.0				
Green Ext Time (p_c), s		3.6		0.2		2.5		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	230	70	10	170	10	50	10	30	10	10	10
Future Volume (vph)	10	230	70	10	170	10	50	10	30	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

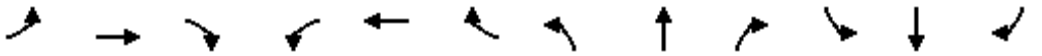
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	230	70	10	170	10	50	10	30	10	10	10
Future Vol, veh/h	10	230	70	10	170	10	50	10	30	10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	10	230	70	10	170	10	50	10	30	10	10	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	9.1	8.8	8.3
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	56%	3%	5%	33%
Vol Thru, %	11%	74%	89%	33%
Vol Right, %	33%	23%	5%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	310	190	30
LT Vol	50	10	10	10
Through Vol	10	230	170	10
RT Vol	30	70	10	10
Lane Flow Rate	90	310	190	30
Geometry Grp	1	1	1	1
Degree of Util (X)	0.126	0.381	0.241	0.042
Departure Headway (Hd)	5.038	4.423	4.569	5.018
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	709	812	785	710
Service Time	3.085	2.452	2.603	3.071
HCM Lane V/C Ratio	0.127	0.382	0.242	0.042
HCM Control Delay	8.8	10.2	9.1	8.3
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.4	1.8	0.9	0.1

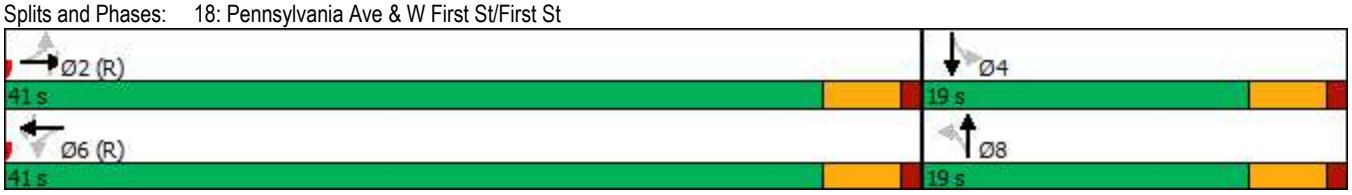


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	370	20	20	330	50	20	10	20	70	20	30
Future Volume (vph)	30	370	20	20	330	50	20	10	20	70	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1613	0	1736	1606	0	0	1752	1384	0	1759	1398
Flt Permitted	0.531			0.524				0.789			0.754	
Satd. Flow (perm)	958	1613	0	952	1606	0	0	1418	1354	0	1376	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			23				27			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	390	0	20	380	0	0	30	20	0	90	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	43.4	43.4		43.4	43.4			11.0	43.4		11.0	43.4
Actuated g/C Ratio	0.72	0.72		0.72	0.72			0.18	0.72		0.18	0.72
v/c Ratio	0.04	0.33		0.03	0.33			0.12	0.02		0.36	0.03
Control Delay	5.3	5.3		5.6	6.0			18.9	2.6		23.8	2.9
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.3	5.3		5.6	6.0			18.9	2.6		23.8	2.9
LOS	A	A		A	A			B	A		C	A
Approach Delay		5.3			6.0			12.4			18.6	
Approach LOS		A			A			B			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.36	

Intersection Signal Delay: 7.6 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	250	10	0	0	240
Future Volume (vph)	10	250	10	0	0	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	250	10	0	0	240
Future Vol, veh/h	10	250	10	0	0	240
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	10	250	10	0	0	240

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	250	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	721	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	781	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	721	1048	-	-	-	-
Mov Cap-2 Maneuver	721	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1030	-
HCM Lane V/C Ratio	-	0.252	-
HCM Control Delay (s)	-	9.7	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	220	20
Future Volume (vph)	0	0	10	0	220	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

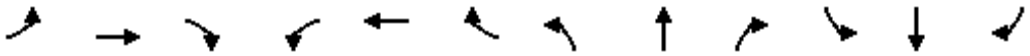
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	220	20
Future Vol, veh/h	0	0	10	0	220	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	220	20

Major/Minor	Minor2		Major2	
Conflicting Flow All	460	20	0	0
Stage 1	460	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	472	1008	-	-
Stage 1	537	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1008	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	70	10	10	10	90	330	10	10	320	20
Future Volume (vph)	20	10	70	10	10	10	90	330	10	10	320	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

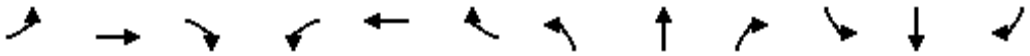
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	10	70	10	10	10	90	330	10	10	320	20
Future Vol, veh/h	20	10	70	10	10	10	90	330	10	10	320	20
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	20	10	70	10	10	10	90	330	10	10	320	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	899	894	353	930	899	361	351	0	0	353	0	0
Stage 1	361	361	-	528	528	-	-	-	-	-	-	-
Stage 2	538	533	-	402	371	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	262	283	695	250	281	688	1213	-	-	1200	-	-
Stage 1	662	629	-	538	531	-	-	-	-	-	-	-
Stage 2	531	528	-	629	623	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	226	248	680	196	247	671	1200	-	-	1185	-	-
Mov Cap-2 Maneuver	226	248	-	196	247	-	-	-	-	-	-	-
Stage 1	594	616	-	482	476	-	-	-	-	-	-	-
Stage 2	459	473	-	543	611	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.9	19.3	1.7	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1200	-	-	431	282	1185	-	-
HCM Lane V/C Ratio	0.075	-	-	0.232	0.106	0.008	-	-
HCM Control Delay (s)	8.2	0	-	15.9	19.3	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.9	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	20	10	0	10	40	230	10	0	190	10
Future Volume (vph)	0	0	20	10	0	10	40	230	10	0	190	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

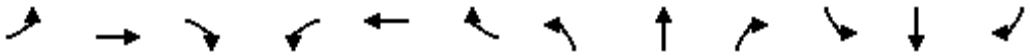
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	10	0	10	40	230	10	0	190	10
Future Vol, veh/h	0	0	20	10	0	10	40	230	10	0	190	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	0	0	20	10	0	10	40	230	10	0	190	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	515	515	195	520	515	235	200	0	0	240	0	0
Stage 1	195	195	-	315	315	-	-	-	-	-	-	-
Stage 2	320	320	-	205	200	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	474	466	851	432	432	750	1372	-	-	1327	-	-
Stage 1	811	743	-	650	616	-	-	-	-	-	-	-
Stage 2	696	656	-	747	695	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	456	450	851	411	417	750	1372	-	-	1327	-	-
Mov Cap-2 Maneuver	456	450	-	411	417	-	-	-	-	-	-	-
Stage 1	783	743	-	628	595	-	-	-	-	-	-	-
Stage 2	663	634	-	729	695	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	12	1.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1372	-	-	851	531	1327	-	-
HCM Lane V/C Ratio	0.029	-	-	0.024	0.038	-	-	-
HCM Control Delay (s)	7.7	0	-	9.3	12	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	110	10	30	120	10	10	10	30	10	10	10
Future Volume (vph)	10	110	10	30	120	10	10	10	30	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

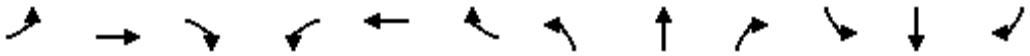
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	110	10	30	120	10	10	10	30	10	10	10
Future Vol, veh/h	10	110	10	30	120	10	10	10	30	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	110	10	30	120	10	10	10	30	10	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	130	0	0	120	0	0	330	325	115	340	325	125
Stage 1	-	-	-	-	-	-	135	135	-	185	185	-
Stage 2	-	-	-	-	-	-	195	190	-	155	140	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1455	-	-	1462	-	-	627	596	943	618	596	931
Stage 1	-	-	-	-	-	-	873	789	-	821	751	-
Stage 2	-	-	-	-	-	-	811	747	-	852	785	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1462	-	-	599	579	943	577	579	931
Mov Cap-2 Maneuver	-	-	-	-	-	-	599	579	-	577	579	-
Stage 1	-	-	-	-	-	-	867	783	-	815	734	-
Stage 2	-	-	-	-	-	-	774	731	-	809	780	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.4	10.1	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	760	1455	-	-	1462	-	-	662
HCM Lane V/C Ratio	0.066	0.007	-	-	0.021	-	-	0.045
HCM Control Delay (s)	10.1	7.5	0	-	7.5	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

2025 Baseline Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	5	10	0	0	0	0	10	35	155	20	0
Future Volume (vph)	380	5	10	0	0	0	0	10	35	155	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

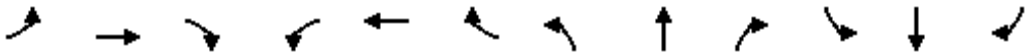
Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	380	5	10	0	0	0	0	10	35	155	20	0
Future Vol, veh/h	380	5	10	0	0	0	0	10	35	155	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	380	5	10	0	0	0	0	10	35	155	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	358	375	20	-	0	0	45	0	0
Stage 1	330	330	-	-	-	-	-	-	-
Stage 2	28	45	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	642	558	1061	0	-	-	1444	-	0
Stage 1	731	648	-	0	-	-	-	-	0
Stage 2	997	859	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	572	0	1061	-	-	-	1444	-	-
Mov Cap-2 Maneuver	572	0	-	-	-	-	-	-	-
Stage 1	731	0	-	-	-	-	-	-	-
Stage 2	888	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.5	0	6.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	579	1444	-
HCM Lane V/C Ratio	-	-	0.682	0.107	-
HCM Control Delay (s)	-	-	23.5	7.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	5.2	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	5	225	5	385	0	0	135	100
Future Volume (vph)	0	0	0	40	5	225	5	385	0	0	135	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

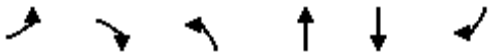
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	40	5	225	5	385	0	0	135	100
Future Vol, veh/h	0	0	0	40	5	225	5	385	0	0	135	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	40	5	225	5	385	0	0	135	100

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	580	630	385	235	0	-	-	-	0
Stage 1	395	395	-	-	-	-	-	-	-
Stage 2	185	235	-	-	-	-	-	-	-
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-
Pot Cap-1 Maneuver	454	381	633	1338	-	0	0	-	-
Stage 1	651	581	-	-	-	0	0	-	-
Stage 2	814	685	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	452	0	633	1338	-	-	-	-	-
Mov Cap-2 Maneuver	452	0	-	-	-	-	-	-	-
Stage 1	648	0	-	-	-	-	-	-	-
Stage 2	814	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.9	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1338	-	597	-	-
HCM Lane V/C Ratio	0.004	-	0.452	-	-
HCM Control Delay (s)	7.7	0	15.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	2.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	65	50	560	170	20
Future Volume (vph)	25	65	50	560	170	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

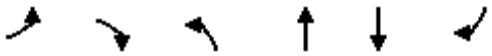
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	65	50	560	170	20
Future Vol, veh/h	25	65	50	560	170	20
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	25	65	50	560	170	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	840	180	190	0	-	0
Stage 1	180	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	321	835	1384	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	309	835	1384	-	-	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1384	-	567	-	-
HCM Lane V/C Ratio	0.036	-	0.159	-	-
HCM Control Delay (s)	7.7	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	140	105	330	255	85	125
Future Volume (vph)	140	105	330	255	85	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

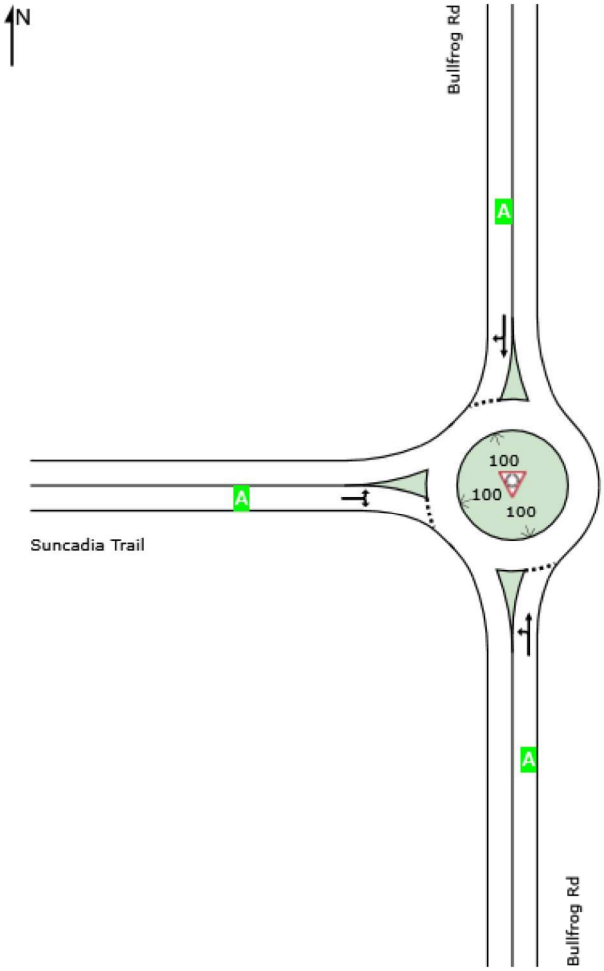
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2025 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2025 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

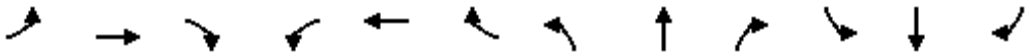
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	585	1.4	1173	0.499	100	8.6	LOS A	3.5	88.7	Full	1600	0.0	0.0
Approach	585	1.4		0.499		8.6	LOS A	3.5	88.7				
North: Bullfrog Rd													
Lane 1[d]	210	3.5	948	0.222	100	6.0	LOS A	1.0	25.9	Full	1600	0.0	0.0
Approach	210	3.5		0.222		6.0	LOS A	1.0	25.9				
West: Suncadia Trail													
Lane 1[d]	245	4.2	1211	0.202	100	4.7	LOS A	1.0	25.3	Full	1600	0.0	0.0
Approach	245	4.2		0.202		4.7	LOS A	1.0	25.3				
Intersection	1040	2.5		0.499		7.2	LOS A	3.5	88.7				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	30	0	0	0	15	380	0	0	180	40
Future Volume (vph)	25	0	30	0	0	0	15	380	0	0	180	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	30	0	0	0	15	380	0	0	180	40
Future Vol, veh/h	25	0	30	0	0	0	15	380	0	0	180	40
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	30	0	0	0	15	380	0	0	180	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	610	610	200	625	630	380	220	0	0	380	0	0
Stage 1	200	200	-	410	410	-	-	-	-	-	-	-
Stage 2	410	410	-	215	220	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	399	403	828	400	401	671	1349	-	-	1173	-	-
Stage 1	790	726	-	623	599	-	-	-	-	-	-	-
Stage 2	609	587	-	792	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	395	397	828	381	395	671	1349	-	-	1173	-	-
Mov Cap-2 Maneuver	395	397	-	381	395	-	-	-	-	-	-	-
Stage 1	779	726	-	614	591	-	-	-	-	-	-	-
Stage 2	600	579	-	763	725	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1349	-	-	553	-	1173	-	-
HCM Lane V/C Ratio	0.011	-	-	0.099	-	-	-	-
HCM Control Delay (s)	7.7	0	-	12.2	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	110	395	245	160	315	110
Future Volume (vph)	110	395	245	160	315	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

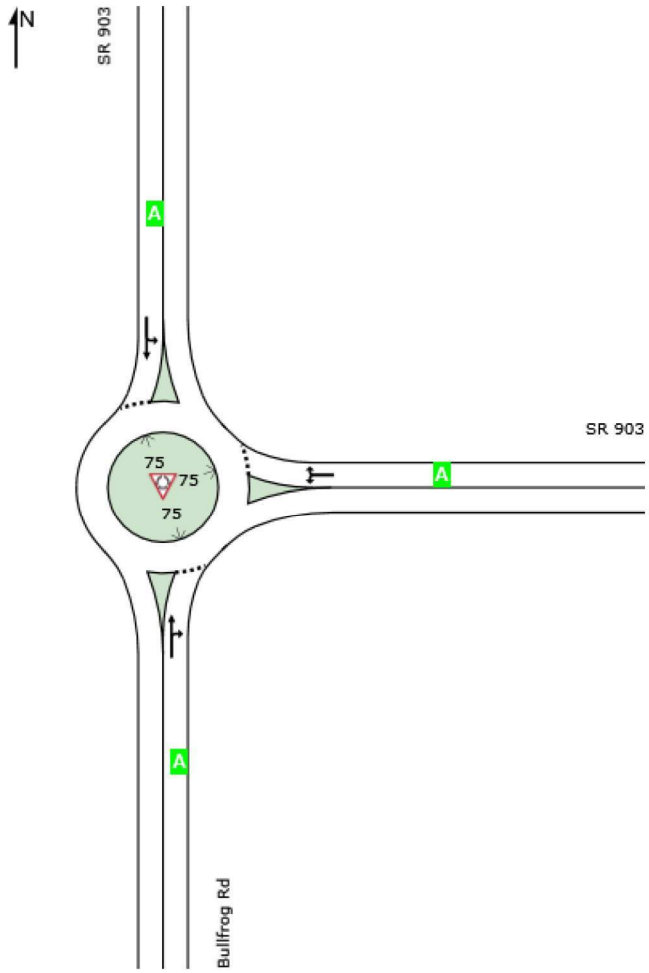
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2025 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2025 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

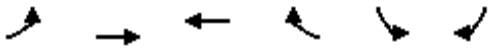
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	405	3.3	955	0.424	100	8.6	LOS A	2.3	59.5	Full	1600	0.0	0.0
Approach	405	3.3		0.424		8.6	LOS A	2.3	59.5				
East: SR 903													
Lane 1[d]	505	2.8	1037	0.487	100	9.2	LOS A	3.0	77.1	Full	1600	0.0	0.0
Approach	505	2.8		0.487		9.2	LOS A	3.0	77.1				
North: SR 903													
Lane 1[d]	425	4.4	1178	0.361	100	6.6	LOS A	2.1	53.3	Full	1600	0.0	0.0
Approach	425	4.4		0.361		6.6	LOS A	2.1	53.3				
Intersection	1335	3.5		0.487		8.2	LOS A	3.0	77.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	530	575	30	20	10
Future Volume (vph)	5	530	575	30	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

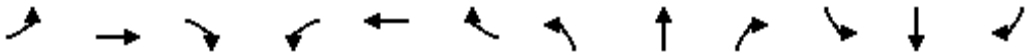
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	530	575	30	20	10
Future Vol, veh/h	5	530	575	30	20	10
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	5	530	575	30	20	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	605	0	-	0	1130	597
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	540	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	963	-	-	-	227	507
Stage 1	-	-	-	-	558	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	963	-	-	-	225	504
Mov Cap-2 Maneuver	-	-	-	-	225	-
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	588	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	963	-	-	-	276
HCM Lane V/C Ratio	0.005	-	-	-	0.109
HCM Control Delay (s)	8.8	0	-	-	19.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	450	115	40	455	5	135	0	85	0	0	0
Future Volume (vph)	0	450	115	40	455	5	135	0	85	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

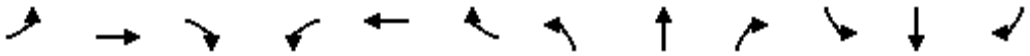
Intersection	
Int Delay, s/veh	11

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	450	115	40	455	5	135	0	85	0	0	0
Future Vol, veh/h	0	450	115	40	455	5	135	0	85	0	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	0	450	115	40	455	5	135	0	85	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	460	0	0	569	0	0	1050	1052	513	1089	1107	458
Stage 1	-	-	-	-	-	-	512	512	-	538	538	-
Stage 2	-	-	-	-	-	-	538	540	-	551	569	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1091	-	-	998	-	-	206	227	563	195	212	607
Stage 1	-	-	-	-	-	-	547	538	-	531	526	-
Stage 2	-	-	-	-	-	-	529	523	-	522	509	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1091	-	-	994	-	-	197	214	560	158	200	607
Mov Cap-2 Maneuver	-	-	-	-	-	-	197	214	-	158	200	-
Stage 1	-	-	-	-	-	-	545	536	-	531	498	-
Stage 2	-	-	-	-	-	-	500	495	-	442	507	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.7	62.6	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	263	1091	-	-	994	-	-	-
HCM Lane V/C Ratio	0.837	-	-	-	0.04	-	-	-
HCM Control Delay (s)	62.6	0	-	-	8.8	0	-	0
HCM Lane LOS	F	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	6.8	0	-	-	0.1	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	545	0	5	510	10	5	5	5	20	0	25
Future Volume (vph)	20	545	0	5	510	10	5	5	5	20	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	545	0	5	510	10	5	5	5	20	0	25
Future Vol, veh/h	20	545	0	5	510	10	5	5	5	20	0	25
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	20	545	0	5	510	10	5	5	5	20	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	521	0	0	550	0	0	1128	1121	552	1118	1116	516
Stage 1	-	-	-	-	-	-	590	590	-	526	526	-
Stage 2	-	-	-	-	-	-	538	531	-	592	590	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	1025	-	-	1010	-	-	119	139	385	186	209	563
Stage 1	-	-	-	-	-	-	359	368	-	539	532	-
Stage 2	-	-	-	-	-	-	386	396	-	496	498	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1024	-	-	1005	-	-	110	133	382	173	200	562
Mov Cap-2 Maneuver	-	-	-	-	-	-	110	133	-	173	200	-
Stage 1	-	-	-	-	-	-	347	356	-	523	528	-
Stage 2	-	-	-	-	-	-	366	393	-	468	482	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	30.5	20.2
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	156	1024	-	-	1005	-	-	281
HCM Lane V/C Ratio	0.096	0.02	-	-	0.005	-	-	0.16
HCM Control Delay (s)	30.5	8.6	0	-	8.6	0	-	20.2
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.6



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	135	10	30	180
Future Volume (vph)	25	10	135	10	30	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

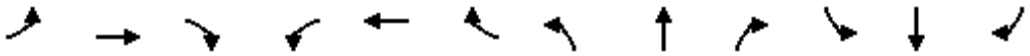
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	135	10	30	180
Future Vol, veh/h	25	10	135	10	30	180
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	135	10	30	180
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	8.6	8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	14%	0%	93%
Vol Thru, %	0%	71%	7%
Vol Right, %	86%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	210	35	145
LT Vol	30	0	135
Through Vol	0	25	10
RT Vol	180	10	0
Lane Flow Rate	210	35	145
Geometry Grp	1	1	1
Degree of Util (X)	0.227	0.042	0.182
Departure Headway (Hd)	3.894	4.33	4.518
Convergence, Y/N	Yes	Yes	Yes
Cap	928	829	783
Service Time	1.896	2.344	2.608
HCM Lane V/C Ratio	0.226	0.042	0.185
HCM Control Delay	8	7.5	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	350	200	55	195	100	75	70	155	80	70	40
Future Volume (vph)	125	350	200	55	195	100	75	70	155	80	70	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	31.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	125	350	200	55	195	100	75	70	155	80	70	40
Future Vol, veh/h	125	350	200	55	195	100	75	70	155	80	70	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	125	350	200	55	195	100	75	70	155	80	70	40

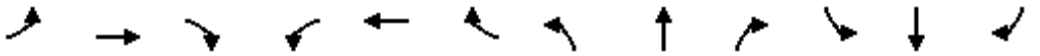
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	550	0	0	1110	1105	450	1168	1155	245
Stage 1	-	-	-	-	-	-	700	700	-	355	355	-
Stage 2	-	-	-	-	-	-	410	405	-	813	800	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1255	-	-	1005	-	-	187	211	609	169	195	789
Stage 1	-	-	-	-	-	-	430	441	-	658	626	-
Stage 2	-	-	-	-	-	-	619	598	-	369	394	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1005	-	-	107	179	609	~ 78	166	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	107	179	-	~ 78	166	-
Stage 1	-	-	-	-	-	-	387	397	-	592	592	-
Stage 2	-	-	-	-	-	-	490	565	-	204	355	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	1.4	88.5	104.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	133	609	1255	-	-	1005	-	-	78	233
HCM Lane V/C Ratio	1.09	0.255	0.1	-	-	0.055	-	-	1.026	0.472
HCM Control Delay (s)	169.4	12.9	8.2	-	-	8.8	-	-	203	33.5
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	8.2	1	0.3	-	-	0.2	-	-	5.6	2.3

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	545	25	70	370	0	40	0	140	0	20	5
Future Volume (vph)	15	545	25	70	370	0	40	0	140	0	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

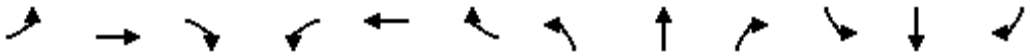
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	545	25	70	370	0	40	0	140	0	20	5
Future Vol, veh/h	15	545	25	70	370	0	40	0	140	0	20	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	15	545	25	70	370	0	40	0	140	0	20	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	574	0	0	1123	1103	562	1169	1115	379
Stage 1	-	-	-	-	-	-	592	592	-	511	511	-
Stage 2	-	-	-	-	-	-	531	511	-	658	604	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1177	-	-	989	-	-	180	209	521	127	159	546
Stage 1	-	-	-	-	-	-	487	489	-	443	444	-
Stage 2	-	-	-	-	-	-	526	532	-	362	399	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	985	-	-	148	191	519	87	145	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	191	-	87	145	-
Stage 1	-	-	-	-	-	-	479	481	-	437	412	-
Stage 2	-	-	-	-	-	-	457	494	-	261	392	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.4	19.7	29.8
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	148	519	1176	-	-	985	-	-	170
HCM Lane V/C Ratio	0.27	0.27	0.013	-	-	0.071	-	-	0.147
HCM Control Delay (s)	38.1	14.5	8.1	-	-	8.9	-	-	29.8
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1	1.1	0	-	-	0.2	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	405	100	60	300	20	210	40	20	15	15	15
Future Volume (vph)	30	405	100	60	300	20	210	40	20	15	15	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	24.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	405	100	60	300	20	210	40	20	15	15	15
Future Vol, veh/h	30	405	100	60	300	20	210	40	20	15	15	15
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	30	405	100	60	300	20	210	40	20	15	15	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	321	0	0	507	0	0	963	958	458	977	998	312
Stage 1	-	-	-	-	-	-	517	517	-	431	431	-
Stage 2	-	-	-	-	-	-	446	441	-	546	567	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	1222	-	-	1058	-	-	232	254	597	232	246	733
Stage 1	-	-	-	-	-	-	536	529	-	607	586	-
Stage 2	-	-	-	-	-	-	586	572	-	526	510	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1221	-	-	1056	-	-	~ 198	228	595	179	220	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 198	228	-	179	220	-
Stage 1	-	-	-	-	-	-	516	509	-	585	545	-
Stage 2	-	-	-	-	-	-	519	532	-	452	491	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.4	106.5	21.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	198	287	1221	-	-	1056	-	-	261
HCM Lane V/C Ratio	1.061	0.209	0.025	-	-	0.057	-	-	0.172
HCM Control Delay (s)	131	20.8	8	0	-	8.6	0	-	21.6
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	9.7	0.8	0.1	-	-	0.2	-	-	0.6

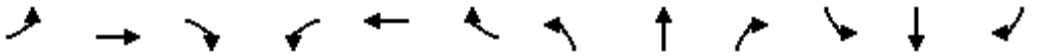
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	515	110	70	340	130	85	65	105	25	135	60
Future Volume (vph)	60	515	110	70	340	130	85	65	105	25	135	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 84.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

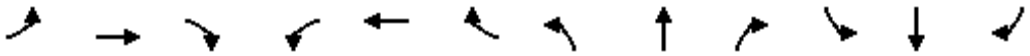




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	515	110	70	340	130	85	65	105	25	135	60
Future Volume (veh/h)	60	515	110	70	340	130	85	65	105	25	135	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	60	515	110	70	340	130	85	65	105	25	135	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	583	988	211	474	859	328	222	139	224	235	265	118
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	907	1469	314	793	1277	488	1140	617	996	1165	1182	525
Grp Volume(v), veh/h	60	0	625	70	0	470	85	0	170	25	0	195
Grp Sat Flow(s),veh/h/ln	907	0	1782	793	0	1765	1140	0	1613	1165	0	1707
Q Serve(g_s), s	2.8	0.0	15.9	4.4	0.0	10.7	6.3	0.0	8.2	1.7	0.0	9.0
Cycle Q Clear(g_c), s	13.5	0.0	15.9	20.2	0.0	10.7	15.3	0.0	8.2	9.9	0.0	9.0
Prop In Lane	1.00		0.18	1.00		0.28	1.00		0.62	1.00		0.31
Lane Grp Cap(c), veh/h	583	0	1199	474	0	1187	222	0	362	235	0	383
V/C Ratio(X)	0.10	0.00	0.52	0.15	0.00	0.40	0.38	0.00	0.47	0.11	0.00	0.51
Avail Cap(c_a), veh/h	583	0	1199	474	0	1187	352	0	546	368	0	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.6	0.0	7.4	12.5	0.0	6.5	37.2	0.0	30.2	34.5	0.0	30.5
Incr Delay (d2), s/veh	0.4	0.0	1.6	0.7	0.0	1.0	1.5	0.0	1.3	0.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	5.8	0.8	0.0	3.8	1.9	0.0	3.3	0.5	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.9	0.0	9.0	13.2	0.0	7.5	38.7	0.0	31.5	34.7	0.0	31.5
LnGrp LOS	A	A	A	B	A	A	D	A	C	C	A	C
Approach Vol, veh/h		685			540			255			220	
Approach Delay, s/veh		9.1			8.3			33.9			31.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		24.8		65.0		24.8				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		60.4		30.4		60.4		30.4				
Max Q Clear Time (g_c+I1), s		17.9		17.3		22.2		11.9				
Green Ext Time (p_c), s		5.9		1.5		4.3		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	265	150	20	230	30	155	20	5	15	10	25
Future Volume (vph)	15	265	150	20	230	30	155	20	5	15	10	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	265	150	20	230	30	155	20	5	15	10	25
Future Vol, veh/h	15	265	150	20	230	30	155	20	5	15	10	25
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	15	265	150	20	230	30	155	20	5	15	10	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	262	0	0	417	0	0	677	674	344	672	734	249
Stage 1	-	-	-	-	-	-	372	372	-	287	287	-
Stage 2	-	-	-	-	-	-	305	302	-	385	447	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1291	-	-	1142	-	-	365	375	696	372	350	795
Stage 1	-	-	-	-	-	-	646	617	-	725	678	-
Stage 2	-	-	-	-	-	-	702	662	-	642	577	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1289	-	-	1140	-	-	335	360	693	343	336	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	335	360	-	343	336	-
Stage 1	-	-	-	-	-	-	635	607	-	713	662	-
Stage 2	-	-	-	-	-	-	654	647	-	606	567	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.6	23.3	13.4
HCM LOS			C	B

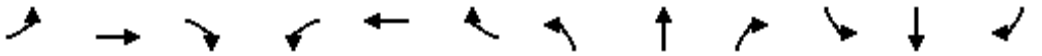
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	335	398	1289	-	-	1140	-	-	476
HCM Lane V/C Ratio	0.463	0.063	0.012	-	-	0.018	-	-	0.105
HCM Control Delay (s)	24.7	14.7	7.8	0	-	8.2	0	-	13.4
HCM Lane LOS	C	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	2.3	0.2	0	-	-	0.1	-	-	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	480	200	40	315	50	170	85	35	45	120	10
Future Volume (vph)	10	480	200	40	315	50	170	85	35	45	120	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





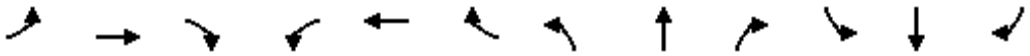
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	480	200	40	315	50	170	85	35	45	120	10
Future Volume (veh/h)	10	480	200	40	315	50	170	85	35	45	120	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	480	200	40	315	50	170	85	35	45	120	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	742	720	300	381	907	144	298	258	106	300	338	28
Arrive On Green	0.65	0.65	0.65	1.00	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	998	1113	464	753	1403	223	1230	1106	455	1201	1448	121
Grp Volume(v), veh/h	10	0	680	40	0	365	170	0	120	45	0	130
Grp Sat Flow(s),veh/h/ln	998	0	1577	753	0	1625	1230	0	1561	1201	0	1568
Q Serve(g_s), s	0.3	0.0	20.1	1.8	0.0	0.0	10.1	0.0	4.8	2.4	0.0	5.2
Cycle Q Clear(g_c), s	0.3	0.0	20.1	21.9	0.0	0.0	15.2	0.0	4.8	7.2	0.0	5.2
Prop In Lane	1.00		0.29	1.00		0.14	1.00		0.29	1.00		0.08
Lane Grp Cap(c), veh/h	742	0	1020	381	0	1051	298	0	365	300	0	366
V/C Ratio(X)	0.01	0.00	0.67	0.10	0.00	0.35	0.57	0.00	0.33	0.15	0.00	0.36
Avail Cap(c_a), veh/h	742	0	1020	381	0	1051	347	0	427	348	0	429
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.97	0.00	0.97	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	8.2	4.5	0.0	0.0	30.4	0.0	23.9	26.9	0.0	24.0
Incr Delay (d2), s/veh	0.0	0.0	3.0	0.5	0.0	0.9	0.6	0.0	0.2	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	6.5	0.3	0.0	0.3	3.0	0.0	1.7	0.7	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.8	0.0	11.3	5.1	0.0	0.9	31.0	0.0	24.1	26.9	0.0	24.2
LnGrp LOS	A	A	B	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		690			405			290			175	
Approach Delay, s/veh		11.2			1.3			28.2			24.9	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.0	22.0	53.0	22.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	45.5	20.5	45.5	20.5
Max Q Clear Time (g_c+I1), s	22.1	9.2	23.9	17.2
Green Ext Time (p_c), s	5.6	0.4	2.7	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	185	85	15	195	10	55	20	25	5	10	35
Future Volume (vph)	20	185	85	15	195	10	55	20	25	5	10	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

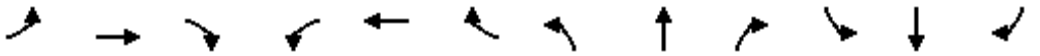
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	185	85	15	195	10	55	20	25	5	10	35
Future Vol, veh/h	20	185	85	15	195	10	55	20	25	5	10	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	20	185	85	15	195	10	55	20	25	5	10	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	9.5	9.1	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	55%	7%	7%	10%
Vol Thru, %	20%	64%	89%	20%
Vol Right, %	25%	29%	5%	70%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	290	220	50
LT Vol	55	20	15	5
Through Vol	20	185	195	10
RT Vol	25	85	10	35
Lane Flow Rate	100	290	220	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.143	0.355	0.282	0.066
Departure Headway (Hd)	5.148	4.401	4.615	4.784
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	693	815	777	744
Service Time	3.205	2.437	2.655	2.847
HCM Lane V/C Ratio	0.144	0.356	0.283	0.067
HCM Control Delay	9.1	9.9	9.5	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1.6	1.2	0.2

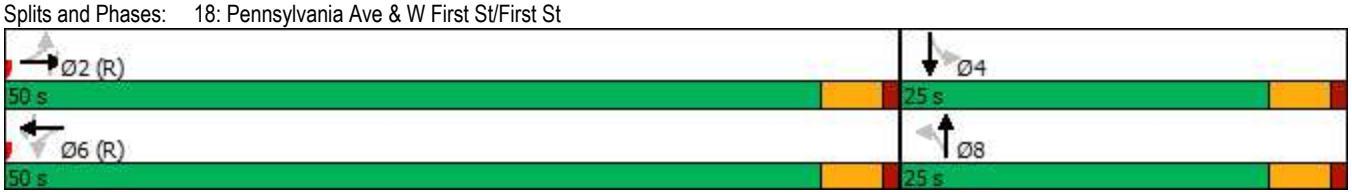


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	480	30	30	335	55	15	10	20	75	20	45
Future Volume (vph)	35	480	30	30	335	55	15	10	20	75	20	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1626	0	1770	1635	0	0	1791	1411	0	1810	1439
Flt Permitted	0.524			0.449				0.814			0.754	
Satd. Flow (perm)	953	1626	0	831	1635	0	0	1498	1367	0	1407	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			20				22			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	510	0	30	390	0	0	25	20	0	95	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	57.6	57.6		57.6	57.6			11.8	57.6		11.8	57.6
Actuated g/C Ratio	0.77	0.77		0.77	0.77			0.16	0.77		0.16	0.77
v/c Ratio	0.05	0.41		0.05	0.31			0.11	0.02		0.43	0.04
Control Delay	4.9	5.2		4.9	5.2			25.1	2.5		33.0	2.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.9	5.2		4.9	5.2			25.1	2.5		33.0	2.1
LOS	A	A		A	A			C	A		C	A
Approach Delay		5.2			5.1			15.0			23.0	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Intersection Signal Delay: 7.7 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	225	15	0	0	305
Future Volume (vph)	20	225	15	0	0	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	225	15	0	0	305
Future Vol, veh/h	20	225	15	0	0	305
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	20	225	15	0	0	305

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	320	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	663	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	736	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	663	1050	-	-	-	-
Mov Cap-2 Maneuver	663	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	736	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1002	-
HCM Lane V/C Ratio	-	0.245	-
HCM Control Delay (s)	-	9.8	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	290	35
Future Volume (vph)	0	0	10	0	290	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

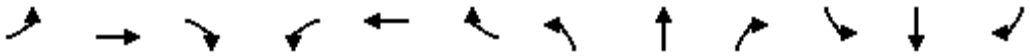
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	290	35
Future Vol, veh/h	0	0	10	0	290	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	290	35

Major/Minor	Minor2		Major2	
Conflicting Flow All	615	35	0	0
Stage 1	615	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	409	1044	-	-
Stage 1	485	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1044	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	45	70	10	10	10	70	385	15	10	275	25
Future Volume (vph)	20	45	70	10	10	10	70	385	15	10	275	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

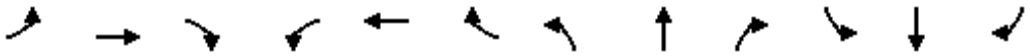
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	45	70	10	10	10	70	385	15	10	275	25
Future Vol, veh/h	20	45	70	10	10	10	70	385	15	10	275	25
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	20	45	70	10	10	10	70	385	15	10	275	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	894	874	316	926	879	436	313	0	0	413	0	0
Stage 1	321	321	-	546	546	-	-	-	-	-	-	-
Stage 2	573	553	-	380	333	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	264	290	729	251	288	625	1247	-	-	1135	-	-
Stage 1	695	655	-	526	521	-	-	-	-	-	-	-
Stage 2	508	518	-	646	647	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	227	260	710	179	258	600	1232	-	-	1121	-	-
Mov Cap-2 Maneuver	227	260	-	179	258	-	-	-	-	-	-	-
Stage 1	637	640	-	482	477	-	-	-	-	-	-	-
Stage 2	440	474	-	528	632	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.9	20	1.2	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1232	-	-	375	270	1121	-	-
HCM Lane V/C Ratio	0.057	-	-	0.36	0.111	0.009	-	-
HCM Control Delay (s)	8.1	0	-	19.9	20	8.2	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.6	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	10	10	0	10	45	250	10	0	175	5
Future Volume (vph)	0	0	10	10	0	10	45	250	10	0	175	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

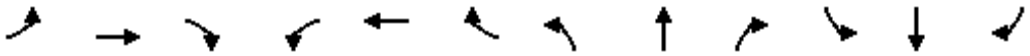
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	10	10	0	10	45	250	10	0	175	5
Future Vol, veh/h	0	0	10	10	0	10	45	250	10	0	175	5
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	0	0	10	10	0	10	45	250	10	0	175	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	528	528	178	528	525	255	180	0	0	260	0	0
Stage 1	178	178	-	345	345	-	-	-	-	-	-	-
Stage 2	350	350	-	183	180	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	437	434	825	464	460	789	1389	-	-	1293	-	-
Stage 1	788	723	-	675	640	-	-	-	-	-	-	-
Stage 2	635	605	-	823	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	419	418	825	445	443	789	1389	-	-	1293	-	-
Mov Cap-2 Maneuver	419	418	-	445	443	-	-	-	-	-	-	-
Stage 1	758	723	-	649	616	-	-	-	-	-	-	-
Stage 2	603	582	-	813	754	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	11.6	1.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1389	-	-	825	569	1293	-	-
HCM Lane V/C Ratio	0.032	-	-	0.012	0.035	-	-	-
HCM Control Delay (s)	7.7	0	-	9.4	11.6	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	85	5	30	135	35	0	25	25	20	0	25
Future Volume (vph)	20	85	5	30	135	35	0	25	25	20	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.4

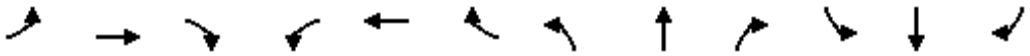
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	85	5	30	135	35	0	25	25	20	0	25
Future Vol, veh/h	20	85	5	30	135	35	0	25	25	20	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	85	5	30	135	35	0	25	25	20	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	170	0	0	90	0	0	353	358	88	366	343	153
Stage 1	-	-	-	-	-	-	128	128	-	213	213	-
Stage 2	-	-	-	-	-	-	225	230	-	153	130	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1389	-	-	1518	-	-	585	554	946	594	583	898
Stage 1	-	-	-	-	-	-	855	773	-	794	730	-
Stage 2	-	-	-	-	-	-	758	698	-	854	792	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1389	-	-	1518	-	-	553	534	946	542	561	898
Mov Cap-2 Maneuver	-	-	-	-	-	-	553	534	-	542	561	-
Stage 1	-	-	-	-	-	-	842	761	-	782	714	-
Stage 2	-	-	-	-	-	-	721	683	-	792	780	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	1.1	10.7	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	683	1389	-	-	1518	-	-	695
HCM Lane V/C Ratio	0.073	0.014	-	-	0.02	-	-	0.065
HCM Control Delay (s)	10.7	7.6	0	-	7.4	0	-	10.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2

2025 Baseline Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	0	5	0	0	0	0	10	5	135	20	0
Future Volume (vph)	115	0	5	0	0	0	0	10	5	135	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

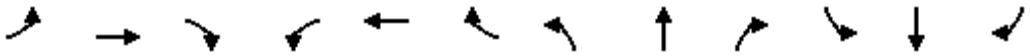
Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	115	0	5	0	0	0	0	10	5	135	20	0
Future Vol, veh/h	115	0	5	0	0	0	0	10	5	135	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	115	0	5	0	0	0	0	10	5	135	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	303	305	20	-	0	0	15	0	0
Stage 1	290	290	-	-	-	-	-	-	-
Stage 2	13	15	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	691	610	1061	0	-	-	1616	-	0
Stage 1	762	674	-	0	-	-	-	-	0
Stage 2	1012	885	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	633	0	1061	-	-	-	1616	-	-
Mov Cap-2 Maneuver	633	0	-	-	-	-	-	-	-
Stage 1	762	0	-	-	-	-	-	-	-
Stage 2	927	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.9	0	6.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	644	1616	-
HCM Lane V/C Ratio	-	-	0.186	0.084	-
HCM Control Delay (s)	-	-	11.9	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	5	110	5	120	0	0	135	865
Future Volume (vph)	0	0	0	20	5	110	5	120	0	0	135	865
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

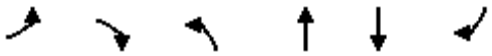
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	5	110	5	120	0	0	135	865
Future Vol, veh/h	0	0	0	20	5	110	5	120	0	0	135	865
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	20	5	110	5	120	0	0	135	865

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	698	1130	120	1000	0	-	-	-	0
Stage 1	130	130	-	-	-	-	-	-	-
Stage 2	568	1000	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	410	205	937	700	-	0	0	-	-
Stage 1	901	792	-	-	-	0	0	-	-
Stage 2	571	324	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	407	0	937	700	-	-	-	-	-
Mov Cap-2 Maneuver	407	0	-	-	-	-	-	-	-
Stage 1	894	0	-	-	-	-	-	-	-
Stage 2	571	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	700	-	781	-	-
HCM Lane V/C Ratio	0.007	-	0.173	-	-
HCM Control Delay (s)	10.2	0	10.6	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	15	45	15	215	955	20
Future Volume (vph)	15	45	15	215	955	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

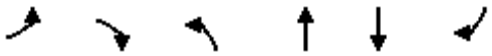
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	45	15	215	955	20
Future Vol, veh/h	15	45	15	215	955	20
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	15	45	15	215	955	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1210	965	975	0	-	0
Stage 1	965	-	-	-	-	-
Stage 2	245	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	200	307	716	-	-	-
Stage 1	367	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	307	716	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	359	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.2	0.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	716	-	269	-	-
HCM Lane V/C Ratio	0.021	-	0.223	-	-
HCM Control Delay (s)	10.1	-	22.2	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	145	130	100	830	100
Future Volume (vph)	75	145	130	100	830	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

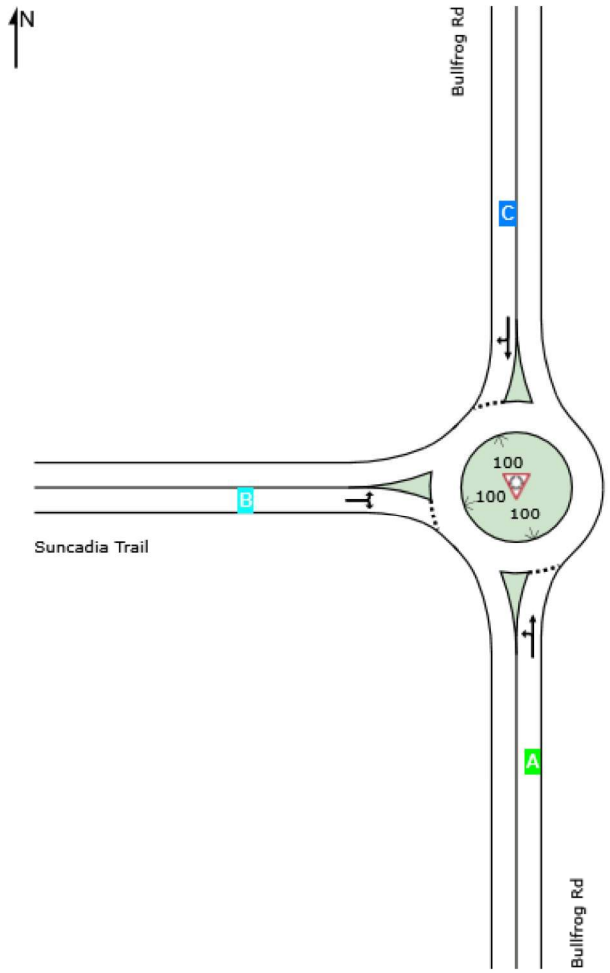
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2025 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	C	B	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2025 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

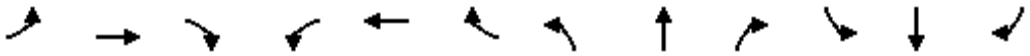
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	230	0.6	1271	0.181	100	4.4	LOS A	0.9	22.5	Full	1600	0.0	0.0
Approach	230	0.6		0.181		4.4	LOS A	0.9	22.5				
North: Bullfrog Rd													
Lane 1[d]	930	1.0	1196	0.778	100	16.5	LOS C	11.6	291.2	Full	1600	0.0	0.0
Approach	930	1.0		0.778		16.5	LOS C	11.6	291.2				
West: Suncadia Trail													
Lane 1[d]	220	0.0	587	0.375	100	11.6	LOS B	1.8	46.0	Full	1600	0.0	0.0
Approach	220	0.0		0.375		11.6	LOS B	1.8	46.0				
Intersection	1380	0.8		0.778		13.7	LOS B	11.6	291.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	0	20	0	0	0	15	160	0	0	910	15
Future Volume (vph)	15	0	20	0	0	0	15	160	0	0	910	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	20	0	0	0	15	160	0	0	910	15
Future Vol, veh/h	15	0	20	0	0	0	15	160	0	0	910	15
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	15	0	20	0	0	0	15	160	0	0	910	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1108	1108	918	1118	1115	160	925	0	0	160	0	0
Stage 1	918	918	-	190	190	-	-	-	-	-	-	-
Stage 2	190	190	-	928	925	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	183	206	322	186	210	890	747	-	-	1425	-	-
Stage 1	319	344	-	816	747	-	-	-	-	-	-	-
Stage 2	800	734	-	324	351	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	180	201	322	171	205	890	747	-	-	1425	-	-
Mov Cap-2 Maneuver	180	201	-	171	205	-	-	-	-	-	-	-
Stage 1	312	344	-	798	731	-	-	-	-	-	-	-
Stage 2	782	718	-	304	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.5	0	0.9	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	747	-	-	241	-	1425	-	-
HCM Lane V/C Ratio	0.02	-	-	0.145	-	-	-	-
HCM Control Delay (s)	9.9	0	-	22.5	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	685	285	110	65	290	240
Future Volume (vph)	685	285	110	65	290	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Confl. Peds. (#/hr)	1					
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

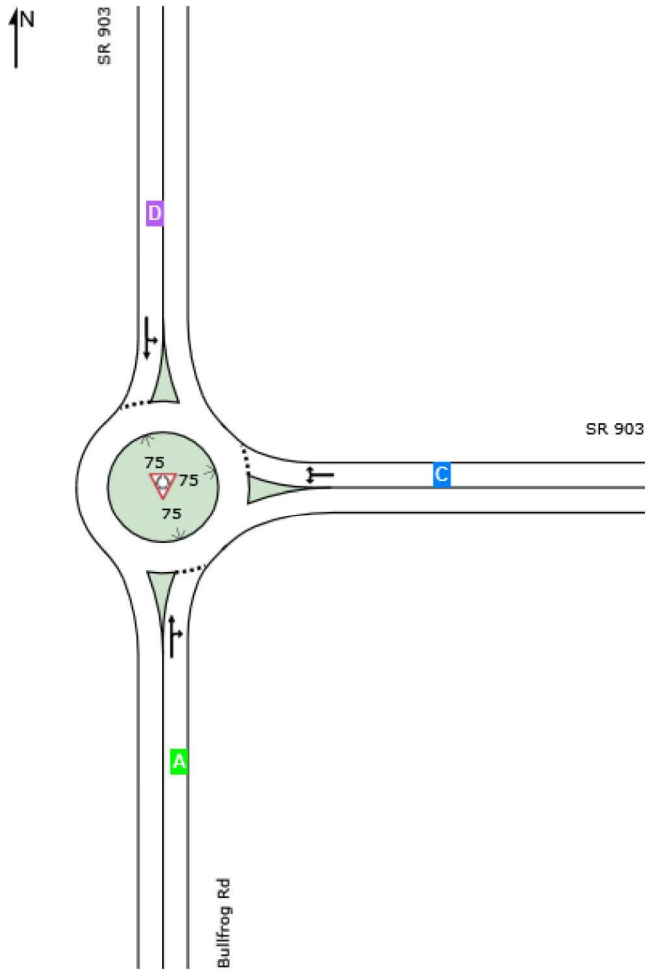
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2025 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	C	D	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

LANE SUMMARY

Site: 6 [2025 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

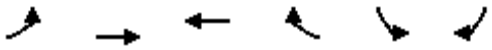
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	175	0.0	1026	0.171	100	5.1	LOS A	0.8	19.6	Full	1600	0.0	0.0
Approach	175	0.0		0.171		5.1	LOS A	0.8	19.6				
East: SR 903													
Lane 1[d]	970	1.1	1220	0.795	100	17.2	LOS C	10.9	275.6	Full	1600	0.0	0.0
Approach	970	1.1		0.795		17.2	LOS C	10.9	275.6				
North: SR 903													
Lane 1[d]	530	0.3	679	0.781	100	25.4	LOS D	9.5	237.8	Full	1600	0.0	0.0
Approach	530	0.3		0.781		25.4	LOS D	9.5	237.8				
Intersection	1675	0.7		0.795		18.6	LOS C	10.9	275.6				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	355	960	20	10	10
Future Volume (vph)	5	355	960	20	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

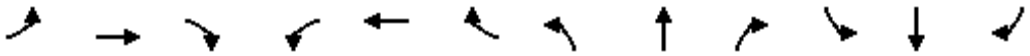
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	355	960	20	10	10
Future Vol, veh/h	5	355	960	20	10	10
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	5	355	960	20	10	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	985	0	-	0	1340	975
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	365	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	705	-	-	-	170	308
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	707	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	702	-	-	-	167	307
Mov Cap-2 Maneuver	-	-	-	-	167	-
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	23.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	702	-	-	-	216
HCM Lane V/C Ratio	0.007	-	-	-	0.093
HCM Control Delay (s)	10.2	0	-	-	23.4
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	310	50	20	900	5	85	0	45	10	0	0
Future Volume (vph)	0	310	50	20	900	5	85	0	45	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

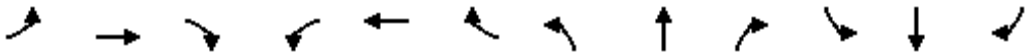
Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	310	50	20	900	5	85	0	45	10	0	0
Future Vol, veh/h	0	310	50	20	900	5	85	0	45	10	0	0
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	0	310	50	20	900	5	85	0	45	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	905	0	0	363	0	0	1281	1283	338	1301	1306	903
Stage 1	-	-	-	-	-	-	338	338	-	943	943	-
Stage 2	-	-	-	-	-	-	943	945	-	358	363	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	756	-	-	1201	-	-	142	164	702	139	161	339
Stage 1	-	-	-	-	-	-	674	639	-	318	344	-
Stage 2	-	-	-	-	-	-	314	339	-	664	628	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	756	-	-	1198	-	-	138	158	700	127	155	339
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	158	-	127	155	-
Stage 1	-	-	-	-	-	-	672	637	-	318	332	-
Stage 2	-	-	-	-	-	-	303	327	-	621	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	56.6	35.8
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	191	756	-	-	1198	-	-	127
HCM Lane V/C Ratio	0.681	-	-	-	0.017	-	-	0.079
HCM Control Delay (s)	56.6	0	-	-	8.1	0	-	35.8
HCM Lane LOS	F	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	4.1	0	-	-	0.1	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	340	40	20	875	25	70	0	15	10	0	0
Future Volume (vph)	20	340	40	20	875	25	70	0	15	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	340	40	20	875	25	70	0	15	10	0	0
Future Vol, veh/h	20	340	40	20	875	25	70	0	15	10	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	20	340	40	20	875	25	70	0	15	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	900	0	0	384	0	0	1332	1344	364	1336	1352	888
Stage 1	-	-	-	-	-	-	404	404	-	928	928	-
Stage 2	-	-	-	-	-	-	928	940	-	408	424	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	755	-	-	1180	-	-	131	152	681	132	151	345
Stage 1	-	-	-	-	-	-	623	599	-	324	349	-
Stage 2	-	-	-	-	-	-	321	342	-	624	590	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	755	-	-	1176	-	-	124	141	678	122	140	345
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	141	-	122	140	-
Stage 1	-	-	-	-	-	-	599	576	-	313	337	-
Stage 2	-	-	-	-	-	-	310	330	-	589	568	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	60.1	37.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	145	755	-	-	1176	-	-	122
HCM Lane V/C Ratio	0.586	0.026	-	-	0.017	-	-	0.082
HCM Control Delay (s)	60.1	9.9	0	-	8.1	0	-	37.1
HCM Lane LOS	F	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	3	0.1	-	-	0.1	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	60	10	20	115
Future Volume (vph)	25	15	60	10	20	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

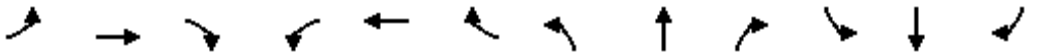
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	60	10	20	115
Future Vol, veh/h	25	15	60	10	20	115
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	60	10	20	115
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.3	7.8	7.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	15%	0%	86%
Vol Thru, %	0%	62%	14%
Vol Right, %	85%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	135	40	70
LT Vol	20	0	60
Through Vol	0	25	10
RT Vol	115	15	0
Lane Flow Rate	135	40	70
Geometry Grp	1	1	1
Degree of Util (X)	0.138	0.045	0.084
Departure Headway (Hd)	3.676	4.051	4.34
Convergence, Y/N	Yes	Yes	Yes
Cap	965	877	823
Service Time	1.735	2.107	2.384
HCM Lane V/C Ratio	0.14	0.046	0.085
HCM Control Delay	7.3	7.3	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.1	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	220	120	55	295	95	70	55	130	50	40	35
Future Volume (vph)	80	220	120	55	295	95	70	55	130	50	40	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

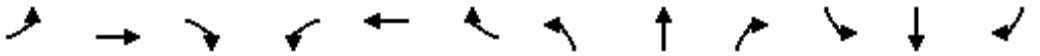
Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	220	120	55	295	95	70	55	130	50	40	35
Future Vol, veh/h	80	220	120	55	295	95	70	55	130	50	40	35
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	80	220	120	55	295	95	70	55	130	50	40	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	340	0	0	931	940	280	986	953	344
Stage 1	-	-	-	-	-	-	440	440	-	453	453	-
Stage 2	-	-	-	-	-	-	491	500	-	533	500	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1169	-	-	1219	-	-	247	264	759	229	261	703
Stage 1	-	-	-	-	-	-	596	578	-	590	573	-
Stage 2	-	-	-	-	-	-	559	543	-	534	546	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1169	-	-	1219	-	-	187	235	759	143	232	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	187	235	-	143	232	-
Stage 1	-	-	-	-	-	-	555	539	-	550	547	-
Stage 2	-	-	-	-	-	-	470	519	-	370	509	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	1	28.3	28.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	205	759	1169	-	-	1219	-	-	143	337
HCM Lane V/C Ratio	0.61	0.171	0.068	-	-	0.045	-	-	0.35	0.223
HCM Control Delay (s)	46.7	10.7	8.3	-	-	8.1	-	-	43.1	18.7
HCM Lane LOS	E	B	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	3.5	0.6	0.2	-	-	0.1	-	-	1.4	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	370	5	60	505	40	20	30	60	5	50	50
Future Volume (vph)	75	370	5	60	505	40	20	30	60	5	50	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

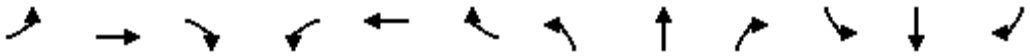
Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	370	5	60	505	40	20	30	60	5	50	50
Future Vol, veh/h	75	370	5	60	505	40	20	30	60	5	50	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	370	5	60	505	40	20	30	60	5	50	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	377	0	0	1220	1192	375	1215	1174	527
Stage 1	-	-	-	-	-	-	525	525	-	647	647	-
Stage 2	-	-	-	-	-	-	695	667	-	568	527	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	1027	-	-	1181	-	-	155	185	667	157	191	549
Stage 1	-	-	-	-	-	-	532	526	-	458	465	-
Stage 2	-	-	-	-	-	-	429	454	-	506	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1179	-	-	99	162	666	111	167	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	162	-	111	167	-
Stage 1	-	-	-	-	-	-	492	487	-	424	440	-
Stage 2	-	-	-	-	-	-	328	430	-	400	487	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	28.5	31
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	129	666	1025	-	-	1179	-	-	241
HCM Lane V/C Ratio	0.388	0.09	0.073	-	-	0.051	-	-	0.436
HCM Control Delay (s)	49.6	10.9	8.8	-	-	8.2	-	-	31
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.6	0.3	0.2	-	-	0.2	-	-	2.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	255	70	70	600	10	320	15	10	5	10	10
Future Volume (vph)	15	255	70	70	600	10	320	15	10	5	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	109.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	255	70	70	600	10	320	15	10	5	10	10
Future Vol, veh/h	15	255	70	70	600	10	320	15	10	5	10	10
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	15	255	70	70	600	10	320	15	10	5	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	618	0	0	328	0	0	1082	1081	295	1088	1111	617
Stage 1	-	-	-	-	-	-	323	323	-	753	753	-
Stage 2	-	-	-	-	-	-	759	758	-	335	358	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	957	-	-	1237	-	-	~ 196	219	747	195	211	494
Stage 1	-	-	-	-	-	-	691	652	-	405	420	-
Stage 2	-	-	-	-	-	-	400	417	-	683	631	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	950	-	-	1233	-	-	~ 169	194	743	165	187	488
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 169	194	-	165	187	-
Stage 1	-	-	-	-	-	-	676	638	-	394	381	-
Stage 2	-	-	-	-	-	-	347	378	-	644	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.8	$ 436.7	21.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	169	275	950	-	-	1233	-	-	240
HCM Lane V/C Ratio	1.893	0.091	0.016	-	-	0.057	-	-	0.104
HCM Control Delay (s)	$ 469.3	19.4	8.8	0	-	8.1	0	-	21.7
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	23.9	0.3	0	-	-	0.2	-	-	0.3

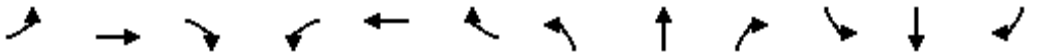
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	90	65	490	270	80	60	75	20	105	40
Future Volume (vph)	15	320	90	65	490	270	80	60	75	20	105	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 90.8	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





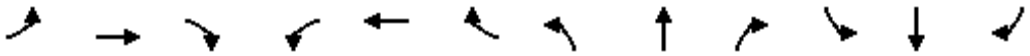
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	90	65	490	270	80	60	75	20	105	40
Future Volume (veh/h)	15	320	90	65	490	270	80	60	75	20	105	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	90	65	490	270	80	60	75	20	105	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	443	1017	286	707	821	452	206	132	165	209	226	86
Arrive On Green	0.72	0.72	0.72	0.72	0.72	0.72	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	706	1404	395	975	1133	624	1248	759	949	1260	1298	495
Grp Volume(v), veh/h	15	0	410	65	0	760	80	0	135	20	0	145
Grp Sat Flow(s),veh/h/ln	706	0	1799	975	0	1757	1248	0	1708	1260	0	1793
Q Serve(g_s), s	1.0	0.0	7.3	2.3	0.0	19.0	5.6	0.0	6.4	1.3	0.0	6.6
Cycle Q Clear(g_c), s	19.9	0.0	7.3	9.6	0.0	19.0	12.1	0.0	6.4	7.7	0.0	6.6
Prop In Lane	1.00		0.22	1.00		0.36	1.00		0.56	1.00		0.28
Lane Grp Cap(c), veh/h	443	0	1303	707	0	1273	206	0	297	209	0	312
V/C Ratio(X)	0.03	0.00	0.31	0.09	0.00	0.60	0.39	0.00	0.45	0.10	0.00	0.47
Avail Cap(c_a), veh/h	443	0	1303	707	0	1273	340	0	480	345	0	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.9	0.0	4.4	6.2	0.0	6.0	39.0	0.0	33.5	36.9	0.0	33.5
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.3	0.0	2.1	1.7	0.0	1.5	0.3	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.5	0.5	0.0	6.4	1.8	0.0	2.8	0.4	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.0	0.0	5.1	6.4	0.0	8.1	40.7	0.0	35.0	37.2	0.0	35.1
LnGrp LOS	B	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		425			825			215			165	
Approach Delay, s/veh		5.3			8.0			37.1			35.3	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		20.3		70.0		20.3				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		65.4		25.4		65.4		25.4				
Max Q Clear Time (g_c+I1), s		21.9		14.1		21.0		9.7				
Green Ext Time (p_c), s		3.3		1.1		8.0		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.9									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	175	85	10	200	20	500	15	10	15	10	10
Future Volume (vph)	15	175	85	10	200	20	500	15	10	15	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	43.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	175	85	10	200	20	500	15	10	15	10	10
Future Vol, veh/h	15	175	85	10	200	20	500	15	10	15	10	10
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	15	175	85	10	200	20	500	15	10	15	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	261	0	0	489	489	220	491	521	210
Stage 1	-	-	-	-	-	-	249	249	-	230	230	-
Stage 2	-	-	-	-	-	-	240	240	-	261	291	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1349	-	-	1309	-	-	~ 489	480	820	478	451	815
Stage 1	-	-	-	-	-	-	755	701	-	760	703	-
Stage 2	-	-	-	-	-	-	763	707	-	731	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1349	-	-	1308	-	-	~ 467	469	818	453	441	815
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 467	469	-	453	441	-
Stage 1	-	-	-	-	-	-	744	691	-	750	697	-
Stage 2	-	-	-	-	-	-	736	701	-	697	652	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.3	87.8	12.5
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	467	566	1349	-	-	1308	-	-	514
HCM Lane V/C Ratio	1.071	0.044	0.011	-	-	0.008	-	-	0.068
HCM Control Delay (s)	91.6	11.7	7.7	0	-	7.8	0	-	12.5
HCM Lane LOS	F	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	15.9	0.1	0	-	-	0	-	-	0.2

Notes

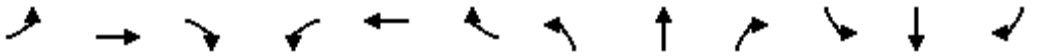
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	280	115	35	480	270	310	300	35	20	75	10
Future Volume (vph)	15	280	115	35	480	270	310	300	35	20	75	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

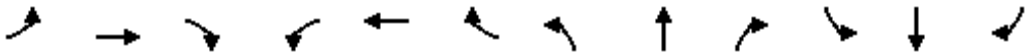




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	280	115	35	480	270	310	300	35	20	75	10
Future Volume (veh/h)	15	280	115	35	480	270	310	300	35	20	75	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	280	115	35	480	270	310	300	35	20	75	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	508	682	280	550	612	345	415	438	51	201	427	57
Arrive On Green	0.60	0.60	0.60	1.00	1.00	1.00	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	709	1130	464	994	1015	571	1298	1477	172	1033	1440	192
Grp Volume(v), veh/h	15	0	395	35	0	750	310	0	335	20	0	85
Grp Sat Flow(s),veh/h/ln	709	0	1594	994	0	1587	1298	0	1650	1033	0	1632
Q Serve(g_s), s	0.8	0.0	11.8	0.7	0.0	0.0	20.9	0.0	16.1	1.6	0.0	3.5
Cycle Q Clear(g_c), s	0.8	0.0	11.8	12.5	0.0	0.0	24.4	0.0	16.1	17.7	0.0	3.5
Prop In Lane	1.00		0.29	1.00		0.36	1.00		0.10	1.00		0.12
Lane Grp Cap(c), veh/h	508	0	961	550	0	957	415	0	490	201	0	484
V/C Ratio(X)	0.03	0.00	0.41	0.06	0.00	0.78	0.75	0.00	0.68	0.10	0.00	0.18
Avail Cap(c_a), veh/h	508	0	961	550	0	957	427	0	504	210	0	499
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.80	0.00	0.80	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.2	0.0	9.4	1.4	0.0	0.0	32.5	0.0	27.9	35.7	0.0	23.5
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.2	0.0	5.2	6.0	0.0	3.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.2	0.1	0.0	1.4	7.2	0.0	6.7	0.4	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.3	0.0	10.7	1.5	0.0	5.2	38.6	0.0	30.9	35.8	0.0	23.5
LnGrp LOS	A	A	B	A	A	A	D	A	C	D	A	C
Approach Vol, veh/h		410			785			645			105	
Approach Delay, s/veh		10.5			5.0			34.6			25.9	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.8		31.2		58.8		31.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		13.8		19.7		14.5		26.4				
Green Ext Time (p_c), s		3.1		0.2		7.5		0.3				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	145	50	10	150	10	55	10	10	5	10	15
Future Volume (vph)	10	145	50	10	150	10	55	10	10	5	10	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

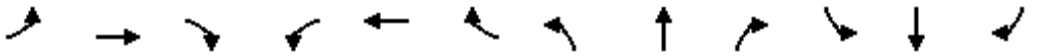
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	145	50	10	150	10	55	10	10	5	10	15
Future Vol, veh/h	10	145	50	10	150	10	55	10	10	5	10	15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	10	145	50	10	150	10	55	10	10	5	10	15
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.5	8.4	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	73%	5%	6%	17%
Vol Thru, %	13%	71%	88%	33%
Vol Right, %	13%	24%	6%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	205	170	30
LT Vol	55	10	10	5
Through Vol	10	145	150	10
RT Vol	10	50	10	15
Lane Flow Rate	75	205	170	30
Geometry Grp	1	1	1	1
Degree of Util (X)	0.101	0.241	0.206	0.038
Departure Headway (Hd)	4.824	4.232	4.359	4.552
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	743	851	825	786
Service Time	2.85	2.251	2.379	2.581
HCM Lane V/C Ratio	0.101	0.241	0.206	0.038
HCM Control Delay	8.4	8.6	8.5	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.9	0.8	0.1

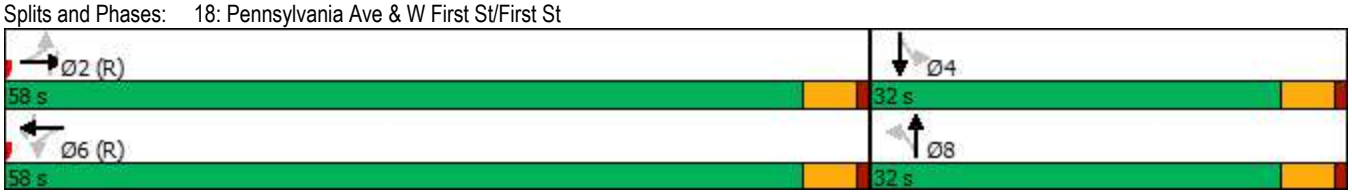


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	285	20	25	720	50	5	15	15	60	15	15
Future Volume (vph)	20	285	20	25	720	50	5	15	15	60	15	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1656	0	1770	1657	0	0	1877	1454	0	1828	1454
Flt Permitted	0.318			0.574				0.933			0.755	
Satd. Flow (perm)	592	1656	0	1061	1657	0	0	1770	1416	0	1428	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			7				18			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	305	0	25	770	0	0	20	15	0	75	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	71.8	71.8		71.8	71.8			12.6	71.8		12.6	71.8
Actuated g/C Ratio	0.80	0.80		0.80	0.80			0.14	0.80		0.14	0.80
v/c Ratio	0.04	0.23		0.03	0.58			0.08	0.01		0.38	0.01
Control Delay	3.8	3.3		4.8	8.7			30.2	2.6		38.1	2.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	3.8	3.3		4.8	8.7			30.2	2.6		38.1	2.6
LOS	A	A		A	A			C	A		D	A
Approach Delay		3.3			8.6			18.4			32.2	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	

Intersection Signal Delay: 9.2 Intersection LOS: A
Intersection Capacity Utilization 79.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	635	20	0	0	195
Future Volume (vph)	30	635	20	0	0	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	10.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	635	20	0	0	195
Future Vol, veh/h	30	635	20	0	0	195
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	30	635	20	0	0	195

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	215	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	771	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	836	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	771	1055	-	-	-	-
Mov Cap-2 Maneuver	771	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1038	-
HCM Lane V/C Ratio	-	0.641	-
HCM Control Delay (s)	-	14.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	4.8	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	200	40
Future Volume (vph)	0	0	25	0	200	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

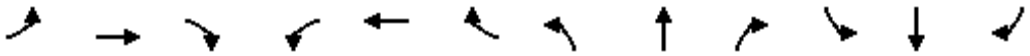
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	200	40
Future Vol, veh/h	0	0	25	0	200	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	200	40

Major/Minor	Minor2		Major2	
Conflicting Flow All	440	40	0	0
Stage 1	440	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	514	1037	-	-
Stage 1	581	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1037	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	35	55	15	5	10	90	215	5	5	300	40
Future Volume (vph)	5	35	55	15	5	10	90	215	5	5	300	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

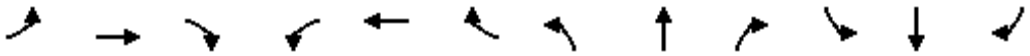
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	35	55	15	5	10	90	215	5	5	300	40
Future Vol, veh/h	5	35	55	15	5	10	90	215	5	5	300	40
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	5	35	55	15	5	10	90	215	5	5	300	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	781	750	345	788	768	254	355	0	0	225	0	0
Stage 1	345	345	-	403	403	-	-	-	-	-	-	-
Stage 2	436	405	-	385	365	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	315	342	702	311	334	790	1215	-	-	1344	-	-
Stage 1	675	640	-	628	603	-	-	-	-	-	-	-
Stage 2	603	602	-	642	627	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	273	305	685	240	298	763	1198	-	-	1338	-	-
Mov Cap-2 Maneuver	273	305	-	240	298	-	-	-	-	-	-	-
Stage 1	608	628	-	571	548	-	-	-	-	-	-	-
Stage 2	523	547	-	549	615	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	17.2	2.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1198	-	-	445	325	1338	-	-
HCM Lane V/C Ratio	0.075	-	-	0.213	0.092	0.004	-	-
HCM Control Delay (s)	8.2	0	-	15.3	17.2	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.3	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	20	25	0	5	35	135	5	0	225	10
Future Volume (vph)	0	0	20	25	0	5	35	135	5	0	225	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

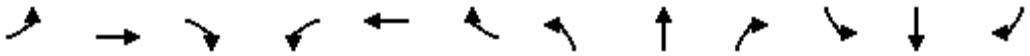
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	25	0	5	35	135	5	0	225	10
Future Vol, veh/h	0	0	20	25	0	5	35	135	5	0	225	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	20	25	0	5	35	135	5	0	225	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	440	440	230	448	443	138	235	0	0	140	0	0
Stage 1	230	230	-	208	208	-	-	-	-	-	-	-
Stage 2	210	210	-	240	235	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	531	514	814	524	512	916	1344	-	-	1456	-	-
Stage 1	777	718	-	799	734	-	-	-	-	-	-	-
Stage 2	797	732	-	768	714	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	517	500	814	500	498	916	1344	-	-	1456	-	-
Mov Cap-2 Maneuver	517	500	-	500	498	-	-	-	-	-	-	-
Stage 1	755	718	-	777	713	-	-	-	-	-	-	-
Stage 2	770	712	-	749	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	12	1.6	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1344	-	-	814	541	1456	-	-
HCM Lane V/C Ratio	0.026	-	-	0.025	0.055	-	-	-
HCM Control Delay (s)	7.8	0	-	9.5	12	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	145	5	15	95	10	10	0	10	25	0	5
Future Volume (vph)	10	145	5	15	95	10	10	0	10	25	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

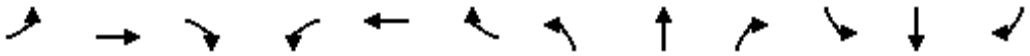
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	145	5	15	95	10	10	0	10	25	0	5
Future Vol, veh/h	10	145	5	15	95	10	10	0	10	25	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	145	5	15	95	10	10	0	10	25	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	150	0	0	301	303	148	303	300	100
Stage 1	-	-	-	-	-	-	168	168	-	130	130	-
Stage 2	-	-	-	-	-	-	133	135	-	173	170	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1499	-	-	1444	-	-	655	613	904	653	616	961
Stage 1	-	-	-	-	-	-	839	763	-	878	792	-
Stage 2	-	-	-	-	-	-	875	789	-	834	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1499	-	-	1444	-	-	643	602	904	637	605	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	643	602	-	637	605	-
Stage 1	-	-	-	-	-	-	833	758	-	872	783	-
Stage 2	-	-	-	-	-	-	861	780	-	819	757	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.9	9.9	10.6
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	751	1499	-	-	1444	-	-	675
HCM Lane V/C Ratio	0.027	0.007	-	-	0.01	-	-	0.044
HCM Control Delay (s)	9.9	7.4	0	-	7.5	0	-	10.6
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	270	85	5	605	0	405	5	5	0	5	20
Future Volume (vph)	5	270	85	5	605	0	405	5	5	0	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	126.7

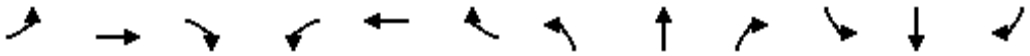
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	270	85	5	605	0	405	5	5	0	5	20
Future Vol, veh/h	5	270	85	5	605	0	405	5	5	0	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	270	85	5	605	0	405	5	5	0	5	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	605	0	0	355	0	0	951	938	313	943	980	605
Stage 1	-	-	-	-	-	-	323	323	-	615	615	-
Stage 2	-	-	-	-	-	-	628	615	-	328	365	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	973	-	-	1209	-	-	~ 239	263	725	245	252	501
Stage 1	-	-	-	-	-	-	687	649	-	482	485	-
Stage 2	-	-	-	-	-	-	469	481	-	689	627	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	973	-	-	1209	-	-	~ 224	260	725	238	249	501
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 224	260	-	238	249	-
Stage 1	-	-	-	-	-	-	683	645	-	479	482	-
Stage 2	-	-	-	-	-	-	443	478	-	675	623	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 429.5	14.2
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	226	973	-	-	1209	-	-	417
HCM Lane V/C Ratio	1.836	0.005	-	-	0.004	-	-	0.06
HCM Control Delay (s)	$ 429.5	8.7	0	-	8	0	-	14.2
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	29	0	-	-	0	-	-	0.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	435	0	270	0	0	95	340
Future Volume (vph)	0	0	0	0	0	435	0	270	0	0	95	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

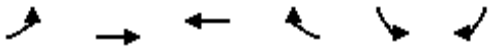
Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	435	0	270	0	0	95	340
Future Vol, veh/h	0	0	0	0	0	435	0	270	0	0	95	340
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	435	0	270	0	0	95	340

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	-	-	270	-	0	-	-	-	0	
Stage 1	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	
Critical Hdwy	-	-	6.23	-	-	-	-	-	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-	
Pot Cap-1 Maneuver	0	0	766	0	-	0	0	-	-	
Stage 1	0	0	-	0	-	0	0	-	-	
Stage 2	0	0	-	0	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	-	0	766	-	-	-	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-	
Stage 1	-	0	-	-	-	-	-	-	-	
Stage 2	-	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	766	-	-
HCM Lane V/C Ratio	-	0.568	-	-
HCM Control Delay (s)	-	15.7	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	3.6	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	250	5	0	0	115	0
Future Volume (vph)	250	5	0	0	115	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	250	5	0	0	115	0
Future Vol, veh/h	250	5	0	0	115	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	250	5	0	0	115	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	9.6	8.8
HCM LOS	A	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	255	115
LT Vol	250	115
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	255	115
Geometry Grp	1	1
Degree of Util (X)	0.319	0.155
Departure Headway (Hd)	4.504	4.851
Convergence, Y/N	Yes	Yes
Cap	803	742
Service Time	2.504	2.865
HCM Lane V/C Ratio	0.318	0.155
HCM Control Delay	9.6	8.8
HCM Lane LOS	A	A
HCM 95th-tile Q	1.4	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	260	5	350	535	85	0
Future Volume (vph)	260	5	350	535	85	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	11.6

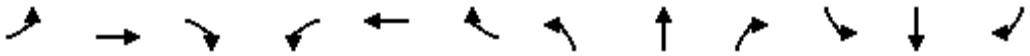
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	260	5	350	535	85	0
Future Vol, veh/h	260	5	350	535	85	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	260	5	350	535	85	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	265	0	1498	263
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	1235	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1305	-	135	776
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	274	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1305	-	99	776
Mov Cap-2 Maneuver	-	-	-	-	99	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	201	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	132.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	99	-	-	1305	-
HCM Lane V/C Ratio	0.859	-	-	0.268	-
HCM Control Delay (s)	132.3	-	-	8.8	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	4.8	-	-	1.1	-

2031 Baseline Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	5	20	0	0	0	0	20	30	210	30	0
Future Volume (vph)	170	5	20	0	0	0	0	20	30	210	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

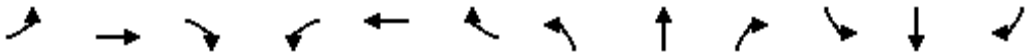
Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	170	5	20	0	0	0	0	20	30	210	30	0
Future Vol, veh/h	170	5	20	0	0	0	0	20	30	210	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	170	5	20	0	0	0	0	20	30	210	30	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	485	500	30	-	0	0	50	0	0
Stage 1	450	450	-	-	-	-	-	-	-
Stage 2	35	50	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	537	470	1039	0	-	-	1544	-	0
Stage 1	638	568	-	0	-	-	-	-	0
Stage 2	982	849	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	463	0	1039	-	-	-	1544	-	-
Mov Cap-2 Maneuver	463	0	-	-	-	-	-	-	-
Stage 1	638	0	-	-	-	-	-	-	-
Stage 2	846	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	0	6.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	492	1544	-
HCM Lane V/C Ratio	-	-	0.396	0.136	-
HCM Control Delay (s)	-	-	17	7.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0.5	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	5	320	10	180	0	0	210	110
Future Volume (vph)	0	0	0	30	5	320	10	180	0	0	210	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

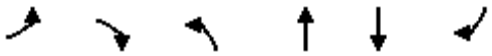
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	30	5	320	10	180	0	0	210	110
Future Vol, veh/h	0	0	0	30	5	320	10	180	0	0	210	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	30	5	320	10	180	0	0	210	110

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	465	520	180	320	0	-	-	-	0
Stage 1	200	200	-	-	-	-	-	-	-
Stage 2	265	320	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	552	458	858	1229	-	0	0	-	-
Stage 1	829	732	-	-	-	0	0	-	-
Stage 2	775	649	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	547	0	858	1229	-	-	-	-	-
Mov Cap-2 Maneuver	547	0	-	-	-	-	-	-	-
Stage 1	822	0	-	-	-	-	-	-	-
Stage 2	775	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1229	-	818	-	-
HCM Lane V/C Ratio	0.008	-	0.434	-	-
HCM Control Delay (s)	8	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	2.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	80	130	370	230	40
Future Volume (vph)	50	80	130	370	230	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

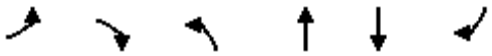
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	80	130	370	230	40
Future Vol, veh/h	50	80	130	370	230	40
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	50	80	130	370	230	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	880	250	270	0	-	0
Stage 1	250	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	301	758	1282	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	271	758	1282	-	-	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	685	-	-	-	-	-
Stage 2	507	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.3	2.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1282	-	448	-	-
HCM Lane V/C Ratio	0.101	-	0.29	-	-
HCM Control Delay (s)	8.1	-	16.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	190	270	140	90	70
Future Volume (vph)	130	190	270	140	90	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

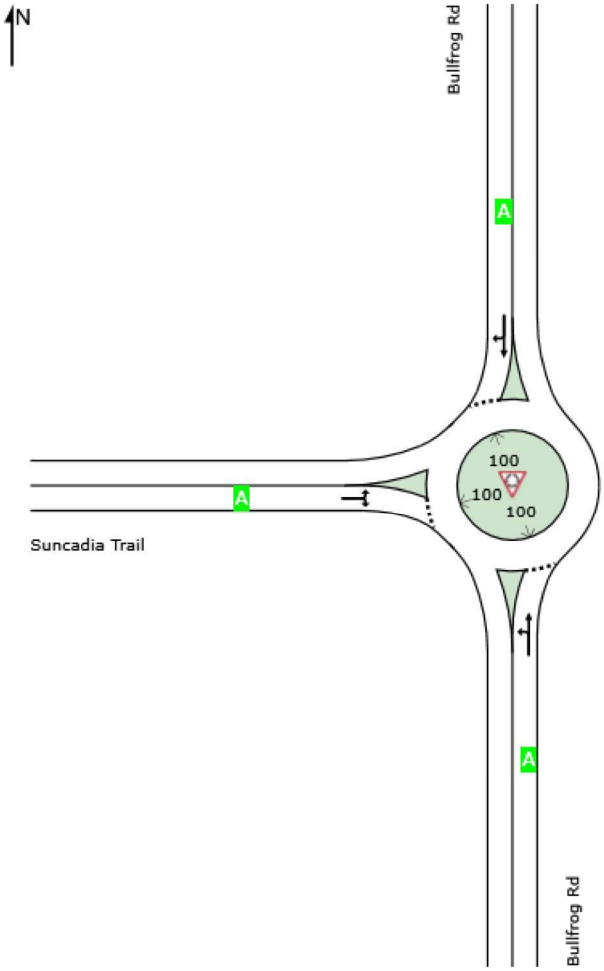
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2031 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2031 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

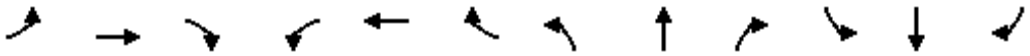
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	410	4.3	1151	0.356	100	6.6	LOS A	2.0	51.7	Full	1600	0.0	0.0
Approach	410	4.3		0.356		6.6	LOS A	2.0	51.7				
North: Bullfrog Rd													
Lane 1[d]	160	2.1	1014	0.158	100	5.0	LOS A	0.7	17.9	Full	1600	0.0	0.0
Approach	160	2.1		0.158		5.0	LOS A	0.7	17.9				
West: Suncadia Trail													
Lane 1[d]	320	4.7	1200	0.267	100	5.4	LOS A	1.4	35.6	Full	1600	0.0	0.0
Approach	320	4.7		0.267		5.4	LOS A	1.4	35.6				
Intersection	890	4.0		0.356		5.9	LOS A	2.0	51.7				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	10	0	0	0	10	260	0	0	150	20
Future Volume (vph)	30	0	10	0	0	0	10	260	0	0	150	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	10	0	0	0	10	260	0	0	150	20
Future Vol, veh/h	30	0	10	0	0	0	10	260	0	0	150	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	30	0	10	0	0	0	10	260	0	0	150	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	441	441	161	445	451	260	171	0	0	260	0	0
Stage 1	161	161	-	280	280	-	-	-	-	-	-	-
Stage 2	280	280	-	165	171	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	518	503	871	527	507	784	1394	-	-	1304	-	-
Stage 1	829	755	-	731	683	-	-	-	-	-	-	-
Stage 2	716	670	-	842	761	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	514	498	870	518	502	784	1393	-	-	1304	-	-
Mov Cap-2 Maneuver	514	498	-	518	502	-	-	-	-	-	-	-
Stage 1	822	754	-	725	678	-	-	-	-	-	-	-
Stage 2	710	665	-	832	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1393	-	-	573	-	1304	-	-
HCM Lane V/C Ratio	0.007	-	-	0.07	-	-	-	-
HCM Control Delay (s)	7.6	0	-	11.8	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	420	140	150	310	120
Future Volume (vph)	70	420	140	150	310	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

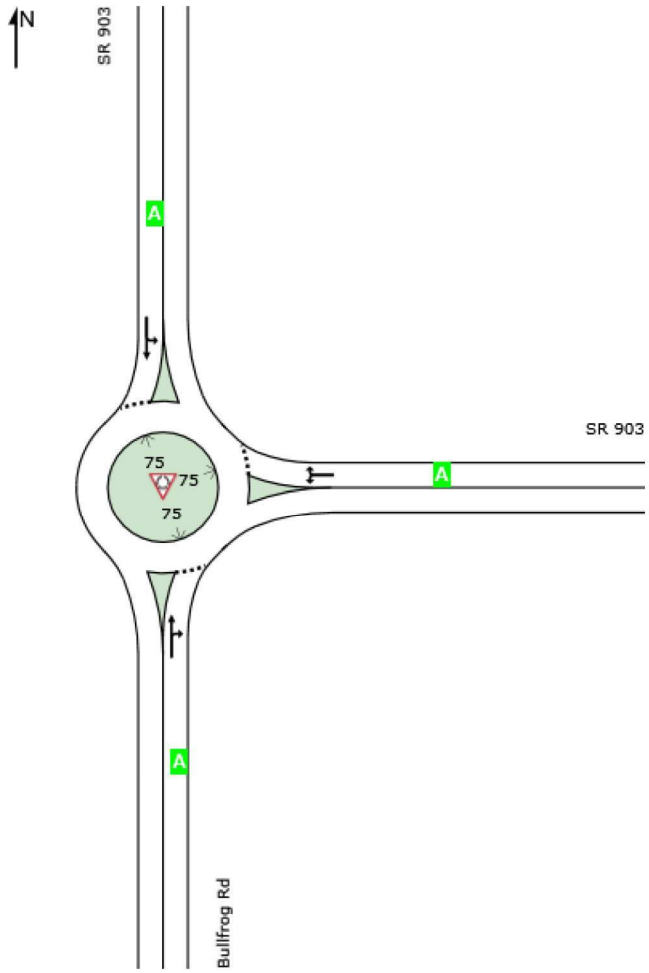
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2031 Baseline - Weekday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2031 Baseline - Weekday PM Peak Hour]

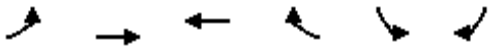
47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

Lane Use and Performance													
	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	290	4.3	957	0.303	100	6.9	LOS A	1.5	38.0	Full	1600	0.0	0.0
Approach	290	4.3		0.303		6.9	LOS A	1.5	38.0				
East: SR 903													
Lane 1[d]	490	2.8	1156	0.424	100	7.5	LOS A	2.6	67.1	Full	1600	0.0	0.0
Approach	490	2.8		0.424		7.5	LOS A	2.6	67.1				
North: SR 903													
Lane 1[d]	430	2.3	1253	0.343	100	6.1	LOS A	2.0	51.5	Full	1600	0.0	0.0
Approach	430	2.3		0.343		6.1	LOS A	2.0	51.5				
Intersection	1210	3.0		0.424		6.9	LOS A	2.6	67.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	560	560	30	20	10
Future Volume (vph)	10	560	560	30	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

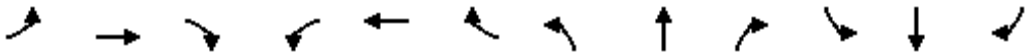
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	560	560	30	20	10
Future Vol, veh/h	10	560	560	30	20	10
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	10	560	560	30	20	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	590	0	-	0	1155	578
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	580	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	966	-	-	-	220	519
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	564	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	966	-	-	-	217	518
Mov Cap-2 Maneuver	-	-	-	-	217	-
Stage 1	-	-	-	-	558	-
Stage 2	-	-	-	-	564	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	20.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	966	-	-	-	269
HCM Lane V/C Ratio	0.01	-	-	-	0.112
HCM Control Delay (s)	8.8	0	-	-	20.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	490	90	30	480	10	100	0	110	10	0	0
Future Volume (vph)	10	490	90	30	480	10	100	0	110	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

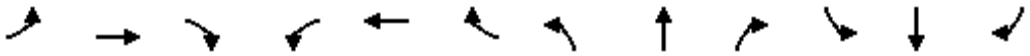
Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	490	90	30	480	10	100	0	110	10	0	0
Future Vol, veh/h	10	490	90	30	480	10	100	0	110	10	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	490	90	30	480	10	100	0	110	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	490	0	0	580	0	0	1101	1105	535	1155	1145	486
Stage 1	-	-	-	-	-	-	555	555	-	545	545	-
Stage 2	-	-	-	-	-	-	546	550	-	610	600	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1058	-	-	989	-	-	191	213	549	175	201	585
Stage 1	-	-	-	-	-	-	520	516	-	526	522	-
Stage 2	-	-	-	-	-	-	526	519	-	485	493	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1058	-	-	989	-	-	183	201	549	134	190	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	183	201	-	134	190	-
Stage 1	-	-	-	-	-	-	513	509	-	519	500	-
Stage 2	-	-	-	-	-	-	503	497	-	382	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	47.8	34
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	281	1058	-	-	989	-	-	134
HCM Lane V/C Ratio	0.747	0.009	-	-	0.03	-	-	0.075
HCM Control Delay (s)	47.8	8.4	0	-	8.8	0	-	34
HCM Lane LOS	E	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	5.5	0	-	-	0.1	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	590	20	10	500	10	20	0	20	10	0	10
Future Volume (vph)	10	590	20	10	500	10	20	0	20	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	590	20	10	500	10	20	0	20	10	0	10
Future Vol, veh/h	10	590	20	10	500	10	20	0	20	10	0	10
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	10	590	20	10	500	10	20	0	20	10	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	614	0	0	1154	1154	604	1155	1159	505
Stage 1	-	-	-	-	-	-	624	624	-	525	525	-
Stage 2	-	-	-	-	-	-	530	530	-	630	634	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	1040	-	-	965	-	-	163	185	472	175	197	571
Stage 1	-	-	-	-	-	-	449	455	-	540	533	-
Stage 2	-	-	-	-	-	-	506	503	-	473	476	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1040	-	-	961	-	-	156	179	470	164	190	571
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	179	-	164	190	-
Stage 1	-	-	-	-	-	-	440	446	-	532	525	-
Stage 2	-	-	-	-	-	-	490	495	-	446	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	23.5	20.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	234	1040	-	-	961	-	-	255
HCM Lane V/C Ratio	0.171	0.01	-	-	0.01	-	-	0.078
HCM Control Delay (s)	23.5	8.5	0	-	8.8	0	-	20.3
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	100	20	10	190
Future Volume (vph)	20	10	100	20	10	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

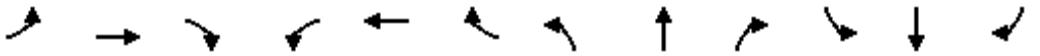
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	100	20	10	190
Future Vol, veh/h	20	10	100	20	10	190
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	100	20	10	190
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	8.3	7.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	5%	0%	83%
Vol Thru, %	0%	67%	17%
Vol Right, %	95%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	200	30	120
LT Vol	10	0	100
Through Vol	0	20	20
RT Vol	190	10	0
Lane Flow Rate	200	30	120
Geometry Grp	1	1	1
Degree of Util (X)	0.203	0.035	0.149
Departure Headway (Hd)	3.65	4.147	4.46
Convergence, Y/N	Yes	Yes	Yes
Cap	964	850	799
Service Time	1.745	2.236	2.517
HCM Lane V/C Ratio	0.207	0.035	0.15
HCM Control Delay	7.7	7.4	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	0.1	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	280	130	60	220	90	70	60	110	70	50	30
Future Volume (vph)	120	280	130	60	220	90	70	60	110	70	50	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

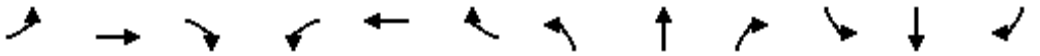
Intersection	
Int Delay, s/veh	15.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	120	280	130	60	220	90	70	60	110	70	50	30
Future Vol, veh/h	120	280	130	60	220	90	70	60	110	70	50	30
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	120	280	130	60	220	90	70	60	110	70	50	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	311	0	0	413	0	0	1014	1019	349	1057	1039	267
Stage 1	-	-	-	-	-	-	588	588	-	386	386	-
Stage 2	-	-	-	-	-	-	426	431	-	671	653	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1227	-	-	1135	-	-	216	236	692	204	232	774
Stage 1	-	-	-	-	-	-	493	494	-	639	612	-
Stage 2	-	-	-	-	-	-	604	581	-	448	465	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1226	-	-	1132	-	-	149	201	689	118	197	773
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	201	-	118	197	-
Stage 1	-	-	-	-	-	-	444	444	-	576	579	-
Stage 2	-	-	-	-	-	-	502	550	-	293	418	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	1.4	45.6	46.4
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	169	689	1226	-	-	1132	-	-	118	273
HCM Lane V/C Ratio	0.769	0.16	0.098	-	-	0.053	-	-	0.593	0.293
HCM Control Delay (s)	74.7	11.2	8.3	-	-	8.4	-	-	72.5	23.6
HCM Lane LOS	F	B	A	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	5	0.6	0.3	-	-	0.2	-	-	2.9	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	440	10	80	360	10	20	10	100	10	10	20
Future Volume (vph)	25	440	10	80	360	10	20	10	100	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

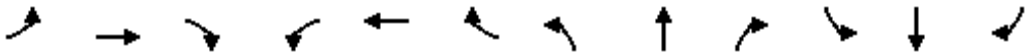
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	440	10	80	360	10	20	10	100	10	10	20
Future Vol, veh/h	25	440	10	80	360	10	20	10	100	10	10	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	25	440	10	80	360	10	20	10	100	10	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	452	0	0	1040	1032	447	1080	1032	373
Stage 1	-	-	-	-	-	-	497	497	-	530	530	-
Stage 2	-	-	-	-	-	-	543	535	-	550	502	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1162	-	-	1093	-	-	206	230	605	192	229	664
Stage 1	-	-	-	-	-	-	549	540	-	525	520	-
Stage 2	-	-	-	-	-	-	519	519	-	512	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1091	-	-	178	207	604	143	206	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	207	-	143	206	-
Stage 1	-	-	-	-	-	-	536	527	-	511	479	-
Stage 2	-	-	-	-	-	-	455	479	-	410	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	15.7	20.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	604	1156	-	-	1091	-	-	269
HCM Lane V/C Ratio	0.16	0.166	0.022	-	-	0.073	-	-	0.149
HCM Control Delay (s)	27.9	12.1	8.2	-	-	8.6	-	-	20.7
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.6	0.6	0.1	-	-	0.2	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	500	70	80	340	50	150	20	30	40	30	20
Future Volume (vph)	50	500	70	80	340	50	150	20	30	40	30	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	30.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	500	70	80	340	50	150	20	30	40	30	20
Future Vol, veh/h	50	500	70	80	340	50	150	20	30	40	30	20
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	50	500	70	80	340	50	150	20	30	40	30	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	571	0	0	1188	1186	536	1185	1196	367
Stage 1	-	-	-	-	-	-	636	636	-	525	525	-
Stage 2	-	-	-	-	-	-	552	550	-	660	671	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1147	-	-	1002	-	-	165	189	545	167	188	683
Stage 1	-	-	-	-	-	-	466	472	-	540	533	-
Stage 2	-	-	-	-	-	-	518	516	-	455	458	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1147	-	-	1001	-	-	~ 120	158	544	125	158	682
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 120	158	-	125	158	-
Stage 1	-	-	-	-	-	-	435	441	-	505	478	-
Stage 2	-	-	-	-	-	-	422	463	-	384	428	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.5	179.9	49.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	120	275	1147	-	-	1001	-	-	167
HCM Lane V/C Ratio	1.25	0.182	0.044	-	-	0.08	-	-	0.539
HCM Control Delay (s)	232.8	21	8.3	0	-	8.9	0	-	49.3
HCM Lane LOS	F	C	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	9.6	0.7	0.1	-	-	0.3	-	-	2.7

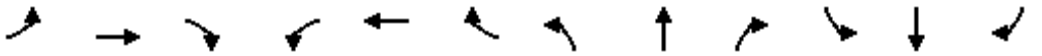
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	100	80	340	100	80	90	80	20	100	80
Future Volume (vph)	20	420	100	80	340	100	80	90	80	20	100	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 69.3	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	100	80	340	100	80	90	80	20	100	80
Future Volume (veh/h)	20	420	100	80	340	100	80	90	80	20	100	80
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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	100	80	340	100	80	90	80	20	100	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	603	930	221	546	891	262	242	189	168	250	198	158
Arrive On Green	0.66	0.66	0.66	0.66	0.66	0.66	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	919	1414	337	860	1355	399	1193	905	804	1194	946	757
Grp Volume(v), veh/h	20	0	520	80	0	440	80	0	170	20	0	180
Grp Sat Flow(s),veh/h/ln	919	0	1750	860	0	1754	1193	0	1709	1194	0	1702
Q Serve(g_s), s	0.7	0.0	10.0	3.4	0.0	7.9	4.4	0.0	6.0	1.0	0.0	6.5
Cycle Q Clear(g_c), s	8.6	0.0	10.0	13.4	0.0	7.9	10.8	0.0	6.0	7.1	0.0	6.5
Prop In Lane	1.00		0.19	1.00		0.23	1.00		0.47	1.00		0.44
Lane Grp Cap(c), veh/h	603	0	1151	546	0	1153	242	0	357	250	0	356
V/C Ratio(X)	0.03	0.00	0.45	0.15	0.00	0.38	0.33	0.00	0.48	0.08	0.00	0.51
Avail Cap(c_a), veh/h	603	0	1151	546	0	1153	432	0	629	439	0	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	0.0	5.8	9.0	0.0	5.4	28.9	0.0	24.0	27.1	0.0	24.1
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.6	0.0	1.0	1.1	0.0	1.4	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.3	0.7	0.0	2.6	1.3	0.0	2.5	0.3	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	0.0	7.0	9.6	0.0	6.4	30.1	0.0	25.4	27.3	0.0	25.7
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		540			520			250			200	
Approach Delay, s/veh		7.1			6.9			26.9			25.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		19.0		50.0		19.0				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		12.0		9.1		15.4		12.8				
Green Ext Time (p_c), s		4.2		1.4		3.8		1.4				

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

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	380	150	10	300	30	140	30	10	30	20	30
Future Volume (vph)	40	380	150	10	300	30	140	30	10	30	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	380	150	10	300	30	140	30	10	30	20	30
Future Vol, veh/h	40	380	150	10	300	30	140	30	10	30	20	30
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	40	380	150	10	300	30	140	30	10	30	20	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	330	0	0	533	0	0	899	888	463	895	948	316
Stage 1	-	-	-	-	-	-	538	538	-	335	335	-
Stage 2	-	-	-	-	-	-	361	350	-	560	613	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1202	-	-	1025	-	-	261	284	601	257	257	715
Stage 1	-	-	-	-	-	-	529	524	-	671	635	-
Stage 2	-	-	-	-	-	-	659	635	-	506	477	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1202	-	-	1022	-	-	223	266	596	219	241	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	223	266	-	219	241	-
Stage 1	-	-	-	-	-	-	502	497	-	639	627	-
Stage 2	-	-	-	-	-	-	603	627	-	443	453	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	39.1	20.9
HCM LOS			E	C

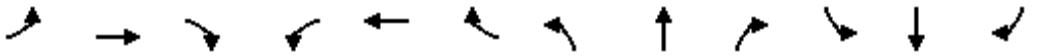
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	223	309	1202	-	-	1022	-	-	305
HCM Lane V/C Ratio	0.628	0.129	0.033	-	-	0.01	-	-	0.262
HCM Control Delay (s)	45	18.4	8.1	0	-	8.6	0	-	20.9
HCM Lane LOS	E	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.7	0.4	0.1	-	-	0	-	-	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	360	130	40	320	30	190	140	40	30	130	10
Future Volume (vph)	10	360	130	40	320	30	190	140	40	30	130	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





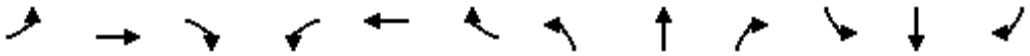
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	360	130	40	320	30	190	140	40	30	130	10
Future Volume (veh/h)	10	360	130	40	320	30	190	140	40	30	130	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	360	130	40	320	30	190	140	40	30	130	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	721	689	249	502	914	86	322	289	83	286	364	28
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	988	1132	409	898	1503	141	1186	1198	342	1173	1506	116
Grp Volume(v), veh/h	10	0	490	40	0	350	190	0	180	30	0	140
Grp Sat Flow(s),veh/h/ln	988	0	1541	898	0	1644	1186	0	1540	1173	0	1622
Q Serve(g_s), s	0.2	0.0	11.0	0.9	0.0	0.0	9.5	0.0	6.0	1.4	0.0	4.3
Cycle Q Clear(g_c), s	0.2	0.0	11.0	11.8	0.0	0.0	13.8	0.0	6.0	7.4	0.0	4.3
Prop In Lane	1.00		0.27	1.00		0.09	1.00		0.22	1.00		0.07
Lane Grp Cap(c), veh/h	721	0	937	502	0	1000	322	0	372	286	0	392
V/C Ratio(X)	0.01	0.00	0.52	0.08	0.00	0.35	0.59	0.00	0.48	0.11	0.00	0.36
Avail Cap(c_a), veh/h	721	0	937	502	0	1000	322	0	372	286	0	392
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.96	0.00	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.6	0.0	6.7	1.8	0.0	0.0	24.6	0.0	19.5	22.7	0.0	18.9
Incr Delay (d2), s/veh	0.0	0.0	1.9	0.3	0.0	0.9	2.0	0.0	0.4	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.3	0.1	0.0	0.3	2.7	0.0	2.1	0.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	8.6	2.1	0.0	0.9	26.6	0.0	19.9	22.8	0.0	19.1
LnGrp LOS	A	A	A	A	A	A	C	A	B	C	A	B
Approach Vol, veh/h		500			390			370			170	
Approach Delay, s/veh		8.6			1.0			23.3			19.7	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		19.0		41.0		19.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		13.0		9.4		13.8		15.8				
Green Ext Time (p_c), s		3.6		0.2		2.5		0.0				

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	300	90	10	290	20	50	20	30	10	20	10
Future Volume (vph)	20	300	90	10	290	20	50	20	30	10	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

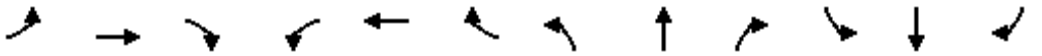
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	300	90	10	290	20	50	20	30	10	20	10
Future Vol, veh/h	20	300	90	10	290	20	50	20	30	10	20	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	20	300	90	10	290	20	50	20	30	10	20	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13	11.4	9.8	9.1
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	5%	3%	25%
Vol Thru, %	20%	73%	91%	50%
Vol Right, %	30%	22%	6%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	410	320	40
LT Vol	50	20	10	10
Through Vol	20	300	290	20
RT Vol	30	90	20	10
Lane Flow Rate	100	410	320	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.158	0.532	0.424	0.064
Departure Headway (Hd)	5.698	4.671	4.772	5.743
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	633	767	749	627
Service Time	3.7	2.74	2.848	3.748
HCM Lane V/C Ratio	0.158	0.535	0.427	0.064
HCM Control Delay	9.8	13	11.4	9.1
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.6	3.2	2.1	0.2

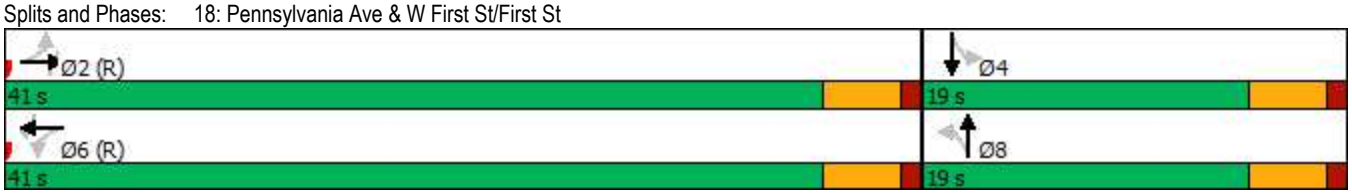


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	370	20	20	330	50	20	10	30	90	20	30
Future Volume (vph)	40	370	20	20	330	50	20	10	30	90	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1613	0	1736	1606	0	0	1752	1384	0	1756	1398
Flt Permitted	0.529			0.522				0.784			0.744	
Satd. Flow (perm)	954	1613	0	949	1606	0	0	1409	1354	0	1357	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			23				30			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	390	0	20	380	0	0	30	30	0	110	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	43.0	43.0		43.0	43.0			11.4	43.0		11.4	43.0
Actuated g/C Ratio	0.72	0.72		0.72	0.72			0.19	0.72		0.19	0.72
v/c Ratio	0.06	0.34		0.03	0.33			0.11	0.03		0.43	0.03
Control Delay	5.3	5.4		5.8	6.2			18.4	2.9		25.0	2.9
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.3	5.4		5.8	6.2			18.4	2.9		25.0	2.9
LOS	A	A		A	A			B	A		C	A
Approach Delay		5.4			6.2			10.6			20.3	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Intersection Signal Delay: 8.0 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	330	10	0	0	270
Future Volume (vph)	10	330	10	0	0	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	330	10	0	0	270
Future Vol, veh/h	10	330	10	0	0	270
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	10	330	10	0	0	270

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	693	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	757	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	693	1048	-	-	-	-
Mov Cap-2 Maneuver	693	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1032	-
HCM Lane V/C Ratio	-	0.329	-
HCM Control Delay (s)	-	10.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	240	40
Future Volume (vph)	0	0	10	0	240	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

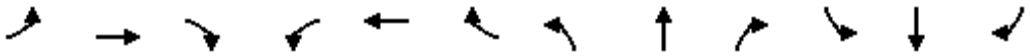
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	240	40
Future Vol, veh/h	0	0	10	0	240	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	240	40

Major/Minor	Minor2		Major2	
Conflicting Flow All	520	40	0	0
Stage 1	520	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	436	982	-	-
Stage 1	504	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	982	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	100	10	10	10	90	350	10	10	380	20
Future Volume (vph)	30	10	100	10	10	10	90	350	10	10	380	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

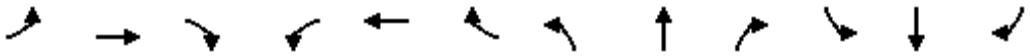
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	10	100	10	10	10	90	350	10	10	380	20
Future Vol, veh/h	30	10	100	10	10	10	90	350	10	10	380	20
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	30	10	100	10	10	10	90	350	10	10	380	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	979	974	413	1025	979	381	411	0	0	373	0	0
Stage 1	421	421	-	548	548	-	-	-	-	-	-	-
Stage 2	558	553	-	477	431	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	231	254	643	215	252	671	1153	-	-	1180	-	-
Stage 1	614	592	-	524	520	-	-	-	-	-	-	-
Stage 2	518	518	-	573	586	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	197	221	629	156	220	654	1141	-	-	1165	-	-
Mov Cap-2 Maneuver	197	221	-	156	220	-	-	-	-	-	-	-
Stage 1	548	580	-	466	463	-	-	-	-	-	-	-
Stage 2	444	461	-	463	574	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.1	22.1	1.7	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1141	-	-	393	240	1165	-	-
HCM Lane V/C Ratio	0.079	-	-	0.356	0.125	0.009	-	-
HCM Control Delay (s)	8.4	0	-	19.1	22.1	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.6	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	30	20	0	10	50	270	20	0	230	10
Future Volume (vph)	10	0	30	20	0	10	50	270	20	0	230	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

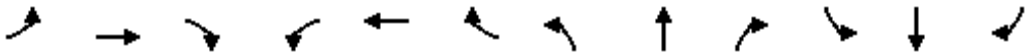
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	30	20	0	10	50	270	20	0	230	10
Future Vol, veh/h	10	0	30	20	0	10	50	270	20	0	230	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	10	0	30	20	0	10	50	270	20	0	230	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	620	625	235	630	620	280	240	0	0	290	0	0
Stage 1	235	235	-	380	380	-	-	-	-	-	-	-
Stage 2	385	390	-	250	240	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	403	404	809	363	375	707	1327	-	-	1272	-	-
Stage 1	773	714	-	598	576	-	-	-	-	-	-	-
Stage 2	642	611	-	706	666	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	384	386	809	338	358	707	1327	-	-	1272	-	-
Mov Cap-2 Maneuver	384	386	-	338	358	-	-	-	-	-	-	-
Stage 1	738	714	-	571	550	-	-	-	-	-	-	-
Stage 2	604	584	-	680	666	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	14.5	1.1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	634	409	1272	-	-
HCM Lane V/C Ratio	0.038	-	-	0.063	0.073	-	-	-
HCM Control Delay (s)	7.8	0	-	11.1	14.5	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	140	10	30	150	10	10	10	40	10	10	10
Future Volume (vph)	10	140	10	30	150	10	10	10	40	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.9

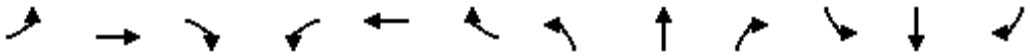
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	140	10	30	150	10	10	10	40	10	10	10
Future Vol, veh/h	10	140	10	30	150	10	10	10	40	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	140	10	30	150	10	10	10	40	10	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	160	0	0	150	0	0	390	385	145	405	385	155
Stage 1	-	-	-	-	-	-	165	165	-	215	215	-
Stage 2	-	-	-	-	-	-	225	220	-	190	170	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1419	-	-	1425	-	-	573	552	908	560	552	896
Stage 1	-	-	-	-	-	-	842	766	-	792	729	-
Stage 2	-	-	-	-	-	-	782	725	-	816	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1419	-	-	1425	-	-	545	535	908	515	535	896
Mov Cap-2 Maneuver	-	-	-	-	-	-	545	535	-	515	535	-
Stage 1	-	-	-	-	-	-	835	760	-	786	712	-
Stage 2	-	-	-	-	-	-	745	708	-	764	756	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.2	10.3	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	740	1419	-	-	1425	-	-	609
HCM Lane V/C Ratio	0.081	0.007	-	-	0.021	-	-	0.049
HCM Control Delay (s)	10.3	7.6	0	-	7.6	0	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

2031 Baseline Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	470	5	15	0	0	0	0	10	35	260	20	0
Future Volume (vph)	470	5	15	0	0	0	0	10	35	260	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	89.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	470	5	15	0	0	0	0	10	35	260	20	0
Future Vol, veh/h	470	5	15	0	0	0	0	10	35	260	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	470	5	15	0	0	0	0	10	35	260	20	0

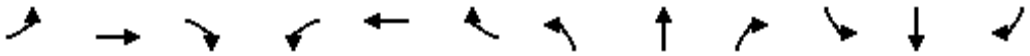
Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	568	585	20	-	0	0	45	0	0
Stage 1	540	540	-	-	-	-	-	-	-
Stage 2	28	45	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	486	424	1061	0	-	-	1444	-	0
Stage 1	586	523	-	0	-	-	-	-	0
Stage 2	997	859	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 398	0	1061	-	-	-	1444	-	-
Mov Cap-2 Maneuver	~ 398	0	-	-	-	-	-	-	-
Stage 1	586	0	-	-	-	-	-	-	-
Stage 2	816	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	144	0	7.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	406	1444	-
HCM Lane V/C Ratio	-	-	1.207	0.18	-
HCM Control Delay (s)	-	-	144	8	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	19.8	0.7	-

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	5	385	5	475	0	0	220	105
Future Volume (vph)	0	0	0	60	5	385	5	475	0	0	220	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

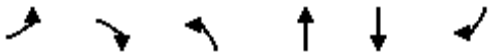
Intersection	
Int Delay, s/veh	14.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	60	5	385	5	475	0	0	220	105
Future Vol, veh/h	0	0	0	60	5	385	5	475	0	0	220	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	60	5	385	5	475	0	0	220	105

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	758	810	475	325	0	-	-	-	0	
Stage 1	485	485	-	-	-	-	-	-	-	
Stage 2	273	325	-	-	-	-	-	-	-	
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-	
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-	
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-	
Pot Cap-1 Maneuver	356	298	562	1240	-	0	0	-	-	
Stage 1	591	529	-	-	-	0	0	-	-	
Stage 2	742	625	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	354	0	562	1240	-	-	-	-	-	
Mov Cap-2 Maneuver	354	0	-	-	-	-	-	-	-	
Stage 1	588	0	-	-	-	-	-	-	-	
Stage 2	742	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	41.5	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1240	-	521	-	-
HCM Lane V/C Ratio	0.004	-	0.864	-	-
HCM Control Delay (s)	7.9	0	41.5	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0	-	9.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	105	95	765	220	20
Future Volume (vph)	35	105	95	765	220	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

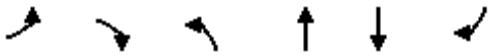
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	105	95	765	220	20
Future Vol, veh/h	35	105	95	765	220	20
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	35	105	95	765	220	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1185	230	240	0	-	0
Stage 1	230	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	198	783	1327	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	184	783	1327	-	-	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	357	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1327	-	432	-	-
HCM Lane V/C Ratio	0.072	-	0.324	-	-
HCM Control Delay (s)	7.9	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	145	515	285	95	125
Future Volume (vph)	130	145	515	285	95	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

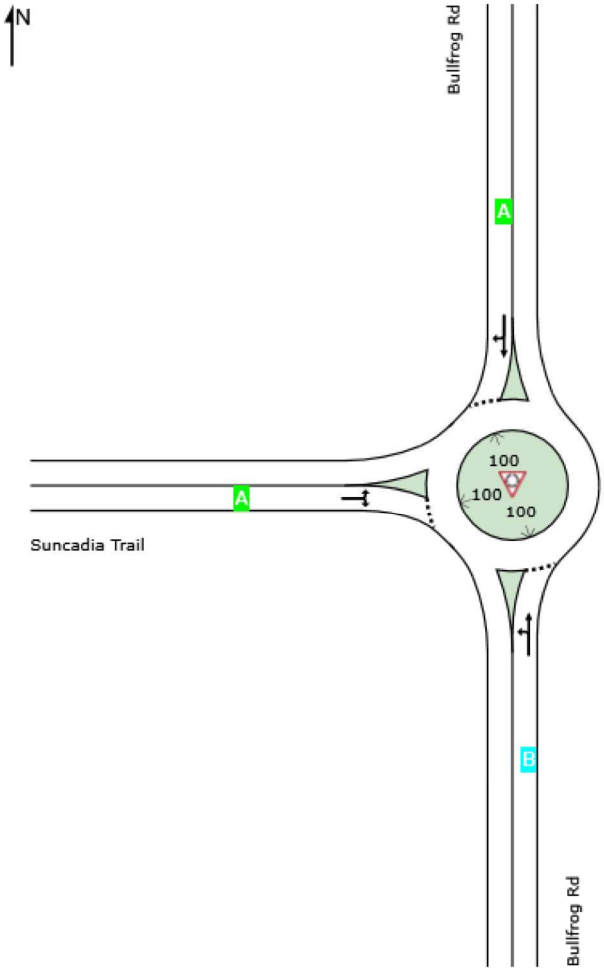
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2031 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	A	A	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2031 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

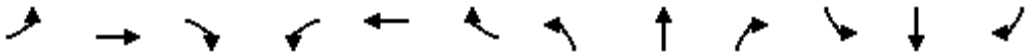
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	800	1.4	1185	0.675	100	12.5	LOS B	6.5	164.7	Full	1600	0.0	0.0
Approach	800	1.4		0.675		12.5	LOS B	6.5	164.7				
North: Bullfrog Rd													
Lane 1[d]	220	3.5	783	0.281	100	7.8	LOS A	1.3	32.1	Full	1600	0.0	0.0
Approach	220	3.5		0.281		7.8	LOS A	1.3	32.1				
West: Suncadia Trail													
Lane 1[d]	275	4.2	1198	0.230	100	5.0	LOS A	1.1	29.4	Full	1600	0.0	0.0
Approach	275	4.2		0.230		5.0	LOS A	1.1	29.4				
Intersection	1295	2.4		0.675		10.1	LOS B	6.5	164.7				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	30	0	0	0	15	400	0	0	190	40
Future Volume (vph)	25	0	30	0	0	0	15	400	0	0	190	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	30	0	0	0	15	400	0	0	190	40
Future Vol, veh/h	25	0	30	0	0	0	15	400	0	0	190	40
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	30	0	0	0	15	400	0	0	190	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	640	640	210	655	660	400	230	0	0	400	0	0
Stage 1	210	210	-	430	430	-	-	-	-	-	-	-
Stage 2	430	430	-	225	230	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	381	387	818	382	386	654	1338	-	-	1153	-	-
Stage 1	781	719	-	607	587	-	-	-	-	-	-	-
Stage 2	594	575	-	782	718	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	377	382	818	364	381	654	1338	-	-	1153	-	-
Mov Cap-2 Maneuver	377	382	-	364	381	-	-	-	-	-	-	-
Stage 1	770	719	-	599	579	-	-	-	-	-	-	-
Stage 2	586	567	-	753	718	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1338	-	-	534	-	1153	-	-
HCM Lane V/C Ratio	0.011	-	-	0.103	-	-	-	-
HCM Control Delay (s)	7.7	0	-	12.5	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-

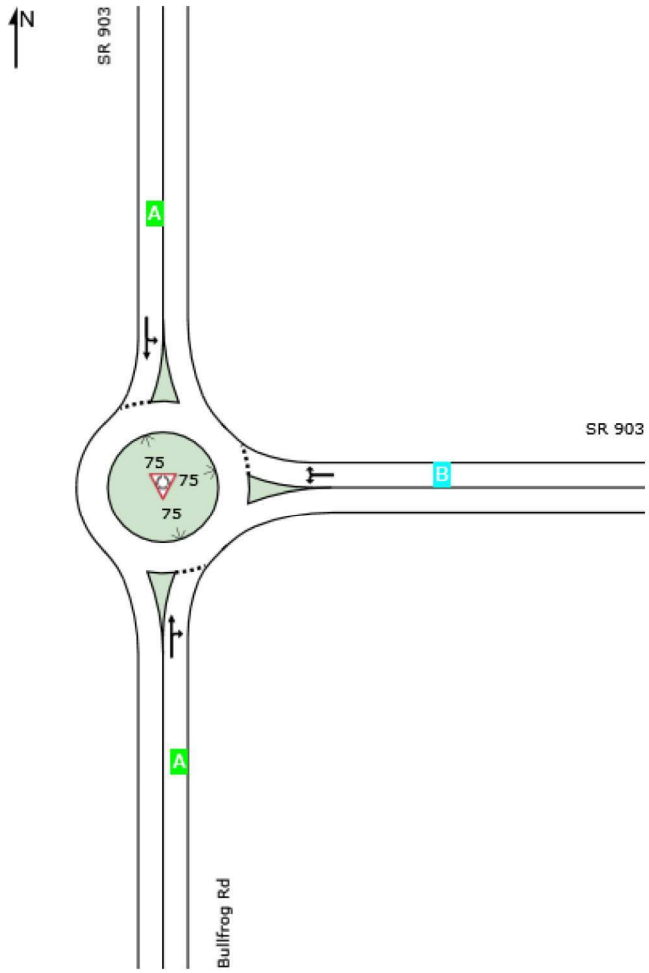
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2031 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2031 Baseline - Friday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

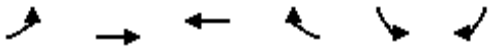
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	425	3.3	896	0.474	100	10.0	LOS A	3.1	79.9	Full	1600	0.0	0.0
Approach	425	3.3		0.474		10.0	LOS A	3.1	79.9				
East: SR 903													
Lane 1[d]	585	2.8	1015	0.576	100	11.1	LOS B	5.2	134.1	Full	1600	0.0	0.0
Approach	585	2.8		0.576		11.1	LOS B	5.2	134.1				
North: SR 903													
Lane 1[d]	495	4.4	1178	0.420	100	7.4	LOS A	2.6	67.0	Full	1600	0.0	0.0
Approach	495	4.4		0.420		7.4	LOS A	2.6	67.0				
Intersection	1505	3.5		0.576		9.6	LOS A	5.2	134.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	620	695	40	20	10
Future Volume (vph)	5	620	695	40	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

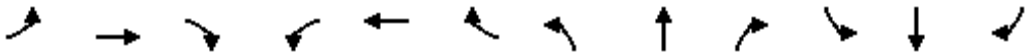
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	620	695	40	20	10
Future Vol, veh/h	5	620	695	40	20	10
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	5	620	695	40	20	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	735	0	-	0	1345	722
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	630	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	861	-	-	-	169	430
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	861	-	-	-	167	427
Mov Cap-2 Maneuver	-	-	-	-	167	-
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	535	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	25
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	861	-	-	-	210
HCM Lane V/C Ratio	0.006	-	-	-	0.143
HCM Control Delay (s)	9.2	0	-	-	25
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	540	115	40	585	5	150	0	130	0	0	0
Future Volume (vph)	0	540	115	40	585	5	150	0	130	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	41.2

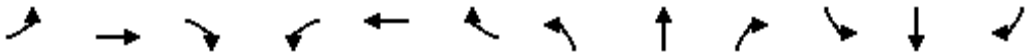
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	540	115	40	585	5	150	0	130	0	0	0
Future Vol, veh/h	0	540	115	40	585	5	150	0	130	0	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	0	540	115	40	585	5	150	0	130	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	590	0	0	659	0	0	1270	1272	603	1332	1327	588
Stage 1	-	-	-	-	-	-	602	602	-	668	668	-
Stage 2	-	-	-	-	-	-	668	670	-	664	659	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	976	-	-	924	-	-	~ 146	168	501	133	157	513
Stage 1	-	-	-	-	-	-	488	490	-	451	459	-
Stage 2	-	-	-	-	-	-	449	457	-	453	464	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	976	-	-	920	-	-	~ 138	156	499	93	146	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 138	156	-	93	146	-
Stage 1	-	-	-	-	-	-	486	488	-	451	429	-
Stage 2	-	-	-	-	-	-	420	427	-	335	462	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	228.8	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	976	-	-	920	-	-	-
HCM Lane V/C Ratio	1.346	-	-	-	0.043	-	-	-
HCM Control Delay (s)	228.8	0	-	-	9.1	0	-	0
HCM Lane LOS	F	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	15.7	0	-	-	0.1	-	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	680	0	15	625	10	15	10	5	20	15	25
Future Volume (vph)	20	680	0	15	625	10	15	10	5	20	15	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	680	0	15	625	10	15	10	5	20	15	25
Future Vol, veh/h	20	680	0	15	625	10	15	10	5	20	15	25
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	20	680	0	15	625	10	15	10	5	20	15	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	636	0	0	685	0	0	1405	1391	687	1391	1386	631
Stage 1	-	-	-	-	-	-	725	725	-	661	661	-
Stage 2	-	-	-	-	-	-	680	666	-	730	725	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	928	-	-	899	-	-	73	90	315	121	144	485
Stage 1	-	-	-	-	-	-	295	312	-	455	463	-
Stage 2	-	-	-	-	-	-	315	336	-	417	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	927	-	-	895	-	-	60	84	313	103	134	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	84	-	103	134	-
Stage 1	-	-	-	-	-	-	283	300	-	439	450	-
Stage 2	-	-	-	-	-	-	281	327	-	382	416	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	77.5	37.9
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	78	927	-	-	895	-	-	168
HCM Lane V/C Ratio	0.385	0.022	-	-	0.017	-	-	0.357
HCM Control Delay (s)	77.5	9	0	-	9.1	0	-	37.9
HCM Lane LOS	F	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0.1	-	-	1.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	135	10	30	245
Future Volume (vph)	25	10	135	10	30	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

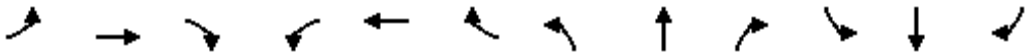
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	135	10	30	245
Future Vol, veh/h	25	10	135	10	30	245
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	135	10	30	245
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.7	8.9	8.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	11%	0%	93%
Vol Thru, %	0%	71%	7%
Vol Right, %	89%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	275	35	145
LT Vol	30	0	135
Through Vol	0	25	10
RT Vol	245	10	0
Lane Flow Rate	275	35	145
Geometry Grp	1	1	1
Degree of Util (X)	0.296	0.043	0.191
Departure Headway (Hd)	3.879	4.47	4.747
Convergence, Y/N	Yes	Yes	Yes
Cap	930	802	761
Service Time	1.888	2.494	2.747
HCM Lane V/C Ratio	0.296	0.044	0.191
HCM Control Delay	8.5	7.7	8.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	395	200	70	195	110	75	85	155	80	70	40
Future Volume (vph)	150	395	200	70	195	110	75	85	155	80	70	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	70.6

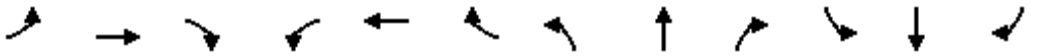
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	395	200	70	195	110	75	85	155	80	70	40
Future Vol, veh/h	150	395	200	70	195	110	75	85	155	80	70	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	150	395	200	70	195	110	75	85	155	80	70	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	595	0	0	1240	1240	495	1305	1285	250
Stage 1	-	-	-	-	-	-	795	795	-	390	390	-
Stage 2	-	-	-	-	-	-	445	445	-	915	895	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1244	-	-	967	-	-	152	175	575	136	163	784
Stage 1	-	-	-	-	-	-	381	399	-	630	604	-
Stage 2	-	-	-	-	-	-	592	575	-	324	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1244	-	-	967	-	-	~ 74	143	575	~ 46	133	784
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 74	143	-	~ 46	133	-
Stage 1	-	-	-	-	-	-	335	351	-	554	561	-
Stage 2	-	-	-	-	-	-	456	534	-	158	313	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	1.7	202.8	257.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	100	575	1244	-	-	967	-	-	46	191
HCM Lane V/C Ratio	1.6	0.27	0.121	-	-	0.072	-	-	1.739	0.576
HCM Control Delay (s)	$ 386.1	13.6	8.3	-	-	9	-	-	$ 547.7	46.7
HCM Lane LOS	F	B	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	12.4	1.1	0.4	-	-	0.2	-	-	8	3.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	570	35	70	370	0	40	0	155	0	20	5
Future Volume (vph)	25	570	35	70	370	0	40	0	155	0	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

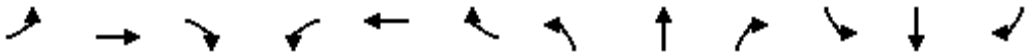
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	570	35	70	370	0	40	0	155	0	20	5
Future Vol, veh/h	25	570	35	70	370	0	40	0	155	0	20	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	25	570	35	70	370	0	40	0	155	0	20	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	609	0	0	1173	1153	592	1226	1170	379
Stage 1	-	-	-	-	-	-	642	642	-	511	511	-
Stage 2	-	-	-	-	-	-	531	511	-	715	659	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1177	-	-	960	-	-	167	195	501	116	147	546
Stage 1	-	-	-	-	-	-	458	464	-	443	444	-
Stage 2	-	-	-	-	-	-	526	532	-	334	374	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	956	-	-	135	176	499	74	133	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	135	176	-	74	133	-
Stage 1	-	-	-	-	-	-	447	452	-	433	411	-
Stage 2	-	-	-	-	-	-	456	493	-	225	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.4	21	32.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	135	499	1176	-	-	956	-	-	157
HCM Lane V/C Ratio	0.296	0.311	0.021	-	-	0.073	-	-	0.159
HCM Control Delay (s)	42.5	15.4	8.1	-	-	9.1	-	-	32.2
HCM Lane LOS	E	C	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.2	1.3	0.1	-	-	0.2	-	-	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	510	100	90	390	30	225	40	25	25	25	35
Future Volume (vph)	40	510	100	90	390	30	225	40	25	25	25	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	95.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	510	100	90	390	30	225	40	25	25	25	35
Future Vol, veh/h	40	510	100	90	390	30	225	40	25	25	25	35
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	40	510	100	90	390	30	225	40	25	25	25	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	421	0	0	612	0	0	1258	1243	563	1260	1278	407
Stage 1	-	-	-	-	-	-	642	642	-	586	586	-
Stage 2	-	-	-	-	-	-	616	601	-	674	692	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	1122	-	-	967	-	-	~ 146	172	520	149	168	648
Stage 1	-	-	-	-	-	-	458	464	-	500	500	-
Stage 2	-	-	-	-	-	-	473	485	-	448	448	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1121	-	-	965	-	-	~ 104	142	519	97	139	647
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 104	142	-	97	139	-
Stage 1	-	-	-	-	-	-	432	438	-	472	439	-
Stage 2	-	-	-	-	-	-	370	425	-	366	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.6	$ 489.1	44.4
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	104	197	1121	-	-	965	-	-	173
HCM Lane V/C Ratio	2.163	0.33	0.036	-	-	0.093	-	-	0.491
HCM Control Delay (s)	$ 621.1	32	8.3	0	-	9.1	0	-	44.4
HCM Lane LOS	F	D	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	19.5	1.4	0.1	-	-	0.3	-	-	2.4

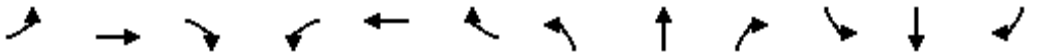
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	540	125	70	340	145	85	85	120	25	170	80
Future Volume (vph)	60	540	125	70	340	145	85	85	120	25	170	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 86.7	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

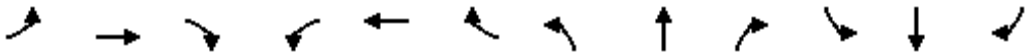




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	540	125	70	340	145	85	85	120	25	170	80
Future Volume (veh/h)	60	540	125	70	340	145	85	85	120	25	170	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	60	540	125	70	340	145	85	85	120	25	170	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	541	940	218	416	802	342	209	168	237	237	289	136
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	895	1444	334	764	1232	525	1086	673	951	1130	1159	545
Grp Volume(v), veh/h	60	0	665	70	0	485	85	0	205	25	0	250
Grp Sat Flow(s),veh/h/ln	895	0	1778	764	0	1758	1086	0	1624	1130	0	1704
Q Serve(g_s), s	3.2	0.0	19.3	5.2	0.0	12.3	6.9	0.0	10.1	1.8	0.0	12.0
Cycle Q Clear(g_c), s	15.5	0.0	19.3	24.5	0.0	12.3	18.9	0.0	10.1	11.9	0.0	12.0
Prop In Lane	1.00		0.19	1.00		0.30	1.00		0.59	1.00		0.32
Lane Grp Cap(c), veh/h	541	0	1158	416	0	1144	209	0	405	237	0	425
V/C Ratio(X)	0.11	0.00	0.57	0.17	0.00	0.42	0.41	0.00	0.51	0.11	0.00	0.59
Avail Cap(c_a), veh/h	541	0	1158	416	0	1144	293	0	532	326	0	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.5	0.0	9.0	15.9	0.0	7.8	38.9	0.0	29.9	35.0	0.0	30.6
Incr Delay (d2), s/veh	0.4	0.0	2.1	0.9	0.0	1.2	1.8	0.0	1.4	0.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	7.4	1.0	0.0	4.6	1.9	0.0	4.1	0.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	11.1	16.7	0.0	8.9	40.7	0.0	31.3	35.2	0.0	31.9
LnGrp LOS	B	A	B	B	A	A	D	A	C	D	A	C
Approach Vol, veh/h		725			555			290			275	
Approach Delay, s/veh		11.2			9.9			34.0			32.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		27.8		65.0		27.8				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		60.4		30.4		60.4		30.4				
Max Q Clear Time (g_c+I1), s		21.3		20.9		26.5		14.0				
Green Ext Time (p_c), s		6.4		1.5		4.4		1.5				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	345	190	20	330	45	200	25	5	25	25	40
Future Volume (vph)	20	345	190	20	330	45	200	25	5	25	25	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	345	190	20	330	45	200	25	5	25	25	40
Future Vol, veh/h	20	345	190	20	330	45	200	25	5	25	25	40
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	20	345	190	20	330	45	200	25	5	25	25	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	377	0	0	537	0	0	909	899	444	892	972	357
Stage 1	-	-	-	-	-	-	482	482	-	395	395	-
Stage 2	-	-	-	-	-	-	427	417	-	497	577	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1171	-	-	1031	-	-	255	278	612	265	254	692
Stage 1	-	-	-	-	-	-	564	552	-	634	608	-
Stage 2	-	-	-	-	-	-	604	590	-	559	505	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1169	-	-	1029	-	-	212	263	610	234	241	689
Mov Cap-2 Maneuver	-	-	-	-	-	-	212	263	-	234	241	-
Stage 1	-	-	-	-	-	-	549	537	-	617	592	-
Stage 2	-	-	-	-	-	-	530	574	-	514	491	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	85.1	19.6
HCM LOS			F	C

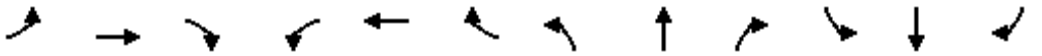
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	212	291	1169	-	-	1029	-	-	335
HCM Lane V/C Ratio	0.943	0.103	0.017	-	-	0.019	-	-	0.269
HCM Control Delay (s)	95.1	18.8	8.1	0	-	8.6	0	-	19.6
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	7.9	0.3	0.1	-	-	0.1	-	-	1.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	480	200	40	315	50	200	115	35	45	160	10
Future Volume (vph)	10	480	200	40	315	50	200	115	35	45	160	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





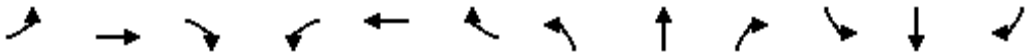
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	480	200	40	315	50	200	115	35	45	160	10
Future Volume (veh/h)	10	480	200	40	315	50	200	115	35	45	160	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	480	200	40	315	50	200	115	35	45	160	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	701	675	281	328	851	135	316	330	101	326	405	25
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	998	1113	464	754	1402	223	1186	1209	368	1169	1481	93
Grp Volume(v), veh/h	10	0	680	40	0	365	200	0	150	45	0	170
Grp Sat Flow(s),veh/h/ln	998	0	1576	754	0	1625	1186	0	1577	1169	0	1573
Q Serve(g_s), s	0.3	0.0	22.4	2.1	0.0	0.0	12.4	0.0	5.7	2.4	0.0	6.6
Cycle Q Clear(g_c), s	0.3	0.0	22.4	24.5	0.0	0.0	19.0	0.0	5.7	8.1	0.0	6.6
Prop In Lane	1.00		0.29	1.00		0.14	1.00		0.23	1.00		0.06
Lane Grp Cap(c), veh/h	701	0	956	328	0	986	316	0	431	326	0	430
V/C Ratio(X)	0.01	0.00	0.71	0.12	0.00	0.37	0.63	0.00	0.35	0.14	0.00	0.40
Avail Cap(c_a), veh/h	701	0	956	328	0	986	316	0	431	326	0	430
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.00	0.84	0.97	0.00	0.97	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	0.0	10.2	6.0	0.0	0.0	29.9	0.0	21.9	25.2	0.0	22.2
Incr Delay (d2), s/veh	0.0	0.0	3.8	0.7	0.0	1.0	3.1	0.0	0.2	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	7.6	0.3	0.0	0.3	3.7	0.0	2.1	0.7	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	14.0	6.8	0.0	1.0	33.1	0.0	22.1	25.2	0.0	22.4
LnGrp LOS	A	A	B	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		690			405			350			215	
Approach Delay, s/veh		13.9			1.6			28.4			23.0	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		25.0		50.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		24.4		10.1		26.5		21.0				
Green Ext Time (p_c), s		5.4		0.5		2.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			15.1									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	245	110	15	335	20	55	35	25	5	15	35
Future Volume (vph)	40	245	110	15	335	20	55	35	25	5	15	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

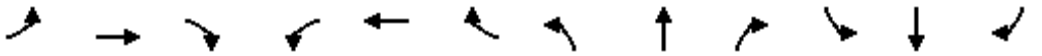
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	245	110	15	335	20	55	35	25	5	15	35
Future Vol, veh/h	40	245	110	15	335	20	55	35	25	5	15	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	40	245	110	15	335	20	55	35	25	5	15	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.8	12.9	10.3	9.2
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	10%	4%	9%
Vol Thru, %	30%	62%	91%	27%
Vol Right, %	22%	28%	5%	64%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	395	370	55
LT Vol	55	40	15	5
Through Vol	35	245	335	15
RT Vol	25	110	20	35
Lane Flow Rate	115	395	370	55
Geometry Grp	1	1	1	1
Degree of Util (X)	0.188	0.515	0.507	0.086
Departure Headway (Hd)	5.886	4.803	4.934	5.616
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	612	754	736	639
Service Time	3.906	2.803	2.934	3.64
HCM Lane V/C Ratio	0.188	0.524	0.503	0.086
HCM Control Delay	10.3	12.8	12.9	9.2
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	0.7	3	2.9	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	480	30	30	335	55	15	10	30	100	20	45
Future Volume (vph)	45	480	30	30	335	55	15	10	30	100	20	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1626	0	1770	1635	0	0	1791	1411	0	1806	1439
Flt Permitted	0.522			0.447				0.810			0.744	
Satd. Flow (perm)	949	1626	0	828	1635	0	0	1490	1367	0	1387	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			20				30			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	510	0	30	390	0	0	25	30	0	120	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	56.9	56.9		56.9	56.9			12.5	56.9		12.5	56.9
Actuated g/C Ratio	0.76	0.76		0.76	0.76			0.17	0.76		0.17	0.76
v/c Ratio	0.06	0.41		0.05	0.31			0.10	0.03		0.52	0.04
Control Delay	5.6	6.2		5.1	5.4			24.2	2.4		35.0	2.1
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.6	6.2		5.1	5.4			24.2	2.4		35.0	2.1
LOS	A	A		A	A			C	A		D	A
Approach Delay		6.1			5.4			12.3			26.1	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	

Intersection Signal Delay: 8.9 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	300	15	0	0	345
Future Volume (vph)	20	300	15	0	0	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	300	15	0	0	345
Future Vol, veh/h	20	300	15	0	0	345
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	20	300	15	0	0	345

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	360	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	629	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	706	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	629	1050	-	-	-	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	706	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1008	-
HCM Lane V/C Ratio	-	0.317	-
HCM Control Delay (s)	-	10.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	315	75
Future Volume (vph)	0	0	10	0	315	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

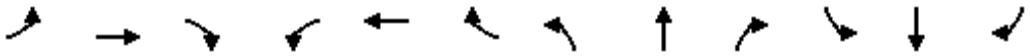
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	315	75
Future Vol, veh/h	0	0	10	0	315	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	315	75

Major/Minor	Minor2		Major2	
Conflicting Flow All	705	75	0	0
Stage 1	705	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	363	992	-	-
Stage 1	442	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	992	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	45	100	10	10	10	70	405	15	10	330	25
Future Volume (vph)	25	45	100	10	10	10	70	405	15	10	330	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

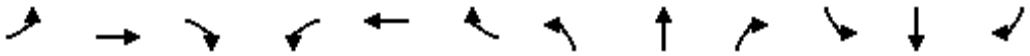
Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	45	100	10	10	10	70	405	15	10	330	25
Future Vol, veh/h	25	45	100	10	10	10	70	405	15	10	330	25
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	25	45	100	10	10	10	70	405	15	10	330	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	969	949	371	1016	954	456	368	0	0	433	0	0
Stage 1	376	376	-	566	566	-	-	-	-	-	-	-
Stage 2	593	573	-	450	388	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	235	262	679	218	261	609	1191	-	-	1116	-	-
Stage 1	649	620	-	513	511	-	-	-	-	-	-	-
Stage 2	496	507	-	592	612	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	200	233	661	143	232	584	1176	-	-	1102	-	-
Mov Cap-2 Maneuver	200	233	-	143	232	-	-	-	-	-	-	-
Stage 1	591	606	-	467	466	-	-	-	-	-	-	-
Stage 2	427	462	-	453	598	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.4	23	1.2	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1176	-	-	362	230	1102	-	-
HCM Lane V/C Ratio	0.06	-	-	0.47	0.13	0.009	-	-
HCM Control Delay (s)	8.3	0	-	23.4	23	8.3	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.4	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	15	20	0	10	60	295	20	0	215	5
Future Volume (vph)	5	0	15	20	0	10	60	295	20	0	215	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

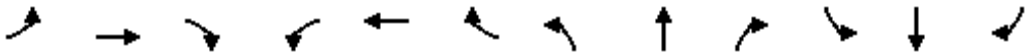
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	15	20	0	10	60	295	20	0	215	5
Future Vol, veh/h	5	0	15	20	0	10	60	295	20	0	215	5
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	5	0	15	20	0	10	60	295	20	0	215	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	648	653	218	650	645	305	220	0	0	315	0	0
Stage 1	218	218	-	425	425	-	-	-	-	-	-	-
Stage 2	430	435	-	225	220	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	362	367	783	385	393	740	1343	-	-	1234	-	-
Stage 1	749	694	-	611	590	-	-	-	-	-	-	-
Stage 2	573	554	-	782	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	342	347	783	362	372	740	1343	-	-	1234	-	-
Mov Cap-2 Maneuver	342	347	-	362	372	-	-	-	-	-	-	-
Stage 1	709	694	-	578	558	-	-	-	-	-	-	-
Stage 2	535	524	-	767	725	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	13.9	1.2	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1343	-	-	592	436	1234	-	-
HCM Lane V/C Ratio	0.045	-	-	0.034	0.069	-	-	-
HCM Control Delay (s)	7.8	0	-	11.3	13.9	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	105	5	30	170	35	0	25	30	20	0	25
Future Volume (vph)	20	105	5	30	170	35	0	25	30	20	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.2

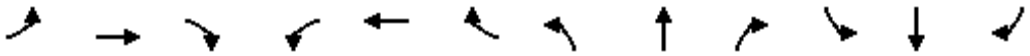
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	105	5	30	170	35	0	25	30	20	0	25
Future Vol, veh/h	20	105	5	30	170	35	0	25	30	20	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	105	5	30	170	35	0	25	30	20	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	205	0	0	110	0	0	408	413	108	423	398	188
Stage 1	-	-	-	-	-	-	148	148	-	248	248	-
Stage 2	-	-	-	-	-	-	260	265	-	175	150	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1349	-	-	1493	-	-	538	516	922	545	543	859
Stage 1	-	-	-	-	-	-	834	758	-	760	705	-
Stage 2	-	-	-	-	-	-	725	673	-	832	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1349	-	-	1493	-	-	507	496	922	492	522	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	496	-	492	522	-
Stage 1	-	-	-	-	-	-	821	746	-	748	689	-
Stage 2	-	-	-	-	-	-	688	658	-	766	765	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	1	10.9	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	663	1349	-	-	1493	-	-	645
HCM Lane V/C Ratio	0.083	0.015	-	-	0.02	-	-	0.07
HCM Control Delay (s)	10.9	7.7	0	-	7.5	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

2031 Baseline Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	5	5	0	0	0	0	15	5	205	20	0
Future Volume (vph)	145	5	5	0	0	0	0	15	5	205	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

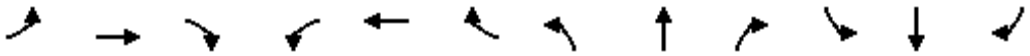
Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	145	5	5	0	0	0	0	15	5	205	20	0
Future Vol, veh/h	145	5	5	0	0	0	0	15	5	205	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	145	5	5	0	0	0	0	15	5	205	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	448	450	20	-	0	0	20	0	0
Stage 1	430	430	-	-	-	-	-	-	-
Stage 2	18	20	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	570	506	1061	0	-	-	1609	-	0
Stage 1	658	585	-	0	-	-	-	-	0
Stage 2	1007	881	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	496	0	1061	-	-	-	1609	-	-
Mov Cap-2 Maneuver	496	0	-	-	-	-	-	-	-
Stage 1	658	0	-	-	-	-	-	-	-
Stage 2	877	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.3	0	6.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	505	1609	-
HCM Lane V/C Ratio	-	-	0.307	0.127	-
HCM Control Delay (s)	-	-	15.3	7.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	5	275	5	155	0	0	200	900
Future Volume (vph)	0	0	0	25	5	275	5	155	0	0	200	900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

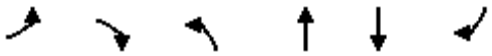
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	5	275	5	155	0	0	200	900
Future Vol, veh/h	0	0	0	25	5	275	5	155	0	0	200	900
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	25	5	275	5	155	0	0	200	900

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	815	1265	155	1100	0	-	-	-	0
Stage 1	165	165	-	-	-	-	-	-	-
Stage 2	650	1100	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	350	171	896	642	-	0	0	-	-
Stage 1	869	766	-	-	-	0	0	-	-
Stage 2	523	290	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	347	0	896	642	-	-	-	-	-
Mov Cap-2 Maneuver	347	0	-	-	-	-	-	-	-
Stage 1	861	0	-	-	-	-	-	-	-
Stage 2	523	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	642	-	792	-	-
HCM Lane V/C Ratio	0.008	-	0.385	-	-
HCM Control Delay (s)	10.7	0	12.4	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	70	30	400	1030	25
Future Volume (vph)	20	70	30	400	1030	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

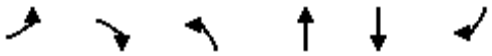
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	70	30	400	1030	25
Future Vol, veh/h	20	70	30	400	1030	25
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	20	70	30	400	1030	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1503	1043	1055	0	-	0
Stage 1	1043	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	132	276	668	-	-	-
Stage 1	336	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	126	276	668	-	-	-
Mov Cap-2 Maneuver	126	-	-	-	-	-
Stage 1	321	-	-	-	-	-
Stage 2	631	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.7	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	668	-	218	-	-
HCM Lane V/C Ratio	0.045	-	0.413	-	-
HCM Control Delay (s)	10.6	-	32.7	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	195	270	150	860	75
Future Volume (vph)	75	195	270	150	860	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

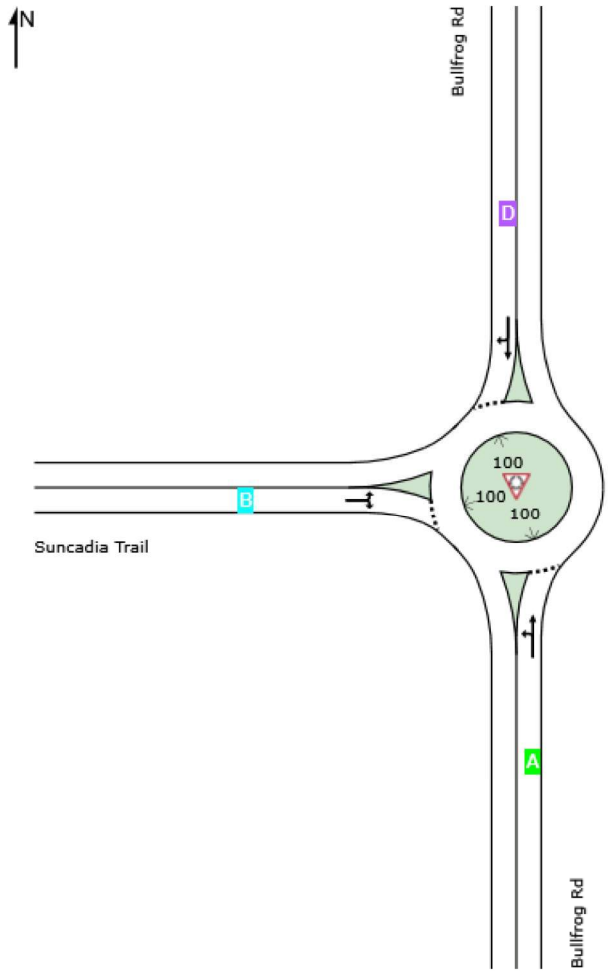
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2031 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	D	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2031 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

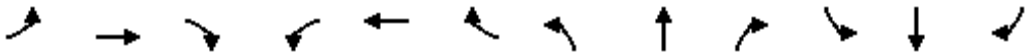
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	420	0.6	1271	0.331	100	5.9	LOS A	2.0	49.2	Full	1600	0.0	0.0
Approach	420	0.6		0.331		5.9	LOS A	2.0	49.2				
North: Bullfrog Rd													
Lane 1[d]	935	1.0	1036	0.903	100	29.6	LOS D	33.7	848.3	Full	1600	0.0	0.0
Approach	935	1.0		0.903		29.6	LOS D	33.7	848.3				
West: Suncadia Trail													
Lane 1[d]	270	0.0	569	0.475	100	14.3	LOS B	2.7	67.4	Full	1600	0.0	0.0
Approach	270	0.0		0.475		14.3	LOS B	2.7	67.4				
Intersection	1625	0.7		0.903		20.9	LOS C	33.7	848.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	20	0	0	0	15	210	0	0	915	30
Future Volume (vph)	10	0	20	0	0	0	15	210	0	0	915	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	20	0	0	0	15	210	0	0	915	30
Future Vol, veh/h	10	0	20	0	0	0	15	210	0	0	915	30
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	10	0	20	0	0	0	15	210	0	0	915	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1170	1170	930	1180	1185	210	945	0	0	210	0	0
Stage 1	930	930	-	240	240	-	-	-	-	-	-	-
Stage 2	240	240	-	940	945	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	166	189	317	169	191	835	734	-	-	1367	-	-
Stage 1	314	339	-	768	711	-	-	-	-	-	-	-
Stage 2	752	698	-	319	343	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	163	185	317	155	187	835	734	-	-	1367	-	-
Mov Cap-2 Maneuver	163	185	-	155	187	-	-	-	-	-	-	-
Stage 1	307	339	-	750	695	-	-	-	-	-	-	-
Stage 2	735	682	-	299	343	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.1	0	0.7	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	734	-	-	241	-	1367	-	-
HCM Lane V/C Ratio	0.02	-	-	0.124	-	-	-	-
HCM Control Delay (s)	10	0	-	22.1	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	685	345	120	100	345	260
Future Volume (vph)	685	345	120	100	345	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Confl. Peds. (#/hr)	1					
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

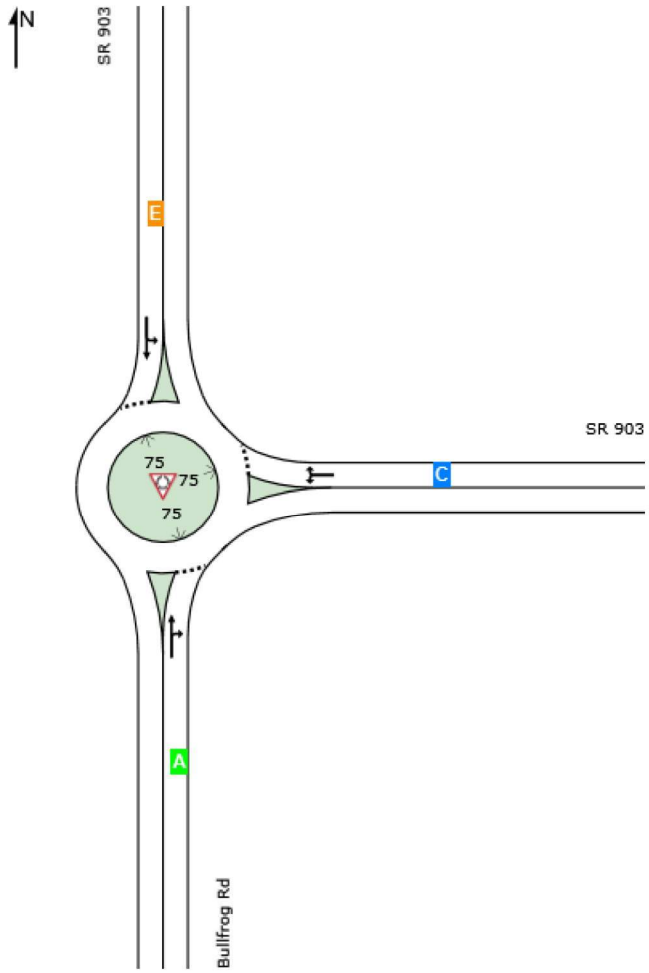
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2031 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	C	E	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2031 Baseline - Sunday PM Peak Hour]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

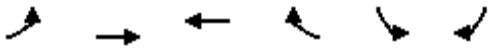
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	220	0.0	969	0.227	100	5.9	LOS A	1.1	26.9	Full	1600	0.0	0.0
Approach	220	0.0		0.227		5.9	LOS A	1.1	26.9				
East: SR 903													
Lane 1[d]	1030	1.1	1208	0.853	100	21.5	LOS C	22.7	572.2	Full	1600	0.0	0.0
Approach	1030	1.1		0.853		21.5	LOS C	22.7	572.2				
North: SR 903													
Lane 1[d]	605	0.3	679	0.891	100	37.5	LOS E	15.6	390.9	Full	1600	0.0	0.0
Approach	605	0.3		0.891		37.5	LOS E	15.6	390.9				
Intersection	1855	0.7		0.891		24.9	LOS C	22.7	572.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	415	1100	30	10	10
Future Volume (vph)	5	415	1100	30	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

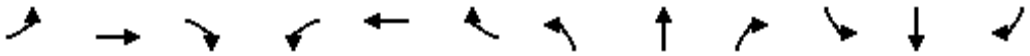
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	415	1100	30	10	10
Future Vol, veh/h	5	415	1100	30	10	10
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	5	415	1100	30	10	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1135	0	-	0	1545	1120
Stage 1	-	-	-	-	1120	-
Stage 2	-	-	-	-	425	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	619	-	-	-	127	254
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	664	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	616	-	-	-	124	253
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	661	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	29.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	616	-	-	-	166
HCM Lane V/C Ratio	0.008	-	-	-	0.12
HCM Control Delay (s)	10.9	0	-	-	29.6
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	370	50	20	1000	5	95	0	70	10	0	0
Future Volume (vph)	0	370	50	20	1000	5	95	0	70	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

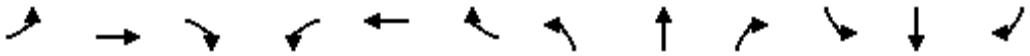
Intersection	
Int Delay, s/veh	13.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	370	50	20	1000	5	95	0	70	10	0	0
Future Vol, veh/h	0	370	50	20	1000	5	95	0	70	10	0	0
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	0	370	50	20	1000	5	95	0	70	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1005	0	0	423	0	0	1441	1443	398	1473	1466	1003
Stage 1	-	-	-	-	-	-	398	398	-	1043	1043	-
Stage 2	-	-	-	-	-	-	1043	1045	-	430	423	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	693	-	-	1142	-	-	110	131	649	106	129	297
Stage 1	-	-	-	-	-	-	626	601	-	280	309	-
Stage 2	-	-	-	-	-	-	276	304	-	607	591	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	693	-	-	1139	-	-	106	125	647	92	123	297
Mov Cap-2 Maneuver	-	-	-	-	-	-	106	125	-	92	123	-
Stage 1	-	-	-	-	-	-	624	599	-	280	297	-
Stage 2	-	-	-	-	-	-	265	292	-	541	589	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	128	48.8
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	164	693	-	-	1139	-	-	92
HCM Lane V/C Ratio	1.006	-	-	-	0.018	-	-	0.109
HCM Control Delay (s)	128	0	-	-	8.2	0	-	48.8
HCM Lane LOS	F	A	-	-	A	A	-	E
HCM 95th %tile Q(veh)	7.9	0	-	-	0.1	-	-	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	425	40	20	1010	5	70	15	30	10	0	0
Future Volume (vph)	20	425	40	20	1010	5	70	15	30	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	425	40	20	1010	5	70	15	30	10	0	0
Future Vol, veh/h	20	425	40	20	1010	5	70	15	30	10	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	20	425	40	20	1010	5	70	15	30	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1015	0	0	469	0	0	1542	1544	449	1561	1562	1013
Stage 1	-	-	-	-	-	-	489	489	-	1053	1053	-
Stage 2	-	-	-	-	-	-	1053	1055	-	508	509	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	683	-	-	1098	-	-	94	115	610	92	113	293
Stage 1	-	-	-	-	-	-	561	549	-	276	306	-
Stage 2	-	-	-	-	-	-	274	302	-	551	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	1094	-	-	88	105	608	73	104	293
Mov Cap-2 Maneuver	-	-	-	-	-	-	88	105	-	73	104	-
Stage 1	-	-	-	-	-	-	536	525	-	265	293	-
Stage 2	-	-	-	-	-	-	262	289	-	488	517	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	151.8	62
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	116	683	-	-	1094	-	-	73
HCM Lane V/C Ratio	0.991	0.029	-	-	0.018	-	-	0.137
HCM Control Delay (s)	151.8	10.4	0	-	8.4	0	-	62
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	6.5	0.1	-	-	0.1	-	-	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	60	10	20	155
Future Volume (vph)	25	15	60	10	20	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

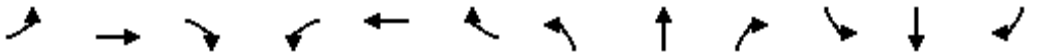
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	60	10	20	155
Future Vol, veh/h	25	15	60	10	20	155
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	60	10	20	155
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	7.9	7.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	11%	0%	86%
Vol Thru, %	0%	62%	14%
Vol Right, %	89%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	175	40	70
LT Vol	20	0	60
Through Vol	0	25	10
RT Vol	155	15	0
Lane Flow Rate	175	40	70
Geometry Grp	1	1	1
Degree of Util (X)	0.177	0.046	0.086
Departure Headway (Hd)	3.649	4.123	4.412
Convergence, Y/N	Yes	Yes	Yes
Cap	971	860	808
Service Time	1.714	2.187	2.463
HCM Lane V/C Ratio	0.18	0.047	0.087
HCM Control Delay	7.5	7.4	7.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	225	120	65	350	105	70	65	110	50	40	35
Future Volume (vph)	95	225	120	65	350	105	70	65	110	50	40	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

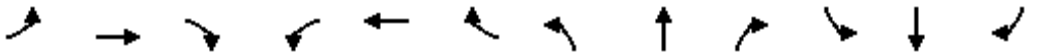
Intersection	
Int Delay, s/veh	13.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	225	120	65	350	105	70	65	110	50	40	35
Future Vol, veh/h	95	225	120	65	350	105	70	65	110	50	40	35
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	95	225	120	65	350	105	70	65	110	50	40	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	455	0	0	345	0	0	1046	1060	285	1096	1068	404
Stage 1	-	-	-	-	-	-	475	475	-	533	533	-
Stage 2	-	-	-	-	-	-	571	585	-	563	535	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1106	-	-	1214	-	-	206	224	754	193	223	651
Stage 1	-	-	-	-	-	-	570	557	-	534	528	-
Stage 2	-	-	-	-	-	-	506	498	-	514	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1106	-	-	1214	-	-	147	194	754	110	193	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	194	-	110	193	-
Stage 1	-	-	-	-	-	-	521	509	-	488	499	-
Stage 2	-	-	-	-	-	-	416	471	-	350	482	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	1	50.6	38.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	166	754	1106	-	-	1214	-	-	110	287
HCM Lane V/C Ratio	0.813	0.146	0.086	-	-	0.054	-	-	0.455	0.261
HCM Control Delay (s)	83.2	10.6	8.6	-	-	8.1	-	-	62.5	21.9
HCM Lane LOS	F	B	A	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	5.4	0.5	0.3	-	-	0.2	-	-	2	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	365	5	60	505	40	20	30	65	5	50	50
Future Volume (vph)	75	365	5	60	505	40	20	30	65	5	50	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

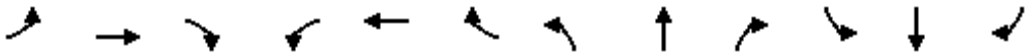
Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	365	5	60	505	40	20	30	65	5	50	50
Future Vol, veh/h	75	365	5	60	505	40	20	30	65	5	50	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	365	5	60	505	40	20	30	65	5	50	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	372	0	0	1215	1187	370	1212	1169	527
Stage 1	-	-	-	-	-	-	520	520	-	647	647	-
Stage 2	-	-	-	-	-	-	695	667	-	565	522	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	1027	-	-	1186	-	-	157	187	671	158	192	549
Stage 1	-	-	-	-	-	-	536	529	-	458	465	-
Stage 2	-	-	-	-	-	-	429	454	-	508	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1184	-	-	100	164	670	111	168	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	100	164	-	111	168	-
Stage 1	-	-	-	-	-	-	496	489	-	424	440	-
Stage 2	-	-	-	-	-	-	328	430	-	399	489	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	27.3	30.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	131	670	1025	-	-	1184	-	-	242
HCM Lane V/C Ratio	0.382	0.097	0.073	-	-	0.051	-	-	0.434
HCM Control Delay (s)	48.5	11	8.8	-	-	8.2	-	-	30.8
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.6	0.3	0.2	-	-	0.2	-	-	2.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	315	70	110	700	20	345	15	15	5	15	20
Future Volume (vph)	15	315	70	110	700	20	345	15	15	5	15	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	258.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	315	70	110	700	20	345	15	15	5	15	20
Future Vol, veh/h	15	315	70	110	700	20	345	15	15	5	15	20
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	15	315	70	110	700	20	345	15	15	5	15	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	728	0	0	388	0	0	1335	1331	355	1335	1356	722
Stage 1	-	-	-	-	-	-	383	383	-	938	938	-
Stage 2	-	-	-	-	-	-	952	948	-	397	418	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	871	-	-	1176	-	-	~ 131	155	691	132	151	430
Stage 1	-	-	-	-	-	-	642	614	-	320	346	-
Stage 2	-	-	-	-	-	-	~ 313	341	-	633	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	864	-	-	1173	-	-	~ 98	126	688	101	123	425
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 98	126	-	101	123	-
Stage 1	-	-	-	-	-	-	626	599	-	311	289	-
Stage 2	-	-	-	-	-	-	~ 237	285	-	589	579	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.1	$ 1129.1	30.1
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	98	213	864	-	-	1173	-	-	183
HCM Lane V/C Ratio	3.52	0.141	0.017	-	-	0.094	-	-	0.219
HCM Control Delay (s)	$ 1225.1	24.7	9.2	0	-	8.4	0	-	30.1
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	34.6	0.5	0.1	-	-	0.3	-	-	0.8

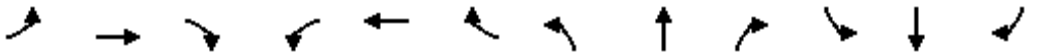
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	95	65	490	300	80	75	85	20	130	55
Future Volume (vph)	15	320	95	65	490	300	80	75	85	20	130	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 90.8	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





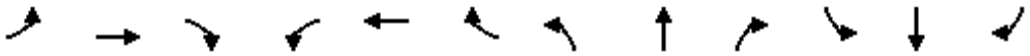
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	95	65	490	300	80	75	85	20	130	55
Future Volume (veh/h)	15	320	95	65	490	300	80	75	85	20	130	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	95	65	490	300	80	75	85	20	130	55
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	396	978	290	678	767	469	200	156	177	215	244	103
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	686	1385	411	971	1086	665	1205	804	911	1232	1255	531
Grp Volume(v), veh/h	15	0	415	65	0	790	80	0	160	20	0	185
Grp Sat Flow(s),veh/h/ln	686	0	1796	971	0	1750	1205	0	1716	1232	0	1786
Q Serve(g_s), s	1.1	0.0	8.2	2.5	0.0	22.4	5.9	0.0	7.7	1.4	0.0	8.6
Cycle Q Clear(g_c), s	23.5	0.0	8.2	10.7	0.0	22.4	14.5	0.0	7.7	9.0	0.0	8.6
Prop In Lane	1.00		0.23	1.00		0.38	1.00		0.53	1.00		0.30
Lane Grp Cap(c), veh/h	396	0	1268	678	0	1236	200	0	334	215	0	347
V/C Ratio(X)	0.04	0.00	0.33	0.10	0.00	0.64	0.40	0.00	0.48	0.09	0.00	0.53
Avail Cap(c_a), veh/h	396	0	1268	678	0	1236	296	0	471	314	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	5.2	7.2	0.0	7.3	40.1	0.0	33.1	37.2	0.0	33.5
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.3	0.0	2.5	1.8	0.0	1.5	0.3	0.0	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	0.2	0.0	2.9	0.6	0.0	7.9	1.9	0.0	3.3	0.4	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	5.9	7.5	0.0	9.8	41.9	0.0	34.7	37.4	0.0	35.3
LnGrp LOS	B	A	A	A	A	A	D	A	C	D	A	D
Approach Vol, veh/h		430			855			240			205	
Approach Delay, s/veh		6.2			9.6			37.1			35.5	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	70.0	22.6	70.0	22.6
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	65.4	25.4	65.4	25.4
Max Q Clear Time (g_c+I1), s	25.5	16.5	24.4	11.0
Green Ext Time (p_c), s	3.3	1.1	8.5	1.3

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	230	105	10	300	30	500	20	10	25	25	15
Future Volume (vph)	20	230	105	10	300	30	500	20	10	25	25	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	108.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	230	105	10	300	30	500	20	10	25	25	15
Future Vol, veh/h	20	230	105	10	300	30	500	20	10	25	25	15
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	20	230	105	10	300	30	500	20	10	25	25	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	330	0	0	336	0	0	679	674	285	674	711	315
Stage 1	-	-	-	-	-	-	324	324	-	335	335	-
Stage 2	-	-	-	-	-	-	355	350	-	339	376	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1229	-	-	1229	-	-	~ 366	376	754	360	351	712
Stage 1	-	-	-	-	-	-	688	650	-	667	632	-
Stage 2	-	-	-	-	-	-	662	633	-	663	606	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1229	-	-	1228	-	-	~ 330	364	753	332	340	712
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 330	364	-	332	340	-
Stage 1	-	-	-	-	-	-	674	636	-	654	626	-
Stage 2	-	-	-	-	-	-	616	627	-	620	593	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	261.4	16.3
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	330	440	1229	-	-	1228	-	-	383
HCM Lane V/C Ratio	1.515	0.068	0.016	-	-	0.008	-	-	0.17
HCM Control Delay (s)	276.3	13.8	8	0	-	8	0	-	16.3
HCM Lane LOS	F	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	28	0.2	0.1	-	-	0	-	-	0.6

Notes

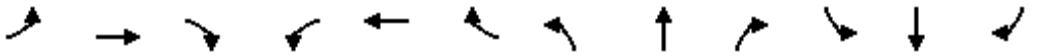
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	280	115	35	440	270	365	325	35	20	95	10
Future Volume (vph)	15	280	115	35	440	270	365	325	35	20	95	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

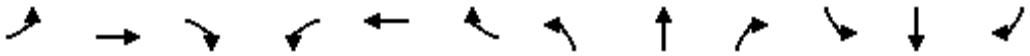




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	280	115	35	440	270	365	325	35	20	95	10
Future Volume (veh/h)	15	280	115	35	440	270	365	325	35	20	95	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	280	115	35	440	270	365	325	35	20	95	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	518	672	276	538	582	357	409	456	49	193	453	48
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	736	1130	464	994	980	601	1276	1491	161	1010	1483	156
Grp Volume(v), veh/h	15	0	395	35	0	710	365	0	360	20	0	105
Grp Sat Flow(s),veh/h/ln	736	0	1594	994	0	1581	1276	0	1652	1010	0	1639
Q Serve(g_s), s	0.8	0.0	12.0	0.8	0.0	0.0	23.2	0.0	17.4	1.6	0.0	4.3
Cycle Q Clear(g_c), s	0.8	0.0	12.0	12.8	0.0	0.0	27.5	0.0	17.4	19.0	0.0	4.3
Prop In Lane	1.00		0.29	1.00		0.38	1.00		0.10	1.00		0.10
Lane Grp Cap(c), veh/h	518	0	947	538	0	940	409	0	505	193	0	501
V/C Ratio(X)	0.03	0.00	0.42	0.07	0.00	0.76	0.89	0.00	0.71	0.10	0.00	0.21
Avail Cap(c_a), veh/h	518	0	947	538	0	940	409	0	505	193	0	501
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.79	0.00	0.79	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	9.8	1.4	0.0	0.0	34.5	0.0	27.7	36.2	0.0	23.2
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.2	0.0	4.5	20.5	0.0	4.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.3	0.1	0.0	1.2	10.4	0.0	7.3	0.4	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.1	1.6	0.0	4.5	55.0	0.0	31.8	36.3	0.0	23.3
LnGrp LOS	A	A	B	A	A	A	D	A	C	D	A	C
Approach Vol, veh/h		410			745			725			125	
Approach Delay, s/veh		11.0			4.4			43.5			25.3	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		14.0		21.0		14.8		29.5				
Green Ext Time (p_c), s		3.1		0.2		6.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			21.2									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	190	60	10	300	20	55	25	10	5	20	15
Future Volume (vph)	20	190	60	10	300	20	55	25	10	5	20	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

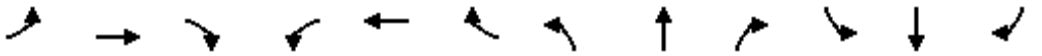
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	190	60	10	300	20	55	25	10	5	20	15
Future Vol, veh/h	20	190	60	10	300	20	55	25	10	5	20	15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	20	190	60	10	300	20	55	25	10	5	20	15
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	10.8	9.2	8.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	61%	7%	3%	12%
Vol Thru, %	28%	70%	91%	50%
Vol Right, %	11%	22%	6%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	270	330	40
LT Vol	55	20	10	5
Through Vol	25	190	300	20
RT Vol	10	60	20	15
Lane Flow Rate	90	270	330	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.134	0.339	0.415	0.058
Departure Headway (Hd)	5.344	4.522	4.527	5.177
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	667	791	792	686
Service Time	3.412	2.569	2.571	3.252
HCM Lane V/C Ratio	0.135	0.341	0.417	0.058
HCM Control Delay	9.2	9.9	10.8	8.6
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.5	1.5	2.1	0.2

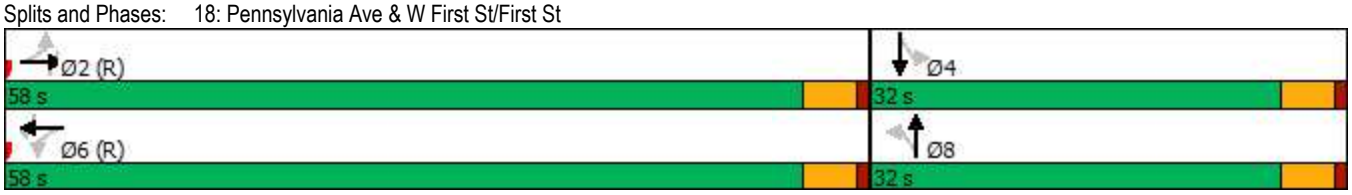


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	285	20	25	720	50	5	15	20	75	15	15
Future Volume (vph)	25	285	20	25	720	50	5	15	20	75	15	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1656	0	1770	1657	0	0	1877	1454	0	1824	1454
Flt Permitted	0.316			0.574				0.931			0.748	
Satd. Flow (perm)	588	1656	0	1061	1657	0	0	1766	1416	0	1415	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			7				20			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	305	0	25	770	0	0	20	20	0	90	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	71.4	71.4		71.4	71.4			13.0	71.4		13.0	71.4
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.14	0.79		0.14	0.79
v/c Ratio	0.05	0.23		0.03	0.59			0.08	0.02		0.44	0.01
Control Delay	3.9	3.4		5.0	9.0			29.7	2.7		39.7	2.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	3.9	3.4		5.0	9.0			29.7	2.7		39.7	2.6
LOS	A	A		A	A			C	A		D	A
Approach Delay		3.4			8.9			16.2			34.4	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay: 9.8 Intersection LOS: A
Intersection Capacity Utilization 79.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	750	20	0	0	220
Future Volume (vph)	30	750	20	0	0	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	13.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	750	20	0	0	220
Future Vol, veh/h	30	750	20	0	0	220
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	30	750	20	0	0	220

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	240	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	220	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	746	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	814	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	746	1055	-	-	-	-
Mov Cap-2 Maneuver	746	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1038	-
HCM Lane V/C Ratio	-	0.751	-
HCM Control Delay (s)	-	18.1	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	7.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	215	80
Future Volume (vph)	0	0	25	0	215	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

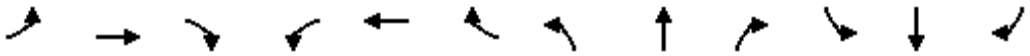
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	215	80
Future Vol, veh/h	0	0	25	0	215	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	215	80

Major/Minor	Minor2		Major2	
Conflicting Flow All	510	80	0	0
Stage 1	510	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	469	986	-	-
Stage 1	541	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	986	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	35	75	30	5	10	90	230	5	5	350	40
Future Volume (vph)	10	35	75	30	5	10	90	230	5	5	350	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

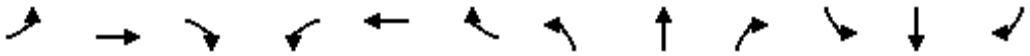
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	35	75	30	5	10	90	230	5	5	350	40
Future Vol, veh/h	10	35	75	30	5	10	90	230	5	5	350	40
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	10	35	75	30	5	10	90	230	5	5	350	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	846	815	395	863	833	269	405	0	0	240	0	0
Stage 1	395	395	-	418	418	-	-	-	-	-	-	-
Stage 2	451	420	-	445	415	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	284	314	659	277	307	775	1165	-	-	1327	-	-
Stage 1	634	608	-	616	594	-	-	-	-	-	-	-
Stage 2	592	593	-	596	596	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	245	279	643	202	273	749	1148	-	-	1321	-	-
Mov Cap-2 Maneuver	245	279	-	202	273	-	-	-	-	-	-	-
Stage 1	569	596	-	558	538	-	-	-	-	-	-	-
Stage 2	511	537	-	488	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.8	22.5	2.3	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1148	-	-	424	250	1321	-	-
HCM Lane V/C Ratio	0.078	-	-	0.283	0.18	0.004	-	-
HCM Control Delay (s)	8.4	0	-	16.8	22.5	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.1	0.6	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	30	45	0	5	40	160	15	0	225	10
Future Volume (vph)	10	0	30	45	0	5	40	160	15	0	225	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

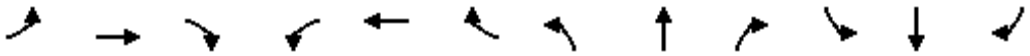
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	30	45	0	5	40	160	15	0	225	10
Future Vol, veh/h	10	0	30	45	0	5	40	160	15	0	225	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	0	30	45	0	5	40	160	15	0	225	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	480	485	230	493	483	168	235	0	0	175	0	0
Stage 1	230	230	-	248	248	-	-	-	-	-	-	-
Stage 2	250	255	-	245	235	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	499	485	814	490	486	881	1344	-	-	1414	-	-
Stage 1	777	718	-	760	705	-	-	-	-	-	-	-
Stage 2	759	700	-	763	714	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	484	469	814	460	470	881	1344	-	-	1414	-	-
Mov Cap-2 Maneuver	484	469	-	460	470	-	-	-	-	-	-	-
Stage 1	751	718	-	735	682	-	-	-	-	-	-	-
Stage 2	730	677	-	735	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	13.3	1.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1344	-	-	695	483	1414	-	-
HCM Lane V/C Ratio	0.03	-	-	0.058	0.104	-	-	-
HCM Control Delay (s)	7.8	0	-	10.5	13.3	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	185	5	15	115	10	10	0	10	25	0	5
Future Volume (vph)	10	185	5	15	115	10	10	0	10	25	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

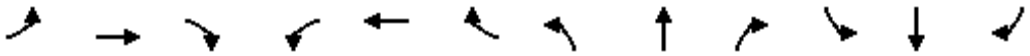
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	185	5	15	115	10	10	0	10	25	0	5
Future Vol, veh/h	10	185	5	15	115	10	10	0	10	25	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	185	5	15	115	10	10	0	10	25	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	125	0	0	190	0	0	361	363	188	363	360	120
Stage 1	-	-	-	-	-	-	208	208	-	150	150	-
Stage 2	-	-	-	-	-	-	153	155	-	213	210	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1474	-	-	1396	-	-	598	568	859	597	570	937
Stage 1	-	-	-	-	-	-	799	734	-	857	777	-
Stage 2	-	-	-	-	-	-	854	773	-	794	732	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1474	-	-	1396	-	-	586	557	859	581	559	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	586	557	-	581	559	-
Stage 1	-	-	-	-	-	-	793	728	-	850	768	-
Stage 2	-	-	-	-	-	-	839	764	-	778	726	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.8	10.3	11.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	1474	-	-	1396	-	-	620
HCM Lane V/C Ratio	0.029	0.007	-	-	0.011	-	-	0.048
HCM Control Delay (s)	10.3	7.5	0	-	7.6	0	-	11.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	330	105	10	740	0	495	10	5	0	10	20
Future Volume (vph)	5	330	105	10	740	0	495	10	5	0	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	325

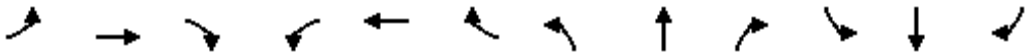
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	330	105	10	740	0	495	10	5	0	10	20
Future Vol, veh/h	5	330	105	10	740	0	495	10	5	0	10	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	330	105	10	740	0	495	10	5	0	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	740	0	0	435	0	0	1168	1153	383	1160	1205	740
Stage 1	-	-	-	-	-	-	393	393	-	760	760	-
Stage 2	-	-	-	-	-	-	775	760	-	400	445	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	867	-	-	1130	-	-	~ 170	197	662	174	185	420
Stage 1	-	-	-	-	-	-	630	604	-	401	417	-
Stage 2	-	-	-	-	-	-	~ 389	413	-	630	578	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	867	-	-	1130	-	-	~ 152	192	662	163	181	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 152	192	-	163	181	-
Stage 1	-	-	-	-	-	-	625	599	-	398	411	-
Stage 2	-	-	-	-	-	-	~ 356	407	-	610	573	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 1101.1	18.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	154	867	-	-	1130	-	-	292
HCM Lane V/C Ratio	3.312	0.006	-	-	0.009	-	-	0.103
HCM Control Delay (s)	$ 1101.1	9.2	0	-	8.2	0	-	18.7
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	48.4	0	-	-	0	-	-	0.3

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	530	0	335	0	0	115	415
Future Volume (vph)	0	0	0	0	0	530	0	335	0	0	115	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

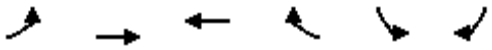
Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	530	0	335	0	0	115	415
Future Vol, veh/h	0	0	0	0	0	530	0	335	0	0	115	415
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	530	0	335	0	0	115	415

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	-	-	335	-	0	-	-	-	0	
Stage 1	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	
Critical Hdwy	-	-	6.23	-	-	-	-	-	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-	
Pot Cap-1 Maneuver	0	0	705	0	-	0	0	-	-	
Stage 1	0	0	-	0	-	0	0	-	-	
Stage 2	0	0	-	0	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	-	0	705	-	-	-	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-	
Stage 1	-	0	-	-	-	-	-	-	-	
Stage 2	-	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	23.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	705	-	-
HCM Lane V/C Ratio	-	0.752	-	-
HCM Control Delay (s)	-	23.9	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	6.9	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	305	5	0	0	140	0
Future Volume (vph)	305	5	0	0	140	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	305	5	0	0	140	0
Future Vol, veh/h	305	5	0	0	140	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	305	5	0	0	140	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	10.5	9.2
HCM LOS	B	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	310	140
LT Vol	305	140
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	310	140
Geometry Grp	1	1
Degree of Util (X)	0.393	0.194
Departure Headway (Hd)	4.565	4.991
Convergence, Y/N	Yes	Yes
Cap	791	721
Service Time	2.581	3.011
HCM Lane V/C Ratio	0.392	0.194
HCM Control Delay	10.5	9.2
HCM Lane LOS	B	A
HCM 95th-tile Q	1.9	0.7



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	315	5	425	655	105	0
Future Volume (vph)	315	5	425	655	105	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	42.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	315	5	425	655	105	0
Future Vol, veh/h	315	5	425	655	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	315	5	425	655	105	0

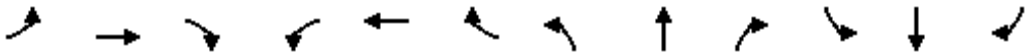
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	320	0	1823	318
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	1505	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1246	-	~ 85	723
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	203	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1246	-	~ 56	723
Mov Cap-2 Maneuver	-	-	-	-	~ 56	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	134	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.7	$ 571.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	56	-	-	1246	-
HCM Lane V/C Ratio	1.875	-	-	0.341	-
HCM Control Delay (s)	$ 571.1	-	-	9.4	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	10	-	-	1.5	-

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

2037 Baseline Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	5	20	0	0	0	0	30	40	290	40	0
Future Volume (vph)	180	5	20	0	0	0	0	30	40	290	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

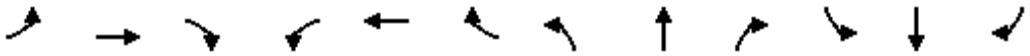
Intersection	
Int Delay, s/veh	13.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	180	5	20	0	0	0	0	30	40	290	40	0
Future Vol, veh/h	180	5	20	0	0	0	0	30	40	290	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	180	5	20	0	0	0	0	30	40	290	40	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	670	690	40	-	0	0	70	0	0
Stage 1	620	620	-	-	-	-	-	-	-
Stage 2	50	70	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	419	366	1026	0	-	-	1518	-	0
Stage 1	533	477	-	0	-	-	-	-	0
Stage 2	967	833	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	337	0	1026	-	-	-	1518	-	-
Mov Cap-2 Maneuver	337	0	-	-	-	-	-	-	-
Stage 1	533	0	-	-	-	-	-	-	-
Stage 2	778	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.3	0	7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	361	1518	-
HCM Lane V/C Ratio	-	-	0.568	0.191	-
HCM Control Delay (s)	-	-	27.3	7.9	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	3.4	0.7	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	5	510	10	200	0	0	290	110
Future Volume (vph)	0	0	0	40	5	510	10	200	0	0	290	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

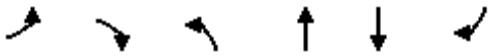
Intersection	
Int Delay, s/veh	9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	40	5	510	10	200	0	0	290	110
Future Vol, veh/h	0	0	0	40	5	510	10	200	0	0	290	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	40	5	510	10	200	0	0	290	110

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	565	620	200	400	0	-	-	-	0	
Stage 1	220	220	-	-	-	-	-	-	-	
Stage 2	345	400	-	-	-	-	-	-	-	
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-	
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-	
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-	
Pot Cap-1 Maneuver	483	401	836	1148	-	0	0	-	-	
Stage 1	812	717	-	-	-	0	0	-	-	
Stage 2	713	598	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	478	0	836	1148	-	-	-	-	-	
Mov Cap-2 Maneuver	478	0	-	-	-	-	-	-	-	
Stage 1	804	0	-	-	-	-	-	-	-	
Stage 2	713	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	19.4	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1148	-	793	-	-
HCM Lane V/C Ratio	0.009	-	0.7	-	-
HCM Control Delay (s)	8.2	0	19.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	5.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	120	190	520	290	50
Future Volume (vph)	50	120	190	520	290	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

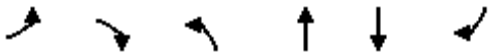
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	120	190	520	290	50
Future Vol, veh/h	50	120	190	520	290	50
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	50	120	190	520	290	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1215	315	340	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	188	696	1208	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	158	696	1208	-	-	-
Mov Cap-2 Maneuver	158	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	376	-	-	-	-	-

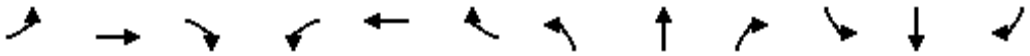
Approach	EB	NB	SB
HCM Control Delay, s	24.8	2.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1208	-	348	-	-
HCM Lane V/C Ratio	0.157	-	0.489	-	-
HCM Control Delay (s)	8.5	-	24.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	2.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	250	420	150	90	70
Future Volume (vph)	130	250	420	150	90	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	10	0	0	0	10	270	0	0	150	20
Future Volume (vph)	30	0	10	0	0	0	10	270	0	0	150	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1654	0	0	1900	0	0	1823	0	0	1833	0
Flt Permitted		0.964						0.998				
Satd. Flow (perm)	0	1654	0	0	1900	0	0	1823	0	0	1833	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	0	0	0	0	280	0	0	170	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.3%		ICU Level of Service A	
Analysis Period (min) 15			

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	30	0	10	0	0	0	10	270	0	0	150	20
Future Vol, veh/h	30	0	10	0	0	0	10	270	0	0	150	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	30	0	10	0	0	0	10	270	0	0	150	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	451	451	161	455	461	270	171	0	0	270	0	0
Stage 1	161	161	-	290	290	-	-	-	-	-	-	-
Stage 2	290	290	-	165	171	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	510	496	871	519	500	774	1394	-	-	1293	-	-
Stage 1	829	755	-	722	676	-	-	-	-	-	-	-
Stage 2	707	663	-	842	761	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	506	492	870	510	496	774	1393	-	-	1293	-	-
Mov Cap-2 Maneuver	506	492	-	510	496	-	-	-	-	-	-	-
Stage 1	822	754	-	716	671	-	-	-	-	-	-	-
Stage 2	701	658	-	832	760	-	-	-	-	-	-	-

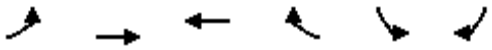
Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1393	-	-	565	-	1293	-	-
HCM Lane V/C Ratio	0.007	-	-	0.071	-	-	-	-
HCM Control Delay (s)	7.6	0	-	11.9	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	500	150	150	360	130
Future Volume (vph)	70	500	150	150	360	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	630	620	30	30	10
Future Volume (vph)	10	630	620	30	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

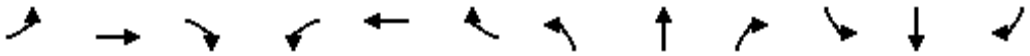
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	630	620	30	30	10
Future Vol, veh/h	10	630	620	30	30	10
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	10	630	620	30	30	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	650	0	-	0	1285	638
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	650	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	917	-	-	-	183	480
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	523	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	917	-	-	-	180	479
Mov Cap-2 Maneuver	-	-	-	-	180	-
Stage 1	-	-	-	-	523	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	25.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	917	-	-	-	213
HCM Lane V/C Ratio	0.011	-	-	-	0.188
HCM Control Delay (s)	9	0	-	-	25.8
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	560	90	40	480	10	170	10	140	10	0	0
Future Volume (vph)	10	560	90	40	480	10	170	10	140	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	54.2

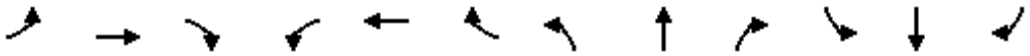
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	560	90	40	480	10	170	10	140	10	0	0
Future Vol, veh/h	10	560	90	40	480	10	170	10	140	10	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	560	90	40	480	10	170	10	140	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	490	0	0	650	0	0	1191	1195	605	1265	1235	486
Stage 1	-	-	-	-	-	-	625	625	-	565	565	-
Stage 2	-	-	-	-	-	-	566	570	-	700	670	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1058	-	-	931	-	-	~ 166	188	501	147	178	585
Stage 1	-	-	-	-	-	-	476	480	-	513	511	-
Stage 2	-	-	-	-	-	-	513	509	-	433	459	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1058	-	-	931	-	-	~ 157	174	501	96	165	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 157	174	-	96	165	-
Stage 1	-	-	-	-	-	-	469	473	-	505	481	-
Stage 2	-	-	-	-	-	-	482	479	-	301	452	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	254.8	46.8
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	225	1058	-	-	931	-	-	96
HCM Lane V/C Ratio	1.422	0.009	-	-	0.043	-	-	0.104
HCM Control Delay (s)	254.8	8.4	0	-	9	0	-	46.8
HCM Lane LOS	F	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	18.4	0	-	-	0.1	-	-	0.3

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	690	20	10	500	10	20	0	20	10	0	10
Future Volume (vph)	10	690	20	10	500	10	20	0	20	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	690	20	10	500	10	20	0	20	10	0	10
Future Vol, veh/h	10	690	20	10	500	10	20	0	20	10	0	10
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	10	690	20	10	500	10	20	0	20	10	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	714	0	0	1254	1254	704	1255	1259	505
Stage 1	-	-	-	-	-	-	724	724	-	525	525	-
Stage 2	-	-	-	-	-	-	530	530	-	730	734	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	1040	-	-	886	-	-	138	161	413	150	172	571
Stage 1	-	-	-	-	-	-	394	409	-	540	533	-
Stage 2	-	-	-	-	-	-	506	503	-	417	429	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1040	-	-	883	-	-	132	155	411	139	166	571
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	155	-	139	166	-
Stage 1	-	-	-	-	-	-	386	401	-	531	524	-
Stage 2	-	-	-	-	-	-	489	495	-	390	420	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	27.4	22.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	200	1040	-	-	883	-	-	224
HCM Lane V/C Ratio	0.2	0.01	-	-	0.011	-	-	0.089
HCM Control Delay (s)	27.4	8.5	0	-	9.1	0	-	22.6
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	100	20	10	280
Future Volume (vph)	20	10	100	20	10	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

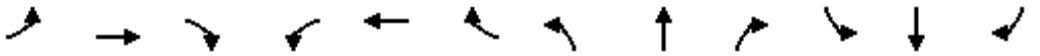
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	100	20	10	280
Future Vol, veh/h	20	10	100	20	10	280
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	100	20	10	280
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	8.6	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	3%	0%	83%
Vol Thru, %	0%	67%	17%
Vol Right, %	97%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	290	30	120
LT Vol	10	0	100
Through Vol	0	20	20
RT Vol	280	10	0
Lane Flow Rate	290	30	120
Geometry Grp	1	1	1
Degree of Util (X)	0.302	0.037	0.154
Departure Headway (Hd)	3.744	4.424	4.619
Convergence, Y/N	Yes	Yes	Yes
Cap	966	811	766
Service Time	1.746	2.442	2.716
HCM Lane V/C Ratio	0.3	0.037	0.157
HCM Control Delay	8.4	7.6	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.1	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	310	130	60	250	160	70	70	110	70	50	40
Future Volume (vph)	150	310	130	60	250	160	70	70	110	70	50	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

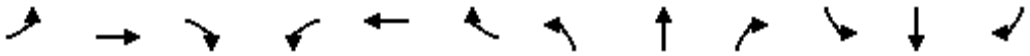
Intersection	
Int Delay, s/veh	32

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	310	130	60	250	160	70	70	110	70	50	40
Future Vol, veh/h	150	310	130	60	250	160	70	70	110	70	50	40
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	150	310	130	60	250	160	70	70	110	70	50	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	411	0	0	443	0	0	1174	1209	379	1217	1194	332
Stage 1	-	-	-	-	-	-	678	678	-	451	451	-
Stage 2	-	-	-	-	-	-	496	531	-	766	743	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1127	-	-	1107	-	-	168	182	666	158	187	712
Stage 1	-	-	-	-	-	-	440	450	-	590	573	-
Stage 2	-	-	-	-	-	-	554	524	-	397	423	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1126	-	-	1104	-	-	102	149	663	73	153	711
Mov Cap-2 Maneuver	-	-	-	-	-	-	102	149	-	73	153	-
Stage 1	-	-	-	-	-	-	380	389	-	511	541	-
Stage 2	-	-	-	-	-	-	448	495	-	235	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	1.1	116.8	100.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	121	663	1126	-	-	1104	-	-	73	235
HCM Lane V/C Ratio	1.157	0.166	0.133	-	-	0.054	-	-	0.959	0.383
HCM Control Delay (s)	199.5	11.5	8.7	-	-	8.4	-	-	191.2	29.5
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	8.5	0.6	0.5	-	-	0.2	-	-	4.9	1.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	450	10	80	480	10	20	10	100	10	10	20
Future Volume (vph)	30	450	10	80	480	10	20	10	100	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

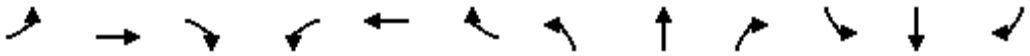
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	450	10	80	480	10	20	10	100	10	10	20
Future Vol, veh/h	30	450	10	80	480	10	20	10	100	10	10	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	30	450	10	80	480	10	20	10	100	10	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	495	0	0	462	0	0	1180	1172	457	1220	1172	493
Stage 1	-	-	-	-	-	-	517	517	-	650	650	-
Stage 2	-	-	-	-	-	-	663	655	-	570	522	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1048	-	-	1084	-	-	165	190	597	154	189	568
Stage 1	-	-	-	-	-	-	536	529	-	451	459	-
Stage 2	-	-	-	-	-	-	446	458	-	499	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1043	-	-	1082	-	-	140	170	596	113	169	564
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	170	-	113	169	-
Stage 1	-	-	-	-	-	-	519	513	-	436	423	-
Stage 2	-	-	-	-	-	-	388	422	-	395	508	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.2	17.6	25.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	149	596	1043	-	-	1082	-	-	218
HCM Lane V/C Ratio	0.201	0.168	0.029	-	-	0.074	-	-	0.183
HCM Control Delay (s)	35.2	12.3	8.6	-	-	8.6	-	-	25.2
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.7	0.6	0.1	-	-	0.2	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	600	80	90	390	90	160	20	50	50	40	20
Future Volume (vph)	60	600	80	90	390	90	160	20	50	50	40	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	86.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	600	80	90	390	90	160	20	50	50	40	20
Future Vol, veh/h	60	600	80	90	390	90	160	20	50	50	40	20
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	60	600	80	90	390	90	160	20	50	50	40	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	480	0	0	681	0	0	1408	1421	641	1410	1416	437
Stage 1	-	-	-	-	-	-	761	761	-	615	615	-
Stage 2	-	-	-	-	-	-	647	660	-	795	801	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1062	-	-	912	-	-	~ 116	136	475	117	139	624
Stage 1	-	-	-	-	-	-	398	414	-	482	485	-
Stage 2	-	-	-	-	-	-	460	460	-	384	400	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1062	-	-	911	-	-	~ 68	106	475	75	109	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 68	106	-	75	109	-
Stage 1	-	-	-	-	-	-	361	375	-	438	419	-
Stage 2	-	-	-	-	-	-	347	397	-	295	363	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.5	$ 528.4	185.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	68	238	1062	-	-	911	-	-	103
HCM Lane V/C Ratio	2.353	0.294	0.056	-	-	0.099	-	-	1.068
HCM Control Delay (s)	$ 748	26.3	8.6	0	-	9.4	0	-	185.7
HCM Lane LOS	F	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	15.4	1.2	0.2	-	-	0.3	-	-	6.9

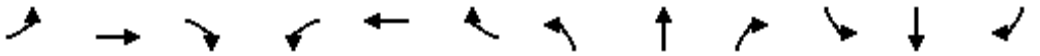
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	110	110	340	110	90	110	90	20	110	90
Future Volume (vph)	20	420	110	110	340	110	90	110	90	20	110	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 69.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





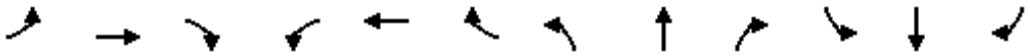
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	110	110	340	110	90	110	90	20	110	90
Future Volume (veh/h)	20	420	110	110	340	110	90	110	90	20	110	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	110	110	340	110	90	110	90	20	110	90
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	573	888	232	516	848	274	249	215	176	249	214	175
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	910	1383	362	853	1321	427	1172	943	772	1162	936	765
Grp Volume(v), veh/h	20	0	530	110	0	450	90	0	200	20	0	200
Grp Sat Flow(s),veh/h/ln	910	0	1746	853	0	1749	1172	0	1715	1162	0	1701
Q Serve(g_s), s	0.8	0.0	11.1	5.4	0.0	8.8	5.1	0.0	7.2	1.1	0.0	7.3
Cycle Q Clear(g_c), s	9.6	0.0	11.1	16.4	0.0	8.8	12.4	0.0	7.2	8.3	0.0	7.3
Prop In Lane	1.00		0.21	1.00		0.24	1.00		0.45	1.00		0.45
Lane Grp Cap(c), veh/h	573	0	1120	516	0	1122	249	0	391	249	0	388
V/C Ratio(X)	0.03	0.00	0.47	0.21	0.00	0.40	0.36	0.00	0.51	0.08	0.00	0.52
Avail Cap(c_a), veh/h	573	0	1120	516	0	1122	402	0	616	401	0	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.4	0.0	6.5	10.8	0.0	6.1	29.3	0.0	23.8	27.5	0.0	23.9
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.9	0.0	1.1	1.3	0.0	1.5	0.2	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.8	1.1	0.0	3.0	1.5	0.0	3.0	0.3	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.5	0.0	8.0	11.7	0.0	7.2	30.6	0.0	25.3	27.7	0.0	25.4
LnGrp LOS	A	A	A	B	A	A	C	A	C	C	A	C
Approach Vol, veh/h		550			560			290			220	
Approach Delay, s/veh		8.0			8.1			26.9			25.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.0	20.8	50.0	20.8
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	45.4	25.4	45.4	25.4
Max Q Clear Time (g_c+I1), s	13.1	10.3	18.4	14.4
Green Ext Time (p_c), s	4.3	1.5	4.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	470	180	20	420	50	150	30	10	40	20	40
Future Volume (vph)	60	470	180	20	420	50	150	30	10	40	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	25.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	470	180	20	420	50	150	30	10	40	20	40
Future Vol, veh/h	60	470	180	20	420	50	150	30	10	40	20	40
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	60	470	180	20	420	50	150	30	10	40	20	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	470	0	0	653	0	0	1199	1193	568	1190	1258	446
Stage 1	-	-	-	-	-	-	683	683	-	485	485	-
Stage 2	-	-	-	-	-	-	516	510	-	705	773	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1066	-	-	924	-	-	163	188	524	161	168	604
Stage 1	-	-	-	-	-	-	441	451	-	556	545	-
Stage 2	-	-	-	-	-	-	544	539	-	421	403	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1066	-	-	921	-	-	~ 124	165	520	123	148	603
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 124	165	-	123	148	-
Stage 1	-	-	-	-	-	-	400	409	-	505	529	-
Stage 2	-	-	-	-	-	-	474	523	-	346	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.4	175.9	43.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	124	199	1066	-	-	921	-	-	190
HCM Lane V/C Ratio	1.21	0.201	0.056	-	-	0.022	-	-	0.526
HCM Control Delay (s)	215.5	27.6	8.6	0	-	9	0	-	43.3
HCM Lane LOS	F	D	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	9.3	0.7	0.2	-	-	0.1	-	-	2.7

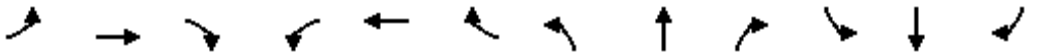
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	360	130	40	320	30	230	150	90	30	170	20
Future Volume (vph)	10	360	130	40	320	30	230	150	90	30	170	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





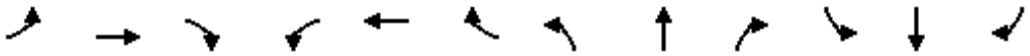
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	360	130	40	320	30	230	150	90	30	170	20
Future Volume (veh/h)	10	360	130	40	320	30	230	150	90	30	170	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	360	130	40	320	30	230	150	90	30	170	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	721	689	249	502	914	86	279	226	136	228	349	41
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	988	1132	409	898	1503	141	1134	937	562	1111	1442	170
Grp Volume(v), veh/h	10	0	490	40	0	350	230	0	240	30	0	190
Grp Sat Flow(s),veh/h/ln	988	0	1541	898	0	1644	1134	0	1499	1111	0	1612
Q Serve(g_s), s	0.2	0.0	11.0	0.9	0.0	0.0	8.4	0.0	8.7	1.5	0.0	6.1
Cycle Q Clear(g_c), s	0.2	0.0	11.0	11.8	0.0	0.0	14.5	0.0	8.7	10.2	0.0	6.1
Prop In Lane	1.00		0.27	1.00		0.09	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	721	0	937	502	0	1000	279	0	362	228	0	390
V/C Ratio(X)	0.01	0.00	0.52	0.08	0.00	0.35	0.82	0.00	0.66	0.13	0.00	0.49
Avail Cap(c_a), veh/h	721	0	937	502	0	1000	279	0	362	228	0	390
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.90	0.96	0.00	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.6	0.0	6.7	1.8	0.0	0.0	27.1	0.0	20.5	25.1	0.0	19.6
Incr Delay (d2), s/veh	0.0	0.0	1.9	0.3	0.0	0.9	16.9	0.0	3.6	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.3	0.1	0.0	0.3	4.5	0.0	3.2	0.4	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	8.6	2.1	0.0	0.9	43.9	0.0	24.1	25.2	0.0	19.9
LnGrp LOS	A	A	A	A	A	A	D	A	C	C	A	B
Approach Vol, veh/h		500			390			470			220	
Approach Delay, s/veh		8.5			1.0			33.8			20.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		19.0		41.0		19.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		13.0		12.2		13.8		16.5				
Green Ext Time (p_c), s		3.6		0.2		2.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			15.9									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	360	110	20	400	40	60	20	30	10	20	20
Future Volume (vph)	20	360	110	20	400	40	60	20	30	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

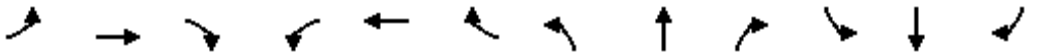
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	16.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	360	110	20	400	40	60	20	30	10	20	20
Future Vol, veh/h	20	360	110	20	400	40	60	20	30	10	20	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	20	360	110	20	400	40	60	20	30	10	20	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.5	17.1	10.9	10
HCM LOS	C	C	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	55%	4%	4%	20%
Vol Thru, %	18%	73%	87%	40%
Vol Right, %	27%	22%	9%	40%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	490	460	50
LT Vol	60	20	20	10
Through Vol	20	360	400	20
RT Vol	30	110	40	20
Lane Flow Rate	110	490	460	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.193	0.687	0.649	0.087
Departure Headway (Hd)	6.332	5.047	5.081	6.299
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	565	715	713	567
Service Time	4.385	3.077	3.112	4.361
HCM Lane V/C Ratio	0.195	0.685	0.645	0.088
HCM Control Delay	10.9	18.5	17.1	10
HCM Lane LOS	B	C	C	A
HCM 95th-tile Q	0.7	5.5	4.8	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	370	20	20	330	50	20	10	40	100	40	30
Future Volume (vph)	70	370	20	20	330	50	20	10	40	100	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1613	0	1736	1606	0	0	1752	1384	0	1765	1398
Flt Permitted	0.527			0.520				0.778			0.769	
Satd. Flow (perm)	951	1613	0	945	1606	0	0	1399	1354	0	1403	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			23				40			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	390	0	20	380	0	0	30	40	0	140	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	42.4	42.4		42.4	42.4			12.0	42.4		12.0	42.4
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.20	0.71		0.20	0.71
v/c Ratio	0.10	0.34		0.03	0.33			0.11	0.04		0.50	0.03
Control Delay	6.4	6.6		6.0	6.5			17.8	2.8		26.3	3.0
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	6.4	6.6		6.0	6.5			17.8	2.8		26.3	3.0
LOS	A	A		A	A			B	A		C	A
Approach Delay		6.6			6.5			9.2			22.2	
Approach LOS		A			A			A			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	

Intersection Signal Delay: 9.1 Intersection LOS: A
Intersection Capacity Utilization 70.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	380	10	0	0	310
Future Volume (vph)	20	380	10	0	0	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	380	10	0	0	310
Future Vol, veh/h	20	380	10	0	0	310
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	20	380	10	0	0	310

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	320	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	657	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	726	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	657	1048	-	-	-	-
Mov Cap-2 Maneuver	657	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	726	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1018	-
HCM Lane V/C Ratio	-	0.393	-
HCM Control Delay (s)	-	10.8	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.9	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	280	50
Future Volume (vph)	0	0	10	0	280	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

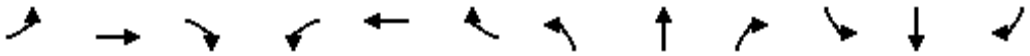
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	280	50
Future Vol, veh/h	0	0	10	0	280	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	280	50

Major/Minor	Minor2		Major2	
Conflicting Flow All	610	50	0	0
Stage 1	610	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	386	970	-	-
Stage 1	458	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	970	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	110	10	10	10	100	370	10	10	420	30
Future Volume (vph)	30	10	110	10	10	10	100	370	10	10	420	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

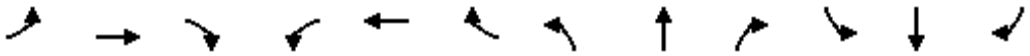
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	10	110	10	10	10	100	370	10	10	420	30
Future Vol, veh/h	30	10	110	10	10	10	100	370	10	10	420	30
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	30	10	110	10	10	10	100	370	10	10	420	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1064	1059	458	1115	1069	401	461	0	0	393	0	0
Stage 1	466	466	-	588	588	-	-	-	-	-	-	-
Stage 2	598	593	-	527	481	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	202	226	607	187	223	653	1105	-	-	1160	-	-
Stage 1	581	566	-	499	499	-	-	-	-	-	-	-
Stage 2	492	497	-	538	557	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	168	193	594	129	190	637	1093	-	-	1146	-	-
Mov Cap-2 Maneuver	168	193	-	129	190	-	-	-	-	-	-	-
Stage 1	508	554	-	436	436	-	-	-	-	-	-	-
Stage 2	413	434	-	420	545	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.9	25.4	1.8	0.2
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1093	-	-	361	206	1146	-	-
HCM Lane V/C Ratio	0.091	-	-	0.416	0.146	0.009	-	-
HCM Control Delay (s)	8.6	0	-	21.9	25.4	8.2	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	2	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	40	20	0	10	70	310	30	10	260	20
Future Volume (vph)	10	0	40	20	0	10	70	310	30	10	260	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

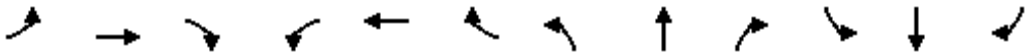
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	40	20	0	10	70	310	30	10	260	20
Future Vol, veh/h	10	0	40	20	0	10	70	310	30	10	260	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	10	0	40	20	0	10	70	310	30	10	260	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	760	770	270	775	765	325	280	0	0	340	0	0
Stage 1	290	290	-	465	465	-	-	-	-	-	-	-
Stage 2	470	480	-	310	300	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	325	333	774	289	308	666	1283	-	-	1219	-	-
Stage 1	722	676	-	536	526	-	-	-	-	-	-	-
Stage 2	578	558	-	654	626	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	301	307	774	258	284	666	1283	-	-	1219	-	-
Mov Cap-2 Maneuver	301	307	-	258	284	-	-	-	-	-	-	-
Stage 1	673	669	-	500	490	-	-	-	-	-	-	-
Stage 2	531	520	-	614	620	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	17.2	1.4	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1283	-	-	589	324	1219	-	-
HCM Lane V/C Ratio	0.055	-	-	0.085	0.093	0.008	-	-
HCM Control Delay (s)	8	0	-	11.7	17.2	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.3	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	160	10	30	180	10	10	10	40	20	10	10
Future Volume (vph)	10	160	10	30	180	10	10	10	40	20	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

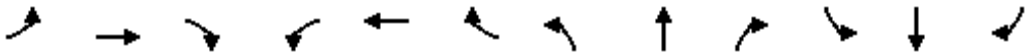
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	160	10	30	180	10	10	10	40	20	10	10
Future Vol, veh/h	10	160	10	30	180	10	10	10	40	20	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	160	10	30	180	10	10	10	40	20	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	170	0	0	440	435	165	455	435	185
Stage 1	-	-	-	-	-	-	185	185	-	245	245	-
Stage 2	-	-	-	-	-	-	255	250	-	210	190	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1384	-	-	1401	-	-	531	517	885	519	517	862
Stage 1	-	-	-	-	-	-	821	751	-	763	707	-
Stage 2	-	-	-	-	-	-	754	704	-	797	747	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1384	-	-	1401	-	-	504	500	885	476	500	862
Mov Cap-2 Maneuver	-	-	-	-	-	-	504	500	-	476	500	-
Stage 1	-	-	-	-	-	-	814	745	-	757	690	-
Stage 2	-	-	-	-	-	-	717	687	-	745	741	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1	10.6	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	706	1384	-	-	1401	-	-	543
HCM Lane V/C Ratio	0.085	0.007	-	-	0.021	-	-	0.074
HCM Control Delay (s)	10.6	7.6	0	-	7.6	0	-	12.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

2037 Baseline Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	530	5	15	0	0	0	0	15	45	350	30	0
Future Volume (vph)	530	5	15	0	0	0	0	15	45	350	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	260.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	530	5	15	0	0	0	0	15	45	350	30	0
Future Vol, veh/h	530	5	15	0	0	0	0	15	45	350	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	530	5	15	0	0	0	0	15	45	350	30	0

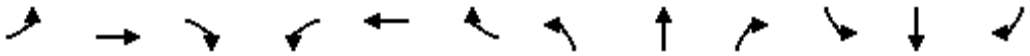
Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	768	790	30	-	0	0	60	0	0
Stage 1	730	730	-	-	-	-	-	-	-
Stage 2	38	60	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	~ 371	324	1047	0	-	-	1425	-	0
Stage 1	~ 479	429	-	0	-	-	-	-	0
Stage 2	987	847	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 278	0	1047	-	-	-	1425	-	-
Mov Cap-2 Maneuver	~ 278	0	-	-	-	-	-	-	-
Stage 1	~ 479	0	-	-	-	-	-	-	-
Stage 2	740	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 463.9	0	7.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	284	1425	-
HCM Lane V/C Ratio	-	-	1.937	0.246	-
HCM Control Delay (s)	-	-	$ 463.9	8.3	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	38.6	1	-

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	80	5	535	5	540	0	0	300	115
Future Volume (vph)	0	0	0	80	5	535	5	540	0	0	300	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	73.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	80	5	535	5	540	0	0	300	115
Future Vol, veh/h	0	0	0	80	5	535	5	540	0	0	300	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	80	5	535	5	540	0	0	300	115

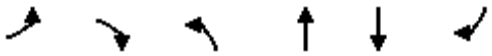
Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	908	965	540	415	0	-	-	-	0	
Stage 1	550	550	-	-	-	-	-	-	-	
Stage 2	358	415	-	-	-	-	-	-	-	
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-	
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-	
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-	
Pot Cap-1 Maneuver	289	241	~ 516	1149	-	0	0	-	-	
Stage 1	551	494	-	-	-	0	0	-	-	
Stage 2	678	569	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	287	0	~ 516	1149	-	-	-	-	-	
Mov Cap-2 Maneuver	287	0	-	-	-	-	-	-	-	
Stage 1	548	0	-	-	-	-	-	-	-	
Stage 2	678	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	186.6	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1149	-	467	-	-
HCM Lane V/C Ratio	0.004	-	1.328	-	-
HCM Control Delay (s)	8.1	0	186.6	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	27.6	-	-

Notes

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	155	140	935	260	25
Future Volume (vph)	35	155	140	935	260	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

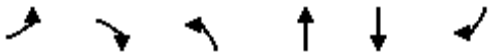
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	155	140	935	260	25
Future Vol, veh/h	35	155	140	935	260	25
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	35	155	140	935	260	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1488	273	285	0	-	0
Stage 1	273	-	-	-	-	-
Stage 2	1215	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	129	740	1277	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	115	740	1277	-	-	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	267	-	-	-	-	-

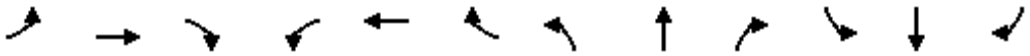
Approach	EB	NB	SB
HCM Control Delay, s	24.6	1.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1277	-	370	-	-
HCM Lane V/C Ratio	0.11	-	0.514	-	-
HCM Control Delay (s)	8.2	-	24.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	190	700	270	95	125
Future Volume (vph)	130	190	700	270	95	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	30	0	0	0	15	385	0	0	190	50
Future Volume (vph)	25	0	30	0	0	0	15	385	0	0	190	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	30	0	0	0	15	385	0	0	190	50
Future Vol, veh/h	25	0	30	0	0	0	15	385	0	0	190	50
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	30	0	0	0	15	385	0	0	190	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	630	630	215	645	655	385	240	0	0	385	0	0
Stage 1	215	215	-	415	415	-	-	-	-	-	-	-
Stage 2	415	415	-	230	240	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	387	392	813	388	388	667	1327	-	-	1168	-	-
Stage 1	776	716	-	619	596	-	-	-	-	-	-	-
Stage 2	605	584	-	777	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	383	387	813	370	383	667	1327	-	-	1168	-	-
Mov Cap-2 Maneuver	383	387	-	370	383	-	-	-	-	-	-	-
Stage 1	765	716	-	610	588	-	-	-	-	-	-	-
Stage 2	597	576	-	748	711	-	-	-	-	-	-	-

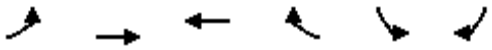
Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	538	-	1168	-	-
HCM Lane V/C Ratio	0.011	-	-	0.102	-	-	-	-
HCM Control Delay (s)	7.7	0	-	12.5	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	110	570	255	155	435	130
Future Volume (vph)	110	570	255	155	435	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	695	770	40	35	10
Future Volume (vph)	5	695	770	40	35	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

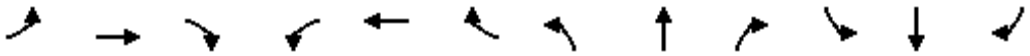
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	695	770	40	35	10
Future Vol, veh/h	5	695	770	40	35	10
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	5	695	770	40	35	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	810	0	-	0	1495	797
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	807	-	-	-	137	390
Stage 1	-	-	-	-	451	-
Stage 2	-	-	-	-	494	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	807	-	-	-	136	387
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	494	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	36.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	807	-	-	-	159
HCM Lane V/C Ratio	0.006	-	-	-	0.283
HCM Control Delay (s)	9.5	0	-	-	36.3
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	615	115	55	565	5	260	0	165	0	0	0
Future Volume (vph)	0	615	115	55	565	5	260	0	165	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	185.8

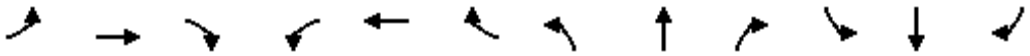
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	615	115	55	565	5	260	0	165	0	0	0
Future Vol, veh/h	0	615	115	55	565	5	260	0	165	0	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	0	615	115	55	565	5	260	0	165	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	570	0	0	734	0	0	1355	1357	678	1434	1412	568
Stage 1	-	-	-	-	-	-	677	677	-	678	678	-
Stage 2	-	-	-	-	-	-	678	680	-	756	734	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	993	-	-	866	-	-	~ 127	150	454	113	139	526
Stage 1	-	-	-	-	-	-	444	454	-	445	455	-
Stage 2	-	-	-	-	-	-	444	452	-	403	429	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	993	-	-	863	-	-	~ 117	135	452	67	126	526
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 117	135	-	67	126	-
Stage 1	-	-	-	-	-	-	442	452	-	445	413	-
Stage 2	-	-	-	-	-	-	403	410	-	256	427	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	$ 777.2	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	164	993	-	-	863	-	-	-
HCM Lane V/C Ratio	2.591	-	-	-	0.064	-	-	-
HCM Control Delay (s)	$ 777.2	0	-	-	9.5	0	-	0
HCM Lane LOS	F	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	36.9	0	-	-	0.2	-	-	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	795	0	15	625	45	15	10	5	20	15	25
Future Volume (vph)	20	795	0	15	625	45	15	10	5	20	15	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	20	795	0	15	625	45	15	10	5	20	15	25
Future Vol, veh/h	20	795	0	15	625	45	15	10	5	20	15	25
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	20	795	0	15	625	45	15	10	5	20	15	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	671	0	0	800	0	0	1538	1541	802	1524	1519	649
Stage 1	-	-	-	-	-	-	840	840	-	679	679	-
Stage 2	-	-	-	-	-	-	698	701	-	845	840	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	901	-	-	814	-	-	57	71	265	98	120	473
Stage 1	-	-	-	-	-	-	250	271	-	445	454	-
Stage 2	-	-	-	-	-	-	307	322	-	360	384	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	900	-	-	810	-	-	46	66	263	80	111	473
Mov Cap-2 Maneuver	-	-	-	-	-	-	46	66	-	80	111	-
Stage 1	-	-	-	-	-	-	239	259	-	427	440	-
Stage 2	-	-	-	-	-	-	272	312	-	325	367	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	114.2	50.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	60	900	-	-	810	-	-	137
HCM Lane V/C Ratio	0.5	0.022	-	-	0.019	-	-	0.438
HCM Control Delay (s)	114.2	9.1	0	-	9.5	0	-	50.3
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2	0.1	-	-	0.1	-	-	1.9



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	135	10	30	365
Future Volume (vph)	25	10	135	10	30	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

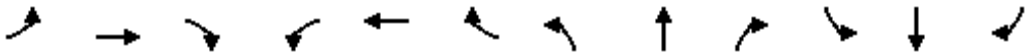
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	135	10	30	365
Future Vol, veh/h	25	10	135	10	30	365
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	135	10	30	365
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8	9.3	9.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	8%	0%	93%
Vol Thru, %	0%	71%	7%
Vol Right, %	92%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	395	35	145
LT Vol	30	0	135
Through Vol	0	25	10
RT Vol	365	10	0
Lane Flow Rate	395	35	145
Geometry Grp	1	1	1
Degree of Util (X)	0.425	0.046	0.2
Departure Headway (Hd)	3.871	4.728	4.971
Convergence, Y/N	Yes	Yes	Yes
Cap	932	756	721
Service Time	1.884	2.768	3.007
HCM Lane V/C Ratio	0.424	0.046	0.201
HCM Control Delay	9.7	8	9.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	2.1	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	395	200	70	195	200	75	95	155	80	70	55
Future Volume (vph)	185	395	200	70	195	200	75	95	155	80	70	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	172.5

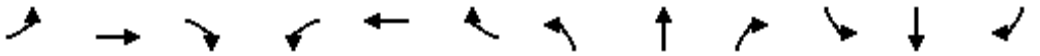
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	395	200	70	195	200	75	95	155	80	70	55
Future Vol, veh/h	185	395	200	70	195	200	75	95	155	80	70	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	185	395	200	70	195	200	75	95	155	80	70	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	595	0	0	1363	1400	495	1425	1400	295
Stage 1	-	-	-	-	-	-	865	865	-	435	435	-
Stage 2	-	-	-	-	-	-	498	535	-	990	965	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1153	-	-	967	-	-	125	140	575	112	139	740
Stage 1	-	-	-	-	-	-	348	371	-	596	577	-
Stage 2	-	-	-	-	-	-	554	524	-	294	331	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1153	-	-	967	-	-	~ 47	109	575	~ 18	108	740
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 47	109	-	~ 18	108	-
Stage 1	-	-	-	-	-	-	292	312	-	501	535	-
Stage 2	-	-	-	-	-	-	413	486	-	125	278	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	1.4	$ 422	$ 813.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	69	575	1153	-	-	967	-	-	18	173
HCM Lane V/C Ratio	2.464	0.27	0.16	-	-	0.072	-	-	4.444	0.723
HCM Control Delay (s)	$ 794.3	13.6	8.7	-	-	9	-	-	$ 1980.3	66.6
HCM Lane LOS	F	B	A	-	-	A	-	-	F	F
HCM 95th %tile Q(veh)	16.5	1.1	0.6	-	-	0.2	-	-	10.6	4.5

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	600	25	70	495	0	40	0	155	0	20	5
Future Volume (vph)	5	600	25	70	495	0	40	0	155	0	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

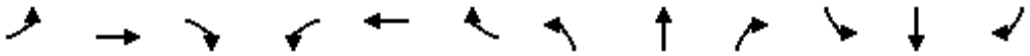
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	600	25	70	495	0	40	0	155	0	20	5
Future Vol, veh/h	5	600	25	70	495	0	40	0	155	0	20	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	5	600	25	70	495	0	40	0	155	0	20	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	496	0	0	629	0	0	1283	1263	617	1336	1275	504
Stage 1	-	-	-	-	-	-	627	627	-	636	636	-
Stage 2	-	-	-	-	-	-	656	636	-	700	639	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1058	-	-	944	-	-	140	167	484	96	125	458
Stage 1	-	-	-	-	-	-	466	472	-	373	384	-
Stage 2	-	-	-	-	-	-	450	467	-	341	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1057	-	-	940	-	-	112	153	482	61	115	454
Mov Cap-2 Maneuver	-	-	-	-	-	-	112	153	-	61	115	-
Stage 1	-	-	-	-	-	-	462	468	-	371	355	-
Stage 2	-	-	-	-	-	-	386	432	-	230	380	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.1	23.8	37.6
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	112	482	1057	-	-	940	-	-	135
HCM Lane V/C Ratio	0.357	0.322	0.005	-	-	0.074	-	-	0.185
HCM Control Delay (s)	54	16	8.4	-	-	9.1	-	-	37.6
HCM Lane LOS	F	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	1.4	1.4	0	-	-	0.2	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	610	115	105	445	100	245	40	45	35	35	35
Future Volume (vph)	45	610	115	105	445	100	245	40	45	35	35	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	246.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	610	115	105	445	100	245	40	45	35	35	35
Future Vol, veh/h	45	610	115	105	445	100	245	40	45	35	35	35
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	45	610	115	105	445	100	245	40	45	35	35	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	546	0	0	727	0	0	1501	1516	671	1507	1523	497
Stage 1	-	-	-	-	-	-	760	760	-	706	706	-
Stage 2	-	-	-	-	-	-	741	756	-	801	817	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	1008	-	-	876	-	-	~ 99	118	451	100	119	577
Stage 1	-	-	-	-	-	-	394	410	-	430	442	-
Stage 2	-	-	-	-	-	-	403	412	-	381	393	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1007	-	-	874	-	-	~ 54	90	450	49	90	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 54	90	-	49	90	-
Stage 1	-	-	-	-	-	-	363	378	-	397	364	-
Stage 2	-	-	-	-	-	-	282	339	-	283	362	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.6	$ 1308.9	232.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	54	156	1007	-	-	874	-	-	90
HCM Lane V/C Ratio	4.537	0.545	0.045	-	-	0.12	-	-	1.167
HCM Control Delay (s)	$ 1744.7	52.7	8.7	0	-	9.7	0	-	232.2
HCM Lane LOS	F	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	27.2	2.7	0.1	-	-	0.4	-	-	7.3

Notes

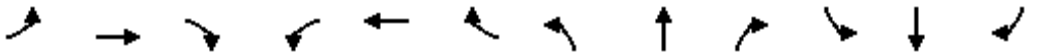
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	540	135	95	340	160	100	100	135	25	185	90
Future Volume (vph)	80	540	135	95	340	160	100	100	135	25	185	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 88.9	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

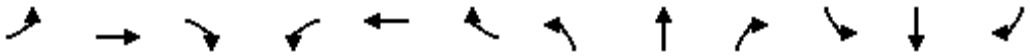




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	540	135	95	340	160	100	100	135	25	185	90
Future Volume (veh/h)	80	540	135	95	340	160	100	100	135	25	185	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	80	540	135	95	340	160	100	100	135	25	185	90
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	506	900	225	386	755	355	212	187	252	236	308	150
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	883	1420	355	757	1191	560	1063	693	935	1101	1145	557
Grp Volume(v), veh/h	80	0	675	95	0	500	100	0	235	25	0	275
Grp Sat Flow(s),veh/h/ln	883	0	1775	757	0	1751	1063	0	1628	1101	0	1702
Q Serve(g_s), s	4.9	0.0	21.4	8.1	0.0	13.9	8.6	0.0	11.7	1.9	0.0	13.4
Cycle Q Clear(g_c), s	18.8	0.0	21.4	29.5	0.0	13.9	22.0	0.0	11.7	13.6	0.0	13.4
Prop In Lane	1.00		0.20	1.00		0.32	1.00		0.57	1.00		0.33
Lane Grp Cap(c), veh/h	506	0	1125	386	0	1110	212	0	438	236	0	458
V/C Ratio(X)	0.16	0.00	0.60	0.25	0.00	0.45	0.47	0.00	0.54	0.11	0.00	0.60
Avail Cap(c_a), veh/h	506	0	1125	386	0	1110	265	0	520	291	0	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	10.3	19.0	0.0	8.9	39.9	0.0	29.7	35.5	0.0	30.3
Incr Delay (d2), s/veh	0.7	0.0	2.4	1.5	0.0	1.3	2.3	0.0	1.5	0.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	8.4	1.6	0.0	5.3	2.4	0.0	4.8	0.5	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	0.0	12.7	20.5	0.0	10.2	42.2	0.0	31.2	35.7	0.0	31.7
LnGrp LOS	B	A	B	C	A	B	D	A	C	D	A	C
Approach Vol, veh/h		755			595			335			300	
Approach Delay, s/veh		12.8			11.9			34.5			32.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.0	30.2	65.0	30.2
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	60.4	30.4	60.4	30.4
Max Q Clear Time (g_c+I1), s	23.4	24.0	31.5	15.6
Green Ext Time (p_c), s	6.6	1.3	4.7	1.6

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	425	230	40	465	75	215	25	5	30	25	50
Future Volume (vph)	25	425	230	40	465	75	215	25	5	30	25	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	67.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	425	230	40	465	75	215	25	5	30	25	50
Future Vol, veh/h	25	425	230	40	465	75	215	25	5	30	25	50
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	25	425	230	40	465	75	215	25	5	30	25	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	542	0	0	657	0	0	1214	1214	544	1192	1292	507
Stage 1	-	-	-	-	-	-	592	592	-	585	585	-
Stage 2	-	-	-	-	-	-	622	622	-	607	707	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1017	-	-	931	-	-	~ 158	181	537	166	165	570
Stage 1	-	-	-	-	-	-	491	492	-	501	501	-
Stage 2	-	-	-	-	-	-	473	477	-	487	441	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1015	-	-	929	-	-	~ 116	162	535	134	148	568
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 116	162	-	134	148	-
Stage 1	-	-	-	-	-	-	470	471	-	480	469	-
Stage 2	-	-	-	-	-	-	382	446	-	438	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.6	$ 423.5	36
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	116	183	1015	-	-	929	-	-	218
HCM Lane V/C Ratio	1.853	0.164	0.025	-	-	0.043	-	-	0.482
HCM Control Delay (s)	$ 478.6	28.5	8.6	0	-	9	0	-	36
HCM Lane LOS	F	D	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	17.1	0.6	0.1	-	-	0.1	-	-	2.4

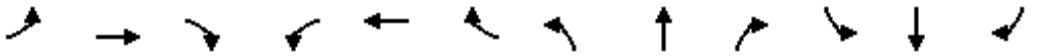
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	490	200	40	315	50	240	125	75	45	205	25
Future Volume (vph)	10	490	200	40	315	50	240	125	75	45	205	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





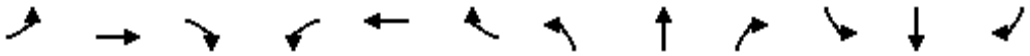
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	490	200	40	315	50	240	125	75	45	205	25
Future Volume (veh/h)	10	490	200	40	315	50	240	125	75	45	205	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	490	200	40	315	50	240	125	75	45	205	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	701	680	277	321	851	135	262	263	158	280	380	46
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	998	1120	457	747	1402	223	1123	962	577	1117	1390	170
Grp Volume(v), veh/h	10	0	690	40	0	365	240	0	200	45	0	230
Grp Sat Flow(s),veh/h/ln	998	0	1578	747	0	1625	1123	0	1539	1117	0	1559
Q Serve(g_s), s	0.3	0.0	22.9	2.2	0.0	0.0	11.1	0.0	8.1	2.6	0.0	9.4
Cycle Q Clear(g_c), s	0.3	0.0	22.9	25.2	0.0	0.0	20.5	0.0	8.1	10.8	0.0	9.4
Prop In Lane	1.00		0.29	1.00		0.14	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	701	0	957	321	0	986	262	0	421	280	0	426
V/C Ratio(X)	0.01	0.00	0.72	0.12	0.00	0.37	0.92	0.00	0.48	0.16	0.00	0.54
Avail Cap(c_a), veh/h	701	0	957	321	0	986	262	0	421	280	0	426
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.00	0.82	0.96	0.00	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	0.0	10.3	6.3	0.0	0.0	33.7	0.0	22.8	27.3	0.0	23.2
Incr Delay (d2), s/veh	0.0	0.0	3.9	0.8	0.0	1.0	33.7	0.0	0.3	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	7.8	0.3	0.0	0.3	6.8	0.0	2.9	0.7	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	14.2	7.1	0.0	1.0	67.4	0.0	23.1	27.4	0.0	24.0
LnGrp LOS	A	A	B	A	A	A	E	A	C	C	A	C
Approach Vol, veh/h		700			405			440			275	
Approach Delay, s/veh		14.1			1.6			47.3			24.5	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		25.0		50.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		24.9		12.8		27.2		22.5				
Green Ext Time (p_c), s		5.4		0.6		2.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	295	135	30	460	40	65	35	25	5	15	70
Future Volume (vph)	40	295	135	30	460	40	65	35	25	5	15	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

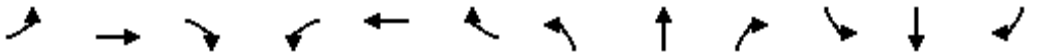
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	20.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	295	135	30	460	40	65	35	25	5	15	70
Future Vol, veh/h	40	295	135	30	460	40	65	35	25	5	15	70
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	40	295	135	30	460	40	65	35	25	5	15	70
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19.2	24.6	11.8	10.6
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	52%	9%	6%	6%
Vol Thru, %	28%	63%	87%	17%
Vol Right, %	20%	29%	8%	78%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	470	530	90
LT Vol	65	40	30	5
Through Vol	35	295	460	15
RT Vol	25	135	40	70
Lane Flow Rate	125	470	530	90
Geometry Grp	1	1	1	1
Degree of Util (X)	0.232	0.687	0.779	0.157
Departure Headway (Hd)	6.694	5.26	5.29	6.297
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	533	682	678	564
Service Time	4.787	3.322	3.35	4.396
HCM Lane V/C Ratio	0.235	0.689	0.782	0.16
HCM Control Delay	11.8	19.2	24.6	10.6
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	0.9	5.5	7.5	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	480	30	30	335	55	15	10	40	110	35	45
Future Volume (vph)	80	480	30	30	335	55	15	10	40	110	35	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1626	0	1770	1635	0	0	1791	1411	0	1812	1439
Flt Permitted	0.515			0.437				0.819			0.762	
Satd. Flow (perm)	936	1626	0	809	1635	0	0	1507	1367	0	1422	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			20				40			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	510	0	30	390	0	0	25	40	0	145	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	52.8	52.8		52.8	52.8			13.2	52.8		13.2	52.8
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.18	0.70		0.18	0.70
v/c Ratio	0.12	0.45		0.05	0.34			0.09	0.04		0.58	0.04
Control Delay	6.8	8.3		5.4	6.0			23.6	2.2		36.4	2.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	6.8	8.3		5.4	6.0			23.6	2.2		36.4	2.2
LOS	A	A		A	A			C	A		D	A
Approach Delay		8.1			6.0			10.5			28.3	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	

Intersection Signal Delay: 10.5 Intersection LOS: B
Intersection Capacity Utilization 71.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	345	15	0	0	395
Future Volume (vph)	40	345	15	0	0	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	345	15	0	0	395
Future Vol, veh/h	40	345	15	0	0	395
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	40	345	15	0	0	395

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	410	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	588	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	670	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	588	1050	-	-	-	-
Mov Cap-2 Maneuver	588	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	670	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	971	-
HCM Lane V/C Ratio	-	0.396	-
HCM Control Delay (s)	-	11.1	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.9	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	370	90
Future Volume (vph)	0	0	10	0	370	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

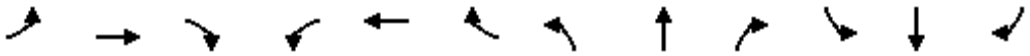
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	370	90
Future Vol, veh/h	0	0	10	0	370	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	370	90

Major/Minor	Minor2		Major2	
Conflicting Flow All	830	90	0	0
Stage 1	830	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	308	973	-	-
Stage 1	388	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	973	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	45	110	10	10	10	75	550	15	10	365	40
Future Volume (vph)	25	45	110	10	10	10	75	550	15	10	365	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

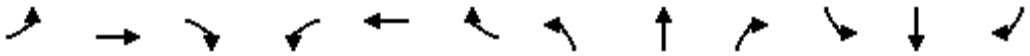
Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	45	110	10	10	10	75	550	15	10	365	40
Future Vol, veh/h	25	45	110	10	10	10	75	550	15	10	365	40
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	25	45	110	10	10	10	75	550	15	10	365	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1166	1146	413	1219	1159	601	418	0	0	578	0	0
Stage 1	418	418	-	721	721	-	-	-	-	-	-	-
Stage 2	748	728	-	498	438	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	172	201	643	159	197	504	1141	-	-	986	-	-
Stage 1	616	594	-	422	435	-	-	-	-	-	-	-
Stage 2	408	432	-	558	582	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	142	175	626	94	171	484	1127	-	-	974	-	-
Mov Cap-2 Maneuver	142	175	-	94	171	-	-	-	-	-	-	-
Stage 1	549	579	-	376	388	-	-	-	-	-	-	-
Stage 2	341	385	-	413	567	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.4	32.2	1	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1127	-	-	296	162	974	-	-
HCM Lane V/C Ratio	0.067	-	-	0.608	0.185	0.01	-	-
HCM Control Delay (s)	8.4	0	-	34.4	32.2	8.7	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3.7	0.7	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	20	20	0	10	80	340	30	5	240	10
Future Volume (vph)	5	0	20	20	0	10	80	340	30	5	240	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

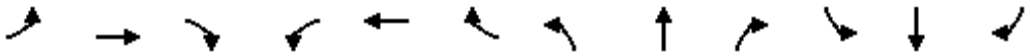
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	20	20	0	10	80	340	30	5	240	10
Future Vol, veh/h	5	0	20	20	0	10	80	340	30	5	240	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	5	0	20	20	0	10	80	340	30	5	240	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	775	785	245	780	775	355	250	0	0	370	0	0
Stage 1	255	255	-	515	515	-	-	-	-	-	-	-
Stage 2	520	530	-	265	260	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	296	307	756	315	331	693	1310	-	-	1178	-	-
Stage 1	715	668	-	546	538	-	-	-	-	-	-	-
Stage 2	511	501	-	745	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	274	282	756	288	304	693	1310	-	-	1178	-	-
Mov Cap-2 Maneuver	274	282	-	288	304	-	-	-	-	-	-	-
Stage 1	660	665	-	504	497	-	-	-	-	-	-	-
Stage 2	465	462	-	722	694	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	16	1.4	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1310	-	-	559	358	1178	-	-
HCM Lane V/C Ratio	0.061	-	-	0.045	0.084	0.004	-	-
HCM Control Delay (s)	7.9	0	-	11.7	16	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.3	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	120	5	30	205	35	0	25	30	40	0	25
Future Volume (vph)	20	120	5	30	205	35	0	25	30	40	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.4

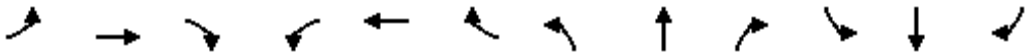
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	120	5	30	205	35	0	25	30	40	0	25
Future Vol, veh/h	20	120	5	30	205	35	0	25	30	40	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	120	5	30	205	35	0	25	30	40	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	240	0	0	125	0	0	458	463	123	473	448	223
Stage 1	-	-	-	-	-	-	163	163	-	283	283	-
Stage 2	-	-	-	-	-	-	295	300	-	190	165	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1309	-	-	1474	-	-	498	483	904	505	509	822
Stage 1	-	-	-	-	-	-	818	746	-	728	681	-
Stage 2	-	-	-	-	-	-	694	650	-	816	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1309	-	-	1474	-	-	468	464	904	454	489	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	464	-	454	489	-
Stage 1	-	-	-	-	-	-	805	734	-	716	665	-
Stage 2	-	-	-	-	-	-	657	634	-	750	754	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0.8	11.2	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	632	1309	-	-	1474	-	-	548
HCM Lane V/C Ratio	0.087	0.015	-	-	0.02	-	-	0.119
HCM Control Delay (s)	11.2	7.8	0	-	7.5	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.4

2037 Baseline Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	5	5	0	0	0	0	20	10	265	20	0
Future Volume (vph)	155	5	5	0	0	0	0	20	10	265	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

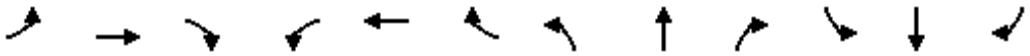
Intersection	
Int Delay, s/veh	11

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	155	5	5	0	0	0	0	20	10	265	20	0
Future Vol, veh/h	155	5	5	0	0	0	0	20	10	265	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	155	5	5	0	0	0	0	20	10	265	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	575	580	20	-	0	0	30	0	0
Stage 1	550	550	-	-	-	-	-	-	-
Stage 2	25	30	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	481	427	1061	0	-	-	1596	-	0
Stage 1	580	517	-	0	-	-	-	-	0
Stage 2	1000	872	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	400	0	1061	-	-	-	1596	-	-
Mov Cap-2 Maneuver	400	0	-	-	-	-	-	-	-
Stage 1	580	0	-	-	-	-	-	-	-
Stage 2	832	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.7	0	7.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	1596	-
HCM Lane V/C Ratio	-	-	0.404	0.166	-
HCM Control Delay (s)	-	-	19.7	7.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0.6	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	5	480	5	170	0	0	250	995
Future Volume (vph)	0	0	0	35	5	480	5	170	0	0	250	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

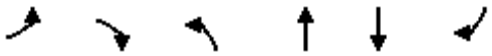
Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	35	5	480	5	170	0	0	250	995
Future Vol, veh/h	0	0	0	35	5	480	5	170	0	0	250	995
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	35	5	480	5	170	0	0	250	995

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	928	1425	170	1245	0	-	-	-	0
Stage 1	180	180	-	-	-	-	-	-	-
Stage 2	748	1245	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	300	137	879	566	-	0	0	-	-
Stage 1	856	754	-	-	-	0	0	-	-
Stage 2	471	248	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	297	0	879	566	-	-	-	-	-
Mov Cap-2 Maneuver	297	0	-	-	-	-	-	-	-
Stage 1	847	0	-	-	-	-	-	-	-
Stage 2	471	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.5	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	566	-	776	-	-
HCM Lane V/C Ratio	0.009	-	0.67	-	-
HCM Control Delay (s)	11.4	0	18.5	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0	-	5.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	105	40	610	1140	30
Future Volume (vph)	20	105	40	610	1140	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

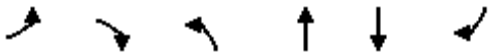
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	105	40	610	1140	30
Future Vol, veh/h	20	105	40	610	1140	30
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	20	105	40	610	1140	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1845	1155	1170	0	-	0
Stage 1	1155	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	81	237	604	-	-	-
Stage 1	297	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	76	237	604	-	-	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	277	-	-	-	-	-
Stage 2	494	-	-	-	-	-

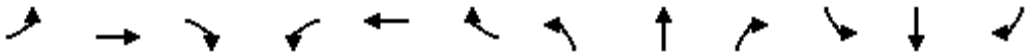
Approach	EB	NB	SB
HCM Control Delay, s	63.3	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	604	-	177	-	-
HCM Lane V/C Ratio	0.066	-	0.706	-	-
HCM Control Delay (s)	11.4	-	63.3	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	4.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	260	440	190	910	95
Future Volume (vph)	75	260	440	190	910	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			3273	1408	
Travel Time (s)	19.3			63.8	27.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	20	0	0	0	40	225	0	0	985	15
Future Volume (vph)	10	0	20	0	0	0	40	225	0	0	985	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	20	0	0	0	40	225	0	0	985	15
Future Vol, veh/h	10	0	20	0	0	0	40	225	0	0	985	15
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	10	0	20	0	0	0	40	225	0	0	985	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1298	1298	993	1308	1305	225	1000	0	0	225	0	0
Stage 1	993	993	-	305	305	-	-	-	-	-	-	-
Stage 2	305	305	-	1003	1000	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	135	158	291	138	162	819	700	-	-	1350	-	-
Stage 1	289	317	-	709	666	-	-	-	-	-	-	-
Stage 2	694	653	-	294	324	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	148	291	122	151	819	700	-	-	1350	-	-
Mov Cap-2 Maneuver	128	148	-	122	151	-	-	-	-	-	-	-
Stage 1	270	317	-	663	623	-	-	-	-	-	-	-
Stage 2	649	611	-	274	324	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.7	0	1.6	0
HCM LOS	D	A		

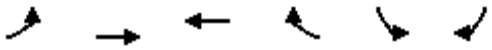
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	700	-	-	204	-	1350	-	-
HCM Lane V/C Ratio	0.057	-	-	0.147	-	-	-	-
HCM Control Delay (s)	10.5	0	-	25.7	0	0	-	-
HCM Lane LOS	B	A	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	750	410	110	125	350	250
Future Volume (vph)	750	410	110	125	350	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Confl. Peds. (#/hr)	1					
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other

Control Type: Roundabout



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	470	1200	30	20	10
Future Volume (vph)	5	470	1200	30	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2986	1314		535	
Travel Time (s)		81.4	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

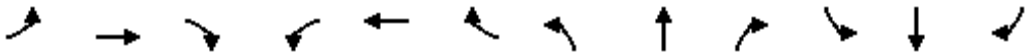
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	470	1200	30	20	10
Future Vol, veh/h	5	470	1200	30	20	10
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	5	470	1200	30	20	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1235	0	-	0	1700	1220
Stage 1	-	-	-	-	1220	-
Stage 2	-	-	-	-	480	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	568	-	-	-	102	222
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	565	-	-	-	100	221
Mov Cap-2 Maneuver	-	-	-	-	100	-
Stage 1	-	-	-	-	277	-
Stage 2	-	-	-	-	624	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	43.9
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	565	-	-	-	122
HCM Lane V/C Ratio	0.009	-	-	-	0.246
HCM Control Delay (s)	11.4	0	-	-	43.9
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	425	50	30	1100	30	165	0	90	10	10	20
Future Volume (vph)	0	425	50	30	1100	30	165	0	90	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	119.9

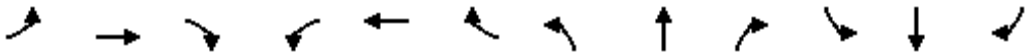
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	425	50	30	1100	30	165	0	90	10	10	20
Future Vol, veh/h	0	425	50	30	1100	30	165	0	90	10	10	20
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	0	425	50	30	1100	30	165	0	90	10	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1130	0	0	478	0	0	1643	1643	453	1670	1653	1115
Stage 1	-	-	-	-	-	-	453	453	-	1175	1175	-
Stage 2	-	-	-	-	-	-	1190	1190	-	495	478	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	622	-	-	1090	-	-	~ 79	99	605	77	99	255
Stage 1	-	-	-	-	-	-	584	568	-	236	268	-
Stage 2	-	-	-	-	-	-	228	260	-	560	559	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	622	-	-	1087	-	-	~ 63	91	603	62	91	255
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 63	91	-	62	91	-
Stage 1	-	-	-	-	-	-	582	566	-	236	248	-
Stage 2	-	-	-	-	-	-	187	241	-	476	557	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	$ 898.5	52.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	92	622	-	-	1087	-	-	114
HCM Lane V/C Ratio	2.772	-	-	-	0.028	-	-	0.351
HCM Control Delay (s)	$ 898.5	0	-	-	8.4	0	-	52.8
HCM Lane LOS	F	A	-	-	A	A	-	F
HCM 95th %tile Q(veh)	24.3	0	-	-	0.1	-	-	1.4

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	495	40	60	1100	50	70	20	15	10	0	0
Future Volume (vph)	20	495	40	60	1100	50	70	20	15	10	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	28.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	495	40	60	1100	50	70	20	15	10	0	0
Future Vol, veh/h	20	495	40	60	1100	50	70	20	15	10	0	0
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	20	495	40	60	1100	50	70	20	15	10	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1150	0	0	539	0	0	1804	1829	519	1818	1824	1125
Stage 1	-	-	-	-	-	-	559	559	-	1245	1245	-
Stage 2	-	-	-	-	-	-	1245	1270	-	573	579	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	608	-	-	1034	-	-	~ 61	77	557	61	78	252
Stage 1	-	-	-	-	-	-	513	511	-	215	248	-
Stage 2	-	-	-	-	-	-	213	239	-	508	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	608	-	-	1030	-	-	~ 51	61	555	38	62	252
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 51	61	-	38	62	-
Stage 1	-	-	-	-	-	-	487	485	-	205	207	-
Stage 2	-	-	-	-	-	-	178	200	-	452	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.4	$ 494.7	130.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	61	608	-	-	1030	-	-	38
HCM Lane V/C Ratio	1.721	0.033	-	-	0.058	-	-	0.263
HCM Control Delay (s)	$ 494.7	11.1	0	-	8.7	0	-	130.7
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	9.6	0.1	-	-	0.2	-	-	0.9

Notes

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	60	10	20	230
Future Volume (vph)	25	15	60	10	20	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

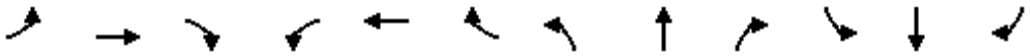
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	60	10	20	230
Future Vol, veh/h	25	15	60	10	20	230
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	60	10	20	230
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	8.1	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	8%	0%	86%
Vol Thru, %	0%	62%	14%
Vol Right, %	92%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	250	40	70
LT Vol	20	0	60
Through Vol	0	25	10
RT Vol	230	15	0
Lane Flow Rate	250	40	70
Geometry Grp	1	1	1
Degree of Util (X)	0.251	0.047	0.088
Departure Headway (Hd)	3.621	4.255	4.543
Convergence, Y/N	Yes	Yes	Yes
Cap	980	831	782
Service Time	1.692	2.337	2.612
HCM Lane V/C Ratio	0.255	0.048	0.09
HCM Control Delay	7.9	7.6	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	0.1	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	275	120	75	400	185	70	75	110	50	40	45
Future Volume (vph)	120	275	120	75	400	185	70	75	110	50	40	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

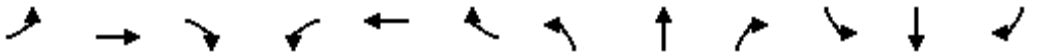
Intersection	
Int Delay, s/veh	36

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	120	275	120	75	400	185	70	75	110	50	40	45
Future Vol, veh/h	120	275	120	75	400	185	70	75	110	50	40	45
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	120	275	120	75	400	185	70	75	110	50	40	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	585	0	0	395	0	0	1261	1310	335	1311	1278	494
Stage 1	-	-	-	-	-	-	575	575	-	643	643	-
Stage 2	-	-	-	-	-	-	686	735	-	668	635	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	990	-	-	1164	-	-	147	159	707	137	168	579
Stage 1	-	-	-	-	-	-	503	503	-	465	472	-
Stage 2	-	-	-	-	-	-	438	425	-	451	476	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	990	-	-	1164	-	-	91	131	707	55	138	578
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	131	-	55	138	-
Stage 1	-	-	-	-	-	-	442	442	-	409	442	-
Stage 2	-	-	-	-	-	-	343	398	-	278	418	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.9	162.2	98.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	108	707	990	-	-	1164	-	-	55	231
HCM Lane V/C Ratio	1.343	0.156	0.121	-	-	0.064	-	-	0.909	0.368
HCM Control Delay (s)	276.9	11	9.1	-	-	8.3	-	-	214.9	29.4
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	10	0.5	0.4	-	-	0.2	-	-	4	1.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	370	5	60	545	40	20	30	65	5	50	50
Future Volume (vph)	75	370	5	60	545	40	20	30	65	5	50	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

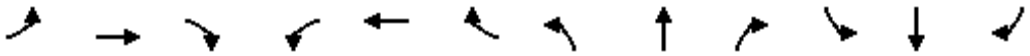
Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	370	5	60	545	40	20	30	65	5	50	50
Future Vol, veh/h	75	370	5	60	545	40	20	30	65	5	50	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	370	5	60	545	40	20	30	65	5	50	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	587	0	0	377	0	0	1260	1232	375	1257	1214	567
Stage 1	-	-	-	-	-	-	525	525	-	687	687	-
Stage 2	-	-	-	-	-	-	735	707	-	570	527	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	993	-	-	1181	-	-	146	176	667	147	181	521
Stage 1	-	-	-	-	-	-	532	526	-	435	446	-
Stage 2	-	-	-	-	-	-	408	435	-	505	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	1179	-	-	91	154	666	102	158	520
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	154	-	102	158	-
Stage 1	-	-	-	-	-	-	491	485	-	402	422	-
Stage 2	-	-	-	-	-	-	309	412	-	395	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	29.8	33.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	121	666	991	-	-	1179	-	-	227
HCM Lane V/C Ratio	0.413	0.098	0.076	-	-	0.051	-	-	0.463
HCM Control Delay (s)	54.3	11	8.9	-	-	8.2	-	-	33.8
HCM Lane LOS	F	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.8	0.3	0.2	-	-	0.2	-	-	2.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	380	80	120	900	50	365	15	30	10	20	20
Future Volume (vph)	20	380	80	120	900	50	365	15	30	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	601.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	380	80	120	900	50	365	15	30	10	20	20
Future Vol, veh/h	20	380	80	120	900	50	365	15	30	10	20	20
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	20	380	80	120	900	50	365	15	30	10	20	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	958	0	0	463	0	0	1652	1661	425	1658	1676	937
Stage 1	-	-	-	-	-	-	463	463	-	1173	1173	-
Stage 2	-	-	-	-	-	-	1189	1198	-	485	503	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	714	-	-	1104	-	-	~ 79	98	631	79	96	324
Stage 1	-	-	-	-	-	-	581	566	-	236	268	-
Stage 2	-	-	-	-	-	-	~ 230	260	-	567	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	709	-	-	1101	-	-	~ 46	71	628	50	70	320
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 46	71	-	50	70	-
Stage 1	-	-	-	-	-	-	557	543	-	225	204	-
Stage 2	-	-	-	-	-	-	~ 148	198	-	504	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1	$ 2933.4	84.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	46	174	709	-	-	1101	-	-	91
HCM Lane V/C Ratio	7.935	0.259	0.028	-	-	0.109	-	-	0.549
HCM Control Delay (s)	$ 3291	32.8	10.2	0	-	8.7	0	-	84.8
HCM Lane LOS	F	D	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	43.1	1	0.1	-	-	0.4	-	-	2.5

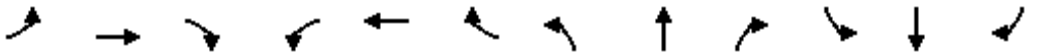
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	105	90	490	300	95	90	95	20	140	60
Future Volume (vph)	15	320	105	90	490	300	95	90	95	20	140	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 91.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





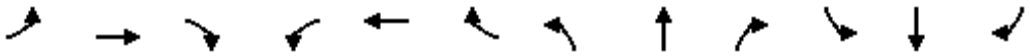
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	105	90	490	300	95	90	95	20	140	60
Future Volume (veh/h)	15	320	105	90	490	300	95	90	95	20	140	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	105	90	490	300	95	90	95	20	140	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	376	931	306	648	750	459	210	177	187	217	265	114
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	686	1348	442	962	1086	665	1189	837	884	1205	1250	536
Grp Volume(v), veh/h	15	0	425	90	0	790	95	0	185	20	0	200
Grp Sat Flow(s),veh/h/ln	686	0	1790	962	0	1750	1189	0	1721	1205	0	1786
Q Serve(g_s), s	1.2	0.0	9.1	4.0	0.0	24.1	7.3	0.0	9.0	1.4	0.0	9.4
Cycle Q Clear(g_c), s	25.3	0.0	9.1	13.1	0.0	24.1	16.7	0.0	9.0	10.4	0.0	9.4
Prop In Lane	1.00		0.25	1.00		0.38	1.00		0.51	1.00		0.30
Lane Grp Cap(c), veh/h	376	0	1237	648	0	1209	210	0	365	217	0	378
V/C Ratio(X)	0.04	0.00	0.34	0.14	0.00	0.65	0.45	0.00	0.51	0.09	0.00	0.53
Avail Cap(c_a), veh/h	376	0	1237	648	0	1209	277	0	462	285	0	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	5.9	8.6	0.0	8.2	40.5	0.0	32.9	37.5	0.0	33.1
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.4	0.0	2.8	2.2	0.0	1.6	0.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.3	0.9	0.0	8.8	2.3	0.0	3.9	0.4	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	6.7	9.0	0.0	11.0	42.7	0.0	34.5	37.8	0.0	34.7
LnGrp LOS	B	A	A	A	A	B	D	A	C	D	A	C
Approach Vol, veh/h		440			880			280			220	
Approach Delay, s/veh		7.0			10.8			37.3			35.0	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	70.0	24.7	70.0	24.7
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	65.4	25.4	65.4	25.4
Max Q Clear Time (g_c+I1), s	27.3	18.7	26.1	12.4
Green Ext Time (p_c), s	3.4	1.1	8.6	1.3

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	285	125	15	455	50	600	50	10	30	25	15
Future Volume (vph)	25	285	125	15	455	50	600	50	10	30	25	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	307.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	285	125	15	455	50	600	50	10	30	25	15
Future Vol, veh/h	25	285	125	15	455	50	600	50	10	30	25	15
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	25	285	125	15	455	50	600	50	10	30	25	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	505	0	0	411	0	0	929	934	350	939	971	480
Stage 1	-	-	-	-	-	-	399	399	-	510	510	-
Stage 2	-	-	-	-	-	-	530	535	-	429	461	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1060	-	-	1153	-	-	~ 248	266	693	238	247	574
Stage 1	-	-	-	-	-	-	627	602	-	535	528	-
Stage 2	-	-	-	-	-	-	~ 533	524	-	593	555	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1060	-	-	1152	-	-	~ 214	253	692	192	235	574
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 214	253	-	192	235	-
Stage 1	-	-	-	-	-	-	607	583	-	518	518	-
Stage 2	-	-	-	-	-	-	~ 485	515	-	517	537	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	$ 782.7	25.8
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	214	283	1060	-	-	1152	-	-	242
HCM Lane V/C Ratio	2.804	0.212	0.024	-	-	0.013	-	-	0.289
HCM Control Delay (s)	$ 858.9	21.1	8.5	0	-	8.2	0	-	25.8
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	52.5	0.8	0.1	-	-	0	-	-	1.2

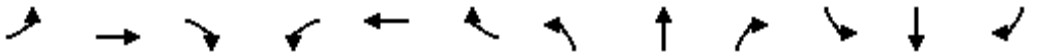
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	280	115	35	440	270	445	350	75	20	125	25
Future Volume (vph)	15	280	115	35	440	270	445	350	75	20	125	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

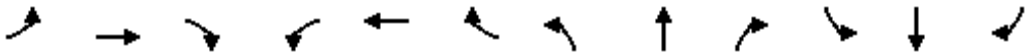




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	280	115	35	440	270	445	350	75	20	125	25
Future Volume (veh/h)	15	280	115	35	440	270	445	350	75	20	125	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	280	115	35	440	270	445	350	75	20	125	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	518	672	276	538	582	357	368	409	88	137	412	82
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	736	1130	464	994	980	601	1226	1340	287	954	1348	270
Grp Volume(v), veh/h	15	0	395	35	0	710	445	0	425	20	0	150
Grp Sat Flow(s),veh/h/ln	736	0	1594	994	0	1581	1226	0	1627	954	0	1617
Q Serve(g_s), s	0.8	0.0	12.0	0.8	0.0	0.0	21.1	0.0	22.1	1.8	0.0	6.4
Cycle Q Clear(g_c), s	0.8	0.0	12.0	12.8	0.0	0.0	27.5	0.0	22.1	23.9	0.0	6.4
Prop In Lane	1.00		0.29	1.00		0.38	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	518	0	947	538	0	940	368	0	497	137	0	494
V/C Ratio(X)	0.03	0.00	0.42	0.07	0.00	0.76	1.21	0.00	0.85	0.15	0.00	0.30
Avail Cap(c_a), veh/h	518	0	947	538	0	940	368	0	497	137	0	494
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.79	0.00	0.79	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	9.8	1.4	0.0	0.0	36.7	0.0	29.4	40.6	0.0	23.9
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.2	0.0	4.5	117.4	0.0	13.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.3	0.1	0.0	1.2	20.2	0.0	10.3	0.4	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.1	1.6	0.0	4.5	154.1	0.0	42.4	40.8	0.0	24.0
LnGrp LOS	A	A	B	A	A	A	F	A	D	D	A	C
Approach Vol, veh/h		410			745			870			170	
Approach Delay, s/veh		11.0			4.4			99.6			26.0	
Approach LOS		B			A			F			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		14.0		25.9		14.8		29.5				
Green Ext Time (p_c), s		3.1		0.1		6.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			45.0									
HCM 6th LOS			D									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	225	75	25	400	40	70	25	10	5	20	30
Future Volume (vph)	20	225	75	25	400	40	70	25	10	5	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

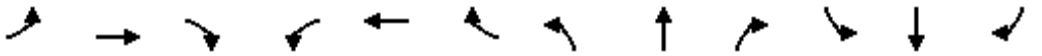
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	225	75	25	400	40	70	25	10	5	20	30
Future Vol, veh/h	20	225	75	25	400	40	70	25	10	5	20	30
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	20	225	75	25	400	40	70	25	10	5	20	30
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.6	14.9	10.2	9.3
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	6%	5%	9%
Vol Thru, %	24%	70%	86%	36%
Vol Right, %	10%	23%	9%	55%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	320	465	55
LT Vol	70	20	25	5
Through Vol	25	225	400	20
RT Vol	10	75	40	30
Lane Flow Rate	105	320	465	55
Geometry Grp	1	1	1	1
Degree of Util (X)	0.174	0.434	0.606	0.087
Departure Headway (Hd)	5.952	4.888	4.695	5.69
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	605	742	758	631
Service Time	3.968	2.888	2.794	3.709
HCM Lane V/C Ratio	0.174	0.431	0.613	0.087
HCM Control Delay	10.2	11.6	14.9	9.3
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	0.6	2.2	4.1	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	285	20	25	720	50	5	15	25	80	35	15
Future Volume (vph)	45	285	20	25	720	50	5	15	25	80	35	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1656	0	1770	1657	0	0	1877	1454	0	1835	1454
Flt Permitted	0.312			0.574				0.930			0.780	
Satd. Flow (perm)	580	1656	0	1061	1657	0	0	1764	1416	0	1476	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			7				25			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	305	0	25	770	0	0	20	25	0	115	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	70.6	70.6		70.6	70.6			13.8	70.6		13.8	70.6
Actuated g/C Ratio	0.78	0.78		0.78	0.78			0.15	0.78		0.15	0.78
v/c Ratio	0.10	0.23		0.03	0.59			0.07	0.02		0.51	0.01
Control Delay	4.2	3.6		5.2	9.4			28.9	2.6		40.9	2.7
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.2	3.6		5.2	9.4			28.9	2.6		40.9	2.7
LOS	A	A		A	A			C	A		D	A
Approach Delay		3.7			9.3			14.3			36.5	
Approach LOS		A			A			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay: 10.6 Intersection LOS: B
Intersection Capacity Utilization 79.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	900	20	0	0	250
Future Volume (vph)	60	900	20	0	0	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	27.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	900	20	0	0	250
Future Vol, veh/h	60	900	20	0	0	250
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	60	900	20	0	0	250

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	270	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	717	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	789	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	717	1055	-	-	-	-
Mov Cap-2 Maneuver	717	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	789	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.3	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1025	-
HCM Lane V/C Ratio	-	0.937	-
HCM Control Delay (s)	-	35.3	-
HCM Lane LOS	-	E	-
HCM 95th %tile Q(veh)	-	15.3	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	255	100
Future Volume (vph)	0	0	25	0	255	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

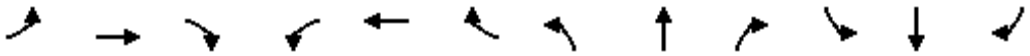
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	255	100
Future Vol, veh/h	0	0	25	0	255	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	255	100

Major/Minor	Minor2		Major2	
Conflicting Flow All	610	100	0	0
Stage 1	610	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	412	961	-	-
Stage 1	488	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	961	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	35	100	30	5	10	100	240	5	5	400	65
Future Volume (vph)	10	35	100	30	5	10	100	240	5	5	400	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

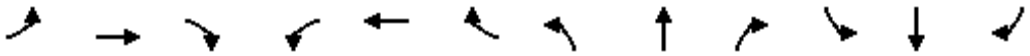
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	35	100	30	5	10	100	240	5	5	400	65
Future Vol, veh/h	10	35	100	30	5	10	100	240	5	5	400	65
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	10	35	100	30	5	10	100	240	5	5	400	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	939	908	458	968	938	279	480	0	0	250	0	0
Stage 1	458	458	-	448	448	-	-	-	-	-	-	-
Stage 2	481	450	-	520	490	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	246	277	607	235	266	765	1093	-	-	1316	-	-
Stage 1	587	570	-	594	576	-	-	-	-	-	-	-
Stage 2	570	575	-	543	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	209	241	593	157	232	739	1077	-	-	1310	-	-
Mov Cap-2 Maneuver	209	241	-	157	232	-	-	-	-	-	-	-
Stage 1	516	559	-	527	511	-	-	-	-	-	-	-
Stage 2	482	511	-	417	542	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	28.3	2.5	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1077	-	-	401	199	1310	-	-
HCM Lane V/C Ratio	0.093	-	-	0.362	0.226	0.004	-	-
HCM Control Delay (s)	8.7	0	-	19	28.3	7.8	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.6	0.8	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	40	45	0	5	60	185	20	10	300	20
Future Volume (vph)	10	0	40	45	0	5	60	185	20	10	300	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

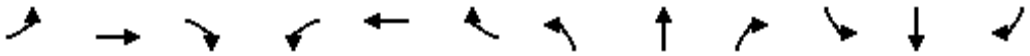
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	40	45	0	5	60	185	20	10	300	20
Future Vol, veh/h	10	0	40	45	0	5	60	185	20	10	300	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	0	40	45	0	5	60	185	20	10	300	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	648	655	310	665	655	195	320	0	0	205	0	0
Stage 1	330	330	-	315	315	-	-	-	-	-	-	-
Stage 2	318	325	-	350	340	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	386	388	735	376	388	851	1251	-	-	1378	-	-
Stage 1	687	649	-	700	659	-	-	-	-	-	-	-
Stage 2	698	653	-	671	643	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	366	364	735	338	364	851	1251	-	-	1378	-	-
Mov Cap-2 Maneuver	366	364	-	338	364	-	-	-	-	-	-	-
Stage 1	650	643	-	662	623	-	-	-	-	-	-	-
Stage 2	656	618	-	629	637	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	16.6	1.8	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1251	-	-	612	360	1378	-	-
HCM Lane V/C Ratio	0.048	-	-	0.082	0.139	0.007	-	-
HCM Control Delay (s)	8	0	-	11.4	16.6	7.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	215	5	15	140	10	10	0	10	45	0	5
Future Volume (vph)	10	215	5	15	140	10	10	0	10	45	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

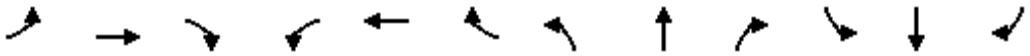
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	215	5	15	140	10	10	0	10	45	0	5
Future Vol, veh/h	10	215	5	15	140	10	10	0	10	45	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	215	5	15	140	10	10	0	10	45	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	150	0	0	220	0	0	416	418	218	418	415	145
Stage 1	-	-	-	-	-	-	238	238	-	175	175	-
Stage 2	-	-	-	-	-	-	178	180	-	243	240	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1444	-	-	1361	-	-	551	529	827	549	531	908
Stage 1	-	-	-	-	-	-	770	712	-	832	758	-
Stage 2	-	-	-	-	-	-	828	754	-	765	711	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1444	-	-	1361	-	-	539	518	827	534	520	908
Mov Cap-2 Maneuver	-	-	-	-	-	-	539	518	-	534	520	-
Stage 1	-	-	-	-	-	-	764	706	-	825	749	-
Stage 2	-	-	-	-	-	-	814	745	-	750	705	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.7	10.7	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	653	1444	-	-	1361	-	-	557
HCM Lane V/C Ratio	0.031	0.007	-	-	0.011	-	-	0.09
HCM Control Delay (s)	10.7	7.5	0	-	7.7	0	-	12.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	390	125	10	880	0	585	10	5	0	10	25
Future Volume (vph)	5	390	125	10	880	0	585	10	5	0	10	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	646.4

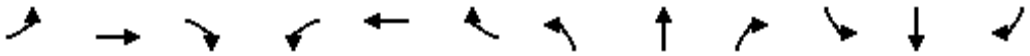
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	390	125	10	880	0	585	10	5	0	10	25
Future Vol, veh/h	5	390	125	10	880	0	585	10	5	0	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	390	125	10	880	0	585	10	5	0	10	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	880	0	0	515	0	0	1381	1363	453	1370	1425	880
Stage 1	-	-	-	-	-	-	463	463	-	900	900	-
Stage 2	-	-	-	-	-	-	918	900	-	470	525	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	768	-	-	1056	-	-	~ 121	147	605	125	137	349
Stage 1	-	-	-	-	-	-	~ 577	562	-	336	360	-
Stage 2	-	-	-	-	-	-	~ 324	356	-	578	533	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	768	-	-	1056	-	-	~ 104	143	605	115	133	349
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 104	143	-	115	133	-
Stage 1	-	-	-	-	-	-	~ 572	557	-	333	353	-
Stage 2	-	-	-	-	-	-	~ 287	349	-	558	528	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 2201.5	22.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	105	768	-	-	1056	-	-	238
HCM Lane V/C Ratio	5.714	0.007	-	-	0.009	-	-	0.147
HCM Control Delay (s)	$ 2201.5	9.7	0	-	8.4	0	-	22.7
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	65.3	0	-	-	0	-	-	0.5

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	630	0	395	0	0	135	490
Future Volume (vph)	0	0	0	0	0	630	0	395	0	0	135	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

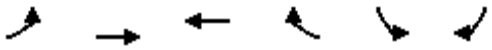
Intersection	
Int Delay, s/veh	20

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	630	0	395	0	0	135	490
Future Vol, veh/h	0	0	0	0	0	630	0	395	0	0	135	490
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	630	0	395	0	0	135	490

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	395	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.23	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	652	0	-	0	0	-	-
Stage 1	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	-	0	652	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	52.5	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.966	-	-
HCM Control Delay (s)	-	52.5	-	-
HCM Lane LOS	-	F	-	-
HCM 95th %tile Q(veh)	-	14.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	360	5	0	0	165	0
Future Volume (vph)	360	5	0	0	165	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	360	5	0	0	165	0
Future Vol, veh/h	360	5	0	0	165	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	360	5	0	0	165	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	11.7	9.7
HCM LOS	B	A

Lane	EBLn1	SBLn1
Vol Left, %	99%	100%
Vol Thru, %	1%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	365	165
LT Vol	360	165
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	365	165
Geometry Grp	1	1
Degree of Util (X)	0.47	0.235
Departure Headway (Hd)	4.639	5.133
Convergence, Y/N	Yes	Yes
Cap	777	700
Service Time	2.662	3.163
HCM Lane V/C Ratio	0.47	0.236
HCM Control Delay	11.7	9.7
HCM Lane LOS	B	A
HCM 95th-tile Q	2.5	0.9



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	375	5	505	775	125	0
Future Volume (vph)	375	5	505	775	125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	121.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	375	5	505	775	125	0
Future Vol, veh/h	375	5	505	775	125	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	375	5	505	775	125	0

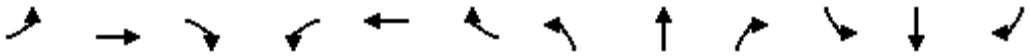
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	380	0	2163	378
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	1785	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1184	-	~ 52	669
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	147	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1184	-	~ 30	669
Mov Cap-2 Maneuver	-	-	-	-	~ 30	-
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	~ 84	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	$ 1693.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	30	-	-	1184	-
HCM Lane V/C Ratio	4.167	-	-	0.427	-
HCM Control Delay (s)	$ 1693.5	-	-	10.3	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	15	-	-	2.2	-

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

2025 with SEIS Alternative 5 Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	5	10	0	0	0	0	20	30	163	20	0
Future Volume (vph)	185	5	10	0	0	0	0	20	30	163	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

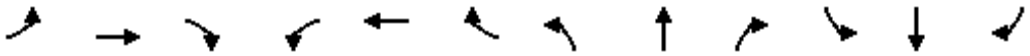
Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	5	10	0	0	0	0	20	30	163	20	0
Future Vol, veh/h	185	5	10	0	0	0	0	20	30	163	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	185	5	10	0	0	0	0	20	30	163	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	381	396	20	-	0	0	50	0	0
Stage 1	346	346	-	-	-	-	-	-	-
Stage 2	35	50	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	617	538	1052	0	-	-	1544	-	0
Stage 1	712	632	-	0	-	-	-	-	0
Stage 2	982	849	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	551	0	1052	-	-	-	1544	-	-
Mov Cap-2 Maneuver	551	0	-	-	-	-	-	-	-
Stage 1	712	0	-	-	-	-	-	-	-
Stage 2	877	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0	6.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	565	1544	-
HCM Lane V/C Ratio	-	-	0.354	0.106	-
HCM Control Delay (s)	-	-	14.8	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	5	233	10	195	0	0	153	118
Future Volume (vph)	0	0	0	20	5	233	10	195	0	0	153	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

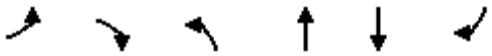
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	5	233	10	195	0	0	153	118
Future Vol, veh/h	0	0	0	20	5	233	10	195	0	0	153	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	20	5	233	10	195	0	0	153	118

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	427	486	195	271	0	-	-	-	0
Stage 1	215	215	-	-	-	-	-	-	-
Stage 2	212	271	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	581	478	841	1281	-	0	0	-	-
Stage 1	816	721	-	-	-	0	0	-	-
Stage 2	819	682	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	576	0	841	1281	-	-	-	-	-
Mov Cap-2 Maneuver	576	0	-	-	-	-	-	-	-
Stage 1	809	0	-	-	-	-	-	-	-
Stage 2	819	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1281	-	811	-	-
HCM Lane V/C Ratio	0.008	-	0.318	-	-
HCM Control Delay (s)	7.8	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	44	50	70	348	221	33
Future Volume (vph)	44	50	70	348	221	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

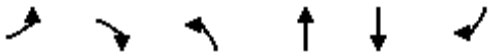
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	50	70	348	221	33
Future Vol, veh/h	44	50	70	348	221	33
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	44	50	70	348	221	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	726	238	254	0	-	0
Stage 1	238	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	373	770	1300	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	353	770	1300	-	-	-
Mov Cap-2 Maneuver	353	-	-	-	-	-
Stage 1	730	-	-	-	-	-
Stage 2	591	-	-	-	-	-

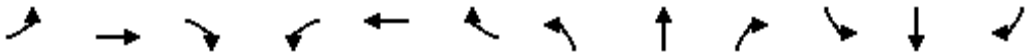
Approach	EB	NB	SB
HCM Control Delay, s	13.9	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1300	-	496	-	-
HCM Lane V/C Ratio	0.054	-	0.19	-	-
HCM Control Delay (s)	7.9	-	13.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	133	144	162	187	113	87
Future Volume (vph)	133	144	162	187	113	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1568	1192	
Travel Time (s)	19.3			30.5	23.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	0	14	0	0	0	11	300	0	0	194	20
Future Volume (vph)	20	0	14	0	0	0	11	300	0	0	194	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

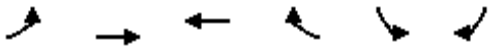
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	0	14	0	0	0	11	300	0	0	194	20
Future Vol, veh/h	20	0	14	0	0	0	11	300	0	0	194	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	20	0	14	0	0	0	11	300	0	0	194	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	527	527	205	533	537	300	215	0	0	300	0	0
Stage 1	205	205	-	322	322	-	-	-	-	-	-	-
Stage 2	322	322	-	211	215	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	454	449	823	461	453	744	1343	-	-	1261	-	-
Stage 1	786	723	-	694	655	-	-	-	-	-	-	-
Stage 2	679	642	-	796	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	450	444	822	449	448	744	1342	-	-	1261	-	-
Mov Cap-2 Maneuver	450	444	-	449	448	-	-	-	-	-	-	-
Stage 1	777	722	-	687	648	-	-	-	-	-	-	-
Stage 2	672	636	-	782	728	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1342	-	-	553	-	1261	-	-
HCM Lane V/C Ratio	0.008	-	-	0.061	-	-	-	-
HCM Control Delay (s)	7.7	0	-	11.9	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	634	663	20	20	14
Future Volume (vph)	13	634	663	20	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2805	1314		535	
Travel Time (s)		76.5	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

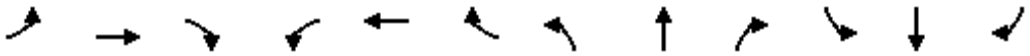
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	634	663	20	20	14
Future Vol, veh/h	13	634	663	20	20	14
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	13	634	663	20	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	683	0	-	0	1333	676
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	660	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	892	-	-	-	172	457
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	892	-	-	-	168	456
Mov Cap-2 Maneuver	-	-	-	-	168	-
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	518	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	23.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	892	-	-	-	227
HCM Lane V/C Ratio	0.015	-	-	-	0.15
HCM Control Delay (s)	9.1	0	-	-	23.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	543	108	30	564	10	115	0	70	10	0	4
Future Volume (vph)	13	543	108	30	564	10	115	0	70	10	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

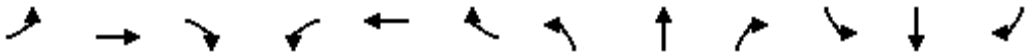
Intersection	
Int Delay, s/veh	13.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	543	108	30	564	10	115	0	70	10	0	4
Future Vol, veh/h	13	543	108	30	564	10	115	0	70	10	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	13	543	108	30	564	10	115	0	70	10	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	574	0	0	651	0	0	1255	1257	597	1287	1306	570
Stage 1	-	-	-	-	-	-	623	623	-	629	629	-
Stage 2	-	-	-	-	-	-	632	634	-	658	677	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	984	-	-	931	-	-	150	173	507	142	161	525
Stage 1	-	-	-	-	-	-	477	481	-	474	478	-
Stage 2	-	-	-	-	-	-	472	476	-	457	455	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	984	-	-	931	-	-	141	161	507	116	150	525
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	161	-	116	150	-
Stage 1	-	-	-	-	-	-	467	471	-	464	456	-
Stage 2	-	-	-	-	-	-	446	454	-	386	445	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	103	31.7
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	194	984	-	-	931	-	-	149
HCM Lane V/C Ratio	0.954	0.013	-	-	0.032	-	-	0.094
HCM Control Delay (s)	103	8.7	0	-	9	0	-	31.7
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	7.8	0	-	-	0.1	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	587	33	10	562	10	38	0	20	10	0	14
Future Volume (vph)	13	587	33	10	562	10	38	0	20	10	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	587	33	10	562	10	38	0	20	10	0	14
Future Vol, veh/h	13	587	33	10	562	10	38	0	20	10	0	14
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	13	587	33	10	562	10	38	0	20	10	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	572	0	0	624	0	0	1228	1226	608	1227	1237	567
Stage 1	-	-	-	-	-	-	634	634	-	587	587	-
Stage 2	-	-	-	-	-	-	594	592	-	640	650	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	986	-	-	957	-	-	144	167	469	157	177	527
Stage 1	-	-	-	-	-	-	443	450	-	499	500	-
Stage 2	-	-	-	-	-	-	466	471	-	467	468	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	986	-	-	953	-	-	136	160	467	146	170	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	136	160	-	146	170	-
Stage 1	-	-	-	-	-	-	432	439	-	489	493	-
Stage 2	-	-	-	-	-	-	447	464	-	438	457	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	34.2	20.8
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	180	986	-	-	953	-	-	252
HCM Lane V/C Ratio	0.322	0.013	-	-	0.01	-	-	0.095
HCM Control Delay (s)	34.2	8.7	0	-	8.8	0	-	20.8
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	118	20	10	165
Future Volume (vph)	20	10	118	20	10	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

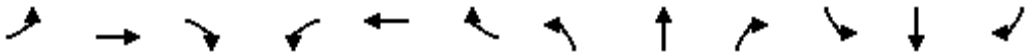
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	118	20	10	165
Future Vol, veh/h	20	10	118	20	10	165
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	118	20	10	165
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	8.4	7.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	6%	0%	86%
Vol Thru, %	0%	67%	14%
Vol Right, %	94%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	175	30	138
LT Vol	10	0	118
Through Vol	0	20	20
RT Vol	165	10	0
Lane Flow Rate	175	30	138
Geometry Grp	1	1	1
Degree of Util (X)	0.184	0.034	0.169
Departure Headway (Hd)	3.788	4.117	4.421
Convergence, Y/N	Yes	Yes	Yes
Cap	954	854	805
Service Time	1.788	2.216	2.483
HCM Lane V/C Ratio	0.183	0.035	0.171
HCM Control Delay	7.6	7.4	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0.1	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	250	130	50	180	80	70	68	115	80	63	35
Future Volume (vph)	107	250	130	50	180	80	70	68	115	80	63	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

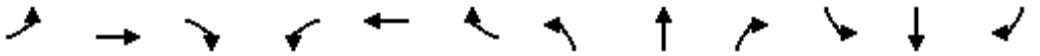
Intersection	
Int Delay, s/veh	13.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	107	250	130	50	180	80	70	68	115	80	63	35
Future Vol, veh/h	107	250	130	50	180	80	70	68	115	80	63	35
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	107	250	130	50	180	80	70	68	115	80	63	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	383	0	0	902	893	319	943	918	222
Stage 1	-	-	-	-	-	-	532	532	-	321	321	-
Stage 2	-	-	-	-	-	-	370	361	-	622	597	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1280	-	-	1165	-	-	258	280	719	244	273	820
Stage 1	-	-	-	-	-	-	529	524	-	693	653	-
Stage 2	-	-	-	-	-	-	648	624	-	476	493	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1279	-	-	1162	-	-	178	244	716	146	238	818
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	244	-	146	238	-
Stage 1	-	-	-	-	-	-	484	478	-	634	624	-
Stage 2	-	-	-	-	-	-	533	597	-	314	450	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	1.3	33.7	36.9
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	205	716	1279	-	-	1162	-	-	146	319
HCM Lane V/C Ratio	0.673	0.161	0.084	-	-	0.043	-	-	0.548	0.307
HCM Control Delay (s)	52.6	11	8.1	-	-	8.2	-	-	56.1	21.2
HCM Lane LOS	F	B	A	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	4.1	0.6	0.3	-	-	0.1	-	-	2.7	1.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	440	10	80	360	10	20	28	90	10	23	20
Future Volume (vph)	25	440	10	80	360	10	20	28	90	10	23	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

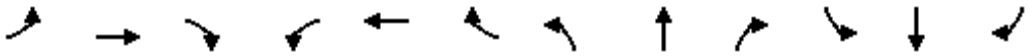
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	440	10	80	360	10	20	28	90	10	23	20
Future Vol, veh/h	25	440	10	80	360	10	20	28	90	10	23	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	25	440	10	80	360	10	20	28	90	10	23	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	452	0	0	1047	1032	447	1084	1032	373
Stage 1	-	-	-	-	-	-	497	497	-	530	530	-
Stage 2	-	-	-	-	-	-	550	535	-	554	502	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1162	-	-	1093	-	-	203	230	605	191	229	664
Stage 1	-	-	-	-	-	-	549	540	-	525	520	-
Stage 2	-	-	-	-	-	-	514	519	-	510	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1091	-	-	167	207	604	135	206	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	207	-	135	206	-
Stage 1	-	-	-	-	-	-	536	527	-	511	479	-
Stage 2	-	-	-	-	-	-	438	479	-	402	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	18.5	23.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	188	604	1156	-	-	1091	-	-	245
HCM Lane V/C Ratio	0.255	0.149	0.022	-	-	0.073	-	-	0.216
HCM Control Delay (s)	30.6	12	8.2	-	-	8.6	-	-	23.7
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0.5	0.1	-	-	0.2	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	479	100	50	359	30	182	20	20	20	20	21
Future Volume (vph)	48	479	100	50	359	30	182	20	20	20	20	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	31.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	479	100	50	359	30	182	20	20	20	20	21
Future Vol, veh/h	48	479	100	50	359	30	182	20	20	20	20	21
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	48	479	100	50	359	30	182	20	20	20	20	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	389	0	0	580	0	0	1123	1115	530	1119	1150	376
Stage 1	-	-	-	-	-	-	626	626	-	474	474	-
Stage 2	-	-	-	-	-	-	497	489	-	645	676	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1148	-	-	994	-	-	183	208	549	186	200	675
Stage 1	-	-	-	-	-	-	472	477	-	575	561	-
Stage 2	-	-	-	-	-	-	555	549	-	464	456	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1148	-	-	993	-	-	~ 146	182	548	149	175	674
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 146	182	-	149	175	-
Stage 1	-	-	-	-	-	-	442	446	-	539	525	-
Stage 2	-	-	-	-	-	-	483	513	-	400	427	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1	180.1	27.8
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	146	273	1148	-	-	993	-	-	218
HCM Lane V/C Ratio	1.247	0.147	0.042	-	-	0.05	-	-	0.28
HCM Control Delay (s)	215.2	20.4	8.3	0	-	8.8	0	-	27.8
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	10.8	0.5	0.1	-	-	0.2	-	-	1.1

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

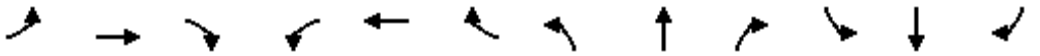
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	90	80	340	118	80	84	70	40	90	60
Future Volume (vph)	20	420	90	80	340	118	80	84	70	40	90	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 70
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





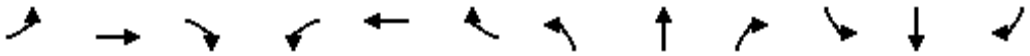
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	90	80	340	118	80	84	70	40	90	60
Future Volume (veh/h)	20	420	90	80	340	118	80	84	70	40	90	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	90	80	340	118	80	84	70	40	90	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	608	971	208	573	870	302	247	179	150	243	198	132
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	904	1445	310	868	1295	449	1226	934	779	1211	1029	686
Grp Volume(v), veh/h	20	0	510	80	0	458	80	0	154	40	0	150
Grp Sat Flow(s),veh/h/ln	904	0	1755	868	0	1745	1226	0	1713	1211	0	1715
Q Serve(g_s), s	0.7	0.0	9.1	3.2	0.0	7.9	4.2	0.0	5.4	2.0	0.0	5.2
Cycle Q Clear(g_c), s	8.6	0.0	9.1	12.3	0.0	7.9	9.4	0.0	5.4	7.4	0.0	5.2
Prop In Lane	1.00		0.18	1.00		0.26	1.00		0.45	1.00		0.40
Lane Grp Cap(c), veh/h	608	0	1179	573	0	1172	247	0	329	243	0	329
V/C Ratio(X)	0.03	0.00	0.43	0.14	0.00	0.39	0.32	0.00	0.47	0.16	0.00	0.46
Avail Cap(c_a), veh/h	608	0	1179	573	0	1172	472	0	644	465	0	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.8	0.0	5.1	8.0	0.0	4.9	28.3	0.0	24.2	27.5	0.0	24.2
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.5	0.0	1.0	1.1	0.0	1.5	0.5	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.9	0.6	0.0	2.5	1.3	0.0	2.2	0.6	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	0.0	6.3	8.5	0.0	5.9	29.4	0.0	25.7	28.0	0.0	25.6
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		530			538			234			190	
Approach Delay, s/veh		6.3			6.3			27.0			26.1	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		17.6		50.0		17.6				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		11.1		9.4		14.3		11.4				
Green Ext Time (p_c), s		4.2		1.2		4.0		1.4				

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	334	150	10	257	20	155	20	10	20	10	27
Future Volume (vph)	35	334	150	10	257	20	155	20	10	20	10	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	334	150	10	257	20	155	20	10	20	10	27
Future Vol, veh/h	35	334	150	10	257	20	155	20	10	20	10	27
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	35	334	150	10	257	20	155	20	10	20	10	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	277	0	0	487	0	0	789	779	417	786	844	268
Stage 1	-	-	-	-	-	-	482	482	-	287	287	-
Stage 2	-	-	-	-	-	-	307	297	-	499	557	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1258	-	-	1066	-	-	310	328	638	305	296	761
Stage 1	-	-	-	-	-	-	567	555	-	712	667	-
Stage 2	-	-	-	-	-	-	705	669	-	546	506	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1258	-	-	1063	-	-	279	311	633	273	281	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	279	311	-	273	281	-
Stage 1	-	-	-	-	-	-	543	532	-	684	660	-
Stage 2	-	-	-	-	-	-	662	662	-	495	485	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	30.1	15.6
HCM LOS			D	C

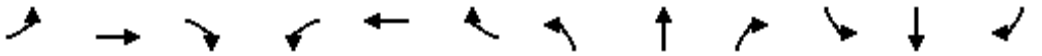
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	279	375	1258	-	-	1063	-	-	395
HCM Lane V/C Ratio	0.556	0.08	0.028	-	-	0.009	-	-	0.144
HCM Control Delay (s)	32.9	15.4	7.9	0	-	8.4	0	-	15.6
HCM Lane LOS	D	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.1	0.3	0.1	-	-	0	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	375	135	40	338	50	170	125	40	45	115	10
Future Volume (vph)	10	375	135	40	338	50	170	125	40	45	115	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





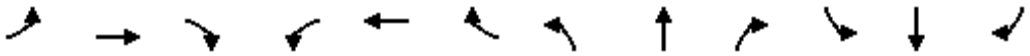
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	375	135	40	338	50	170	125	40	45	115	10
Future Volume (veh/h)	10	375	135	40	338	50	170	125	40	45	115	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	375	135	40	338	50	170	125	40	45	115	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	707	697	251	494	874	129	326	273	87	290	350	30
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	954	1133	408	882	1421	210	1202	1162	372	1188	1490	130
Grp Volume(v), veh/h	10	0	510	40	0	388	170	0	165	45	0	125
Grp Sat Flow(s),veh/h/ln	954	0	1541	882	0	1631	1202	0	1534	1188	0	1619
Q Serve(g_s), s	0.2	0.0	11.4	0.9	0.0	0.0	8.2	0.0	5.5	2.0	0.0	3.8
Cycle Q Clear(g_c), s	0.2	0.0	11.4	12.3	0.0	0.0	12.0	0.0	5.5	7.6	0.0	3.8
Prop In Lane	1.00		0.26	1.00		0.13	1.00		0.24	1.00		0.08
Lane Grp Cap(c), veh/h	707	0	948	494	0	1003	326	0	361	290	0	381
V/C Ratio(X)	0.01	0.00	0.54	0.08	0.00	0.39	0.52	0.00	0.46	0.16	0.00	0.33
Avail Cap(c_a), veh/h	707	0	948	494	0	1003	334	0	371	298	0	391
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.00	0.92	0.94	0.00	0.94	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	0.0	6.6	1.9	0.0	0.0	24.0	0.0	19.7	22.9	0.0	19.0
Incr Delay (d2), s/veh	0.0	0.0	2.0	0.3	0.0	1.1	0.6	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.4	0.1	0.0	0.3	2.3	0.0	1.9	0.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.0	8.7	2.2	0.0	1.1	24.6	0.0	20.0	23.0	0.0	19.2
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	B
Approach Vol, veh/h		520			428			335			170	
Approach Delay, s/veh		8.6			1.2			22.3			20.2	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.4	18.6	41.4	18.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	36.5	14.5	36.5	14.5
Max Q Clear Time (g_c+I1), s	13.4	9.6	14.3	14.0
Green Ext Time (p_c), s	3.8	0.2	2.8	0.1

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	251	90	10	183	10	80	10	30	10	10	14
Future Volume (vph)	13	251	90	10	183	10	80	10	30	10	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

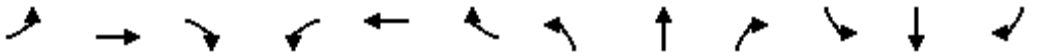
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	251	90	10	183	10	80	10	30	10	10	14
Future Vol, veh/h	13	251	90	10	183	10	80	10	30	10	10	14
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	13	251	90	10	183	10	80	10	30	10	10	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.2	9.5	9.5	8.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	4%	5%	29%
Vol Thru, %	8%	71%	90%	29%
Vol Right, %	25%	25%	5%	41%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	354	203	34
LT Vol	80	13	10	10
Through Vol	10	251	183	10
RT Vol	30	90	10	14
Lane Flow Rate	120	354	203	34
Geometry Grp	1	1	1	1
Degree of Util (X)	0.175	0.446	0.267	0.049
Departure Headway (Hd)	5.262	4.531	4.732	5.166
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	677	793	755	687
Service Time	3.329	2.574	2.783	3.244
HCM Lane V/C Ratio	0.177	0.446	0.269	0.049
HCM Control Delay	9.5	11.2	9.5	8.5
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.6	2.3	1.1	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	400	20	20	368	76	20	14	20	90	20	30
Future Volume (vph)	30	400	20	20	368	76	20	14	20	90	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1615	0	1736	1595	0	0	1757	1384	0	1756	1398
Flt Permitted	0.488			0.504				0.797			0.741	
Satd. Flow (perm)	881	1615	0	916	1595	0	0	1433	1354	0	1352	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			32				27			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	420	0	20	444	0	0	34	20	0	110	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	43.5	43.5		43.5	43.5			10.9	43.5		10.9	43.5
Actuated g/C Ratio	0.72	0.72		0.72	0.72			0.18	0.72		0.18	0.72
v/c Ratio	0.05	0.36		0.03	0.38			0.13	0.02		0.45	0.03
Control Delay	4.3	4.7		5.0	6.0			19.7	2.2		26.7	2.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.3	4.7		5.0	6.0			19.7	2.2		26.7	2.5
LOS	A	A		A	A			B	A		C	A
Approach Delay		4.7			6.0			13.2			21.5	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	

Intersection Signal Delay: 7.8 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	285	10	0	0	260
Future Volume (vph)	10	285	10	0	0	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	285	10	0	0	260
Future Vol, veh/h	10	285	10	0	0	260
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	10	285	10	0	0	260

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	270	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	702	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	765	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	702	1048	-	-	-	-
Mov Cap-2 Maneuver	702	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	765	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1031	-
HCM Lane V/C Ratio	-	0.286	-
HCM Control Delay (s)	-	9.9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	240	20
Future Volume (vph)	0	0	10	0	240	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

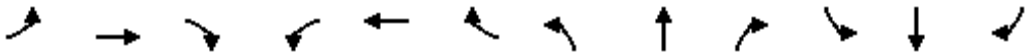
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	240	20
Future Vol, veh/h	0	0	10	0	240	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	240	20

Major/Minor	Minor2		Major2	
Conflicting Flow All	500	20	0	0
Stage 1	500	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	448	1008	-	-
Stage 1	514	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1008	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	76	12	10	10	98	339	12	10	335	20
Future Volume (vph)	20	10	76	12	10	10	98	339	12	10	335	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

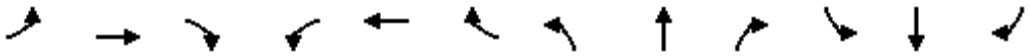
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	10	76	12	10	10	98	339	12	10	335	20
Future Vol, veh/h	20	10	76	12	10	10	98	339	12	10	335	20
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	20	10	76	12	10	10	98	339	12	10	335	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	940	936	368	974	940	371	366	0	0	364	0	0
Stage 1	376	376	-	554	554	-	-	-	-	-	-	-
Stage 2	564	560	-	420	386	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	246	267	682	233	266	679	1198	-	-	1189	-	-
Stage 1	649	620	-	520	517	-	-	-	-	-	-	-
Stage 2	514	514	-	615	614	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	209	232	667	178	231	662	1185	-	-	1174	-	-
Mov Cap-2 Maneuver	209	232	-	178	231	-	-	-	-	-	-	-
Stage 1	576	607	-	461	458	-	-	-	-	-	-	-
Stage 2	439	455	-	524	601	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.5	21.2	1.8	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1185	-	-	419	254	1174	-	-
HCM Lane V/C Ratio	0.083	-	-	0.253	0.126	0.009	-	-
HCM Control Delay (s)	8.3	0	-	16.5	21.2	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	24	14	0	10	41	237	11	0	197	10
Future Volume (vph)	0	0	24	14	0	10	41	237	11	0	197	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

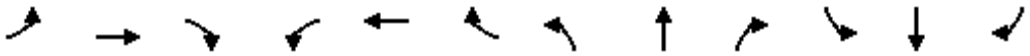
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	24	14	0	10	41	237	11	0	197	10
Future Vol, veh/h	0	0	24	14	0	10	41	237	11	0	197	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	0	0	24	14	0	10	41	237	11	0	197	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	532	532	202	539	532	243	207	0	0	248	0	0
Stage 1	202	202	-	325	325	-	-	-	-	-	-	-
Stage 2	330	330	-	214	207	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	461	456	844	420	422	743	1364	-	-	1318	-	-
Stage 1	805	738	-	641	610	-	-	-	-	-	-	-
Stage 2	687	649	-	739	690	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	443	440	844	397	407	743	1364	-	-	1318	-	-
Mov Cap-2 Maneuver	443	440	-	397	407	-	-	-	-	-	-	-
Stage 1	777	738	-	619	589	-	-	-	-	-	-	-
Stage 2	654	626	-	718	690	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	12.7	1.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1364	-	-	844	493	1318	-	-
HCM Lane V/C Ratio	0.03	-	-	0.028	0.049	-	-	-
HCM Control Delay (s)	7.7	0	-	9.4	12.7	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	114	10	31	125	11	10	10	32	11	10	10
Future Volume (vph)	10	114	10	31	125	11	10	10	32	11	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	114	10	31	125	11	10	10	32	11	10	10
Future Vol, veh/h	10	114	10	31	125	11	10	10	32	11	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	114	10	31	125	11	10	10	32	11	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	136	0	0	124	0	0	342	337	119	353	337	131
Stage 1	-	-	-	-	-	-	139	139	-	193	193	-
Stage 2	-	-	-	-	-	-	203	198	-	160	144	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1448	-	-	1457	-	-	616	587	938	606	587	924
Stage 1	-	-	-	-	-	-	869	785	-	813	745	-
Stage 2	-	-	-	-	-	-	804	741	-	847	782	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1448	-	-	1457	-	-	588	569	938	564	569	924
Mov Cap-2 Maneuver	-	-	-	-	-	-	588	569	-	564	569	-
Stage 1	-	-	-	-	-	-	863	780	-	807	728	-
Stage 2	-	-	-	-	-	-	766	724	-	802	777	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.4	10.1	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	757	1448	-	-	1457	-	-	647
HCM Lane V/C Ratio	0.069	0.007	-	-	0.021	-	-	0.048
HCM Control Delay (s)	10.1	7.5	0	-	7.5	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	10	339	53	21	236
Future Volume (vph)	28	10	339	53	21	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1716	0	1811	0	0	1837
Flt Permitted	0.965					0.996
Satd. Flow (perm)	1716	0	1811	0	0	1837
Link Speed (mph)	25		35			35
Link Distance (ft)	1094		1705			1568
Travel Time (s)	29.8		33.2			30.5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	0	426	0	0	280
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	10	339	53	21	236
Future Vol, veh/h	28	10	339	53	21	236
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, %	3	3	3	3	3	3
Mvmt Flow	30	11	368	58	23	257

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	700	397	0	0	426	0
Stage 1	397	-	-	-	-	-
Stage 2	303	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	404	650	-	-	1128	-
Stage 1	677	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	394	650	-	-	1128	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	729	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	440	1128	-
HCM Lane V/C Ratio	-	-	0.094	0.02	-
HCM Control Delay (s)	-	-	14	8.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	23	33	278	42	21	177
Future Volume (vph)	23	33	278	42	21	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	870		1192			216
Travel Time (s)	23.7		23.2			4.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	33	278	42	21	177
Future Vol, veh/h	23	33	278	42	21	177
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, %	3	3	3	3	3	3
Mvmt Flow	25	36	302	46	23	192

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	563	325	0	0	348	0
Stage 1	325	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	486	714	-	-	1205	-
Stage 1	730	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	476	714	-	-	1205	-
Mov Cap-2 Maneuver	476	-	-	-	-	-
Stage 1	730	-	-	-	-	-
Stage 2	782	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	592	1205	-
HCM Lane V/C Ratio	-	-	0.103	0.019	-
HCM Control Delay (s)	-	-	11.8	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	492	11	203	474	3	155
Future Volume (vph)	492	11	203	474	3	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	182			2805	960	
Travel Time (s)	2.8			42.5	26.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.4

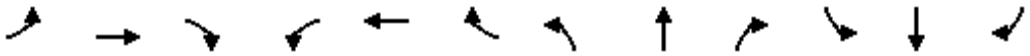
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	492	11	203	474	3	155
Future Vol, veh/h	492	11	203	474	3	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	535	12	221	515	3	168

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	547	0	1498	541
Stage 1	-	-	-	-	541	-
Stage 2	-	-	-	-	957	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1017	-	134	539
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	371	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1017	-	93	539
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	581	-
Stage 2	-	-	-	-	258	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.9	16.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	494	-	-	1017	-
HCM Lane V/C Ratio	0.348	-	-	0.217	-
HCM Control Delay (s)	16.1	-	-	9.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.5	-	-	0.8	-

2025 with SEIS Alternative 5 Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	415	5	10	0	0	0	0	10	35	178	20	0
Future Volume (vph)	415	5	10	0	0	0	0	10	35	178	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

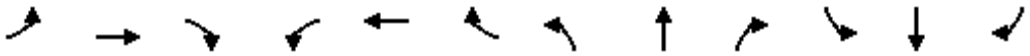
Intersection	
Int Delay, s/veh	23.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	415	5	10	0	0	0	0	10	35	178	20	0
Future Vol, veh/h	415	5	10	0	0	0	0	10	35	178	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	415	5	10	0	0	0	0	10	35	178	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	404	421	20	-	0	0	45	0	0
Stage 1	376	376	-	-	-	-	-	-	-
Stage 2	28	45	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	605	525	1061	0	-	-	1444	-	0
Stage 1	696	618	-	0	-	-	-	-	0
Stage 2	997	859	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	529	0	1061	-	-	-	1444	-	-
Mov Cap-2 Maneuver	529	0	-	-	-	-	-	-	-
Stage 1	696	0	-	-	-	-	-	-	-
Stage 2	872	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.8	0	7.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	535	1444	-
HCM Lane V/C Ratio	-	-	0.804	0.123	-
HCM Control Delay (s)	-	-	33.8	7.8	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	7.7	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	5	278	5	420	0	0	158	118
Future Volume (vph)	0	0	0	40	5	278	5	420	0	0	158	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

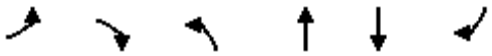
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	40	5	278	5	420	0	0	158	118
Future Vol, veh/h	0	0	0	40	5	278	5	420	0	0	158	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	40	5	278	5	420	0	0	158	118

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	647	706	420	276	0	-	-	-	0
Stage 1	430	430	-	-	-	-	-	-	-
Stage 2	217	276	-	-	-	-	-	-	-
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-
Pot Cap-1 Maneuver	414	344	604	1293	-	0	0	-	-
Stage 1	627	560	-	-	-	0	0	-	-
Stage 2	787	657	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	412	0	604	1293	-	-	-	-	-
Mov Cap-2 Maneuver	412	0	-	-	-	-	-	-	-
Stage 1	624	0	-	-	-	-	-	-	-
Stage 2	787	0	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1293	-	571	-	-
HCM Lane V/C Ratio	0.004	-	0.566	-	-
HCM Control Delay (s)	7.8	0	19.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	3.5	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	65	50	648	211	23
Future Volume (vph)	29	65	50	648	211	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

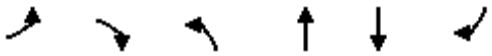
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	65	50	648	211	23
Future Vol, veh/h	29	65	50	648	211	23
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	29	65	50	648	211	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	971	223	234	0	-	0
Stage 1	223	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	268	790	1333	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	258	790	1333	-	-	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	449	-	-	-	-	-

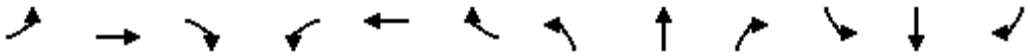
Approach	EB	NB	SB
HCM Control Delay, s	14.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1333	-	483	-	-
HCM Lane V/C Ratio	0.038	-	0.195	-	-
HCM Control Delay (s)	7.8	-	14.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	143	109	332	302	118	132
Future Volume (vph)	143	109	332	302	118	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1532	1229	
Travel Time (s)	19.3			29.8	23.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	34	0	0	0	16	420	0	0	214	40
Future Volume (vph)	25	0	34	0	0	0	16	420	0	0	214	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

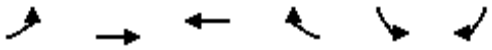
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	34	0	0	0	16	420	0	0	214	40
Future Vol, veh/h	25	0	34	0	0	0	16	420	0	0	214	40
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	34	0	0	0	16	420	0	0	214	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	686	686	234	703	706	420	254	0	0	420	0	0
Stage 1	234	234	-	452	452	-	-	-	-	-	-	-
Stage 2	452	452	-	251	254	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	355	364	793	355	363	638	1311	-	-	1134	-	-
Stage 1	758	702	-	591	574	-	-	-	-	-	-	-
Stage 2	578	562	-	758	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	351	358	793	335	357	638	1311	-	-	1134	-	-
Mov Cap-2 Maneuver	351	358	-	335	357	-	-	-	-	-	-	-
Stage 1	746	702	-	582	565	-	-	-	-	-	-	-
Stage 2	569	553	-	726	701	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1311	-	-	517	-	1134	-	-
HCM Lane V/C Ratio	0.012	-	-	0.114	-	-	-	-
HCM Control Delay (s)	7.8	0	-	12.9	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	8	684	778	30	20	14
Future Volume (vph)	8	684	778	30	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2822	1314		535	
Travel Time (s)		77.0	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

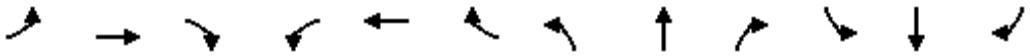
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	684	778	30	20	14
Future Vol, veh/h	8	684	778	30	20	14
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	8	684	778	30	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	808	0	-	0	1493	800
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	700	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	809	-	-	-	137	388
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	496	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	809	-	-	-	135	385
Mov Cap-2 Maneuver	-	-	-	-	135	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	28.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	809	-	-	-	184
HCM Lane V/C Ratio	0.01	-	-	-	0.185
HCM Control Delay (s)	9.5	0	-	-	28.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	583	133	40	629	5	160	0	85	0	0	4
Future Volume (vph)	3	583	133	40	629	5	160	0	85	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	50.6

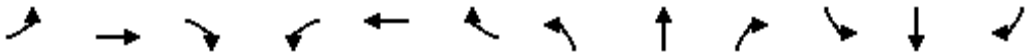
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	583	133	40	629	5	160	0	85	0	0	4
Future Vol, veh/h	3	583	133	40	629	5	160	0	85	0	0	4
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	3	583	133	40	629	5	160	0	85	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	634	0	0	720	0	0	1374	1374	655	1411	1438	632
Stage 1	-	-	-	-	-	-	660	660	-	712	712	-
Stage 2	-	-	-	-	-	-	714	714	-	699	726	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	939	-	-	877	-	-	~ 123	146	468	117	134	484
Stage 1	-	-	-	-	-	-	454	462	-	427	439	-
Stage 2	-	-	-	-	-	-	424	436	-	434	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	939	-	-	874	-	-	~ 115	134	466	90	123	484
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	134	-	90	123	-
Stage 1	-	-	-	-	-	-	450	458	-	425	408	-
Stage 2	-	-	-	-	-	-	391	405	-	353	429	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	$ 337.5	12.5
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	156	939	-	-	874	-	-	484
HCM Lane V/C Ratio	1.571	0.003	-	-	0.046	-	-	0.008
HCM Control Delay (s)	$ 337.5	8.8	0	-	9.3	0	-	12.5
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	16.6	0	-	-	0.1	-	-	0

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	662	13	5	662	10	23	5	5	20	0	29
Future Volume (vph)	23	662	13	5	662	10	23	5	5	20	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	662	13	5	662	10	23	5	5	20	0	29
Future Vol, veh/h	23	662	13	5	662	10	23	5	5	20	0	29
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	23	662	13	5	662	10	23	5	5	20	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	673	0	0	680	0	0	1412	1403	676	1400	1404	668
Stage 1	-	-	-	-	-	-	720	720	-	678	678	-
Stage 2	-	-	-	-	-	-	692	683	-	722	726	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	899	-	-	903	-	-	72	89	321	119	141	462
Stage 1	-	-	-	-	-	-	297	314	-	445	455	-
Stage 2	-	-	-	-	-	-	310	329	-	421	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	898	-	-	899	-	-	65	84	319	107	133	462
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	84	-	107	133	-
Stage 1	-	-	-	-	-	-	283	300	-	426	450	-
Stage 2	-	-	-	-	-	-	288	326	-	390	413	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	83	29.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	77	898	-	-	899	-	-	196
HCM Lane V/C Ratio	0.429	0.026	-	-	0.006	-	-	0.25
HCM Control Delay (s)	83	9.1	0	-	9	0	-	29.4
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0	-	-	1



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	153	10	30	205
Future Volume (vph)	25	10	153	10	30	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

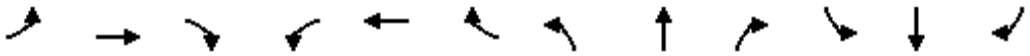
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	153	10	30	205
Future Vol, veh/h	25	10	153	10	30	205
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	153	10	30	205
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	8.9	8.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	13%	0%	94%
Vol Thru, %	0%	71%	6%
Vol Right, %	87%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	235	35	163
LT Vol	30	0	153
Through Vol	0	25	10
RT Vol	205	10	0
Lane Flow Rate	235	35	163
Geometry Grp	1	1	1
Degree of Util (X)	0.257	0.043	0.211
Departure Headway (Hd)	3.932	4.411	4.67
Convergence, Y/N	Yes	Yes	Yes
Cap	917	813	773
Service Time	1.941	2.433	2.67
HCM Lane V/C Ratio	0.256	0.043	0.211
HCM Control Delay	8.3	7.6	8.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	0.1	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	350	200	55	195	100	75	88	155	80	83	45
Future Volume (vph)	132	350	200	55	195	100	75	88	155	80	83	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	47.8

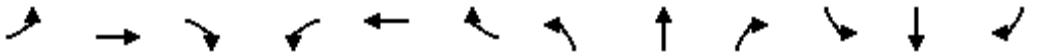
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	132	350	200	55	195	100	75	88	155	80	83	45
Future Vol, veh/h	132	350	200	55	195	100	75	88	155	80	83	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	132	350	200	55	195	100	75	88	155	80	83	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	550	0	0	1133	1119	450	1191	1169	245
Stage 1	-	-	-	-	-	-	714	714	-	355	355	-
Stage 2	-	-	-	-	-	-	419	405	-	836	814	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1255	-	-	1005	-	-	180	207	609	163	191	789
Stage 1	-	-	-	-	-	-	422	435	-	658	626	-
Stage 2	-	-	-	-	-	-	612	598	-	359	389	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1005	-	-	90	175	609	~ 66	162	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	175	-	~ 66	162	-
Stage 1	-	-	-	-	-	-	378	389	-	589	592	-
Stage 2	-	-	-	-	-	-	469	565	-	185	348	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	1.4	141.2	134.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	122	609	1255	-	-	1005	-	-	66	225
HCM Lane V/C Ratio	1.336	0.255	0.105	-	-	0.055	-	-	1.212	0.569
HCM Control Delay (s)	263.3	12.9	8.2	-	-	8.8	-	-	286.2	40.2
HCM Lane LOS	F	B	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	10.8	1	0.4	-	-	0.2	-	-	6.4	3.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	545	25	70	370	0	40	18	140	0	33	5
Future Volume (vph)	15	545	25	70	370	0	40	18	140	0	33	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

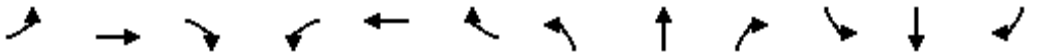
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	545	25	70	370	0	40	18	140	0	33	5
Future Vol, veh/h	15	545	25	70	370	0	40	18	140	0	33	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	15	545	25	70	370	0	40	18	140	0	33	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	574	0	0	1129	1103	562	1178	1115	379
Stage 1	-	-	-	-	-	-	592	592	-	511	511	-
Stage 2	-	-	-	-	-	-	537	511	-	667	604	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1177	-	-	989	-	-	179	209	521	125	159	546
Stage 1	-	-	-	-	-	-	487	489	-	443	444	-
Stage 2	-	-	-	-	-	-	522	532	-	357	399	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	985	-	-	136	191	519	79	145	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	136	191	-	79	145	-
Stage 1	-	-	-	-	-	-	479	481	-	437	412	-
Stage 2	-	-	-	-	-	-	439	494	-	248	392	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.4	23.1	34.4
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	149	519	1176	-	-	985	-	-	160
HCM Lane V/C Ratio	0.389	0.27	0.013	-	-	0.071	-	-	0.238
HCM Control Delay (s)	43.8	14.5	8.1	-	-	8.9	-	-	34.4
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.7	1.1	0	-	-	0.2	-	-	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	484	130	60	399	20	252	40	20	15	15	26
Future Volume (vph)	38	484	130	60	399	20	252	40	20	15	15	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	85.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	484	130	60	399	20	252	40	20	15	15	26
Future Vol, veh/h	38	484	130	60	399	20	252	40	20	15	15	26
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	38	484	130	60	399	20	252	40	20	15	15	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	420	0	0	616	0	0	1178	1167	552	1186	1222	411
Stage 1	-	-	-	-	-	-	627	627	-	530	530	-
Stage 2	-	-	-	-	-	-	551	540	-	656	692	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	1123	-	-	964	-	-	~ 165	191	528	167	181	645
Stage 1	-	-	-	-	-	-	466	472	-	536	530	-
Stage 2	-	-	-	-	-	-	513	516	-	458	448	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1122	-	-	962	-	-	~ 132	166	526	118	157	644
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 132	166	-	118	157	-
Stage 1	-	-	-	-	-	-	440	446	-	507	486	-
Stage 2	-	-	-	-	-	-	438	473	-	379	423	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.1	$ 403	27.8
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	132	215	1122	-	-	962	-	-	213
HCM Lane V/C Ratio	1.909	0.279	0.034	-	-	0.062	-	-	0.263
HCM Control Delay (s)	$ 492.3	28.1	8.3	0	-	9	0	-	27.8
HCM Lane LOS	F	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	19.8	1.1	0.1	-	-	0.2	-	-	1

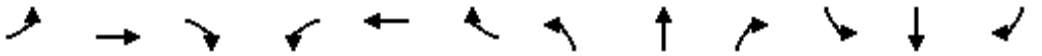
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	515	110	70	340	158	85	79	105	45	145	60
Future Volume (vph)	60	515	110	70	340	158	85	79	105	45	145	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 84.8	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

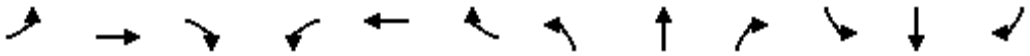




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	515	110	70	340	158	85	79	105	45	145	60
Future Volume (veh/h)	60	515	110	70	340	158	85	79	105	45	145	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	60	515	110	70	340	158	85	79	105	45	145	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	555	982	210	468	800	372	220	160	213	231	278	115
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	884	1469	314	793	1196	556	1130	699	928	1151	1211	501
Grp Volume(v), veh/h	60	0	625	70	0	498	85	0	184	45	0	205
Grp Sat Flow(s),veh/h/ln	884	0	1782	793	0	1752	1130	0	1627	1151	0	1712
Q Serve(g_s), s	3.0	0.0	16.2	4.5	0.0	11.9	6.4	0.0	8.9	3.2	0.0	9.5
Cycle Q Clear(g_c), s	14.9	0.0	16.2	20.6	0.0	11.9	15.9	0.0	8.9	12.1	0.0	9.5
Prop In Lane	1.00		0.18	1.00		0.32	1.00		0.57	1.00		0.29
Lane Grp Cap(c), veh/h	555	0	1192	468	0	1172	220	0	373	231	0	393
V/C Ratio(X)	0.11	0.00	0.52	0.15	0.00	0.43	0.39	0.00	0.49	0.20	0.00	0.52
Avail Cap(c_a), veh/h	555	0	1192	468	0	1172	341	0	548	354	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	0.0	7.6	12.9	0.0	6.9	37.4	0.0	30.2	35.5	0.0	30.5
Incr Delay (d2), s/veh	0.4	0.0	1.7	0.7	0.0	1.1	1.6	0.0	1.4	0.4	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	6.0	0.9	0.0	4.3	1.9	0.0	3.6	0.9	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	0.0	9.3	13.6	0.0	8.1	39.0	0.0	31.7	35.9	0.0	31.5
LnGrp LOS	B	A	A	B	A	A	D	A	C	D	A	C
Approach Vol, veh/h		685			568			269			250	
Approach Delay, s/veh		9.4			8.7			34.0			32.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		25.3		65.0		25.3				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		60.4		30.4		60.4		30.4				
Max Q Clear Time (g_c+I1), s		18.2		17.9		22.6		14.1				
Green Ext Time (p_c), s		5.9		1.6		4.6		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	309	180	20	277	30	200	20	5	15	10	32
Future Volume (vph)	20	309	180	20	277	30	200	20	5	15	10	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	309	180	20	277	30	200	20	5	15	10	32
Future Vol, veh/h	20	309	180	20	277	30	200	20	5	15	10	32
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	20	309	180	20	277	30	200	20	5	15	10	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	309	0	0	491	0	0	796	790	403	788	865	296
Stage 1	-	-	-	-	-	-	441	441	-	334	334	-
Stage 2	-	-	-	-	-	-	355	349	-	454	531	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1240	-	-	1072	-	-	304	321	645	311	294	748
Stage 1	-	-	-	-	-	-	593	575	-	684	647	-
Stage 2	-	-	-	-	-	-	660	632	-	589	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1238	-	-	1070	-	-	272	305	643	282	280	745
Mov Cap-2 Maneuver	-	-	-	-	-	-	272	305	-	282	280	-
Stage 1	-	-	-	-	-	-	578	561	-	667	631	-
Stage 2	-	-	-	-	-	-	606	616	-	550	516	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	44.2	14.6
HCM LOS			E	B

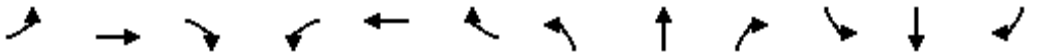
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	272	341	1238	-	-	1070	-	-	432
HCM Lane V/C Ratio	0.735	0.073	0.016	-	-	0.019	-	-	0.132
HCM Control Delay (s)	47.7	16.4	8	0	-	8.4	0	-	14.6
HCM Lane LOS	E	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	5.3	0.2	0	-	-	0.1	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	495	205	40	333	70	180	110	35	60	135	10
Future Volume (vph)	10	495	205	40	333	70	180	110	35	60	135	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





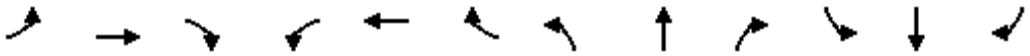
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	495	205	40	333	70	180	110	35	60	135	10
Future Volume (veh/h)	10	495	205	40	333	70	180	110	35	60	135	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	495	205	40	333	70	180	110	35	60	135	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	704	703	291	344	840	177	306	298	95	300	365	27
Arrive On Green	0.63	0.63	0.63	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	965	1115	462	740	1333	280	1214	1195	380	1174	1462	108
Grp Volume(v), veh/h	10	0	700	40	0	403	180	0	145	60	0	145
Grp Sat Flow(s),veh/h/ln	965	0	1577	740	0	1614	1214	0	1575	1174	0	1570
Q Serve(g_s), s	0.3	0.0	22.1	2.1	0.0	0.0	10.8	0.0	5.7	3.3	0.0	5.7
Cycle Q Clear(g_c), s	0.3	0.0	22.1	24.2	0.0	0.0	16.5	0.0	5.7	9.0	0.0	5.7
Prop In Lane	1.00		0.29	1.00		0.17	1.00		0.24	1.00		0.07
Lane Grp Cap(c), veh/h	704	0	994	344	0	1017	306	0	393	300	0	392
V/C Ratio(X)	0.01	0.00	0.70	0.12	0.00	0.40	0.59	0.00	0.37	0.20	0.00	0.37
Avail Cap(c_a), veh/h	704	0	994	344	0	1017	335	0	430	328	0	429
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	0.95	0.00	0.95	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.2	0.0	9.2	5.7	0.0	0.0	30.1	0.0	23.2	27.0	0.0	23.3
Incr Delay (d2), s/veh	0.0	0.0	3.7	0.7	0.0	1.1	1.2	0.0	0.2	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	7.4	0.3	0.0	0.3	3.2	0.0	2.1	0.9	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.2	0.0	12.9	6.3	0.0	1.1	31.3	0.0	23.5	27.1	0.0	23.5
LnGrp LOS	A	A	B	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		710			443			325			205	
Approach Delay, s/veh		12.8			1.6			27.8			24.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	51.8	23.2	51.8	23.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	45.5	20.5	45.5	20.5
Max Q Clear Time (g_c+I1), s	24.1	11.0	26.2	18.5
Green Ext Time (p_c), s	5.6	0.4	2.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	206	105	15	208	10	85	20	25	5	10	39
Future Volume (vph)	23	206	105	15	208	10	85	20	25	5	10	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

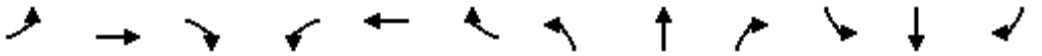
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	206	105	15	208	10	85	20	25	5	10	39
Future Vol, veh/h	23	206	105	15	208	10	85	20	25	5	10	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	23	206	105	15	208	10	85	20	25	5	10	39
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.8	10	9.7	8.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	65%	7%	6%	9%
Vol Thru, %	15%	62%	89%	19%
Vol Right, %	19%	31%	4%	72%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	334	233	54
LT Vol	85	23	15	5
Through Vol	20	206	208	10
RT Vol	25	105	10	39
Lane Flow Rate	130	334	233	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.193	0.419	0.309	0.075
Departure Headway (Hd)	5.355	4.516	4.778	4.973
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	664	792	748	712
Service Time	3.435	2.571	2.84	3.063
HCM Lane V/C Ratio	0.196	0.422	0.311	0.076
HCM Control Delay	9.7	10.8	10	8.5
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.7	2.1	1.3	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	510	30	30	373	81	15	14	20	95	20	45
Future Volume (vph)	35	510	30	30	373	81	15	14	20	95	20	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1628	0	1770	1623	0	0	1799	1411	0	1806	1439
Flt Permitted	0.482			0.430				0.830			0.743	
Satd. Flow (perm)	877	1628	0	796	1623	0	0	1528	1367	0	1386	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			27				22			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	540	0	30	454	0	0	29	20	0	115	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	57.2	57.2		57.2	57.2			12.2	57.2		12.2	57.2
Actuated g/C Ratio	0.76	0.76		0.76	0.76			0.16	0.76		0.16	0.76
v/c Ratio	0.05	0.43		0.05	0.36			0.12	0.02		0.51	0.04
Control Delay	5.2	5.7		4.9	5.6			25.0	2.4		35.3	2.0
Queue Delay	0.0	0.1		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.2	5.8		4.9	5.6			25.0	2.4		35.3	2.0
LOS	A	A		A	A			C	A		D	A
Approach Delay		5.7			5.6			15.8			26.0	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	

Intersection Signal Delay: 8.6 Intersection LOS: A
Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	260	15	0	0	325
Future Volume (vph)	20	260	15	0	0	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	260	15	0	0	325
Future Vol, veh/h	20	260	15	0	0	325
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	20	260	15	0	0	325

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	340	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	646	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	721	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	646	1050	-	-	-	-
Mov Cap-2 Maneuver	646	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	721	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1005	-
HCM Lane V/C Ratio	-	0.279	-
HCM Control Delay (s)	-	10	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	310	35
Future Volume (vph)	0	0	10	0	310	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

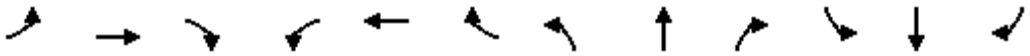
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	310	35
Future Vol, veh/h	0	0	10	0	310	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	310	35

Major/Minor	Minor2		Major2	
Conflicting Flow All	655	35	0	0
Stage 1	655	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	388	1044	-	-
Stage 1	466	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1044	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	45	76	12	10	10	78	394	17	10	290	25
Future Volume (vph)	20	45	76	12	10	10	78	394	17	10	290	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

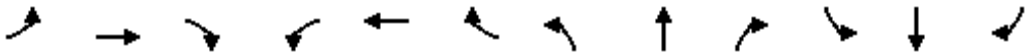
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	45	76	12	10	10	78	394	17	10	290	25
Future Vol, veh/h	20	45	76	12	10	10	78	394	17	10	290	25
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	20	45	76	12	10	10	78	394	17	10	290	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	935	916	331	970	920	446	328	0	0	424	0	0
Stage 1	336	336	-	572	572	-	-	-	-	-	-	-
Stage 2	599	580	-	398	348	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	248	274	715	235	273	617	1232	-	-	1125	-	-
Stage 1	682	645	-	509	508	-	-	-	-	-	-	-
Stage 2	492	503	-	632	638	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	211	242	696	163	242	592	1217	-	-	1111	-	-
Mov Cap-2 Maneuver	211	242	-	163	242	-	-	-	-	-	-	-
Stage 1	618	630	-	461	460	-	-	-	-	-	-	-
Stage 2	422	456	-	510	623	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.1	22	1.3	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1217	-	-	362	243	1111	-	-
HCM Lane V/C Ratio	0.064	-	-	0.39	0.132	0.009	-	-
HCM Control Delay (s)	8.2	0	-	21.1	22	8.3	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.8	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	14	14	0	10	46	257	11	0	182	5
Future Volume (vph)	0	0	14	14	0	10	46	257	11	0	182	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

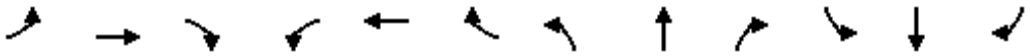
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	14	14	0	10	46	257	11	0	182	5
Future Vol, veh/h	0	0	14	14	0	10	46	257	11	0	182	5
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	0	0	14	14	0	10	46	257	11	0	182	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	545	545	185	547	542	263	187	0	0	268	0	0
Stage 1	185	185	-	355	355	-	-	-	-	-	-	-
Stage 2	360	360	-	192	187	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	425	424	818	451	450	781	1381	-	-	1284	-	-
Stage 1	781	718	-	666	633	-	-	-	-	-	-	-
Stage 2	627	599	-	814	749	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	407	407	818	430	432	781	1381	-	-	1284	-	-
Mov Cap-2 Maneuver	407	407	-	430	432	-	-	-	-	-	-	-
Stage 1	751	718	-	640	608	-	-	-	-	-	-	-
Stage 2	595	576	-	800	749	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	12.1	1.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1381	-	-	818	529	1284	-	-
HCM Lane V/C Ratio	0.033	-	-	0.017	0.045	-	-	-
HCM Control Delay (s)	7.7	0	-	9.5	12.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	89	5	31	140	36	0	25	27	21	0	25
Future Volume (vph)	20	89	5	31	140	36	0	25	27	21	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	89	5	31	140	36	0	25	27	21	0	25
Future Vol, veh/h	20	89	5	31	140	36	0	25	27	21	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	89	5	31	140	36	0	25	27	21	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	176	0	0	94	0	0	365	370	92	378	354	158
Stage 1	-	-	-	-	-	-	132	132	-	220	220	-
Stage 2	-	-	-	-	-	-	233	238	-	158	134	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1382	-	-	1513	-	-	575	546	941	583	574	893
Stage 1	-	-	-	-	-	-	850	770	-	787	725	-
Stage 2	-	-	-	-	-	-	750	692	-	849	789	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1382	-	-	1513	-	-	543	525	941	530	552	893
Mov Cap-2 Maneuver	-	-	-	-	-	-	543	525	-	530	552	-
Stage 1	-	-	-	-	-	-	837	758	-	775	708	-
Stage 2	-	-	-	-	-	-	712	676	-	785	777	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	1.1	10.7	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	681	1382	-	-	1513	-	-	680
HCM Lane V/C Ratio	0.076	0.014	-	-	0.02	-	-	0.068
HCM Control Delay (s)	10.7	7.6	0	-	7.4	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	10	624	53	21	206
Future Volume (vph)	28	10	624	53	21	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	593		1741			1532
Travel Time (s)	16.2		33.9			29.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	10	624	53	21	206
Future Vol, veh/h	28	10	624	53	21	206
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, %	3	3	3	3	3	3
Mvmt Flow	30	11	678	58	23	224

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	977	707	0	0	736	0
Stage 1	707	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	277	434	-	-	865	-
Stage 1	487	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	434	-	-	865	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	750	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	299	865	-
HCM Lane V/C Ratio	-	-	0.138	0.026	-
HCM Control Delay (s)	-	-	19	9.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	23	33	403	42	21	227
Future Volume (vph)	23	33	403	42	21	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	837		1229			179
Travel Time (s)	22.8		23.9			3.5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	33	403	42	21	227
Future Vol, veh/h	23	33	403	42	21	227
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, %	3	3	3	3	3	3
Mvmt Flow	25	36	438	46	23	247

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	754	461	0	0	484	0
Stage 1	461	-	-	-	-	-
Stage 2	293	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	375	598	-	-	1074	-
Stage 1	633	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	366	598	-	-	1074	-
Mov Cap-2 Maneuver	366	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	736	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	474	1074	-
HCM Lane V/C Ratio	-	-	0.128	0.021	-
HCM Control Delay (s)	-	-	13.7	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	537	11	203	589	3	155
Future Volume (vph)	537	11	203	589	3	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	165			2822	769	
Travel Time (s)	2.5			42.8	21.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.2

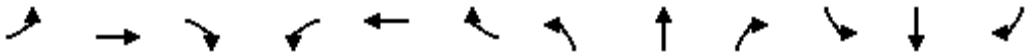
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	537	11	203	589	3	155
Future Vol, veh/h	537	11	203	589	3	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	584	12	221	640	3	168

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	596	0	1672	590
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	1082	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	976	-	105	506
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	324	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	976	-	68	506
Mov Cap-2 Maneuver	-	-	-	-	68	-
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	210	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	17.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	451	-	-	976	-
HCM Lane V/C Ratio	0.381	-	-	0.226	-
HCM Control Delay (s)	17.8	-	-	9.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.8	-	-	0.9	-

2025 with SEIS Alternative 5 Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	0	5	0	0	0	0	10	5	169	20	0
Future Volume (vph)	139	0	5	0	0	0	0	10	5	169	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

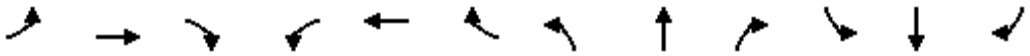
Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	0	5	0	0	0	0	10	5	169	20	0
Future Vol, veh/h	139	0	5	0	0	0	0	10	5	169	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	139	0	5	0	0	0	0	10	5	169	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	371	373	20	-	0	0	15	0	0
Stage 1	358	358	-	-	-	-	-	-	-
Stage 2	13	15	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	632	559	1061	0	-	-	1616	-	0
Stage 1	710	630	-	0	-	-	-	-	0
Stage 2	1012	885	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	565	0	1061	-	-	-	1616	-	-
Mov Cap-2 Maneuver	565	0	-	-	-	-	-	-	-
Stage 1	710	0	-	-	-	-	-	-	-
Stage 2	905	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0	6.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	574	1616	-
HCM Lane V/C Ratio	-	-	0.251	0.105	-
HCM Control Delay (s)	-	-	13.4	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	5	146	5	144	0	0	169	888
Future Volume (vph)	0	0	0	20	5	146	5	144	0	0	169	888
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

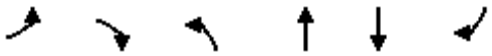
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	5	146	5	144	0	0	169	888
Future Vol, veh/h	0	0	0	20	5	146	5	144	0	0	169	888
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	20	5	146	5	144	0	0	169	888

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	767	1211	144	1057	0	-	-	-	0
Stage 1	154	154	-	-	-	-	-	-	-
Stage 2	613	1057	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	373	184	909	667	-	0	0	-	-
Stage 1	879	774	-	-	-	0	0	-	-
Stage 2	544	304	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	370	0	909	667	-	-	-	-	-
Mov Cap-2 Maneuver	370	0	-	-	-	-	-	-	-
Stage 1	872	0	-	-	-	-	-	-	-
Stage 2	544	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	667	-	773	-	-
HCM Lane V/C Ratio	0.007	-	0.221	-	-
HCM Control Delay (s)	10.4	0	11	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	18	45	15	275	1012	23
Future Volume (vph)	18	45	15	275	1012	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

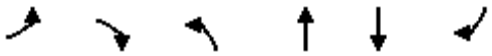
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	45	15	275	1012	23
Future Vol, veh/h	18	45	15	275	1012	23
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	18	45	15	275	1012	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1329	1024	1035	0	-	0
Stage 1	1024	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	169	283	679	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	165	283	679	-	-	-
Mov Cap-2 Maneuver	165	-	-	-	-	-
Stage 1	336	-	-	-	-	-
Stage 2	743	-	-	-	-	-

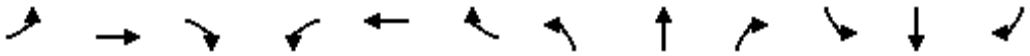
Approach	EB	NB	SB
HCM Control Delay, s	25.8	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	679	-	235	-	-
HCM Lane V/C Ratio	0.022	-	0.268	-	-
HCM Control Delay (s)	10.4	-	25.8	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	84	147	132	136	866	108
Future Volume (vph)	84	147	132	136	866	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1778	1272	
Travel Time (s)	19.3			34.6	24.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	0	21	0	0	0	16	196	0	0	949	15
Future Volume (vph)	15	0	21	0	0	0	16	196	0	0	949	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

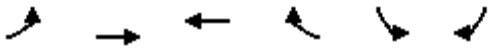
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	21	0	0	0	16	196	0	0	949	15
Future Vol, veh/h	15	0	21	0	0	0	16	196	0	0	949	15
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	15	0	21	0	0	0	16	196	0	0	949	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1185	1185	957	1195	1192	196	964	0	0	196	0	0
Stage 1	957	957	-	228	228	-	-	-	-	-	-	-
Stage 2	228	228	-	967	964	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	162	185	306	165	189	850	722	-	-	1383	-	-
Stage 1	303	330	-	779	719	-	-	-	-	-	-	-
Stage 2	764	706	-	308	336	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	159	180	306	151	184	850	722	-	-	1383	-	-
Mov Cap-2 Maneuver	159	180	-	151	184	-	-	-	-	-	-	-
Stage 1	295	330	-	760	701	-	-	-	-	-	-	-
Stage 2	745	688	-	287	336	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.4	0	0.8	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	722	-	-	221	-	1383	-	-
HCM Lane V/C Ratio	0.022	-	-	0.163	-	-	-	-
HCM Control Delay (s)	10.1	0	-	24.4	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	8	524	1137	20	10	13
Future Volume (vph)	8	524	1137	20	10	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2845	1314		535	
Travel Time (s)		77.6	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

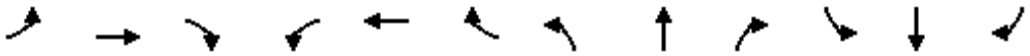
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	524	1137	20	10	13
Future Vol, veh/h	8	524	1137	20	10	13
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	8	524	1137	20	10	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1162	0	-	0	1692	1152
Stage 1	-	-	-	-	1152	-
Stage 2	-	-	-	-	540	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	605	-	-	-	104	243
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	602	-	-	-	101	242
Mov Cap-2 Maneuver	-	-	-	-	101	-
Stage 1	-	-	-	-	297	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	33.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	602	-	-	-	151
HCM Lane V/C Ratio	0.013	-	-	-	0.152
HCM Control Delay (s)	11.1	0	-	-	33.1
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	456	70	20	1053	5	106	0	45	10	0	3
Future Volume (vph)	3	456	70	20	1053	5	106	0	45	10	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	26

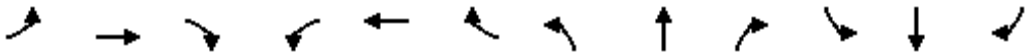
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	456	70	20	1053	5	106	0	45	10	0	3
Future Vol, veh/h	3	456	70	20	1053	5	106	0	45	10	0	3
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	3	456	70	20	1053	5	106	0	45	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1058	0	0	529	0	0	1597	1598	494	1616	1631	1056
Stage 1	-	-	-	-	-	-	500	500	-	1096	1096	-
Stage 2	-	-	-	-	-	-	1097	1098	-	520	535	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	662	-	-	1043	-	-	~ 85	106	573	84	103	276
Stage 1	-	-	-	-	-	-	551	541	-	261	292	-
Stage 2	-	-	-	-	-	-	257	287	-	543	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	662	-	-	1040	-	-	~ 80	100	571	74	97	276
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 80	100	-	74	97	-
Stage 1	-	-	-	-	-	-	546	536	-	259	278	-
Stage 2	-	-	-	-	-	-	242	274	-	497	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	298.2	52.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	108	662	-	-	1040	-	-	89
HCM Lane V/C Ratio	1.398	0.005	-	-	0.019	-	-	0.146
HCM Control Delay (s)	298.2	10.5	0	-	8.5	0	-	52.2
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	10.7	0	-	-	0.1	-	-	0.5

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	469	54	20	1010	25	85	0	15	10	0	3
Future Volume (vph)	23	469	54	20	1010	25	85	0	15	10	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	13.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	469	54	20	1010	25	85	0	15	10	0	3
Future Vol, veh/h	23	469	54	20	1010	25	85	0	15	10	0	3
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	23	469	54	20	1010	25	85	0	15	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1035	0	0	527	0	0	1610	1621	500	1613	1636	1023
Stage 1	-	-	-	-	-	-	546	546	-	1063	1063	-
Stage 2	-	-	-	-	-	-	1064	1075	-	550	573	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	672	-	-	1045	-	-	~ 84	103	571	85	102	289
Stage 1	-	-	-	-	-	-	522	518	-	272	302	-
Stage 2	-	-	-	-	-	-	270	296	-	523	507	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	672	-	-	1041	-	-	~ 77	93	569	77	92	289
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 77	93	-	77	92	-
Stage 1	-	-	-	-	-	-	494	491	-	259	288	-
Stage 2	-	-	-	-	-	-	255	282	-	484	480	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	224.4	49.9
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	88	672	-	-	1041	-	-	93
HCM Lane V/C Ratio	1.136	0.034	-	-	0.019	-	-	0.14
HCM Control Delay (s)	224.4	10.5	0	-	8.5	0	-	49.9
HCM Lane LOS	F	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	6.9	0.1	-	-	0.1	-	-	0.5

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	80	10	20	136
Future Volume (vph)	25	15	80	10	20	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

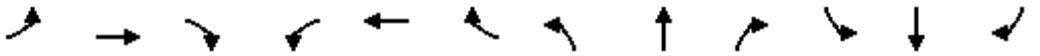
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	80	10	20	136
Future Vol, veh/h	25	15	80	10	20	136
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	80	10	20	136
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	8	7.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	13%	0%	89%
Vol Thru, %	0%	62%	11%
Vol Right, %	87%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	156	40	90
LT Vol	20	0	80
Through Vol	0	25	10
RT Vol	136	15	0
Lane Flow Rate	156	40	90
Geometry Grp	1	1	1
Degree of Util (X)	0.16	0.046	0.11
Departure Headway (Hd)	3.694	4.105	4.385
Convergence, Y/N	Yes	Yes	Yes
Cap	956	863	813
Service Time	1.771	2.174	2.435
HCM Lane V/C Ratio	0.163	0.046	0.111
HCM Control Delay	7.5	7.4	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	220	120	55	295	95	70	70	130	50	54	41
Future Volume (vph)	86	220	120	55	295	95	70	70	130	50	54	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

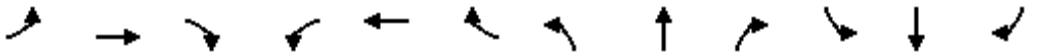
Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	220	120	55	295	95	70	70	130	50	54	41
Future Vol, veh/h	86	220	120	55	295	95	70	70	130	50	54	41
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	86	220	120	55	295	95	70	70	130	50	54	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	340	0	0	953	952	280	1005	965	344
Stage 1	-	-	-	-	-	-	452	452	-	453	453	-
Stage 2	-	-	-	-	-	-	501	500	-	552	512	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1169	-	-	1219	-	-	239	259	759	222	257	703
Stage 1	-	-	-	-	-	-	587	570	-	590	573	-
Stage 2	-	-	-	-	-	-	552	543	-	522	540	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1169	-	-	1219	-	-	168	229	759	129	227	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	229	-	129	227	-
Stage 1	-	-	-	-	-	-	544	528	-	546	547	-
Stage 2	-	-	-	-	-	-	447	519	-	348	500	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	1	36.6	30.8
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	194	759	1169	-	-	1219	-	-	129	321
HCM Lane V/C Ratio	0.722	0.171	0.074	-	-	0.045	-	-	0.388	0.296
HCM Control Delay (s)	60.7	10.7	8.3	-	-	8.1	-	-	49.6	20.9
HCM Lane LOS	F	B	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	4.6	0.6	0.2	-	-	0.1	-	-	1.6	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	370	5	60	505	40	20	45	60	5	64	50
Future Volume (vph)	75	370	5	60	505	40	20	45	60	5	64	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

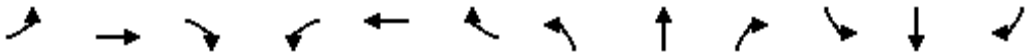
Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	370	5	60	505	40	20	45	60	5	64	50
Future Vol, veh/h	75	370	5	60	505	40	20	45	60	5	64	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	370	5	60	505	40	20	45	60	5	64	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	377	0	0	1227	1192	375	1222	1174	527
Stage 1	-	-	-	-	-	-	525	525	-	647	647	-
Stage 2	-	-	-	-	-	-	702	667	-	575	527	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	1027	-	-	1181	-	-	154	185	667	156	191	549
Stage 1	-	-	-	-	-	-	532	526	-	458	465	-
Stage 2	-	-	-	-	-	-	426	454	-	502	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1179	-	-	90	162	666	102	167	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	162	-	102	167	-
Stage 1	-	-	-	-	-	-	492	487	-	424	440	-
Stage 2	-	-	-	-	-	-	314	430	-	384	487	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	35.2	37.1
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	666	1025	-	-	1179	-	-	227
HCM Lane V/C Ratio	0.5	0.09	0.073	-	-	0.051	-	-	0.524
HCM Control Delay (s)	57.6	10.9	8.8	-	-	8.2	-	-	37.1
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.3	0.3	0.2	-	-	0.2	-	-	2.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	345	101	70	689	10	357	15	10	5	10	19
Future Volume (vph)	23	345	101	70	689	10	357	15	10	5	10	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	231.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	345	101	70	689	10	357	15	10	5	10	19
Future Vol, veh/h	23	345	101	70	689	10	357	15	10	5	10	19
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	23	345	101	70	689	10	357	15	10	5	10	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	0	449	0	0	1298	1292	401	1298	1337	706
Stage 1	-	-	-	-	-	-	445	445	-	842	842	-
Stage 2	-	-	-	-	-	-	853	847	-	456	495	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	887	-	-	1117	-	-	~ 139	164	651	140	155	439
Stage 1	-	-	-	-	-	-	594	576	-	362	383	-
Stage 2	-	-	-	-	-	-	~ 355	379	-	588	549	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	880	-	-	1114	-	-	~ 112	140	648	113	133	434
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 112	140	-	113	133	-
Stage 1	-	-	-	-	-	-	571	554	-	347	341	-
Stage 2	-	-	-	-	-	-	~ 294	337	-	543	528	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.8	$ 998.2	25.7
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	112	204	880	-	-	1114	-	-	208
HCM Lane V/C Ratio	3.188	0.123	0.026	-	-	0.063	-	-	0.163
HCM Control Delay (s)	$ 1066.3	25.1	9.2	0	-	8.4	0	-	25.7
HCM Lane LOS	F	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	34.5	0.4	0.1	-	-	0.2	-	-	0.6

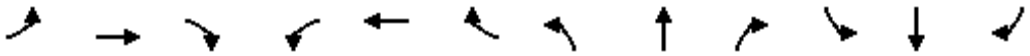
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	90	65	490	295	80	72	75	40	116	40
Future Volume (vph)	15	320	90	65	490	295	80	72	75	40	116	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 90.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





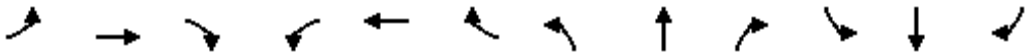
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	90	65	490	295	80	72	75	40	116	40
Future Volume (veh/h)	15	320	90	65	490	295	80	72	75	40	116	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	90	65	490	295	80	72	75	40	116	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	418	1010	284	700	786	473	205	151	158	207	240	83
Arrive On Green	0.72	0.72	0.72	0.72	0.72	0.72	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	689	1404	395	975	1093	658	1236	843	878	1246	1338	461
Grp Volume(v), veh/h	15	0	410	65	0	785	80	0	147	40	0	156
Grp Sat Flow(s),veh/h/ln	689	0	1799	975	0	1751	1236	0	1721	1246	0	1799
Q Serve(g_s), s	1.0	0.0	7.5	2.4	0.0	20.7	5.7	0.0	7.0	2.7	0.0	7.1
Cycle Q Clear(g_c), s	21.8	0.0	7.5	9.9	0.0	20.7	12.7	0.0	7.0	9.7	0.0	7.1
Prop In Lane	1.00		0.22	1.00		0.38	1.00		0.51	1.00		0.26
Lane Grp Cap(c), veh/h	418	0	1294	700	0	1260	205	0	309	207	0	323
V/C Ratio(X)	0.04	0.00	0.32	0.09	0.00	0.62	0.39	0.00	0.48	0.19	0.00	0.48
Avail Cap(c_a), veh/h	418	0	1294	700	0	1260	328	0	481	332	0	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	0.0	4.6	6.4	0.0	6.5	39.2	0.0	33.5	37.8	0.0	33.5
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.3	0.0	2.3	1.7	0.0	1.6	0.6	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.6	0.5	0.0	7.1	1.8	0.0	3.0	0.9	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	0.0	5.3	6.7	0.0	8.8	41.0	0.0	35.1	38.4	0.0	35.1
LnGrp LOS	B	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		425			850			227			196	
Approach Delay, s/veh		5.5			8.7			37.2			35.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		20.9		70.0		20.9				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		65.4		25.4		65.4		25.4				
Max Q Clear Time (g_c+I1), s		23.8		14.7		22.7		11.7				
Green Ext Time (p_c), s		3.3		1.1		8.4		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.8									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	214	130	10	238	20	545	15	10	15	10	16
Future Volume (vph)	21	214	130	10	238	20	545	15	10	15	10	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	101.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	214	130	10	238	20	545	15	10	15	10	16
Future Vol, veh/h	21	214	130	10	238	20	545	15	10	15	10	16
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	21	214	130	10	238	20	545	15	10	15	10	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	258	0	0	345	0	0	603	600	281	603	655	248
Stage 1	-	-	-	-	-	-	322	322	-	268	268	-
Stage 2	-	-	-	-	-	-	281	278	-	335	387	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1307	-	-	1220	-	-	~ 411	415	758	402	378	776
Stage 1	-	-	-	-	-	-	690	651	-	725	676	-
Stage 2	-	-	-	-	-	-	726	680	-	667	599	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1307	-	-	1219	-	-	~ 385	402	757	376	366	776
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 385	402	-	376	366	-
Stage 1	-	-	-	-	-	-	676	637	-	711	669	-
Stage 2	-	-	-	-	-	-	693	673	-	629	586	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.3	219.6	13.4
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	385	495	1307	-	-	1219	-	-	467
HCM Lane V/C Ratio	1.416	0.051	0.016	-	-	0.008	-	-	0.088
HCM Control Delay (s)	229.1	12.7	7.8	0	-	8	0	-	13.4
HCM Lane LOS	F	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	27.4	0.2	0	-	-	0	-	-	0.3

Notes

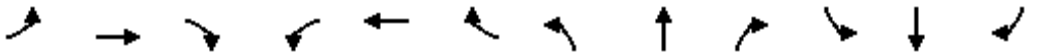
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	292	123	35	498	295	317	320	35	48	92	10
Future Volume (vph)	15	292	123	35	498	295	317	320	35	48	92	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

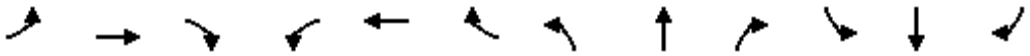




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	292	123	35	498	295	317	320	35	48	92	10
Future Volume (veh/h)	15	292	123	35	498	295	317	320	35	48	92	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	292	123	35	498	295	317	320	35	48	92	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	485	666	281	521	591	350	412	455	50	197	452	49
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	682	1120	472	976	994	589	1279	1489	163	1015	1478	161
Grp Volume(v), veh/h	15	0	415	35	0	793	317	0	355	48	0	102
Grp Sat Flow(s),veh/h/ln	682	0	1592	976	0	1583	1279	0	1651	1015	0	1639
Q Serve(g_s), s	0.8	0.0	12.9	0.8	0.0	0.0	22.0	0.0	17.1	4.0	0.0	4.1
Cycle Q Clear(g_c), s	0.8	0.0	12.9	13.7	0.0	0.0	26.1	0.0	17.1	21.1	0.0	4.1
Prop In Lane	1.00		0.30	1.00		0.37	1.00		0.10	1.00		0.10
Lane Grp Cap(c), veh/h	485	0	946	521	0	941	412	0	505	197	0	501
V/C Ratio(X)	0.03	0.00	0.44	0.07	0.00	0.84	0.77	0.00	0.70	0.24	0.00	0.20
Avail Cap(c_a), veh/h	485	0	946	521	0	941	412	0	505	197	0	501
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.74	0.00	0.74	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	10.0	1.6	0.0	0.0	32.8	0.0	27.6	37.0	0.0	23.1
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.2	0.0	6.9	7.8	0.0	3.7	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.6	0.1	0.0	1.8	7.6	0.0	7.2	1.0	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.4	1.8	0.0	6.9	40.6	0.0	31.4	37.2	0.0	23.2
LnGrp LOS	A	A	B	A	A	A	D	A	C	D	A	C
Approach Vol, veh/h		430			828			672			150	
Approach Delay, s/veh		11.3			6.7			35.7			27.7	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		14.9		23.1		15.7		28.1				
Green Ext Time (p_c), s		3.3		0.2		8.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			18.5									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	156	75	10	162	10	78	10	10	5	10	18
Future Volume (vph)	13	156	75	10	162	10	78	10	10	5	10	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

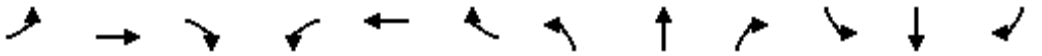
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	156	75	10	162	10	78	10	10	5	10	18
Future Vol, veh/h	13	156	75	10	162	10	78	10	10	5	10	18
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	13	156	75	10	162	10	78	10	10	5	10	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	8.8	8.8	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	80%	5%	5%	15%
Vol Thru, %	10%	64%	89%	30%
Vol Right, %	10%	31%	5%	55%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	244	182	33
LT Vol	78	13	10	5
Through Vol	10	156	162	10
RT Vol	10	75	10	18
Lane Flow Rate	98	244	182	33
Geometry Grp	1	1	1	1
Degree of Util (X)	0.135	0.29	0.226	0.043
Departure Headway (Hd)	4.977	4.286	4.478	4.677
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	839	803	764
Service Time	3.013	2.311	2.505	2.717
HCM Lane V/C Ratio	0.136	0.291	0.227	0.043
HCM Control Delay	8.8	9.1	8.8	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1.2	0.9	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	325	20	25	763	70	5	18	15	82	18	15
Future Volume (vph)	20	325	20	25	763	70	5	18	15	82	18	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1658	0	1770	1651	0	0	1879	1454	0	1826	1454
Flt Permitted	0.284			0.550				0.939			0.749	
Satd. Flow (perm)	528	1658	0	1017	1651	0	0	1782	1416	0	1417	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9				18			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	345	0	25	833	0	0	23	15	0	100	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	71.0	71.0		71.0	71.0			13.4	71.0		13.4	71.0
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.15	0.79		0.15	0.79
v/c Ratio	0.05	0.26		0.03	0.64			0.09	0.01		0.47	0.01
Control Delay	4.2	3.6		5.0	10.5			29.6	2.6		40.4	2.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.2	3.6		5.0	10.6			29.6	2.6		40.4	2.6
LOS	A	A		A	B			C	A		D	A
Approach Delay		3.6			10.4			18.9			35.5	
Approach LOS		A			B			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	

Intersection Signal Delay: 11.0 Intersection LOS: B
Intersection Capacity Utilization 82.7% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	662	20	0	0	220
Future Volume (vph)	30	662	20	0	0	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	11.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	662	20	0	0	220
Future Vol, veh/h	30	662	20	0	0	220
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	30	662	20	0	0	220

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	240	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	220	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	746	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	814	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	746	1055	-	-	-	-
Mov Cap-2 Maneuver	746	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	814	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1036	-
HCM Lane V/C Ratio	-	0.668	-
HCM Control Delay (s)	-	15.2	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	5.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	225	40
Future Volume (vph)	0	0	25	0	225	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

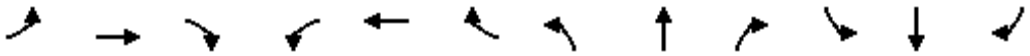
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	225	40
Future Vol, veh/h	0	0	25	0	225	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	225	40

Major/Minor	Minor2		Major2	
Conflicting Flow All	490	40	0	0
Stage 1	490	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	482	1037	-	-
Stage 1	552	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1037	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	35	64	18	5	10	97	229	8	5	313	40
Future Volume (vph)	5	35	64	18	5	10	97	229	8	5	313	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

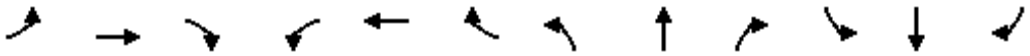
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	35	64	18	5	10	97	229	8	5	313	40
Future Vol, veh/h	5	35	64	18	5	10	97	229	8	5	313	40
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	5	35	64	18	5	10	97	229	8	5	313	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	824	794	358	835	810	269	368	0	0	242	0	0
Stage 1	358	358	-	432	432	-	-	-	-	-	-	-
Stage 2	466	436	-	403	378	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	294	323	691	289	316	775	1202	-	-	1324	-	-
Stage 1	664	631	-	606	586	-	-	-	-	-	-	-
Stage 2	581	583	-	628	619	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	253	286	675	216	279	749	1185	-	-	1318	-	-
Mov Cap-2 Maneuver	253	286	-	216	279	-	-	-	-	-	-	-
Stage 1	593	619	-	547	528	-	-	-	-	-	-	-
Stage 2	499	525	-	529	607	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	19.1	2.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1185	-	-	439	288	1318	-	-
HCM Lane V/C Ratio	0.082	-	-	0.237	0.115	0.004	-	-
HCM Control Delay (s)	8.3	0	-	15.7	19.1	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.9	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	21	26	0	5	36	147	6	0	236	10
Future Volume (vph)	0	0	21	26	0	5	36	147	6	0	236	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

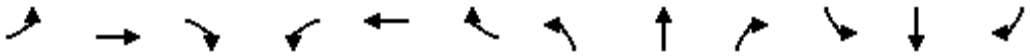
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	21	26	0	5	36	147	6	0	236	10
Future Vol, veh/h	0	0	21	26	0	5	36	147	6	0	236	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	21	26	0	5	36	147	6	0	236	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	466	466	241	474	468	150	246	0	0	153	0	0
Stage 1	241	241	-	222	222	-	-	-	-	-	-	-
Stage 2	225	225	-	252	246	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	510	497	803	504	496	902	1332	-	-	1440	-	-
Stage 1	767	710	-	785	723	-	-	-	-	-	-	-
Stage 2	782	721	-	757	706	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	496	482	803	480	481	902	1332	-	-	1440	-	-
Mov Cap-2 Maneuver	496	482	-	480	481	-	-	-	-	-	-	-
Stage 1	744	710	-	761	701	-	-	-	-	-	-	-
Stage 2	754	699	-	737	706	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	12.4	1.5	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1332	-	-	803	519	1440	-	-
HCM Lane V/C Ratio	0.027	-	-	0.026	0.06	-	-	-
HCM Control Delay (s)	7.8	0	-	9.6	12.4	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	154	5	17	103	12	10	0	11	26	0	5
Future Volume (vph)	10	154	5	17	103	12	10	0	11	26	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

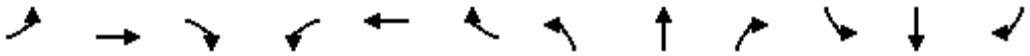
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	154	5	17	103	12	10	0	11	26	0	5
Future Vol, veh/h	10	154	5	17	103	12	10	0	11	26	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	154	5	17	103	12	10	0	11	26	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	115	0	0	159	0	0	323	326	157	325	322	109
Stage 1	-	-	-	-	-	-	177	177	-	143	143	-
Stage 2	-	-	-	-	-	-	146	149	-	182	179	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1487	-	-	1433	-	-	634	596	894	632	599	950
Stage 1	-	-	-	-	-	-	829	756	-	865	782	-
Stage 2	-	-	-	-	-	-	861	778	-	824	755	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1487	-	-	1433	-	-	621	584	894	615	587	950
Mov Cap-2 Maneuver	-	-	-	-	-	-	621	584	-	615	587	-
Stage 1	-	-	-	-	-	-	823	751	-	859	772	-
Stage 2	-	-	-	-	-	-	845	768	-	808	750	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1	10	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	739	1487	-	-	1433	-	-	652
HCM Lane V/C Ratio	0.028	0.007	-	-	0.012	-	-	0.048
HCM Control Delay (s)	10	7.4	0	-	7.5	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	298	85	5	635	0	417	5	5	0	5	20
Future Volume (vph)	5	298	85	5	635	0	417	5	5	0	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	156.6

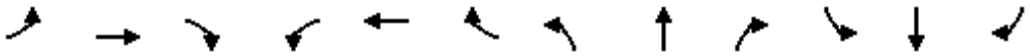
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	298	85	5	635	0	417	5	5	0	5	20
Future Vol, veh/h	5	298	85	5	635	0	417	5	5	0	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	298	85	5	635	0	417	5	5	0	5	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	635	0	0	383	0	0	1009	996	341	1001	1038	635
Stage 1	-	-	-	-	-	-	351	351	-	645	645	-
Stage 2	-	-	-	-	-	-	658	645	-	356	393	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	948	-	-	1181	-	-	~ 218	243	699	223	233	482
Stage 1	-	-	-	-	-	-	664	630	-	464	471	-
Stage 2	-	-	-	-	-	-	452	466	-	666	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	948	-	-	1181	-	-	~ 203	240	699	216	230	482
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 203	240	-	216	230	-
Stage 1	-	-	-	-	-	-	659	626	-	461	468	-
Stage 2	-	-	-	-	-	-	426	463	-	651	605	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 541.6	14.7
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	205	948	-	-	1181	-	-	395
HCM Lane V/C Ratio	2.083	0.005	-	-	0.004	-	-	0.063
HCM Control Delay (s)	$ 541.6	8.8	0	-	8.1	0	-	14.7
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	32.7	0	-	-	0	-	-	0.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	447	0	270	0	0	106	340
Future Volume (vph)	0	0	0	0	0	447	0	270	0	0	106	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

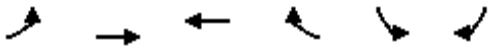
Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	447	0	270	0	0	106	340
Future Vol, veh/h	0	0	0	0	0	447	0	270	0	0	106	340
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	447	0	270	0	0	106	340

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	-	-	270	-	0	-	-	-	0	
Stage 1	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	
Critical Hdwy	-	-	6.23	-	-	-	-	-	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-	
Pot Cap-1 Maneuver	0	0	766	0	-	0	0	-	-	
Stage 1	0	0	-	0	-	0	0	-	-	
Stage 2	0	0	-	0	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	-	0	766	-	-	-	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-	
Stage 1	-	0	-	-	-	-	-	-	-	
Stage 2	-	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	766	-	-
HCM Lane V/C Ratio	-	0.584	-	-
HCM Control Delay (s)	-	16.1	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	3.8	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	250	5	0	0	126	0
Future Volume (vph)	250	5	0	0	126	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	250	5	0	0	126	0
Future Vol, veh/h	250	5	0	0	126	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	250	5	0	0	126	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	9.7	8.9
HCM LOS	A	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	255	126
LT Vol	250	126
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	255	126
Geometry Grp	1	1
Degree of Util (X)	0.32	0.17
Departure Headway (Hd)	4.521	4.853
Convergence, Y/N	Yes	Yes
Cap	798	742
Service Time	2.533	2.867
HCM Lane V/C Ratio	0.32	0.17
HCM Control Delay	9.7	8.9
HCM Lane LOS	A	A
HCM 95th-tile Q	1.4	0.6



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	288	5	350	565	85	0
Future Volume (vph)	288	5	350	565	85	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	13.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	288	5	350	565	85	0
Future Vol, veh/h	288	5	350	565	85	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	288	5	350	565	85	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	293	0	1556	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	1265	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1274	-	124	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	265	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1274	-	90	748
Mov Cap-2 Maneuver	-	-	-	-	90	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	192	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	163.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	90	-	-	1274	-
HCM Lane V/C Ratio	0.944	-	-	0.275	-
HCM Control Delay (s)	163.5	-	-	8.9	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	5.3	-	-	1.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	37	14	254	39	15	998
Future Volume (vph)	37	14	254	39	15	998
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	689		1495			1778
Travel Time (s)	18.8		29.1			34.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	14	254	39	15	998
Future Vol, veh/h	37	14	254	39	15	998
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, %	3	3	3	3	3	3
Mvmt Flow	40	15	276	42	16	1085

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1414	297	0	0	318	0
Stage 1	297	-	-	-	-	-
Stage 2	1117	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	151	740	-	-	1236	-
Stage 1	752	-	-	-	-	-
Stage 2	311	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	146	740	-	-	1236	-
Mov Cap-2 Maneuver	146	-	-	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	301	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.2	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	187	1236	-
HCM Lane V/C Ratio	-	-	0.296	0.013	-
HCM Control Delay (s)	-	-	32.2	8	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	25	187	33	27	943
Future Volume (vph)	31	25	187	33	27	943
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	675		1272			136
Travel Time (s)	18.4		24.8			2.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	25	187	33	27	943
Future Vol, veh/h	31	25	187	33	27	943
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, %	3	3	3	3	3	3
Mvmt Flow	34	27	203	36	29	1025

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1304	221	0	0	239	0
Stage 1	221	-	-	-	-	-
Stage 2	1083	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	176	816	-	-	1322	-
Stage 1	813	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	167	816	-	-	1322	-
Mov Cap-2 Maneuver	167	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	307	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.1	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	259	1322	-
HCM Lane V/C Ratio	-	-	0.235	0.022	-
HCM Control Delay (s)	-	-	23.1	7.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	362	6	177	973	6	170
Future Volume (vph)	362	6	177	973	6	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	141			2845	685	
Travel Time (s)	2.1			43.1	18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

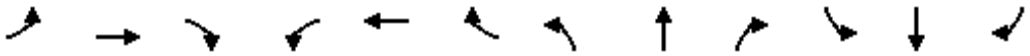
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	362	6	177	973	6	170
Future Vol, veh/h	362	6	177	973	6	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	393	7	192	1058	7	185

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	400	0	1839	397
Stage 1	-	-	-	-	397	-
Stage 2	-	-	-	-	1442	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1153	-	82	650
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	217	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1153	-	49	650
Mov Cap-2 Maneuver	-	-	-	-	49	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	129	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	18.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	458	-	-	1153	-
HCM Lane V/C Ratio	0.418	-	-	0.167	-
HCM Control Delay (s)	18.4	-	-	8.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0.6	-

2031 with SEIS Alternative 5 Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	5	20	0	0	0	0	20	30	245	30	0
Future Volume (vph)	215	5	20	0	0	0	0	20	30	245	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

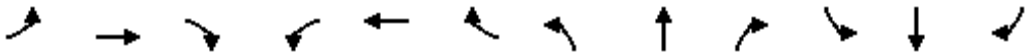
Intersection	
Int Delay, s/veh	13.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	215	5	20	0	0	0	0	20	30	245	30	0
Future Vol, veh/h	215	5	20	0	0	0	0	20	30	245	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	215	5	20	0	0	0	0	20	30	245	30	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	555	570	30	-	0	0	50	0	0
Stage 1	520	520	-	-	-	-	-	-	-
Stage 2	35	50	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	489	429	1039	0	-	-	1544	-	0
Stage 1	593	529	-	0	-	-	-	-	0
Stage 2	982	849	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	410	0	1039	-	-	-	1544	-	-
Mov Cap-2 Maneuver	410	0	-	-	-	-	-	-	-
Stage 1	593	0	-	-	-	-	-	-	-
Stage 2	824	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.3	0	6.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	432	1544	-
HCM Lane V/C Ratio	-	-	0.556	0.159	-
HCM Control Delay (s)	-	-	23.3	7.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	3.3	0.6	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	5	387	10	225	0	0	245	137
Future Volume (vph)	0	0	0	30	5	387	10	225	0	0	245	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

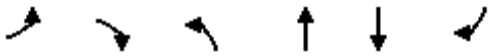
Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	30	5	387	10	225	0	0	245	137
Future Vol, veh/h	0	0	0	30	5	387	10	225	0	0	245	137
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	30	5	387	10	225	0	0	245	137

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	559	627	225	382	0	-	-	-	0
Stage 1	245	245	-	-	-	-	-	-	-
Stage 2	314	382	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	487	398	809	1166	-	0	0	-	-
Stage 1	791	700	-	-	-	0	0	-	-
Stage 2	736	609	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	482	0	809	1166	-	-	-	-	-
Mov Cap-2 Maneuver	482	0	-	-	-	-	-	-	-
Stage 1	783	0	-	-	-	-	-	-	-
Stage 2	736	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1166	-	771	-	-
HCM Lane V/C Ratio	0.009	-	0.547	-	-
HCM Control Delay (s)	8.1	0	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	3.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	54	80	130	482	292	44
Future Volume (vph)	54	80	130	482	292	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

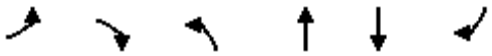
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	80	130	482	292	44
Future Vol, veh/h	54	80	130	482	292	44
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	54	80	130	482	292	44

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1056	314	336	0	-	0
Stage 1	314	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	236	697	1212	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	211	697	1212	-	-	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	448	-	-	-	-	-

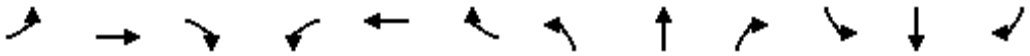
Approach	EB	NB	SB
HCM Control Delay, s	20.7	1.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1212	-	361	-	-
HCM Lane V/C Ratio	0.107	-	0.371	-	-
HCM Control Delay (s)	8.3	-	20.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	1.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	135	195	272	203	135	82
Future Volume (vph)	135	195	272	203	135	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1690	1156	
Travel Time (s)	19.3			32.9	22.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	13	0	0	0	12	322	0	0	196	20
Future Volume (vph)	30	0	13	0	0	0	12	322	0	0	196	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

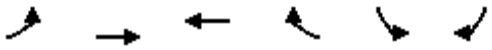
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	13	0	0	0	12	322	0	0	196	20
Future Vol, veh/h	30	0	13	0	0	0	12	322	0	0	196	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	30	0	13	0	0	0	12	322	0	0	196	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	553	553	207	559	563	322	217	0	0	322	0	0
Stage 1	207	207	-	346	346	-	-	-	-	-	-	-
Stage 2	346	346	-	213	217	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	436	434	821	443	438	724	1341	-	-	1238	-	-
Stage 1	784	721	-	674	639	-	-	-	-	-	-	-
Stage 2	659	627	-	794	727	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	432	429	820	432	433	724	1340	-	-	1238	-	-
Mov Cap-2 Maneuver	432	429	-	432	433	-	-	-	-	-	-	-
Stage 1	775	720	-	667	632	-	-	-	-	-	-	-
Stage 2	652	620	-	781	726	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.8	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1340	-	-	504	-	1238	-	-
HCM Lane V/C Ratio	0.009	-	-	0.085	-	-	-	-
HCM Control Delay (s)	7.7	0	-	12.8	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	796	822	30	20	14
Future Volume (vph)	14	796	822	30	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2832	1314		535	
Travel Time (s)		77.2	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

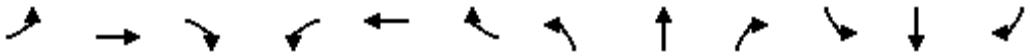
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	796	822	30	20	14
Future Vol, veh/h	14	796	822	30	20	14
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	14	796	822	30	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	852	0	-	0	1661	840
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	824	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	770	-	-	-	108	368
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	434	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	770	-	-	-	104	367
Mov Cap-2 Maneuver	-	-	-	-	104	-
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	434	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	36.4
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	770	-	-	-	148
HCM Lane V/C Ratio	0.018	-	-	-	0.23
HCM Control Delay (s)	9.8	0	-	-	36.4
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	695	117	30	707	10	131	0	110	10	0	4
Future Volume (vph)	14	695	117	30	707	10	131	0	110	10	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	58.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	695	117	30	707	10	131	0	110	10	0	4
Future Vol, veh/h	14	695	117	30	707	10	131	0	110	10	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	14	695	117	30	707	10	131	0	110	10	0	4

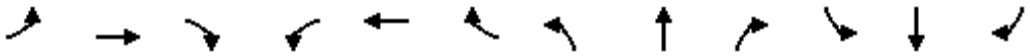
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	717	0	0	812	0	0	1557	1559	754	1609	1612	713
Stage 1	-	-	-	-	-	-	782	782	-	772	772	-
Stage 2	-	-	-	-	-	-	775	777	-	837	840	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	870	-	-	810	-	-	~ 93	113	412	85	105	435
Stage 1	-	-	-	-	-	-	390	408	-	395	412	-
Stage 2	-	-	-	-	-	-	394	410	-	364	384	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	870	-	-	810	-	-	~ 86	103	412	58	96	435
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 86	103	-	58	96	-
Stage 1	-	-	-	-	-	-	378	396	-	383	386	-
Stage 2	-	-	-	-	-	-	366	385	-	259	372	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	$ 437.8	61.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	135	870	-	-	810	-	-	77
HCM Lane V/C Ratio	1.785	0.016	-	-	0.037	-	-	0.182
HCM Control Delay (s)	$ 437.8	9.2	0	-	9.6	0	-	61.9
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	18.2	0	-	-	0.1	-	-	0.6

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	772	39	10	701	10	42	0	20	10	0	14
Future Volume (vph)	14	772	39	10	701	10	42	0	20	10	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	772	39	10	701	10	42	0	20	10	0	14
Future Vol, veh/h	14	772	39	10	701	10	42	0	20	10	0	14
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	14	772	39	10	701	10	42	0	20	10	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	711	0	0	815	0	0	1557	1555	796	1556	1569	706
Stage 1	-	-	-	-	-	-	824	824	-	726	726	-
Stage 2	-	-	-	-	-	-	733	731	-	830	843	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	875	-	-	812	-	-	85	105	365	93	112	439
Stage 1	-	-	-	-	-	-	346	367	-	419	433	-
Stage 2	-	-	-	-	-	-	390	406	-	367	382	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	875	-	-	809	-	-	79	100	364	85	106	439
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	100	-	85	106	-
Stage 1	-	-	-	-	-	-	335	355	-	407	424	-
Stage 2	-	-	-	-	-	-	370	398	-	337	369	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	78.5	31.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	106	875	-	-	809	-	-	160
HCM Lane V/C Ratio	0.585	0.016	-	-	0.012	-	-	0.15
HCM Control Delay (s)	78.5	9.2	0	-	9.5	0	-	31.4
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	2.8	0	-	-	0	-	-	0.5



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	127	20	10	221
Future Volume (vph)	20	10	127	20	10	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

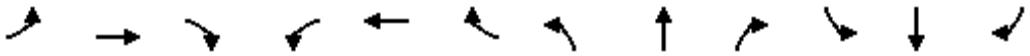
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	127	20	10	221
Future Vol, veh/h	20	10	127	20	10	221
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	127	20	10	221
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	8.6	8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	4%	0%	86%
Vol Thru, %	0%	67%	14%
Vol Right, %	96%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	231	30	147
LT Vol	10	0	127
Through Vol	0	20	20
RT Vol	221	10	0
Lane Flow Rate	231	30	147
Geometry Grp	1	1	1
Degree of Util (X)	0.244	0.036	0.185
Departure Headway (Hd)	3.809	4.339	4.52
Convergence, Y/N	Yes	Yes	Yes
Cap	947	827	784
Service Time	1.811	2.353	2.606
HCM Lane V/C Ratio	0.244	0.036	0.188
HCM Control Delay	8	7.5	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	280	130	60	220	90	70	82	110	70	69	38
Future Volume (vph)	129	280	130	60	220	90	70	82	110	70	69	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

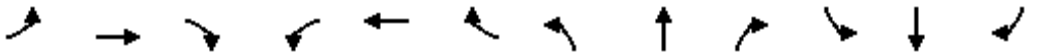
Intersection	
Int Delay, s/veh	23.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	129	280	130	60	220	90	70	82	110	70	69	38
Future Vol, veh/h	129	280	130	60	220	90	70	82	110	70	69	38
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	129	280	130	60	220	90	70	82	110	70	69	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	311	0	0	413	0	0	1046	1037	349	1086	1057	267
Stage 1	-	-	-	-	-	-	606	606	-	386	386	-
Stage 2	-	-	-	-	-	-	440	431	-	700	671	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1227	-	-	1135	-	-	206	230	692	195	226	774
Stage 1	-	-	-	-	-	-	482	485	-	639	612	-
Stage 2	-	-	-	-	-	-	594	581	-	431	457	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1226	-	-	1132	-	-	125	194	689	98	191	773
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	194	-	98	191	-
Stage 1	-	-	-	-	-	-	430	433	-	571	579	-
Stage 2	-	-	-	-	-	-	471	550	-	262	408	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1.4	77.3	58
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	155	689	1226	-	-	1132	-	-	98	261
HCM Lane V/C Ratio	0.981	0.16	0.105	-	-	0.053	-	-	0.714	0.41
HCM Control Delay (s)	125.2	11.2	8.3	-	-	8.4	-	-	103.7	28.1
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	7.4	0.6	0.4	-	-	0.2	-	-	3.7	1.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	440	10	80	360	10	20	32	100	10	29	20
Future Volume (vph)	25	440	10	80	360	10	20	32	100	10	29	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

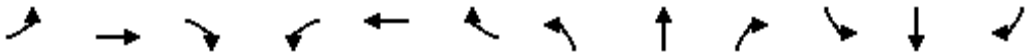
Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	440	10	80	360	10	20	32	100	10	29	20
Future Vol, veh/h	25	440	10	80	360	10	20	32	100	10	29	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	25	440	10	80	360	10	20	32	100	10	29	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	452	0	0	1050	1032	447	1091	1032	373
Stage 1	-	-	-	-	-	-	497	497	-	530	530	-
Stage 2	-	-	-	-	-	-	553	535	-	561	502	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1162	-	-	1093	-	-	202	230	605	189	229	664
Stage 1	-	-	-	-	-	-	549	540	-	525	520	-
Stage 2	-	-	-	-	-	-	512	519	-	505	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1091	-	-	162	207	604	129	206	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	207	-	129	206	-
Stage 1	-	-	-	-	-	-	536	527	-	511	479	-
Stage 2	-	-	-	-	-	-	431	479	-	387	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	18.7	25.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	604	1156	-	-	1091	-	-	237
HCM Lane V/C Ratio	0.278	0.166	0.022	-	-	0.073	-	-	0.249
HCM Control Delay (s)	31.5	12.1	8.2	-	-	8.6	-	-	25.2
HCM Lane LOS	D	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.1	0.6	0.1	-	-	0.2	-	-	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	623	117	80	474	50	204	20	30	40	30	33
Future Volume (vph)	62	623	117	80	474	50	204	20	30	40	30	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	155.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	623	117	80	474	50	204	20	30	40	30	33
Future Vol, veh/h	62	623	117	80	474	50	204	20	30	40	30	33
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	62	623	117	80	474	50	204	20	30	40	30	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	524	0	0	741	0	0	1500	1491	683	1490	1524	501
Stage 1	-	-	-	-	-	-	807	807	-	659	659	-
Stage 2	-	-	-	-	-	-	693	684	-	831	865	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1023	-	-	866	-	-	~ 100	124	449	103	119	574
Stage 1	-	-	-	-	-	-	375	394	-	456	464	-
Stage 2	-	-	-	-	-	-	434	449	-	367	374	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1023	-	-	865	-	-	~ 59	96	449	67	92	573
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 59	96	-	67	92	-
Stage 1	-	-	-	-	-	-	335	352	-	408	403	-
Stage 2	-	-	-	-	-	-	328	390	-	289	334	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.3	$ 1011.9	158.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	59	182	1023	-	-	865	-	-	105
HCM Lane V/C Ratio	3.458	0.275	0.061	-	-	0.092	-	-	0.981
HCM Control Delay (s)	$ 1252	32.1	8.7	0	-	9.6	0	-	158.1
HCM Lane LOS	F	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	21.7	1.1	0.2	-	-	0.3	-	-	6.1

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

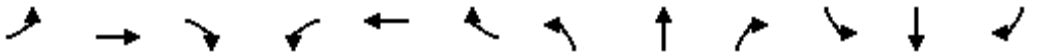
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	100	80	340	136	80	108	80	51	116	80
Future Volume (vph)	20	420	100	80	340	136	80	108	80	51	116	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 69.3
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





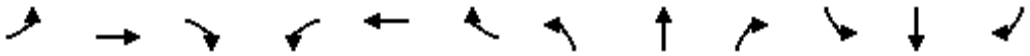
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	100	80	340	136	80	108	80	51	116	80
Future Volume (veh/h)	20	420	100	80	340	136	80	108	80	51	116	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	100	80	340	136	80	108	80	51	116	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	564	919	219	535	806	323	241	216	160	247	221	152
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	889	1414	337	860	1240	496	1176	989	733	1175	1014	699
Grp Volume(v), veh/h	20	0	520	80	0	476	80	0	188	51	0	196
Grp Sat Flow(s),veh/h/ln	889	0	1750	860	0	1736	1176	0	1722	1175	0	1713
Q Serve(g_s), s	0.8	0.0	10.3	3.6	0.0	9.2	4.5	0.0	6.7	2.8	0.0	7.1
Cycle Q Clear(g_c), s	10.0	0.0	10.3	13.9	0.0	9.2	11.6	0.0	6.7	9.5	0.0	7.1
Prop In Lane	1.00		0.19	1.00		0.29	1.00		0.43	1.00		0.41
Lane Grp Cap(c), veh/h	564	0	1138	535	0	1129	241	0	375	247	0	374
V/C Ratio(X)	0.04	0.00	0.46	0.15	0.00	0.42	0.33	0.00	0.50	0.21	0.00	0.52
Avail Cap(c_a), veh/h	564	0	1138	535	0	1129	412	0	626	418	0	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.3	0.0	6.1	9.5	0.0	5.9	29.2	0.0	24.0	28.1	0.0	24.1
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.6	0.0	1.2	1.1	0.0	1.5	0.6	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.5	0.7	0.0	3.1	1.3	0.0	2.8	0.8	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	0.0	7.4	10.1	0.0	7.0	30.3	0.0	25.4	28.7	0.0	25.7
LnGrp LOS	A	A	A	B	A	A	C	A	C	C	A	C
Approach Vol, veh/h		540			556			268			247	
Approach Delay, s/veh		7.4			7.5			26.9			26.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		19.8		50.0		19.8				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		12.3		11.5		15.9		13.6				
Green Ext Time (p_c), s		4.2		1.5		4.2		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	448	197	10	365	30	200	30	10	30	20	39
Future Volume (vph)	48	448	197	10	365	30	200	30	10	30	20	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	32.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	448	197	10	365	30	200	30	10	30	20	39
Future Vol, veh/h	48	448	197	10	365	30	200	30	10	30	20	39
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	48	448	197	10	365	30	200	30	10	30	20	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	648	0	0	1077	1061	555	1068	1144	381
Stage 1	-	-	-	-	-	-	646	646	-	400	400	-
Stage 2	-	-	-	-	-	-	431	415	-	668	744	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1137	-	-	928	-	-	~ 197	225	533	196	196	657
Stage 1	-	-	-	-	-	-	462	469	-	618	595	-
Stage 2	-	-	-	-	-	-	605	594	-	441	416	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1137	-	-	925	-	-	~ 159	206	529	160	180	656
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 159	206	-	160	180	-
Stage 1	-	-	-	-	-	-	429	436	-	576	587	-
Stage 2	-	-	-	-	-	-	541	586	-	374	386	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	181.2	27.3
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	159	243	1137	-	-	925	-	-	249
HCM Lane V/C Ratio	1.258	0.165	0.042	-	-	0.011	-	-	0.357
HCM Control Delay (s)	212.9	22.7	8.3	0	-	8.9	0	-	27.3
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	11.6	0.6	0.1	-	-	0	-	-	1.5

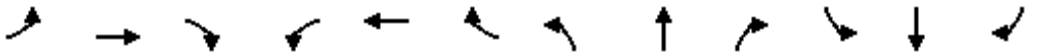
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	383	138	40	341	60	205	170	40	54	153	10
Future Volume (vph)	10	383	138	40	341	60	205	170	40	54	153	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





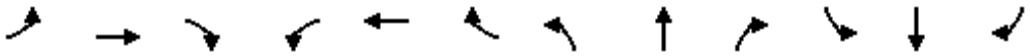
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	383	138	40	341	60	205	170	40	54	153	10
Future Volume (veh/h)	10	383	138	40	341	60	205	170	40	54	153	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	383	138	40	341	60	205	170	40	54	153	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	693	689	248	476	841	148	303	303	71	260	369	24
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	943	1133	408	873	1382	243	1162	1254	295	1141	1525	100
Grp Volume(v), veh/h	10	0	521	40	0	401	205	0	210	54	0	163
Grp Sat Flow(s),veh/h/ln	943	0	1541	873	0	1625	1162	0	1549	1141	0	1625
Q Serve(g_s), s	0.3	0.0	12.0	1.0	0.0	0.0	9.4	0.0	7.1	2.6	0.0	5.1
Cycle Q Clear(g_c), s	0.3	0.0	12.0	13.0	0.0	0.0	14.5	0.0	7.1	9.8	0.0	5.1
Prop In Lane	1.00		0.26	1.00		0.15	1.00		0.19	1.00		0.06
Lane Grp Cap(c), veh/h	693	0	938	476	0	989	303	0	374	260	0	393
V/C Ratio(X)	0.01	0.00	0.56	0.08	0.00	0.41	0.68	0.00	0.56	0.21	0.00	0.42
Avail Cap(c_a), veh/h	693	0	938	476	0	989	303	0	374	260	0	393
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.93	0.00	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	7.0	2.1	0.0	0.0	25.8	0.0	20.0	24.2	0.0	19.2
Incr Delay (d2), s/veh	0.0	0.0	2.2	0.3	0.0	1.2	4.9	0.0	1.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.6	0.1	0.0	0.3	3.2	0.0	2.5	0.7	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	9.1	2.5	0.0	1.2	30.7	0.0	21.1	24.4	0.0	19.4
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	B
Approach Vol, veh/h		531			441			415			217	
Approach Delay, s/veh		9.0			1.3			25.9			20.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.0	19.0	41.0	19.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	36.5	14.5	36.5	14.5
Max Q Clear Time (g_c+I1), s	14.0	11.8	15.0	16.5
Green Ext Time (p_c), s	3.9	0.2	2.9	0.0

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	333	121	10	311	20	90	20	30	10	20	14
Future Volume (vph)	24	333	121	10	311	20	90	20	30	10	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

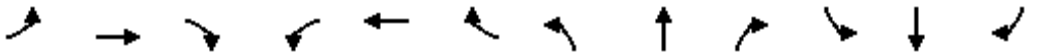
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	333	121	10	311	20	90	20	30	10	20	14
Future Vol, veh/h	24	333	121	10	311	20	90	20	30	10	20	14
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	24	333	121	10	311	20	90	20	30	10	20	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.9	13	11	9.7
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	64%	5%	3%	23%
Vol Thru, %	14%	70%	91%	45%
Vol Right, %	21%	25%	6%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	478	341	44
LT Vol	90	24	10	10
Through Vol	20	333	311	20
RT Vol	30	121	20	14
Lane Flow Rate	140	478	341	44
Geometry Grp	1	1	1	1
Degree of Util (X)	0.236	0.656	0.486	0.075
Departure Headway (Hd)	6.068	4.941	5.133	6.105
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	591	731	702	586
Service Time	4.11	2.97	3.166	4.156
HCM Lane V/C Ratio	0.237	0.654	0.486	0.075
HCM Control Delay	11	16.9	13	9.7
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	0.9	4.9	2.7	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	417	20	20	381	86	20	14	30	118	23	30
Future Volume (vph)	40	417	20	20	381	86	20	14	30	118	23	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1615	0	1736	1591	0	0	1757	1384	0	1754	1398
Flt Permitted	0.471			0.491				0.787			0.737	
Satd. Flow (perm)	850	1615	0	893	1591	0	0	1416	1354	0	1344	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			35				30			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	437	0	20	467	0	0	34	30	0	141	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	43.2	43.2		43.2	43.2			11.2	43.2		11.2	43.2
Actuated g/C Ratio	0.72	0.72		0.72	0.72			0.19	0.72		0.19	0.72
v/c Ratio	0.07	0.38		0.03	0.40			0.13	0.03		0.56	0.03
Control Delay	4.5	5.2		4.9	6.2			19.6	2.3		30.2	2.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.5	5.2		4.9	6.2			19.6	2.3		30.2	2.3
LOS	A	A		A	A			B	A		C	A
Approach Delay		5.1			6.2			11.5			25.3	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.56	

Intersection Signal Delay: 8.8 Intersection LOS: A
Intersection Capacity Utilization 66.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	375	10	0	0	301
Future Volume (vph)	10	375	10	0	0	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	375	10	0	0	301
Future Vol, veh/h	10	375	10	0	0	301
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	10	375	10	0	0	301

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	311	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	301	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	665	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	733	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	665	1048	-	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	733	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1033	-
HCM Lane V/C Ratio	-	0.373	-
HCM Control Delay (s)	-	10.5	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.7	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	271	40
Future Volume (vph)	0	0	10	0	271	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

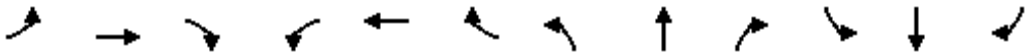
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	271	40
Future Vol, veh/h	0	0	10	0	271	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	271	40

Major/Minor	Minor2		Major2	
Conflicting Flow All	582	40	0	0
Stage 1	582	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	401	982	-	-
Stage 1	471	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	982	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	109	12	10	10	100	367	13	10	400	20
Future Volume (vph)	30	10	109	12	10	10	100	367	13	10	400	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

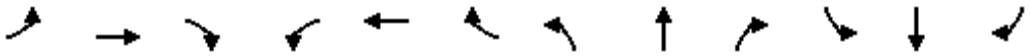
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	10	109	12	10	10	100	367	13	10	400	20
Future Vol, veh/h	30	10	109	12	10	10	100	367	13	10	400	20
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	30	10	109	12	10	10	100	367	13	10	400	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1038	1034	433	1089	1038	400	431	0	0	393	0	0
Stage 1	441	441	-	587	587	-	-	-	-	-	-	-
Stage 2	597	593	-	502	451	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	211	234	627	195	233	654	1134	-	-	1160	-	-
Stage 1	599	580	-	499	500	-	-	-	-	-	-	-
Stage 2	493	497	-	555	574	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	177	201	613	137	200	638	1122	-	-	1146	-	-
Mov Cap-2 Maneuver	177	201	-	137	200	-	-	-	-	-	-	-
Stage 1	526	568	-	437	438	-	-	-	-	-	-	-
Stage 2	415	435	-	438	562	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	25.3	1.8	0.2
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1122	-	-	375	209	1146	-	-
HCM Lane V/C Ratio	0.089	-	-	0.397	0.153	0.009	-	-
HCM Control Delay (s)	8.5	0	-	20.8	25.3	8.2	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.9	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	38	27	0	10	51	285	21	0	235	10
Future Volume (vph)	10	0	38	27	0	10	51	285	21	0	235	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

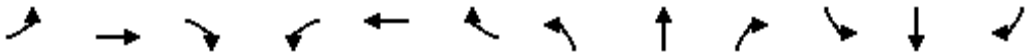
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	38	27	0	10	51	285	21	0	235	10
Future Vol, veh/h	10	0	38	27	0	10	51	285	21	0	235	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	10	0	38	27	0	10	51	285	21	0	235	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	643	648	240	657	643	296	245	0	0	306	0	0
Stage 1	240	240	-	398	398	-	-	-	-	-	-	-
Stage 2	403	408	-	259	245	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	389	392	804	348	363	692	1321	-	-	1255	-	-
Stage 1	768	711	-	584	565	-	-	-	-	-	-	-
Stage 2	628	600	-	698	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	370	374	804	320	346	692	1321	-	-	1255	-	-
Mov Cap-2 Maneuver	370	374	-	320	346	-	-	-	-	-	-	-
Stage 1	732	711	-	557	538	-	-	-	-	-	-	-
Stage 2	590	572	-	665	663	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	15.7	1.1	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1321	-	-	646	374	1255	-	-
HCM Lane V/C Ratio	0.039	-	-	0.074	0.099	-	-	-
HCM Control Delay (s)	7.8	0	-	11	15.7	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	143	10	32	161	12	10	10	41	11	10	10
Future Volume (vph)	10	143	10	32	161	12	10	10	41	11	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	10	143	10	32	161	12	10	10	41	11	10	10
Future Vol, veh/h	10	143	10	32	161	12	10	10	41	11	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	143	10	32	161	12	10	10	41	11	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	173	0	0	153	0	0	409	405	148	425	404	167
Stage 1	-	-	-	-	-	-	168	168	-	231	231	-
Stage 2	-	-	-	-	-	-	241	237	-	194	173	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1404	-	-	1421	-	-	556	538	904	543	539	882
Stage 1	-	-	-	-	-	-	839	763	-	776	717	-
Stage 2	-	-	-	-	-	-	767	713	-	812	760	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1404	-	-	1421	-	-	528	520	904	498	521	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	528	520	-	498	521	-
Stage 1	-	-	-	-	-	-	832	757	-	770	699	-
Stage 2	-	-	-	-	-	-	729	695	-	759	754	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.2	10.4	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	730	1404	-	-	1421	-	-	589
HCM Lane V/C Ratio	0.084	0.007	-	-	0.023	-	-	0.053
HCM Control Delay (s)	10.4	7.6	0	-	7.6	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	43	16	459	67	27	303
Future Volume (vph)	43	16	459	67	27	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	845		1583			1690
Travel Time (s)	23.0		30.8			32.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	16	459	67	27	303
Future Vol, veh/h	43	16	459	67	27	303
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, %	3	3	3	3	3	3
Mvmt Flow	47	17	499	73	29	329

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	923	536	0	0	572	0
Stage 1	536	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	298	543	-	-	996	-
Stage 1	585	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	287	543	-	-	996	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.6	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	329	996	-
HCM Lane V/C Ratio	-	-	0.195	0.029	-
HCM Control Delay (s)	-	-	18.6	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	35	50	284	54	27	182
Future Volume (vph)	35	50	284	54	27	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1086		1156			252
Travel Time (s)	29.6		22.5			4.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	50	284	54	27	182
Future Vol, veh/h	35	50	284	54	27	182
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, %	3	3	3	3	3	3
Mvmt Flow	38	54	309	59	29	198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	595	339	0	0	368	0
Stage 1	339	-	-	-	-	-
Stage 2	256	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	465	701	-	-	1185	-
Stage 1	719	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	452	701	-	-	1185	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	763	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	571	1185	-
HCM Lane V/C Ratio	-	-	0.162	0.025	-
HCM Control Delay (s)	-	-	12.5	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	570	13	261	575	4	240
Future Volume (vph)	570	13	261	575	4	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	154			2832	792	
Travel Time (s)	2.3			42.9	21.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.7

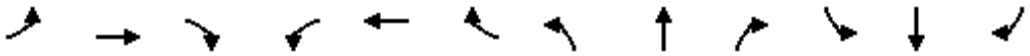
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	570	13	261	575	4	240
Future Vol, veh/h	570	13	261	575	4	240
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	620	14	284	625	4	261

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	634	0	1820	627
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	1193	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	944	-	85	482
Stage 1	-	-	-	-	531	-
Stage 2	-	-	-	-	286	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	944	-	46	482
Mov Cap-2 Maneuver	-	-	-	-	46	-
Stage 1	-	-	-	-	531	-
Stage 2	-	-	-	-	154	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	27.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	417	-	-	944	-
HCM Lane V/C Ratio	0.636	-	-	0.301	-
HCM Control Delay (s)	27.5	-	-	10.4	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	4.3	-	-	1.3	-

2031 with SEIS Alternative 5 Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	515	5	15	0	0	0	0	10	35	295	20	0
Future Volume (vph)	515	5	15	0	0	0	0	10	35	295	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	160.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	515	5	15	0	0	0	0	10	35	295	20	0
Future Vol, veh/h	515	5	15	0	0	0	0	10	35	295	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	515	5	15	0	0	0	0	10	35	295	20	0

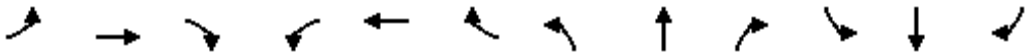
Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	638	655	20	-	0	0	45	0	0
Stage 1	610	610	-	-	-	-	-	-	-
Stage 2	28	45	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	~ 442	387	1061	0	-	-	1444	-	0
Stage 1	544	486	-	0	-	-	-	-	0
Stage 2	997	859	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 351	0	1061	-	-	-	1444	-	-
Mov Cap-2 Maneuver	~ 351	0	-	-	-	-	-	-	-
Stage 1	544	0	-	-	-	-	-	-	-
Stage 2	791	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	264.6	0	7.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	358	1444	-
HCM Lane V/C Ratio	-	-	1.494	0.204	-
HCM Control Delay (s)	-	-	264.6	8.1	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	29	0.8	-

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	5	452	5	520	0	0	255	132
Future Volume (vph)	0	0	0	60	5	452	5	520	0	0	255	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

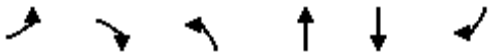
Intersection	
Int Delay, s/veh	31.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	60	5	452	5	520	0	0	255	132
Future Vol, veh/h	0	0	0	60	5	452	5	520	0	0	255	132
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	60	5	452	5	520	0	0	255	132

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	851	917	520	387	0	-	-	-	0	
Stage 1	530	530	-	-	-	-	-	-	-	
Stage 2	321	387	-	-	-	-	-	-	-	
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-	
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-	
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-	
Pot Cap-1 Maneuver	313	258	529	1177	-	0	0	-	-	
Stage 1	563	504	-	-	-	0	0	-	-	
Stage 2	705	586	-	-	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	311	0	529	1177	-	-	-	-	-	
Mov Cap-2 Maneuver	311	0	-	-	-	-	-	-	-	
Stage 1	560	0	-	-	-	-	-	-	-	
Stage 2	705	0	-	-	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	85.8	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1177	-	489	-	-
HCM Lane V/C Ratio	0.004	-	1.057	-	-
HCM Control Delay (s)	8.1	0	85.8	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	15.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	39	105	95	877	282	24
Future Volume (vph)	39	105	95	877	282	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

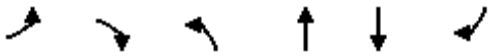
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	105	95	877	282	24
Future Vol, veh/h	39	105	95	877	282	24
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	39	105	95	877	282	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1361	294	306	0	-	0
Stage 1	294	-	-	-	-	-
Stage 2	1067	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	155	720	1255	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	143	720	1255	-	-	-
Mov Cap-2 Maneuver	143	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	315	-	-	-	-	-

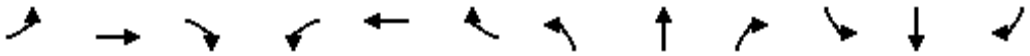
Approach	EB	NB	SB
HCM Control Delay, s	22.8	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1255	-	344	-	-
HCM Lane V/C Ratio	0.076	-	0.419	-	-
HCM Control Delay (s)	8.1	-	22.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	135	150	517	348	140	137
Future Volume (vph)	135	150	517	348	140	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1574	1196	
Travel Time (s)	19.3			30.7	23.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	33	0	0	0	17	462	0	0	236	40
Future Volume (vph)	25	0	33	0	0	0	17	462	0	0	236	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

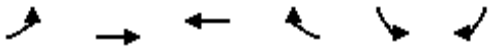
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	33	0	0	0	17	462	0	0	236	40
Future Vol, veh/h	25	0	33	0	0	0	17	462	0	0	236	40
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	33	0	0	0	17	462	0	0	236	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	752	752	256	769	772	462	276	0	0	462	0	0
Stage 1	256	256	-	496	496	-	-	-	-	-	-	-
Stage 2	496	496	-	273	276	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	320	333	771	321	333	604	1287	-	-	1094	-	-
Stage 1	738	687	-	559	549	-	-	-	-	-	-	-
Stage 2	546	537	-	737	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	316	327	771	303	327	604	1287	-	-	1094	-	-
Mov Cap-2 Maneuver	316	327	-	303	327	-	-	-	-	-	-	-
Stage 1	725	687	-	549	539	-	-	-	-	-	-	-
Stage 2	536	527	-	705	685	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1287	-	-	476	-	1094	-	-
HCM Lane V/C Ratio	0.013	-	-	0.122	-	-	-	-
HCM Control Delay (s)	7.8	0	-	13.6	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	856	957	40	20	14
Future Volume (vph)	9	856	957	40	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2756	1314		535	
Travel Time (s)		75.2	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

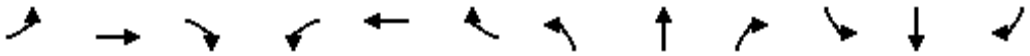
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	856	957	40	20	14
Future Vol, veh/h	9	856	957	40	20	14
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	9	856	957	40	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	997	0	-	0	1851	984
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	874	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	686	-	-	-	83	304
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	412	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	686	-	-	-	81	302
Mov Cap-2 Maneuver	-	-	-	-	81	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	412	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	48.4
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	686	-	-	-	116
HCM Lane V/C Ratio	0.013	-	-	-	0.293
HCM Control Delay (s)	10.3	0	-	-	48.4
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	745	142	40	812	5	181	0	130	0	0	4
Future Volume (vph)	4	745	142	40	812	5	181	0	130	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	164

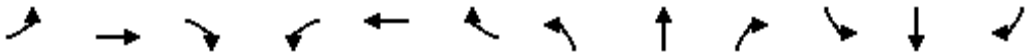
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	745	142	40	812	5	181	0	130	0	0	4
Future Vol, veh/h	4	745	142	40	812	5	181	0	130	0	0	4
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	4	745	142	40	812	5	181	0	130	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	817	0	0	891	0	0	1725	1725	821	1785	1794	815
Stage 1	-	-	-	-	-	-	828	828	-	895	895	-
Stage 2	-	-	-	-	-	-	897	897	-	890	899	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	802	-	-	757	-	-	~ 70	89	376	64	81	381
Stage 1	-	-	-	-	-	-	367	387	-	338	362	-
Stage 2	-	-	-	-	-	-	336	360	-	340	360	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	802	-	-	754	-	-	~ 63	79	374	38	72	381
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 63	79	-	38	72	-
Stage 1	-	-	-	-	-	-	362	382	-	335	327	-
Stage 2	-	-	-	-	-	-	300	325	-	219	355	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	$ 1086.2	14.5
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	97	802	-	-	754	-	-	381
HCM Lane V/C Ratio	3.206	0.005	-	-	0.053	-	-	0.01
HCM Control Delay (s)	$ 1086.2	9.5	0	-	10	0	-	14.5
HCM Lane LOS	F	A	A	-	B	A	-	B
HCM 95th %tile Q(veh)	30.6	0	-	-	0.2	-	-	0

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	862	19	15	826	10	37	10	5	20	15	29
Future Volume (vph)	24	862	19	15	826	10	37	10	5	20	15	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	21.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	862	19	15	826	10	37	10	5	20	15	29
Future Vol, veh/h	24	862	19	15	826	10	37	10	5	20	15	29
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	24	862	19	15	826	10	37	10	5	20	15	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	837	0	0	886	0	0	1808	1792	879	1791	1796	832
Stage 1	-	-	-	-	-	-	925	925	-	862	862	-
Stage 2	-	-	-	-	-	-	883	867	-	929	934	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	780	-	-	756	-	-	~ 35	47	236	63	81	372
Stage 1	-	-	-	-	-	-	220	243	-	353	375	-
Stage 2	-	-	-	-	-	-	234	262	-	324	347	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	779	-	-	752	-	-	~ 25	42	234	47	73	372
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 25	42	-	47	73	-
Stage 1	-	-	-	-	-	-	206	227	-	331	361	-
Stage 2	-	-	-	-	-	-	199	252	-	284	324	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	$ 637.6	110.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	30	779	-	-	752	-	-	90
HCM Lane V/C Ratio	1.733	0.031	-	-	0.02	-	-	0.711
HCM Control Delay (s)	$ 637.6	9.8	0	-	9.9	0	-	110.5
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	6	0.1	-	-	0.1	-	-	3.5

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	162	10	30	276
Future Volume (vph)	25	10	162	10	30	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

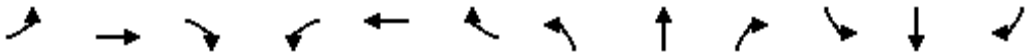
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	162	10	30	276
Future Vol, veh/h	25	10	162	10	30	276
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	162	10	30	276
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.8	9.3	8.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	10%	0%	94%
Vol Thru, %	0%	71%	6%
Vol Right, %	90%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	306	35	172
LT Vol	30	0	162
Through Vol	0	25	10
RT Vol	276	10	0
Lane Flow Rate	306	35	172
Geometry Grp	1	1	1
Degree of Util (X)	0.335	0.045	0.229
Departure Headway (Hd)	3.942	4.579	4.801
Convergence, Y/N	Yes	Yes	Yes
Cap	915	781	748
Service Time	1.956	2.611	2.829
HCM Lane V/C Ratio	0.334	0.045	0.23
HCM Control Delay	8.9	7.8	9.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.5	0.1	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	395	200	70	195	110	75	107	155	80	89	48
Future Volume (vph)	159	395	200	70	195	110	75	107	155	80	89	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	129.4

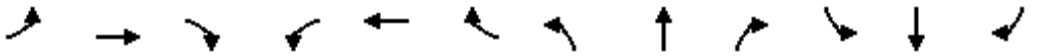
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	159	395	200	70	195	110	75	107	155	80	89	48
Future Vol, veh/h	159	395	200	70	195	110	75	107	155	80	89	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	159	395	200	70	195	110	75	107	155	80	89	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	595	0	0	1272	1258	495	1334	1303	250
Stage 1	-	-	-	-	-	-	813	813	-	390	390	-
Stage 2	-	-	-	-	-	-	459	445	-	944	913	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1244	-	-	967	-	-	144	171	575	130	159	784
Stage 1	-	-	-	-	-	-	372	392	-	630	604	-
Stage 2	-	-	-	-	-	-	582	575	-	312	350	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1244	-	-	967	-	-	~ 52	138	575	~ 30	129	784
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 52	138	-	~ 30	129	-
Stage 1	-	-	-	-	-	-	324	342	-	549	561	-
Stage 2	-	-	-	-	-	-	426	534	-	137	305	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	1.7	$ 367.3	$ 424
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	82	575	1244	-	-	967	-	-	30	182
HCM Lane V/C Ratio	2.22	0.27	0.128	-	-	0.072	-	-	2.667	0.753
HCM Control Delay (s)	$ 668.5	13.6	8.3	-	-	9	-	-	$ 1033.5	68.1
HCM Lane LOS	F	B	A	-	-	A	-	-	F	F
HCM 95th %tile Q(veh)	16.6	1.1	0.4	-	-	0.2	-	-	9.4	4.9

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	570	35	70	370	0	40	22	155	0	39	5
Future Volume (vph)	25	570	35	70	370	0	40	22	155	0	39	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

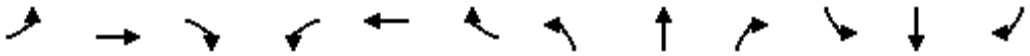
Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	570	35	70	370	0	40	22	155	0	39	5
Future Vol, veh/h	25	570	35	70	370	0	40	22	155	0	39	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	25	570	35	70	370	0	40	22	155	0	39	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	609	0	0	1182	1153	592	1237	1170	379
Stage 1	-	-	-	-	-	-	642	642	-	511	511	-
Stage 2	-	-	-	-	-	-	540	511	-	726	659	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1177	-	-	960	-	-	164	195	501	113	147	546
Stage 1	-	-	-	-	-	-	458	464	-	443	444	-
Stage 2	-	-	-	-	-	-	520	532	-	329	374	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	956	-	-	116	176	499	65	133	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	176	-	65	133	-
Stage 1	-	-	-	-	-	-	447	452	-	433	411	-
Stage 2	-	-	-	-	-	-	429	493	-	211	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.4	26.5	40.3
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	132	499	1176	-	-	956	-	-	145
HCM Lane V/C Ratio	0.47	0.311	0.021	-	-	0.073	-	-	0.303
HCM Control Delay (s)	54.4	15.4	8.1	-	-	9.1	-	-	40.3
HCM Lane LOS	F	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.1	1.3	0.1	-	-	0.2	-	-	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	633	147	90	524	30	279	40	25	25	25	48
Future Volume (vph)	52	633	147	90	524	30	279	40	25	25	25	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	333.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	633	147	90	524	30	279	40	25	25	25	48
Future Vol, veh/h	52	633	147	90	524	30	279	40	25	25	25	48
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	52	633	147	90	524	30	279	40	25	25	25	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	555	0	0	782	0	0	1570	1548	710	1564	1606	541
Stage 1	-	-	-	-	-	-	813	813	-	720	720	-
Stage 2	-	-	-	-	-	-	757	735	-	844	886	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	1001	-	-	836	-	-	~ 88	112	429	92	106	545
Stage 1	-	-	-	-	-	-	368	388	-	422	435	-
Stage 2	-	-	-	-	-	-	395	421	-	361	365	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1000	-	-	834	-	-	~ 50	85	428	45	81	544
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 50	85	-	45	81	-
Stage 1	-	-	-	-	-	-	333	351	-	382	366	-
Stage 2	-	-	-	-	-	-	283	354	-	273	330	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.4	$ 1814.3	151.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	50	123	1000	-	-	834	-	-	103
HCM Lane V/C Ratio	5.58	0.528	0.052	-	-	0.108	-	-	0.951
HCM Control Delay (s)	$ 2222.3	63.1	8.8	0	-	9.8	0	-	151.8
HCM Lane LOS	F	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	31.9	2.5	0.2	-	-	0.4	-	-	5.8

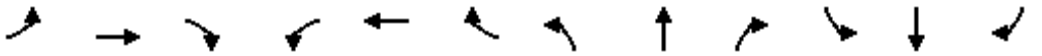
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	540	125	70	340	181	85	103	120	56	186	80
Future Volume (vph)	60	540	125	70	340	181	85	103	120	56	186	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 87.9	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

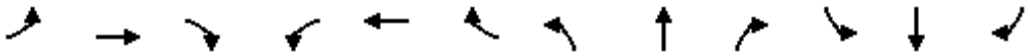




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	540	125	70	340	181	85	103	120	56	186	80
Future Volume (veh/h)	60	540	125	70	340	181	85	103	120	56	186	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	60	540	125	70	340	181	85	103	120	56	186	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	504	932	216	408	734	391	205	194	226	232	307	132
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	866	1444	334	764	1137	605	1071	757	881	1113	1196	514
Grp Volume(v), veh/h	60	0	665	70	0	521	85	0	223	56	0	266
Grp Sat Flow(s),veh/h/ln	866	0	1778	764	0	1743	1071	0	1638	1113	0	1710
Q Serve(g_s), s	3.5	0.0	19.8	5.4	0.0	14.2	7.1	0.0	11.0	4.3	0.0	12.8
Cycle Q Clear(g_c), s	17.7	0.0	19.8	25.2	0.0	14.2	19.9	0.0	11.0	15.2	0.0	12.8
Prop In Lane	1.00		0.19	1.00		0.35	1.00		0.54	1.00		0.30
Lane Grp Cap(c), veh/h	504	0	1147	408	0	1124	205	0	420	232	0	439
V/C Ratio(X)	0.12	0.00	0.58	0.17	0.00	0.46	0.41	0.00	0.53	0.24	0.00	0.61
Avail Cap(c_a), veh/h	504	0	1147	408	0	1124	278	0	532	308	0	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	9.4	16.6	0.0	8.4	39.4	0.0	29.9	36.5	0.0	30.6
Incr Delay (d2), s/veh	0.5	0.0	2.1	0.9	0.0	1.4	1.9	0.0	1.5	0.5	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	7.7	1.0	0.0	5.3	2.0	0.0	4.5	1.2	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	0.0	11.6	17.5	0.0	9.8	41.3	0.0	31.4	37.0	0.0	32.0
LnGrp LOS	B	A	B	B	A	A	D	A	C	D	A	C
Approach Vol, veh/h		725			591			308			322	
Approach Delay, s/veh		11.7			10.7			34.2			32.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.0	28.6	65.0	28.6
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	60.4	30.4	60.4	30.4
Max Q Clear Time (g_c+I1), s	21.8	21.9	27.2	17.2
Green Ext Time (p_c), s	6.4	1.5	4.8	1.5

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	413	237	20	395	45	260	25	5	25	25	49
Future Volume (vph)	28	413	237	20	395	45	260	25	5	25	25	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	71

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	413	237	20	395	45	260	25	5	25	25	49
Future Vol, veh/h	28	413	237	20	395	45	260	25	5	25	25	49
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	28	413	237	20	395	45	260	25	5	25	25	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	442	0	0	652	0	0	1087	1072	536	1065	1168	422
Stage 1	-	-	-	-	-	-	590	590	-	460	460	-
Stage 2	-	-	-	-	-	-	497	482	-	605	708	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1107	-	-	935	-	-	~ 193	220	543	202	195	636
Stage 1	-	-	-	-	-	-	492	493	-	585	569	-
Stage 2	-	-	-	-	-	-	553	552	-	488	441	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1105	-	-	933	-	-	~ 151	204	541	171	181	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 151	204	-	171	181	-
Stage 1	-	-	-	-	-	-	471	472	-	560	551	-
Stage 2	-	-	-	-	-	-	472	535	-	438	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	$ 363.7	25.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	151	228	1105	-	-	933	-	-	274
HCM Lane V/C Ratio	1.722	0.132	0.025	-	-	0.021	-	-	0.361
HCM Control Delay (s)	$ 403	23.2	8.3	0	-	8.9	0	-	25.4
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	18.8	0.4	0.1	-	-	0.1	-	-	1.6

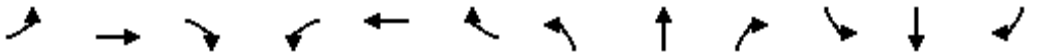
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	503	208	40	336	80	215	145	35	69	183	10
Future Volume (vph)	10	503	208	40	336	80	215	145	35	69	183	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





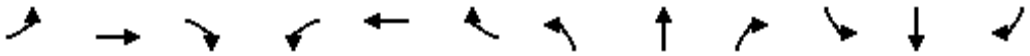
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	503	208	40	336	80	215	145	35	69	183	10
Future Volume (veh/h)	10	503	208	40	336	80	215	145	35	69	183	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	503	208	40	336	80	215	145	35	69	183	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	674	677	280	304	788	188	296	350	84	301	408	22
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	953	1116	461	733	1298	309	1162	1279	309	1137	1494	82
Grp Volume(v), veh/h	10	0	711	40	0	416	215	0	180	69	0	193
Grp Sat Flow(s),veh/h/ln	953	0	1577	733	0	1608	1162	0	1588	1137	0	1575
Q Serve(g_s), s	0.3	0.0	24.2	2.4	0.0	0.0	12.9	0.0	7.0	4.0	0.0	7.6
Cycle Q Clear(g_c), s	0.3	0.0	24.2	26.6	0.0	0.0	20.5	0.0	7.0	10.9	0.0	7.6
Prop In Lane	1.00		0.29	1.00		0.19	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	674	0	957	304	0	975	296	0	434	301	0	431
V/C Ratio(X)	0.01	0.00	0.74	0.13	0.00	0.43	0.73	0.00	0.41	0.23	0.00	0.45
Avail Cap(c_a), veh/h	674	0	957	304	0	975	296	0	434	301	0	431
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.00	0.84	0.93	0.00	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	0.0	10.6	7.1	0.0	0.0	31.5	0.0	22.3	26.8	0.0	22.6
Incr Delay (d2), s/veh	0.0	0.0	4.4	0.8	0.0	1.3	7.6	0.0	0.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	8.3	0.4	0.0	0.3	4.5	0.0	2.6	1.1	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	15.0	7.9	0.0	1.3	39.1	0.0	22.6	27.0	0.0	22.8
LnGrp LOS	A	A	B	A	A	A	D	A	C	C	A	C
Approach Vol, veh/h		721			456			395			262	
Approach Delay, s/veh		14.8			1.9			31.6			23.9	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		25.0		50.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		26.2		12.9		28.6		22.5				
Green Ext Time (p_c), s		5.5		0.5		2.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	278	141	15	356	20	95	35	25	5	15	39
Future Volume (vph)	44	278	141	15	356	20	95	35	25	5	15	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

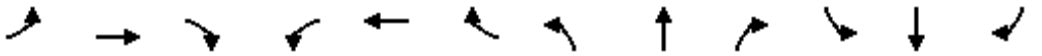
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	278	141	15	356	20	95	35	25	5	15	39
Future Vol, veh/h	44	278	141	15	356	20	95	35	25	5	15	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	44	278	141	15	356	20	95	35	25	5	15	39
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.7	15	11.6	9.8
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	61%	10%	4%	8%
Vol Thru, %	23%	60%	91%	25%
Vol Right, %	16%	30%	5%	66%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	463	391	59
LT Vol	95	44	15	5
Through Vol	35	278	356	15
RT Vol	25	141	20	39
Lane Flow Rate	155	463	391	59
Geometry Grp	1	1	1	1
Degree of Util (X)	0.269	0.644	0.568	0.099
Departure Headway (Hd)	6.248	5.009	5.227	6.025
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	574	718	688	592
Service Time	4.306	3.05	3.27	4.095
HCM Lane V/C Ratio	0.27	0.645	0.568	0.1
HCM Control Delay	11.6	16.7	15	9.8
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	1.1	4.7	3.6	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	527	30	30	386	91	15	14	30	128	23	45
Future Volume (vph)	45	527	30	30	386	91	15	14	30	128	23	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1628	0	1770	1619	0	0	1799	1411	0	1804	1439
Flt Permitted	0.458			0.408				0.837			0.738	
Satd. Flow (perm)	833	1628	0	756	1619	0	0	1541	1367	0	1376	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			29				30			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	557	0	30	477	0	0	29	30	0	151	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	52.7	52.7		52.7	52.7			13.3	52.7		13.3	52.7
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.18	0.70		0.18	0.70
v/c Ratio	0.08	0.49		0.06	0.42			0.11	0.03		0.62	0.05
Control Delay	6.0	7.5		5.2	6.6			24.0	2.3		38.5	2.0
Queue Delay	0.0	0.2		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	6.0	7.7		5.2	6.6			24.0	2.3		38.5	2.0
LOS	A	A		A	A			C	A		D	A
Approach Delay		7.6			6.5			13.0			30.1	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	

Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 70.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	345	15	0	0	376
Future Volume (vph)	20	345	15	0	0	376
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	345	15	0	0	376
Future Vol, veh/h	20	345	15	0	0	376
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	20	345	15	0	0	376

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	391	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	603	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	683	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	603	1050	-	-	-	-
Mov Cap-2 Maneuver	603	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	683	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1009	-
HCM Lane V/C Ratio	-	0.362	-
HCM Control Delay (s)	-	10.6	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.7	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	346	75
Future Volume (vph)	0	0	10	0	346	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

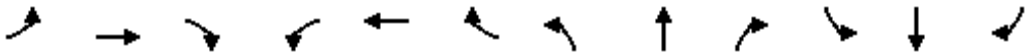
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	346	75
Future Vol, veh/h	0	0	10	0	346	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	346	75

Major/Minor	Minor2		Major2	
Conflicting Flow All	767	75	0	0
Stage 1	767	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	335	992	-	-
Stage 1	414	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	992	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	45	109	12	10	10	80	422	18	10	350	25
Future Volume (vph)	25	45	109	12	10	10	80	422	18	10	350	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

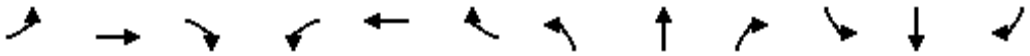
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	45	109	12	10	10	80	422	18	10	350	25
Future Vol, veh/h	25	45	109	12	10	10	80	422	18	10	350	25
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	25	45	109	12	10	10	80	422	18	10	350	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1027	1009	391	1079	1012	474	388	0	0	453	0	0
Stage 1	396	396	-	604	604	-	-	-	-	-	-	-
Stage 2	631	613	-	475	408	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	215	242	662	198	241	595	1170	-	-	1097	-	-
Stage 1	633	607	-	489	491	-	-	-	-	-	-	-
Stage 2	472	486	-	574	600	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	180	212	644	124	211	571	1156	-	-	1083	-	-
Mov Cap-2 Maneuver	180	212	-	124	211	-	-	-	-	-	-	-
Stage 1	568	592	-	439	440	-	-	-	-	-	-	-
Stage 2	400	436	-	429	586	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.3	26.7	1.3	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1156	-	-	344	198	1083	-	-
HCM Lane V/C Ratio	0.069	-	-	0.52	0.162	0.009	-	-
HCM Control Delay (s)	8.3	0	-	26.3	26.7	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.9	0.6	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	23	27	0	10	61	310	21	0	220	5
Future Volume (vph)	5	0	23	27	0	10	61	310	21	0	220	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

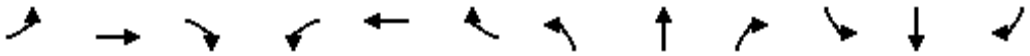
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	23	27	0	10	61	310	21	0	220	5
Future Vol, veh/h	5	0	23	27	0	10	61	310	21	0	220	5
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	5	0	23	27	0	10	61	310	21	0	220	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	671	676	223	677	668	321	225	0	0	331	0	0
Stage 1	223	223	-	443	443	-	-	-	-	-	-	-
Stage 2	448	453	-	234	225	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	349	356	778	369	382	724	1338	-	-	1217	-	-
Stage 1	745	690	-	598	579	-	-	-	-	-	-	-
Stage 2	560	544	-	774	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	329	336	778	343	361	724	1338	-	-	1217	-	-
Mov Cap-2 Maneuver	329	336	-	343	361	-	-	-	-	-	-	-
Stage 1	703	690	-	565	547	-	-	-	-	-	-	-
Stage 2	521	514	-	751	721	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	14.9	1.2	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1338	-	-	626	400	1217	-	-
HCM Lane V/C Ratio	0.046	-	-	0.045	0.093	-	-	-
HCM Control Delay (s)	7.8	0	-	11	14.9	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.3	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	108	5	32	181	37	0	25	31	21	0	25
Future Volume (vph)	20	108	5	32	181	37	0	25	31	21	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	108	5	32	181	37	0	25	31	21	0	25
Future Vol, veh/h	20	108	5	32	181	37	0	25	31	21	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	108	5	32	181	37	0	25	31	21	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	218	0	0	113	0	0	427	433	111	443	417	200
Stage 1	-	-	-	-	-	-	151	151	-	264	264	-
Stage 2	-	-	-	-	-	-	276	282	-	179	153	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1334	-	-	1489	-	-	523	502	918	528	530	846
Stage 1	-	-	-	-	-	-	831	755	-	746	694	-
Stage 2	-	-	-	-	-	-	711	662	-	827	775	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1334	-	-	1489	-	-	492	481	918	475	508	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	492	481	-	475	508	-
Stage 1	-	-	-	-	-	-	818	743	-	734	677	-
Stage 2	-	-	-	-	-	-	673	645	-	760	763	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	1	11	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	653	1334	-	-	1489	-	-	624
HCM Lane V/C Ratio	0.086	0.015	-	-	0.021	-	-	0.074
HCM Control Delay (s)	11	7.7	0	-	7.5	0	-	11.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	43	16	849	67	27	263
Future Volume (vph)	43	16	849	67	27	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	813		1699			1574
Travel Time (s)	22.2		33.1			30.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	16	849	67	27	263
Future Vol, veh/h	43	16	849	67	27	263
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, %	3	3	3	3	3	3
Mvmt Flow	47	17	923	73	29	286

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1304	960	0	0	996	0
Stage 1	960	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	176	310	-	-	691	-
Stage 1	370	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	167	310	-	-	691	-
Mov Cap-2 Maneuver	167	-	-	-	-	-
Stage 1	370	-	-	-	-	-
Stage 2	680	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.1	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	191	691	-
HCM Lane V/C Ratio	-	-	0.336	0.042	-
HCM Control Delay (s)	-	-	33.1	10.4	0
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	35	50	429	54	27	242
Future Volume (vph)	35	50	429	54	27	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	821		1196			213
Travel Time (s)	22.4		23.3			4.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	50	429	54	27	242
Future Vol, veh/h	35	50	429	54	27	242
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, %	3	3	3	3	3	3
Mvmt Flow	38	54	466	59	29	263

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	817	496	0	0	525	0
Stage 1	496	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	345	572	-	-	1037	-
Stage 1	610	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	334	572	-	-	1037	-
Mov Cap-2 Maneuver	334	-	-	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	709	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	442	1037	-
HCM Lane V/C Ratio	-	-	0.209	0.028	-
HCM Control Delay (s)	-	-	15.3	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	625	13	261	710	4	240
Future Volume (vph)	625	13	261	710	4	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	230			2756	1013	
Travel Time (s)	3.5			41.8	27.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.6

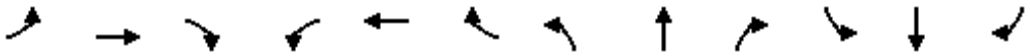
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	625	13	261	710	4	240
Future Vol, veh/h	625	13	261	710	4	240
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	679	14	284	772	4	261

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	693	0	2026	686
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	1340	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	898	-	63	446
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	243	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	898	-	28	446
Mov Cap-2 Maneuver	-	-	-	-	28	-
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	108	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.9	38.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	358	-	-	898	-
HCM Lane V/C Ratio	0.741	-	-	0.316	-
HCM Control Delay (s)	38.9	-	-	10.8	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	5.7	-	-	1.4	-

2031 with SEIS Alternative 5 Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	5	5	0	0	0	0	15	5	247	20	0
Future Volume (vph)	174	5	5	0	0	0	0	15	5	247	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

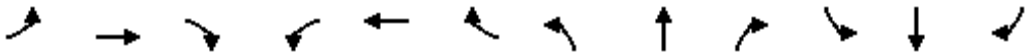
Intersection	
Int Delay, s/veh	11.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	174	5	5	0	0	0	0	15	5	247	20	0
Future Vol, veh/h	174	5	5	0	0	0	0	15	5	247	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	174	5	5	0	0	0	0	15	5	247	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	532	534	20	-	0	0	20	0	0
Stage 1	514	514	-	-	-	-	-	-	-
Stage 2	18	20	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	510	454	1061	0	-	-	1609	-	0
Stage 1	602	537	-	0	-	-	-	-	0
Stage 2	1007	881	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	431	0	1061	-	-	-	1609	-	-
Mov Cap-2 Maneuver	431	0	-	-	-	-	-	-	-
Stage 1	602	0	-	-	-	-	-	-	-
Stage 2	851	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	0	7.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	438	1609	-
HCM Lane V/C Ratio	-	-	0.42	0.154	-
HCM Control Delay (s)	-	-	19	7.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2	0.5	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	5	319	5	184	0	0	242	928
Future Volume (vph)	0	0	0	25	5	319	5	184	0	0	242	928
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

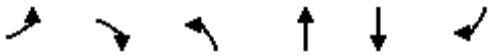
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	5	319	5	184	0	0	242	928
Future Vol, veh/h	0	0	0	25	5	319	5	184	0	0	242	928
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	25	5	319	5	184	0	0	242	928

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	900	1364	184	1170	0	-	-	-	0
Stage 1	194	194	-	-	-	-	-	-	-
Stage 2	706	1170	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	312	149	864	604	-	0	0	-	-
Stage 1	844	744	-	-	-	0	0	-	-
Stage 2	493	269	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	309	0	864	604	-	-	-	-	-
Mov Cap-2 Maneuver	309	0	-	-	-	-	-	-	-
Stage 1	836	0	-	-	-	-	-	-	-
Stage 2	493	0	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	604	-	764	-	-
HCM Lane V/C Ratio	0.008	-	0.457	-	-
HCM Control Delay (s)	11	0	13.6	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	2.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	24	70	30	473	1100	28
Future Volume (vph)	24	70	30	473	1100	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

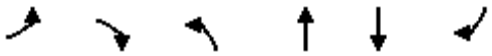
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	70	30	473	1100	28
Future Vol, veh/h	24	70	30	473	1100	28
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	24	70	30	473	1100	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1647	1114	1128	0	-	0
Stage 1	1114	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	108	251	627	-	-	-
Stage 1	311	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	103	251	627	-	-	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	296	-	-	-	-	-
Stage 2	584	-	-	-	-	-

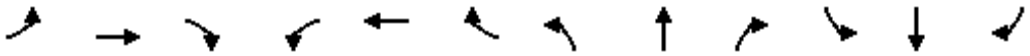
Approach	EB	NB	SB
HCM Control Delay, s	43.4	0.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	627	-	184	-	-
HCM Lane V/C Ratio	0.048	-	0.511	-	-
HCM Control Delay (s)	11	-	43.4	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	2.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	86	197	272	194	904	85
Future Volume (vph)	86	197	272	194	904	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1632	1194	
Travel Time (s)	19.3			31.8	23.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	22	0	0	0	17	254	0	0	962	30
Future Volume (vph)	10	0	22	0	0	0	17	254	0	0	962	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

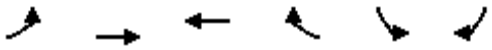
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	22	0	0	0	17	254	0	0	962	30
Future Vol, veh/h	10	0	22	0	0	0	17	254	0	0	962	30
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	10	0	22	0	0	0	17	254	0	0	962	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1265	1265	977	1276	1280	254	992	0	0	254	0	0
Stage 1	977	977	-	288	288	-	-	-	-	-	-	-
Stage 2	288	288	-	988	992	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	143	165	298	145	167	790	705	-	-	1317	-	-
Stage 1	295	323	-	724	677	-	-	-	-	-	-	-
Stage 2	709	665	-	300	326	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	160	298	131	162	790	705	-	-	1317	-	-
Mov Cap-2 Maneuver	140	160	-	131	162	-	-	-	-	-	-	-
Stage 1	287	323	-	704	658	-	-	-	-	-	-	-
Stage 2	689	646	-	278	326	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.1	0	0.6	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	705	-	-	220	-	1317	-	-
HCM Lane V/C Ratio	0.024	-	-	0.145	-	-	-	-
HCM Control Delay (s)	10.2	0	-	24.1	0	0	-	-
HCM Lane LOS	B	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	8	625	1319	30	10	14
Future Volume (vph)	8	625	1319	30	10	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2732	1314		535	
Travel Time (s)		74.5	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

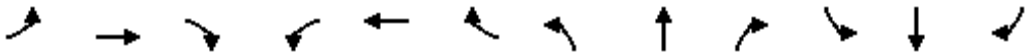
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	625	1319	30	10	14
Future Vol, veh/h	8	625	1319	30	10	14
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	8	625	1319	30	10	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1354	0	-	0	1980	1339
Stage 1	-	-	-	-	1339	-
Stage 2	-	-	-	-	641	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	511	-	-	-	69	189
Stage 1	-	-	-	-	247	-
Stage 2	-	-	-	-	528	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	509	-	-	-	67	188
Mov Cap-2 Maneuver	-	-	-	-	67	-
Stage 1	-	-	-	-	240	-
Stage 2	-	-	-	-	525	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	48.1
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	509	-	-	-	107
HCM Lane V/C Ratio	0.016	-	-	-	0.224
HCM Control Delay (s)	12.2	0	-	-	48.1
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	553	74	20	1190	5	120	0	70	10	0	4
Future Volume (vph)	3	553	74	20	1190	5	120	0	70	10	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	69.1

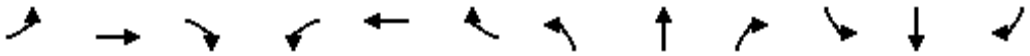
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	553	74	20	1190	5	120	0	70	10	0	4
Future Vol, veh/h	3	553	74	20	1190	5	120	0	70	10	0	4
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	3	553	74	20	1190	5	120	0	70	10	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1195	0	0	630	0	0	1834	1834	593	1864	1869	1193
Stage 1	-	-	-	-	-	-	599	599	-	1233	1233	-
Stage 2	-	-	-	-	-	-	1235	1235	-	631	636	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	588	-	-	957	-	-	~ 58	76	504	56	73	230
Stage 1	-	-	-	-	-	-	487	489	-	219	251	-
Stage 2	-	-	-	-	-	-	215	247	-	472	475	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	588	-	-	954	-	-	~ 54	71	503	46	68	230
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 54	71	-	46	68	-
Stage 1	-	-	-	-	-	-	482	484	-	217	235	-
Stage 2	-	-	-	-	-	-	198	232	-	403	470	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 738.6	82.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	80	588	-	-	954	-	-	60
HCM Lane V/C Ratio	2.375	0.005	-	-	0.021	-	-	0.233
HCM Control Delay (s)	$ 738.6	11.2	0	-	8.9	0	-	82.4
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	17.8	0	-	-	0.1	-	-	0.8

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	588	57	20	1178	5	88	15	30	10	0	4
Future Volume (vph)	23	588	57	20	1178	5	88	15	30	10	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	46.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	588	57	20	1178	5	88	15	30	10	0	4
Future Vol, veh/h	23	588	57	20	1178	5	88	15	30	10	0	4
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	23	588	57	20	1178	5	88	15	30	10	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1183	0	0	649	0	0	1890	1890	621	1906	1916	1181
Stage 1	-	-	-	-	-	-	667	667	-	1221	1221	-
Stage 2	-	-	-	-	-	-	1223	1223	-	685	695	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	590	-	-	942	-	-	~ 53	70	487	53	68	234
Stage 1	-	-	-	-	-	-	448	457	-	222	255	-
Stage 2	-	-	-	-	-	-	219	252	-	441	447	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	590	-	-	938	-	-	~ 47	61	485	37	60	234
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 47	61	-	37	60	-
Stage 1	-	-	-	-	-	-	419	427	-	208	239	-
Stage 2	-	-	-	-	-	-	202	236	-	375	418	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	$ 688	105.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	61	590	-	-	938	-	-	49
HCM Lane V/C Ratio	2.18	0.039	-	-	0.021	-	-	0.286
HCM Control Delay (s)	$ 688	11.3	0	-	8.9	0	-	105.6
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	12.9	0.1	-	-	0.1	-	-	1

Notes

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	84	10	20	180
Future Volume (vph)	25	15	84	10	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

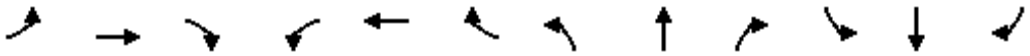
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	84	10	20	180
Future Vol, veh/h	25	15	84	10	20	180
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	84	10	20	180
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	8.1	7.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	10%	0%	89%
Vol Thru, %	0%	62%	11%
Vol Right, %	90%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	200	40	94
LT Vol	20	0	84
Through Vol	0	25	10
RT Vol	180	15	0
Lane Flow Rate	200	40	94
Geometry Grp	1	1	1
Degree of Util (X)	0.204	0.047	0.117
Departure Headway (Hd)	3.679	4.187	4.463
Convergence, Y/N	Yes	Yes	Yes
Cap	960	844	797
Service Time	1.763	2.269	2.525
HCM Lane V/C Ratio	0.208	0.047	0.118
HCM Control Delay	7.7	7.5	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	0.1	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	225	120	65	350	105	70	83	110	50	57	42
Future Volume (vph)	102	225	120	65	350	105	70	83	110	50	57	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

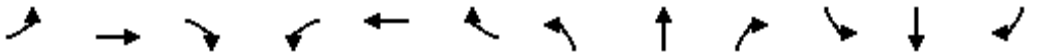
Intersection	
Int Delay, s/veh	21

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	102	225	120	65	350	105	70	83	110	50	57	42
Future Vol, veh/h	102	225	120	65	350	105	70	83	110	50	57	42
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	102	225	120	65	350	105	70	83	110	50	57	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	455	0	0	345	0	0	1072	1074	285	1119	1082	404
Stage 1	-	-	-	-	-	-	489	489	-	533	533	-
Stage 2	-	-	-	-	-	-	583	585	-	586	549	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1106	-	-	1214	-	-	198	220	754	186	219	651
Stage 1	-	-	-	-	-	-	561	549	-	534	528	-
Stage 2	-	-	-	-	-	-	498	498	-	500	520	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1106	-	-	1214	-	-	127	189	754	94	188	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	127	189	-	94	188	-
Stage 1	-	-	-	-	-	-	509	498	-	485	499	-
Stage 2	-	-	-	-	-	-	390	471	-	323	472	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1	79.6	44.2
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	154	754	1106	-	-	1214	-	-	94	269
HCM Lane V/C Ratio	0.994	0.146	0.092	-	-	0.054	-	-	0.532	0.368
HCM Control Delay (s)	129.2	10.6	8.6	-	-	8.1	-	-	80.3	26
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	7.5	0.5	0.3	-	-	0.2	-	-	2.4	1.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	365	5	60	505	40	20	48	65	5	67	50
Future Volume (vph)	75	365	5	60	505	40	20	48	65	5	67	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

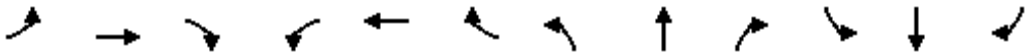
Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	365	5	60	505	40	20	48	65	5	67	50
Future Vol, veh/h	75	365	5	60	505	40	20	48	65	5	67	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	365	5	60	505	40	20	48	65	5	67	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	372	0	0	1224	1187	370	1221	1169	527
Stage 1	-	-	-	-	-	-	520	520	-	647	647	-
Stage 2	-	-	-	-	-	-	704	667	-	574	522	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	1027	-	-	1186	-	-	154	187	671	156	192	549
Stage 1	-	-	-	-	-	-	536	529	-	458	465	-
Stage 2	-	-	-	-	-	-	424	454	-	502	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1184	-	-	88	164	670	99	168	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	88	164	-	99	168	-
Stage 1	-	-	-	-	-	-	496	489	-	424	440	-
Stage 2	-	-	-	-	-	-	310	430	-	379	489	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	35.5	38.2
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	131	670	1025	-	-	1184	-	-	226
HCM Lane V/C Ratio	0.519	0.097	0.073	-	-	0.051	-	-	0.54
HCM Control Delay (s)	58.9	11	8.8	-	-	8.2	-	-	38.2
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.5	0.3	0.2	-	-	0.2	-	-	2.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	433	105	110	812	20	390	15	15	5	15	31
Future Volume (vph)	25	433	105	110	812	20	390	15	15	5	15	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	584

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	433	105	110	812	20	390	15	15	5	15	31
Future Vol, veh/h	25	433	105	110	812	20	390	15	15	5	15	31
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	25	433	105	110	812	20	390	15	15	5	15	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	840	0	0	541	0	0	1608	1599	491	1603	1641	834
Stage 1	-	-	-	-	-	-	539	539	-	1050	1050	-
Stage 2	-	-	-	-	-	-	1069	1060	-	553	591	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	791	-	-	1033	-	-	~ 85	107	580	86	101	371
Stage 1	-	-	-	-	-	-	528	523	-	277	307	-
Stage 2	-	-	-	-	-	-	~ 269	302	-	521	498	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	785	-	-	1030	-	-	~ 54	81	577	59	76	367
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 54	81	-	59	76	-
Stage 1	-	-	-	-	-	-	502	497	-	262	244	-
Stage 2	-	-	-	-	-	-	~ 184	240	-	469	474	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1	$ 2739.1	45.2
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	54	142	785	-	-	1030	-	-	139
HCM Lane V/C Ratio	7.222	0.211	0.032	-	-	0.107	-	-	0.367
HCM Control Delay (s)	$ 2947	37	9.7	0	-	8.9	0	-	45.2
HCM Lane LOS	F	E	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	45.2	0.8	0.1	-	-	0.4	-	-	1.5

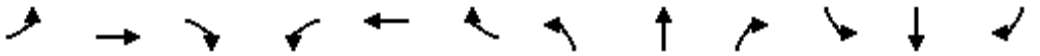
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	95	65	490	330	80	90	85	41	144	55
Future Volume (vph)	15	320	95	65	490	330	80	90	85	41	144	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 91.1	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





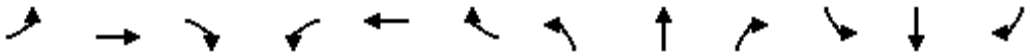
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	95	65	490	330	80	90	85	41	144	55
Future Volume (veh/h)	15	320	95	65	490	330	80	90	85	41	144	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	95	65	490	330	80	90	85	41	144	55
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	367	970	288	669	729	491	198	179	169	212	261	100
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	667	1385	411	971	1042	702	1189	889	840	1216	1297	496
Grp Volume(v), veh/h	15	0	415	65	0	820	80	0	175	41	0	199
Grp Sat Flow(s),veh/h/ln	667	0	1796	971	0	1743	1189	0	1729	1216	0	1793
Q Serve(g_s), s	1.2	0.0	8.4	2.6	0.0	24.9	6.1	0.0	8.4	2.9	0.0	9.3
Cycle Q Clear(g_c), s	26.1	0.0	8.4	11.0	0.0	24.9	15.4	0.0	8.4	11.3	0.0	9.3
Prop In Lane	1.00		0.23	1.00		0.40	1.00		0.49	1.00		0.28
Lane Grp Cap(c), veh/h	367	0	1258	669	0	1221	198	0	348	212	0	361
V/C Ratio(X)	0.04	0.00	0.33	0.10	0.00	0.67	0.40	0.00	0.50	0.19	0.00	0.55
Avail Cap(c_a), veh/h	367	0	1258	669	0	1221	282	0	470	298	0	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	5.5	7.6	0.0	7.9	40.4	0.0	33.1	38.2	0.0	33.5
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.3	0.0	3.0	1.9	0.0	1.6	0.6	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.0	0.6	0.0	9.0	1.9	0.0	3.7	0.9	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	6.2	7.9	0.0	10.9	42.3	0.0	34.7	38.8	0.0	35.4
LnGrp LOS	B	A	A	A	A	B	D	A	C	D	A	D
Approach Vol, veh/h		430			885			255			240	
Approach Delay, s/veh		6.5			10.7			37.1			36.0	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	70.0	23.4	70.0	23.4
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	65.4	25.4	65.4	25.4
Max Q Clear Time (g_c+I1), s	28.1	17.4	26.9	13.3
Green Ext Time (p_c), s	3.3	1.1	8.9	1.4

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	286	160	10	359	30	546	20	10	25	25	22
Future Volume (vph)	27	286	160	10	359	30	546	20	10	25	25	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	213.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	286	160	10	359	30	546	20	10	25	25	22
Future Vol, veh/h	27	286	160	10	359	30	546	20	10	25	25	22
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	27	286	160	10	359	30	546	20	10	25	25	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	389	0	0	447	0	0	839	830	368	830	895	374
Stage 1	-	-	-	-	-	-	421	421	-	394	394	-
Stage 2	-	-	-	-	-	-	418	409	-	436	501	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1170	-	-	1119	-	-	~ 285	306	677	283	274	659
Stage 1	-	-	-	-	-	-	610	589	-	619	595	-
Stage 2	-	-	-	-	-	-	612	596	-	587	533	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1170	-	-	1118	-	-	~ 247	293	676	256	262	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 247	293	-	256	262	-
Stage 1	-	-	-	-	-	-	590	570	-	600	588	-
Stage 2	-	-	-	-	-	-	560	589	-	540	516	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	$ 559.8	19.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	247	361	1170	-	-	1118	-	-	318
HCM Lane V/C Ratio	2.211	0.083	0.023	-	-	0.009	-	-	0.226
HCM Control Delay (s)	$ 589.7	15.9	8.2	0	-	8.2	0	-	19.6
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	42.2	0.3	0.1	-	-	0	-	-	0.9

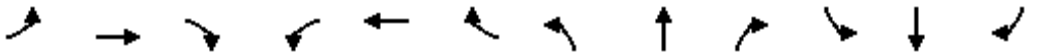
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	291	125	35	458	295	377	346	35	55	115	10
Future Volume (vph)	15	291	125	35	458	295	377	346	35	55	115	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

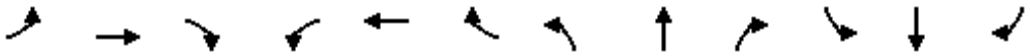




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	291	125	35	458	295	377	346	35	55	115	10
Future Volume (veh/h)	15	291	125	35	458	295	377	346	35	55	115	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	291	125	35	458	295	377	346	35	55	115	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	501	662	284	520	570	367	391	459	46	177	462	40
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	707	1113	478	975	959	618	1254	1502	152	991	1513	132
Grp Volume(v), veh/h	15	0	416	35	0	753	377	0	381	55	0	125
Grp Sat Flow(s),veh/h/ln	707	0	1591	975	0	1577	1254	0	1654	991	0	1644
Q Serve(g_s), s	0.8	0.0	12.9	0.8	0.0	0.0	22.4	0.0	18.7	4.8	0.0	5.1
Cycle Q Clear(g_c), s	0.8	0.0	12.9	13.8	0.0	0.0	27.5	0.0	18.7	23.5	0.0	5.1
Prop In Lane	1.00		0.30	1.00		0.39	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	501	0	946	520	0	938	391	0	505	177	0	502
V/C Ratio(X)	0.03	0.00	0.44	0.07	0.00	0.80	0.96	0.00	0.75	0.31	0.00	0.25
Avail Cap(c_a), veh/h	501	0	946	520	0	938	391	0	505	177	0	502
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.69	0.00	0.69	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	10.0	1.7	0.0	0.0	35.8	0.0	28.2	38.8	0.0	23.5
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.2	0.0	5.1	35.6	0.0	5.7	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.6	0.1	0.0	1.3	12.3	0.0	8.1	1.2	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.4	1.8	0.0	5.1	71.4	0.0	33.9	39.2	0.0	23.6
LnGrp LOS	A	A	B	A	A	A	E	A	C	D	A	C
Approach Vol, veh/h		431			788			758			180	
Approach Delay, s/veh		11.3			5.0			52.5			28.3	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		14.9		25.5		15.8		29.5				
Green Ext Time (p_c), s		3.3		0.1		7.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			24.9									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	208	95	10	332	20	78	25	10	5	20	19
Future Volume (vph)	23	208	95	10	332	20	78	25	10	5	20	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

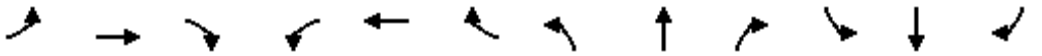
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	208	95	10	332	20	78	25	10	5	20	19
Future Vol, veh/h	23	208	95	10	332	20	78	25	10	5	20	19
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	23	208	95	10	332	20	78	25	10	5	20	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11	11.9	9.9	8.9
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	69%	7%	3%	11%
Vol Thru, %	22%	64%	92%	45%
Vol Right, %	9%	29%	6%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	113	326	362	44
LT Vol	78	23	10	5
Through Vol	25	208	332	20
RT Vol	10	95	20	19
Lane Flow Rate	113	326	362	44
Geometry Grp	1	1	1	1
Degree of Util (X)	0.179	0.418	0.471	0.067
Departure Headway (Hd)	5.687	4.617	4.686	5.513
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	635	773	760	653
Service Time	3.687	2.694	2.761	3.518
HCM Lane V/C Ratio	0.178	0.422	0.476	0.067
HCM Control Delay	9.9	11	11.9	8.9
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.6	2.1	2.5	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	331	20	25	763	70	5	18	20	107	18	15
Future Volume (vph)	25	331	20	25	763	70	5	18	20	107	18	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1658	0	1770	1651	0	0	1879	1454	0	1822	1454
Flt Permitted	0.269			0.541				0.943			0.740	
Satd. Flow (perm)	501	1658	0	1001	1651	0	0	1789	1416	0	1399	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9				20			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	351	0	25	833	0	0	23	20	0	125	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	66.5	66.5		66.5	66.5			14.5	66.5		14.5	66.5
Actuated g/C Ratio	0.74	0.74		0.74	0.74			0.16	0.74		0.16	0.74
v/c Ratio	0.07	0.29		0.03	0.68			0.08	0.02		0.56	0.01
Control Delay	4.4	4.1		5.3	12.1			28.6	2.8		42.4	2.7
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.4	4.1		5.3	12.1			28.6	2.8		42.4	2.7
LOS	A	A		A	B			C	A		D	A
Approach Delay		4.1			11.9			16.6			38.2	
Approach LOS		A			B			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	

Intersection Signal Delay: 12.6 Intersection LOS: B
Intersection Capacity Utilization 82.7% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	783	20	0	0	251
Future Volume (vph)	30	783	20	0	0	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	14.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	783	20	0	0	251
Future Vol, veh/h	30	783	20	0	0	251
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	30	783	20	0	0	251

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	271	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	716	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	788	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	716	1055	-	-	-	-
Mov Cap-2 Maneuver	716	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	788	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1037	-
HCM Lane V/C Ratio	-	0.784	-
HCM Control Delay (s)	-	19.8	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	8.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	246	80
Future Volume (vph)	0	0	25	0	246	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

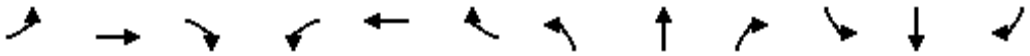
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	246	80
Future Vol, veh/h	0	0	25	0	246	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	246	80

Major/Minor	Minor2		Major2	
Conflicting Flow All	572	80	0	0
Stage 1	572	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	433	986	-	-
Stage 1	508	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	986	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	35	85	34	5	10	98	248	8	5	366	40
Future Volume (vph)	10	35	85	34	5	10	98	248	8	5	366	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

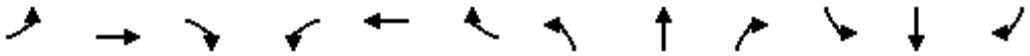
Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	35	85	34	5	10	98	248	8	5	366	40
Future Vol, veh/h	10	35	85	34	5	10	98	248	8	5	366	40
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	10	35	85	34	5	10	98	248	8	5	366	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	898	868	411	919	884	288	421	0	0	261	0	0
Stage 1	411	411	-	453	453	-	-	-	-	-	-	-
Stage 2	487	457	-	466	431	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	262	293	645	254	286	756	1149	-	-	1303	-	-
Stage 1	622	598	-	590	573	-	-	-	-	-	-	-
Stage 2	566	571	-	581	586	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	224	257	630	179	251	730	1133	-	-	1297	-	-
Mov Cap-2 Maneuver	224	257	-	179	251	-	-	-	-	-	-	-
Stage 1	551	587	-	528	513	-	-	-	-	-	-	-
Stage 2	482	511	-	466	575	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.7	26.1	2.3	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1133	-	-	412	219	1297	-	-
HCM Lane V/C Ratio	0.086	-	-	0.316	0.224	0.004	-	-
HCM Control Delay (s)	8.5	0	-	17.7	26.1	7.8	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.3	0.8	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	31	46	0	5	42	174	17	0	239	10
Future Volume (vph)	10	0	31	46	0	5	42	174	17	0	239	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

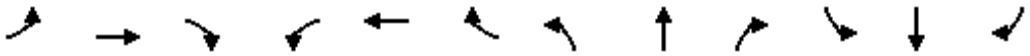
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	31	46	0	5	42	174	17	0	239	10
Future Vol, veh/h	10	0	31	46	0	5	42	174	17	0	239	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	0	31	46	0	5	42	174	17	0	239	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	513	519	244	527	516	183	249	0	0	191	0	0
Stage 1	244	244	-	267	267	-	-	-	-	-	-	-
Stage 2	269	275	-	260	249	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	475	464	800	465	466	865	1328	-	-	1395	-	-
Stage 1	764	708	-	743	692	-	-	-	-	-	-	-
Stage 2	741	686	-	749	704	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	460	448	800	435	450	865	1328	-	-	1395	-	-
Mov Cap-2 Maneuver	460	448	-	435	450	-	-	-	-	-	-	-
Stage 1	737	708	-	717	668	-	-	-	-	-	-	-
Stage 2	711	662	-	720	704	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	13.9	1.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1328	-	-	678	457	1395	-	-
HCM Lane V/C Ratio	0.032	-	-	0.06	0.112	-	-	-
HCM Control Delay (s)	7.8	0	-	10.7	13.9	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	196	5	17	126	10	10	0	11	27	0	5
Future Volume (vph)	10	196	5	17	126	10	10	0	11	27	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

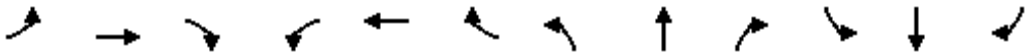
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	196	5	17	126	10	10	0	11	27	0	5
Future Vol, veh/h	10	196	5	17	126	10	10	0	11	27	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	196	5	17	126	10	10	0	11	27	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	136	0	0	201	0	0	387	389	199	389	386	131
Stage 1	-	-	-	-	-	-	219	219	-	165	165	-
Stage 2	-	-	-	-	-	-	168	170	-	224	221	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1461	-	-	1383	-	-	575	549	847	574	551	924
Stage 1	-	-	-	-	-	-	788	726	-	842	766	-
Stage 2	-	-	-	-	-	-	839	762	-	783	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1461	-	-	1383	-	-	563	537	847	557	539	924
Mov Cap-2 Maneuver	-	-	-	-	-	-	563	537	-	557	539	-
Stage 1	-	-	-	-	-	-	782	720	-	835	756	-
Stage 2	-	-	-	-	-	-	824	752	-	767	718	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.8	10.4	11.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	683	1461	-	-	1383	-	-	594
HCM Lane V/C Ratio	0.031	0.007	-	-	0.012	-	-	0.054
HCM Control Delay (s)	10.4	7.5	0	-	7.6	0	-	11.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	365	105	10	777	0	510	10	5	0	10	20
Future Volume (vph)	5	365	105	10	777	0	510	10	5	0	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	391.4

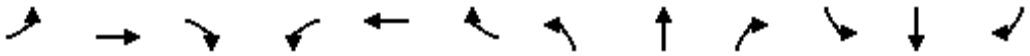
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	365	105	10	777	0	510	10	5	0	10	20
Future Vol, veh/h	5	365	105	10	777	0	510	10	5	0	10	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	365	105	10	777	0	510	10	5	0	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	777	0	0	470	0	0	1240	1225	418	1232	1277	777
Stage 1	-	-	-	-	-	-	428	428	-	797	797	-
Stage 2	-	-	-	-	-	-	812	797	-	435	480	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	839	-	-	1097	-	-	~ 151	178	633	155	168	400
Stage 1	-	-	-	-	-	-	603	583	-	383	401	-
Stage 2	-	-	-	-	-	-	~ 371	397	-	604	558	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	839	-	-	1097	-	-	~ 134	174	633	144	164	400
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 134	174	-	144	164	-
Stage 1	-	-	-	-	-	-	598	578	-	380	395	-
Stage 2	-	-	-	-	-	-	~ 338	391	-	584	554	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 1353.4	20
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	136	839	-	-	1097	-	-	270
HCM Lane V/C Ratio	3.86	0.006	-	-	0.009	-	-	0.111
HCM Control Delay (s)	$ 1353.4	9.3	0	-	8.3	0	-	20
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	52.4	0	-	-	0	-	-	0.4

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	545	0	335	0	0	129	415
Future Volume (vph)	0	0	0	0	0	545	0	335	0	0	129	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

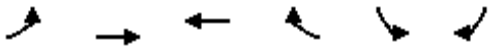
Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	545	0	335	0	0	129	415
Future Vol, veh/h	0	0	0	0	0	545	0	335	0	0	129	415
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	545	0	335	0	0	129	415

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	335	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.23	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	705	0	-	0	0	-	-
Stage 1	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	-	0	705	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.3	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	705	-	-
HCM Lane V/C Ratio	-	0.773	-	-
HCM Control Delay (s)	-	25.3	-	-
HCM Lane LOS	-	D	-	-
HCM 95th %tile Q(veh)	-	7.4	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	305	5	0	0	154	0
Future Volume (vph)	305	5	0	0	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	305	5	0	0	154	0
Future Vol, veh/h	305	5	0	0	154	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	305	5	0	0	154	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	10.6	9.4
HCM LOS	B	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	310	154
LT Vol	305	154
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	310	154
Geometry Grp	1	1
Degree of Util (X)	0.396	0.214
Departure Headway (Hd)	4.601	4.995
Convergence, Y/N	Yes	Yes
Cap	784	719
Service Time	2.621	3.017
HCM Lane V/C Ratio	0.395	0.214
HCM Control Delay	10.6	9.4
HCM Lane LOS	B	A
HCM 95th-tile Q	1.9	0.8



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	350	5	425	692	105	0
Future Volume (vph)	350	5	425	692	105	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	48.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	350	5	425	692	105	0
Future Vol, veh/h	350	5	425	692	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	350	5	425	692	105	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	355	0	1895	353
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	1542	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1209	-	~ 77	691
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	194	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1209	-	~ 50	691
Mov Cap-2 Maneuver	-	-	-	-	~ 50	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	126	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	$ 684.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	50	-	-	1209	-
HCM Lane V/C Ratio	2.1	-	-	0.352	-
HCM Control Delay (s)	$ 684.1	-	-	9.6	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	10.6	-	-	1.6	-

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	45	17	449	48	18	1083
Future Volume (vph)	45	17	449	48	18	1083
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1353		1641			1632
Travel Time (s)	36.9		32.0			31.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	17	449	48	18	1083
Future Vol, veh/h	45	17	449	48	18	1083
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, %	3	3	3	3	3	3
Mvmt Flow	49	18	488	52	20	1177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1731	514	0	0	540	0
Stage 1	514	-	-	-	-	-
Stage 2	1217	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	96	558	-	-	1023	-
Stage 1	598	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	91	558	-	-	1023	-
Mov Cap-2 Maneuver	91	-	-	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	263	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	70	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	118	1023	-
HCM Lane V/C Ratio	-	-	0.571	0.019	-
HCM Control Delay (s)	-	-	70	8.6	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	2.8	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	38	31	240	40	33	951
Future Volume (vph)	38	31	240	40	33	951
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1685	0	1810	0	0	1841
Flt Permitted	0.973					0.998
Satd. Flow (perm)	1685	0	1810	0	0	1841
Link Speed (mph)	25		35			35
Link Distance (ft)	1095		1194			214
Travel Time (s)	29.9		23.3			4.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	75	0	304	0	0	1070
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 80.9%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	31	240	40	33	951
Future Vol, veh/h	38	31	240	40	33	951
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, %	3	3	3	3	3	3
Mvmt Flow	41	34	261	43	36	1034

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1389	283	0	0	304	0
Stage 1	283	-	-	-	-	-
Stage 2	1106	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	156	754	-	-	1251	-
Stage 1	763	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	145	754	-	-	1251	-
Mov Cap-2 Maneuver	145	-	-	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	294	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.3	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	228	1251	-
HCM Lane V/C Ratio	-	-	0.329	0.029	-
HCM Control Delay (s)	-	-	28.3	8	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	424	7	220	1113	7	209
Future Volume (vph)	424	7	220	1113	7	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			2732	1016	
Travel Time (s)	3.8			41.4	27.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.4

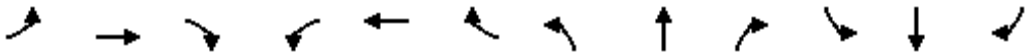
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	424	7	220	1113	7	209
Future Vol, veh/h	424	7	220	1113	7	209
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	461	8	239	1210	8	227

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	469	0	2153	465
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	1688	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1087	-	52	595
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	164	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1087	-	17	595
Mov Cap-2 Maneuver	-	-	-	-	17	-
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	54	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	58.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	283	-	-	1087	-
HCM Lane V/C Ratio	0.83	-	-	0.22	-
HCM Control Delay (s)	58.2	-	-	9.2	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	6.8	-	-	0.8	-

2037 with SEIS Alternative 5 Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	237	5	20	0	0	0	0	30	40	340	40	0
Future Volume (vph)	237	5	20	0	0	0	0	30	40	340	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

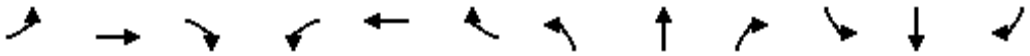
Intersection	
Int Delay, s/veh	27.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	237	5	20	0	0	0	0	30	40	340	40	0
Future Vol, veh/h	237	5	20	0	0	0	0	30	40	340	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	237	5	20	0	0	0	0	30	40	340	40	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	770	790	40	-	0	0	70	0	0
Stage 1	720	720	-	-	-	-	-	-	-
Stage 2	50	70	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	366	320	1026	0	-	-	1518	-	0
Stage 1	478	429	-	0	-	-	-	-	0
Stage 2	967	833	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	282	0	1026	-	-	-	1518	-	-
Mov Cap-2 Maneuver	282	0	-	-	-	-	-	-	-
Stage 1	478	0	-	-	-	-	-	-	-
Stage 2	746	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	63.5	0	7.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	299	1518	-
HCM Lane V/C Ratio	-	-	0.876	0.224	-
HCM Control Delay (s)	-	-	63.5	8.1	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.9	0.9	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	5	596	10	257	0	0	340	149
Future Volume (vph)	0	0	0	40	5	596	10	257	0	0	340	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

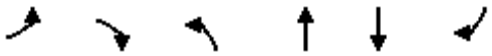
Intersection	
Int Delay, s/veh	15.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	40	5	596	10	257	0	0	340	149
Future Vol, veh/h	0	0	0	40	5	596	10	257	0	0	340	149
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	40	5	596	10	257	0	0	340	149

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	692	766	257	489	0	-	-	-	0
Stage 1	277	277	-	-	-	-	-	-	-
Stage 2	415	489	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	407	331	777	1064	-	0	0	-	-
Stage 1	765	678	-	-	-	0	0	-	-
Stage 2	662	546	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	403	0	777	1064	-	-	-	-	-
Mov Cap-2 Maneuver	403	0	-	-	-	-	-	-	-
Stage 1	757	0	-	-	-	-	-	-	-
Stage 2	662	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.7	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1064	-	734	-	-
HCM Lane V/C Ratio	0.009	-	0.873	-	-
HCM Control Delay (s)	8.4	0	33.7	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	10.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	56	120	190	663	379	56
Future Volume (vph)	56	120	190	663	379	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

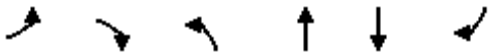
Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	56	120	190	663	379	56
Future Vol, veh/h	56	120	190	663	379	56
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	56	120	190	663	379	56

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1450	407	435	0	-	0
Stage 1	407	-	-	-	-	-
Stage 2	1043	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	135	617	1114	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	112	617	1114	-	-	-
Mov Cap-2 Maneuver	112	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	321	-	-	-	-	-

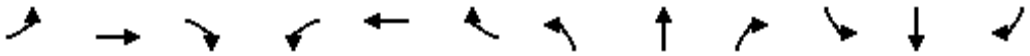
Approach	EB	NB	SB
HCM Control Delay, s	46.4	2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1114	-	253	-	-
HCM Lane V/C Ratio	0.171	-	0.696	-	-
HCM Control Delay (s)	8.9	-	46.4	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.6	-	4.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	135	255	424	231	153	86
Future Volume (vph)	135	255	424	231	153	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1598	1150	
Travel Time (s)	19.3			31.1	22.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	16	0	0	0	12	358	0	0	207	20
Future Volume (vph)	30	0	16	0	0	0	12	358	0	0	207	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	30	0	16	0	0	0	12	358	0	0	207	20
Future Vol, veh/h	30	0	16	0	0	0	12	358	0	0	207	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	30	0	16	0	0	0	12	358	0	0	207	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	600	600	218	607	610	358	228	0	0	358	0	0
Stage 1	218	218	-	382	382	-	-	-	-	-	-	-
Stage 2	382	382	-	225	228	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	406	408	809	411	412	691	1328	-	-	1201	-	-
Stage 1	773	713	-	645	616	-	-	-	-	-	-	-
Stage 2	630	604	-	782	719	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	402	403	808	399	407	691	1327	-	-	1201	-	-
Mov Cap-2 Maneuver	402	403	-	399	407	-	-	-	-	-	-	-
Stage 1	764	712	-	638	609	-	-	-	-	-	-	-
Stage 2	623	597	-	767	718	-	-	-	-	-	-	-

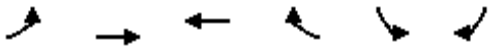
Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	487	-	1201	-	-
HCM Lane V/C Ratio	0.009	-	-	0.094	-	-	-	-
HCM Control Delay (s)	7.7	0	-	13.2	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	72	502	225	163	365	185
Future Volume (vph)	72	502	225	163	365	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	972	945	30	30	16
Future Volume (vph)	16	972	945	30	30	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2719	1314		535	
Travel Time (s)		74.2	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

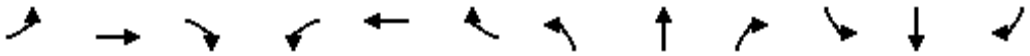
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	972	945	30	30	16
Future Vol, veh/h	16	972	945	30	30	16
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	16	972	945	30	30	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	975	0	-	0	1964	963
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	1004	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	692	-	-	-	70	313
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	357	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	692	-	-	-	67	312
Mov Cap-2 Maneuver	-	-	-	-	67	-
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	357	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	78.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	692	-	-	-	92
HCM Lane V/C Ratio	0.023	-	-	-	0.5
HCM Control Delay (s)	10.3	0	-	-	78.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	2.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	856	129	40	759	10	210	10	140	10	0	6
Future Volume (vph)	17	856	129	40	759	10	210	10	140	10	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	273.8

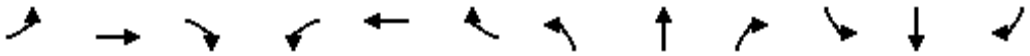
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	17	856	129	40	759	10	210	10	140	10	0	6
Future Vol, veh/h	17	856	129	40	759	10	210	10	140	10	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	17	856	129	40	759	10	210	10	140	10	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	769	0	0	985	0	0	1803	1804	921	1874	1863	765
Stage 1	-	-	-	-	-	-	955	955	-	844	844	-
Stage 2	-	-	-	-	-	-	848	849	-	1030	1019	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	832	-	-	697	-	-	~ 62	80	331	55	74	406
Stage 1	-	-	-	-	-	-	313	339	-	361	382	-
Stage 2	-	-	-	-	-	-	359	380	-	284	317	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	832	-	-	697	-	-	~ 54	69	331	25	63	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 54	69	-	25	63	-
Stage 1	-	-	-	-	-	-	298	323	-	344	344	-
Stage 2	-	-	-	-	-	-	318	342	-	151	302	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	$ 1654.8	150.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	81	832	-	-	697	-	-	39
HCM Lane V/C Ratio	4.444	0.02	-	-	0.057	-	-	0.41
HCM Control Delay (s)	$ 1654.8	9.4	0	-	10.5	0	-	150.8
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	38.4	0.1	-	-	0.2	-	-	1.4

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	947	54	10	729	10	64	0	20	10	0	16
Future Volume (vph)	15	947	54	10	729	10	64	0	20	10	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	14.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	947	54	10	729	10	64	0	20	10	0	16
Future Vol, veh/h	15	947	54	10	729	10	64	0	20	10	0	16
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	15	947	54	10	729	10	64	0	20	10	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	739	0	0	1005	0	0	1770	1767	978	1768	1789	734
Stage 1	-	-	-	-	-	-	1008	1008	-	754	754	-
Stage 2	-	-	-	-	-	-	762	759	-	1014	1035	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	854	-	-	689	-	-	~ 59	77	285	66	82	423
Stage 1	-	-	-	-	-	-	272	300	-	404	420	-
Stage 2	-	-	-	-	-	-	375	394	-	290	312	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	854	-	-	686	-	-	~ 54	72	284	58	76	423
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 54	72	-	58	76	-
Stage 1	-	-	-	-	-	-	260	287	-	388	410	-
Stage 2	-	-	-	-	-	-	352	384	-	259	298	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	299.1	41.6
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	67	854	-	-	686	-	-	124
HCM Lane V/C Ratio	1.254	0.018	-	-	0.015	-	-	0.21
HCM Control Delay (s)	299.1	9.3	0	-	10.3	0	-	41.6
HCM Lane LOS	F	A	A	-	B	A	-	E
HCM 95th %tile Q(veh)	6.8	0.1	-	-	0	-	-	0.8

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	139	20	10	320
Future Volume (vph)	20	10	139	20	10	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

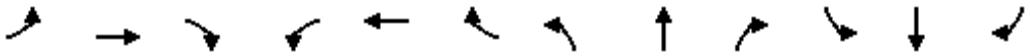
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	139	20	10	320
Future Vol, veh/h	20	10	139	20	10	320
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	139	20	10	320
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.8	9.1	8.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	3%	0%	87%
Vol Thru, %	0%	67%	13%
Vol Right, %	97%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	330	30	159
LT Vol	10	0	139
Through Vol	0	20	20
RT Vol	320	10	0
Lane Flow Rate	330	30	159
Geometry Grp	1	1	1
Degree of Util (X)	0.352	0.038	0.212
Departure Headway (Hd)	3.845	4.569	4.798
Convergence, Y/N	Yes	Yes	Yes
Cap	937	783	749
Service Time	1.856	2.601	2.825
HCM Lane V/C Ratio	0.352	0.038	0.212
HCM Control Delay	8.9	7.8	9.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.6	0.1	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	310	130	60	250	160	70	99	110	70	78	51
Future Volume (vph)	161	310	130	60	250	160	70	99	110	70	78	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	69.5

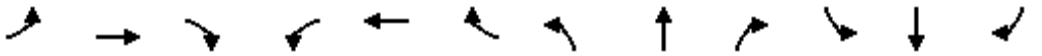
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	161	310	130	60	250	160	70	99	110	70	78	51
Future Vol, veh/h	161	310	130	60	250	160	70	99	110	70	78	51
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	161	310	130	60	250	160	70	99	110	70	78	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	411	0	0	443	0	0	1216	1231	379	1254	1216	332
Stage 1	-	-	-	-	-	-	700	700	-	451	451	-
Stage 2	-	-	-	-	-	-	516	531	-	803	765	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1127	-	-	1107	-	-	157	177	666	149	182	712
Stage 1	-	-	-	-	-	-	428	440	-	590	573	-
Stage 2	-	-	-	-	-	-	540	524	-	379	414	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1126	-	-	1104	-	-	73	143	663	~ 48	147	711
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	143	-	~ 48	147	-
Stage 1	-	-	-	-	-	-	366	376	-	505	541	-
Stage 2	-	-	-	-	-	-	405	495	-	199	354	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	1.1	251.4	179.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	102	663	1126	-	-	1104	-	-	48	214
HCM Lane V/C Ratio	1.657	0.166	0.143	-	-	0.054	-	-	1.458	0.603
HCM Control Delay (s)	$ 407.5	11.5	8.7	-	-	8.4	-	-	$ 427.8	44.5
HCM Lane LOS	F	B	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	13.2	0.6	0.5	-	-	0.2	-	-	6.7	3.4

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	450	10	80	480	25	20	39	100	16	38	20
Future Volume (vph)	30	450	10	80	480	25	20	39	100	16	38	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

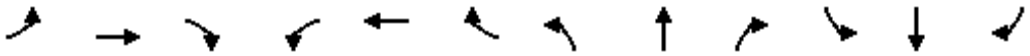
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	450	10	80	480	25	20	39	100	16	38	20
Future Vol, veh/h	30	450	10	80	480	25	20	39	100	16	38	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	30	450	10	80	480	25	20	39	100	16	38	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	462	0	0	1202	1187	457	1243	1180	501
Stage 1	-	-	-	-	-	-	517	517	-	658	658	-
Stage 2	-	-	-	-	-	-	685	670	-	585	522	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1035	-	-	1084	-	-	159	186	597	148	187	562
Stage 1	-	-	-	-	-	-	536	529	-	447	455	-
Stage 2	-	-	-	-	-	-	433	451	-	490	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1030	-	-	1082	-	-	117	166	596	93	167	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	117	166	-	93	167	-
Stage 1	-	-	-	-	-	-	519	513	-	432	419	-
Stage 2	-	-	-	-	-	-	351	415	-	366	508	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.2	24.8	41.6
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	145	596	1030	-	-	1082	-	-	170
HCM Lane V/C Ratio	0.407	0.168	0.029	-	-	0.074	-	-	0.435
HCM Control Delay (s)	45.9	12.3	8.6	-	-	8.6	-	-	41.6
HCM Lane LOS	E	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	1.8	0.6	0.1	-	-	0.2	-	-	2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	790	130	90	519	90	243	20	50	50	40	37
Future Volume (vph)	77	790	130	90	519	90	243	20	50	50	40	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	783.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	790	130	90	519	90	243	20	50	50	40	37
Future Vol, veh/h	77	790	130	90	519	90	243	20	50	50	40	37
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	77	790	130	90	519	90	243	20	50	50	40	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	609	0	0	921	0	0	1795	1799	856	1788	1819	566
Stage 1	-	-	-	-	-	-	1010	1010	-	744	744	-
Stage 2	-	-	-	-	-	-	785	789	-	1044	1075	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	950	-	-	741	-	-	~ 62	80	357	64	79	528
Stage 1	-	-	-	-	-	-	289	317	-	410	424	-
Stage 2	-	-	-	-	-	-	386	402	-	279	298	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	950	-	-	740	-	-	~ 17	54	357	~ 30	53	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 17	54	-	~ 30	53	-
Stage 1	-	-	-	-	-	-	~ 239	262	-	340	345	-
Stage 2	-	-	-	-	-	-	257	327	-	184	247	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.4	$ 4995.7	$ 848.5
HCM LOS			F	F

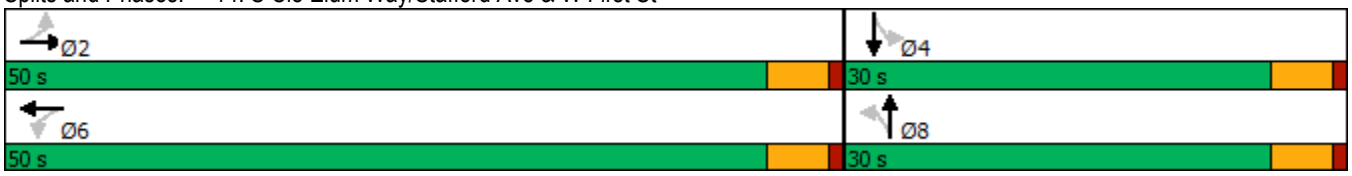
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	17	137	950	-	-	740	-	-	51
HCM Lane V/C Ratio	14.294	0.511	0.081	-	-	0.122	-	-	2.49
HCM Control Delay (s)	$ 6418.7	56	9.1	0	-	10.5	0	-	$ 848.5
HCM Lane LOS	F	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	31.2	2.4	0.3	-	-	0.4	-	-	13.1

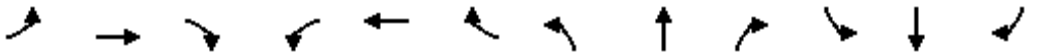
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	426	110	110	355	170	90	133	90	48	132	90
Future Volume (vph)	20	426	110	110	355	170	90	133	90	48	132	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 69.8	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





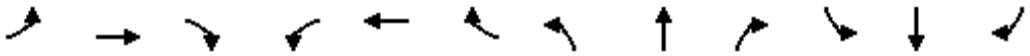
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	426	110	110	355	170	90	133	90	48	132	90
Future Volume (veh/h)	20	426	110	110	355	170	90	133	90	48	132	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	426	110	110	355	170	90	133	90	48	132	90
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	500	877	227	498	737	353	246	247	167	245	244	167
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	850	1388	358	848	1166	559	1148	1031	698	1138	1019	695
Grp Volume(v), veh/h	20	0	536	110	0	525	90	0	223	48	0	222
Grp Sat Flow(s),veh/h/ln	850	0	1746	848	0	1725	1148	0	1728	1138	0	1714
Q Serve(g_s), s	0.9	0.0	11.7	5.7	0.0	11.6	5.3	0.0	8.1	2.8	0.0	8.1
Cycle Q Clear(g_c), s	12.5	0.0	11.7	17.4	0.0	11.6	13.5	0.0	8.1	10.8	0.0	8.1
Prop In Lane	1.00		0.21	1.00		0.32	1.00		0.40	1.00		0.41
Lane Grp Cap(c), veh/h	500	0	1104	498	0	1090	246	0	415	245	0	411
V/C Ratio(X)	0.04	0.00	0.49	0.22	0.00	0.48	0.37	0.00	0.54	0.20	0.00	0.54
Avail Cap(c_a), veh/h	500	0	1104	498	0	1090	376	0	611	375	0	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.3	0.0	7.0	11.6	0.0	7.0	29.7	0.0	23.8	28.6	0.0	23.8
Incr Delay (d2), s/veh	0.1	0.0	1.5	1.0	0.0	1.5	1.3	0.0	1.5	0.5	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	4.1	1.1	0.0	4.0	1.5	0.0	3.4	0.8	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.4	0.0	8.5	12.7	0.0	8.5	31.0	0.0	25.4	29.1	0.0	25.4
LnGrp LOS	B	A	A	B	A	A	C	A	C	C	A	C
Approach Vol, veh/h		556			635			313			270	
Approach Delay, s/veh		8.6			9.2			27.0			26.1	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		21.8		50.0		21.8				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		14.5		12.8		19.4		15.5				
Green Ext Time (p_c), s		4.4		1.7		4.8		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	586	241	20	455	50	233	30	10	40	20	51
Future Volume (vph)	73	586	241	20	455	50	233	30	10	40	20	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	137

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	73	586	241	20	455	50	233	30	10	40	20	51
Future Vol, veh/h	73	586	241	20	455	50	233	30	10	40	20	51
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	73	586	241	20	455	50	233	30	10	40	20	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	505	0	0	830	0	0	1413	1401	715	1398	1496	481
Stage 1	-	-	-	-	-	-	856	856	-	520	520	-
Stage 2	-	-	-	-	-	-	557	545	-	878	976	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1034	-	-	793	-	-	~ 116	141	432	116	120	577
Stage 1	-	-	-	-	-	-	354	376	-	532	526	-
Stage 2	-	-	-	-	-	-	517	520	-	337	324	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1034	-	-	791	-	-	~ 78	117	429	79	100	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 78	117	-	79	100	-
Stage 1	-	-	-	-	-	-	305	323	-	459	508	-
Stage 2	-	-	-	-	-	-	436	502	-	256	279	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.4	$ 867.9	90.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	78	143	1034	-	-	791	-	-	140
HCM Lane V/C Ratio	2.987	0.28	0.071	-	-	0.025	-	-	0.793
HCM Control Delay (s)	$ 1010.1	39.7	8.7	0	-	9.7	0	-	90.6
HCM Lane LOS	F	E	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	23.1	1.1	0.2	-	-	0.1	-	-	4.9

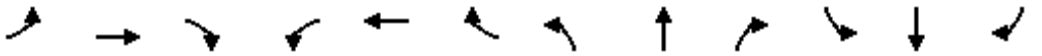
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	384	140	40	380	71	245	192	90	57	204	20
Future Volume (vph)	10	384	140	40	380	71	245	192	90	57	204	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





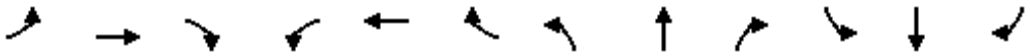
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	384	140	40	380	71	245	192	90	57	204	20
Future Volume (veh/h)	10	384	140	40	380	71	245	192	90	57	204	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	384	140	40	380	71	245	192	90	57	204	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	668	687	250	474	832	155	252	249	117	193	356	35
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	900	1129	412	870	1367	255	1099	1031	483	1069	1472	144
Grp Volume(v), veh/h	10	0	524	40	0	451	245	0	282	57	0	224
Grp Sat Flow(s),veh/h/ln	900	0	1541	870	0	1623	1099	0	1514	1069	0	1617
Q Serve(g_s), s	0.3	0.0	12.1	1.0	0.0	0.0	7.2	0.0	10.4	3.1	0.0	7.3
Cycle Q Clear(g_c), s	0.3	0.0	12.1	13.1	0.0	0.0	14.5	0.0	10.4	13.6	0.0	7.3
Prop In Lane	1.00		0.27	1.00		0.16	1.00		0.32	1.00		0.09
Lane Grp Cap(c), veh/h	668	0	937	474	0	987	252	0	366	193	0	391
V/C Ratio(X)	0.01	0.00	0.56	0.08	0.00	0.46	0.97	0.00	0.77	0.30	0.00	0.57
Avail Cap(c_a), veh/h	668	0	937	474	0	987	252	0	366	193	0	391
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.00	0.89	0.89	0.00	0.89	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	7.0	2.2	0.0	0.0	28.1	0.0	21.2	27.5	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.0	2.1	0.3	0.0	1.4	49.1	0.0	8.8	0.3	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.6	0.1	0.0	0.4	6.9	0.0	4.4	0.8	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	9.1	2.5	0.0	1.4	77.1	0.0	30.0	27.8	0.0	21.4
LnGrp LOS	A	A	A	A	A	A	E	A	C	C	A	C
Approach Vol, veh/h		534			491			527			281	
Approach Delay, s/veh		9.0			1.4			51.9			22.7	
Approach LOS		A			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		19.0		41.0		19.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		14.1		15.6		15.1		16.5				
Green Ext Time (p_c), s		3.9		0.0		3.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		21.4
HCM 6th LOS		C

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	31	410	165	20	400	40	89	20	30	10	20	26
Future Volume (vph)	31	410	165	20	400	40	89	20	30	10	20	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

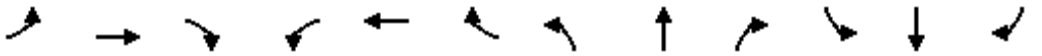
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	25.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	410	165	20	400	40	89	20	30	10	20	26
Future Vol, veh/h	31	410	165	20	400	40	89	20	30	10	20	26
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	31	410	165	20	400	40	89	20	30	10	20	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	34.6	20.1	12.3	10.7
HCM LOS	D	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	64%	5%	4%	18%
Vol Thru, %	14%	68%	87%	36%
Vol Right, %	22%	27%	9%	46%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	139	606	460	56
LT Vol	89	31	20	10
Through Vol	20	410	400	20
RT Vol	30	165	40	26
Lane Flow Rate	139	606	460	56
Geometry Grp	1	1	1	1
Degree of Util (X)	0.261	0.881	0.695	0.107
Departure Headway (Hd)	6.767	5.232	5.44	6.866
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	527	691	662	525
Service Time	4.86	3.294	3.508	4.866
HCM Lane V/C Ratio	0.264	0.877	0.695	0.107
HCM Control Delay	12.3	34.6	20.1	10.7
HCM Lane LOS	B	D	C	B
HCM 95th-tile Q	1	10.8	5.6	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	419	22	20	431	77	20	10	40	150	45	30
Future Volume (vph)	70	419	22	20	431	77	20	10	40	150	45	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1615	0	1736	1600	0	0	1752	1384	0	1759	1398
Flt Permitted	0.430			0.476				0.774			0.756	
Satd. Flow (perm)	776	1615	0	866	1600	0	0	1392	1354	0	1379	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			27				40			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	441	0	20	508	0	0	30	40	0	195	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	38.8	38.8		38.8	38.8			12.2	38.8		12.2	38.8
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.20	0.65		0.20	0.65
v/c Ratio	0.14	0.42		0.04	0.49			0.11	0.04		0.70	0.03
Control Delay	5.6	6.7		5.0	7.7			18.8	2.1		35.2	2.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.6	6.7		5.0	7.7			18.8	2.1		35.2	2.2
LOS	A	A		A	A			B	A		D	A
Approach Delay		6.6			7.6			9.3			30.8	
Approach LOS		A			A			A			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 75.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	437	10	0	0	354
Future Volume (vph)	20	437	10	0	0	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	437	10	0	0	354
Future Vol, veh/h	20	437	10	0	0	354
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	20	437	10	0	0	354

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	364	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	620	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	693	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	620	1048	-	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	693	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1017	-
HCM Lane V/C Ratio	-	0.449	-
HCM Control Delay (s)	-	11.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	2.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	324	50
Future Volume (vph)	0	0	10	0	324	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

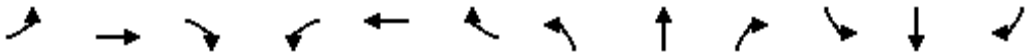
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	324	50
Future Vol, veh/h	0	0	10	0	324	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	324	50

Major/Minor	Minor2		Major2	
Conflicting Flow All	698	50	0	0
Stage 1	698	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	343	970	-	-
Stage 1	416	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	970	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	121	13	10	10	117	391	16	10	449	30
Future Volume (vph)	30	10	121	13	10	10	117	391	16	10	449	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

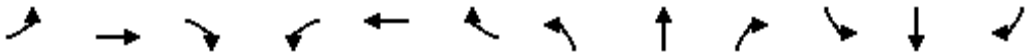
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	10	121	13	10	10	117	391	16	10	449	30
Future Vol, veh/h	30	10	121	13	10	10	117	391	16	10	449	30
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	30	10	121	13	10	10	117	391	16	10	449	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1151	1149	487	1208	1156	425	490	0	0	420	0	0
Stage 1	495	495	-	646	646	-	-	-	-	-	-	-
Stage 2	656	654	-	562	510	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	177	200	585	161	198	634	1078	-	-	1134	-	-
Stage 1	560	549	-	464	470	-	-	-	-	-	-	-
Stage 2	458	466	-	515	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	166	572	104	164	618	1067	-	-	1120	-	-
Mov Cap-2 Maneuver	144	166	-	104	164	-	-	-	-	-	-	-
Stage 1	475	537	-	393	399	-	-	-	-	-	-	-
Stage 2	372	395	-	389	529	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.3	32.6	2	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1067	-	-	335	163	1120	-	-
HCM Lane V/C Ratio	0.11	-	-	0.481	0.202	0.009	-	-
HCM Control Delay (s)	8.8	0	-	25.3	32.6	8.2	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	2.5	0.7	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	49	28	0	10	71	329	31	10	272	20
Future Volume (vph)	10	0	49	28	0	10	71	329	31	10	272	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

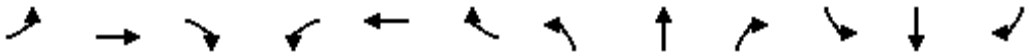
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	0	49	28	0	10	71	329	31	10	272	20
Future Vol, veh/h	10	0	49	28	0	10	71	329	31	10	272	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	10	0	49	28	0	10	71	329	31	10	272	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	794	804	282	814	799	345	292	0	0	360	0	0
Stage 1	302	302	-	487	487	-	-	-	-	-	-	-
Stage 2	492	502	-	327	312	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	308	319	762	271	294	649	1270	-	-	1199	-	-
Stage 1	712	668	-	521	514	-	-	-	-	-	-	-
Stage 2	562	545	-	640	618	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	285	294	762	238	271	649	1270	-	-	1199	-	-
Mov Cap-2 Maneuver	285	294	-	238	271	-	-	-	-	-	-	-
Stage 1	662	661	-	485	478	-	-	-	-	-	-	-
Stage 2	515	507	-	593	612	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	19.5	1.3	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1270	-	-	594	286	1199	-	-
HCM Lane V/C Ratio	0.056	-	-	0.099	0.133	0.008	-	-
HCM Control Delay (s)	8	0	-	11.7	19.5	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	166	10	32	195	12	10	10	43	23	10	10
Future Volume (vph)	10	166	10	32	195	12	10	10	43	23	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

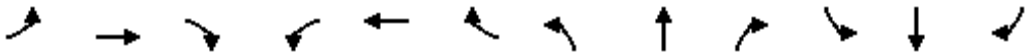
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	166	10	32	195	12	10	10	43	23	10	10
Future Vol, veh/h	10	166	10	32	195	12	10	10	43	23	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	166	10	32	195	12	10	10	43	23	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	207	0	0	176	0	0	466	462	171	483	461	201
Stage 1	-	-	-	-	-	-	191	191	-	265	265	-
Stage 2	-	-	-	-	-	-	275	271	-	218	196	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1364	-	-	1394	-	-	510	500	878	497	500	845
Stage 1	-	-	-	-	-	-	815	746	-	745	693	-
Stage 2	-	-	-	-	-	-	736	689	-	789	742	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1364	-	-	1394	-	-	483	483	878	453	483	845
Mov Cap-2 Maneuver	-	-	-	-	-	-	483	483	-	453	483	-
Stage 1	-	-	-	-	-	-	808	740	-	739	675	-
Stage 2	-	-	-	-	-	-	698	671	-	734	736	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1	10.7	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	1364	-	-	1394	-	-	516
HCM Lane V/C Ratio	0.09	0.007	-	-	0.023	-	-	0.083
HCM Control Delay (s)	10.7	7.7	0	-	7.6	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

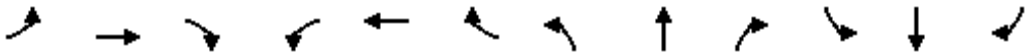
Intersection	
Int Delay, s/veh	0

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

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	1	0	0	2	2	1	2	2	1
Stage 1	-	-	-	-	-	-	1	1	-	1	1	-
Stage 2	-	-	-	-	-	-	1	1	-	1	1	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1622	-	-	1020	894	1084	1020	894	1084
Stage 1	-	-	-	-	-	-	1022	895	-	1022	895	-
Stage 2	-	-	-	-	-	-	1022	895	-	1022	895	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1622	-	-	1020	894	1084	1020	894	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	1020	894	-	1020	894	-
Stage 1	-	-	-	-	-	-	1022	895	-	1022	895	-
Stage 2	-	-	-	-	-	-	1022	895	-	1022	895	-

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

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1622	-	-	1622	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s)	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

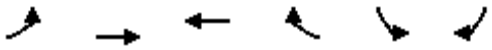
Intersection	
Int Delay, s/veh	0

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

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	0	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	-	0	-	0	0	-	-
Stage 1	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	-	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	0
Intersection LOS	-

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	0	0
HCM LOS	-	-

Lane	EBLn1	SBLn1
Vol Left, %	0%	0%
Vol Thru, %	100%	100%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	0	0
LT Vol	0	0
Through Vol	0	0
RT Vol	0	0
Lane Flow Rate	0	0
Geometry Grp	1	1
Degree of Util (X)	0	0
Departure Headway (Hd)	3.934	3.934
Convergence, Y/N	Yes	Yes
Cap	0	0
Service Time	1.934	1.934
HCM Lane V/C Ratio	0	0
HCM Control Delay	6.9	6.9
HCM Lane LOS	N	N
HCM 95th-tile Q	0	0



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1622	-	1021	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1622	-	1021	1084
Mov Cap-2 Maneuver	-	-	-	-	1021	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1622	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	61	22	633	86	34	374
Future Volume (vph)	61	22	633	86	34	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	928		1675			1598
Travel Time (s)	25.3		32.6			31.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Parking (#/hr)				0		
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	22	633	86	34	374
Future Vol, veh/h	61	22	633	86	34	374
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, %	3	3	3	3	3	3
Mvmt Flow	66	24	688	93	37	407

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1216	735	0	0	781	0
Stage 1	735	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	199	418	-	-	832	-
Stage 1	473	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	418	-	-	832	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.3	0	0.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	220	832	-
HCM Lane V/C Ratio	-	-	0.41	0.044	-
HCM Control Delay (s)	-	-	32.3	9.5	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	50	72	298	68	34	189
Future Volume (vph)	50	72	298	68	34	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1207		1150			258
Travel Time (s)	32.9		22.4			5.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	72	298	68	34	189
Future Vol, veh/h	50	72	298	68	34	189
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, %	3	3	3	3	3	3
Mvmt Flow	54	78	324	74	37	205

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	640	361	0	0	398	0
Stage 1	361	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	438	681	-	-	1155	-
Stage 1	703	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	422	681	-	-	1155	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	703	-	-	-	-	-
Stage 2	738	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	544	1155	-
HCM Lane V/C Ratio	-	-	0.244	0.032	-
HCM Control Delay (s)	-	-	13.7	8.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	645	17	331	630	6	343
Future Volume (vph)	645	17	331	630	6	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	267			2719	1009	
Travel Time (s)	4.0			41.2	27.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	29.4

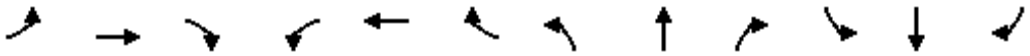
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	645	17	331	630	6	343
Future Vol, veh/h	645	17	331	630	6	343
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	701	18	360	685	7	373

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	719	0	2115	710
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	1405	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	878	-	55	432
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	226	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	878	-	19	432
Mov Cap-2 Maneuver	-	-	-	-	19	-
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	76	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	155.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	314	-	-	878	-
HCM Lane V/C Ratio	1.208	-	-	0.41	-
HCM Control Delay (s)	155.1	-	-	11.9	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	16.7	-	-	2	-

2037 with SEIS Alternative 5 Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	587	5	15	0	0	0	0	15	45	400	30	0
Future Volume (vph)	587	5	15	0	0	0	0	15	45	400	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	416.3

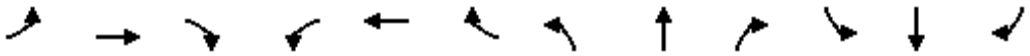
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	587	5	15	0	0	0	0	15	45	400	30	0
Future Vol, veh/h	587	5	15	0	0	0	0	15	45	400	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	587	5	15	0	0	0	0	15	45	400	30	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	868	890	30	-	0	0	60	0	0
Stage 1	830	830	-	-	-	-	-	-	-
Stage 2	38	60	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	~ 324	283	1047	0	-	-	1425	-	0
Stage 1	~ 430	386	-	0	-	-	-	-	0
Stage 2	987	847	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 232	0	1047	-	-	-	1425	-	-
Mov Cap-2 Maneuver	~ 232	0	-	-	-	-	-	-	-
Stage 1	~ 430	0	-	-	-	-	-	-	-
Stage 2	706	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 746.8	0	7.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	237	1425	-
HCM Lane V/C Ratio	-	-	2.561	0.281	-
HCM Control Delay (s)	-	-	$ 746.8	8.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	50.7	1.2	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	80	5	621	5	597	0	0	350	154
Future Volume (vph)	0	0	0	80	5	621	5	597	0	0	350	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	126.3

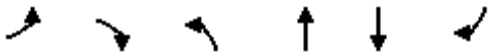
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	80	5	621	5	597	0	0	350	154
Future Vol, veh/h	0	0	0	80	5	621	5	597	0	0	350	154
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	80	5	621	5	597	0	0	350	154

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	1034	1111	597	504	0	-	-	-	0
Stage 1	607	607	-	-	-	-	-	-	-
Stage 2	427	504	-	-	-	-	-	-	-
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-
Pot Cap-1 Maneuver	242	197	~ 478	1066	-	0	0	-	-
Stage 1	518	465	-	-	-	0	0	-	-
Stage 2	629	518	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	240	0	~ 478	1066	-	-	-	-	-
Mov Cap-2 Maneuver	240	0	-	-	-	-	-	-	-
Stage 1	514	0	-	-	-	-	-	-	-
Stage 2	629	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 324	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1066	-	429	-	-
HCM Lane V/C Ratio	0.005	-	1.646	-	-
HCM Control Delay (s)	8.4	0	$ 324	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	41.1	-	-

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	41	155	140	1078	349	31
Future Volume (vph)	41	155	140	1078	349	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

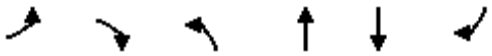
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	41	155	140	1078	349	31
Future Vol, veh/h	41	155	140	1078	349	31
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	41	155	140	1078	349	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1723	365	380	0	-	0
Stage 1	365	-	-	-	-	-
Stage 2	1358	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	92	656	1178	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	227	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	81	656	1178	-	-	-
Mov Cap-2 Maneuver	81	-	-	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	227	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	49.6	1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1178	-	264	-	-
HCM Lane V/C Ratio	0.119	-	0.742	-	-
HCM Control Delay (s)	8.5	-	49.6	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.4	-	5.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	135	195	704	351	158	141
Future Volume (vph)	135	195	704	351	158	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1746	1158	
Travel Time (s)	19.3			34.0	22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

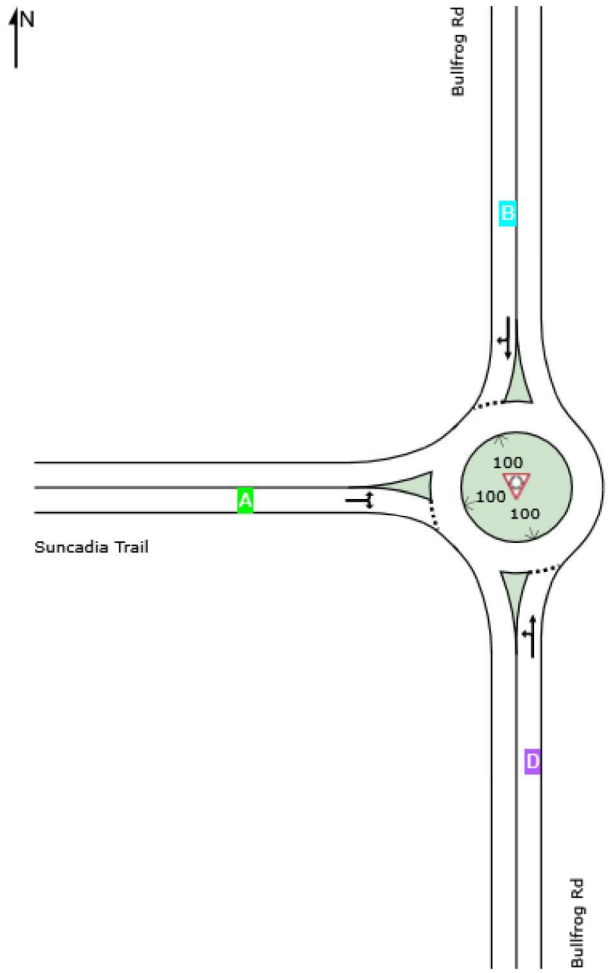
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2037 With Project - Friday PM Peak Hour - Alt 5]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	D	B	A	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2037 With Project - Friday PM Peak Hour - Alt 5]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

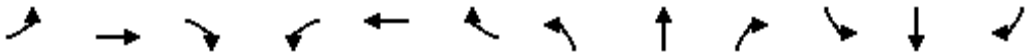
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	1055	1.4	1179	0.895	100	26.2	LOS D	38.4	971.1	Full	1600	0.0	0.0
Approach	1055	1.4		0.895		26.2	LOS D	38.4	971.1				
North: Bullfrog Rd													
Lane 1[d]	299	3.5	644	0.465	100	12.7	LOS B	2.7	69.4	Full	1600	0.0	0.0
Approach	299	3.5		0.465		12.7	LOS B	2.7	69.4				
West: Suncadia Trail													
Lane 1[d]	330	4.2	1121	0.294	100	6.0	LOS A	1.5	39.3	Full	1600	0.0	0.0
Approach	330	4.2		0.294		6.0	LOS A	1.5	39.3				
Intersection	1684	2.3		0.895		19.8	LOS C	38.4	971.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	36	0	0	0	17	473	0	0	247	50
Future Volume (vph)	25	0	36	0	0	0	17	473	0	0	247	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	36	0	0	0	17	473	0	0	247	50
Future Vol, veh/h	25	0	36	0	0	0	17	473	0	0	247	50
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	36	0	0	0	17	473	0	0	247	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	779	779	272	797	804	473	297	0	0	473	0	0
Stage 1	272	272	-	507	507	-	-	-	-	-	-	-
Stage 2	507	507	-	290	297	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	307	321	755	307	319	595	1264	-	-	1084	-	-
Stage 1	723	676	-	552	543	-	-	-	-	-	-	-
Stage 2	539	531	-	722	671	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	303	315	755	288	313	595	1264	-	-	1084	-	-
Mov Cap-2 Maneuver	303	315	-	288	313	-	-	-	-	-	-	-
Stage 1	710	676	-	542	533	-	-	-	-	-	-	-
Stage 2	529	521	-	688	671	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1264	-	-	469	-	1084	-	-
HCM Lane V/C Ratio	0.013	-	-	0.13	-	-	-	-
HCM Control Delay (s)	7.9	0	-	13.8	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	112	572	330	168	440	185
Future Volume (vph)	112	572	330	168	440	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

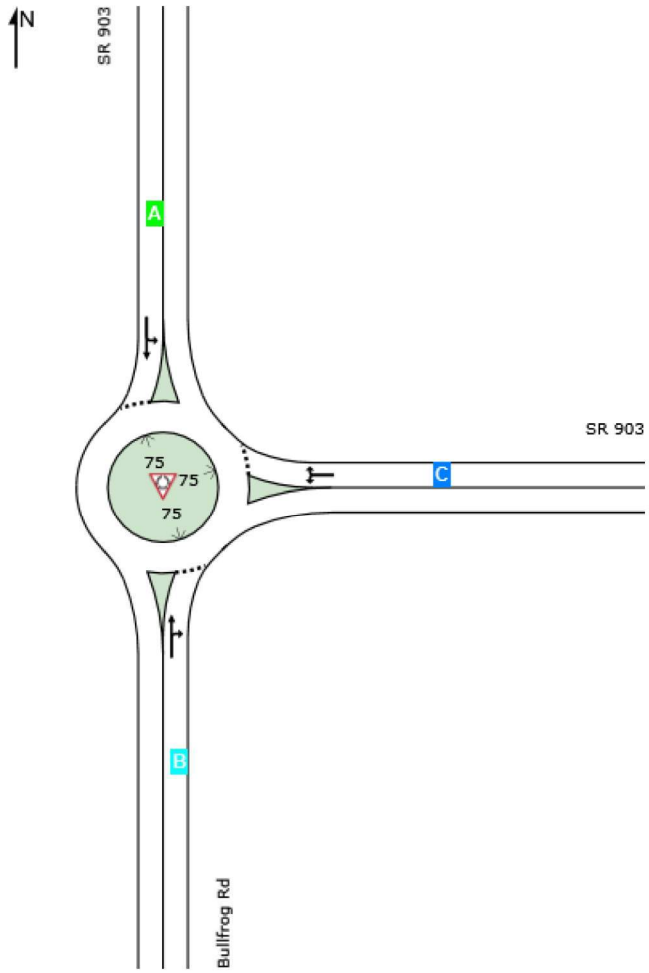
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2037 With Project - Friday PM Peak Hour - Alt 5]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	B	C	A	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2037 With Project - Friday PM Peak Hour - Alt 5]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

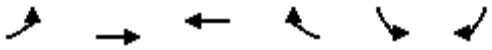
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	498	3.3	836	0.596	100	13.4	LOS B	5.5	141.4	Full	1600	0.0	0.0
Approach	498	3.3		0.596		13.4	LOS B	5.5	141.4				
East: SR 903													
Lane 1[d]	684	2.8	948	0.722	100	16.6	LOS C	11.3	289.2	Full	1600	0.0	0.0
Approach	684	2.8		0.722		16.6	LOS C	11.3	289.2				
North: SR 903													
Lane 1[d]	625	4.4	1175	0.532	100	9.1	LOS A	3.8	99.4	Full	1600	0.0	0.0
Approach	625	4.4		0.532		9.1	LOS A	3.8	99.4				
Intersection	1807	3.5		0.722		13.1	LOS B	11.3	289.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	1037	1095	40	35	16
Future Volume (vph)	11	1037	1095	40	35	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2634	1314		535	
Travel Time (s)		71.8	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

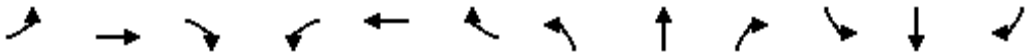
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	1037	1095	40	35	16
Future Vol, veh/h	11	1037	1095	40	35	16
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	11	1037	1095	40	35	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1135	0	-	0	2174	1122
Stage 1	-	-	-	-	1115	-
Stage 2	-	-	-	-	1059	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	608	-	-	-	52	253
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	336	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	608	-	-	-	50	251
Mov Cap-2 Maneuver	-	-	-	-	50	-
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	336	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	150.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	608	-	-	-	67
HCM Lane V/C Ratio	0.018	-	-	-	0.761
HCM Control Delay (s)	11	0	-	-	150.9
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	3.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	911	154	55	844	5	300	0	165	0	0	6
Future Volume (vph)	7	911	154	55	844	5	300	0	165	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	626.3

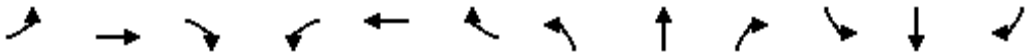
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	911	154	55	844	5	300	0	165	0	0	6
Future Vol, veh/h	7	911	154	55	844	5	300	0	165	0	0	6
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	7	911	154	55	844	5	300	0	165	0	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	849	0	0	1069	0	0	1966	1965	993	2043	2040	847
Stage 1	-	-	-	-	-	-	1006	1006	-	957	957	-
Stage 2	-	-	-	-	-	-	960	959	-	1086	1083	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	780	-	-	648	-	-	~ 47	63	299	42	57	365
Stage 1	-	-	-	-	-	-	~ 292	320	-	312	339	-
Stage 2	-	-	-	-	-	-	310	337	-	264	296	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	780	-	-	646	-	-	~ 40	51	298	16	47	365
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 40	51	-	16	47	-
Stage 1	-	-	-	-	-	-	~ 284	311	-	305	284	-
Stage 2	-	-	-	-	-	-	~ 256	283	-	115	288	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	$ 3294.2	15
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	58	780	-	-	646	-	-	365
HCM Lane V/C Ratio	8.017	0.009	-	-	0.085	-	-	0.016
HCM Control Delay (s)	$ 3294.2	9.7	0	-	11.1	0	-	15
HCM Lane LOS	F	A	A	-	B	A	-	C
HCM 95th %tile Q(veh)	54.1	0	-	-	0.3	-	-	0.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1052	34	15	854	45	59	10	5	20	15	31
Future Volume (vph)	25	1052	34	15	854	45	59	10	5	20	15	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	81.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	25	1052	34	15	854	45	59	10	5	20	15	31
Future Vol, veh/h	25	1052	34	15	854	45	59	10	5	20	15	31
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	25	1052	34	15	854	45	59	10	5	20	15	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	900	0	0	1091	0	0	2054	2054	1076	2037	2049	878
Stage 1	-	-	-	-	-	-	1124	1124	-	908	908	-
Stage 2	-	-	-	-	-	-	930	930	-	1129	1141	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	738	-	-	632	-	-	~ 22	30	175	43	56	350
Stage 1	-	-	-	-	-	-	164	189	-	332	357	-
Stage 2	-	-	-	-	-	-	219	242	-	250	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	737	-	-	629	-	-	~ 14	26	174	26	48	350
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 14	26	-	26	48	-
Stage 1	-	-	-	-	-	-	149	172	-	303	340	-
Stage 2	-	-	-	-	-	-	182	230	-	209	253	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	$ 2110.3	298.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	16	737	-	-	629	-	-	56
HCM Lane V/C Ratio	4.625	0.034	-	-	0.024	-	-	1.179
HCM Control Delay (s)	$ 2110.3	10.1	0	-	10.9	0	-	298.4
HCM Lane LOS	F	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	10	0.1	-	-	0.1	-	-	5.6

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	174	10	30	405
Future Volume (vph)	25	10	174	10	30	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

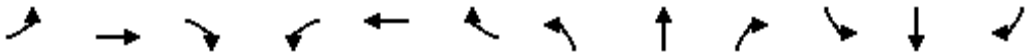
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	174	10	30	405
Future Vol, veh/h	25	10	174	10	30	405
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	174	10	30	405
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.2	9.9	10.6
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	7%	0%	95%
Vol Thru, %	0%	71%	5%
Vol Right, %	93%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	435	35	184
LT Vol	30	0	174
Through Vol	0	25	10
RT Vol	405	10	0
Lane Flow Rate	435	35	184
Geometry Grp	1	1	1
Degree of Util (X)	0.48	0.048	0.259
Departure Headway (Hd)	3.974	4.886	5.073
Convergence, Y/N	Yes	Yes	Yes
Cap	909	729	705
Service Time	1.995	2.942	3.122
HCM Lane V/C Ratio	0.479	0.048	0.261
HCM Control Delay	10.6	8.2	9.9
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.6	0.2	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	196	395	200	70	195	200	75	124	155	80	98	66
Future Volume (vph)	196	395	200	70	195	200	75	124	155	80	98	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	280.8

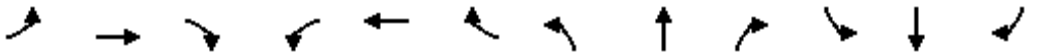
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	196	395	200	70	195	200	75	124	155	80	98	66
Future Vol, veh/h	196	395	200	70	195	200	75	124	155	80	98	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	196	395	200	70	195	200	75	124	155	80	98	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	595	0	0	1404	1422	495	1462	1422	295
Stage 1	-	-	-	-	-	-	887	887	-	435	435	-
Stage 2	-	-	-	-	-	-	517	535	-	1027	987	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1153	-	-	967	-	-	117	136	575	106	135	740
Stage 1	-	-	-	-	-	-	339	362	-	596	577	-
Stage 2	-	-	-	-	-	-	541	524	-	280	323	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1153	-	-	967	-	-	~ 15	~ 105	575	-	104	740
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 15	~ 105	-	-	104	-
Stage 1	-	-	-	-	-	-	281	300	-	495	535	-
Stage 2	-	-	-	-	-	-	373	486	-	100	268	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	1.4	$ 1463.7	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	32	575	1153	-	-	967	-	-	-	159
HCM Lane V/C Ratio	6.219	0.27	0.17	-	-	0.072	-	-	-	1.031
HCM Control Delay (s)	$ 2593.1	13.6	8.8	-	-	9	-	-	-	137.5
HCM Lane LOS	F	B	A	-	-	A	-	-	-	F
HCM 95th %tile Q(veh)	24	1.1	0.6	-	-	0.2	-	-	-	8.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	600	25	70	495	15	40	29	155	6	48	5
Future Volume (vph)	5	600	25	70	495	15	40	29	155	6	48	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

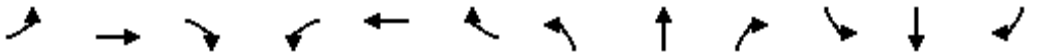
Intersection	
Int Delay, s/veh	9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	600	25	70	495	15	40	29	155	6	48	5
Future Vol, veh/h	5	600	25	70	495	15	40	29	155	6	48	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	5	600	25	70	495	15	40	29	155	6	48	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	511	0	0	629	0	0	1304	1278	617	1359	1283	512
Stage 1	-	-	-	-	-	-	627	627	-	644	644	-
Stage 2	-	-	-	-	-	-	677	651	-	715	639	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1044	-	-	944	-	-	135	164	484	92	124	452
Stage 1	-	-	-	-	-	-	466	472	-	369	381	-
Stage 2	-	-	-	-	-	-	438	460	-	334	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1043	-	-	940	-	-	84	150	482	50	114	448
Mov Cap-2 Maneuver	-	-	-	-	-	-	84	150	-	50	114	-
Stage 1	-	-	-	-	-	-	462	468	-	367	352	-
Stage 2	-	-	-	-	-	-	344	426	-	212	380	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.1	39.5	73.9
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	103	482	1043	-	-	940	-	-	107
HCM Lane V/C Ratio	0.67	0.322	0.005	-	-	0.074	-	-	0.551
HCM Control Delay (s)	92.4	16	8.5	-	-	9.1	-	-	73.9
HCM Lane LOS	F	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	3.4	1.4	0	-	-	0.2	-	-	2.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	800	165	105	574	100	328	40	45	35	35	52
Future Volume (vph)	62	800	165	105	574	100	328	40	45	35	35	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1872.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	800	165	105	574	100	328	40	45	35	35	52
Future Vol, veh/h	62	800	165	105	574	100	328	40	45	35	35	52
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	62	800	165	105	574	100	328	40	45	35	35	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	675	0	0	967	0	0	1888	1894	886	1885	1926	626
Stage 1	-	-	-	-	-	-	1009	1009	-	835	835	-
Stage 2	-	-	-	-	-	-	879	885	-	1050	1091	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	902	-	-	712	-	-	~ 53	69	339	55	67	488
Stage 1	-	-	-	-	-	-	~ 286	314	-	365	386	-
Stage 2	-	-	-	-	-	-	338	359	-	277	293	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	901	-	-	711	-	-	~ 12	44	338	~ 8	43	487
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 12	44	-	~ 8	43	-
Stage 1	-	-	-	-	-	-	~ 241	265	-	308	293	-
Stage 2	-	-	-	-	-	-	~ 202	272	-	172	247	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.5	$ 9935.7	$ 2275.2
HCM LOS			F	F

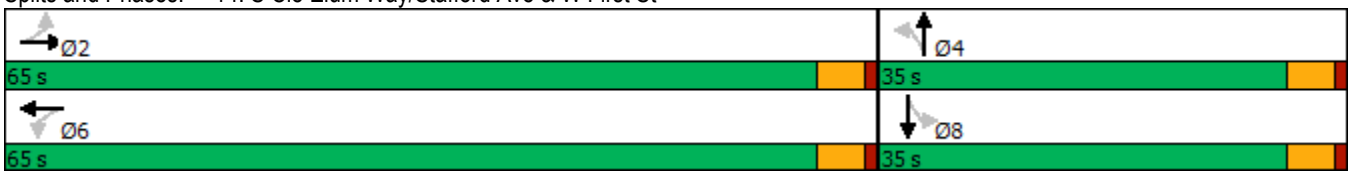
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	12	82	901	-	-	711	-	-	23
HCM Lane V/C Ratio	27.333	1.037	0.069	-	-	0.148	-	-	5.304
HCM Control Delay (s)	$ 12458.6	200.5	9.3	0	-	10.9	0	-	$ 2275.2
HCM Lane LOS	F	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	42.4	5.8	0.2	-	-	0.5	-	-	15.4

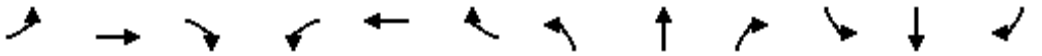
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	546	135	95	355	220	100	123	135	53	207	90
Future Volume (vph)	80	546	135	95	355	220	100	123	135	53	207	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 90	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

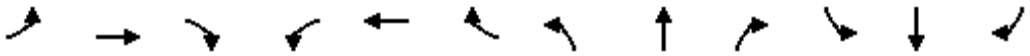




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	546	135	95	355	220	100	123	135	53	207	90
Future Volume (veh/h)	80	546	135	95	355	220	100	123	135	53	207	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	80	546	135	95	355	220	100	123	135	53	207	90
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	438	892	221	372	670	415	206	218	239	229	331	144
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	824	1423	352	753	1069	663	1043	783	860	1079	1192	518
Grp Volume(v), veh/h	80	0	681	95	0	575	100	0	258	53	0	297
Grp Sat Flow(s),veh/h/ln	824	0	1775	753	0	1732	1043	0	1643	1079	0	1710
Q Serve(g_s), s	5.8	0.0	22.4	8.4	0.0	17.9	8.9	0.0	13.0	4.3	0.0	14.6
Cycle Q Clear(g_c), s	23.7	0.0	22.4	30.8	0.0	17.9	23.6	0.0	13.0	17.2	0.0	14.6
Prop In Lane	1.00		0.20	1.00		0.38	1.00		0.52	1.00		0.30
Lane Grp Cap(c), veh/h	438	0	1112	372	0	1085	206	0	457	229	0	475
V/C Ratio(X)	0.18	0.00	0.61	0.26	0.00	0.53	0.49	0.00	0.57	0.23	0.00	0.63
Avail Cap(c_a), veh/h	438	0	1112	372	0	1085	245	0	518	270	0	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	10.9	20.2	0.0	10.1	40.7	0.0	29.8	37.2	0.0	30.4
Incr Delay (d2), s/veh	0.9	0.0	2.5	1.7	0.0	1.9	2.5	0.0	1.6	0.5	0.0	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	1.2	0.0	8.9	1.6	0.0	6.9	2.4	0.0	5.3	1.2	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	13.4	21.9	0.0	11.9	43.2	0.0	31.4	37.7	0.0	32.3
LnGrp LOS	B	A	B	C	A	B	D	A	C	D	A	C
Approach Vol, veh/h		761			670			358			350	
Approach Delay, s/veh		13.9			13.3			34.7			33.1	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		31.4		65.0		31.4				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		60.4		30.4		60.4		30.4				
Max Q Clear Time (g_c+I1), s		25.7		25.6		32.8		19.2				
Green Ext Time (p_c), s		6.7		1.2		5.5		1.6				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	541	291	40	500	75	298	25	5	30	25	61
Future Volume (vph)	38	541	291	40	500	75	298	25	5	30	25	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	245.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	541	291	40	500	75	298	25	5	30	25	61
Future Vol, veh/h	38	541	291	40	500	75	298	25	5	30	25	61
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	38	541	291	40	500	75	298	25	5	30	25	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	577	0	0	834	0	0	1428	1422	691	1400	1530	542
Stage 1	-	-	-	-	-	-	765	765	-	620	620	-
Stage 2	-	-	-	-	-	-	663	657	-	780	910	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	987	-	-	799	-	-	~ 112	135	443	119	118	544
Stage 1	-	-	-	-	-	-	394	411	-	479	483	-
Stage 2	-	-	-	-	-	-	449	460	-	391	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	797	-	-	~ 71	115	441	87	100	542
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 71	115	-	87	100	-
Stage 1	-	-	-	-	-	-	363	379	-	442	446	-
Stage 2	-	-	-	-	-	-	347	425	-	333	328	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.6	$ 1419.4	67.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	71	131	985	-	-	797	-	-	164
HCM Lane V/C Ratio	4.197	0.229	0.039	-	-	0.05	-	-	0.707
HCM Control Delay (s)	$ 1558.2	40.5	8.8	0	-	9.8	0	-	67.5
HCM Lane LOS	F	E	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	31.9	0.8	0.1	-	-	0.2	-	-	4.2

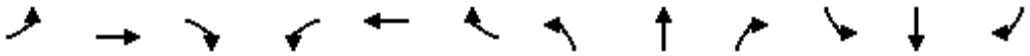
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	514	210	40	375	91	255	167	75	72	239	25
Future Volume (vph)	10	514	210	40	375	91	255	167	75	72	239	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





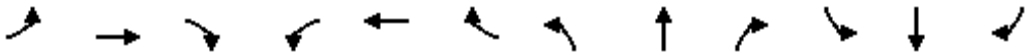
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	514	210	40	375	91	255	167	75	72	239	25
Future Volume (veh/h)	10	514	210	40	375	91	255	167	75	72	239	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	514	210	40	375	91	255	167	75	72	239	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	648	679	278	294	784	190	233	294	132	246	387	40
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	911	1120	458	724	1293	314	1089	1074	482	1075	1415	148
Grp Volume(v), veh/h	10	0	724	40	0	466	255	0	242	72	0	264
Grp Sat Flow(s),veh/h/ln	911	0	1578	724	0	1607	1089	0	1556	1075	0	1563
Q Serve(g_s), s	0.3	0.0	25.0	2.5	0.0	0.0	9.4	0.0	10.0	4.6	0.0	11.1
Cycle Q Clear(g_c), s	0.3	0.0	25.0	27.5	0.0	0.0	20.5	0.0	10.0	14.7	0.0	11.1
Prop In Lane	1.00		0.29	1.00		0.20	1.00		0.31	1.00		0.09
Lane Grp Cap(c), veh/h	648	0	957	294	0	975	233	0	425	246	0	427
V/C Ratio(X)	0.02	0.00	0.76	0.14	0.00	0.48	1.10	0.00	0.57	0.29	0.00	0.62
Avail Cap(c_a), veh/h	648	0	957	294	0	975	233	0	425	246	0	427
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	0.91	0.00	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	0.0	10.7	7.6	0.0	0.0	34.7	0.0	23.4	29.8	0.0	23.8
Incr Delay (d2), s/veh	0.0	0.0	4.5	0.9	0.0	1.5	86.7	0.0	1.1	0.2	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	8.6	0.4	0.0	0.4	9.8	0.0	3.7	1.2	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	15.3	8.4	0.0	1.5	121.5	0.0	24.6	30.0	0.0	25.8
LnGrp LOS	A	A	B	A	A	A	F	A	C	C	A	C
Approach Vol, veh/h		734			506			497			336	
Approach Delay, s/veh		15.1			2.1			74.3			26.7	
Approach LOS		B			A			E			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		25.0		50.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		27.0		16.7		29.5		22.5				
Green Ext Time (p_c), s		5.5		0.5		3.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			28.0									
HCM 6th LOS			C									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	345	190	30	460	40	94	35	25	5	15	76
Future Volume (vph)	51	345	190	30	460	40	94	35	25	5	15	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

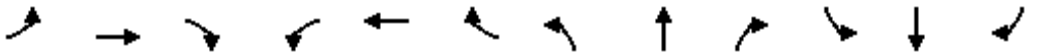
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	32.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	51	345	190	30	460	40	94	35	25	5	15	76
Future Vol, veh/h	51	345	190	30	460	40	94	35	25	5	15	76
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	51	345	190	30	460	40	94	35	25	5	15	76
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	40.5	33.7	13.7	11.7
HCM LOS	E	D	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	61%	9%	6%	5%
Vol Thru, %	23%	59%	87%	16%
Vol Right, %	16%	32%	8%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	154	586	530	96
LT Vol	94	51	30	5
Through Vol	35	345	460	15
RT Vol	25	190	40	76
Lane Flow Rate	154	586	530	96
Geometry Grp	1	1	1	1
Degree of Util (X)	0.313	0.91	0.854	0.187
Departure Headway (Hd)	7.31	5.593	5.801	7.003
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	491	645	625	511
Service Time	5.373	3.639	3.847	5.075
HCM Lane V/C Ratio	0.314	0.909	0.848	0.188
HCM Control Delay	13.7	40.5	33.7	11.7
HCM Lane LOS	B	E	D	B
HCM 95th-tile Q	1.3	11.6	9.5	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	529	32	30	436	82	15	12	40	160	40	45
Future Volume (vph)	80	529	32	30	436	82	15	12	40	160	40	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1626	0	1770	1629	0	0	1795	1411	0	1810	1439
Flt Permitted	0.425			0.398				0.820			0.751	
Satd. Flow (perm)	774	1626	0	737	1629	0	0	1510	1367	0	1401	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			23				40			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	561	0	30	518	0	0	27	40	0	200	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	51.2	51.2		51.2	51.2			14.8	51.2		14.8	51.2
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.20	0.68		0.20	0.68
v/c Ratio	0.15	0.50		0.06	0.46			0.09	0.04		0.72	0.05
Control Delay	7.7	10.5		5.7	7.8			22.8	2.2		42.7	2.1
Queue Delay	0.0	0.3		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	7.7	10.8		5.7	7.8			22.8	2.2		42.7	2.1
LOS	A	B		A	A			C	A		D	A
Approach Delay		10.4			7.7			10.5			35.2	
Approach LOS		B			A			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	

Intersection Signal Delay: 13.5 Intersection LOS: B
Intersection Capacity Utilization 76.3% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	402	15	0	0	439
Future Volume (vph)	40	402	15	0	0	439
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	402	15	0	0	439
Future Vol, veh/h	40	402	15	0	0	439
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	40	402	15	0	0	439

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	454	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	555	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	639	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	555	1050	-	-	-	-
Mov Cap-2 Maneuver	555	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	639	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	972	-
HCM Lane V/C Ratio	-	0.455	-
HCM Control Delay (s)	-	11.8	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	2.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	414	90
Future Volume (vph)	0	0	10	0	414	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

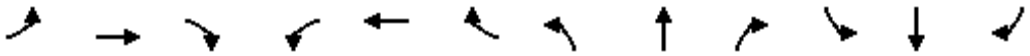
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	414	90
Future Vol, veh/h	0	0	10	0	414	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	414	90

Major/Minor	Minor2		Major2	
Conflicting Flow All	918	90	0	0
Stage 1	918	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	274	973	-	-
Stage 1	353	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	973	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	45	121	13	10	10	92	571	21	10	394	40
Future Volume (vph)	25	45	121	13	10	10	92	571	21	10	394	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

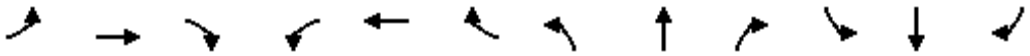
Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	45	121	13	10	10	92	571	21	10	394	40
Future Vol, veh/h	25	45	121	13	10	10	92	571	21	10	394	40
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	25	45	121	13	10	10	92	571	21	10	394	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1253	1236	442	1311	1246	625	447	0	0	605	0	0
Stage 1	447	447	-	779	779	-	-	-	-	-	-	-
Stage 2	806	789	-	532	467	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	150	178	620	137	175	488	1113	-	-	963	-	-
Stage 1	595	577	-	392	409	-	-	-	-	-	-	-
Stage 2	379	405	-	535	565	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	120	150	604	74	147	468	1099	-	-	951	-	-
Mov Cap-2 Maneuver	120	150	-	74	147	-	-	-	-	-	-	-
Stage 1	514	562	-	339	354	-	-	-	-	-	-	-
Stage 2	306	350	-	383	550	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	45.1	44.2	1.2	0.2
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1099	-	-	270	124	951	-	-
HCM Lane V/C Ratio	0.084	-	-	0.707	0.266	0.011	-	-
HCM Control Delay (s)	8.6	0	-	45.1	44.2	8.8	0	-
HCM Lane LOS	A	A	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	4.9	1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	29	28	0	10	81	359	31	5	252	10
Future Volume (vph)	5	0	29	28	0	10	81	359	31	5	252	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

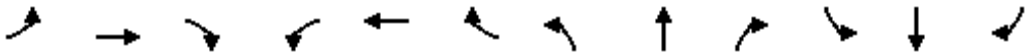
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	29	28	0	10	81	359	31	5	252	10
Future Vol, veh/h	5	0	29	28	0	10	81	359	31	5	252	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	5	0	29	28	0	10	81	359	31	5	252	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	809	819	257	819	809	375	262	0	0	390	0	0
Stage 1	267	267	-	537	537	-	-	-	-	-	-	-
Stage 2	542	552	-	282	272	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	281	293	744	297	317	676	1296	-	-	1158	-	-
Stage 1	705	660	-	532	526	-	-	-	-	-	-	-
Stage 2	497	490	-	729	688	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	259	268	744	267	290	676	1296	-	-	1158	-	-
Mov Cap-2 Maneuver	259	268	-	267	290	-	-	-	-	-	-	-
Stage 1	649	657	-	489	484	-	-	-	-	-	-	-
Stage 2	450	451	-	697	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	17.9	1.4	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1296	-	-	583	318	1158	-	-
HCM Lane V/C Ratio	0.063	-	-	0.058	0.119	0.004	-	-
HCM Control Delay (s)	8	0	-	11.6	17.9	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	126	5	32	220	37	0	25	33	43	0	25
Future Volume (vph)	20	126	5	32	220	37	0	25	33	43	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	20	126	5	32	220	37	0	25	33	43	0	25
Future Vol, veh/h	20	126	5	32	220	37	0	25	33	43	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	126	5	32	220	37	0	25	33	43	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	131	0	0	484	490	129	501	474	239
Stage 1	-	-	-	-	-	-	169	169	-	303	303	-
Stage 2	-	-	-	-	-	-	315	321	-	198	171	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1290	-	-	1467	-	-	479	466	897	484	492	805
Stage 1	-	-	-	-	-	-	812	742	-	711	667	-
Stage 2	-	-	-	-	-	-	677	636	-	808	761	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1290	-	-	1467	-	-	449	446	897	432	471	805
Mov Cap-2 Maneuver	-	-	-	-	-	-	449	446	-	432	471	-
Stage 1	-	-	-	-	-	-	798	729	-	699	650	-
Stage 2	-	-	-	-	-	-	639	619	-	739	748	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.8	11.3	12.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	625	1290	-	-	1467	-	-	521
HCM Lane V/C Ratio	0.093	0.016	-	-	0.022	-	-	0.131
HCM Control Delay (s)	11.3	7.8	0	-	7.5	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.4



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	61	22	1033	86	34	319
Future Volume (vph)	61	22	1033	86	34	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1089		1527			1746
Travel Time (s)	29.7		29.7			34.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	22	1033	86	34	319
Future Vol, veh/h	61	22	1033	86	34	319
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, %	3	3	3	3	3	3
Mvmt Flow	66	24	1123	93	37	347

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1591	1170	0	0	1216	0
Stage 1	1170	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	118	234	-	-	570	-
Stage 1	294	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	109	234	-	-	570	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	294	-	-	-	-	-
Stage 2	607	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	83.5	0	1.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	127	570	-
HCM Lane V/C Ratio	-	-	0.71	0.065	-
HCM Control Delay (s)	-	-	83.5	11.8	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	4	0.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	50	72	418	68	34	249
Future Volume (vph)	50	72	418	68	34	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	882		1158			250
Travel Time (s)	24.1		22.6			4.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	72	418	68	34	249
Future Vol, veh/h	50	72	418	68	34	249
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, %	3	3	3	3	3	3
Mvmt Flow	54	78	454	74	37	271

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	836	491	0	0	528	0
Stage 1	491	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	336	575	-	-	1034	-
Stage 1	613	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	322	575	-	-	1034	-
Mov Cap-2 Maneuver	322	-	-	-	-	-
Stage 1	613	-	-	-	-	-
Stage 2	685	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	435	1034	-
HCM Lane V/C Ratio	-	-	0.305	0.036	-
HCM Control Delay (s)	-	-	16.9	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	705	17	331	780	6	343
Future Volume (vph)	705	17	331	780	6	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			45	45	
Link Distance (ft)	352			2634	1030	
Travel Time (s)	9.6			39.9	15.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	73.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	705	17	331	780	6	343
Future Vol, veh/h	705	17	331	780	6	343
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	766	18	360	848	7	373

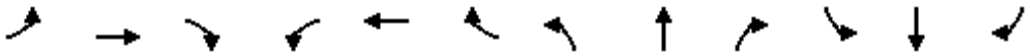
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	784	0	2343	775
Stage 1	-	-	-	-	775	-
Stage 2	-	-	-	-	1568	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	830	-	40	396
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	188	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	830	-	7	396
Mov Cap-2 Maneuver	-	-	-	-	7	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	34	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	$ 448.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	203	-	-	830	-
HCM Lane V/C Ratio	1.869	-	-	0.433	-
HCM Control Delay (s)	$ 448.7	-	-	12.6	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	27.3	-	-	2.2	-

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

2037 with SEIS Alternative 5 Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	191	5	5	0	0	0	0	20	10	315	20	0
Future Volume (vph)	191	5	5	0	0	0	0	20	10	315	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

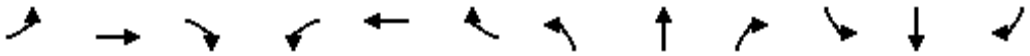
Intersection	
Int Delay, s/veh	14.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	191	5	5	0	0	0	0	20	10	315	20	0
Future Vol, veh/h	191	5	5	0	0	0	0	20	10	315	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	191	5	5	0	0	0	0	20	10	315	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	675	680	20	-	0	0	30	0	0
Stage 1	650	650	-	-	-	-	-	-	-
Stage 2	25	30	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	421	374	1061	0	-	-	1596	-	0
Stage 1	521	467	-	0	-	-	-	-	0
Stage 2	1000	872	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	337	0	1061	-	-	-	1596	-	-
Mov Cap-2 Maneuver	337	0	-	-	-	-	-	-	-
Stage 1	521	0	-	-	-	-	-	-	-
Stage 2	800	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.3	0	7.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	343	1596	-
HCM Lane V/C Ratio	-	-	0.586	0.197	-
HCM Control Delay (s)	-	-	29.3	7.8	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	3.5	0.7	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	5	533	5	206	0	0	300	1028
Future Volume (vph)	0	0	0	35	5	533	5	206	0	0	300	1028
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

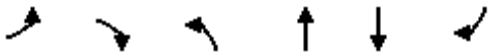
Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	35	5	533	5	206	0	0	300	1028
Future Vol, veh/h	0	0	0	35	5	533	5	206	0	0	300	1028
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	35	5	533	5	206	0	0	300	1028

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	1030	1544	206	1328	0	-	-	-	0
Stage 1	216	216	-	-	-	-	-	-	-
Stage 2	814	1328	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	261	116	840	527	-	0	0	-	-
Stage 1	825	728	-	-	-	0	0	-	-
Stage 2	439	226	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	258	0	840	527	-	-	-	-	-
Mov Cap-2 Maneuver	258	0	-	-	-	-	-	-	-
Stage 1	816	0	-	-	-	-	-	-	-
Stage 2	439	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.7	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	527	-	737	-	-
HCM Lane V/C Ratio	0.009	-	0.777	-	-
HCM Control Delay (s)	11.9	0	24.7	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0	-	7.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	24	105	40	699	1223	34
Future Volume (vph)	24	105	40	699	1223	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

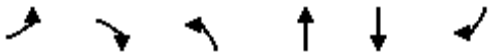
Intersection	
Int Delay, s/veh	7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	105	40	699	1223	34
Future Vol, veh/h	24	105	40	699	1223	34
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	24	105	40	699	1223	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2019	1240	1257	0	-	0
Stage 1	1240	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	63	212	560	-	-	-
Stage 1	270	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	59	212	560	-	-	-
Mov Cap-2 Maneuver	59	-	-	-	-	-
Stage 1	251	-	-	-	-	-
Stage 2	449	-	-	-	-	-

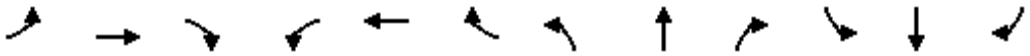
Approach	EB	NB	SB
HCM Control Delay, s	111.6	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	560	-	143	-	-
HCM Lane V/C Ratio	0.071	-	0.902	-	-
HCM Control Delay (s)	11.9	-	111.6	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	6.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	89	262	443	243	963	108
Future Volume (vph)	89	262	443	243	963	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1690	1214	
Travel Time (s)	19.3			32.9	23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	22	0	0	0	42	278	0	0	1043	15
Future Volume (vph)	10	0	22	0	0	0	42	278	0	0	1043	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	10	0	22	0	0	0	42	278	0	0	1043	15
Future Vol, veh/h	10	0	22	0	0	0	42	278	0	0	1043	15
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	10	0	22	0	0	0	42	278	0	0	1043	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1413	1413	1051	1424	1420	278	1058	0	0	278	0	0
Stage 1	1051	1051	-	362	362	-	-	-	-	-	-	-
Stage 2	362	362	-	1062	1058	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	112	135	269	115	138	766	666	-	-	1291	-	-
Stage 1	268	298	-	661	629	-	-	-	-	-	-	-
Stage 2	646	616	-	273	304	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	106	125	269	100	128	766	666	-	-	1291	-	-
Mov Cap-2 Maneuver	106	125	-	100	128	-	-	-	-	-	-	-
Stage 1	248	298	-	611	582	-	-	-	-	-	-	-
Stage 2	598	570	-	251	304	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29	0	1.4	0
HCM LOS	D	A		

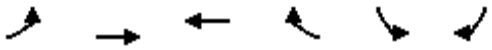
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	666	-	-	182	-	1291	-	-
HCM Lane V/C Ratio	0.063	-	-	0.176	-	-	-	-
HCM Control Delay (s)	10.8	0	-	29	0	0	-	-
HCM Lane LOS	B	A	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	759	415	155	133	354	299
Future Volume (vph)	759	415	155	133	354	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Confl. Peds. (#/hr)	1					
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other

Control Type: Roundabout



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	719	1468	30	20	14
Future Volume (vph)	9	719	1468	30	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2777	1314		535	
Travel Time (s)		75.7	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

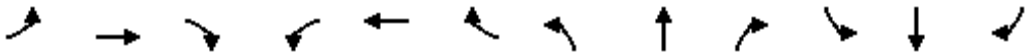
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	719	1468	30	20	14
Future Vol, veh/h	9	719	1468	30	20	14
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	9	719	1468	30	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1503	0	-	0	2225	1488
Stage 1	-	-	-	-	1488	-
Stage 2	-	-	-	-	737	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	449	-	-	-	48	154
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	477	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	447	-	-	-	46	153
Mov Cap-2 Maneuver	-	-	-	-	46	-
Stage 1	-	-	-	-	201	-
Stage 2	-	-	-	-	475	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	109.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	447	-	-	-	65
HCM Lane V/C Ratio	0.02	-	-	-	0.523
HCM Control Delay (s)	13.2	0	-	-	109.8
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	2.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	641	79	30	1333	30	196	0	90	10	10	24
Future Volume (vph)	4	641	79	30	1333	30	196	0	90	10	10	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	433.8

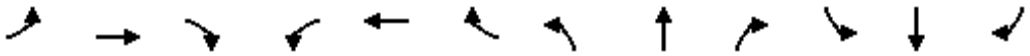
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	641	79	30	1333	30	196	0	90	10	10	24
Future Vol, veh/h	4	641	79	30	1333	30	196	0	90	10	10	24
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	4	641	79	30	1333	30	196	0	90	10	10	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1363	0	0	723	0	0	2117	2115	684	2142	2139	1348
Stage 1	-	-	-	-	-	-	692	692	-	1408	1408	-
Stage 2	-	-	-	-	-	-	1425	1423	-	734	731	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	507	-	-	884	-	-	~ 37	50	447	36	50	186
Stage 1	-	-	-	-	-	-	433	444	-	174	207	-
Stage 2	-	-	-	-	-	-	~ 167	201	-	415	430	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	507	-	-	881	-	-	~ 23	42	446	25	42	186
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 23	42	-	25	42	-
Stage 1	-	-	-	-	-	-	426	437	-	172	178	-
Stage 2	-	-	-	-	-	-	~ 118	172	-	327	423	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	$ 3683.3	173.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	33	507	-	-	881	-	-	57
HCM Lane V/C Ratio	8.667	0.008	-	-	0.034	-	-	0.772
HCM Control Delay (s)	$ 3683.3	12.2	0	-	9.2	0	-	173.6
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	34.7	0	-	-	0.1	-	-	3.3

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	686	61	60	1307	50	92	20	15	10	0	4
Future Volume (vph)	24	686	61	60	1307	50	92	20	15	10	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	116.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	24	686	61	60	1307	50	92	20	15	10	0	4
Future Vol, veh/h	24	686	61	60	1307	50	92	20	15	10	0	4
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	24	686	61	60	1307	50	92	20	15	10	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1357	0	0	751	0	0	2223	2246	721	2234	2251	1332
Stage 1	-	-	-	-	-	-	769	769	-	1452	1452	-
Stage 2	-	-	-	-	-	-	1454	1477	-	782	799	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	507	-	-	863	-	-	~ 31	42	427	31	42	191
Stage 1	-	-	-	-	-	-	394	411	-	164	197	-
Stage 2	-	-	-	-	-	-	162	190	-	390	401	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	507	-	-	860	-	-	~ 22	27	425	~ 9	27	191
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 22	27	-	~ 9	27	-
Stage 1	-	-	-	-	-	-	361	376	-	151	140	-
Stage 2	-	-	-	-	-	-	113	135	-	327	367	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.4	$ 2051.1	$ 741.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	26	507	-	-	860	-	-	12
HCM Lane V/C Ratio	4.885	0.047	-	-	0.07	-	-	1.167
HCM Control Delay (s)	$ 2051.1	12.5	0	-	9.5	0	-	$ 741.1
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	15.7	0.1	-	-	0.2	-	-	2.4

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	89	10	20	261
Future Volume (vph)	25	15	89	10	20	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

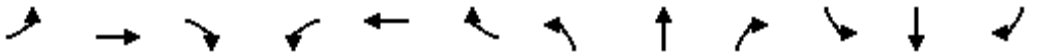
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	89	10	20	261
Future Vol, veh/h	25	15	89	10	20	261
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	89	10	20	261
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.7	8.4	8.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	7%	0%	90%
Vol Thru, %	0%	62%	10%
Vol Right, %	93%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	281	40	99
LT Vol	20	0	89
Through Vol	0	25	10
RT Vol	261	15	0
Lane Flow Rate	281	40	99
Geometry Grp	1	1	1
Degree of Util (X)	0.286	0.049	0.127
Departure Headway (Hd)	3.664	4.444	4.608
Convergence, Y/N	Yes	Yes	Yes
Cap	961	811	769
Service Time	1.763	2.444	2.692
HCM Lane V/C Ratio	0.292	0.049	0.129
HCM Control Delay	8.3	7.7	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	0.2	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	275	120	75	400	185	70	97	110	50	61	53
Future Volume (vph)	129	275	120	75	400	185	70	97	110	50	61	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	66.7

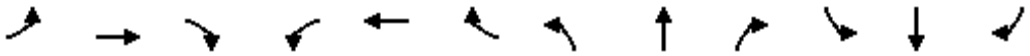
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	129	275	120	75	400	185	70	97	110	50	61	53
Future Vol, veh/h	129	275	120	75	400	185	70	97	110	50	61	53
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	129	275	120	75	400	185	70	97	110	50	61	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	585	0	0	395	0	0	1294	1328	335	1340	1296	494
Stage 1	-	-	-	-	-	-	593	593	-	643	643	-
Stage 2	-	-	-	-	-	-	701	735	-	697	653	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	990	-	-	1164	-	-	139	155	707	131	164	579
Stage 1	-	-	-	-	-	-	492	493	-	465	472	-
Stage 2	-	-	-	-	-	-	429	425	-	435	467	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	990	-	-	1164	-	-	70	126	707	~ 36	133	578
Mov Cap-2 Maneuver	-	-	-	-	-	-	70	126	-	~ 36	133	-
Stage 1	-	-	-	-	-	-	428	429	-	405	442	-
Stage 2	-	-	-	-	-	-	314	398	-	247	406	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.9	284.9	168.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	94	707	990	-	-	1164	-	-	36	207
HCM Lane V/C Ratio	1.777	0.156	0.13	-	-	0.064	-	-	1.389	0.551
HCM Control Delay (s)	$ 465.3	11	9.2	-	-	8.3	-	-	$ 457.4	41.8
HCM Lane LOS	F	B	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	13.7	0.5	0.4	-	-	0.2	-	-	5.3	2.9

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	370	5	60	545	40	20	52	65	5	71	50
Future Volume (vph)	75	370	5	60	545	40	20	52	65	5	71	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

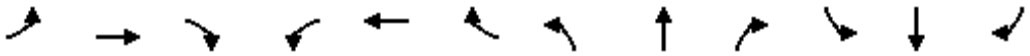
Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	370	5	60	545	40	20	52	65	5	71	50
Future Vol, veh/h	75	370	5	60	545	40	20	52	65	5	71	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	370	5	60	545	40	20	52	65	5	71	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	587	0	0	377	0	0	1271	1232	375	1268	1214	567
Stage 1	-	-	-	-	-	-	525	525	-	687	687	-
Stage 2	-	-	-	-	-	-	746	707	-	581	527	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	993	-	-	1181	-	-	143	176	667	145	181	521
Stage 1	-	-	-	-	-	-	532	526	-	435	446	-
Stage 2	-	-	-	-	-	-	402	435	-	498	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	1179	-	-	76	154	666	88	158	520
Mov Cap-2 Maneuver	-	-	-	-	-	-	76	154	-	88	158	-
Stage 1	-	-	-	-	-	-	491	485	-	402	422	-
Stage 2	-	-	-	-	-	-	287	412	-	371	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	43.2	45.4
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	120	666	991	-	-	1179	-	-	209
HCM Lane V/C Ratio	0.6	0.098	0.076	-	-	0.051	-	-	0.603
HCM Control Delay (s)	72.3	11	8.9	-	-	8.2	-	-	45.4
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	3	0.3	0.2	-	-	0.2	-	-	3.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	503	137	120	1036	50	423	15	30	10	20	33
Future Volume (vph)	31	503	137	120	1036	50	423	15	30	10	20	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1972.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	503	137	120	1036	50	423	15	30	10	20	33
Future Vol, veh/h	31	503	137	120	1036	50	423	15	30	10	20	33
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	31	503	137	120	1036	50	423	15	30	10	20	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1094	0	0	643	0	0	1969	1971	577	1967	2014	1073
Stage 1	-	-	-	-	-	-	637	637	-	1309	1309	-
Stage 2	-	-	-	-	-	-	1332	1334	-	658	705	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	634	-	-	947	-	-	~ 47	63	518	48	59	270
Stage 1	-	-	-	-	-	-	467	473	-	198	231	-
Stage 2	-	-	-	-	-	-	~ 191	224	-	457	442	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	629	-	-	944	-	-	~ 17	39	516	23	36	267
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 17	39	-	23	36	-
Stage 1	-	-	-	-	-	-	429	435	-	181	155	-
Stage 2	-	-	-	-	-	-	~ 98	150	-	382	406	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.9	$ 10111.4	270.7
HCM LOS			F	F

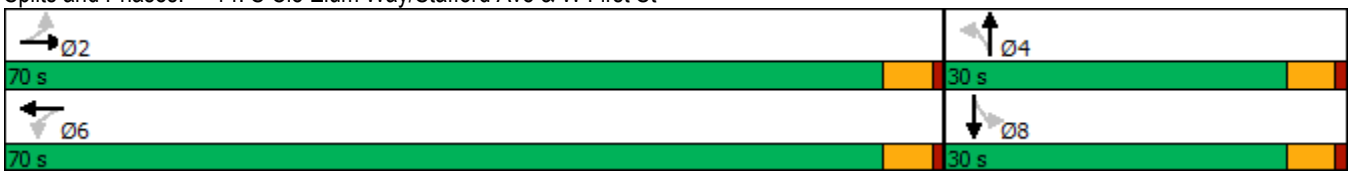
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	17	102	629	-	-	944	-	-	57
HCM Lane V/C Ratio	24.882	0.441	0.049	-	-	0.127	-	-	1.105
HCM Control Delay (s)	$ 11180.1	65.6	11	0	-	9.4	0	-	270.7
HCM Lane LOS	F	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	53.7	1.9	0.2	-	-	0.4	-	-	5.2

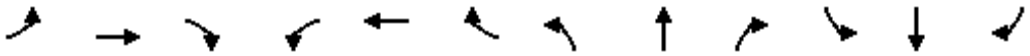
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	105	90	490	340	95	108	95	60	157	60
Future Volume (vph)	15	320	105	90	490	340	95	108	95	60	157	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 92	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





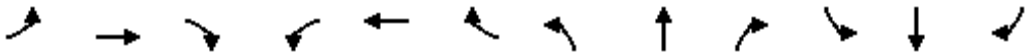
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	105	90	490	340	95	108	95	60	157	60
Future Volume (veh/h)	15	320	105	90	490	340	95	108	95	60	157	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	105	90	490	340	95	108	95	60	157	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	337	922	303	639	703	488	207	203	178	213	285	109
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	661	1348	442	962	1028	713	1170	923	812	1185	1297	496
Grp Volume(v), veh/h	15	0	425	90	0	830	95	0	203	60	0	217
Grp Sat Flow(s),veh/h/ln	661	0	1790	962	0	1741	1170	0	1735	1185	0	1793
Q Serve(g_s), s	1.3	0.0	9.4	4.1	0.0	27.5	7.5	0.0	9.9	4.5	0.0	10.3
Cycle Q Clear(g_c), s	28.9	0.0	9.4	13.5	0.0	27.5	17.8	0.0	9.9	14.4	0.0	10.3
Prop In Lane	1.00		0.25	1.00		0.41	1.00		0.47	1.00		0.28
Lane Grp Cap(c), veh/h	337	0	1225	639	0	1191	207	0	381	213	0	394
V/C Ratio(X)	0.04	0.00	0.35	0.14	0.00	0.70	0.46	0.00	0.53	0.28	0.00	0.55
Avail Cap(c_a), veh/h	337	0	1225	639	0	1191	261	0	461	268	0	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	6.3	9.1	0.0	9.1	41.0	0.0	33.0	39.3	0.0	33.1
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.5	0.0	3.4	2.3	0.0	1.6	1.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.5	0.9	0.0	10.2	2.3	0.0	4.3	1.4	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	7.0	9.5	0.0	12.5	43.2	0.0	34.6	40.3	0.0	34.8
LnGrp LOS	B	A	A	A	A	B	D	A	C	D	A	C
Approach Vol, veh/h		440			920			298			277	
Approach Delay, s/veh		7.4			12.2			37.4			36.0	
Approach LOS		A			B			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		25.6		70.0		25.6				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		65.4		25.4		65.4		25.4				
Max Q Clear Time (g_c+I1), s		30.9		19.8		29.5		16.4				
Green Ext Time (p_c), s		3.4		1.0		9.2		1.3				

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	331	195	15	512	50	670	50	10	30	25	24
Future Volume (vph)	32	331	195	15	512	50	670	50	10	30	25	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	528.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	331	195	15	512	50	670	50	10	30	25	24
Future Vol, veh/h	32	331	195	15	512	50	670	50	10	30	25	24
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	32	331	195	15	512	50	670	50	10	30	25	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	527	0	0	1086	1086	431	1091	1158	537
Stage 1	-	-	-	-	-	-	494	494	-	567	567	-
Stage 2	-	-	-	-	-	-	592	592	-	524	591	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1009	-	-	1045	-	-	~ 194	216	624	187	191	532
Stage 1	-	-	-	-	-	-	~ 557	546	-	498	497	-
Stage 2	-	-	-	-	-	-	~ 493	494	-	526	485	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1009	-	-	1044	-	-	~ 157	202	623	142	178	532
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 157	202	-	142	178	-
Stage 1	-	-	-	-	-	-	~ 531	520	-	475	487	-
Stage 2	-	-	-	-	-	-	~ 437	484	-	446	462	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	$ 1404.3	34.5
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	157	228	1009	-	-	1044	-	-	199
HCM Lane V/C Ratio	4.268	0.263	0.032	-	-	0.014	-	-	0.397
HCM Control Delay (s)	$ 1527.7	26.3	8.7	0	-	8.5	0	-	34.5
HCM Lane LOS	F	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	67.8	1	0.1	-	-	0	-	-	1.8

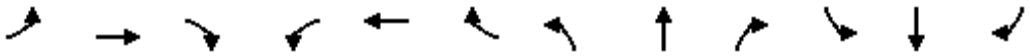
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	311	124	35	470	310	455	380	75	61	154	25
Future Volume (vph)	15	311	124	35	470	310	455	380	75	61	154	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

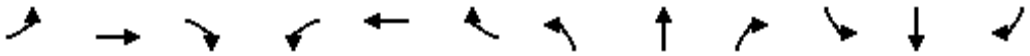




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	311	124	35	470	310	455	380	75	61	154	25
Future Volume (veh/h)	15	311	124	35	470	310	455	380	75	61	154	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	311	124	35	470	310	455	380	75	61	154	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	490	678	270	504	564	372	343	416	82	114	427	69
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	690	1141	455	959	949	626	1195	1362	269	929	1399	227
Grp Volume(v), veh/h	15	0	435	35	0	780	455	0	455	61	0	179
Grp Sat Flow(s),veh/h/ln	690	0	1596	959	0	1576	1195	0	1631	929	0	1626
Q Serve(g_s), s	0.8	0.0	13.7	0.9	0.0	0.0	19.8	0.0	24.2	3.3	0.0	7.7
Cycle Q Clear(g_c), s	0.8	0.0	13.7	14.6	0.0	0.0	27.5	0.0	24.2	27.5	0.0	7.7
Prop In Lane	1.00		0.29	1.00		0.40	1.00		0.16	1.00		0.14
Lane Grp Cap(c), veh/h	490	0	948	504	0	937	343	0	498	114	0	497
V/C Ratio(X)	0.03	0.00	0.46	0.07	0.00	0.83	1.33	0.00	0.91	0.53	0.00	0.36
Avail Cap(c_a), veh/h	490	0	948	504	0	937	343	0	498	114	0	497
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.00	0.95	0.66	0.00	0.66	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	10.2	1.9	0.0	0.0	37.4	0.0	30.1	44.1	0.0	24.4
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.2	0.0	5.9	166.7	0.0	20.8	2.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.9	0.1	0.0	1.5	23.5	0.0	12.1	1.4	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.7	2.0	0.0	5.9	204.1	0.0	50.9	46.6	0.0	24.6
LnGrp LOS	A	A	B	A	A	A	F	A	D	D	A	C
Approach Vol, veh/h		450			815			910			240	
Approach Delay, s/veh		11.6			5.7			127.5			30.2	
Approach LOS		B			A			F			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		15.7		29.5		16.6		29.5				
Green Ext Time (p_c), s		3.5		0.0		8.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			55.1									
HCM 6th LOS			E									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	247	95	25	433	40	90	25	10	5	20	34
Future Volume (vph)	24	247	95	25	433	40	90	25	10	5	20	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

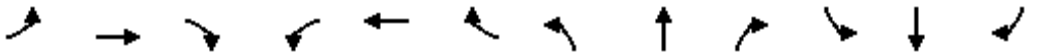
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	247	95	25	433	40	90	25	10	5	20	34
Future Vol, veh/h	24	247	95	25	433	40	90	25	10	5	20	34
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	24	247	95	25	433	40	90	25	10	5	20	34
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.3	18.1	11	9.7
HCM LOS	B	C	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	72%	7%	5%	8%
Vol Thru, %	20%	67%	87%	34%
Vol Right, %	8%	26%	8%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	366	498	59
LT Vol	90	24	25	5
Through Vol	25	247	433	20
RT Vol	10	95	40	34
Lane Flow Rate	125	366	498	59
Geometry Grp	1	1	1	1
Degree of Util (X)	0.216	0.512	0.685	0.098
Departure Headway (Hd)	6.22	5.035	4.955	5.977
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	576	717	727	598
Service Time	4.268	3.069	2.986	4.033
HCM Lane V/C Ratio	0.217	0.51	0.685	0.099
HCM Control Delay	11	13.3	18.1	9.7
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	0.8	2.9	5.5	0.3



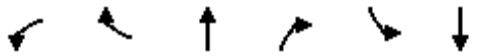
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	354	23	25	786	70	5	15	25	100	35	15
Future Volume (vph)	45	354	23	25	786	70	5	15	25	100	35	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1658	0	1770	1653	0	0	1877	1454	0	1832	1454
Flt Permitted	0.256			0.523				0.934			0.769	
Satd. Flow (perm)	476	1658	0	968	1653	0	0	1772	1416	0	1455	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9				25			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	377	0	25	856	0	0	20	25	0	135	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	66.3	66.3		66.3	66.3			14.7	66.3		14.7	66.3
Actuated g/C Ratio	0.74	0.74		0.74	0.74			0.16	0.74		0.16	0.74
v/c Ratio	0.13	0.31		0.04	0.70			0.07	0.02		0.57	0.01
Control Delay	4.7	4.2		5.4	12.8			28.2	2.6		42.5	2.7
Queue Delay	0.0	0.0		0.0	0.1			0.0	0.0		0.0	0.0
Total Delay	4.7	4.2		5.4	12.8			28.2	2.6		42.5	2.7
LOS	A	A		A	B			C	A		D	A
Approach Delay		4.2			12.6			14.0			38.5	
Approach LOS		A			B			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	

Intersection Signal Delay: 12.9 Intersection LOS: B
Intersection Capacity Utilization 83.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	940	20	0	0	288
Future Volume (vph)	60	940	20	0	0	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	33.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	940	20	0	0	288
Future Vol, veh/h	60	940	20	0	0	288
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	60	940	20	0	0	288

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	308	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	682	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	759	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	682	1055	-	-	-	-
Mov Cap-2 Maneuver	682	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	759	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	43.6	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1021	-
HCM Lane V/C Ratio	-	0.979	-
HCM Control Delay (s)	-	43.6	-
HCM Lane LOS	-	E	-
HCM 95th %tile Q(veh)	-	18.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	293	100
Future Volume (vph)	0	0	25	0	293	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

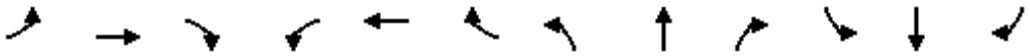
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	293	100
Future Vol, veh/h	0	0	25	0	293	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	293	100

Major/Minor	Minor2		Major2	
Conflicting Flow All	686	100	0	0
Stage 1	686	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	373	961	-	-
Stage 1	451	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	961	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	35	113	34	5	10	112	259	9	5	418	65
Future Volume (vph)	10	35	113	34	5	10	112	259	9	5	418	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

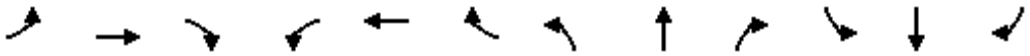
Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	35	113	34	5	10	112	259	9	5	418	65
Future Vol, veh/h	10	35	113	34	5	10	112	259	9	5	418	65
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	10	35	113	34	5	10	112	259	9	5	418	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1002	973	476	1038	1001	300	498	0	0	273	0	0
Stage 1	476	476	-	493	493	-	-	-	-	-	-	-
Stage 2	526	497	-	545	508	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	223	254	593	211	245	744	1076	-	-	1290	-	-
Stage 1	574	560	-	562	550	-	-	-	-	-	-	-
Stage 2	539	548	-	526	542	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	186	217	579	133	209	719	1061	-	-	1284	-	-
Mov Cap-2 Maneuver	186	217	-	133	209	-	-	-	-	-	-	-
Stage 1	495	549	-	490	480	-	-	-	-	-	-	-
Stage 2	447	478	-	391	532	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.7	35.3	2.6	0.1
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1061	-	-	385	167	1284	-	-
HCM Lane V/C Ratio	0.106	-	-	0.41	0.293	0.004	-	-
HCM Control Delay (s)	8.8	0	-	20.7	35.3	7.8	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	2	1.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	42	47	0	5	62	200	22	10	314	20
Future Volume (vph)	10	0	42	47	0	5	62	200	22	10	314	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

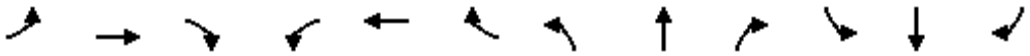
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	42	47	0	5	62	200	22	10	314	20
Future Vol, veh/h	10	0	42	47	0	5	62	200	22	10	314	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	0	42	47	0	5	62	200	22	10	314	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	682	690	324	700	689	211	334	0	0	222	0	0
Stage 1	344	344	-	335	335	-	-	-	-	-	-	-
Stage 2	338	346	-	365	354	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	367	371	722	357	371	834	1237	-	-	1359	-	-
Stage 1	676	640	-	683	646	-	-	-	-	-	-	-
Stage 2	681	639	-	658	634	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	346	347	722	320	347	834	1237	-	-	1359	-	-
Mov Cap-2 Maneuver	346	347	-	320	347	-	-	-	-	-	-	-
Stage 1	637	634	-	644	609	-	-	-	-	-	-	-
Stage 2	638	603	-	614	628	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	17.5	1.8	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1237	-	-	597	340	1359	-	-
HCM Lane V/C Ratio	0.05	-	-	0.087	0.153	0.007	-	-
HCM Control Delay (s)	8.1	0	-	11.6	17.5	7.7	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	225	5	17	151	12	10	0	12	47	0	5
Future Volume (vph)	10	225	5	17	151	12	10	0	12	47	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

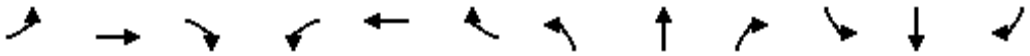
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	225	5	17	151	12	10	0	12	47	0	5
Future Vol, veh/h	10	225	5	17	151	12	10	0	12	47	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	225	5	17	151	12	10	0	12	47	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	163	0	0	230	0	0	442	445	228	445	441	157
Stage 1	-	-	-	-	-	-	248	248	-	191	191	-
Stage 2	-	-	-	-	-	-	194	197	-	254	250	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1428	-	-	1350	-	-	529	511	816	527	513	894
Stage 1	-	-	-	-	-	-	760	705	-	815	746	-
Stage 2	-	-	-	-	-	-	812	742	-	755	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1428	-	-	1350	-	-	517	500	816	511	502	894
Mov Cap-2 Maneuver	-	-	-	-	-	-	517	500	-	511	502	-
Stage 1	-	-	-	-	-	-	754	699	-	808	736	-
Stage 2	-	-	-	-	-	-	796	732	-	738	698	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.7	10.8	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	646	1428	-	-	1350	-	-	533
HCM Lane V/C Ratio	0.034	0.007	-	-	0.013	-	-	0.098
HCM Control Delay (s)	10.8	7.5	0	-	7.7	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	432	125	10	925	0	603	10	5	0	10	25
Future Volume (vph)	5	432	125	10	925	0	603	10	5	0	10	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	785.5

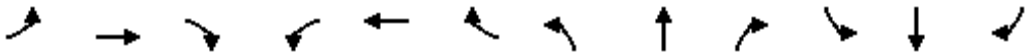
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	432	125	10	925	0	603	10	5	0	10	25
Future Vol, veh/h	5	432	125	10	925	0	603	10	5	0	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	432	125	10	925	0	603	10	5	0	10	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	925	0	0	557	0	0	1468	1450	495	1457	1512	925
Stage 1	-	-	-	-	-	-	505	505	-	945	945	-
Stage 2	-	-	-	-	-	-	963	945	-	512	567	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	739	-	-	1019	-	-	~ 105	130	573	109	121	329
Stage 1	-	-	-	-	-	-	~ 548	539	-	317	343	-
Stage 2	-	-	-	-	-	-	~ 306	339	-	548	510	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	739	-	-	1019	-	-	~ 89	126	573	99	117	329
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 89	126	-	99	117	-
Stage 1	-	-	-	-	-	-	~ 543	534	-	314	336	-
Stage 2	-	-	-	-	-	-	~ 269	332	-	528	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 2731	24.8
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	90	739	-	-	1019	-	-	217
HCM Lane V/C Ratio	6.867	0.007	-	-	0.01	-	-	0.161
HCM Control Delay (s)	$ 2731	9.9	0	-	8.6	0	-	24.8
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	69.3	0	-	-	0	-	-	0.6

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	648	0	395	0	0	152	490
Future Volume (vph)	0	0	0	0	0	648	0	395	0	0	152	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

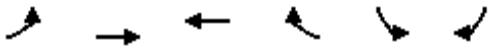
Intersection	
Int Delay, s/veh	22.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	648	0	395	0	0	152	490
Future Vol, veh/h	0	0	0	0	0	648	0	395	0	0	152	490
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	648	0	395	0	0	152	490

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	395	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.23	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	652	0	-	0	0	-	-
Stage 1	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	-	0	652	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	58.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.994	-	-
HCM Control Delay (s)	-	58.9	-	-
HCM Lane LOS	-	F	-	-
HCM 95th %tile Q(veh)	-	15.3	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	360	5	0	0	182	0
Future Volume (vph)	360	5	0	0	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	360	5	0	0	182	0
Future Vol, veh/h	360	5	0	0	182	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	360	5	0	0	182	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	11.9	10
HCM LOS	B	A

Lane	EBLn1	SBLn1
Vol Left, %	99%	100%
Vol Thru, %	1%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	365	182
LT Vol	360	182
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	365	182
Geometry Grp	1	1
Degree of Util (X)	0.475	0.26
Departure Headway (Hd)	4.684	5.139
Convergence, Y/N	Yes	Yes
Cap	770	699
Service Time	2.712	3.172
HCM Lane V/C Ratio	0.474	0.26
HCM Control Delay	11.9	10
HCM Lane LOS	B	A
HCM 95th-tile Q	2.6	1



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	417	5	505	820	125	0
Future Volume (vph)	417	5	505	820	125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	137.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	417	5	505	820	125	0
Future Vol, veh/h	417	5	505	820	125	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	417	5	505	820	125	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	422	0	2250	420
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	1830	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1143	-	~ 46	633
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	140	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1143	-	~ 26	633
Mov Cap-2 Maneuver	-	-	-	-	~ 26	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	~ 78	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	$ 2016.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	26	-	-	1143	-
HCM Lane V/C Ratio	4.808	-	-	0.442	-
HCM Control Delay (s)	$ 2016.8	-	-	10.6	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	15.4	-	-	2.3	-

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	21	665	58	22	1203
Future Volume (vph)	54	21	665	58	22	1203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1387		1583			1690
Travel Time (s)	37.8		30.8			32.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	11

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	54	21	665	58	22	1203
Future Vol, veh/h	54	21	665	58	22	1203
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, %	3	3	3	3	3	3
Mvmt Flow	59	23	723	63	24	1308

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2111	755	0	0	786	0
Stage 1	755	-	-	-	-	-
Stage 2	1356	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	~ 56	407	-	-	828	-
Stage 1	462	-	-	-	-	-
Stage 2	239	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 50	407	-	-	828	-
Mov Cap-2 Maneuver	~ 50	-	-	-	-	-
Stage 1	462	-	-	-	-	-
Stage 2	214	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	294.4	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	66	828	-
HCM Lane V/C Ratio	-	-	1.235	0.029	-
HCM Control Delay (s)	-	-	294.4	9.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	6.6	0.1	-

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	37	283	49	40	1025
Future Volume (vph)	46	37	283	49	40	1025
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	960		1214			194
Travel Time (s)	26.2		23.6			3.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	37	283	49	40	1025
Future Vol, veh/h	46	37	283	49	40	1025
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, %	3	3	3	3	3	3
Mvmt Flow	50	40	308	53	43	1114

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1535	335	0	0	361	0
Stage 1	335	-	-	-	-	-
Stage 2	1200	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	127	705	-	-	1192	-
Stage 1	722	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	115	705	-	-	1192	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	257	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42.4	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	183	1192	-
HCM Lane V/C Ratio	-	-	0.493	0.036	-
HCM Control Delay (s)	-	-	42.4	8.1	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	2.4	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	478	9	267	1215	8	250
Future Volume (vph)	478	9	267	1215	8	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	209			2777	747	
Travel Time (s)	3.2			42.1	20.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.3

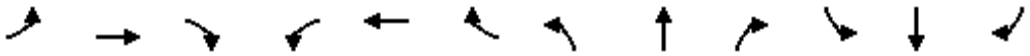
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	478	9	267	1215	8	250
Future Vol, veh/h	478	9	267	1215	8	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	520	10	290	1321	9	272

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	530	0	2426	525
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	1901	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1032	-	35	551
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	128	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1032	-	0	551
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	551	-	-	1032	-
HCM Lane V/C Ratio	0.509	-	-	0.281	-
HCM Control Delay (s)	18.1	-	-	9.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.9	-	-	1.2	-

2025 with SEIS Alternative 6 Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	5	10	0	0	0	0	20	30	153	20	0
Future Volume (vph)	220	5	10	0	0	0	0	20	30	153	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

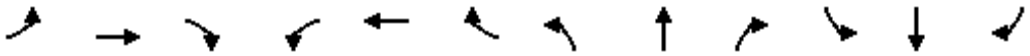
Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	220	5	10	0	0	0	0	20	30	153	20	0
Future Vol, veh/h	220	5	10	0	0	0	0	20	30	153	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	220	5	10	0	0	0	0	20	30	153	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	361	376	20	-	0	0	50	0	0
Stage 1	326	326	-	-	-	-	-	-	-
Stage 2	35	50	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	634	552	1052	0	-	-	1544	-	0
Stage 1	727	645	-	0	-	-	-	-	0
Stage 2	982	849	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	571	0	1052	-	-	-	1544	-	-
Mov Cap-2 Maneuver	571	0	-	-	-	-	-	-	-
Stage 1	727	0	-	-	-	-	-	-	-
Stage 2	884	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.3	0	6.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	583	1544	-
HCM Lane V/C Ratio	-	-	0.403	0.099	-
HCM Control Delay (s)	-	-	15.3	7.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	5	209	10	230	0	0	143	117
Future Volume (vph)	0	0	0	20	5	209	10	230	0	0	143	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

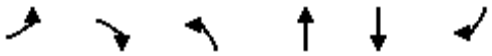
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	5	209	10	230	0	0	143	117
Future Vol, veh/h	0	0	0	20	5	209	10	230	0	0	143	117
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	20	5	209	10	230	0	0	143	117

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	452	510	230	260	0	-	-	-	0
Stage 1	250	250	-	-	-	-	-	-	-
Stage 2	202	260	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	562	464	804	1293	-	0	0	-	-
Stage 1	787	696	-	-	-	0	0	-	-
Stage 2	827	689	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	557	0	804	1293	-	-	-	-	-
Mov Cap-2 Maneuver	557	0	-	-	-	-	-	-	-
Stage 1	780	0	-	-	-	-	-	-	-
Stage 2	827	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1293	-	774	-	-
HCM Lane V/C Ratio	0.008	-	0.302	-	-
HCM Control Delay (s)	7.8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	44	50	70	359	210	34
Future Volume (vph)	44	50	70	359	210	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

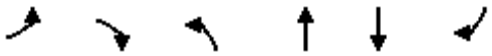
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	50	70	359	210	34
Future Vol, veh/h	44	50	70	359	210	34
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	44	50	70	359	210	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	726	227	244	0	-	0
Stage 1	227	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	373	781	1311	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	353	781	1311	-	-	-
Mov Cap-2 Maneuver	353	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	584	-	-	-	-	-

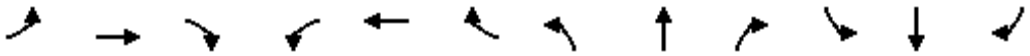
Approach	EB	NB	SB
HCM Control Delay, s	13.9	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1311	-	498	-	-
HCM Lane V/C Ratio	0.053	-	0.189	-	-
HCM Control Delay (s)	7.9	-	13.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	134	141	161	213	135	89
Future Volume (vph)	134	141	161	213	135	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1241	1236	
Travel Time (s)	19.3			24.2	24.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	0	11	0	0	0	11	296	0	0	226	20
Future Volume (vph)	20	0	11	0	0	0	11	296	0	0	226	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

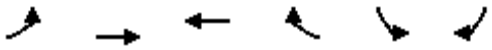
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	0	11	0	0	0	11	296	0	0	226	20
Future Vol, veh/h	20	0	11	0	0	0	11	296	0	0	226	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	20	0	11	0	0	0	11	296	0	0	226	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	555	555	237	560	565	296	247	0	0	296	0	0
Stage 1	237	237	-	318	318	-	-	-	-	-	-	-
Stage 2	318	318	-	242	247	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	435	433	790	442	437	748	1307	-	-	1265	-	-
Stage 1	755	700	-	698	657	-	-	-	-	-	-	-
Stage 2	683	645	-	766	706	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	431	428	789	433	432	748	1306	-	-	1265	-	-
Mov Cap-2 Maneuver	431	428	-	433	432	-	-	-	-	-	-	-
Stage 1	747	699	-	691	650	-	-	-	-	-	-	-
Stage 2	676	639	-	755	705	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1306	-	-	514	-	1265	-	-
HCM Lane V/C Ratio	0.008	-	-	0.06	-	-	-	-
HCM Control Delay (s)	7.8	0	-	12.5	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	612	668	20	20	14
Future Volume (vph)	12	612	668	20	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2594	1314		535	
Travel Time (s)		70.7	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

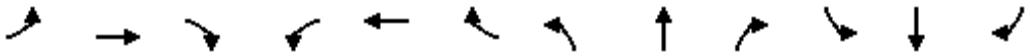
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	612	668	20	20	14
Future Vol, veh/h	12	612	668	20	20	14
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	12	612	668	20	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1314	681
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	636	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	888	-	-	-	176	454
Stage 1	-	-	-	-	508	-
Stage 2	-	-	-	-	531	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	888	-	-	-	172	453
Mov Cap-2 Maneuver	-	-	-	-	172	-
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	531	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	23.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	888	-	-	-	231
HCM Lane V/C Ratio	0.014	-	-	-	0.147
HCM Control Delay (s)	9.1	0	-	-	23.3
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	525	105	30	569	10	115	0	70	10	0	4
Future Volume (vph)	12	525	105	30	569	10	115	0	70	10	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

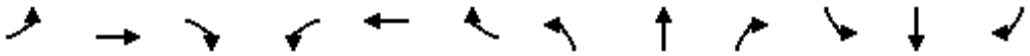
Intersection	
Int Delay, s/veh	12.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	525	105	30	569	10	115	0	70	10	0	4
Future Vol, veh/h	12	525	105	30	569	10	115	0	70	10	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	12	525	105	30	569	10	115	0	70	10	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	579	0	0	630	0	0	1239	1241	578	1271	1288	575
Stage 1	-	-	-	-	-	-	602	602	-	634	634	-
Stage 2	-	-	-	-	-	-	637	639	-	637	654	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	980	-	-	947	-	-	154	176	519	146	165	521
Stage 1	-	-	-	-	-	-	490	492	-	471	476	-
Stage 2	-	-	-	-	-	-	469	474	-	469	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	980	-	-	947	-	-	145	165	519	120	154	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	165	-	120	154	-
Stage 1	-	-	-	-	-	-	481	483	-	462	454	-
Stage 2	-	-	-	-	-	-	443	452	-	398	457	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	95.7	30.7
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	199	980	-	-	947	-	-	154
HCM Lane V/C Ratio	0.93	0.012	-	-	0.032	-	-	0.091
HCM Control Delay (s)	95.7	8.7	0	-	8.9	0	-	30.7
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	7.5	0	-	-	0.1	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	572	31	10	567	10	38	0	20	10	0	14
Future Volume (vph)	12	572	31	10	567	10	38	0	20	10	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	572	31	10	567	10	38	0	20	10	0	14
Future Vol, veh/h	12	572	31	10	567	10	38	0	20	10	0	14
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	12	572	31	10	567	10	38	0	20	10	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	577	0	0	607	0	0	1215	1213	592	1214	1223	572
Stage 1	-	-	-	-	-	-	616	616	-	592	592	-
Stage 2	-	-	-	-	-	-	599	597	-	622	631	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	982	-	-	971	-	-	147	170	479	160	181	523
Stage 1	-	-	-	-	-	-	453	459	-	496	497	-
Stage 2	-	-	-	-	-	-	463	468	-	478	477	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	982	-	-	967	-	-	139	164	477	149	174	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	139	164	-	149	174	-
Stage 1	-	-	-	-	-	-	443	449	-	487	490	-
Stage 2	-	-	-	-	-	-	444	461	-	450	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	33.3	20.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	184	982	-	-	967	-	-	256
HCM Lane V/C Ratio	0.315	0.012	-	-	0.01	-	-	0.094
HCM Control Delay (s)	33.3	8.7	0	-	8.8	0	-	20.5
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-	-	0.3



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	115	20	10	165
Future Volume (vph)	20	10	115	20	10	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

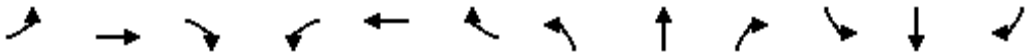
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	115	20	10	165
Future Vol, veh/h	20	10	115	20	10	165
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	115	20	10	165
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	8.4	7.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	6%	0%	85%
Vol Thru, %	0%	67%	15%
Vol Right, %	94%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	175	30	135
LT Vol	10	0	115
Through Vol	0	20	20
RT Vol	165	10	0
Lane Flow Rate	175	30	135
Geometry Grp	1	1	1
Degree of Util (X)	0.184	0.034	0.166
Departure Headway (Hd)	3.782	4.115	4.42
Convergence, Y/N	Yes	Yes	Yes
Cap	954	855	805
Service Time	1.782	2.213	2.482
HCM Lane V/C Ratio	0.183	0.035	0.168
HCM Control Delay	7.6	7.4	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0.1	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	250	130	50	180	80	70	68	115	80	61	34
Future Volume (vph)	107	250	130	50	180	80	70	68	115	80	61	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

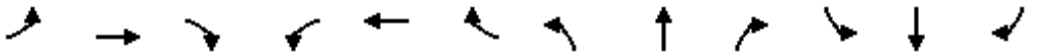
Intersection	
Int Delay, s/veh	13.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	107	250	130	50	180	80	70	68	115	80	61	34
Future Vol, veh/h	107	250	130	50	180	80	70	68	115	80	61	34
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	107	250	130	50	180	80	70	68	115	80	61	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	383	0	0	901	893	319	943	918	222
Stage 1	-	-	-	-	-	-	532	532	-	321	321	-
Stage 2	-	-	-	-	-	-	369	361	-	622	597	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1280	-	-	1165	-	-	258	280	719	244	273	820
Stage 1	-	-	-	-	-	-	529	524	-	693	653	-
Stage 2	-	-	-	-	-	-	649	624	-	476	493	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1279	-	-	1162	-	-	180	244	716	146	238	818
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	244	-	146	238	-
Stage 1	-	-	-	-	-	-	484	478	-	634	624	-
Stage 2	-	-	-	-	-	-	537	597	-	314	450	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	1.3	33.1	37
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	207	716	1279	-	-	1162	-	-	146	319
HCM Lane V/C Ratio	0.667	0.161	0.084	-	-	0.043	-	-	0.548	0.298
HCM Control Delay (s)	51.5	11	8.1	-	-	8.2	-	-	56.1	21
HCM Lane LOS	F	B	A	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	4.1	0.6	0.3	-	-	0.1	-	-	2.7	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	440	10	80	360	10	20	28	90	10	21	20
Future Volume (vph)	25	440	10	80	360	10	20	28	90	10	21	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

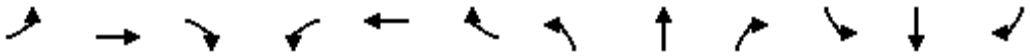
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	440	10	80	360	10	20	28	90	10	21	20
Future Vol, veh/h	25	440	10	80	360	10	20	28	90	10	21	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	25	440	10	80	360	10	20	28	90	10	21	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	452	0	0	1046	1032	447	1084	1032	373
Stage 1	-	-	-	-	-	-	497	497	-	530	530	-
Stage 2	-	-	-	-	-	-	549	535	-	554	502	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1162	-	-	1093	-	-	204	230	605	191	229	664
Stage 1	-	-	-	-	-	-	549	540	-	525	520	-
Stage 2	-	-	-	-	-	-	515	519	-	510	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1091	-	-	169	207	604	135	206	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	207	-	135	206	-
Stage 1	-	-	-	-	-	-	536	527	-	511	479	-
Stage 2	-	-	-	-	-	-	441	479	-	402	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	18.4	23.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	189	604	1156	-	-	1091	-	-	247
HCM Lane V/C Ratio	0.254	0.149	0.022	-	-	0.073	-	-	0.206
HCM Control Delay (s)	30.4	12	8.2	-	-	8.6	-	-	23.3
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0.5	0.1	-	-	0.2	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	463	100	50	369	30	173	20	20	20	20	25
Future Volume (vph)	49	463	100	50	369	30	173	20	20	20	20	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	28

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	463	100	50	369	30	173	20	20	20	20	25
Future Vol, veh/h	49	463	100	50	369	30	173	20	20	20	20	25
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	49	463	100	50	369	30	173	20	20	20	20	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	399	0	0	564	0	0	1121	1111	514	1115	1146	386
Stage 1	-	-	-	-	-	-	612	612	-	484	484	-
Stage 2	-	-	-	-	-	-	509	499	-	631	662	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1138	-	-	1008	-	-	183	209	560	187	201	666
Stage 1	-	-	-	-	-	-	480	484	-	568	555	-
Stage 2	-	-	-	-	-	-	547	544	-	472	462	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1138	-	-	1007	-	-	~ 145	183	559	150	176	665
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 145	183	-	150	176	-
Stage 1	-	-	-	-	-	-	449	453	-	532	519	-
Stage 2	-	-	-	-	-	-	473	509	-	407	432	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1	163.5	27
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	145	276	1138	-	-	1007	-	-	228
HCM Lane V/C Ratio	1.193	0.145	0.043	-	-	0.05	-	-	0.285
HCM Control Delay (s)	196.6	20.2	8.3	0	-	8.8	0	-	27
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	10	0.5	0.1	-	-	0.2	-	-	1.1

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

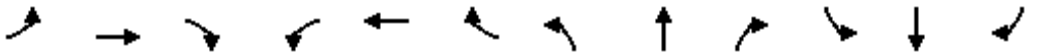
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	90	80	340	112	80	81	70	39	91	60
Future Volume (vph)	20	420	90	80	340	112	80	81	70	39	91	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 70.1
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





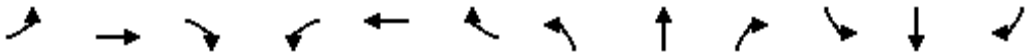
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	90	80	340	112	80	81	70	39	91	60
Future Volume (veh/h)	20	420	90	80	340	112	80	81	70	39	91	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	90	80	340	112	80	81	70	39	91	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	613	971	208	573	883	291	246	176	152	245	199	131
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	909	1445	310	868	1315	433	1224	917	793	1215	1034	682
Grp Volume(v), veh/h	20	0	510	80	0	452	80	0	151	39	0	151
Grp Sat Flow(s),veh/h/ln	909	0	1755	868	0	1748	1224	0	1710	1215	0	1716
Q Serve(g_s), s	0.7	0.0	9.1	3.2	0.0	7.7	4.2	0.0	5.3	2.0	0.0	5.3
Cycle Q Clear(g_c), s	8.4	0.0	9.1	12.3	0.0	7.7	9.5	0.0	5.3	7.3	0.0	5.3
Prop In Lane	1.00		0.18	1.00		0.25	1.00		0.46	1.00		0.40
Lane Grp Cap(c), veh/h	613	0	1179	573	0	1174	246	0	329	245	0	330
V/C Ratio(X)	0.03	0.00	0.43	0.14	0.00	0.39	0.32	0.00	0.46	0.16	0.00	0.46
Avail Cap(c_a), veh/h	613	0	1179	573	0	1174	471	0	643	468	0	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.8	0.0	5.1	8.0	0.0	4.9	28.4	0.0	24.2	27.4	0.0	24.2
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.5	0.0	1.0	1.1	0.0	1.4	0.4	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.9	0.6	0.0	2.4	1.3	0.0	2.2	0.6	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	0.0	6.3	8.5	0.0	5.9	29.4	0.0	25.6	27.8	0.0	25.6
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		530			532			231			190	
Approach Delay, s/veh		6.3			6.3			26.9			26.1	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		17.6		50.0		17.6				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		11.1		9.3		14.3		11.5				
Green Ext Time (p_c), s		4.2		1.2		4.0		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			12.0									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	317	150	10	258	20	160	20	10	20	10	31
Future Volume (vph)	36	317	150	10	258	20	160	20	10	20	10	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	317	150	10	258	20	160	20	10	20	10	31
Future Vol, veh/h	36	317	150	10	258	20	160	20	10	20	10	31
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	36	317	150	10	258	20	160	20	10	20	10	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	278	0	0	470	0	0	777	765	400	772	830	269
Stage 1	-	-	-	-	-	-	467	467	-	288	288	-
Stage 2	-	-	-	-	-	-	310	298	-	484	542	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1257	-	-	1081	-	-	315	335	652	312	301	760
Stage 1	-	-	-	-	-	-	578	563	-	711	666	-
Stage 2	-	-	-	-	-	-	702	669	-	557	514	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1257	-	-	1078	-	-	282	317	647	280	285	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	317	-	280	285	-
Stage 1	-	-	-	-	-	-	553	539	-	683	659	-
Stage 2	-	-	-	-	-	-	655	662	-	505	492	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	30.4	15.2
HCM LOS			D	C

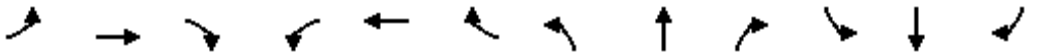
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	282	382	1257	-	-	1078	-	-	414
HCM Lane V/C Ratio	0.567	0.079	0.029	-	-	0.009	-	-	0.147
HCM Control Delay (s)	33.3	15.2	7.9	0	-	8.4	0	-	15.2
HCM Lane LOS	D	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.2	0.3	0.1	-	-	0	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	374	135	40	333	60	169	120	40	50	110	10
Future Volume (vph)	10	374	135	40	333	60	169	120	40	50	110	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





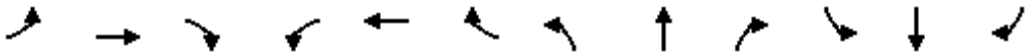
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	374	135	40	333	60	169	120	40	50	110	10
Future Volume (veh/h)	10	374	135	40	333	60	169	120	40	50	110	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	374	135	40	333	60	169	120	40	50	110	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	707	700	253	500	851	153	325	266	89	290	344	31
Arrive On Green	0.62	0.62	0.62	1.00	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	950	1132	409	883	1376	248	1207	1149	383	1194	1483	135
Grp Volume(v), veh/h	10	0	509	40	0	393	169	0	160	50	0	120
Grp Sat Flow(s),veh/h/ln	950	0	1541	883	0	1624	1207	0	1532	1194	0	1618
Q Serve(g_s), s	0.2	0.0	11.3	0.9	0.0	0.0	8.1	0.0	5.4	2.3	0.0	3.7
Cycle Q Clear(g_c), s	0.2	0.0	11.3	12.2	0.0	0.0	11.8	0.0	5.4	7.6	0.0	3.7
Prop In Lane	1.00		0.27	1.00		0.15	1.00		0.25	1.00		0.08
Lane Grp Cap(c), veh/h	707	0	953	500	0	1004	325	0	355	290	0	375
V/C Ratio(X)	0.01	0.00	0.53	0.08	0.00	0.39	0.52	0.00	0.45	0.17	0.00	0.32
Avail Cap(c_a), veh/h	707	0	953	500	0	1004	337	0	370	302	0	391
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.00	0.92	0.94	0.00	0.94	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.4	0.0	6.5	1.9	0.0	0.0	24.0	0.0	19.8	23.0	0.0	19.1
Incr Delay (d2), s/veh	0.0	0.0	2.0	0.3	0.0	1.1	0.5	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.3	0.1	0.0	0.3	2.2	0.0	1.8	0.6	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.4	0.0	8.5	2.1	0.0	1.1	24.5	0.0	20.1	23.2	0.0	19.3
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	B
Approach Vol, veh/h		519			433			329			170	
Approach Delay, s/veh		8.4			1.2			22.4			20.4	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.6		18.4		41.6		18.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		13.3		9.6		14.2		13.8				
Green Ext Time (p_c), s		3.8		0.2		2.9		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	240	83	10	181	10	80	10	30	10	10	17
Future Volume (vph)	14	240	83	10	181	10	80	10	30	10	10	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

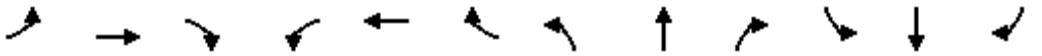
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	240	83	10	181	10	80	10	30	10	10	17
Future Vol, veh/h	14	240	83	10	181	10	80	10	30	10	10	17
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	14	240	83	10	181	10	80	10	30	10	10	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.9	9.5	9.4	8.4
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	4%	5%	27%
Vol Thru, %	8%	71%	90%	27%
Vol Right, %	25%	25%	5%	46%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	337	201	37
LT Vol	80	14	10	10
Through Vol	10	240	181	10
RT Vol	30	83	10	17
Lane Flow Rate	120	337	201	37
Geometry Grp	1	1	1	1
Degree of Util (X)	0.174	0.425	0.263	0.052
Departure Headway (Hd)	5.224	4.538	4.717	5.088
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	683	792	758	698
Service Time	3.288	2.58	2.767	3.162
HCM Lane V/C Ratio	0.176	0.426	0.265	0.053
HCM Control Delay	9.4	10.9	9.5	8.4
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.6	2.1	1.1	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	404	20	20	373	76	20	14	20	81	22	30
Future Volume (vph)	30	404	20	20	373	76	20	14	20	81	22	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1615	0	1736	1596	0	0	1757	1384	0	1757	1398
Flt Permitted	0.486			0.502				0.797			0.749	
Satd. Flow (perm)	877	1615	0	913	1596	0	0	1433	1354	0	1366	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			31				27			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	424	0	20	449	0	0	34	20	0	103	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	43.8	43.8		43.8	43.8			10.6	43.8		10.6	43.8
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.18	0.73		0.18	0.73
v/c Ratio	0.05	0.36		0.03	0.38			0.13	0.02		0.43	0.03
Control Delay	4.1	4.6		4.9	5.9			20.0	2.1		26.4	2.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.1	4.6		4.9	5.9			20.0	2.1		26.4	2.4
LOS	A	A		A	A			C	A		C	A
Approach Delay		4.5			5.9			13.4			21.0	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	

Intersection Signal Delay: 7.5 Intersection LOS: A
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	279	10	0	0	255
Future Volume (vph)	10	279	10	0	0	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	279	10	0	0	255
Future Vol, veh/h	10	279	10	0	0	255
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	10	279	10	0	0	255

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	265	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	255	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	707	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	769	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	707	1048	-	-	-	-
Mov Cap-2 Maneuver	707	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	769	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1031	-
HCM Lane V/C Ratio	-	0.28	-
HCM Control Delay (s)	-	9.8	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	235	20
Future Volume (vph)	0	0	10	0	235	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

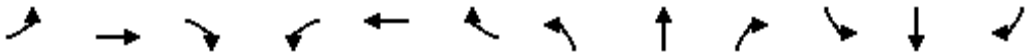
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	235	20
Future Vol, veh/h	0	0	10	0	235	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	235	20

Major/Minor	Minor2		Major2	
Conflicting Flow All	490	20	0	0
Stage 1	490	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	454	1008	-	-
Stage 1	520	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1008	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	74	14	10	10	94	341	14	10	342	20
Future Volume (vph)	20	10	74	14	10	10	94	341	14	10	342	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

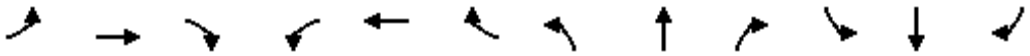
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	10	74	14	10	10	94	341	14	10	342	20
Future Vol, veh/h	20	10	74	14	10	10	94	341	14	10	342	20
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	20	10	74	14	10	10	94	341	14	10	342	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	942	939	375	975	942	374	373	0	0	368	0	0
Stage 1	383	383	-	549	549	-	-	-	-	-	-	-
Stage 2	559	556	-	426	393	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	245	266	676	233	265	677	1191	-	-	1185	-	-
Stage 1	644	616	-	524	520	-	-	-	-	-	-	-
Stage 2	517	516	-	610	609	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	209	232	661	179	231	660	1179	-	-	1170	-	-
Mov Cap-2 Maneuver	209	232	-	179	231	-	-	-	-	-	-	-
Stage 1	574	603	-	466	462	-	-	-	-	-	-	-
Stage 2	443	459	-	521	596	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.6	21.7	1.7	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1179	-	-	415	249	1170	-	-
HCM Lane V/C Ratio	0.08	-	-	0.251	0.137	0.009	-	-
HCM Control Delay (s)	8.3	0	-	16.6	21.7	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	24	14	0	10	41	239	11	0	204	10
Future Volume (vph)	0	0	24	14	0	10	41	239	11	0	204	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

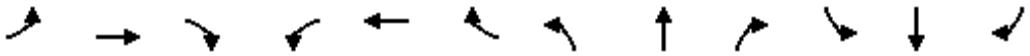
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	24	14	0	10	41	239	11	0	204	10
Future Vol, veh/h	0	0	24	14	0	10	41	239	11	0	204	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	0	0	24	14	0	10	41	239	11	0	204	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	541	541	209	548	541	245	214	0	0	250	0	0
Stage 1	209	209	-	327	327	-	-	-	-	-	-	-
Stage 2	332	332	-	221	214	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	455	451	836	414	417	741	1356	-	-	1316	-	-
Stage 1	798	733	-	640	609	-	-	-	-	-	-	-
Stage 2	686	648	-	732	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	437	435	836	391	402	741	1356	-	-	1316	-	-
Mov Cap-2 Maneuver	437	435	-	391	402	-	-	-	-	-	-	-
Stage 1	770	733	-	618	588	-	-	-	-	-	-	-
Stage 2	653	625	-	711	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	12.8	1.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1356	-	-	836	487	1316	-	-
HCM Lane V/C Ratio	0.03	-	-	0.029	0.049	-	-	-
HCM Control Delay (s)	7.7	0	-	9.4	12.8	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	117	10	31	126	12	10	10	34	13	10	10
Future Volume (vph)	10	117	10	31	126	12	10	10	34	13	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	117	10	31	126	12	10	10	34	13	10	10
Future Vol, veh/h	10	117	10	31	126	12	10	10	34	13	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	117	10	31	126	12	10	10	34	13	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	138	0	0	127	0	0	346	342	122	358	341	132
Stage 1	-	-	-	-	-	-	142	142	-	194	194	-
Stage 2	-	-	-	-	-	-	204	200	-	164	147	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1446	-	-	1453	-	-	612	583	935	601	584	923
Stage 1	-	-	-	-	-	-	866	783	-	812	744	-
Stage 2	-	-	-	-	-	-	803	739	-	843	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1446	-	-	1453	-	-	584	566	935	558	566	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	584	566	-	558	566	-
Stage 1	-	-	-	-	-	-	860	778	-	806	727	-
Stage 2	-	-	-	-	-	-	765	722	-	796	774	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.4	10.1	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	759	1446	-	-	1453	-	-	637
HCM Lane V/C Ratio	0.071	0.007	-	-	0.021	-	-	0.052
HCM Control Delay (s)	10.1	7.5	0	-	7.5	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	28	346	57	53	223
Future Volume (vph)	31	28	346	57	53	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1004		2032			1241
Travel Time (s)	27.4		39.6			24.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	50%	3%	50%	50%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	28	346	57	53	223
Future Vol, veh/h	31	28	346	57	53	223
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, %	50	50	3	50	50	3
Mvmt Flow	34	30	376	62	58	242

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	765	407	0	0	438	0
Stage 1	407	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.9	6.7	-	-	4.6	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	-	-	2.65	-
Pot Cap-1 Maneuver	311	552	-	-	908	-
Stage 1	580	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	288	552	-	-	908	-
Mov Cap-2 Maneuver	288	-	-	-	-	-
Stage 1	580	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	373	908	-
HCM Lane V/C Ratio	-	-	0.172	0.063	-
HCM Control Delay (s)	-	-	16.6	9.2	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	13	294	53	20	207
Future Volume (vph)	17	13	294	53	20	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	817		1236			172
Travel Time (s)	22.3		24.1			3.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	13	294	53	20	207
Future Vol, veh/h	17	13	294	53	20	207
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	14	320	58	22	225

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	618	349	0	0	378	0
Stage 1	349	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	451	692	-	-	1175	-
Stage 1	712	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	442	692	-	-	1175	-
Mov Cap-2 Maneuver	442	-	-	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	758	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	442	692	1175	-
HCM Lane V/C Ratio	-	-	0.042	0.02	0.019	-
HCM Control Delay (s)	-	-	13.5	10.3	8.1	0
HCM Lane LOS	-	-	B	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	493	28	189	493	23	129
Future Volume (vph)	493	28	189	493	23	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	392			2594	1176	
Travel Time (s)	5.9			39.3	32.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.6

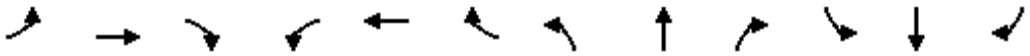
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	493	28	189	493	23	129
Future Vol, veh/h	493	28	189	493	23	129
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	536	30	205	536	25	140

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	566	0	1497	551
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	946	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1001	-	134	532
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	376	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1001	-	95	532
Mov Cap-2 Maneuver	-	-	-	-	95	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	266	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	20.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	95	532	-	-	1001	-
HCM Lane V/C Ratio	0.263	0.264	-	-	0.205	-
HCM Control Delay (s)	55.9	14.2	-	-	9.5	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	1	1.1	-	-	0.8	-

2025 with SEIS Alternative 6 Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	5	10	0	0	0	0	10	35	168	20	0
Future Volume (vph)	450	5	10	0	0	0	0	10	35	168	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

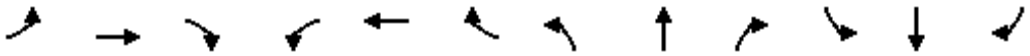
Intersection	
Int Delay, s/veh	26.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	450	5	10	0	0	0	0	10	35	168	20	0
Future Vol, veh/h	450	5	10	0	0	0	0	10	35	168	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	450	5	10	0	0	0	0	10	35	168	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	384	401	20	-	0	0	45	0	0
Stage 1	356	356	-	-	-	-	-	-	-
Stage 2	28	45	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	621	539	1061	0	-	-	1444	-	0
Stage 1	711	631	-	0	-	-	-	-	0
Stage 2	997	859	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	548	0	1061	-	-	-	1444	-	-
Mov Cap-2 Maneuver	548	0	-	-	-	-	-	-	-
Stage 1	711	0	-	-	-	-	-	-	-
Stage 2	879	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.7	0	7
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	554	1444	-
HCM Lane V/C Ratio	-	-	0.839	0.116	-
HCM Control Delay (s)	-	-	36.7	7.8	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	8.8	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	5	254	5	455	0	0	148	117
Future Volume (vph)	0	0	0	40	5	254	5	455	0	0	148	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

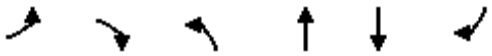
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	40	5	254	5	455	0	0	148	117
Future Vol, veh/h	0	0	0	40	5	254	5	455	0	0	148	117
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	40	5	254	5	455	0	0	148	117

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	672	730	455	265	0	-	-	-	0
Stage 1	465	465	-	-	-	-	-	-	-
Stage 2	207	265	-	-	-	-	-	-	-
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-
Pot Cap-1 Maneuver	400	333	577	1305	-	0	0	-	-
Stage 1	604	540	-	-	-	0	0	-	-
Stage 2	795	665	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	398	0	577	1305	-	-	-	-	-
Mov Cap-2 Maneuver	398	0	-	-	-	-	-	-	-
Stage 1	601	0	-	-	-	-	-	-	-
Stage 2	795	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1305	-	544	-	-
HCM Lane V/C Ratio	0.004	-	0.55	-	-
HCM Control Delay (s)	7.8	0	19.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	3.3	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	65	50	659	200	24
Future Volume (vph)	29	65	50	659	200	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

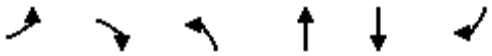
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	65	50	659	200	24
Future Vol, veh/h	29	65	50	659	200	24
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	29	65	50	659	200	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	971	212	224	0	-	0
Stage 1	212	-	-	-	-	-
Stage 2	759	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	268	801	1345	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	258	801	1345	-	-	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	443	-	-	-	-	-

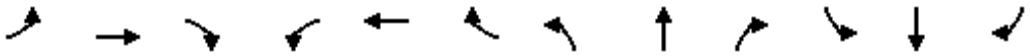
Approach	EB	NB	SB
HCM Control Delay, s	14.2	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1345	-	486	-	-
HCM Lane V/C Ratio	0.037	-	0.193	-	-
HCM Control Delay (s)	7.8	-	14.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	144	106	331	328	140	134
Future Volume (vph)	144	106	331	328	140	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1546	1154	
Travel Time (s)	19.3			30.1	22.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	31	0	0	0	16	416	0	0	246	40
Future Volume (vph)	25	0	31	0	0	0	16	416	0	0	246	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

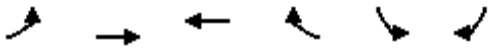
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	31	0	0	0	16	416	0	0	246	40
Future Vol, veh/h	25	0	31	0	0	0	16	416	0	0	246	40
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	31	0	0	0	16	416	0	0	246	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	714	714	266	730	734	416	286	0	0	416	0	0
Stage 1	266	266	-	448	448	-	-	-	-	-	-	-
Stage 2	448	448	-	282	286	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	340	351	761	340	350	641	1276	-	-	1138	-	-
Stage 1	728	680	-	594	576	-	-	-	-	-	-	-
Stage 2	580	564	-	729	679	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	345	761	322	344	641	1276	-	-	1138	-	-
Mov Cap-2 Maneuver	336	345	-	322	344	-	-	-	-	-	-	-
Stage 1	716	680	-	584	567	-	-	-	-	-	-	-
Stage 2	571	555	-	699	679	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1276	-	-	486	-	1138	-	-
HCM Lane V/C Ratio	0.013	-	-	0.115	-	-	-	-
HCM Control Delay (s)	7.9	0	-	13.4	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	662	783	30	20	14
Future Volume (vph)	7	662	783	30	20	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2804	1314		535	
Travel Time (s)		76.5	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

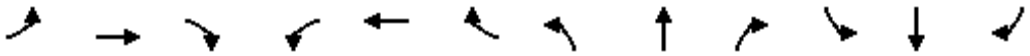
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	662	783	30	20	14
Future Vol, veh/h	7	662	783	30	20	14
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	7	662	783	30	20	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	813	0	-	0	1474	805
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	676	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	805	-	-	-	141	386
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	805	-	-	-	139	383
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	28.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	805	-	-	-	188
HCM Lane V/C Ratio	0.009	-	-	-	0.181
HCM Control Delay (s)	9.5	0	-	-	28.3
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	565	130	40	634	5	160	0	85	0	0	4
Future Volume (vph)	2	565	130	40	634	5	160	0	85	0	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	48.4

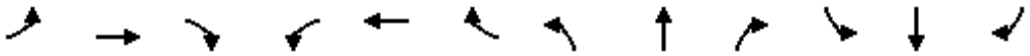
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	565	130	40	634	5	160	0	85	0	0	4
Future Vol, veh/h	2	565	130	40	634	5	160	0	85	0	0	4
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	2	565	130	40	634	5	160	0	85	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	639	0	0	699	0	0	1357	1357	635	1395	1420	637
Stage 1	-	-	-	-	-	-	638	638	-	717	717	-
Stage 2	-	-	-	-	-	-	719	719	-	678	703	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	935	-	-	893	-	-	~ 127	150	480	120	138	481
Stage 1	-	-	-	-	-	-	467	472	-	424	437	-
Stage 2	-	-	-	-	-	-	421	434	-	445	443	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	935	-	-	890	-	-	~ 118	138	478	93	127	481
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 118	138	-	93	127	-
Stage 1	-	-	-	-	-	-	463	468	-	422	406	-
Stage 2	-	-	-	-	-	-	388	404	-	364	439	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	$ 319.6	12.5
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	160	935	-	-	890	-	-	481
HCM Lane V/C Ratio	1.531	0.002	-	-	0.045	-	-	0.008
HCM Control Delay (s)	$ 319.6	8.9	0	-	9.2	0	-	12.5
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	16.3	0	-	-	0.1	-	-	0

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	647	11	5	667	10	23	5	5	20	0	29
Future Volume (vph)	22	647	11	5	667	10	23	5	5	20	0	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	647	11	5	667	10	23	5	5	20	0	29
Future Vol, veh/h	22	647	11	5	667	10	23	5	5	20	0	29
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	22	647	11	5	667	10	23	5	5	20	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	678	0	0	663	0	0	1399	1390	660	1387	1390	673
Stage 1	-	-	-	-	-	-	702	702	-	683	683	-
Stage 2	-	-	-	-	-	-	697	688	-	704	707	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	895	-	-	916	-	-	73	90	328	122	144	459
Stage 1	-	-	-	-	-	-	305	321	-	442	452	-
Stage 2	-	-	-	-	-	-	307	327	-	431	441	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	894	-	-	912	-	-	66	85	326	110	136	459
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	85	-	110	136	-
Stage 1	-	-	-	-	-	-	292	307	-	424	447	-
Stage 2	-	-	-	-	-	-	285	324	-	400	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	81.5	28.7
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	78	894	-	-	912	-	-	200
HCM Lane V/C Ratio	0.423	0.025	-	-	0.005	-	-	0.245
HCM Control Delay (s)	81.5	9.1	0	-	9	0	-	28.7
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0	-	-	0.9



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	150	10	30	205
Future Volume (vph)	25	10	150	10	30	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

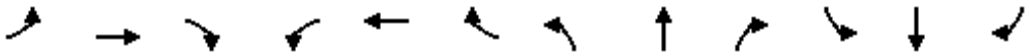
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	150	10	30	205
Future Vol, veh/h	25	10	150	10	30	205
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	150	10	30	205
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	8.9	8.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	13%	0%	94%
Vol Thru, %	0%	71%	6%
Vol Right, %	87%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	235	35	160
LT Vol	30	0	150
Through Vol	0	25	10
RT Vol	205	10	0
Lane Flow Rate	235	35	160
Geometry Grp	1	1	1
Degree of Util (X)	0.256	0.043	0.207
Departure Headway (Hd)	3.924	4.405	4.668
Convergence, Y/N	Yes	Yes	Yes
Cap	919	814	774
Service Time	1.934	2.427	2.668
HCM Lane V/C Ratio	0.256	0.043	0.207
HCM Control Delay	8.3	7.6	8.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	0.1	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	350	200	55	195	100	75	88	155	80	81	44
Future Volume (vph)	132	350	200	55	195	100	75	88	155	80	81	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	46.8

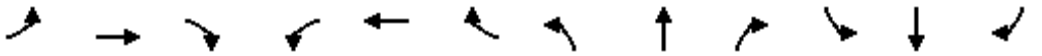
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	132	350	200	55	195	100	75	88	155	80	81	44
Future Vol, veh/h	132	350	200	55	195	100	75	88	155	80	81	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	132	350	200	55	195	100	75	88	155	80	81	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	550	0	0	1132	1119	450	1191	1169	245
Stage 1	-	-	-	-	-	-	714	714	-	355	355	-
Stage 2	-	-	-	-	-	-	418	405	-	836	814	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1255	-	-	1005	-	-	180	207	609	163	191	789
Stage 1	-	-	-	-	-	-	422	435	-	658	626	-
Stage 2	-	-	-	-	-	-	612	598	-	359	389	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1255	-	-	1005	-	-	92	175	609	~ 66	162	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	175	-	~ 66	162	-
Stage 1	-	-	-	-	-	-	378	389	-	589	592	-
Stage 2	-	-	-	-	-	-	472	565	-	185	348	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	1.4	136.3	135.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	124	609	1255	-	-	1005	-	-	66	225
HCM Lane V/C Ratio	1.315	0.255	0.105	-	-	0.055	-	-	1.212	0.556
HCM Control Delay (s)	253.7	12.9	8.2	-	-	8.8	-	-	286.2	39.3
HCM Lane LOS	F	B	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	10.6	1	0.4	-	-	0.2	-	-	6.4	3

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	545	25	70	370	0	40	18	140	0	31	5
Future Volume (vph)	15	545	25	70	370	0	40	18	140	0	31	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

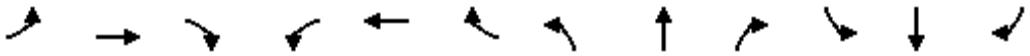
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	545	25	70	370	0	40	18	140	0	31	5
Future Vol, veh/h	15	545	25	70	370	0	40	18	140	0	31	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	15	545	25	70	370	0	40	18	140	0	31	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	574	0	0	1128	1103	562	1178	1115	379
Stage 1	-	-	-	-	-	-	592	592	-	511	511	-
Stage 2	-	-	-	-	-	-	536	511	-	667	604	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1177	-	-	989	-	-	179	209	521	125	159	546
Stage 1	-	-	-	-	-	-	487	489	-	443	444	-
Stage 2	-	-	-	-	-	-	523	532	-	357	399	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	985	-	-	137	191	519	79	145	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	191	-	79	145	-
Stage 1	-	-	-	-	-	-	479	481	-	437	412	-
Stage 2	-	-	-	-	-	-	442	494	-	248	392	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.4	23	33.7
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	150	519	1176	-	-	985	-	-	161
HCM Lane V/C Ratio	0.387	0.27	0.013	-	-	0.071	-	-	0.224
HCM Control Delay (s)	43.4	14.5	8.1	-	-	8.9	-	-	33.7
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.7	1.1	0	-	-	0.2	-	-	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	468	130	60	409	20	243	40	20	15	15	30
Future Volume (vph)	39	468	130	60	409	20	243	40	20	15	15	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	78.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	468	130	60	409	20	243	40	20	15	15	30
Future Vol, veh/h	39	468	130	60	409	20	243	40	20	15	15	30
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	39	468	130	60	409	20	243	40	20	15	15	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	430	0	0	600	0	0	1176	1163	536	1182	1218	421
Stage 1	-	-	-	-	-	-	613	613	-	540	540	-
Stage 2	-	-	-	-	-	-	563	550	-	642	678	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	1114	-	-	977	-	-	~ 166	192	539	168	182	637
Stage 1	-	-	-	-	-	-	475	479	-	530	524	-
Stage 2	-	-	-	-	-	-	506	511	-	466	455	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1113	-	-	975	-	-	~ 132	166	537	119	158	636
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 132	166	-	119	158	-
Stage 1	-	-	-	-	-	-	448	452	-	501	481	-
Stage 2	-	-	-	-	-	-	429	469	-	386	430	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.1	$ 376.9	26.9
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	132	216	1113	-	-	975	-	-	224
HCM Lane V/C Ratio	1.841	0.278	0.035	-	-	0.062	-	-	0.268
HCM Control Delay (s)	$ 463.1	28	8.4	0	-	8.9	0	-	26.9
HCM Lane LOS	F	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	18.7	1.1	0.1	-	-	0.2	-	-	1

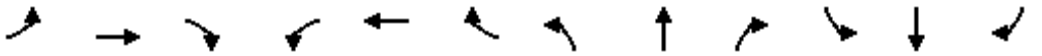
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	515	110	70	340	152	85	76	105	44	146	60
Future Volume (vph)	60	515	110	70	340	152	85	76	105	44	146	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 84.8	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

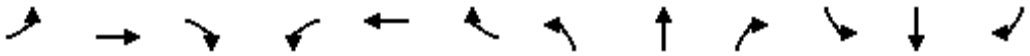




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	515	110	70	340	152	85	76	105	44	146	60
Future Volume (veh/h)	60	515	110	70	340	152	85	76	105	44	146	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	60	515	110	70	340	152	85	76	105	44	146	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	559	982	210	468	811	362	220	157	216	233	279	115
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	889	1469	314	793	1213	542	1129	682	942	1154	1214	499
Grp Volume(v), veh/h	60	0	625	70	0	492	85	0	181	44	0	206
Grp Sat Flow(s),veh/h/ln	889	0	1782	793	0	1755	1129	0	1624	1154	0	1712
Q Serve(g_s), s	3.0	0.0	16.2	4.5	0.0	11.7	6.4	0.0	8.7	3.1	0.0	9.5
Cycle Q Clear(g_c), s	14.7	0.0	16.2	20.6	0.0	11.7	16.0	0.0	8.7	11.8	0.0	9.5
Prop In Lane	1.00		0.18	1.00		0.31	1.00		0.58	1.00		0.29
Lane Grp Cap(c), veh/h	559	0	1192	468	0	1173	220	0	373	233	0	393
V/C Ratio(X)	0.11	0.00	0.52	0.15	0.00	0.42	0.39	0.00	0.49	0.19	0.00	0.52
Avail Cap(c_a), veh/h	559	0	1192	468	0	1173	341	0	547	356	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.3	0.0	7.6	12.9	0.0	6.9	37.5	0.0	30.2	35.3	0.0	30.5
Incr Delay (d2), s/veh	0.4	0.0	1.7	0.7	0.0	1.1	1.6	0.0	1.4	0.4	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	6.0	0.9	0.0	4.2	1.9	0.0	3.5	0.9	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.7	0.0	9.3	13.6	0.0	8.0	39.0	0.0	31.6	35.7	0.0	31.6
LnGrp LOS	B	A	A	B	A	A	D	A	C	D	A	C
Approach Vol, veh/h		685			562			266			250	
Approach Delay, s/veh		9.4			8.7			34.0			32.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		25.3		65.0		25.3				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		60.4		30.4		60.4		30.4				
Max Q Clear Time (g_c+I1), s		18.2		18.0		22.6		13.8				
Green Ext Time (p_c), s		5.9		1.6		4.5		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			16.1									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	292	180	20	278	30	205	20	5	15	10	36
Future Volume (vph)	21	292	180	20	278	30	205	20	5	15	10	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	292	180	20	278	30	205	20	5	15	10	36
Future Vol, veh/h	21	292	180	20	278	30	205	20	5	15	10	36
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	21	292	180	20	278	30	205	20	5	15	10	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	310	0	0	474	0	0	784	776	386	774	851	297
Stage 1	-	-	-	-	-	-	426	426	-	335	335	-
Stage 2	-	-	-	-	-	-	358	350	-	439	516	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1239	-	-	1088	-	-	310	327	660	318	299	747
Stage 1	-	-	-	-	-	-	604	584	-	683	646	-
Stage 2	-	-	-	-	-	-	658	631	-	601	538	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1237	-	-	1086	-	-	276	311	657	289	284	744
Mov Cap-2 Maneuver	-	-	-	-	-	-	276	311	-	289	284	-
Stage 1	-	-	-	-	-	-	588	569	-	665	630	-
Stage 2	-	-	-	-	-	-	602	616	-	561	524	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	44.5	14.3
HCM LOS			E	B

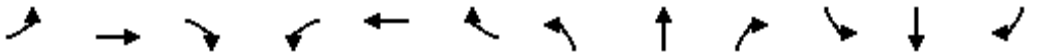
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	276	348	1237	-	-	1086	-	-	450
HCM Lane V/C Ratio	0.743	0.072	0.017	-	-	0.018	-	-	0.136
HCM Control Delay (s)	48	16.1	8	0	-	8.4	0	-	14.3
HCM Lane LOS	E	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	5.4	0.2	0.1	-	-	0.1	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	494	205	40	328	80	179	105	35	65	130	10
Future Volume (vph)	10	494	205	40	328	80	179	105	35	65	130	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





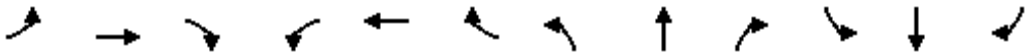
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	494	205	40	328	80	179	105	35	65	130	10
Future Volume (veh/h)	10	494	205	40	328	80	179	105	35	65	130	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	494	205	40	328	80	179	105	35	65	130	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	705	707	293	350	819	200	306	290	97	299	359	28
Arrive On Green	0.63	0.63	0.63	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	960	1115	463	740	1292	315	1219	1179	393	1179	1458	112
Grp Volume(v), veh/h	10	0	699	40	0	408	179	0	140	65	0	140
Grp Sat Flow(s),veh/h/ln	960	0	1577	740	0	1607	1219	0	1573	1179	0	1570
Q Serve(g_s), s	0.3	0.0	21.9	2.0	0.0	0.0	10.7	0.0	5.5	3.6	0.0	5.5
Cycle Q Clear(g_c), s	0.3	0.0	21.9	23.9	0.0	0.0	16.2	0.0	5.5	9.1	0.0	5.5
Prop In Lane	1.00		0.29	1.00		0.20	1.00		0.25	1.00		0.07
Lane Grp Cap(c), veh/h	705	0	1000	350	0	1019	306	0	387	299	0	386
V/C Ratio(X)	0.01	0.00	0.70	0.11	0.00	0.40	0.59	0.00	0.36	0.22	0.00	0.36
Avail Cap(c_a), veh/h	705	0	1000	350	0	1019	339	0	430	331	0	429
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	0.95	0.00	0.95	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	0.0	9.0	5.5	0.0	0.0	30.1	0.0	23.4	27.2	0.0	23.4
Incr Delay (d2), s/veh	0.0	0.0	3.5	0.6	0.0	1.1	1.1	0.0	0.2	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	7.2	0.3	0.0	0.3	3.1	0.0	2.0	1.0	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	0.0	12.6	6.1	0.0	1.1	31.2	0.0	23.6	27.3	0.0	23.6
LnGrp LOS	A	A	B	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h		709			448			319			205	
Approach Delay, s/veh		12.5			1.6			27.9			24.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.0		23.0		52.0		23.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		23.9		11.1		25.9		18.2				
Green Ext Time (p_c), s		5.6		0.4		3.0		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.0									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	195	98	15	206	10	85	20	25	5	10	42
Future Volume (vph)	24	195	98	15	206	10	85	20	25	5	10	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

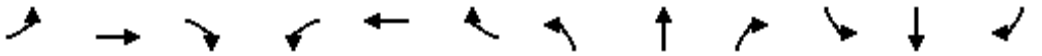
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	195	98	15	206	10	85	20	25	5	10	42
Future Vol, veh/h	24	195	98	15	206	10	85	20	25	5	10	42
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	24	195	98	15	206	10	85	20	25	5	10	42
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	9.9	9.7	8.4
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	65%	8%	6%	9%
Vol Thru, %	15%	62%	89%	18%
Vol Right, %	19%	31%	4%	74%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	317	231	57
LT Vol	85	24	15	5
Through Vol	20	195	206	10
RT Vol	25	98	10	42
Lane Flow Rate	130	317	231	57
Geometry Grp	1	1	1	1
Degree of Util (X)	0.192	0.398	0.306	0.078
Departure Headway (Hd)	5.317	4.522	4.763	4.919
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	792	751	720
Service Time	3.395	2.577	2.824	3.006
HCM Lane V/C Ratio	0.194	0.4	0.308	0.079
HCM Control Delay	9.7	10.6	9.9	8.4
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.7	1.9	1.3	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	514	30	30	378	81	15	14	20	86	22	45
Future Volume (vph)	35	514	30	30	378	81	15	14	20	86	22	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1628	0	1770	1625	0	0	1799	1411	0	1810	1439
Flt Permitted	0.480			0.429				0.830			0.750	
Satd. Flow (perm)	873	1628	0	795	1625	0	0	1528	1367	0	1399	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			26				22			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	544	0	30	459	0	0	29	20	0	108	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	57.5	57.5		57.5	57.5			11.9	57.5		11.9	57.5
Actuated g/C Ratio	0.77	0.77		0.77	0.77			0.16	0.77		0.16	0.77
v/c Ratio	0.05	0.44		0.05	0.37			0.12	0.02		0.49	0.04
Control Delay	5.0	5.5		4.8	5.5			25.4	2.4		34.9	2.0
Queue Delay	0.0	0.1		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.0	5.6		4.8	5.5			25.4	2.4		34.9	2.0
LOS	A	A		A	A			C	A		C	A
Approach Delay		5.6			5.5			16.0			25.2	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	

Intersection Signal Delay: 8.3 Intersection LOS: A
Intersection Capacity Utilization 68.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	254	15	0	0	320
Future Volume (vph)	20	254	15	0	0	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	254	15	0	0	320
Future Vol, veh/h	20	254	15	0	0	320
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	20	254	15	0	0	320

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	335	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	320	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	650	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	725	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	650	1050	-	-	-	-
Mov Cap-2 Maneuver	650	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1005	-
HCM Lane V/C Ratio	-	0.273	-
HCM Control Delay (s)	-	9.9	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	1.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	305	35
Future Volume (vph)	0	0	10	0	305	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

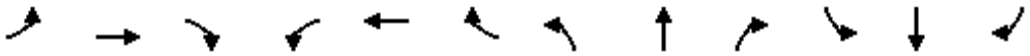
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	305	35
Future Vol, veh/h	0	0	10	0	305	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	305	35

Major/Minor	Minor2		Major2	
Conflicting Flow All	645	35	0	0
Stage 1	645	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	393	1044	-	-
Stage 1	471	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1044	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	45	74	14	10	10	74	396	19	10	297	25
Future Volume (vph)	20	45	74	14	10	10	74	396	19	10	297	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

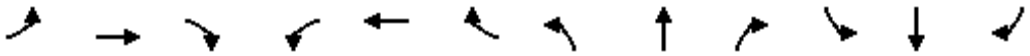
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	45	74	14	10	10	74	396	19	10	297	25
Future Vol, veh/h	20	45	74	14	10	10	74	396	19	10	297	25
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	20	45	74	14	10	10	74	396	19	10	297	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	937	919	338	971	922	449	335	0	0	428	0	0
Stage 1	343	343	-	567	567	-	-	-	-	-	-	-
Stage 2	594	576	-	404	355	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	247	273	709	234	272	614	1224	-	-	1121	-	-
Stage 1	676	641	-	512	510	-	-	-	-	-	-	-
Stage 2	495	505	-	627	633	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	210	242	690	163	242	589	1209	-	-	1107	-	-
Mov Cap-2 Maneuver	210	242	-	163	242	-	-	-	-	-	-	-
Stage 1	614	626	-	465	464	-	-	-	-	-	-	-
Stage 2	426	459	-	506	618	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.3	22.8	1.2	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1209	-	-	358	236	1107	-	-
HCM Lane V/C Ratio	0.061	-	-	0.388	0.144	0.009	-	-
HCM Control Delay (s)	8.2	0	-	21.3	22.8	8.3	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.8	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	14	14	0	10	46	259	11	0	189	5
Future Volume (vph)	0	0	14	14	0	10	46	259	11	0	189	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

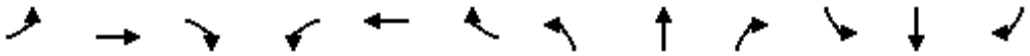
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	14	14	0	10	46	259	11	0	189	5
Future Vol, veh/h	0	0	14	14	0	10	46	259	11	0	189	5
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	0	0	14	14	0	10	46	259	11	0	189	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	554	554	192	556	551	265	194	0	0	270	0	0
Stage 1	192	192	-	357	357	-	-	-	-	-	-	-
Stage 2	362	362	-	199	194	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	419	419	810	445	445	779	1373	-	-	1282	-	-
Stage 1	774	712	-	665	632	-	-	-	-	-	-	-
Stage 2	625	598	-	807	744	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	401	403	810	424	428	779	1373	-	-	1282	-	-
Mov Cap-2 Maneuver	401	403	-	424	428	-	-	-	-	-	-	-
Stage 1	744	712	-	639	607	-	-	-	-	-	-	-
Stage 2	593	575	-	793	744	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	12.2	1.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1373	-	-	810	523	1282	-	-
HCM Lane V/C Ratio	0.034	-	-	0.017	0.046	-	-	-
HCM Control Delay (s)	7.7	0	-	9.5	12.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	92	5	31	141	37	0	25	29	23	0	25
Future Volume (vph)	20	92	5	31	141	37	0	25	29	23	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	92	5	31	141	37	0	25	29	23	0	25
Future Vol, veh/h	20	92	5	31	141	37	0	25	29	23	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	92	5	31	141	37	0	25	29	23	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	178	0	0	97	0	0	369	375	95	384	359	160
Stage 1	-	-	-	-	-	-	135	135	-	222	222	-
Stage 2	-	-	-	-	-	-	234	240	-	162	137	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1380	-	-	1509	-	-	571	542	937	578	571	890
Stage 1	-	-	-	-	-	-	847	768	-	785	723	-
Stage 2	-	-	-	-	-	-	749	691	-	845	787	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1380	-	-	1509	-	-	539	521	937	524	549	890
Mov Cap-2 Maneuver	-	-	-	-	-	-	539	521	-	524	549	-
Stage 1	-	-	-	-	-	-	834	756	-	773	706	-
Stage 2	-	-	-	-	-	-	711	675	-	780	775	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	1.1	10.7	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	684	1380	-	-	1509	-	-	667
HCM Lane V/C Ratio	0.079	0.014	-	-	0.021	-	-	0.072
HCM Control Delay (s)	10.7	7.6	0	-	7.4	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	28	631	57	53	193
Future Volume (vph)	31	28	631	57	53	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1141		1727			1546
Travel Time (s)	31.1		33.6			30.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	50%	3%	50%	50%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	28	631	57	53	193
Future Vol, veh/h	31	28	631	57	53	193
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, %	50	50	3	50	50	3
Mvmt Flow	34	30	686	62	58	210

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1043	717	0	0	748	0
Stage 1	717	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Critical Hdwy	6.9	6.7	-	-	4.6	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	-	-	2.65	-
Pot Cap-1 Maneuver	207	359	-	-	679	-
Stage 1	407	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	187	359	-	-	679	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	407	-	-	-	-	-
Stage 2	573	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.2	0	2.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	242	679	-
HCM Lane V/C Ratio	-	-	0.265	0.085	-
HCM Control Delay (s)	-	-	25.2	10.8	0
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	1	0.3	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	13	419	53	20	257
Future Volume (vph)	17	13	419	53	20	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1752	1568	1817	0	0	1837
Flt Permitted	0.950					0.996
Satd. Flow (perm)	1752	1568	1817	0	0	1837
Link Speed (mph)	25		35			35
Link Distance (ft)	1047		1154			255
Travel Time (s)	28.6		22.5			5.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	14	513	0	0	301
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	13	419	53	20	257
Future Vol, veh/h	17	13	419	53	20	257
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	14	455	58	22	279

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	807	484	0	0	513	0
Stage 1	484	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	349	581	-	-	1047	-
Stage 1	618	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	581	-	-	1047	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	340	581	1047	-
HCM Lane V/C Ratio	-	-	0.054	0.024	0.021	-
HCM Control Delay (s)	-	-	16.2	11.4	8.5	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	538	28	189	608	23	129
Future Volume (vph)	538	28	189	608	23	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1832	0	0	1823	1752	1568
Flt Permitted				0.988	0.950	
Satd. Flow (perm)	1832	0	0	1823	1752	1568
Link Speed (mph)	45			45	25	
Link Distance (ft)	182			2804	831	
Travel Time (s)	2.8			42.5	22.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	615	0	0	866	25	140
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 85.8%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.7

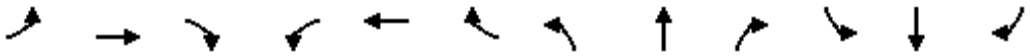
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	538	28	189	608	23	129
Future Vol, veh/h	538	28	189	608	23	129
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	585	30	205	661	25	140

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	615	0	1671	600
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	1071	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	960	-	105	499
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	328	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	960	-	70	499
Mov Cap-2 Maneuver	-	-	-	-	70	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	217	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	25.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	70	499	-	-	960	-
HCM Lane V/C Ratio	0.357	0.281	-	-	0.214	-
HCM Control Delay (s)	82.6	15	-	-	9.8	0
HCM Lane LOS	F	C	-	-	A	A
HCM 95th %tile Q(veh)	1.3	1.1	-	-	0.8	-

2025 with SEIS Alternative 6 Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	0	5	0	0	0	0	10	5	152	20	0
Future Volume (vph)	151	0	5	0	0	0	0	10	5	152	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

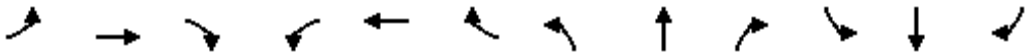
Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	151	0	5	0	0	0	0	10	5	152	20	0
Future Vol, veh/h	151	0	5	0	0	0	0	10	5	152	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	151	0	5	0	0	0	0	10	5	152	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	337	339	20	-	0	0	15	0	0
Stage 1	324	324	-	-	-	-	-	-	-
Stage 2	13	15	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	661	584	1061	0	-	-	1616	-	0
Stage 1	735	651	-	0	-	-	-	-	0
Stage 2	1012	885	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	598	0	1061	-	-	-	1616	-	-
Mov Cap-2 Maneuver	598	0	-	-	-	-	-	-	-
Stage 1	735	0	-	-	-	-	-	-	-
Stage 2	916	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0	6.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	606	1616	-
HCM Lane V/C Ratio	-	-	0.257	0.094	-
HCM Control Delay (s)	-	-	13	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	5	128	5	156	0	0	152	899
Future Volume (vph)	0	0	0	20	5	128	5	156	0	0	152	899
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

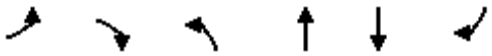
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	5	128	5	156	0	0	152	899
Future Vol, veh/h	0	0	0	20	5	128	5	156	0	0	152	899
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	20	5	128	5	156	0	0	152	899

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	768	1217	156	1051	0	-	-	-	0
Stage 1	166	166	-	-	-	-	-	-	-
Stage 2	602	1051	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	373	182	895	670	-	0	0	-	-
Stage 1	868	765	-	-	-	0	0	-	-
Stage 2	551	306	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	370	0	895	670	-	-	-	-	-
Mov Cap-2 Maneuver	370	0	-	-	-	-	-	-	-
Stage 1	861	0	-	-	-	-	-	-	-
Stage 2	551	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	670	-	751	-	-
HCM Lane V/C Ratio	0.007	-	0.204	-	-
HCM Control Delay (s)	10.4	0	11	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	45	15	269	1006	25
Future Volume (vph)	20	45	15	269	1006	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

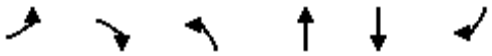
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	45	15	269	1006	25
Future Vol, veh/h	20	45	15	269	1006	25
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	20	45	15	269	1006	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1318	1019	1031	0	-	0
Stage 1	1019	-	-	-	-	-
Stage 2	299	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	172	285	682	-	-	-
Stage 1	345	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	168	285	682	-	-	-
Mov Cap-2 Maneuver	168	-	-	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	748	-	-	-	-	-

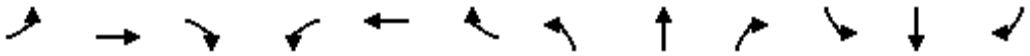
Approach	EB	NB	SB
HCM Control Delay, s	26.1	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	682	-	235	-	-
HCM Lane V/C Ratio	0.022	-	0.277	-	-
HCM Control Delay (s)	10.4	-	26.1	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	81	146	131	154	880	106
Future Volume (vph)	81	146	131	154	880	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1690	1223	
Travel Time (s)	19.3			32.9	23.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	0	21	0	0	0	16	209	0	0	960	15
Future Volume (vph)	15	0	21	0	0	0	16	209	0	0	960	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

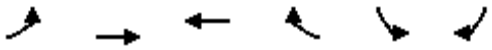
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	21	0	0	0	16	209	0	0	960	15
Future Vol, veh/h	15	0	21	0	0	0	16	209	0	0	960	15
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	15	0	21	0	0	0	16	209	0	0	960	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1209	1209	968	1219	1216	209	975	0	0	209	0	0
Stage 1	968	968	-	241	241	-	-	-	-	-	-	-
Stage 2	241	241	-	978	975	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	156	179	301	159	183	836	716	-	-	1368	-	-
Stage 1	299	326	-	767	710	-	-	-	-	-	-	-
Stage 2	751	697	-	304	332	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	153	175	301	145	178	836	716	-	-	1368	-	-
Mov Cap-2 Maneuver	153	175	-	145	178	-	-	-	-	-	-	-
Stage 1	292	326	-	748	692	-	-	-	-	-	-	-
Stage 2	732	680	-	283	332	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.1	0	0.7	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	716	-	-	215	-	1368	-	-
HCM Lane V/C Ratio	0.022	-	-	0.167	-	-	-	-
HCM Control Delay (s)	10.1	0	-	25.1	0	0	-	-
HCM Lane LOS	B	A	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	501	1113	20	10	13
Future Volume (vph)	7	501	1113	20	10	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2805	1314		535	
Travel Time (s)		76.5	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

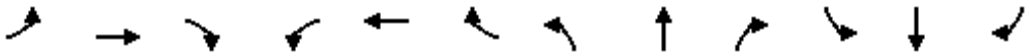
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	501	1113	20	10	13
Future Vol, veh/h	7	501	1113	20	10	13
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	7	501	1113	20	10	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1138	0	-	0	1643	1128
Stage 1	-	-	-	-	1128	-
Stage 2	-	-	-	-	515	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	618	-	-	-	111	251
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	604	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	615	-	-	-	108	250
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	31.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	615	-	-	-	159
HCM Lane V/C Ratio	0.011	-	-	-	0.145
HCM Control Delay (s)	10.9	0	-	-	31.4
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	437	67	20	1032	5	103	0	45	10	0	3
Future Volume (vph)	2	437	67	20	1032	5	103	0	45	10	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	21.1

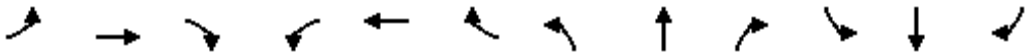
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	437	67	20	1032	5	103	0	45	10	0	3
Future Vol, veh/h	2	437	67	20	1032	5	103	0	45	10	0	3
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	2	437	67	20	1032	5	103	0	45	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1037	0	0	507	0	0	1554	1555	474	1572	1586	1035
Stage 1	-	-	-	-	-	-	478	478	-	1075	1075	-
Stage 2	-	-	-	-	-	-	1076	1077	-	497	511	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	674	-	-	1063	-	-	~ 92	112	588	90	109	284
Stage 1	-	-	-	-	-	-	566	554	-	268	298	-
Stage 2	-	-	-	-	-	-	264	294	-	559	540	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	674	-	-	1060	-	-	~ 87	106	586	80	103	284
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 87	106	-	80	103	-
Stage 1	-	-	-	-	-	-	562	550	-	267	285	-
Stage 2	-	-	-	-	-	-	249	281	-	514	536	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	240.5	48.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	117	674	-	-	1060	-	-	96
HCM Lane V/C Ratio	1.265	0.003	-	-	0.019	-	-	0.135
HCM Control Delay (s)	240.5	10.4	0	-	8.5	0	-	48.3
HCM Lane LOS	F	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	9.6	0	-	-	0.1	-	-	0.5

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	453	52	20	991	25	83	0	15	10	0	3
Future Volume (vph)	22	453	52	20	991	25	83	0	15	10	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	453	52	20	991	25	83	0	15	10	0	3
Future Vol, veh/h	22	453	52	20	991	25	83	0	15	10	0	3
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	22	453	52	20	991	25	83	0	15	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1016	0	0	509	0	0	1572	1583	483	1575	1597	1004
Stage 1	-	-	-	-	-	-	527	527	-	1044	1044	-
Stage 2	-	-	-	-	-	-	1045	1056	-	531	553	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	683	-	-	1061	-	-	89	109	584	90	108	296
Stage 1	-	-	-	-	-	-	535	528	-	279	309	-
Stage 2	-	-	-	-	-	-	276	302	-	536	518	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	1057	-	-	~ 82	99	582	82	98	296
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 82	99	-	82	98	-
Stage 1	-	-	-	-	-	-	509	502	-	266	295	-
Stage 2	-	-	-	-	-	-	261	289	-	499	493	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	187.3	47.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	94	683	-	-	1057	-	-	98
HCM Lane V/C Ratio	1.043	0.032	-	-	0.019	-	-	0.133
HCM Control Delay (s)	187.3	10.4	0	-	8.5	0	-	47.3
HCM Lane LOS	F	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	6.3	0.1	-	-	0.1	-	-	0.4

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	77	10	20	133
Future Volume (vph)	25	15	77	10	20	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

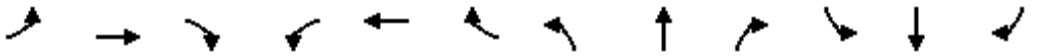
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	77	10	20	133
Future Vol, veh/h	25	15	77	10	20	133
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	77	10	20	133
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.4	8	7.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	13%	0%	89%
Vol Thru, %	0%	62%	11%
Vol Right, %	87%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	153	40	87
LT Vol	20	0	77
Through Vol	0	25	10
RT Vol	133	15	0
Lane Flow Rate	153	40	87
Geometry Grp	1	1	1
Degree of Util (X)	0.157	0.046	0.106
Departure Headway (Hd)	3.691	4.096	4.378
Convergence, Y/N	Yes	Yes	Yes
Cap	958	865	814
Service Time	1.765	2.164	2.429
HCM Lane V/C Ratio	0.16	0.046	0.107
HCM Control Delay	7.5	7.4	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	220	120	55	295	95	70	68	130	50	52	40
Future Volume (vph)	85	220	120	55	295	95	70	68	130	50	52	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

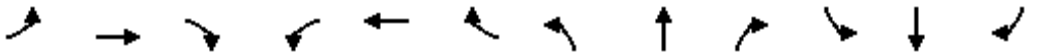
Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	220	120	55	295	95	70	68	130	50	52	40
Future Vol, veh/h	85	220	120	55	295	95	70	68	130	50	52	40
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	85	220	120	55	295	95	70	68	130	50	52	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	340	0	0	950	950	280	1002	963	344
Stage 1	-	-	-	-	-	-	450	450	-	453	453	-
Stage 2	-	-	-	-	-	-	500	500	-	549	510	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1169	-	-	1219	-	-	240	260	759	223	258	703
Stage 1	-	-	-	-	-	-	589	572	-	590	573	-
Stage 2	-	-	-	-	-	-	553	543	-	524	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1169	-	-	1219	-	-	171	230	759	131	228	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	230	-	131	228	-
Stage 1	-	-	-	-	-	-	546	530	-	547	547	-
Stage 2	-	-	-	-	-	-	450	519	-	351	502	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	1	35.1	30.4
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	196	759	1169	-	-	1219	-	-	131	323
HCM Lane V/C Ratio	0.704	0.171	0.073	-	-	0.045	-	-	0.382	0.285
HCM Control Delay (s)	58	10.7	8.3	-	-	8.1	-	-	48.5	20.5
HCM Lane LOS	F	B	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	4.4	0.6	0.2	-	-	0.1	-	-	1.6	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	370	5	60	505	40	20	43	60	5	62	50
Future Volume (vph)	75	370	5	60	505	40	20	43	60	5	62	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

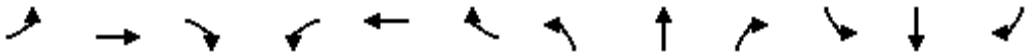
Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	370	5	60	505	40	20	43	60	5	62	50
Future Vol, veh/h	75	370	5	60	505	40	20	43	60	5	62	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	370	5	60	505	40	20	43	60	5	62	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	377	0	0	1226	1192	375	1221	1174	527
Stage 1	-	-	-	-	-	-	525	525	-	647	647	-
Stage 2	-	-	-	-	-	-	701	667	-	574	527	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	1027	-	-	1181	-	-	154	185	667	156	191	549
Stage 1	-	-	-	-	-	-	532	526	-	458	465	-
Stage 2	-	-	-	-	-	-	426	454	-	502	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1179	-	-	91	162	666	103	167	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	162	-	103	167	-
Stage 1	-	-	-	-	-	-	492	487	-	424	440	-
Stage 2	-	-	-	-	-	-	316	430	-	386	487	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	34.2	36.1
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	666	1025	-	-	1179	-	-	229
HCM Lane V/C Ratio	0.485	0.09	0.073	-	-	0.051	-	-	0.511
HCM Control Delay (s)	56.3	10.9	8.8	-	-	8.2	-	-	36.1
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.2	0.3	0.2	-	-	0.2	-	-	2.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	328	100	70	676	10	350	15	10	5	10	20
Future Volume (vph)	25	328	100	70	676	10	350	15	10	5	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	212.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	328	100	70	676	10	350	15	10	5	10	20
Future Vol, veh/h	25	328	100	70	676	10	350	15	10	5	10	20
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	25	328	100	70	676	10	350	15	10	5	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	694	0	0	431	0	0	1271	1265	383	1272	1310	693
Stage 1	-	-	-	-	-	-	431	431	-	829	829	-
Stage 2	-	-	-	-	-	-	840	834	-	443	481	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	897	-	-	1134	-	-	~ 145	170	667	146	160	447
Stage 1	-	-	-	-	-	-	605	585	-	368	388	-
Stage 2	-	-	-	-	-	-	361	385	-	598	557	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	890	-	-	1131	-	-	~ 117	146	664	118	137	442
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 117	146	-	118	137	-
Stage 1	-	-	-	-	-	-	581	562	-	352	346	-
Stage 2	-	-	-	-	-	-	~ 300	344	-	551	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.8	$ 912.5	24.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	117	212	890	-	-	1131	-	-	218
HCM Lane V/C Ratio	2.991	0.118	0.028	-	-	0.062	-	-	0.161
HCM Control Delay (s)	$ 976	24.2	9.2	0	-	8.4	0	-	24.6
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	33.1	0.4	0.1	-	-	0.2	-	-	0.6

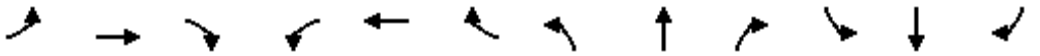
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	90	65	490	290	80	70	75	40	115	40
Future Volume (vph)	15	320	90	65	490	290	80	70	75	40	115	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 90.7	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





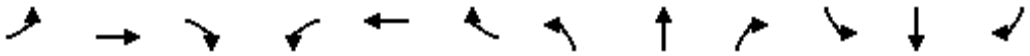
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	90	65	490	290	80	70	75	40	115	40
Future Volume (veh/h)	15	320	90	65	490	290	80	70	75	40	115	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	90	65	490	290	80	70	75	40	115	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	422	1011	284	701	792	469	205	149	159	208	239	83
Arrive On Green	0.72	0.72	0.72	0.72	0.72	0.72	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	692	1404	395	975	1101	652	1237	830	889	1248	1334	464
Grp Volume(v), veh/h	15	0	410	65	0	780	80	0	145	40	0	155
Grp Sat Flow(s),veh/h/ln	692	0	1799	975	0	1753	1237	0	1719	1248	0	1799
Q Serve(g_s), s	1.0	0.0	7.5	2.4	0.0	20.4	5.6	0.0	6.9	2.7	0.0	7.0
Cycle Q Clear(g_c), s	21.4	0.0	7.5	9.9	0.0	20.4	12.7	0.0	6.9	9.6	0.0	7.0
Prop In Lane	1.00		0.22	1.00		0.37	1.00		0.52	1.00		0.26
Lane Grp Cap(c), veh/h	422	0	1295	701	0	1261	205	0	308	208	0	322
V/C Ratio(X)	0.04	0.00	0.32	0.09	0.00	0.62	0.39	0.00	0.47	0.19	0.00	0.48
Avail Cap(c_a), veh/h	422	0	1295	701	0	1261	329	0	481	334	0	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	4.6	6.4	0.0	6.4	39.2	0.0	33.4	37.7	0.0	33.5
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.3	0.0	2.3	1.7	0.0	1.6	0.6	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.6	0.5	0.0	7.0	1.8	0.0	3.0	0.9	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	5.3	6.7	0.0	8.7	40.9	0.0	35.0	38.4	0.0	35.1
LnGrp LOS	B	A	A	A	A	A	D	A	D	D	A	D
Approach Vol, veh/h		425			845			225			195	
Approach Delay, s/veh		5.5			8.6			37.1			35.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		20.9		70.0		20.9				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		65.4		25.4		65.4		25.4				
Max Q Clear Time (g_c+I1), s		23.4		14.7		22.4		11.6				
Green Ext Time (p_c), s		3.3		1.1		8.4		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	216	110	10	243	20	525	15	10	15	10	18
Future Volume (vph)	22	216	110	10	243	20	525	15	10	15	10	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	91.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	216	110	10	243	20	525	15	10	15	10	18
Future Vol, veh/h	22	216	110	10	243	20	525	15	10	15	10	18
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	22	216	110	10	243	20	525	15	10	15	10	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	263	0	0	327	0	0	603	599	273	602	644	253
Stage 1	-	-	-	-	-	-	316	316	-	273	273	-
Stage 2	-	-	-	-	-	-	287	283	-	329	371	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1301	-	-	1238	-	-	~ 411	415	766	403	384	771
Stage 1	-	-	-	-	-	-	695	655	-	720	673	-
Stage 2	-	-	-	-	-	-	720	677	-	672	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1301	-	-	1237	-	-	~ 384	402	765	377	372	771
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 384	402	-	377	372	-
Stage 1	-	-	-	-	-	-	680	641	-	705	667	-
Stage 2	-	-	-	-	-	-	686	671	-	633	596	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	200.3	13.3
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	384	496	1301	-	-	1237	-	-	478
HCM Lane V/C Ratio	1.367	0.05	0.017	-	-	0.008	-	-	0.09
HCM Control Delay (s)	209.2	12.6	7.8	0	-	7.9	0	-	13.3
HCM Lane LOS	F	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	25.4	0.2	0.1	-	-	0	-	-	0.3

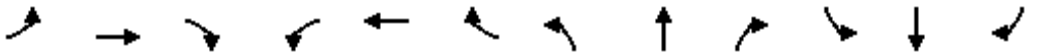
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	295	120	35	494	280	316	315	35	30	90	10
Future Volume (vph)	15	295	120	35	494	280	316	315	35	30	90	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

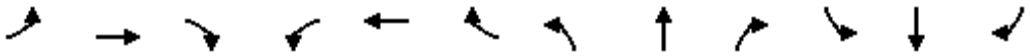




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	295	120	35	494	280	316	315	35	30	90	10
Future Volume (veh/h)	15	295	120	35	494	280	316	315	35	30	90	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	295	120	35	494	280	316	315	35	30	90	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	492	674	274	521	602	341	414	454	50	201	450	50
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	694	1133	461	976	1012	574	1282	1486	165	1019	1474	164
Grp Volume(v), veh/h	15	0	415	35	0	774	316	0	350	30	0	100
Grp Sat Flow(s),veh/h/ln	694	0	1594	976	0	1586	1282	0	1651	1019	0	1638
Q Serve(g_s), s	0.8	0.0	12.8	0.8	0.0	0.0	21.8	0.0	16.8	2.4	0.0	4.1
Cycle Q Clear(g_c), s	0.8	0.0	12.8	13.7	0.0	0.0	25.8	0.0	16.8	19.2	0.0	4.1
Prop In Lane	1.00		0.29	1.00		0.36	1.00		0.10	1.00		0.10
Lane Grp Cap(c), veh/h	492	0	948	521	0	943	414	0	504	201	0	500
V/C Ratio(X)	0.03	0.00	0.44	0.07	0.00	0.82	0.76	0.00	0.69	0.15	0.00	0.20
Avail Cap(c_a), veh/h	492	0	948	521	0	943	414	0	504	201	0	500
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.76	0.00	0.76	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	10.0	1.6	0.0	0.0	32.7	0.0	27.5	36.0	0.0	23.1
Incr Delay (d2), s/veh	0.1	0.0	1.4	0.2	0.0	6.2	7.4	0.0	3.4	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.6	0.1	0.0	1.6	7.5	0.0	7.0	0.6	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.4	1.8	0.0	6.2	40.1	0.0	31.0	36.1	0.0	23.2
LnGrp LOS	A	A	B	A	A	A	D	A	C	D	A	C
Approach Vol, veh/h		430			809			666			130	
Approach Delay, s/veh		11.3			6.0			35.3			26.2	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		14.8		21.2		15.7		27.8				
Green Ext Time (p_c), s		3.3		0.2		7.9		0.0				

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	161	70	10	168	10	75	10	10	5	10	20
Future Volume (vph)	15	161	70	10	168	10	75	10	10	5	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

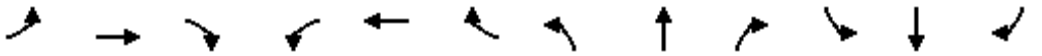
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	161	70	10	168	10	75	10	10	5	10	20
Future Vol, veh/h	15	161	70	10	168	10	75	10	10	5	10	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	15	161	70	10	168	10	75	10	10	5	10	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	8.9	8.8	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	79%	6%	5%	14%
Vol Thru, %	11%	65%	89%	29%
Vol Right, %	11%	28%	5%	57%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	246	188	35
LT Vol	75	15	10	5
Through Vol	10	161	168	10
RT Vol	10	70	10	20
Lane Flow Rate	95	246	188	35
Geometry Grp	1	1	1	1
Degree of Util (X)	0.132	0.294	0.234	0.045
Departure Headway (Hd)	4.995	4.307	4.481	4.675
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	716	834	801	763
Service Time	3.034	2.332	2.508	2.719
HCM Lane V/C Ratio	0.133	0.295	0.235	0.046
HCM Control Delay	8.8	9.1	8.9	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	1.2	0.9	0.1

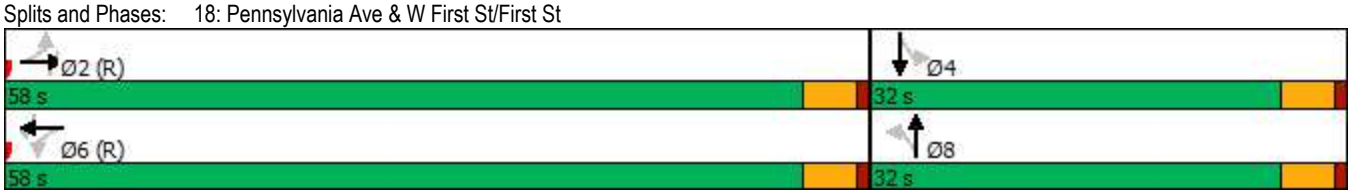


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	310	20	25	744	67	5	18	15	78	17	15
Future Volume (vph)	20	310	20	25	744	67	5	18	15	78	17	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1658	0	1770	1653	0	0	1879	1454	0	1826	1454
Flt Permitted	0.295			0.560				0.939			0.748	
Satd. Flow (perm)	549	1658	0	1036	1653	0	0	1782	1416	0	1415	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9				18			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	330	0	25	811	0	0	23	15	0	95	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	71.2	71.2		71.2	71.2			13.2	71.2		13.2	71.2
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.15	0.79		0.15	0.79
v/c Ratio	0.05	0.25		0.03	0.62			0.09	0.01		0.46	0.01
Control Delay	4.0	3.5		5.0	9.9			29.8	2.6		40.1	2.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.0	3.5		5.0	10.0			29.8	2.6		40.1	2.6
LOS	A	A		A	A			C	A		D	A
Approach Delay		3.5			9.8			19.1			35.0	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	

Intersection Signal Delay: 10.5 Intersection LOS: B
Intersection Capacity Utilization 81.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	656	20	0	0	215
Future Volume (vph)	30	656	20	0	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	11.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	656	20	0	0	215
Future Vol, veh/h	30	656	20	0	0	215
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	30	656	20	0	0	215

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	235	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	215	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	751	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	818	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	751	1055	-	-	-	-
Mov Cap-2 Maneuver	751	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	818	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1037	-
HCM Lane V/C Ratio	-	0.662	-
HCM Control Delay (s)	-	15	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	5.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	220	40
Future Volume (vph)	0	0	25	0	220	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

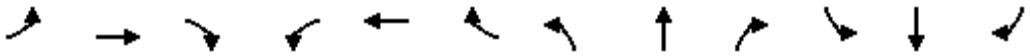
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	220	40
Future Vol, veh/h	0	0	25	0	220	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	220	40

Major/Minor	Minor2		Major2	
Conflicting Flow All	480	40	0	0
Stage 1	480	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	488	1037	-	-
Stage 1	558	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1037	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	35	60	20	5	10	95	225	10	5	311	40
Future Volume (vph)	5	35	60	20	5	10	95	225	10	5	311	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

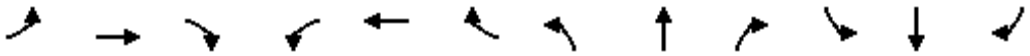
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	35	60	20	5	10	95	225	10	5	311	40
Future Vol, veh/h	5	35	60	20	5	10	95	225	10	5	311	40
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	5	35	60	20	5	10	95	225	10	5	311	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	815	786	356	824	801	266	366	0	0	240	0	0
Stage 1	356	356	-	425	425	-	-	-	-	-	-	-
Stage 2	459	430	-	399	376	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	298	326	693	294	320	778	1204	-	-	1327	-	-
Stage 1	666	633	-	611	590	-	-	-	-	-	-	-
Stage 2	586	587	-	631	620	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	257	289	677	222	284	751	1187	-	-	1321	-	-
Mov Cap-2 Maneuver	257	289	-	222	284	-	-	-	-	-	-	-
Stage 1	596	621	-	552	533	-	-	-	-	-	-	-
Stage 2	505	530	-	535	608	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	19.2	2.4	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1187	-	-	436	289	1321	-	-
HCM Lane V/C Ratio	0.08	-	-	0.229	0.121	0.004	-	-
HCM Control Delay (s)	8.3	0	-	15.7	19.2	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.9	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	21	27	0	5	36	143	6	0	233	10
Future Volume (vph)	0	0	21	27	0	5	36	143	6	0	233	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

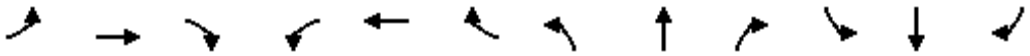
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	21	27	0	5	36	143	6	0	233	10
Future Vol, veh/h	0	0	21	27	0	5	36	143	6	0	233	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	21	27	0	5	36	143	6	0	233	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	459	459	238	467	461	146	243	0	0	149	0	0
Stage 1	238	238	-	218	218	-	-	-	-	-	-	-
Stage 2	221	221	-	249	243	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	516	502	806	509	500	906	1335	-	-	1445	-	-
Stage 1	770	712	-	789	726	-	-	-	-	-	-	-
Stage 2	786	724	-	759	708	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	502	487	806	485	486	906	1335	-	-	1445	-	-
Mov Cap-2 Maneuver	502	487	-	485	486	-	-	-	-	-	-	-
Stage 1	748	712	-	766	705	-	-	-	-	-	-	-
Stage 2	759	703	-	739	708	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	12.3	1.5	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1335	-	-	806	523	1445	-	-
HCM Lane V/C Ratio	0.027	-	-	0.026	0.061	-	-	-
HCM Control Delay (s)	7.8	0	-	9.6	12.3	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	150	5	16	101	11	10	0	11	27	0	5
Future Volume (vph)	10	150	5	16	101	11	10	0	11	27	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

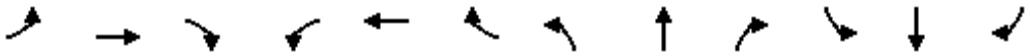
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	150	5	16	101	11	10	0	11	27	0	5
Future Vol, veh/h	10	150	5	16	101	11	10	0	11	27	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	150	5	16	101	11	10	0	11	27	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	112	0	0	155	0	0	314	317	153	317	314	107
Stage 1	-	-	-	-	-	-	173	173	-	139	139	-
Stage 2	-	-	-	-	-	-	141	144	-	178	175	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1490	-	-	1438	-	-	643	602	898	640	605	953
Stage 1	-	-	-	-	-	-	834	760	-	869	785	-
Stage 2	-	-	-	-	-	-	867	782	-	828	758	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1490	-	-	1438	-	-	630	591	898	623	594	953
Mov Cap-2 Maneuver	-	-	-	-	-	-	630	591	-	623	594	-
Stage 1	-	-	-	-	-	-	828	755	-	863	776	-
Stage 2	-	-	-	-	-	-	852	773	-	812	753	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.9	10	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	747	1490	-	-	1438	-	-	659
HCM Lane V/C Ratio	0.028	0.007	-	-	0.011	-	-	0.049
HCM Control Delay (s)	10	7.4	0	-	7.5	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	282	85	5	618	0	415	5	5	0	5	20
Future Volume (vph)	5	282	85	5	618	0	415	5	5	0	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	144.1

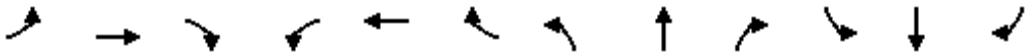
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	282	85	5	618	0	415	5	5	0	5	20
Future Vol, veh/h	5	282	85	5	618	0	415	5	5	0	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	282	85	5	618	0	415	5	5	0	5	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	618	0	0	367	0	0	976	963	325	968	1005	618
Stage 1	-	-	-	-	-	-	335	335	-	628	628	-
Stage 2	-	-	-	-	-	-	641	628	-	340	377	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	962	-	-	1197	-	-	~ 229	255	714	235	243	493
Stage 1	-	-	-	-	-	-	677	641	-	474	479	-
Stage 2	-	-	-	-	-	-	461	474	-	679	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	962	-	-	1197	-	-	~ 214	252	714	227	240	493
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 214	252	-	227	240	-
Stage 1	-	-	-	-	-	-	672	637	-	471	476	-
Stage 2	-	-	-	-	-	-	435	471	-	664	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 488.7	14.4
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	216	962	-	-	1197	-	-	407
HCM Lane V/C Ratio	1.968	0.005	-	-	0.004	-	-	0.061
HCM Control Delay (s)	$ 488.7	8.8	0	-	8	0	-	14.4
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	31.2	0	-	-	0	-	-	0.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	445	0	270	0	0	105	340
Future Volume (vph)	0	0	0	0	0	445	0	270	0	0	105	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

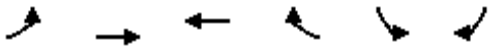
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	445	0	270	0	0	105	340
Future Vol, veh/h	0	0	0	0	0	445	0	270	0	0	105	340
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	445	0	270	0	0	105	340

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	-	-	270	-	0	-	-	-	0	
Stage 1	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	
Critical Hdwy	-	-	6.23	-	-	-	-	-	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-	
Pot Cap-1 Maneuver	0	0	766	0	-	0	0	-	-	
Stage 1	0	0	-	0	-	0	0	-	-	
Stage 2	0	0	-	0	-	0	0	-	-	
Platoon blocked, %					-			-	-	
Mov Cap-1 Maneuver	-	0	766	-	-	-	-	-	-	
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-	
Stage 1	-	0	-	-	-	-	-	-	-	
Stage 2	-	0	-	-	-	-	-	-	-	

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	766	-	-
HCM Lane V/C Ratio	-	0.581	-	-
HCM Control Delay (s)	-	16	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	3.8	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	250	5	0	0	125	0
Future Volume (vph)	250	5	0	0	125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	250	5	0	0	125	0
Future Vol, veh/h	250	5	0	0	125	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	250	5	0	0	125	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	9.6	8.9
HCM LOS	A	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	255	125
LT Vol	250	125
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	255	125
Geometry Grp	1	1
Degree of Util (X)	0.32	0.169
Departure Headway (Hd)	4.519	4.853
Convergence, Y/N	Yes	Yes
Cap	798	741
Service Time	2.531	2.867
HCM Lane V/C Ratio	0.32	0.169
HCM Control Delay	9.6	8.9
HCM Lane LOS	A	A
HCM 95th-tile Q	1.4	0.6



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	272	5	350	548	85	0
Future Volume (vph)	272	5	350	548	85	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	12.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	272	5	350	548	85	0
Future Vol, veh/h	272	5	350	548	85	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	272	5	350	548	85	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	277	0	1523	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	1248	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1292	-	130	764
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1292	-	95	764
Mov Cap-2 Maneuver	-	-	-	-	95	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	198	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	145
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	95	-	-	1292	-
HCM Lane V/C Ratio	0.895	-	-	0.271	-
HCM Control Delay (s)	145	-	-	8.8	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	5.1	-	-	1.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	45	36	245	44	36	986
Future Volume (vph)	45	36	245	44	36	986
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	937		1583			1690
Travel Time (s)	25.6		30.8			32.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	50%	3%	50%	50%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	36	245	44	36	986
Future Vol, veh/h	45	36	245	44	36	986
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, %	50	50	3	50	50	3
Mvmt Flow	49	39	266	48	39	1072

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1440	290	0	0	314	0
Stage 1	290	-	-	-	-	-
Stage 2	1150	-	-	-	-	-
Critical Hdwy	6.9	6.7	-	-	4.6	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	-	-	2.65	-
Pot Cap-1 Maneuver	115	648	-	-	1019	-
Stage 1	662	-	-	-	-	-
Stage 2	244	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	104	648	-	-	1019	-
Mov Cap-2 Maneuver	104	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	221	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.9	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	166	1019	-
HCM Lane V/C Ratio	-	-	0.53	0.038	-
HCM Control Delay (s)	-	-	48.9	8.7	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	2.7	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	15	210	21	16	965
Future Volume (vph)	17	15	210	21	16	965
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1752	1568	1823	0	0	1843
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1752	1568	1823	0	0	1843
Link Speed (mph)	25		35			35
Link Distance (ft)	1001		1223			185
Travel Time (s)	27.3		23.8			3.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	16	251	0	0	1066
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	15	210	21	16	965
Future Vol, veh/h	17	15	210	21	16	965
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	16	228	23	17	1049

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1323	240	0	0	251	0
Stage 1	240	-	-	-	-	-
Stage 2	1083	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	171	796	-	-	1309	-
Stage 1	798	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	166	796	-	-	1309	-
Mov Cap-2 Maneuver	166	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	313	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	166	796	1309	-
HCM Lane V/C Ratio	-	-	0.111	0.02	0.013	-
HCM Control Delay (s)	-	-	29.4	9.6	7.8	0
HCM Lane LOS	-	-	D	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	0	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	385	15	135	991	16	123
Future Volume (vph)	385	15	135	991	16	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1835	0	0	1834	1752	1568
Flt Permitted				0.994	0.950	
Satd. Flow (perm)	1835	0	0	1834	1752	1568
Link Speed (mph)	45			45	25	
Link Distance (ft)	182			2805	987	
Travel Time (s)	2.8			42.5	26.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	434	0	0	1224	17	134
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 94.1%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.4

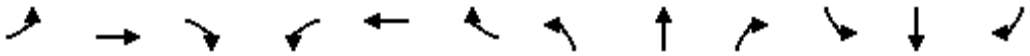
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	385	15	135	991	16	123
Future Vol, veh/h	385	15	135	991	16	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	418	16	147	1077	17	134

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	434	0	1797	426
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	1371	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1120	-	88	626
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	235	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1120	-	59	626
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	158	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	21.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	59	626	-	-	1120	-
HCM Lane V/C Ratio	0.295	0.214	-	-	0.131	-
HCM Control Delay (s)	89.7	12.3	-	-	8.7	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	1	0.8	-	-	0.5	-

2031 with SEIS Alternative 6 Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	5	20	0	0	0	0	20	30	234	30	0
Future Volume (vph)	288	5	20	0	0	0	0	20	30	234	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

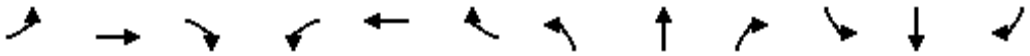
Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	288	5	20	0	0	0	0	20	30	234	30	0
Future Vol, veh/h	288	5	20	0	0	0	0	20	30	234	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	288	5	20	0	0	0	0	20	30	234	30	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	533	548	30	-	0	0	50	0	0
Stage 1	498	498	-	-	-	-	-	-	-
Stage 2	35	50	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	504	441	1039	0	-	-	1544	-	0
Stage 1	607	541	-	0	-	-	-	-	0
Stage 2	982	849	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	426	0	1039	-	-	-	1544	-	-
Mov Cap-2 Maneuver	426	0	-	-	-	-	-	-	-
Stage 1	607	0	-	-	-	-	-	-	-
Stage 2	831	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.4	0	6.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	443	1544	-
HCM Lane V/C Ratio	-	-	0.707	0.152	-
HCM Control Delay (s)	-	-	30.4	7.7	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	5.4	0.5	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	5	370	10	298	0	0	234	141
Future Volume (vph)	0	0	0	30	5	370	10	298	0	0	234	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

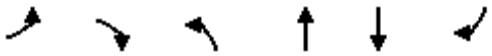
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	30	5	370	10	298	0	0	234	141
Future Vol, veh/h	0	0	0	30	5	370	10	298	0	0	234	141
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	30	5	370	10	298	0	0	234	141

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	623	693	298	375	0	-	-	-	0
Stage 1	318	318	-	-	-	-	-	-	-
Stage 2	305	375	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	447	364	737	1173	-	0	0	-	-
Stage 1	733	650	-	-	-	0	0	-	-
Stage 2	743	614	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	443	0	737	1173	-	-	-	-	-
Mov Cap-2 Maneuver	443	0	-	-	-	-	-	-	-
Stage 1	726	0	-	-	-	-	-	-	-
Stage 2	743	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1173	-	702	-	-
HCM Lane V/C Ratio	0.009	-	0.577	-	-
HCM Control Delay (s)	8.1	0	16.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	3.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	62	80	130	538	285	48
Future Volume (vph)	62	80	130	538	285	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

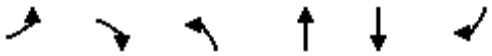
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	62	80	130	538	285	48
Future Vol, veh/h	62	80	130	538	285	48
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	62	80	130	538	285	48

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1107	309	333	0	-	0
Stage 1	309	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	219	702	1215	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	702	1215	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	421	-	-	-	-	-

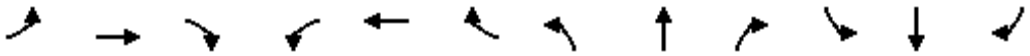
Approach	EB	NB	SB
HCM Control Delay, s	23.9	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1215	-	330	-	-
HCM Lane V/C Ratio	0.107	-	0.43	-	-
HCM Control Delay (s)	8.3	-	23.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	142	192	272	300	184	90
Future Volume (vph)	142	192	272	300	184	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1776	1238	
Travel Time (s)	19.3			34.6	24.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	12	0	0	0	11	311	0	0	244	20
Future Volume (vph)	30	0	12	0	0	0	11	311	0	0	244	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

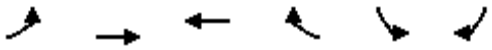
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	12	0	0	0	11	311	0	0	244	20
Future Vol, veh/h	30	0	12	0	0	0	11	311	0	0	244	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	30	0	12	0	0	0	11	311	0	0	244	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	588	588	255	593	598	311	265	0	0	311	0	0
Stage 1	255	255	-	333	333	-	-	-	-	-	-	-
Stage 2	333	333	-	260	265	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	413	415	772	420	418	734	1287	-	-	1249	-	-
Stage 1	738	687	-	685	647	-	-	-	-	-	-	-
Stage 2	670	635	-	749	693	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	409	410	771	410	413	734	1286	-	-	1249	-	-
Mov Cap-2 Maneuver	409	410	-	410	413	-	-	-	-	-	-	-
Stage 1	730	686	-	678	641	-	-	-	-	-	-	-
Stage 2	663	629	-	737	692	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1286	-	-	472	-	1249	-	-
HCM Lane V/C Ratio	0.009	-	-	0.089	-	-	-	-
HCM Control Delay (s)	7.8	0	-	13.4	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	14	797	871	30	20	16
Future Volume (vph)	14	797	871	30	20	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2611	1314		535	
Travel Time (s)		71.2	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

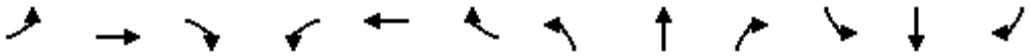
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	797	871	30	20	16
Future Vol, veh/h	14	797	871	30	20	16
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	14	797	871	30	20	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	901	0	-	0	1711	889
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	825	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	738	-	-	-	101	345
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	434	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	738	-	-	-	98	344
Mov Cap-2 Maneuver	-	-	-	-	98	-
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	434	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	38.1
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	738	-	-	-	144
HCM Lane V/C Ratio	0.019	-	-	-	0.25
HCM Control Delay (s)	10	0	-	-	38.1
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	696	117	30	742	10	143	0	110	10	0	6
Future Volume (vph)	14	696	117	30	742	10	143	0	110	10	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	76.4

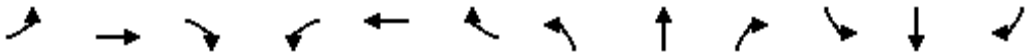
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	696	117	30	742	10	143	0	110	10	0	6
Future Vol, veh/h	14	696	117	30	742	10	143	0	110	10	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	14	696	117	30	742	10	143	0	110	10	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	752	0	0	813	0	0	1594	1595	755	1645	1648	748
Stage 1	-	-	-	-	-	-	783	783	-	807	807	-
Stage 2	-	-	-	-	-	-	811	812	-	838	841	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	844	-	-	809	-	-	~ 87	108	412	80	100	416
Stage 1	-	-	-	-	-	-	390	407	-	378	397	-
Stage 2	-	-	-	-	-	-	376	395	-	364	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	844	-	-	809	-	-	~ 80	98	412	54	91	416
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 80	98	-	54	91	-
Stage 1	-	-	-	-	-	-	378	394	-	366	372	-
Stage 2	-	-	-	-	-	-	347	370	-	259	371	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	$ 561.3	60.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	123	844	-	-	809	-	-	80
HCM Lane V/C Ratio	2.057	0.017	-	-	0.037	-	-	0.2
HCM Control Delay (s)	$ 561.3	9.3	0	-	9.6	0	-	60.9
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	20.8	0.1	-	-	0.1	-	-	0.7

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	772	40	10	725	10	51	0	20	10	0	16
Future Volume (vph)	14	772	40	10	725	10	51	0	20	10	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

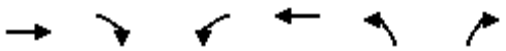
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	772	40	10	725	10	51	0	20	10	0	16
Future Vol, veh/h	14	772	40	10	725	10	51	0	20	10	0	16
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	14	772	40	10	725	10	51	0	20	10	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	735	0	0	816	0	0	1582	1579	796	1580	1594	730
Stage 1	-	-	-	-	-	-	824	824	-	750	750	-
Stage 2	-	-	-	-	-	-	758	755	-	830	844	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	857	-	-	812	-	-	81	101	365	89	108	426
Stage 1	-	-	-	-	-	-	346	367	-	407	422	-
Stage 2	-	-	-	-	-	-	377	395	-	367	382	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	857	-	-	809	-	-	75	96	364	81	102	426
Mov Cap-2 Maneuver	-	-	-	-	-	-	75	96	-	81	102	-
Stage 1	-	-	-	-	-	-	334	355	-	395	413	-
Stage 2	-	-	-	-	-	-	355	387	-	336	369	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	107.7	31.6
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	97	857	-	-	809	-	-	161
HCM Lane V/C Ratio	0.732	0.016	-	-	0.012	-	-	0.161
HCM Control Delay (s)	107.7	9.3	0	-	9.5	0	-	31.6
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	3.8	0.1	-	-	0	-	-	0.6



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	127	20	10	233
Future Volume (vph)	20	10	127	20	10	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

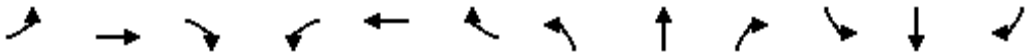
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	127	20	10	233
Future Vol, veh/h	20	10	127	20	10	233
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	127	20	10	233
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	8.7	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	4%	0%	86%
Vol Thru, %	0%	67%	14%
Vol Right, %	96%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	243	30	147
LT Vol	10	0	127
Through Vol	0	20	20
RT Vol	233	10	0
Lane Flow Rate	243	30	147
Geometry Grp	1	1	1
Degree of Util (X)	0.257	0.036	0.185
Departure Headway (Hd)	3.807	4.363	4.542
Convergence, Y/N	Yes	Yes	Yes
Cap	948	822	779
Service Time	1.809	2.38	2.632
HCM Lane V/C Ratio	0.256	0.036	0.189
HCM Control Delay	8.1	7.5	8.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	0.1	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	280	130	60	220	90	70	91	110	70	69	38
Future Volume (vph)	132	280	130	60	220	90	70	91	110	70	69	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

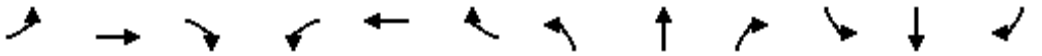
Intersection	
Int Delay, s/veh	27.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	132	280	130	60	220	90	70	91	110	70	69	38
Future Vol, veh/h	132	280	130	60	220	90	70	91	110	70	69	38
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	132	280	130	60	220	90	70	91	110	70	69	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	311	0	0	413	0	0	1052	1043	349	1097	1063	267
Stage 1	-	-	-	-	-	-	612	612	-	386	386	-
Stage 2	-	-	-	-	-	-	440	431	-	711	677	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1227	-	-	1135	-	-	204	228	692	191	224	774
Stage 1	-	-	-	-	-	-	479	482	-	639	612	-
Stage 2	-	-	-	-	-	-	594	581	-	425	454	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1226	-	-	1132	-	-	123	192	689	90	188	773
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	192	-	90	188	-
Stage 1	-	-	-	-	-	-	426	428	-	569	579	-
Stage 2	-	-	-	-	-	-	471	550	-	251	404	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1.4	90.1	66.1
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	154	689	1226	-	-	1132	-	-	90	257
HCM Lane V/C Ratio	1.045	0.16	0.108	-	-	0.053	-	-	0.778	0.416
HCM Control Delay (s)	144	11.2	8.3	-	-	8.4	-	-	123.5	28.6
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	8.2	0.6	0.4	-	-	0.2	-	-	4	1.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	440	10	80	360	10	20	41	100	10	30	20
Future Volume (vph)	25	440	10	80	360	10	20	41	100	10	30	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

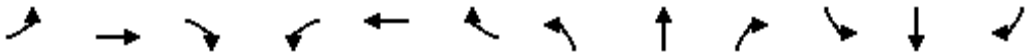
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	440	10	80	360	10	20	41	100	10	30	20
Future Vol, veh/h	25	440	10	80	360	10	20	41	100	10	30	20
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	25	440	10	80	360	10	20	41	100	10	30	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	452	0	0	1050	1032	447	1096	1032	373
Stage 1	-	-	-	-	-	-	497	497	-	530	530	-
Stage 2	-	-	-	-	-	-	553	535	-	566	502	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1162	-	-	1093	-	-	202	230	605	187	229	664
Stage 1	-	-	-	-	-	-	549	540	-	525	520	-
Stage 2	-	-	-	-	-	-	512	519	-	502	535	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1091	-	-	161	207	604	122	206	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	161	207	-	122	206	-
Stage 1	-	-	-	-	-	-	536	527	-	511	479	-
Stage 2	-	-	-	-	-	-	430	479	-	378	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	20	25.7
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	189	604	1156	-	-	1091	-	-	233
HCM Lane V/C Ratio	0.323	0.166	0.022	-	-	0.073	-	-	0.258
HCM Control Delay (s)	32.9	12.1	8.2	-	-	8.6	-	-	25.7
HCM Lane LOS	D	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1.3	0.6	0.1	-	-	0.2	-	-	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	620	120	80	481	50	209	20	30	40	30	45
Future Volume (vph)	62	620	120	80	481	50	209	20	30	40	30	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	169.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	620	120	80	481	50	209	20	30	40	30	45
Future Vol, veh/h	62	620	120	80	481	50	209	20	30	40	30	45
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	62	620	120	80	481	50	209	20	30	40	30	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	531	0	0	741	0	0	1511	1496	681	1495	1531	508
Stage 1	-	-	-	-	-	-	805	805	-	666	666	-
Stage 2	-	-	-	-	-	-	706	691	-	829	865	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1016	-	-	866	-	-	~ 99	123	450	102	118	569
Stage 1	-	-	-	-	-	-	376	395	-	452	460	-
Stage 2	-	-	-	-	-	-	427	446	-	368	374	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1016	-	-	865	-	-	~ 57	95	450	67	91	568
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 57	95	-	67	91	-
Stage 1	-	-	-	-	-	-	336	353	-	404	399	-
Stage 2	-	-	-	-	-	-	315	387	-	290	334	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.3	$ 1095.3	158.3
HCM LOS			F	F

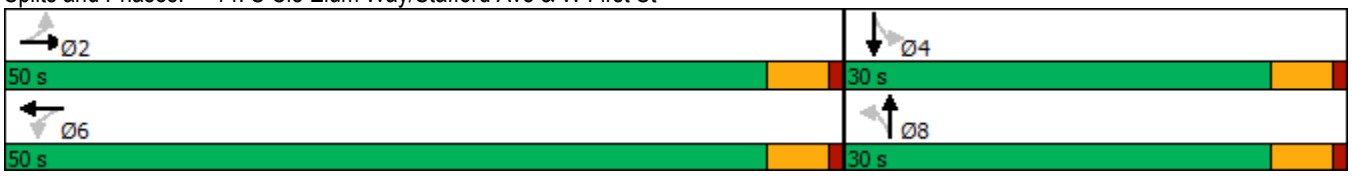
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	57	180	1016	-	-	865	-	-	114
HCM Lane V/C Ratio	3.667	0.278	0.061	-	-	0.092	-	-	1.009
HCM Control Delay (s)	$ 1349.5	32.5	8.8	0	-	9.6	0	-	158.3
HCM Lane LOS	F	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	22.5	1.1	0.2	-	-	0.3	-	-	6.6

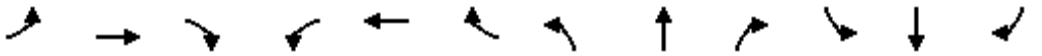
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	420	100	80	340	140	80	109	80	50	120	80
Future Volume (vph)	20	420	100	80	340	140	80	109	80	50	120	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 69.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





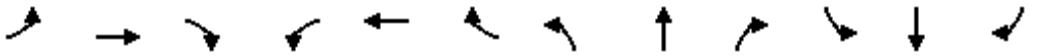
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	420	100	80	340	140	80	109	80	50	120	80
Future Volume (veh/h)	20	420	100	80	340	140	80	109	80	50	120	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	420	100	80	340	140	80	109	80	50	120	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	558	917	218	533	797	328	240	219	160	248	226	151
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	886	1414	337	860	1229	506	1172	993	729	1174	1029	686
Grp Volume(v), veh/h	20	0	520	80	0	480	80	0	189	50	0	200
Grp Sat Flow(s),veh/h/ln	886	0	1750	860	0	1734	1172	0	1722	1174	0	1715
Q Serve(g_s), s	0.8	0.0	10.4	3.6	0.0	9.4	4.5	0.0	6.7	2.7	0.0	7.2
Cycle Q Clear(g_c), s	10.2	0.0	10.4	14.0	0.0	9.4	11.7	0.0	6.7	9.5	0.0	7.2
Prop In Lane	1.00		0.19	1.00		0.29	1.00		0.42	1.00		0.40
Lane Grp Cap(c), veh/h	558	0	1135	533	0	1125	240	0	379	248	0	377
V/C Ratio(X)	0.04	0.00	0.46	0.15	0.00	0.43	0.33	0.00	0.50	0.20	0.00	0.53
Avail Cap(c_a), veh/h	558	0	1135	533	0	1125	407	0	625	416	0	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.5	0.0	6.1	9.6	0.0	6.0	29.3	0.0	23.9	28.1	0.0	24.1
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.6	0.0	1.2	1.2	0.0	1.4	0.6	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.5	0.7	0.0	3.1	1.3	0.0	2.8	0.8	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.6	0.0	7.5	10.2	0.0	7.2	30.4	0.0	25.4	28.6	0.0	25.7
LnGrp LOS	A	A	A	B	A	A	C	A	C	C	A	C
Approach Vol, veh/h		540			560			269			250	
Approach Delay, s/veh		7.5			7.6			26.9			26.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		20.0		50.0		20.0				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		12.4		11.5		16.0		13.7				
Green Ext Time (p_c), s		4.2		1.6		4.2		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	442	200	10	362	30	200	30	10	30	20	49
Future Volume (vph)	48	442	200	10	362	30	200	30	10	30	20	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	33.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	442	200	10	362	30	200	30	10	30	20	49
Future Vol, veh/h	48	442	200	10	362	30	200	30	10	30	20	49
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	48	442	200	10	362	30	200	30	10	30	20	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	645	0	0	1074	1053	550	1060	1138	378
Stage 1	-	-	-	-	-	-	641	641	-	397	397	-
Stage 2	-	-	-	-	-	-	433	412	-	663	741	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1140	-	-	931	-	-	~ 198	227	537	198	198	660
Stage 1	-	-	-	-	-	-	465	471	-	621	596	-
Stage 2	-	-	-	-	-	-	603	596	-	444	417	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1140	-	-	928	-	-	~ 157	208	533	162	181	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 157	208	-	162	181	-
Stage 1	-	-	-	-	-	-	432	438	-	579	588	-
Stage 2	-	-	-	-	-	-	531	588	-	376	387	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	186.8	26.1
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	157	245	1140	-	-	928	-	-	268
HCM Lane V/C Ratio	1.274	0.163	0.042	-	-	0.011	-	-	0.369
HCM Control Delay (s)	219.7	22.5	8.3	0	-	8.9	0	-	26.1
HCM Lane LOS	F	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	11.8	0.6	0.1	-	-	0	-	-	1.6

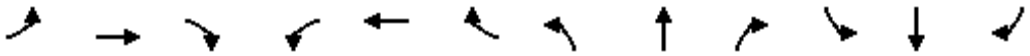
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	383	137	40	340	60	210	170	40	60	150	10
Future Volume (vph)	10	383	137	40	340	60	210	170	40	60	150	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





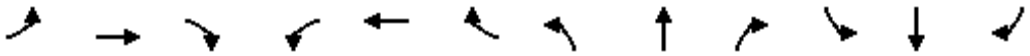
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	383	137	40	340	60	210	170	40	60	150	10
Future Volume (veh/h)	10	383	137	40	340	60	210	170	40	60	150	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	383	137	40	340	60	210	170	40	60	150	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	694	691	247	477	840	148	305	303	71	260	368	25
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	943	1135	406	874	1381	244	1165	1254	295	1141	1523	102
Grp Volume(v), veh/h	10	0	520	40	0	400	210	0	210	60	0	160
Grp Sat Flow(s),veh/h/ln	943	0	1542	874	0	1625	1165	0	1549	1141	0	1625
Q Serve(g_s), s	0.3	0.0	12.0	1.0	0.0	0.0	9.5	0.0	7.1	2.9	0.0	5.0
Cycle Q Clear(g_c), s	0.3	0.0	12.0	12.9	0.0	0.0	14.5	0.0	7.1	10.1	0.0	5.0
Prop In Lane	1.00		0.26	1.00		0.15	1.00		0.19	1.00		0.06
Lane Grp Cap(c), veh/h	694	0	938	477	0	988	305	0	374	260	0	393
V/C Ratio(X)	0.01	0.00	0.55	0.08	0.00	0.40	0.69	0.00	0.56	0.23	0.00	0.41
Avail Cap(c_a), veh/h	694	0	938	477	0	988	305	0	374	260	0	393
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.94	0.00	0.94	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	6.9	2.1	0.0	0.0	25.8	0.0	20.0	24.4	0.0	19.1
Incr Delay (d2), s/veh	0.0	0.0	2.2	0.3	0.0	1.2	5.4	0.0	1.2	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.6	0.1	0.0	0.3	3.4	0.0	2.5	0.8	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	9.1	2.4	0.0	1.2	31.2	0.0	21.1	24.5	0.0	19.4
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	B
Approach Vol, veh/h		530			440			420			220	
Approach Delay, s/veh		9.0			1.3			26.2			20.8	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		19.0		41.0		19.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		14.0		12.1		14.9		16.5				
Green Ext Time (p_c), s		3.9		0.2		2.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	338	110	10	310	20	80	20	30	10	20	22
Future Volume (vph)	24	338	110	10	310	20	80	20	30	10	20	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

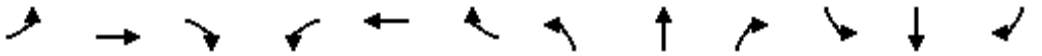
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	338	110	10	310	20	80	20	30	10	20	22
Future Vol, veh/h	24	338	110	10	310	20	80	20	30	10	20	22
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	24	338	110	10	310	20	80	20	30	10	20	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.7	12.9	10.8	9.6
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	62%	5%	3%	19%
Vol Thru, %	15%	72%	91%	38%
Vol Right, %	23%	23%	6%	42%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	472	340	52
LT Vol	80	24	10	10
Through Vol	20	338	310	20
RT Vol	30	110	20	22
Lane Flow Rate	130	472	340	52
Geometry Grp	1	1	1	1
Degree of Util (X)	0.219	0.651	0.483	0.086
Departure Headway (Hd)	6.051	4.966	5.114	5.984
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	593	732	704	596
Service Time	4.099	2.966	3.147	4.042
HCM Lane V/C Ratio	0.219	0.645	0.483	0.087
HCM Control Delay	10.8	16.7	12.9	9.6
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	0.8	4.9	2.6	0.3

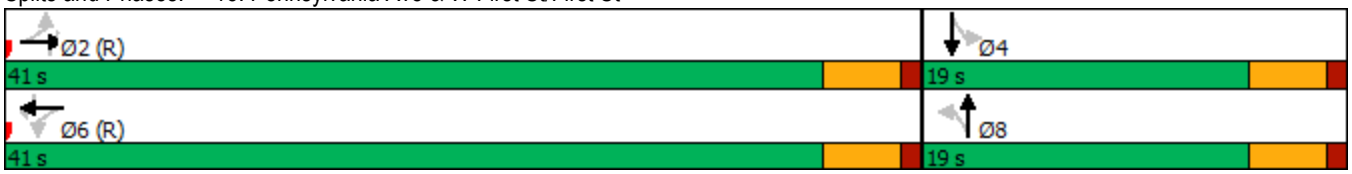


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	423	20	20	380	74	20	16	30	106	24	30
Future Volume (vph)	40	423	20	20	380	74	20	16	30	106	24	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1615	0	1736	1598	0	0	1761	1384	0	1756	1398
Flt Permitted	0.480			0.487				0.800			0.741	
Satd. Flow (perm)	866	1615	0	886	1598	0	0	1440	1354	0	1352	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			30				30			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	443	0	20	454	0	0	36	30	0	130	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	43.3	43.3		43.3	43.3			11.1	43.3		11.1	43.3
Actuated g/C Ratio	0.72	0.72		0.72	0.72			0.18	0.72		0.18	0.72
v/c Ratio	0.06	0.38		0.03	0.39			0.13	0.03		0.52	0.03
Control Delay	4.8	5.5		5.0	6.2			19.6	2.4		28.6	2.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.8	5.5		5.0	6.2			19.6	2.4		28.6	2.4
LOS	A	A		A	A			B	A		C	A
Approach Delay		5.5			6.2			11.8			23.7	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other

Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 8.6	Intersection LOS: A
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	380	10	0	0	297
Future Volume (vph)	10	380	10	0	0	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	380	10	0	0	297
Future Vol, veh/h	10	380	10	0	0	297
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	10	380	10	0	0	297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	307	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	297	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	669	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	736	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	669	1048	-	-	-	-
Mov Cap-2 Maneuver	669	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	736	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1033	-
HCM Lane V/C Ratio	-	0.378	-
HCM Control Delay (s)	-	10.6	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.8	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	267	40
Future Volume (vph)	0	0	10	0	267	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

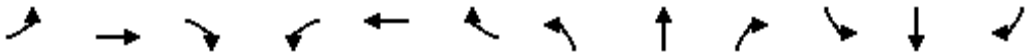
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	267	40
Future Vol, veh/h	0	0	10	0	267	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	267	40

Major/Minor	Minor2		Major2	
Conflicting Flow All	574	40	0	0
Stage 1	574	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	405	982	-	-
Stage 1	475	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	982	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	111	15	10	10	102	369	17	10	439	20
Future Volume (vph)	30	10	111	15	10	10	102	369	17	10	439	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

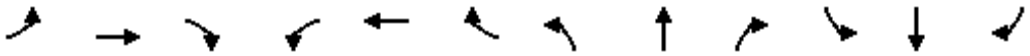
Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	10	111	15	10	10	102	369	17	10	439	20
Future Vol, veh/h	30	10	111	15	10	10	102	369	17	10	439	20
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	30	10	111	15	10	10	102	369	17	10	439	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1085	1083	472	1137	1085	404	470	0	0	399	0	0
Stage 1	480	480	-	595	595	-	-	-	-	-	-	-
Stage 2	605	603	-	542	490	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	196	219	596	181	218	651	1097	-	-	1154	-	-
Stage 1	571	558	-	494	496	-	-	-	-	-	-	-
Stage 2	488	492	-	528	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	163	186	583	124	185	635	1086	-	-	1140	-	-
Mov Cap-2 Maneuver	163	186	-	124	185	-	-	-	-	-	-	-
Stage 1	497	546	-	429	431	-	-	-	-	-	-	-
Stage 2	408	428	-	410	540	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.6	29.3	1.8	0.2
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1086	-	-	353	183	1140	-	-
HCM Lane V/C Ratio	0.094	-	-	0.428	0.191	0.009	-	-
HCM Control Delay (s)	8.7	0	-	22.6	29.3	8.2	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	2.1	0.7	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	43	33	0	10	52	285	22	0	263	10
Future Volume (vph)	10	0	43	33	0	10	52	285	22	0	263	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

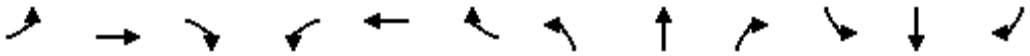
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	0	43	33	0	10	52	285	22	0	263	10
Future Vol, veh/h	10	0	43	33	0	10	52	285	22	0	263	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	10	0	43	33	0	10	52	285	22	0	263	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	673	679	268	690	673	296	273	0	0	307	0	0
Stage 1	268	268	-	400	400	-	-	-	-	-	-	-
Stage 2	405	411	-	290	273	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	372	376	776	331	349	692	1290	-	-	1254	-	-
Stage 1	742	691	-	583	564	-	-	-	-	-	-	-
Stage 2	626	598	-	671	644	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	353	358	776	301	332	692	1290	-	-	1254	-	-
Mov Cap-2 Maneuver	353	358	-	301	332	-	-	-	-	-	-	-
Stage 1	706	691	-	554	536	-	-	-	-	-	-	-
Stage 2	587	569	-	634	644	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.2	16.8	1.1	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1290	-	-	633	347	1254	-	-
HCM Lane V/C Ratio	0.04	-	-	0.084	0.124	-	-	-
HCM Control Delay (s)	7.9	0	-	11.2	16.8	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	161	10	32	161	12	10	10	46	16	10	10
Future Volume (vph)	10	161	10	32	161	12	10	10	46	16	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	161	10	32	161	12	10	10	46	16	10	10
Future Vol, veh/h	10	161	10	32	161	12	10	10	46	16	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	161	10	32	161	12	10	10	46	16	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	173	0	0	171	0	0	427	423	166	445	422	167
Stage 1	-	-	-	-	-	-	186	186	-	231	231	-
Stage 2	-	-	-	-	-	-	241	237	-	214	191	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1404	-	-	1400	-	-	541	526	884	527	526	882
Stage 1	-	-	-	-	-	-	820	750	-	776	717	-
Stage 2	-	-	-	-	-	-	767	713	-	793	746	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1404	-	-	1400	-	-	514	509	884	480	509	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	514	509	-	480	509	-
Stage 1	-	-	-	-	-	-	813	744	-	770	699	-
Stage 2	-	-	-	-	-	-	729	695	-	736	740	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.2	10.5	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	724	1404	-	-	1400	-	-	560
HCM Lane V/C Ratio	0.091	0.007	-	-	0.023	-	-	0.064
HCM Control Delay (s)	10.5	7.6	0	-	7.6	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	31	541	49	61	315
Future Volume (vph)	28	31	541	49	61	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	903		1497			1776
Travel Time (s)	24.6		29.2			34.6
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	50%	50%	3%	50%	50%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	31	541	49	61	315
Future Vol, veh/h	28	31	541	49	61	315
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	93	93	93	93	93	93
Heavy Vehicles, %	50	50	3	50	50	3
Mvmt Flow	30	33	582	53	66	339

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1080	609	0	0	635	0
Stage 1	609	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.9	6.7	-	-	4.6	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	-	-	2.65	-
Pot Cap-1 Maneuver	196	417	-	-	755	-
Stage 1	461	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	175	417	-	-	755	-
Mov Cap-2 Maneuver	175	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	481	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	1.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	252	755	-
HCM Lane V/C Ratio	-	-	0.252	0.087	-
HCM Control Delay (s)	-	-	24	10.2	0
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	1	0.3	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	74	31	291	151	56	200
Future Volume (vph)	74	31	291	151	56	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1583	1777	0	0	1842
Flt Permitted	0.950					0.989
Satd. Flow (perm)	1770	1583	1777	0	0	1842
Link Speed (mph)	25		35			35
Link Distance (ft)	755		1238			171
Travel Time (s)	20.6		24.1			3.3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	31	442	0	0	256
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	31	291	151	56	200
Future Vol, veh/h	74	31	291	151	56	200
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	31	291	151	56	200

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	679	367	0	0	442	0
Stage 1	367	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	417	678	-	-	1118	-
Stage 1	701	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	394	678	-	-	1118	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	1.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	394	678	1118	-
HCM Lane V/C Ratio	-	-	0.188	0.046	0.05	-
HCM Control Delay (s)	-	-	16.2	10.6	8.4	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.1	0.2	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	530	100	344	543	81	274
Future Volume (vph)	530	100	344	543	81	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1806	0	0	1810	1752	1568
Flt Permitted				0.981	0.950	
Satd. Flow (perm)	1806	0	0	1810	1752	1568
Link Speed (mph)	45			45	25	
Link Distance (ft)	375			2611	803	
Travel Time (s)	5.7			39.6	21.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	685	0	0	964	88	298
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 96.1%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	65.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	530	100	344	543	81	274
Future Vol, veh/h	530	100	344	543	81	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	576	109	374	590	88	298

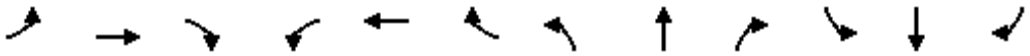
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	685	0	1969	631
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	1338	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	904	-	~ 68	479
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	243	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	904	-	~ 26	479
Mov Cap-2 Maneuver	-	-	-	-	~ 26	-
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	93	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.6	$ 335.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	26	479	-	-	904	-
HCM Lane V/C Ratio	3.386	0.622	-	-	0.414	-
HCM Control Delay (s)	$ 1387	24.1	-	-	11.8	0
HCM Lane LOS	F	C	-	-	B	A
HCM 95th %tile Q(veh)	10.8	4.2	-	-	2.1	-

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

2031 with SEIS Alternative 6 Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	588	5	15	0	0	0	0	10	35	284	20	0
Future Volume (vph)	588	5	15	0	0	0	0	10	35	284	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	209

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	588	5	15	0	0	0	0	10	35	284	20	0
Future Vol, veh/h	588	5	15	0	0	0	0	10	35	284	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	588	5	15	0	0	0	0	10	35	284	20	0

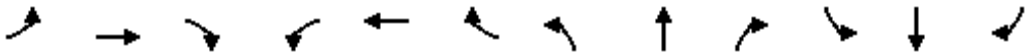
Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	616	633	20	-	0	0	45	0	0
Stage 1	588	588	-	-	-	-	-	-	-
Stage 2	28	45	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	~ 456	398	1061	0	-	-	1444	-	0
Stage 1	~ 557	498	-	0	-	-	-	-	0
Stage 2	997	859	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 365	0	1061	-	-	-	1444	-	-
Mov Cap-2 Maneuver	~ 365	0	-	-	-	-	-	-	-
Stage 1	~ 557	0	-	-	-	-	-	-	-
Stage 2	799	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 325.2	0	7.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	371	1444	-
HCM Lane V/C Ratio	-	-	1.639	0.197	-
HCM Control Delay (s)	-	-	$ 325.2	8.1	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	36	0.7	-

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	5	435	5	593	0	0	244	136
Future Volume (vph)	0	0	0	60	5	435	5	593	0	0	244	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

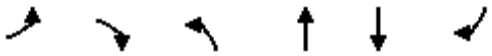
Intersection	
Int Delay, s/veh	38.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	60	5	435	5	593	0	0	244	136
Future Vol, veh/h	0	0	0	60	5	435	5	593	0	0	244	136
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	60	5	435	5	593	0	0	244	136

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	915	983	593	380	0	-	-	-	0
Stage 1	603	603	-	-	-	-	-	-	-
Stage 2	312	380	-	-	-	-	-	-	-
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-
Pot Cap-1 Maneuver	286	235	480	1184	-	0	0	-	-
Stage 1	520	467	-	-	-	0	0	-	-
Stage 2	712	590	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	284	0	480	1184	-	-	-	-	-
Mov Cap-2 Maneuver	284	0	-	-	-	-	-	-	-
Stage 1	517	0	-	-	-	-	-	-	-
Stage 2	712	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	112.5	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1184	-	443	-	-
HCM Lane V/C Ratio	0.004	-	1.129	-	-
HCM Control Delay (s)	8.1	0	112.5	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	17.7	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	47	105	95	933	275	28
Future Volume (vph)	47	105	95	933	275	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

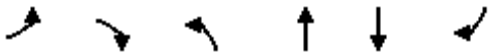
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	105	95	933	275	28
Future Vol, veh/h	47	105	95	933	275	28
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	47	105	95	933	275	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1412	289	303	0	-	0
Stage 1	289	-	-	-	-	-
Stage 2	1123	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	144	725	1258	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	296	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	133	725	1258	-	-	-
Mov Cap-2 Maneuver	133	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	296	-	-	-	-	-

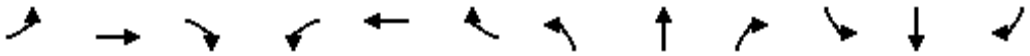
Approach	EB	NB	SB
HCM Control Delay, s	28	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1258	-	305	-	-
HCM Lane V/C Ratio	0.076	-	0.498	-	-
HCM Control Delay (s)	8.1	-	28	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	2.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	142	147	517	445	189	145
Future Volume (vph)	142	147	517	445	189	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1729	1194	
Travel Time (s)	19.3			33.7	23.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	32	0	0	0	16	451	0	0	284	40
Future Volume (vph)	25	0	32	0	0	0	16	451	0	0	284	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

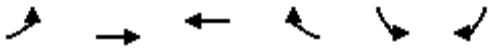
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	32	0	0	0	16	451	0	0	284	40
Future Vol, veh/h	25	0	32	0	0	0	16	451	0	0	284	40
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	32	0	0	0	16	451	0	0	284	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	787	787	304	803	807	451	324	0	0	451	0	0
Stage 1	304	304	-	483	483	-	-	-	-	-	-	-
Stage 2	483	483	-	320	324	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	303	318	724	304	317	613	1236	-	-	1104	-	-
Stage 1	695	654	-	569	556	-	-	-	-	-	-	-
Stage 2	555	544	-	696	653	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	299	313	724	287	312	613	1236	-	-	1104	-	-
Mov Cap-2 Maneuver	299	313	-	287	312	-	-	-	-	-	-	-
Stage 1	683	654	-	559	547	-	-	-	-	-	-	-
Stage 2	546	535	-	665	653	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1236	-	-	446	-	1104	-	-
HCM Lane V/C Ratio	0.013	-	-	0.128	-	-	-	-
HCM Control Delay (s)	8	0	-	14.3	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	857	1006	40	20	16
Future Volume (vph)	9	857	1006	40	20	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2785	1314		535	
Travel Time (s)		76.0	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

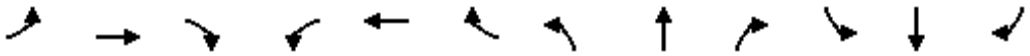
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	857	1006	40	20	16
Future Vol, veh/h	9	857	1006	40	20	16
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	9	857	1006	40	20	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1046	0	-	0	1901	1033
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	875	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	657	-	-	-	77	285
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	411	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	657	-	-	-	75	283
Mov Cap-2 Maneuver	-	-	-	-	75	-
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	411	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	52.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	657	-	-	-	111
HCM Lane V/C Ratio	0.014	-	-	-	0.324
HCM Control Delay (s)	10.6	0	-	-	52.3
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	1.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	746	142	40	847	5	193	0	130	0	0	6
Future Volume (vph)	4	746	142	40	847	5	193	0	130	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	196.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	746	142	40	847	5	193	0	130	0	0	6
Future Vol, veh/h	4	746	142	40	847	5	193	0	130	0	0	6
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	4	746	142	40	847	5	193	0	130	0	0	6

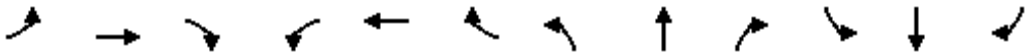
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	852	0	0	892	0	0	1762	1761	822	1821	1830	850
Stage 1	-	-	-	-	-	-	829	829	-	930	930	-
Stage 2	-	-	-	-	-	-	933	932	-	891	900	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	778	-	-	756	-	-	~ 66	85	375	60	77	363
Stage 1	-	-	-	-	-	-	366	387	-	323	349	-
Stage 2	-	-	-	-	-	-	321	347	-	340	360	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	778	-	-	753	-	-	~ 59	75	373	36	68	363
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 59	75	-	36	68	-
Stage 1	-	-	-	-	-	-	361	382	-	320	314	-
Stage 2	-	-	-	-	-	-	284	312	-	219	355	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	$ 1282	15.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	89	778	-	-	753	-	-	363
HCM Lane V/C Ratio	3.629	0.005	-	-	0.053	-	-	0.017
HCM Control Delay (s)	$ 1282	9.7	0	-	10	0	-	15.1
HCM Lane LOS	F	A	A	-	B	A	-	C
HCM 95th %tile Q(veh)	32.9	0	-	-	0.2	-	-	0.1

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	862	20	15	850	10	46	10	5	20	15	31
Future Volume (vph)	24	862	20	15	850	10	46	10	5	20	15	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	32.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	862	20	15	850	10	46	10	5	20	15	31
Future Vol, veh/h	24	862	20	15	850	10	46	10	5	20	15	31
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	24	862	20	15	850	10	46	10	5	20	15	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	861	0	0	887	0	0	1833	1816	879	1816	1821	856
Stage 1	-	-	-	-	-	-	925	925	-	886	886	-
Stage 2	-	-	-	-	-	-	908	891	-	930	935	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	764	-	-	755	-	-	~ 33	45	236	61	78	360
Stage 1	-	-	-	-	-	-	220	243	-	342	365	-
Stage 2	-	-	-	-	-	-	226	254	-	323	347	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	763	-	-	751	-	-	~ 23	40	234	45	70	360
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 23	40	-	45	70	-
Stage 1	-	-	-	-	-	-	205	227	-	320	351	-
Stage 2	-	-	-	-	-	-	190	244	-	283	324	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	$ 886.2	117.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	27	763	-	-	751	-	-	89
HCM Lane V/C Ratio	2.259	0.031	-	-	0.02	-	-	0.742
HCM Control Delay (s)	$ 886.2	9.9	0	-	9.9	0	-	117.2
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	7.4	0.1	-	-	0.1	-	-	3.7

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	162	10	30	288
Future Volume (vph)	25	10	162	10	30	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

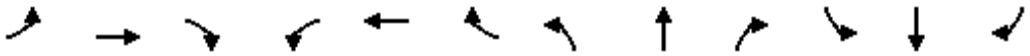
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	162	10	30	288
Future Vol, veh/h	25	10	162	10	30	288
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	162	10	30	288
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.9	9.3	9.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	9%	0%	94%
Vol Thru, %	0%	71%	6%
Vol Right, %	91%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	318	35	172
LT Vol	30	0	162
Through Vol	0	25	10
RT Vol	288	10	0
Lane Flow Rate	318	35	172
Geometry Grp	1	1	1
Degree of Util (X)	0.348	0.045	0.231
Departure Headway (Hd)	3.941	4.605	4.825
Convergence, Y/N	Yes	Yes	Yes
Cap	916	776	745
Service Time	1.956	2.64	2.854
HCM Lane V/C Ratio	0.347	0.045	0.231
HCM Control Delay	9.1	7.9	9.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.6	0.1	0.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	395	200	70	195	110	75	116	155	80	89	48
Future Volume (vph)	162	395	200	70	195	110	75	116	155	80	89	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	157.8

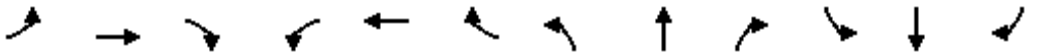
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	162	395	200	70	195	110	75	116	155	80	89	48
Future Vol, veh/h	162	395	200	70	195	110	75	116	155	80	89	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	162	395	200	70	195	110	75	116	155	80	89	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	595	0	0	1278	1264	495	1345	1309	250
Stage 1	-	-	-	-	-	-	819	819	-	390	390	-
Stage 2	-	-	-	-	-	-	459	445	-	955	919	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1244	-	-	967	-	-	143	169	575	127	158	784
Stage 1	-	-	-	-	-	-	369	389	-	630	604	-
Stage 2	-	-	-	-	-	-	582	575	-	308	347	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1244	-	-	967	-	-	~ 51	136	575	~ 23	128	784
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 51	136	-	~ 23	128	-
Stage 1	-	-	-	-	-	-	321	338	-	548	561	-
Stage 2	-	-	-	-	-	-	426	534	-	129	302	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	1.7	$ 401.3	$ 583.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	82	575	1244	-	-	967	-	-	23	181
HCM Lane V/C Ratio	2.329	0.27	0.13	-	-	0.072	-	-	3.478	0.757
HCM Control Delay (s)	$ 716	13.6	8.3	-	-	9	-		$ 1464.7	69
HCM Lane LOS	F	B	A	-	-	A	-	-	F	F
HCM 95th %tile Q(veh)	17.7	1.1	0.4	-	-	0.2	-	-	10.1	4.9

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	570	35	70	370	0	40	31	155	0	40	5
Future Volume (vph)	25	570	35	70	370	0	40	31	155	0	40	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

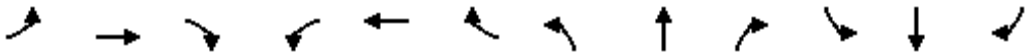
Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	570	35	70	370	0	40	31	155	0	40	5
Future Vol, veh/h	25	570	35	70	370	0	40	31	155	0	40	5
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	25	570	35	70	370	0	40	31	155	0	40	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	609	0	0	1183	1153	592	1242	1170	379
Stage 1	-	-	-	-	-	-	642	642	-	511	511	-
Stage 2	-	-	-	-	-	-	541	511	-	731	659	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1177	-	-	960	-	-	164	195	501	112	147	546
Stage 1	-	-	-	-	-	-	458	464	-	443	444	-
Stage 2	-	-	-	-	-	-	520	532	-	327	374	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	956	-	-	115	176	499	62	133	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	115	176	-	62	133	-
Stage 1	-	-	-	-	-	-	447	452	-	433	411	-
Stage 2	-	-	-	-	-	-	428	493	-	206	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.4	28.6	40.6
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	136	499	1176	-	-	956	-	-	145
HCM Lane V/C Ratio	0.522	0.311	0.021	-	-	0.073	-	-	0.31
HCM Control Delay (s)	57.3	15.4	8.1	-	-	9.1	-	-	40.6
HCM Lane LOS	F	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.5	1.3	0.1	-	-	0.2	-	-	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	630	150	90	531	30	284	40	25	25	25	60
Future Volume (vph)	52	630	150	90	531	30	284	40	25	25	25	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	359.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	630	150	90	531	30	284	40	25	25	25	60
Future Vol, veh/h	52	630	150	90	531	30	284	40	25	25	25	60
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	52	630	150	90	531	30	284	40	25	25	25	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	782	0	0	1581	1553	708	1570	1613	548
Stage 1	-	-	-	-	-	-	811	811	-	727	727	-
Stage 2	-	-	-	-	-	-	770	742	-	843	886	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	995	-	-	836	-	-	~ 87	112	430	91	105	540
Stage 1	-	-	-	-	-	-	369	388	-	419	432	-
Stage 2	-	-	-	-	-	-	389	418	-	361	365	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	994	-	-	834	-	-	~ 48	85	429	45	80	539
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 48	85	-	45	80	-
Stage 1	-	-	-	-	-	-	333	350	-	379	363	-
Stage 2	-	-	-	-	-	-	~ 271	352	-	272	330	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.4	$ 1947.9	152.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	48	123	994	-	-	834	-	-	112
HCM Lane V/C Ratio	5.917	0.528	0.052	-	-	0.108	-	-	0.982
HCM Control Delay (s)	$ 2379.3	63.1	8.8	0	-	9.8	0	-	152.4
HCM Lane LOS	F	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	32.8	2.5	0.2	-	-	0.4	-	-	6.3

Notes

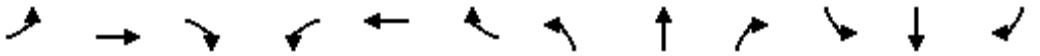
~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	540	125	70	340	185	85	104	120	55	190	80
Future Volume (vph)	60	540	125	70	340	185	85	104	120	55	190	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 88.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

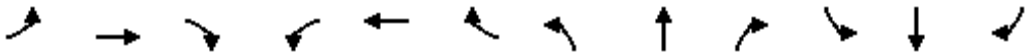




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	540	125	70	340	185	85	104	120	55	190	80
Future Volume (veh/h)	60	540	125	70	340	185	85	104	120	55	190	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	60	540	125	70	340	185	85	104	120	55	190	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	499	930	215	406	726	395	204	196	227	233	311	131
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	863	1444	334	764	1128	614	1067	761	878	1112	1204	507
Grp Volume(v), veh/h	60	0	665	70	0	525	85	0	224	55	0	270
Grp Sat Flow(s),veh/h/ln	863	0	1778	764	0	1741	1067	0	1639	1112	0	1712
Q Serve(g_s), s	3.6	0.0	20.0	5.4	0.0	14.4	7.2	0.0	11.0	4.2	0.0	13.0
Cycle Q Clear(g_c), s	18.0	0.0	20.0	25.3	0.0	14.4	20.2	0.0	11.0	15.2	0.0	13.0
Prop In Lane	1.00		0.19	1.00		0.35	1.00		0.54	1.00		0.30
Lane Grp Cap(c), veh/h	499	0	1145	406	0	1121	204	0	423	233	0	442
V/C Ratio(X)	0.12	0.00	0.58	0.17	0.00	0.47	0.42	0.00	0.53	0.24	0.00	0.61
Avail Cap(c_a), veh/h	499	0	1145	406	0	1121	274	0	531	306	0	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	9.5	16.7	0.0	8.5	39.5	0.0	29.9	36.4	0.0	30.7
Incr Delay (d2), s/veh	0.5	0.0	2.2	0.9	0.0	1.4	1.9	0.0	1.5	0.5	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	7.7	1.0	0.0	5.4	2.0	0.0	4.5	1.2	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	11.7	17.6	0.0	9.9	41.5	0.0	31.4	37.0	0.0	32.0
LnGrp LOS	B	A	B	B	A	A	D	A	C	D	A	C
Approach Vol, veh/h		725			595			309			325	
Approach Delay, s/veh		11.8			10.8			34.1			32.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.0	28.8	65.0	28.8
Change Period (Y+Rc), s	4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s	60.4	30.4	60.4	30.4
Max Q Clear Time (g_c+I1), s	22.0	22.2	27.3	17.2
Green Ext Time (p_c), s	6.4	1.5	4.9	1.6

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	407	240	20	392	45	260	25	5	25	25	59
Future Volume (vph)	28	407	240	20	392	45	260	25	5	25	25	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	72.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	407	240	20	392	45	260	25	5	25	25	59
Future Vol, veh/h	28	407	240	20	392	45	260	25	5	25	25	59
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	28	407	240	20	392	45	260	25	5	25	25	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	439	0	0	649	0	0	1084	1064	531	1057	1162	419
Stage 1	-	-	-	-	-	-	585	585	-	457	457	-
Stage 2	-	-	-	-	-	-	499	479	-	600	705	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1110	-	-	937	-	-	~ 194	222	546	205	197	638
Stage 1	-	-	-	-	-	-	495	496	-	587	571	-
Stage 2	-	-	-	-	-	-	552	553	-	491	442	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1108	-	-	935	-	-	~ 149	206	544	174	183	636
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 149	206	-	174	183	-
Stage 1	-	-	-	-	-	-	474	475	-	562	554	-
Stage 2	-	-	-	-	-	-	464	536	-	441	423	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	$ 373.3	24.5
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	149	230	1108	-	-	935	-	-	292
HCM Lane V/C Ratio	1.745	0.13	0.025	-	-	0.021	-	-	0.373
HCM Control Delay (s)	$ 413.7	23	8.3	0	-	8.9	0	-	24.5
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	19	0.4	0.1	-	-	0.1	-	-	1.7

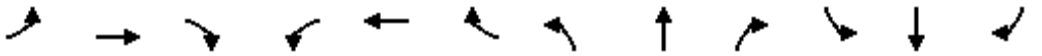
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	503	207	40	335	80	220	145	35	75	180	10
Future Volume (vph)	10	503	207	40	335	80	220	145	35	75	180	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





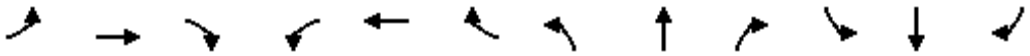
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	503	207	40	335	80	220	145	35	75	180	10
Future Volume (veh/h)	10	503	207	40	335	80	220	145	35	75	180	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	503	207	40	335	80	220	145	35	75	180	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	675	678	279	305	787	188	298	350	84	301	408	23
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	954	1117	460	733	1298	310	1165	1279	309	1137	1492	83
Grp Volume(v), veh/h	10	0	710	40	0	415	220	0	180	75	0	190
Grp Sat Flow(s),veh/h/ln	954	0	1577	733	0	1607	1165	0	1588	1137	0	1575
Q Serve(g_s), s	0.3	0.0	24.2	2.4	0.0	0.0	13.0	0.0	7.0	4.3	0.0	7.5
Cycle Q Clear(g_c), s	0.3	0.0	24.2	26.5	0.0	0.0	20.5	0.0	7.0	11.3	0.0	7.5
Prop In Lane	1.00		0.29	1.00		0.19	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	675	0	957	305	0	975	298	0	434	301	0	431
V/C Ratio(X)	0.01	0.00	0.74	0.13	0.00	0.43	0.74	0.00	0.41	0.25	0.00	0.44
Avail Cap(c_a), veh/h	675	0	957	305	0	975	298	0	434	301	0	431
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	0.83	0.95	0.00	0.95	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	0.0	10.6	7.0	0.0	0.0	31.5	0.0	22.3	27.0	0.0	22.5
Incr Delay (d2), s/veh	0.0	0.0	4.3	0.8	0.0	1.3	8.2	0.0	0.2	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	8.3	0.4	0.0	0.4	4.6	0.0	2.6	1.2	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	14.9	7.9	0.0	1.3	39.7	0.0	22.6	27.1	0.0	22.8
LnGrp LOS	A	A	B	A	A	A	D	A	C	C	A	C
Approach Vol, veh/h		720			455			400			265	
Approach Delay, s/veh		14.8			1.9			32.0			24.0	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		25.0		50.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		26.2		13.3		28.5		22.5				
Green Ext Time (p_c), s		5.5		0.5		2.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.7									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	283	130	15	355	20	85	35	25	5	15	47
Future Volume (vph)	44	283	130	15	355	20	85	35	25	5	15	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

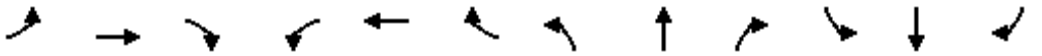
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	283	130	15	355	20	85	35	25	5	15	47
Future Vol, veh/h	44	283	130	15	355	20	85	35	25	5	15	47
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	44	283	130	15	355	20	85	35	25	5	15	47
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.4	14.8	11.4	9.8
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	59%	10%	4%	7%
Vol Thru, %	24%	62%	91%	22%
Vol Right, %	17%	28%	5%	70%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	457	390	67
LT Vol	85	44	15	5
Through Vol	35	283	355	15
RT Vol	25	130	20	47
Lane Flow Rate	145	457	390	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.251	0.636	0.564	0.111
Departure Headway (Hd)	6.237	5.007	5.208	5.95
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	574	722	690	600
Service Time	4.294	3.045	3.248	4.016
HCM Lane V/C Ratio	0.253	0.633	0.565	0.112
HCM Control Delay	11.4	16.4	14.8	9.8
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	1	4.6	3.5	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	533	30	30	385	79	15	16	30	116	24	45
Future Volume (vph)	45	533	30	30	385	79	15	16	30	116	24	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1628	0	1770	1625	0	0	1800	1411	0	1806	1439
Flt Permitted	0.473			0.414				0.835			0.741	
Satd. Flow (perm)	861	1628	0	767	1625	0	0	1537	1367	0	1382	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			25				30			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	563	0	30	464	0	0	31	30	0	140	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	56.5	56.5		56.5	56.5			12.9	56.5		12.9	56.5
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.17	0.75		0.17	0.75
v/c Ratio	0.07	0.46		0.05	0.38			0.12	0.03		0.59	0.04
Control Delay	5.9	7.0		5.1	5.9			24.6	2.3		37.7	2.0
Queue Delay	0.0	0.1		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.9	7.1		5.1	5.9			24.6	2.3		37.7	2.0
LOS	A	A		A	A			C	A		D	A
Approach Delay		7.0			5.9			13.6			29.0	
Approach LOS		A			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	

Intersection Signal Delay: 9.9 Intersection LOS: A
Intersection Capacity Utilization 69.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	350	15	0	0	372
Future Volume (vph)	20	350	15	0	0	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	350	15	0	0	372
Future Vol, veh/h	20	350	15	0	0	372
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	20	350	15	0	0	372

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	387	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	607	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	686	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	607	1050	-	-	-	-
Mov Cap-2 Maneuver	607	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	686	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1010	-
HCM Lane V/C Ratio	-	0.366	-
HCM Control Delay (s)	-	10.6	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.7	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	342	75
Future Volume (vph)	0	0	10	0	342	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

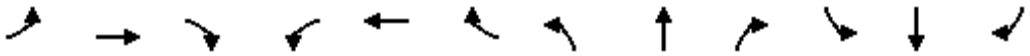
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	342	75
Future Vol, veh/h	0	0	10	0	342	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	342	75

Major/Minor	Minor2		Major2	
Conflicting Flow All	759	75	0	0
Stage 1	759	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	338	992	-	-
Stage 1	418	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	992	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	45	111	15	10	10	82	424	22	10	389	25
Future Volume (vph)	25	45	111	15	10	10	82	424	22	10	389	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

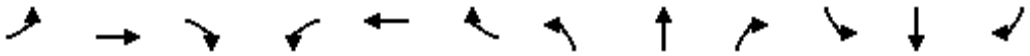
Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	45	111	15	10	10	82	424	22	10	389	25
Future Vol, veh/h	25	45	111	15	10	10	82	424	22	10	389	25
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	25	45	111	15	10	10	82	424	22	10	389	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1074	1058	430	1127	1059	478	427	0	0	459	0	0
Stage 1	435	435	-	612	612	-	-	-	-	-	-	-
Stage 2	639	623	-	515	447	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	199	227	629	183	226	591	1132	-	-	1092	-	-
Stage 1	604	584	-	484	487	-	-	-	-	-	-	-
Stage 2	468	481	-	546	577	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	197	612	111	197	567	1118	-	-	1078	-	-
Mov Cap-2 Maneuver	165	197	-	111	197	-	-	-	-	-	-	-
Stage 1	538	570	-	431	434	-	-	-	-	-	-	-
Stage 2	394	429	-	401	563	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.6	31.2	1.3	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1118	-	-	322	172	1078	-	-
HCM Lane V/C Ratio	0.073	-	-	0.562	0.203	0.009	-	-
HCM Control Delay (s)	8.5	0	-	29.6	31.2	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3.3	0.7	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	28	33	0	10	62	310	22	0	248	5
Future Volume (vph)	5	0	28	33	0	10	62	310	22	0	248	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

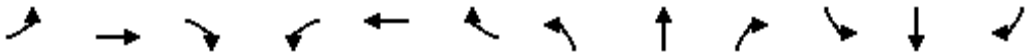
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	0	28	33	0	10	62	310	22	0	248	5
Future Vol, veh/h	5	0	28	33	0	10	62	310	22	0	248	5
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	5	0	28	33	0	10	62	310	22	0	248	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	701	707	251	710	698	321	253	0	0	332	0	0
Stage 1	251	251	-	445	445	-	-	-	-	-	-	-
Stage 2	450	456	-	265	253	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	333	341	750	351	367	724	1306	-	-	1216	-	-
Stage 1	719	671	-	596	578	-	-	-	-	-	-	-
Stage 2	559	542	-	745	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	314	321	750	323	346	724	1306	-	-	1216	-	-
Mov Cap-2 Maneuver	314	321	-	323	346	-	-	-	-	-	-	-
Stage 1	677	671	-	561	544	-	-	-	-	-	-	-
Stage 2	519	511	-	717	701	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	16	1.2	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1306	-	-	620	371	1216	-	-
HCM Lane V/C Ratio	0.047	-	-	0.053	0.116	-	-	-
HCM Control Delay (s)	7.9	0	-	11.1	16	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	126	5	32	181	37	0	25	36	26	0	25
Future Volume (vph)	20	126	5	32	181	37	0	25	36	26	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	126	5	32	181	37	0	25	36	26	0	25
Future Vol, veh/h	20	126	5	32	181	37	0	25	36	26	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	126	5	32	181	37	0	25	36	26	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	218	0	0	131	0	0	445	451	129	463	435	200
Stage 1	-	-	-	-	-	-	169	169	-	264	264	-
Stage 2	-	-	-	-	-	-	276	282	-	199	171	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1334	-	-	1467	-	-	508	491	897	513	517	846
Stage 1	-	-	-	-	-	-	812	742	-	746	694	-
Stage 2	-	-	-	-	-	-	711	662	-	807	761	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1334	-	-	1467	-	-	478	471	897	458	496	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	478	471	-	458	496	-
Stage 1	-	-	-	-	-	-	799	730	-	734	677	-
Stage 2	-	-	-	-	-	-	673	645	-	736	749	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	1	11.1	11.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	654	1334	-	-	1467	-	-	591
HCM Lane V/C Ratio	0.093	0.015	-	-	0.022	-	-	0.086
HCM Control Delay (s)	11.1	7.7	0	-	7.5	0	-	11.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.3



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	31	931	49	61	275
Future Volume (vph)	28	31	931	49	61	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	776		1544			1729
Travel Time (s)	21.2		30.1			33.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	50%	3%	50%	50%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	31	931	49	61	275
Future Vol, veh/h	28	31	931	49	61	275
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, %	50	50	3	50	50	3
Mvmt Flow	30	34	1012	53	66	299

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1470	1039	0	0	1065	0
Stage 1	1039	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Critical Hdwy	6.9	6.7	-	-	4.6	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	-	-	2.65	-
Pot Cap-1 Maneuver	110	227	-	-	503	-
Stage 1	278	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	93	227	-	-	503	-
Mov Cap-2 Maneuver	93	-	-	-	-	-
Stage 1	278	-	-	-	-	-
Stage 2	475	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	53.7	0	2.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	135	503	-
HCM Lane V/C Ratio	-	-	0.475	0.132	-
HCM Control Delay (s)	-	-	53.7	13.2	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	2.2	0.5	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	74	31	436	151	56	260
Future Volume (vph)	74	31	436	151	56	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1025		1194			214
Travel Time (s)	28.0		23.3			4.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	31	436	151	56	260
Future Vol, veh/h	74	31	436	151	56	260
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	80	34	474	164	61	283

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	961	556	0	0	638	0
Stage 1	556	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	283	529	-	-	941	-
Stage 1	572	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	261	529	-	-	941	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.1	0	1.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	261	529	941	-
HCM Lane V/C Ratio	-	-	0.308	0.064	0.065	-
HCM Control Delay (s)	-	-	24.8	12.3	9.1	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2	0.2	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	585	100	344	678	81	274
Future Volume (vph)	585	100	344	678	81	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	201			2785	1046	
Travel Time (s)	3.0			42.2	28.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	130.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	585	100	344	678	81	274
Future Vol, veh/h	585	100	344	678	81	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	636	109	374	737	88	298

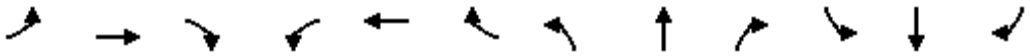
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	745	0	2176	691
Stage 1	-	-	-	-	691	-
Stage 2	-	-	-	-	1485	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	858	-	~ 51	443
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	206	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	858	-	~ 13	443
Mov Cap-2 Maneuver	-	-	-	-	~ 13	-
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	~ 54	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	$ 745.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	13	443	-	-	858	-
HCM Lane V/C Ratio	6.773	0.672	-	-	0.436	-
HCM Control Delay (s)	$ 3171.6	28.2	-	-	12.4	0
HCM Lane LOS	F	D	-	-	B	A
HCM 95th %tile Q(veh)	12.1	4.9	-	-	2.2	-

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

2031 with SEIS Alternative 6 Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	217	5	5	0	0	0	0	15	5	239	20	0
Future Volume (vph)	217	5	5	0	0	0	0	15	5	239	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

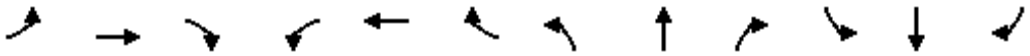
Intersection	
Int Delay, s/veh	13

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	217	5	5	0	0	0	0	15	5	239	20	0
Future Vol, veh/h	217	5	5	0	0	0	0	15	5	239	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	217	5	5	0	0	0	0	15	5	239	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	516	518	20	-	0	0	20	0	0
Stage 1	498	498	-	-	-	-	-	-	-
Stage 2	18	20	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	521	463	1061	0	-	-	1609	-	0
Stage 1	613	546	-	0	-	-	-	-	0
Stage 2	1007	881	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	443	0	1061	-	-	-	1609	-	-
Mov Cap-2 Maneuver	443	0	-	-	-	-	-	-	-
Stage 1	613	0	-	-	-	-	-	-	-
Stage 2	856	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.9	0	7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	449	1609	-
HCM Lane V/C Ratio	-	-	0.506	0.149	-
HCM Control Delay (s)	-	-	20.9	7.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.8	0.5	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	5	311	5	227	0	0	234	969
Future Volume (vph)	0	0	0	25	5	311	5	227	0	0	234	969
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

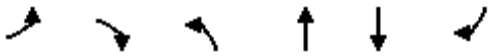
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	5	311	5	227	0	0	234	969
Future Vol, veh/h	0	0	0	25	5	311	5	227	0	0	234	969
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	25	5	311	5	227	0	0	234	969

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	956	1440	227	1203	0	-	-	-	0
Stage 1	237	237	-	-	-	-	-	-	-
Stage 2	719	1203	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	289	134	817	587	-	0	0	-	-
Stage 1	807	713	-	-	-	0	0	-	-
Stage 2	486	260	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	286	0	817	587	-	-	-	-	-
Mov Cap-2 Maneuver	286	0	-	-	-	-	-	-	-
Stage 1	799	0	-	-	-	-	-	-	-
Stage 2	486	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	587	-	718	-	-
HCM Lane V/C Ratio	0.009	-	0.475	-	-
HCM Control Delay (s)	11.2	0	14.5	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	2.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	70	30	508	1133	35
Future Volume (vph)	30	70	30	508	1133	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

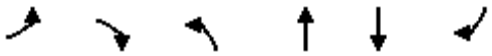
Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	70	30	508	1133	35
Future Vol, veh/h	30	70	30	508	1133	35
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	30	70	30	508	1133	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1719	1151	1168	0	-	0
Stage 1	1151	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	97	239	605	-	-	-
Stage 1	299	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	92	239	605	-	-	-
Mov Cap-2 Maneuver	92	-	-	-	-	-
Stage 1	284	-	-	-	-	-
Stage 2	563	-	-	-	-	-

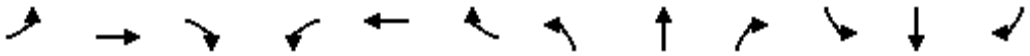
Approach	EB	NB	SB
HCM Control Delay, s	57.7	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	605	-	162	-	-
HCM Lane V/C Ratio	0.05	-	0.617	-	-
HCM Control Delay (s)	11.3	-	57.7	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	3.4	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	91	198	275	271	977	89
Future Volume (vph)	91	198	275	271	977	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1540	1214	
Travel Time (s)	19.3			30.0	23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	22	0	0	0	17	277	0	0	991	30
Future Volume (vph)	10	0	22	0	0	0	17	277	0	0	991	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

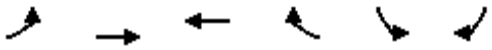
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	22	0	0	0	17	277	0	0	991	30
Future Vol, veh/h	10	0	22	0	0	0	17	277	0	0	991	30
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	10	0	22	0	0	0	17	277	0	0	991	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1317	1317	1006	1328	1332	277	1021	0	0	277	0	0
Stage 1	1006	1006	-	311	311	-	-	-	-	-	-	-
Stage 2	311	311	-	1017	1021	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	131	154	286	133	156	767	688	-	-	1292	-	-
Stage 1	285	313	-	704	662	-	-	-	-	-	-	-
Stage 2	689	649	-	289	316	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	150	286	120	151	767	688	-	-	1292	-	-
Mov Cap-2 Maneuver	128	150	-	120	151	-	-	-	-	-	-	-
Stage 1	277	313	-	684	643	-	-	-	-	-	-	-
Stage 2	669	630	-	267	316	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.7	0	0.6	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	688	-	-	206	-	1292	-	-
HCM Lane V/C Ratio	0.025	-	-	0.155	-	-	-	-
HCM Control Delay (s)	10.4	0	-	25.7	0	0	-	-
HCM Lane LOS	B	A	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	678	1382	30	10	15
Future Volume (vph)	10	678	1382	30	10	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2768	1314		535	
Travel Time (s)		75.5	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

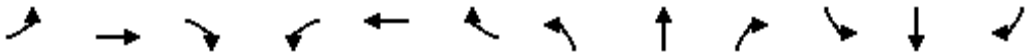
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	678	1382	30	10	15
Future Vol, veh/h	10	678	1382	30	10	15
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	10	678	1382	30	10	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1417	0	-	0	2100	1402
Stage 1	-	-	-	-	1402	-
Stage 2	-	-	-	-	698	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	484	-	-	-	58	173
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	497	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	482	-	-	-	56	172
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	221	-
Stage 2	-	-	-	-	495	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	56.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	482	-	-	-	94
HCM Lane V/C Ratio	0.021	-	-	-	0.266
HCM Control Delay (s)	12.6	0	-	-	56.6
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	593	85	20	1241	5	131	0	70	10	0	5
Future Volume (vph)	5	593	85	20	1241	5	131	0	70	10	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	98.7

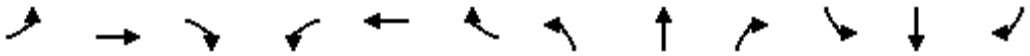
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	593	85	20	1241	5	131	0	70	10	0	5
Future Vol, veh/h	5	593	85	20	1241	5	131	0	70	10	0	5
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	593	85	20	1241	5	131	0	70	10	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1246	0	0	681	0	0	1935	1935	639	1965	1975	1244
Stage 1	-	-	-	-	-	-	649	649	-	1284	1284	-
Stage 2	-	-	-	-	-	-	1286	1286	-	681	691	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	562	-	-	916	-	-	~ 49	65	474	48	63	215
Stage 1	-	-	-	-	-	-	457	464	-	204	238	-
Stage 2	-	-	-	-	-	-	201	234	-	444	449	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	562	-	-	913	-	-	~ 45	59	473	38	58	215
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 45	59	-	38	58	-
Stage 1	-	-	-	-	-	-	449	456	-	201	221	-
Stage 2	-	-	-	-	-	-	182	217	-	373	441	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 1055.1	100.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	66	562	-	-	913	-	-	52
HCM Lane V/C Ratio	3.045	0.009	-	-	0.022	-	-	0.288
HCM Control Delay (s)	$ 1055.1	11.5	0	-	9	0	-	100.2
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	20.5	0	-	-	0.1	-	-	1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	618	65	20	1220	5	96	15	30	10	0	5
Future Volume (vph)	25	618	65	20	1220	5	96	15	30	10	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	62.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	618	65	20	1220	5	96	15	30	10	0	5
Future Vol, veh/h	25	618	65	20	1220	5	96	15	30	10	0	5
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	25	618	65	20	1220	5	96	15	30	10	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1225	0	0	687	0	0	1970	1970	655	1986	2000	1223
Stage 1	-	-	-	-	-	-	705	705	-	1263	1263	-
Stage 2	-	-	-	-	-	-	1265	1265	-	723	737	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	569	-	-	912	-	-	~ 47	63	466	46	61	221
Stage 1	-	-	-	-	-	-	427	439	-	210	243	-
Stage 2	-	-	-	-	-	-	208	240	-	421	428	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	569	-	-	909	-	-	~ 41	54	464	30	53	221
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 41	54	-	30	53	-
Stage 1	-	-	-	-	-	-	395	406	-	195	226	-
Stage 2	-	-	-	-	-	-	189	223	-	352	395	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	$ 916.5	132.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	53	569	-	-	909	-	-	42
HCM Lane V/C Ratio	2.66	0.044	-	-	0.022	-	-	0.357
HCM Control Delay (s)	$ 916.5	11.6	0	-	9	0	-	132.3
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	14.6	0.1	-	-	0.1	-	-	1.2

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	95	10	20	191
Future Volume (vph)	25	15	95	10	20	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

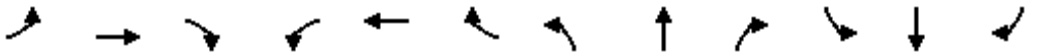
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	95	10	20	191
Future Vol, veh/h	25	15	95	10	20	191
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	95	10	20	191
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	8.2	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	9%	0%	90%
Vol Thru, %	0%	62%	10%
Vol Right, %	91%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	211	40	105
LT Vol	20	0	95
Through Vol	0	25	10
RT Vol	191	15	0
Lane Flow Rate	211	40	105
Geometry Grp	1	1	1
Degree of Util (X)	0.216	0.047	0.131
Departure Headway (Hd)	3.693	4.215	4.485
Convergence, Y/N	Yes	Yes	Yes
Cap	954	837	793
Service Time	1.786	2.306	2.551
HCM Lane V/C Ratio	0.221	0.048	0.132
HCM Control Delay	7.8	7.5	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	0.1	0.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	225	120	65	350	105	70	91	110	50	65	45
Future Volume (vph)	105	225	120	65	350	105	70	91	110	50	65	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

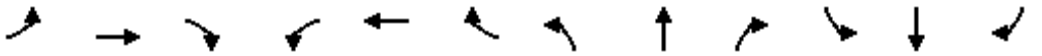
Intersection	
Int Delay, s/veh	25.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	105	225	120	65	350	105	70	91	110	50	65	45
Future Vol, veh/h	105	225	120	65	350	105	70	91	110	50	65	45
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	105	225	120	65	350	105	70	91	110	50	65	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	455	0	0	345	0	0	1084	1080	285	1129	1088	404
Stage 1	-	-	-	-	-	-	495	495	-	533	533	-
Stage 2	-	-	-	-	-	-	589	585	-	596	555	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1106	-	-	1214	-	-	194	218	754	183	218	651
Stage 1	-	-	-	-	-	-	556	546	-	534	528	-
Stage 2	-	-	-	-	-	-	494	498	-	494	516	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1106	-	-	1214	-	-	118	187	754	87	187	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	118	187	-	87	187	-
Stage 1	-	-	-	-	-	-	503	494	-	483	499	-
Stage 2	-	-	-	-	-	-	378	471	-	312	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1	97.7	47.9
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	149	754	1106	-	-	1214	-	-	87	264
HCM Lane V/C Ratio	1.081	0.146	0.095	-	-	0.054	-	-	0.575	0.417
HCM Control Delay (s)	157.2	10.6	8.6	-	-	8.1	-	-	91.6	28
HCM Lane LOS	F	B	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	8.6	0.5	0.3	-	-	0.2	-	-	2.6	1.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	365	5	60	505	40	20	56	65	5	75	50
Future Volume (vph)	75	365	5	60	505	40	20	56	65	5	75	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

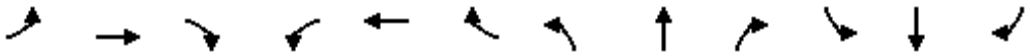
Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	365	5	60	505	40	20	56	65	5	75	50
Future Vol, veh/h	75	365	5	60	505	40	20	56	65	5	75	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	365	5	60	505	40	20	56	65	5	75	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	372	0	0	1228	1187	370	1225	1169	527
Stage 1	-	-	-	-	-	-	520	520	-	647	647	-
Stage 2	-	-	-	-	-	-	708	667	-	578	522	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	1027	-	-	1186	-	-	153	187	671	155	192	549
Stage 1	-	-	-	-	-	-	536	529	-	458	465	-
Stage 2	-	-	-	-	-	-	422	454	-	500	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1184	-	-	83	164	670	94	168	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	164	-	94	168	-
Stage 1	-	-	-	-	-	-	496	489	-	424	440	-
Stage 2	-	-	-	-	-	-	302	430	-	371	489	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	40.5	42.6
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	670	1025	-	-	1184	-	-	220
HCM Lane V/C Ratio	0.585	0.097	0.073	-	-	0.051	-	-	0.591
HCM Control Delay (s)	65.8	11	8.8	-	-	8.2	-	-	42.6
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2.9	0.3	0.2	-	-	0.2	-	-	3.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	428	130	110	838	20	396	15	15	5	15	41
Future Volume (vph)	35	428	130	110	838	20	396	15	15	5	15	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	714.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	428	130	110	838	20	396	15	15	5	15	41
Future Vol, veh/h	35	428	130	110	838	20	396	15	15	5	15	41
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	35	428	130	110	838	20	396	15	15	5	15	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	866	0	0	561	0	0	1666	1652	498	1656	1707	860
Stage 1	-	-	-	-	-	-	566	566	-	1076	1076	-
Stage 2	-	-	-	-	-	-	1100	1086	-	580	631	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	773	-	-	1015	-	-	~ 77	99	574	79	92	359
Stage 1	-	-	-	-	-	-	511	509	-	268	298	-
Stage 2	-	-	-	-	-	-	~ 259	294	-	504	477	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	767	-	-	1012	-	-	~ 45	72	571	51	67	355
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 45	72	-	51	67	-
Stage 1	-	-	-	-	-	-	475	473	-	248	234	-
Stage 2	-	-	-	-	-	-	~ 169	231	-	442	443	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1	$ 3426.6	49.7
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	45	128	767	-	-	1012	-	-	139
HCM Lane V/C Ratio	8.8	0.234	0.046	-	-	0.109	-	-	0.439
HCM Control Delay (s)	$ 3683	41.5	9.9	0	-	9	0	-	49.7
HCM Lane LOS	F	E	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	47	0.9	0.1	-	-	0.4	-	-	2

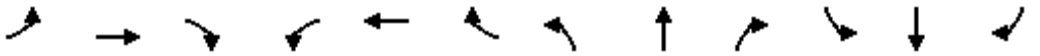
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	95	65	490	330	80	96	85	60	150	55
Future Volume (vph)	15	320	95	65	490	330	80	96	85	60	150	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 91.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	95	65	490	330	80	96	85	60	150	55
Future Volume (veh/h)	15	320	95	65	490	330	80	96	85	60	150	55
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	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	95	65	490	330	80	96	85	60	150	55
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	363	966	287	666	727	489	197	188	166	212	268	98
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	667	1385	411	971	1042	702	1183	920	814	1209	1314	482
Grp Volume(v), veh/h	15	0	415	65	0	820	80	0	181	60	0	205
Grp Sat Flow(s),veh/h/ln	667	0	1796	971	0	1743	1183	0	1734	1209	0	1796
Q Serve(g_s), s	1.2	0.0	8.5	2.6	0.0	25.2	6.1	0.0	8.7	4.3	0.0	9.6
Cycle Q Clear(g_c), s	26.4	0.0	8.5	11.2	0.0	25.2	15.7	0.0	8.7	13.0	0.0	9.6
Prop In Lane	1.00		0.23	1.00		0.40	1.00		0.47	1.00		0.27
Lane Grp Cap(c), veh/h	363	0	1253	666	0	1216	197	0	354	212	0	367
V/C Ratio(X)	0.04	0.00	0.33	0.10	0.00	0.67	0.41	0.00	0.51	0.28	0.00	0.56
Avail Cap(c_a), veh/h	363	0	1253	666	0	1216	276	0	470	292	0	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	5.6	7.8	0.0	8.1	40.6	0.0	33.1	38.9	0.0	33.5
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.3	0.0	3.0	1.9	0.0	1.6	1.0	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.1	0.6	0.0	9.1	1.9	0.0	3.8	1.4	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	6.3	8.1	0.0	11.1	42.5	0.0	34.8	40.0	0.0	35.4
LnGrp LOS	B	A	A	A	A	B	D	A	C	D	A	D
Approach Vol, veh/h		430			885			261			265	
Approach Delay, s/veh		6.6			10.9			37.1			36.4	
Approach LOS		A			B			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		23.7		70.0		23.7				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		65.4		25.4		65.4		25.4				
Max Q Clear Time (g_c+I1), s		28.4		17.7		27.2		15.0				
Green Ext Time (p_c), s		3.3		1.1		8.9		1.4				

Intersection Summary												
HCM 6th Ctrl Delay			17.3									
HCM 6th LOS			B									

Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	268	165	10	353	30	570	20	10	25	25	30
Future Volume (vph)	35	268	165	10	353	30	570	20	10	25	25	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	242

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	268	165	10	353	30	570	20	10	25	25	30
Future Vol, veh/h	35	268	165	10	353	30	570	20	10	25	25	30
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	35	268	165	10	353	30	570	20	10	25	25	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	383	0	0	434	0	0	838	825	353	825	892	368
Stage 1	-	-	-	-	-	-	422	422	-	388	388	-
Stage 2	-	-	-	-	-	-	416	403	-	437	504	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1175	-	-	1131	-	-	~ 286	308	691	285	275	664
Stage 1	-	-	-	-	-	-	609	588	-	624	599	-
Stage 2	-	-	-	-	-	-	614	600	-	587	531	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1175	-	-	1130	-	-	~ 243	292	690	256	261	664
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 243	292	-	256	261	-
Stage 1	-	-	-	-	-	-	584	564	-	599	592	-
Stage 2	-	-	-	-	-	-	~ 555	593	-	535	509	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	$ 618.5	19.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	243	362	1175	-	-	1130	-	-	335
HCM Lane V/C Ratio	2.346	0.083	0.03	-	-	0.009	-	-	0.239
HCM Control Delay (s)	$ 650.2	15.8	8.2	0	-	8.2	0	-	19.1
HCM Lane LOS	F	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	45.6	0.3	0.1	-	-	0	-	-	0.9

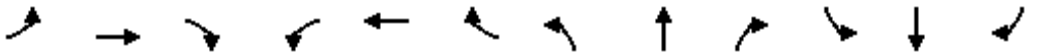
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	305	130	35	459	310	376	355	35	56	119	10
Future Volume (vph)	15	305	130	35	459	310	376	355	35	56	119	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

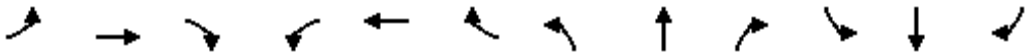




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	305	130	35	459	310	376	355	35	56	119	10
Future Volume (veh/h)	15	305	130	35	459	310	376	355	35	56	119	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	305	130	35	459	310	376	355	35	56	119	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	494	663	283	504	559	377	388	460	45	170	464	39
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	697	1116	476	959	940	635	1249	1506	148	984	1518	128
Grp Volume(v), veh/h	15	0	435	35	0	769	376	0	390	56	0	129
Grp Sat Flow(s),veh/h/ln	697	0	1592	959	0	1574	1249	0	1654	984	0	1645
Q Serve(g_s), s	0.8	0.0	13.7	0.9	0.0	0.0	22.2	0.0	19.3	4.9	0.0	5.3
Cycle Q Clear(g_c), s	0.8	0.0	13.7	14.6	0.0	0.0	27.5	0.0	19.3	24.2	0.0	5.3
Prop In Lane	1.00		0.30	1.00		0.40	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	494	0	946	504	0	936	388	0	505	170	0	503
V/C Ratio(X)	0.03	0.00	0.46	0.07	0.00	0.82	0.97	0.00	0.77	0.33	0.00	0.26
Avail Cap(c_a), veh/h	494	0	946	504	0	936	388	0	505	170	0	503
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.72	0.00	0.72	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	10.2	1.9	0.0	0.0	35.9	0.0	28.4	39.4	0.0	23.5
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.2	0.0	5.9	37.3	0.0	6.6	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.9	0.1	0.0	1.5	12.4	0.0	8.4	1.2	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.7	2.1	0.0	5.9	73.3	0.0	35.0	39.8	0.0	23.6
LnGrp LOS	A	A	B	A	A	A	E	A	C	D	A	C
Approach Vol, veh/h		450			804			766			185	
Approach Delay, s/veh		11.6			5.8			53.8			28.5	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		15.7		26.2		16.6		29.5				
Green Ext Time (p_c), s		3.5		0.1		7.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			25.5									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	203	75	10	318	20	80	25	10	5	20	25
Future Volume (vph)	30	203	75	10	318	20	80	25	10	5	20	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

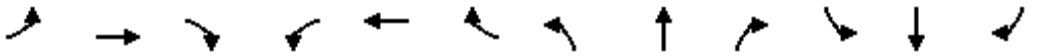
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	203	75	10	318	20	80	25	10	5	20	25
Future Vol, veh/h	30	203	75	10	318	20	80	25	10	5	20	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	30	203	75	10	318	20	80	25	10	5	20	25
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.8	11.6	9.8	8.8
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	70%	10%	3%	10%
Vol Thru, %	22%	66%	91%	40%
Vol Right, %	9%	24%	6%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	308	348	50
LT Vol	80	30	10	5
Through Vol	25	203	318	20
RT Vol	10	75	20	25
Lane Flow Rate	115	308	348	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.177	0.398	0.453	0.075
Departure Headway (Hd)	5.537	4.655	4.686	5.403
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	641	767	762	667
Service Time	3.635	2.724	2.753	3.403
HCM Lane V/C Ratio	0.179	0.402	0.457	0.075
HCM Control Delay	9.8	10.8	11.6	8.8
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.6	1.9	2.4	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	346	20	25	779	70	5	20	20	85	20	15
Future Volume (vph)	25	346	20	25	779	70	5	20	20	85	20	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1660	0	1770	1653	0	0	1881	1454	0	1826	1454
Flt Permitted	0.275			0.536				0.943			0.750	
Satd. Flow (perm)	512	1660	0	992	1653	0	0	1789	1416	0	1419	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9				20			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	366	0	25	849	0	0	25	20	0	105	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	70.8	70.8		70.8	70.8			13.6	70.8		13.6	70.8
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.15	0.79		0.15	0.79
v/c Ratio	0.06	0.28		0.03	0.65			0.09	0.02		0.49	0.01
Control Delay	4.2	3.7		5.1	11.0			29.6	2.8		40.7	2.7
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.2	3.7		5.1	11.0			29.6	2.8		40.7	2.7
LOS	A	A		A	B			C	A		D	A
Approach Delay		3.7			10.8			17.7			36.0	
Approach LOS		A			B			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	

Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 83.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	791	20	0	0	259
Future Volume (vph)	30	791	20	0	0	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	15.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	791	20	0	0	259
Future Vol, veh/h	30	791	20	0	0	259
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	30	791	20	0	0	259

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	279	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	709	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	782	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	709	1055	-	-	-	-
Mov Cap-2 Maneuver	709	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	782	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1037	-
HCM Lane V/C Ratio	-	0.792	-
HCM Control Delay (s)	-	20.2	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	8.6	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	254	80
Future Volume (vph)	0	0	25	0	254	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

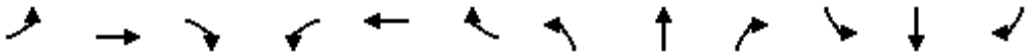
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	254	80
Future Vol, veh/h	0	0	25	0	254	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	254	80

Major/Minor	Minor2		Major2	
Conflicting Flow All	588	80	0	0
Stage 1	588	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	424	986	-	-
Stage 1	499	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	986	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	35	89	40	5	10	105	263	15	5	379	40
Future Volume (vph)	10	35	89	40	5	10	105	263	15	5	379	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

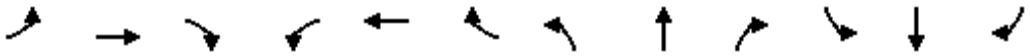
Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	35	89	40	5	10	105	263	15	5	379	40
Future Vol, veh/h	10	35	89	40	5	10	105	263	15	5	379	40
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	10	35	89	40	5	10	105	263	15	5	379	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	943	917	424	967	930	307	434	0	0	283	0	0
Stage 1	424	424	-	486	486	-	-	-	-	-	-	-
Stage 2	519	493	-	481	444	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	245	274	634	236	269	738	1136	-	-	1279	-	-
Stage 1	612	590	-	566	554	-	-	-	-	-	-	-
Stage 2	544	550	-	570	579	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	207	238	619	161	233	713	1120	-	-	1273	-	-
Mov Cap-2 Maneuver	207	238	-	161	233	-	-	-	-	-	-	-
Stage 1	536	579	-	501	490	-	-	-	-	-	-	-
Stage 2	458	487	-	452	568	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.7	30.7	2.3	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1120	-	-	395	194	1273	-	-
HCM Lane V/C Ratio	0.094	-	-	0.339	0.284	0.004	-	-
HCM Control Delay (s)	8.5	0	-	18.7	30.7	7.8	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.5	1.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	35	52	0	5	47	180	21	0	242	10
Future Volume (vph)	10	0	35	52	0	5	47	180	21	0	242	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

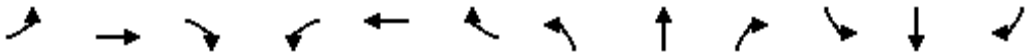
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	35	52	0	5	47	180	21	0	242	10
Future Vol, veh/h	10	0	35	52	0	5	47	180	21	0	242	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	0	35	52	0	5	47	180	21	0	242	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	534	542	247	550	537	191	252	0	0	201	0	0
Stage 1	247	247	-	285	285	-	-	-	-	-	-	-
Stage 2	287	295	-	265	252	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	460	450	797	449	453	856	1325	-	-	1383	-	-
Stage 1	761	706	-	727	679	-	-	-	-	-	-	-
Stage 2	725	673	-	745	702	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	443	432	797	416	435	856	1325	-	-	1383	-	-
Mov Cap-2 Maneuver	443	432	-	416	435	-	-	-	-	-	-	-
Stage 1	731	706	-	698	652	-	-	-	-	-	-	-
Stage 2	692	646	-	712	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	14.5	1.5	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1325	-	-	677	436	1383	-	-
HCM Lane V/C Ratio	0.035	-	-	0.066	0.131	-	-	-
HCM Control Delay (s)	7.8	0	-	10.7	14.5	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.4	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	200	5	19	127	14	10	0	11	26	0	5
Future Volume (vph)	10	200	5	19	127	14	10	0	11	26	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

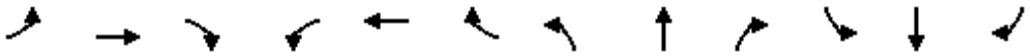
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	200	5	19	127	14	10	0	11	26	0	5
Future Vol, veh/h	10	200	5	19	127	14	10	0	11	26	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	200	5	19	127	14	10	0	11	26	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	141	0	0	205	0	0	398	402	203	400	397	134
Stage 1	-	-	-	-	-	-	223	223	-	172	172	-
Stage 2	-	-	-	-	-	-	175	179	-	228	225	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1455	-	-	1378	-	-	566	540	843	564	544	920
Stage 1	-	-	-	-	-	-	784	723	-	835	760	-
Stage 2	-	-	-	-	-	-	832	755	-	779	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1378	-	-	553	528	843	547	531	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	553	528	-	547	531	-
Stage 1	-	-	-	-	-	-	778	717	-	828	749	-
Stage 2	-	-	-	-	-	-	815	744	-	763	715	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.9	10.5	11.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	675	1455	-	-	1378	-	-	585
HCM Lane V/C Ratio	0.031	0.007	-	-	0.014	-	-	0.053
HCM Control Delay (s)	10.5	7.5	0	-	7.6	0	-	11.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	355	105	10	766	0	516	10	5	0	10	20
Future Volume (vph)	5	355	105	10	766	0	516	10	5	0	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	386.2

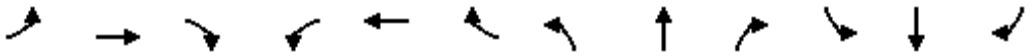
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	355	105	10	766	0	516	10	5	0	10	20
Future Vol, veh/h	5	355	105	10	766	0	516	10	5	0	10	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	355	105	10	766	0	516	10	5	0	10	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	766	0	0	460	0	0	1219	1204	408	1211	1256	766
Stage 1	-	-	-	-	-	-	418	418	-	786	786	-
Stage 2	-	-	-	-	-	-	801	786	-	425	470	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	847	-	-	1106	-	-	~ 156	183	641	161	173	406
Stage 1	-	-	-	-	-	-	610	589	-	388	406	-
Stage 2	-	-	-	-	-	-	~ 377	402	-	611	563	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	847	-	-	1106	-	-	~ 139	179	641	150	169	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 139	179	-	150	169	-
Stage 1	-	-	-	-	-	-	605	584	-	385	400	-
Stage 2	-	-	-	-	-	-	~ 344	396	-	591	558	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 1309.1	19.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	847	-	-	1106	-	-	277
HCM Lane V/C Ratio	3.766	0.006	-	-	0.009	-	-	0.108
HCM Control Delay (s)	$ 1309.1	9.3	0	-	8.3	0	-	19.6
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	52.5	0	-	-	0	-	-	0.4

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	551	0	335	0	0	135	415
Future Volume (vph)	0	0	0	0	0	551	0	335	0	0	135	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

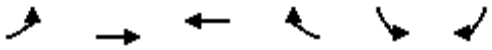
Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	551	0	335	0	0	135	415
Future Vol, veh/h	0	0	0	0	0	551	0	335	0	0	135	415
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	551	0	335	0	0	135	415

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	335	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.23	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	705	0	-	0	0	-	-
Stage 1	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	-	0	705	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	705	-	-
HCM Lane V/C Ratio	-	0.782	-	-
HCM Control Delay (s)	-	25.9	-	-
HCM Lane LOS	-	D	-	-
HCM 95th %tile Q(veh)	-	7.7	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	305	5	0	0	160	0
Future Volume (vph)	305	5	0	0	160	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	305	5	0	0	160	0
Future Vol, veh/h	305	5	0	0	160	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	305	5	0	0	160	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	10.7	9.4
HCM LOS	B	A

Lane	EBLn1	SBLn1
Vol Left, %	98%	100%
Vol Thru, %	2%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	310	160
LT Vol	305	160
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	310	160
Geometry Grp	1	1
Degree of Util (X)	0.398	0.222
Departure Headway (Hd)	4.617	4.997
Convergence, Y/N	Yes	Yes
Cap	781	720
Service Time	2.636	3.021
HCM Lane V/C Ratio	0.397	0.222
HCM Control Delay	10.7	9.4
HCM Lane LOS	B	A
HCM 95th-tile Q	1.9	0.8



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	340	5	425	681	105	0
Future Volume (vph)	340	5	425	681	105	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	46

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	340	5	425	681	105	0
Future Vol, veh/h	340	5	425	681	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	340	5	425	681	105	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	345	0	1874	343
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	1531	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1220	-	~ 79	700
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	197	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1220	-	~ 52	700
Mov Cap-2 Maneuver	-	-	-	-	~ 52	-
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	128	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.7	$ 643.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	52	-	-	1220	-
HCM Lane V/C Ratio	2.019	-	-	0.348	-
HCM Control Delay (s)	$ 643.4	-	-	9.5	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	10.4	-	-	1.6	-

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	38	33	499	39	32	1130
Future Volume (vph)	38	33	499	39	32	1130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	688		1733			1540
Travel Time (s)	18.8		33.8			30.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	50%	50%	3%	50%	50%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	33	499	39	32	1130
Future Vol, veh/h	38	33	499	39	32	1130
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, %	50	50	3	50	50	3
Mvmt Flow	41	36	542	42	35	1228

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1861	563	0	0	584	0
Stage 1	563	-	-	-	-	-
Stage 2	1298	-	-	-	-	-
Critical Hdwy	6.9	6.7	-	-	4.6	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.75	-	-	2.65	-
Pot Cap-1 Maneuver	60	445	-	-	792	-
Stage 1	486	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	52	445	-	-	792	-
Mov Cap-2 Maneuver	52	-	-	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	176	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	148.3	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	88	792	-
HCM Lane V/C Ratio	-	-	0.877	0.044	-
HCM Control Delay (s)	-	-	148.3	9.8	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	4.7	0.1	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	89	41	253	95	49	964
Future Volume (vph)	89	41	253	95	49	964
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	928		1214			194
Travel Time (s)	25.3		23.6			3.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	89	41	253	95	49	964
Future Vol, veh/h	89	41	253	95	49	964
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	97	45	275	103	53	1048

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1481	327	0	0	378	0
Stage 1	327	-	-	-	-	-
Stage 2	1154	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	137	712	-	-	1175	-
Stage 1	728	-	-	-	-	-
Stage 2	299	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	122	712	-	-	1175	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	267	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	72.2	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	122	712	1175	-
HCM Lane V/C Ratio	-	-	0.793	0.063	0.045	-
HCM Control Delay (s)	-	-	100.6	10.4	8.2	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	4.6	0.2	0.1	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	399	60	356	1041	114	289
Future Volume (vph)	399	60	356	1041	114	289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	219			2768	915	
Travel Time (s)	3.3			41.9	25.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3149.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	399	60	356	1041	114	289
Future Vol, veh/h	399	60	356	1041	114	289
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	434	65	387	1132	124	314

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	499	0	2373	467
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	1906	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1060	-	~ 38	594
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	127	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1060	-	~ 1	594
Mov Cap-2 Maneuver	-	-	-	-	~ 1	-
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	~ 2	-

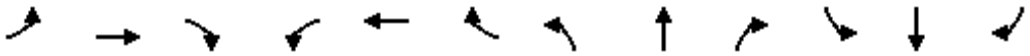
Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	$ 17645.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	1	594	-	-	1060	-
HCM Lane V/C Ratio	123.913	0.529	-	-	0.365	-
HCM Control Delay (s)	$ 62333.9	17.7	-	-	10.3	0
HCM Lane LOS	F	C	-	-	B	A
HCM 95th %tile Q(veh)	18	3.1	-	-	1.7	-

Notes

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

2037 with SEIS Alternative 6 Weekday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	5	20	0	0	0	0	30	40	322	40	0
Future Volume (vph)	310	5	20	0	0	0	0	30	40	322	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	0%	0%	0%	0%	0%	0%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	50.2

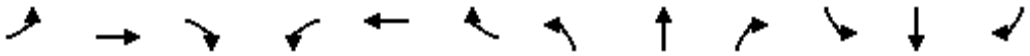
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	310	5	20	0	0	0	0	30	40	322	40	0
Future Vol, veh/h	310	5	20	0	0	0	0	30	40	322	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	0	0	0	0	0	0	4	4	4
Mvmt Flow	310	5	20	0	0	0	0	30	40	322	40	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	734	754	40	-	0	0	70	0	0
Stage 1	684	684	-	-	-	-	-	-	-
Stage 2	50	70	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	384	336	1026	0	-	-	1518	-	0
Stage 1	497	446	-	0	-	-	-	-	0
Stage 2	967	833	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 301	0	1026	-	-	-	1518	-	-
Mov Cap-2 Maneuver	~ 301	0	-	-	-	-	-	-	-
Stage 1	497	0	-	-	-	-	-	-	-
Stage 2	757	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	107.2	0	7.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	314	1518	-
HCM Lane V/C Ratio	-	-	1.067	0.212	-
HCM Control Delay (s)	-	-	107.2	8	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	12.6	0.8	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	5	565	10	330	0	0	322	153
Future Volume (vph)	0	0	0	40	5	565	10	330	0	0	322	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

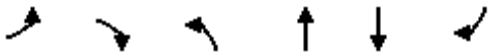
Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	40	5	565	10	330	0	0	322	153
Future Vol, veh/h	0	0	0	40	5	565	10	330	0	0	322	153
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	4	4	4	4	4	4	3	3	3
Mvmt Flow	0	0	0	40	5	565	10	330	0	0	322	153

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	749	825	330	475	0	-	-	-	0
Stage 1	350	350	-	-	-	-	-	-	-
Stage 2	399	475	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	6.24	4.14	-	-	-	-	-
Critical Hdwy Stg 1	5.44	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.44	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	377	305	707	1077	-	0	0	-	-
Stage 1	709	629	-	-	-	0	0	-	-
Stage 2	673	554	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	373	0	707	1077	-	-	-	-	-
Mov Cap-2 Maneuver	373	0	-	-	-	-	-	-	-
Stage 1	701	0	-	-	-	-	-	-	-
Stage 2	673	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42.1	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1077	-	667	-	-
HCM Lane V/C Ratio	0.009	-	0.915	-	-
HCM Control Delay (s)	8.4	0	42.1	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0	-	12	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	64	120	190	705	365	61
Future Volume (vph)	64	120	190	705	365	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	15%	15%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

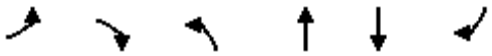
Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	64	120	190	705	365	61
Future Vol, veh/h	64	120	190	705	365	61
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	15	15	4	4	3	3
Mvmt Flow	64	120	190	705	365	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1481	396	426	0	-	0
Stage 1	396	-	-	-	-	-
Stage 2	1085	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.14	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.236	-	-	-
Pot Cap-1 Maneuver	129	626	1123	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	306	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	107	626	1123	-	-	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	543	-	-	-	-	-
Stage 2	306	-	-	-	-	-

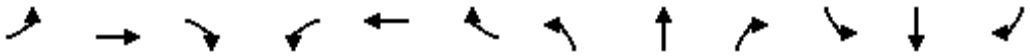
Approach	EB	NB	SB
HCM Control Delay, s	61.1	1.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1123	-	233	-	-
HCM Lane V/C Ratio	0.169	-	0.79	-	-
HCM Control Delay (s)	8.9	-	61.1	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.6	-	5.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	148	254	425	330	209	96
Future Volume (vph)	148	254	425	330	209	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1776	1238	
Travel Time (s)	19.3			34.6	24.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	12	0	0	0	11	339	0	0	267	20
Future Volume (vph)	30	0	12	0	0	0	11	339	0	0	267	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	4%	4%	4%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	30	0	12	0	0	0	11	339	0	0	267	20
Future Vol, veh/h	30	0	12	0	0	0	11	339	0	0	267	20
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	4	4	4	2	2	2
Mvmt Flow	30	0	12	0	0	0	11	339	0	0	267	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	639	639	278	644	649	339	288	0	0	339	0	0
Stage 1	278	278	-	361	361	-	-	-	-	-	-	-
Stage 2	361	361	-	283	288	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.236	-	-	2.218	-	-
Pot Cap-1 Maneuver	382	387	749	389	391	708	1263	-	-	1220	-	-
Stage 1	718	671	-	662	629	-	-	-	-	-	-	-
Stage 2	647	617	-	728	677	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	379	382	748	380	386	708	1262	-	-	1220	-	-
Mov Cap-2 Maneuver	379	382	-	380	386	-	-	-	-	-	-	-
Stage 1	709	670	-	655	622	-	-	-	-	-	-	-
Stage 2	640	610	-	716	676	-	-	-	-	-	-	-

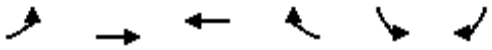
Approach	EB	WB	NB	SB
HCM Control Delay, s	14	0	0.2	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1262	-	-	441	-	1220	-	-
HCM Lane V/C Ratio	0.009	-	-	0.095	-	-	-	-
HCM Control Delay (s)	7.9	0	-	14	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	97	550	192	177	408	220
Future Volume (vph)	97	550	192	177	408	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	12	941	911	30	30	17
Future Volume (vph)	12	941	911	30	30	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2411	1314		535	
Travel Time (s)		65.8	35.8		12.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	2%	2%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

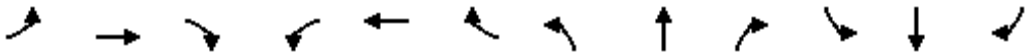
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	941	911	30	30	17
Future Vol, veh/h	12	941	911	30	30	17
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	2	2	0	0
Mvmt Flow	12	941	911	30	30	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	941	0	-	0	1891	929
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	965	-
Critical Hdwy	4.16	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.254	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	712	-	-	-	78	327
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	373	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	712	-	-	-	75	326
Mov Cap-2 Maneuver	-	-	-	-	75	-
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	373	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	65.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	712	-	-	-	104
HCM Lane V/C Ratio	0.017	-	-	-	0.452
HCM Control Delay (s)	10.1	0	-	-	65.5
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	1.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	835	121	40	709	10	225	10	140	10	0	7
Future Volume (vph)	15	835	121	40	709	10	225	10	140	10	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	266.1

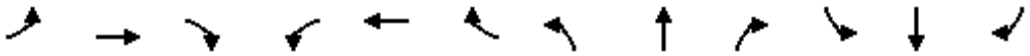
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	835	121	40	709	10	225	10	140	10	0	7
Future Vol, veh/h	15	835	121	40	709	10	225	10	140	10	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	3	3	3	0	0	0	0	0	0
Mvmt Flow	15	835	121	40	709	10	225	10	140	10	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	719	0	0	956	0	0	1725	1725	896	1795	1780	715
Stage 1	-	-	-	-	-	-	926	926	-	794	794	-
Stage 2	-	-	-	-	-	-	799	799	-	1001	986	-
Critical Hdwy	4.15	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	869	-	-	715	-	-	~ 71	90	342	63	83	434
Stage 1	-	-	-	-	-	-	325	350	-	384	403	-
Stage 2	-	-	-	-	-	-	382	401	-	295	328	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	869	-	-	715	-	-	~ 63	79	342	30	72	434
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 63	79	-	30	72	-
Stage 1	-	-	-	-	-	-	313	337	-	369	366	-
Stage 2	-	-	-	-	-	-	341	364	-	163	316	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	$ 1499.4	113.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	91	869	-	-	715	-	-	49
HCM Lane V/C Ratio	4.121	0.017	-	-	0.056	-	-	0.347
HCM Control Delay (s)	$ 1499.4	9.2	0	-	10.3	0	-	113.4
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	39.1	0.1	-	-	0.2	-	-	1.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	864	116	10	654	10	88	0	20	10	0	17
Future Volume (vph)	15	864	116	10	654	10	88	0	20	10	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	17%	17%	17%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	20.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	864	116	10	654	10	88	0	20	10	0	17
Future Vol, veh/h	15	864	116	10	654	10	88	0	20	10	0	17
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	17	17	17	0	0	0
Mvmt Flow	15	864	116	10	654	10	88	0	20	10	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	664	0	0	984	0	0	1644	1640	926	1641	1693	659
Stage 1	-	-	-	-	-	-	956	956	-	679	679	-
Stage 2	-	-	-	-	-	-	688	684	-	962	1014	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.27	6.67	6.37	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.67	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.653	4.153	3.453	3.5	4	3.3
Pot Cap-1 Maneuver	911	-	-	702	-	-	~ 73	93	306	81	94	467
Stage 1	-	-	-	-	-	-	291	317	-	445	454	-
Stage 2	-	-	-	-	-	-	413	427	-	310	319	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	911	-	-	699	-	-	~ 67	87	305	72	88	467
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 67	87	-	72	88	-
Stage 1	-	-	-	-	-	-	279	304	-	429	444	-
Stage 2	-	-	-	-	-	-	389	417	-	279	306	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	$ 328.1	33.3
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	78	911	-	-	699	-	-	154
HCM Lane V/C Ratio	1.385	0.016	-	-	0.014	-	-	0.175
HCM Control Delay (s)	$ 328.1	9	0	-	10.2	0	-	33.3
HCM Lane LOS	F	A	A	-	B	A	-	D
HCM 95th %tile Q(veh)	8.5	0.1	-	-	0	-	-	0.6

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	20	10	131	20	10	335
Future Volume (vph)	20	10	131	20	10	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

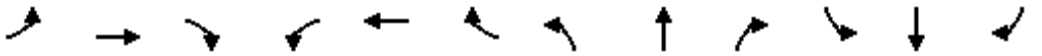
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	131	20	10	335
Future Vol, veh/h	20	10	131	20	10	335
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	1	1	3	3
Mvmt Flow	20	10	131	20	10	335
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.8	9.1	9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	3%	0%	87%
Vol Thru, %	0%	67%	13%
Vol Right, %	97%	33%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	345	30	151
LT Vol	10	0	131
Through Vol	0	20	20
RT Vol	335	10	0
Lane Flow Rate	345	30	151
Geometry Grp	1	1	1
Degree of Util (X)	0.367	0.038	0.202
Departure Headway (Hd)	3.826	4.589	4.824
Convergence, Y/N	Yes	Yes	Yes
Cap	945	779	744
Service Time	1.836	2.622	2.853
HCM Lane V/C Ratio	0.365	0.039	0.203
HCM Control Delay	9	7.8	9.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.7	0.1	0.8



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	310	130	110	250	160	70	111	110	70	70	51
Future Volume (vph)	164	310	130	110	250	160	70	111	110	70	70	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)	1		3	3		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	3%	3%	3%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	192.4

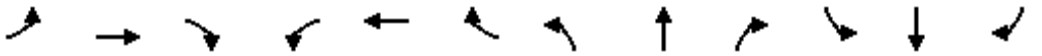
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	164	310	130	110	250	160	70	111	110	70	70	51
Future Vol, veh/h	164	310	130	110	250	160	70	111	110	70	70	51
Conflicting Peds, #/hr	1	0	3	3	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	3	3	3	1	1	1
Mvmt Flow	164	310	130	110	250	160	70	111	110	70	70	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	411	0	0	443	0	0	1318	1337	379	1366	1322	332
Stage 1	-	-	-	-	-	-	706	706	-	551	551	-
Stage 2	-	-	-	-	-	-	612	631	-	815	771	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.13	6.53	6.23	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.527	4.027	3.327	3.509	4.009	3.309
Pot Cap-1 Maneuver	1127	-	-	1107	-	-	134	152	666	125	157	712
Stage 1	-	-	-	-	-	-	425	437	-	520	517	-
Stage 2	-	-	-	-	-	-	479	473	-	373	411	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1126	-	-	1104	-	-	~ 56	116	663	~ 13	120	711
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 56	116	-	~ 13	120	-
Stage 1	-	-	-	-	-	-	362	372	-	444	465	-
Stage 2	-	-	-	-	-	-	340	425	-	186	350	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	1.8	$ 416.9	$ 969.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	82	663	1126	-	-	1104	-	-	13	185
HCM Lane V/C Ratio	2.207	0.166	0.146	-	-	0.1	-	-	5.385	0.654
HCM Control Delay (s)	$ 663.2	11.5	8.7	-	-	8.6	-	-	$ 2550.8	55.2
HCM Lane LOS	F	B	A	-	-	A	-	-	F	F
HCM 95th %tile Q(veh)	16.5	0.6	0.5	-	-	0.3	-	-	9.8	3.8

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	450	10	80	480	50	20	38	100	25	41	70
Future Volume (vph)	30	450	10	80	480	50	20	38	100	25	41	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	5		2	2		5	3					3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	6%	6%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

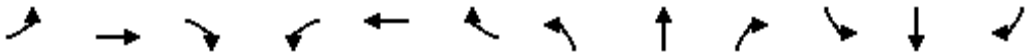
Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	450	10	80	480	50	20	38	100	25	41	70
Future Vol, veh/h	30	450	10	80	480	50	20	38	100	25	41	70
Conflicting Peds, #/hr	5	0	2	2	0	5	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	5	5	5	5	5	5	6	6	6
Mvmt Flow	30	450	10	80	480	50	20	38	100	25	41	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	535	0	0	462	0	0	1241	1212	457	1254	1192	513
Stage 1	-	-	-	-	-	-	517	517	-	670	670	-
Stage 2	-	-	-	-	-	-	724	695	-	584	522	-
Critical Hdwy	4.16	-	-	4.15	-	-	7.15	6.55	6.25	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.245	-	-	3.545	4.045	3.345	3.554	4.054	3.354
Pot Cap-1 Maneuver	1013	-	-	1084	-	-	150	180	597	146	184	553
Stage 1	-	-	-	-	-	-	536	529	-	440	449	-
Stage 2	-	-	-	-	-	-	412	439	-	491	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	1082	-	-	97	161	596	92	164	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	97	161	-	92	164	-
Stage 1	-	-	-	-	-	-	519	512	-	425	414	-
Stage 2	-	-	-	-	-	-	299	404	-	367	507	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.1	27.1	49.6
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	131	596	1008	-	-	1082	-	-	209
HCM Lane V/C Ratio	0.443	0.168	0.03	-	-	0.074	-	-	0.651
HCM Control Delay (s)	52.7	12.3	8.7	-	-	8.6	-	-	49.6
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	2	0.6	0.1	-	-	0.2	-	-	3.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	720	122	90	464	90	222	20	50	50	40	38
Future Volume (vph)	72	720	122	90	464	90	222	20	50	50	40	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)			1	1			2					2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	362.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	720	122	90	464	90	222	20	50	50	40	38
Future Vol, veh/h	72	720	122	90	464	90	222	20	50	50	40	38
Conflicting Peds, #/hr	0	0	1	1	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	0	0	0
Mvmt Flow	72	720	122	90	464	90	222	20	50	50	40	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	554	0	0	843	0	0	1656	1660	782	1649	1676	511
Stage 1	-	-	-	-	-	-	926	926	-	689	689	-
Stage 2	-	-	-	-	-	-	730	734	-	960	987	-
Critical Hdwy	4.16	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	996	-	-	793	-	-	~ 78	97	394	80	96	567
Stage 1	-	-	-	-	-	-	322	347	-	439	450	-
Stage 2	-	-	-	-	-	-	414	426	-	311	328	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	996	-	-	792	-	-	~ 32	69	394	~ 43	69	566
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 32	69	-	~ 43	69	-
Stage 1	-	-	-	-	-	-	277	298	-	378	375	-
Stage 2	-	-	-	-	-	-	287	355	-	218	282	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.4	$ 2225.9	$ 507.9
HCM LOS			F	F

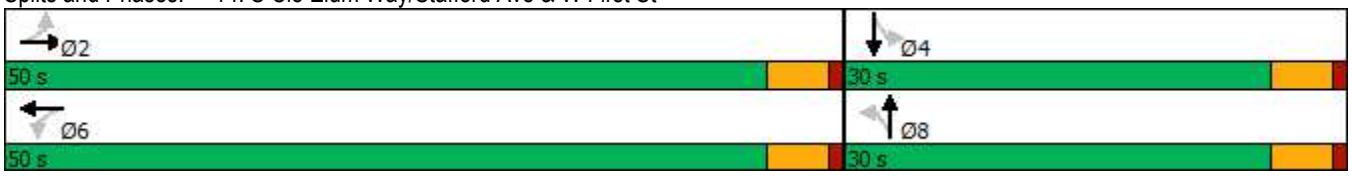
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	32	168	996	-	-	792	-	-	71
HCM Lane V/C Ratio	6.938	0.417	0.072	-	-	0.114	-	-	1.803
HCM Control Delay (s)	$ 2914.9	40.9	8.9	0	-	10.1	0	-	$ 507.9
HCM Lane LOS	F	E	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	26.9	1.9	0.2	-	-	0.4	-	-	11.4

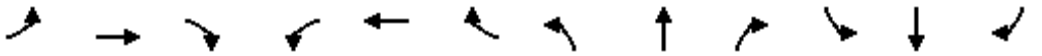
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	425	120	110	380	151	90	131	90	45	127	90
Future Volume (vph)	20	425	120	110	380	151	90	131	90	45	127	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)	1		1	1		1	1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		28.6	28.6		31.6	31.6	
Total Split (s)	50.0	50.0		50.0	50.0		30.0	30.0		30.0	30.0	
Total Split (%)	62.5%	62.5%		62.5%	62.5%		37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 69.7	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





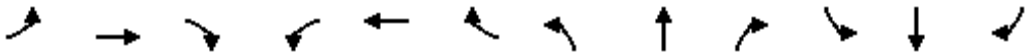
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	425	120	110	380	151	90	131	90	45	127	90
Future Volume (veh/h)	20	425	120	110	380	151	90	131	90	45	127	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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	1811	1811	1811	1826	1826	1826	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	20	425	120	110	380	151	90	131	90	45	127	90
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	4	4	4
Cap, veh/h	500	861	243	494	788	313	247	243	167	244	238	169
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	845	1358	383	841	1243	494	1154	1024	703	1140	1001	710
Grp Volume(v), veh/h	20	0	545	110	0	531	90	0	221	45	0	217
Grp Sat Flow(s),veh/h/ln	845	0	1742	841	0	1737	1154	0	1727	1140	0	1711
Q Serve(g_s), s	0.9	0.0	11.9	5.7	0.0	11.5	5.3	0.0	8.0	2.6	0.0	7.9
Cycle Q Clear(g_c), s	12.5	0.0	11.9	17.7	0.0	11.5	13.2	0.0	8.0	10.6	0.0	7.9
Prop In Lane	1.00		0.22	1.00		0.28	1.00		0.41	1.00		0.41
Lane Grp Cap(c), veh/h	500	0	1104	494	0	1101	247	0	410	244	0	406
V/C Ratio(X)	0.04	0.00	0.49	0.22	0.00	0.48	0.36	0.00	0.54	0.18	0.00	0.53
Avail Cap(c_a), veh/h	500	0	1104	494	0	1101	382	0	613	377	0	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	7.0	11.7	0.0	6.9	29.6	0.0	23.9	28.5	0.0	23.8
Incr Delay (d2), s/veh	0.1	0.0	1.6	1.0	0.0	1.5	1.3	0.0	1.6	0.5	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	4.2	1.1	0.0	4.0	1.5	0.0	3.3	0.7	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	0.0	8.6	12.7	0.0	8.4	30.9	0.0	25.4	29.0	0.0	25.4
LnGrp LOS	B	A	A	B	A	A	C	A	C	C	A	C
Approach Vol, veh/h		565			641			311			262	
Approach Delay, s/veh		8.6			9.2			27.0			26.0	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		21.6		50.0		21.6				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		45.4		25.4		45.4		25.4				
Max Q Clear Time (g_c+I1), s		14.5		12.6		19.7		15.2				
Green Ext Time (p_c), s		4.5		1.6		4.9		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			14.6									
HCM 6th LOS			B									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	535	225	20	447	50	190	30	10	40	20	47
Future Volume (vph)	70	535	225	20	447	50	190	30	10	40	20	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			3	3			1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	4%	4%	4%	1%	1%	1%	6%	6%	6%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	72.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	535	225	20	447	50	190	30	10	40	20	47
Future Vol, veh/h	70	535	225	20	447	50	190	30	10	40	20	47
Conflicting Peds, #/hr	0	0	3	3	0	0	1	0	5	5	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	4	4	4	1	1	1	6	6	6
Mvmt Flow	70	535	225	20	447	50	190	30	10	40	20	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	497	0	0	763	0	0	1338	1328	656	1325	1415	473
Stage 1	-	-	-	-	-	-	791	791	-	512	512	-
Stage 2	-	-	-	-	-	-	547	537	-	813	903	-
Critical Hdwy	4.17	-	-	4.14	-	-	7.11	6.51	6.21	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.16	5.56	-
Follow-up Hdwy	2.263	-	-	2.236	-	-	3.509	4.009	3.309	3.554	4.054	3.354
Pot Cap-1 Maneuver	1042	-	-	841	-	-	~ 131	156	467	130	135	583
Stage 1	-	-	-	-	-	-	384	403	-	537	530	-
Stage 2	-	-	-	-	-	-	523	524	-	367	351	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1042	-	-	839	-	-	~ 92	132	463	93	114	582
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 92	132	-	93	114	-
Stage 1	-	-	-	-	-	-	336	353	-	471	513	-
Stage 2	-	-	-	-	-	-	446	507	-	287	307	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.4	$ 493.5	67.5
HCM LOS			F	F

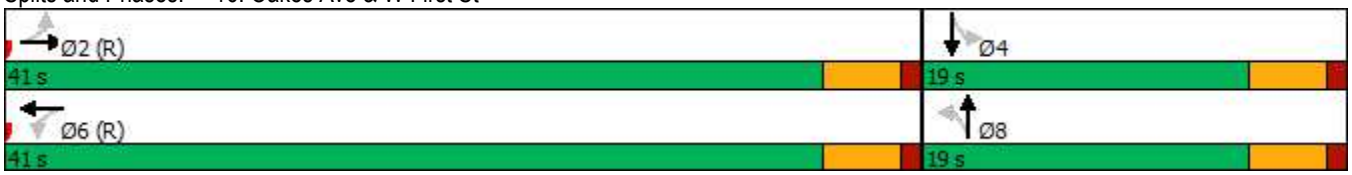
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	92	161	1042	-	-	839	-	-	156
HCM Lane V/C Ratio	2.065	0.248	0.067	-	-	0.024	-	-	0.686
HCM Control Delay (s)	$ 590.1	34.6	8.7	0	-	9.4	0	-	67.5
HCM Lane LOS	F	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	16.6	0.9	0.2	-	-	0.1	-	-	4

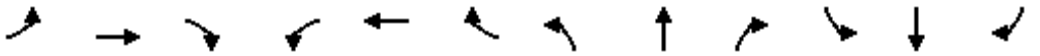
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	375	145	40	380	43	251	177	90	50	195	20
Future Volume (vph)	10	375	145	40	380	43	251	177	90	50	195	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	4		5	5		4	2		1	1		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	3%	3%	3%	8%	8%	8%	5%	5%	5%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0		19.0	19.0	
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%		31.7%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





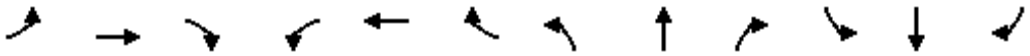
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	375	145	40	380	43	251	177	90	50	195	20
Future Volume (veh/h)	10	375	145	40	380	43	251	177	90	50	195	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1856	1856	1856	1781	1781	1781	1826	1826	1826
Adj Flow Rate, veh/h	10	375	145	40	380	43	251	177	90	50	195	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	7	7	3	3	3	8	8	8	5	5	5
Cap, veh/h	682	674	261	477	896	101	259	242	123	205	354	36
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	924	1109	429	874	1473	167	1108	1001	509	1084	1465	150
Grp Volume(v), veh/h	10	0	520	40	0	423	251	0	267	50	0	215
Grp Sat Flow(s),veh/h/ln	924	0	1537	874	0	1639	1108	0	1509	1084	0	1616
Q Serve(g_s), s	0.3	0.0	12.0	1.0	0.0	0.0	7.5	0.0	9.8	2.7	0.0	7.0
Cycle Q Clear(g_c), s	0.3	0.0	12.0	13.0	0.0	0.0	14.5	0.0	9.8	12.5	0.0	7.0
Prop In Lane	1.00		0.28	1.00		0.10	1.00		0.34	1.00		0.09
Lane Grp Cap(c), veh/h	682	0	935	477	0	997	259	0	365	205	0	390
V/C Ratio(X)	0.01	0.00	0.56	0.08	0.00	0.42	0.97	0.00	0.73	0.24	0.00	0.55
Avail Cap(c_a), veh/h	682	0	935	477	0	997	259	0	365	205	0	390
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.00	0.89	0.91	0.00	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	7.0	2.1	0.0	0.0	27.9	0.0	21.0	26.7	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.0	2.1	0.3	0.0	1.2	47.2	0.0	6.5	0.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.6	0.1	0.0	0.3	6.9	0.0	3.9	0.7	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	9.1	2.5	0.0	1.2	75.1	0.0	27.4	26.9	0.0	20.9
LnGrp LOS	A	A	A	A	A	A	E	A	C	C	A	C
Approach Vol, veh/h		530			463			518			265	
Approach Delay, s/veh		9.0			1.3			50.5			22.0	
Approach LOS		A			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		19.0		41.0		19.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		14.5		36.5		14.5				
Max Q Clear Time (g_c+I1), s		14.0		14.5		15.0		16.5				
Green Ext Time (p_c), s		3.9		0.0		3.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		21.1
HCM 6th LOS		C

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	380	150	20	410	40	70	20	30	10	20	27
Future Volume (vph)	25	380	150	20	410	40	70	20	30	10	20	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		2	2		1	1		5	5		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	8%	8%	8%	3%	3%	3%	4%	4%	4%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

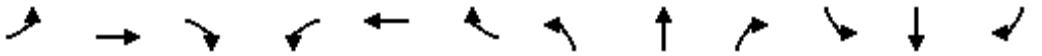
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	20.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	380	150	20	410	40	70	20	30	10	20	27
Future Vol, veh/h	25	380	150	20	410	40	70	20	30	10	20	27
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	8	8	8	3	3	3	4	4	4	0	0	0
Mvmt Flow	25	380	150	20	410	40	70	20	30	10	20	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	24.9	19.2	11.5	10.4
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	58%	5%	4%	18%
Vol Thru, %	17%	68%	87%	35%
Vol Right, %	25%	27%	9%	47%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	555	470	57
LT Vol	70	25	20	10
Through Vol	20	380	410	20
RT Vol	30	150	40	27
Lane Flow Rate	120	555	470	57
Geometry Grp	1	1	1	1
Degree of Util (X)	0.22	0.792	0.688	0.103
Departure Headway (Hd)	6.594	5.138	5.266	6.523
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	542	705	686	545
Service Time	4.666	3.185	3.314	4.609
HCM Lane V/C Ratio	0.221	0.787	0.685	0.105
HCM Control Delay	11.5	24.9	19.2	10.4
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	0.8	7.9	5.5	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	405	20	20	403	56	20	14	40	138	42	30
Future Volume (vph)	70	405	20	20	403	56	20	14	40	138	42	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	1615	0	1736	1610	0	0	1757	1384	0	1759	1398
Flt Permitted	0.463			0.487				0.799			0.754	
Satd. Flow (perm)	836	1615	0	885	1610	0	0	1438	1354	0	1376	1353
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			21				40			30
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	5		9	9		5	12		2	2		12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	5%	5%	5%	4%	4%	4%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	425	0	20	459	0	0	34	40	0	180	30
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	41.0	41.0		41.0	41.0		19.0	19.0	41.0	19.0	19.0	41.0
Total Split (%)	68.3%	68.3%		68.3%	68.3%		31.7%	31.7%	68.3%	31.7%	31.7%	68.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	38.7	38.7		38.7	38.7			12.3	38.7		12.3	38.7
Actuated g/C Ratio	0.64	0.64		0.64	0.64			0.20	0.64		0.20	0.64
v/c Ratio	0.13	0.41		0.04	0.44			0.12	0.05		0.64	0.03
Control Delay	5.9	7.0		5.3	7.4			18.5	2.3		32.0	2.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	5.9	7.0		5.3	7.4			18.5	2.3		32.0	2.5
LOS	A	A		A	A			B	A		C	A
Approach Delay		6.8			7.3			9.8			27.7	
Approach LOS		A			A			A			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	

Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 72.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	428	10	0	0	350
Future Volume (vph)	20	428	10	0	0	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	10%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	428	10	0	0	350
Future Vol, veh/h	20	428	10	0	0	350
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	100	100	100	100	100	100
Heavy Vehicles, %	10	10	20	20	9	9
Mvmt Flow	20	428	10	0	0	350

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	360	10	0	-	-	-
Stage 1	10	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	-	-
Pot Cap-1 Maneuver	623	1048	-	0	0	-
Stage 1	993	-	-	0	0	-
Stage 2	696	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	623	1048	-	-	-	-
Mov Cap-2 Maneuver	623	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	696	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1017	-
HCM Lane V/C Ratio	-	0.441	-
HCM Control Delay (s)	-	11.3	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	2.3	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	318	52
Future Volume (vph)	0	0	10	0	318	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	20%	20%	9%	9%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

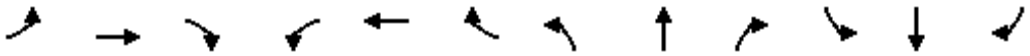
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	318	52
Future Vol, veh/h	0	0	10	0	318	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	20	20	9	9
Mvmt Flow	0	0	10	0	318	52

Major/Minor	Minor2		Major2	
Conflicting Flow All	688	52	0	0
Stage 1	688	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.7	6.4	4.19	-
Critical Hdwy Stg 1	5.7	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4.18	3.48	2.281	-
Pot Cap-1 Maneuver	348	967	-	-
Stage 1	421	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	967	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	131	17	10	10	122	397	21	10	503	30
Future Volume (vph)	30	10	131	17	10	10	122	397	21	10	503	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	13		12	12		13	11		13	13		11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

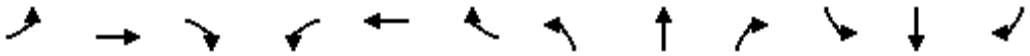
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	10	131	17	10	10	122	397	21	10	503	30
Future Vol, veh/h	30	10	131	17	10	10	122	397	21	10	503	30
Conflicting Peds, #/hr	13	0	12	12	0	13	11	0	13	13	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	3	3	3
Mvmt Flow	30	10	131	17	10	10	122	397	21	10	503	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1224	1224	541	1286	1229	434	544	0	0	431	0	0
Stage 1	549	549	-	665	665	-	-	-	-	-	-	-
Stage 2	675	675	-	621	564	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.11	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.209	-	-	2.227	-	-
Pot Cap-1 Maneuver	157	181	545	143	179	626	1030	-	-	1123	-	-
Stage 1	524	520	-	453	461	-	-	-	-	-	-	-
Stage 2	447	456	-	478	512	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	125	148	533	87	146	611	1019	-	-	1109	-	-
Mov Cap-2 Maneuver	125	148	-	87	146	-	-	-	-	-	-	-
Stage 1	438	508	-	378	384	-	-	-	-	-	-	-
Stage 2	357	380	-	345	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.2	42.6	2	0.2
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1019	-	-	309	132	1109	-	-
HCM Lane V/C Ratio	0.12	-	-	0.553	0.28	0.009	-	-
HCM Control Delay (s)	9	0	-	30.2	42.6	8.3	0	-
HCM Lane LOS	A	A	-	D	E	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	3.1	1.1	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	61	34	0	10	72	332	33	10	308	20
Future Volume (vph)	10	0	61	34	0	10	72	332	33	10	308	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	25%	25%	25%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

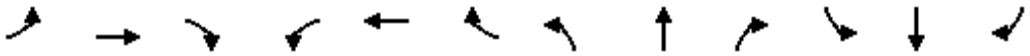
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	0	61	34	0	10	72	332	33	10	308	20
Future Vol, veh/h	10	0	61	34	0	10	72	332	33	10	308	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	25	25	25	2	2	2	2	2	2
Mvmt Flow	10	0	61	34	0	10	72	332	33	10	308	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	836	847	318	862	841	349	328	0	0	365	0	0
Stage 1	338	338	-	493	493	-	-	-	-	-	-	-
Stage 2	498	509	-	369	348	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.75	6.45	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.75	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4.225	3.525	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	289	301	727	251	277	645	1232	-	-	1194	-	-
Stage 1	681	644	-	517	511	-	-	-	-	-	-	-
Stage 2	558	541	-	606	595	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	266	276	727	215	254	645	1232	-	-	1194	-	-
Mov Cap-2 Maneuver	266	276	-	215	254	-	-	-	-	-	-	-
Stage 1	631	638	-	479	473	-	-	-	-	-	-	-
Stage 2	509	501	-	550	589	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	22.2	1.3	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1232	-	-	584	253	1194	-	-
HCM Lane V/C Ratio	0.058	-	-	0.122	0.174	0.008	-	-
HCM Control Delay (s)	8.1	0	-	12	22.2	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0.6	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	194	10	33	196	13	10	10	47	27	10	10
Future Volume (vph)	10	194	10	33	196	13	10	10	47	27	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	194	10	33	196	13	10	10	47	27	10	10
Future Vol, veh/h	10	194	10	33	196	13	10	10	47	27	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	3	3	3	0	0	0	0	0	0
Mvmt Flow	10	194	10	33	196	13	10	10	47	27	10	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	209	0	0	204	0	0	498	494	199	517	493	203
Stage 1	-	-	-	-	-	-	219	219	-	269	269	-
Stage 2	-	-	-	-	-	-	279	275	-	248	224	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1362	-	-	1362	-	-	486	479	847	472	480	843
Stage 1	-	-	-	-	-	-	788	726	-	741	690	-
Stage 2	-	-	-	-	-	-	732	686	-	760	722	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1362	-	-	1362	-	-	460	462	847	427	463	843
Mov Cap-2 Maneuver	-	-	-	-	-	-	460	462	-	427	463	-
Stage 1	-	-	-	-	-	-	782	720	-	735	671	-
Stage 2	-	-	-	-	-	-	693	667	-	702	716	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.1	10.9	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	678	1362	-	-	1362	-	-	486
HCM Lane V/C Ratio	0.099	0.007	-	-	0.024	-	-	0.097
HCM Control Delay (s)	10.9	7.7	0	-	7.7	0	-	13.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.3



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	26	33	722	47	63	400
Future Volume (vph)	26	33	722	47	63	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	789		1497			1776
Travel Time (s)	21.5		29.2			34.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	33	722	47	63	400
Future Vol, veh/h	26	33	722	47	63	400
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, %	3	3	3	3	3	3
Mvmt Flow	28	36	785	51	68	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1382	811	0	0	836	0
Stage 1	811	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	158	378	-	-	793	-
Stage 1	435	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	140	378	-	-	793	-
Mov Cap-2 Maneuver	140	-	-	-	-	-
Stage 1	435	-	-	-	-	-
Stage 2	499	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.6	0	1.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	216	793	-
HCM Lane V/C Ratio	-	-	0.297	0.086	-
HCM Control Delay (s)	-	-	28.6	10	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.3	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	108	54	296	182	82	197
Future Volume (vph)	108	54	296	182	82	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1092		1238			171
Travel Time (s)	29.8		24.1			3.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	108	54	296	182	82	197
Future Vol, veh/h	108	54	296	182	82	197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	117	59	322	198	89	214

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	813	421	0	0	520	0
Stage 1	421	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	347	630	-	-	1041	-
Stage 1	660	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	313	630	-	-	1041	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	615	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.2	0	2.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	313	630	1041	-
HCM Lane V/C Ratio	-	-	0.375	0.093	0.086	-
HCM Control Delay (s)	-	-	23.2	11.3	8.8	0
HCM Lane LOS	-	-	C	B	A	A
HCM 95th %tile Q(veh)	-	-	1.7	0.3	0.3	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	585	139	346	582	114	359
Future Volume (vph)	585	139	346	582	114	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	575			2411	1259	
Travel Time (s)	8.7			36.5	34.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	186.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	585	139	346	582	114	359
Future Vol, veh/h	585	139	346	582	114	359
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	636	151	376	633	124	390

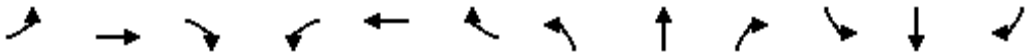
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	787	0	2097	712
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	1385	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	828	-	~ 57	431
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	231	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	828	-	~ 17	431
Mov Cap-2 Maneuver	-	-	-	-	~ 17	-
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	~ 69	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.8	$ 830.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	17	431	-	-	828	-
HCM Lane V/C Ratio	7.289	0.905	-	-	0.454	-
HCM Control Delay (s)	$ 3274	54.2	-	-	12.9	0
HCM Lane LOS	F	F	-	-	B	A
HCM 95th %tile Q(veh)	16.2	9.8	-	-	2.4	-

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

2037 with SEIS Alternative 6 Friday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	660	5	15	0	0	0	0	15	45	382	30	0
Future Volume (vph)	660	5	15	0	0	0	0	15	45	382	30	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	17%	17%	17%	22%	22%	22%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	481.3

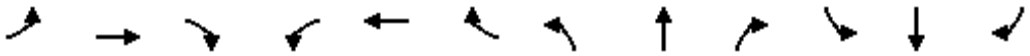
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	660	5	15	0	0	0	0	15	45	382	30	0
Future Vol, veh/h	660	5	15	0	0	0	0	15	45	382	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	17	17	17	22	22	22
Mvmt Flow	660	5	15	0	0	0	0	15	45	382	30	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	832	854	30	-	0	0	60	0	0
Stage 1	794	794	-	-	-	-	-	-	-
Stage 2	38	60	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.32	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.398	-	-
Pot Cap-1 Maneuver	~ 340	297	1047	0	-	-	1425	-	0
Stage 1	~ 447	401	-	0	-	-	-	-	0
Stage 2	987	847	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 247	0	1047	-	-	-	1425	-	-
Mov Cap-2 Maneuver	~ 247	0	-	-	-	-	-	-	-
Stage 1	~ 447	0	-	-	-	-	-	-	-
Stage 2	718	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 810.6	0	7.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	251	1425	-
HCM Lane V/C Ratio	-	-	2.709	0.268	-
HCM Control Delay (s)	-	-	$ 810.6	8.4	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	58	1.1	-

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	80	5	590	5	670	0	0	332	158
Future Volume (vph)	0	0	0	80	5	590	5	670	0	0	332	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	16%	16%	16%	1%	1%	1%	8%	8%	8%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	134.2

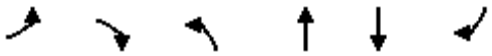
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	80	5	590	5	670	0	0	332	158
Future Vol, veh/h	0	0	0	80	5	590	5	670	0	0	332	158
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	16	16	16	1	1	1	8	8	8
Mvmt Flow	0	0	0	80	5	590	5	670	0	0	332	158

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	1091	1170	670	490	0	-	-	-	0
Stage 1	680	680	-	-	-	-	-	-	-
Stage 2	411	490	-	-	-	-	-	-	-
Critical Hdwy	6.56	6.66	6.36	4.11	-	-	-	-	-
Critical Hdwy Stg 1	5.56	5.66	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.56	5.66	-	-	-	-	-	-	-
Follow-up Hdwy	3.644	4.144	3.444	2.209	-	-	-	-	-
Pot Cap-1 Maneuver	224	182	~ 433	1078	-	0	0	-	-
Stage 1	478	430	-	-	-	0	0	-	-
Stage 2	640	526	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	222	0	~ 433	1078	-	-	-	-	-
Mov Cap-2 Maneuver	222	0	-	-	-	-	-	-	-
Stage 1	475	0	-	-	-	-	-	-	-
Stage 2	640	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 365.7	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	1078	-	389	-	-
HCM Lane V/C Ratio	0.005	-	1.735	-	-
HCM Control Delay (s)	8.4	0	$ 365.7	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0	-	41.8	-	-

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	49	155	140	1120	335	36
Future Volume (vph)	49	155	140	1120	335	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	13%	13%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

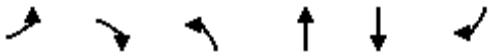
Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	49	155	140	1120	335	36
Future Vol, veh/h	49	155	140	1120	335	36
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	13	13	2	2	5	5
Mvmt Flow	49	155	140	1120	335	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1753	353	371	0	-	0
Stage 1	353	-	-	-	-	-
Stage 2	1400	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.12	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.218	-	-	-
Pot Cap-1 Maneuver	88	667	1188	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	216	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	78	667	1188	-	-	-
Mov Cap-2 Maneuver	78	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	216	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	71.7	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1188	-	237	-	-
HCM Lane V/C Ratio	0.118	-	0.861	-	-
HCM Control Delay (s)	8.4	-	71.7	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.4	-	6.9	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	148	194	705	450	214	151
Future Volume (vph)	148	194	705	450	214	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1660	1216	
Travel Time (s)	19.3			32.3	23.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

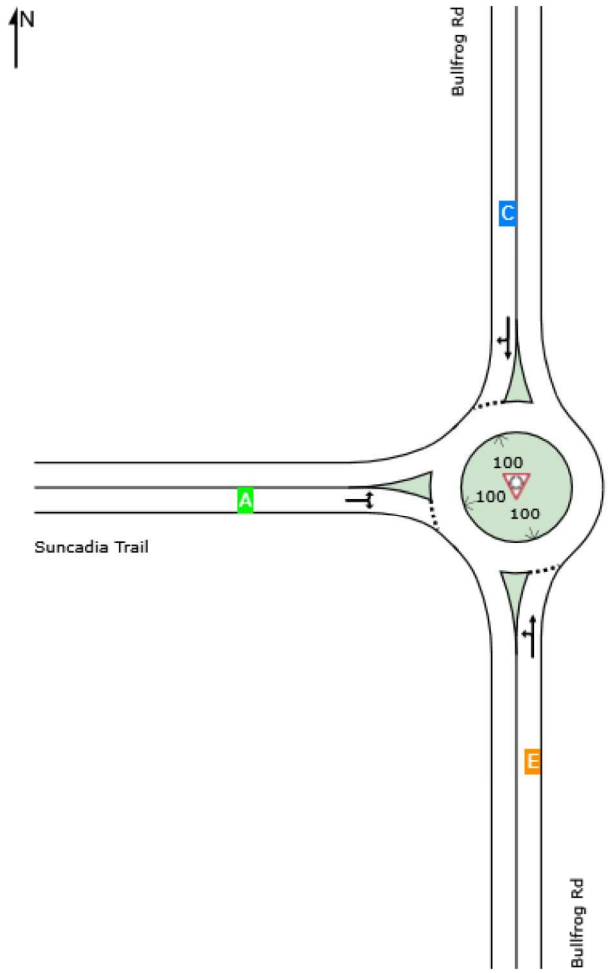
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 4 [2037 With Project - Friday PM Peak Hour - Alt 6]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	E	C	A	D



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 4 [2037 With Project - Friday PM Peak Hour - Alt 6]

47 North
Bullfrog Rd / Suncadia Trail
Site Category: (None)
Roundabout

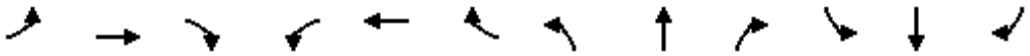
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	1155	1.4	1163	0.993	100	43.8	LOS E	71.8	1814.3	Full	1600	0.0	8.8
Approach	1155	1.4		0.993		43.8	LOS E	71.8	1814.3				
North: Bullfrog Rd													
Lane 1[d]	365	3.5	643	0.568	100	15.5	LOS C	4.0	102.9	Full	1600	0.0	0.0
Approach	365	3.5		0.568		15.5	LOS C	4.0	102.9				
West: Suncadia Trail													
Lane 1[d]	342	4.2	1056	0.324	100	6.6	LOS A	1.7	43.3	Full	1600	0.0	0.0
Approach	342	4.2		0.324		6.6	LOS A	1.7	43.3				
Intersection	1862	2.3		0.993		31.4	LOS D	71.8	1814.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	32	0	0	0	16	454	0	0	307	50
Future Volume (vph)	25	0	32	0	0	0	16	454	0	0	307	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	2%	2%	2%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	25	0	32	0	0	0	16	454	0	0	307	50
Future Vol, veh/h	25	0	32	0	0	0	16	454	0	0	307	50
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	2	2	2	3	3	3
Mvmt Flow	25	0	32	0	0	0	16	454	0	0	307	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	818	818	332	834	843	454	357	0	0	454	0	0
Stage 1	332	332	-	486	486	-	-	-	-	-	-	-
Stage 2	486	486	-	348	357	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	289	305	698	290	303	610	1202	-	-	1101	-	-
Stage 1	671	636	-	566	554	-	-	-	-	-	-	-
Stage 2	553	543	-	672	632	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	285	300	698	273	298	610	1202	-	-	1101	-	-
Mov Cap-2 Maneuver	285	300	-	273	298	-	-	-	-	-	-	-
Stage 1	659	636	-	556	544	-	-	-	-	-	-	-
Stage 2	543	533	-	641	632	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	0	0.3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1202	-	-	427	-	1101	-	-
HCM Lane V/C Ratio	0.013	-	-	0.133	-	-	-	-
HCM Control Delay (s)	8	0	-	14.7	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	137	620	297	182	483	220
Future Volume (vph)	137	620	297	182	483	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

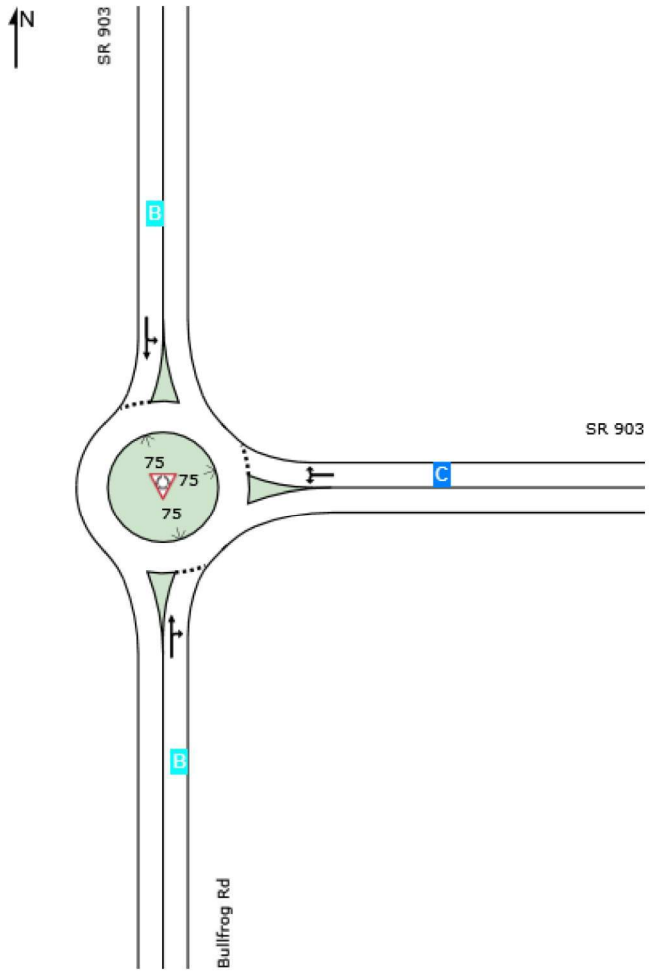
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 6 [2037 With Project - Friday PM Peak Hour - Alt 6]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	East	North	
LOS	B	C	B	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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LANE SUMMARY

Site: 6 [2037 With Project - Friday PM Peak Hour - Alt 6]

47 North
Bullfrog Rd / SR 903
Site Category: (None)
Roundabout

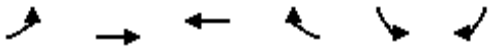
Lane Use and Performance

	Demand Flows Total veh/h	HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Bullfrog Rd													
Lane 1[d]	479	3.3	799	0.600	100	14.0	LOS B	5.4	138.5	Full	1600	0.0	0.0
Approach	479	3.3		0.600		14.0	LOS B	5.4	138.5				
East: SR 903													
Lane 1[d]	757	2.8	982	0.771	100	18.7	LOS C	15.3	390.9	Full	1600	0.0	0.0
Approach	757	2.8		0.771		18.7	LOS C	15.3	390.9				
North: SR 903													
Lane 1[d]	703	4.4	1145	0.614	100	11.1	LOS B	4.9	127.5	Full	1600	0.0	0.0
Approach	703	4.4		0.614		11.1	LOS B	4.9	127.5				
Intersection	1939	3.5		0.771		14.8	LOS B	15.3	390.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	1006	1061	40	35	17
Future Volume (vph)	7	1006	1061	40	35	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2831	1314		535	
Travel Time (s)		77.2	35.8		12.2	
Confl. Peds. (#/hr)						7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	3%	3%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

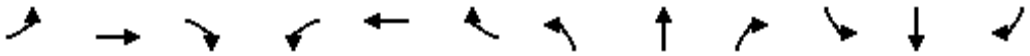
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	1006	1061	40	35	17
Future Vol, veh/h	7	1006	1061	40	35	17
Conflicting Peds, #/hr	0	0	0	0	0	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	3	3	0	0
Mvmt Flow	7	1006	1061	40	35	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1101	0	-	0	2101	1088
Stage 1	-	-	-	-	1081	-
Stage 2	-	-	-	-	1020	-
Critical Hdwy	4.14	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.236	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	627	-	-	-	58	265
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	351	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	627	-	-	-	57	263
Mov Cap-2 Maneuver	-	-	-	-	57	-
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	351	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	118.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	627	-	-	-	77
HCM Lane V/C Ratio	0.011	-	-	-	0.675
HCM Control Delay (s)	10.8	0	-	-	118.5
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	3.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	890	146	55	794	5	315	0	165	0	0	7
Future Volume (vph)	5	890	146	55	794	5	315	0	165	0	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			4	4					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	604.1

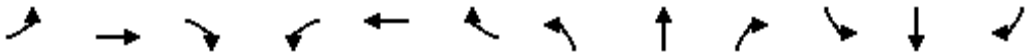
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	890	146	55	794	5	315	0	165	0	0	7
Future Vol, veh/h	5	890	146	55	794	5	315	0	165	0	0	7
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	3	3	3	1	1	1	0	0	0
Mvmt Flow	5	890	146	55	794	5	315	0	165	0	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	799	0	0	1040	0	0	1887	1886	968	1964	1957	797
Stage 1	-	-	-	-	-	-	977	977	-	907	907	-
Stage 2	-	-	-	-	-	-	910	909	-	1057	1050	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	815	-	-	665	-	-	~ 54	71	309	48	64	390
Stage 1	-	-	-	-	-	-	~ 303	330	-	333	357	-
Stage 2	-	-	-	-	-	-	330	355	-	275	307	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	815	-	-	662	-	-	~ 46	59	308	19	53	390
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 46	59	-	19	53	-
Stage 1	-	-	-	-	-	-	~ 297	324	-	328	303	-
Stage 2	-	-	-	-	-	-	~ 275	302	-	126	301	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.7	$ 2996.2	14.4
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	65	815	-	-	662	-	-	390
HCM Lane V/C Ratio	7.385	0.006	-	-	0.083	-	-	0.018
HCM Control Delay (s)	$ 2996.2	9.4	0	-	10.9	0	-	14.4
HCM Lane LOS	F	A	A	-	B	A	-	B
HCM 95th %tile Q(veh)	55.1	0	-	-	0.3	-	-	0.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	969	96	15	779	45	83	10	5	20	15	32
Future Volume (vph)	25	969	96	15	779	45	83	10	5	20	15	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)	1		5	5		1			2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	6%	4%	4%	4%	100%	100%	100%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	100.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	25	969	96	15	779	45	83	10	5	20	15	32
Future Vol, veh/h	25	969	96	15	779	45	83	10	5	20	15	32
Conflicting Peds, #/hr	1	0	5	5	0	1	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	6	6	6	4	4	4	100	100	100	0	0	0
Mvmt Flow	25	969	96	15	779	45	83	10	5	20	15	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	825	0	0	1070	0	0	1927	1927	1024	1910	1953	803
Stage 1	-	-	-	-	-	-	1072	1072	-	833	833	-
Stage 2	-	-	-	-	-	-	855	855	-	1077	1120	-
Critical Hdwy	4.16	-	-	4.14	-	-	8.1	7.5	7.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.1	6.5	-	6.1	5.5	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	4.4	4.9	4.2	3.5	4	3.3
Pot Cap-1 Maneuver	788	-	-	644	-	-	~ 28	38	189	52	65	387
Stage 1	-	-	-	-	-	-	177	202	-	366	386	-
Stage 2	-	-	-	-	-	-	244	266	-	268	284	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	787	-	-	641	-	-	~ 19	33	188	35	57	387
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 19	33	-	35	57	-
Stage 1	-	-	-	-	-	-	162	185	-	336	369	-
Stage 2	-	-	-	-	-	-	205	254	-	227	260	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	$ 2021.5	179.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	21	787	-	-	641	-	-	73
HCM Lane V/C Ratio	4.667	0.032	-	-	0.023	-	-	0.918
HCM Control Delay (s)	$ 2021.5	9.7	0	-	10.8	0	-	179.7
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	12.6	0.1	-	-	0.1	-	-	4.7

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	10	166	10	30	420
Future Volume (vph)	25	10	166	10	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Confl. Peds. (#/hr)					1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

Intersection Summary	
Area Type:	Other

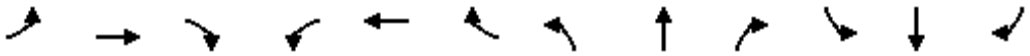
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	10	166	10	30	420
Future Vol, veh/h	25	10	166	10	30	420
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	0	0	2	2	3	3
Mvmt Flow	25	10	166	10	30	420
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.2	9.8	10.8
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	7%	0%	94%
Vol Thru, %	0%	71%	6%
Vol Right, %	93%	29%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	450	35	176
LT Vol	30	0	166
Through Vol	0	25	10
RT Vol	420	10	0
Lane Flow Rate	450	35	176
Geometry Grp	1	1	1
Degree of Util (X)	0.494	0.048	0.249
Departure Headway (Hd)	3.955	4.906	5.1
Convergence, Y/N	Yes	Yes	Yes
Cap	914	726	702
Service Time	1.974	2.961	3.149
HCM Lane V/C Ratio	0.492	0.048	0.251
HCM Control Delay	10.8	8.2	9.8
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.8	0.2	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	199	395	200	120	195	200	75	136	155	80	90	66
Future Volume (vph)	199	395	200	120	195	200	75	136	155	80	90	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	5%	5%	5%	2%	2%	2%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.5

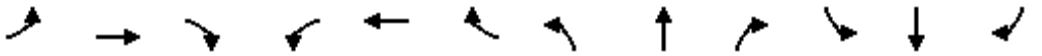
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	199	395	200	120	195	200	75	136	155	80	90	66
Future Vol, veh/h	199	395	200	120	195	200	75	136	155	80	90	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	5	5	5	2	2	2	4	4	4
Mvmt Flow	199	395	200	120	195	200	75	136	155	80	90	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	595	0	0	1506	1528	495	1574	1528	295
Stage 1	-	-	-	-	-	-	893	893	-	535	535	-
Stage 2	-	-	-	-	-	-	613	635	-	1039	993	-
Critical Hdwy	4.14	-	-	4.15	-	-	7.12	6.52	6.22	7.14	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.14	5.54	-
Follow-up Hdwy	2.236	-	-	2.245	-	-	3.518	4.018	3.318	3.536	4.036	3.336
Pot Cap-1 Maneuver	1153	-	-	967	-	-	99	~ 117	575	88	116	740
Stage 1	-	-	-	-	-	-	336	360	-	526	521	-
Stage 2	-	-	-	-	-	-	480	472	-	276	321	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1153	-	-	967	-	-	-	~ 85	575	-	~ 84	740
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 85	-	-	~ 84	-
Stage 1	-	-	-	-	-	-	278	298	-	435	456	-
Stage 2	-	-	-	-	-	-	307	413	-	91	265	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	2.2		
HCM LOS			-	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	575	1153	-	-	967	-	-	-	134
HCM Lane V/C Ratio	-	0.27	0.173	-	-	0.124	-	-	-	1.164
HCM Control Delay (s)	-	13.6	8.8	-	-	9.2	-	-	-	193.1
HCM Lane LOS	-	B	A	-	-	A	-	-	-	F
HCM 95th %tile Q(veh)	-	1.1	0.6	-	-	0.4	-	-	-	9.1

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	600	25	70	495	40	40	28	155	15	51	55
Future Volume (vph)	5	600	25	70	495	40	40	28	155	15	51	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	1		4	4		1	8					8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	5%	5%	5%	67%	67%	67%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

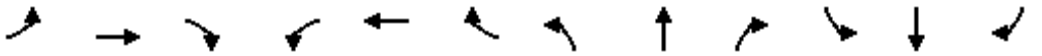
Intersection	
Int Delay, s/veh	16.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	600	25	70	495	40	40	28	155	15	51	55
Future Vol, veh/h	5	600	25	70	495	40	40	28	155	15	51	55
Conflicting Peds, #/hr	1	0	4	4	0	1	8	0	0	0	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	4	4	4	5	5	5	67	67	67
Mvmt Flow	5	600	25	70	495	40	40	28	155	15	51	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	536	0	0	629	0	0	1343	1303	617	1370	1295	524
Stage 1	-	-	-	-	-	-	627	627	-	656	656	-
Stage 2	-	-	-	-	-	-	716	676	-	714	639	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.15	6.55	6.25	7.77	7.17	6.87
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.77	6.17	-
Follow-up Hdwy	2.236	-	-	2.236	-	-	3.545	4.045	3.345	4.103	4.603	3.903
Pot Cap-1 Maneuver	1022	-	-	944	-	-	127	158	484	90	121	445
Stage 1	-	-	-	-	-	-	466	472	-	363	375	-
Stage 2	-	-	-	-	-	-	417	448	-	335	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1021	-	-	940	-	-	66	145	482	49	111	441
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	145	-	49	111	-
Stage 1	-	-	-	-	-	-	462	468	-	361	347	-
Stage 2	-	-	-	-	-	-	286	414	-	213	380	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.1	51.9	112.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	85	482	1021	-	-	940	-	-	136
HCM Lane V/C Ratio	0.8	0.322	0.005	-	-	0.074	-	-	0.89
HCM Control Delay (s)	133.8	16	8.5	-	-	9.1	-	-	112.6
HCM Lane LOS	F	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	4.1	1.4	0	-	-	0.2	-	-	5.9



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	730	157	105	519	100	307	40	45	35	35	53
Future Volume (vph)	57	730	157	105	519	100	307	40	45	35	35	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	840.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	730	157	105	519	100	307	40	45	35	35	53
Future Vol, veh/h	57	730	157	105	519	100	307	40	45	35	35	53
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	2	2	2	5	5	5	0	0	0
Mvmt Flow	57	730	157	105	519	100	307	40	45	35	35	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	620	0	0	889	0	0	1749	1755	812	1746	1783	571
Stage 1	-	-	-	-	-	-	925	925	-	780	780	-
Stage 2	-	-	-	-	-	-	824	830	-	966	1003	-
Critical Hdwy	4.15	-	-	4.12	-	-	7.15	6.55	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.218	-	-	3.545	4.045	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	946	-	-	762	-	-	~ 66	84	374	68	83	524
Stage 1	-	-	-	-	-	-	319	344	-	391	409	-
Stage 2	-	-	-	-	-	-	363	381	-	309	322	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	945	-	-	761	-	-	~ 24	58	373	~ 21	57	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 24	58	-	~ 21	57	-
Stage 1	-	-	-	-	-	-	~ 279	301	-	343	321	-
Stage 2	-	-	-	-	-	-	~ 228	299	-	206	282	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.5	$ 4426	$ 791.4
HCM LOS			F	F

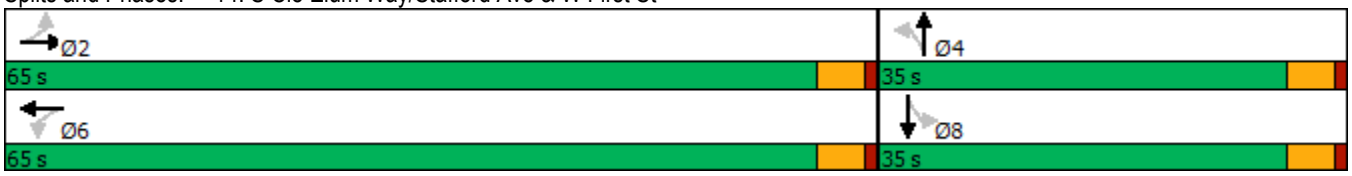
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	24	105	945	-	-	761	-	-	52
HCM Lane V/C Ratio	12.792	0.81	0.06	-	-	0.138	-	-	2.365
HCM Control Delay (s)	$ 5619.3	116.1	9.1	0	-	10.5	0	-	$ 791.4
HCM Lane LOS	F	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	38.4	4.5	0.2	-	-	0.5	-	-	12.6

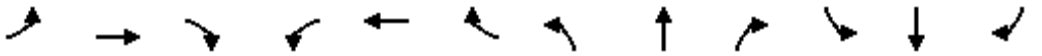
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	545	145	95	380	201	100	121	135	50	202	90
Future Volume (vph)	80	545	145	95	380	201	100	121	135	50	202	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			7	7			7					7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	6%	6%	6%	6%	6%	6%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		35.0	35.0	
Total Split (%)	65.0%	65.0%		65.0%	65.0%		35.0%	35.0%		35.0%	35.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 89.8	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St

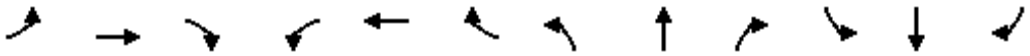




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	545	145	95	380	201	100	121	135	50	202	90
Future Volume (veh/h)	80	545	145	95	380	201	100	121	135	50	202	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	80	545	145	95	380	201	100	121	135	50	202	90
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	6	6	6
Cap, veh/h	437	879	234	367	716	379	208	214	239	229	326	145
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	819	1399	372	747	1140	603	1047	776	866	1081	1182	527
Grp Volume(v), veh/h	80	0	690	95	0	581	100	0	256	50	0	292
Grp Sat Flow(s),veh/h/ln	819	0	1771	747	0	1743	1047	0	1642	1081	0	1708
Q Serve(g_s), s	5.8	0.0	22.8	8.5	0.0	17.9	8.9	0.0	12.9	4.0	0.0	14.3
Cycle Q Clear(g_c), s	23.7	0.0	22.8	31.3	0.0	17.9	23.2	0.0	12.9	16.9	0.0	14.3
Prop In Lane	1.00		0.21	1.00		0.35	1.00		0.53	1.00		0.31
Lane Grp Cap(c), veh/h	437	0	1113	367	0	1095	208	0	453	229	0	472
V/C Ratio(X)	0.18	0.00	0.62	0.26	0.00	0.53	0.48	0.00	0.56	0.22	0.00	0.62
Avail Cap(c_a), veh/h	437	0	1113	367	0	1095	250	0	519	272	0	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	10.9	20.4	0.0	10.0	40.5	0.0	29.8	37.1	0.0	30.4
Incr Delay (d2), s/veh	0.9	0.0	2.6	1.7	0.0	1.8	2.5	0.0	1.6	0.5	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	9.0	1.7	0.0	6.9	2.4	0.0	5.2	1.1	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	0.0	13.5	22.1	0.0	11.8	43.0	0.0	31.4	37.6	0.0	32.1
LnGrp LOS	B	A	B	C	A	B	D	A	C	D	A	C
Approach Vol, veh/h		770			676			356			342	
Approach Delay, s/veh		13.9			13.3			34.7			32.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		31.1		65.0		31.1				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		60.4		30.4		60.4		30.4				
Max Q Clear Time (g_c+I1), s		25.7		25.2		33.3		18.9				
Green Ext Time (p_c), s		6.9		1.2		5.5		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			20.2									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	490	275	40	492	75	255	25	5	30	25	57
Future Volume (vph)	35	490	275	40	492	75	255	25	5	30	25	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)	2		2	2		2	2		2	2		2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	0%	0%	0%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	149

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱			↕	
Traffic Vol, veh/h	35	490	275	40	492	75	255	25	5	30	25	57
Future Vol, veh/h	35	490	275	40	492	75	255	25	5	30	25	57
Conflicting Peds, #/hr	2	0	2	2	0	2	2	0	2	2	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	0	0	0
Mvmt Flow	35	490	275	40	492	75	255	25	5	30	25	57

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	569	0	0	767	0	0	1353	1349	632	1327	1449	534
Stage 1	-	-	-	-	-	-	700	700	-	612	612	-
Stage 2	-	-	-	-	-	-	653	649	-	715	837	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.218	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	993	-	-	847	-	-	~ 126	150	479	134	132	550
Stage 1	-	-	-	-	-	-	428	440	-	484	487	-
Stage 2	-	-	-	-	-	-	455	464	-	425	385	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	845	-	-	~ 84	130	477	102	114	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 84	130	-	102	114	-
Stage 1	-	-	-	-	-	-	399	411	-	452	452	-
Stage 2	-	-	-	-	-	-	357	431	-	369	359	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.6	$ 919.8	52.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	84	148	991	-	-	845	-	-	181
HCM Lane V/C Ratio	3.036	0.203	0.035	-	-	0.047	-	-	0.619
HCM Control Delay (s)	$ 1023.9	35.4	8.8	0	-	9.5	0	-	52.7
HCM Lane LOS	F	E	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	25.2	0.7	0.1	-	-	0.1	-	-	3.5

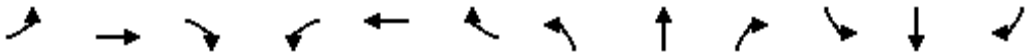
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	505	215	40	375	63	261	152	75	65	230	25
Future Volume (vph)	10	505	215	40	375	63	261	152	75	65	230	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	22		6	6		22						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	5%	5%	5%	9%	9%	9%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St





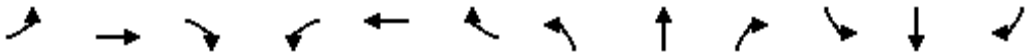
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	505	215	40	375	63	261	152	75	65	230	25
Future Volume (veh/h)	10	505	215	40	375	63	261	152	75	65	230	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1826	1826	1826	1767	1767	1767
Adj Flow Rate, veh/h	10	505	215	40	375	63	261	152	75	65	230	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	3	3	3	3	3	3	5	5	5	9	9	9
Cap, veh/h	663	670	285	296	843	142	240	284	140	258	385	42
Arrive On Green	0.61	0.61	0.61	1.00	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	934	1105	470	727	1389	233	1098	1039	512	1090	1409	153
Grp Volume(v), veh/h	10	0	720	40	0	438	261	0	227	65	0	255
Grp Sat Flow(s),veh/h/ln	934	0	1575	727	0	1623	1098	0	1551	1090	0	1562
Q Serve(g_s), s	0.3	0.0	24.8	2.5	0.0	0.0	9.9	0.0	9.3	4.0	0.0	10.6
Cycle Q Clear(g_c), s	0.3	0.0	24.8	27.3	0.0	0.0	20.5	0.0	9.3	13.4	0.0	10.6
Prop In Lane	1.00		0.30	1.00		0.14	1.00		0.33	1.00		0.10
Lane Grp Cap(c), veh/h	663	0	956	296	0	985	240	0	424	258	0	427
V/C Ratio(X)	0.02	0.00	0.75	0.14	0.00	0.44	1.09	0.00	0.54	0.25	0.00	0.60
Avail Cap(c_a), veh/h	663	0	956	296	0	985	240	0	424	258	0	427
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	0.93	0.00	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	0.0	10.7	7.5	0.0	0.0	34.5	0.0	23.2	28.9	0.0	23.7
Incr Delay (d2), s/veh	0.0	0.0	4.5	0.9	0.0	1.4	82.6	0.0	0.7	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	8.5	0.4	0.0	0.4	9.9	0.0	3.4	1.1	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	15.2	8.3	0.0	1.4	117.2	0.0	23.9	29.1	0.0	25.3
LnGrp LOS	A	A	B	A	A	A	F	A	C	C	A	C
Approach Vol, veh/h		730			478			488			320	
Approach Delay, s/veh		15.0			1.9			73.8			26.0	
Approach LOS		B			A			E			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		25.0		50.0		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		20.5		45.5		20.5				
Max Q Clear Time (g_c+I1), s		26.8		15.4		29.3		22.5				
Green Ext Time (p_c), s		5.5		0.6		2.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			27.9									
HCM 6th LOS			C									

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	45	315	175	30	470	40	75	35	25	5	15	77
Future Volume (vph)	45	315	175	30	470	40	75	35	25	5	15	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	7		7	7		7	4		41	41		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	5%	5%	5%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

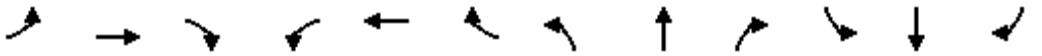
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	26.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	315	175	30	470	40	75	35	25	5	15	77
Future Vol, veh/h	45	315	175	30	470	40	75	35	25	5	15	77
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	5	5	5	0	0	0
Mvmt Flow	45	315	175	30	470	40	75	35	25	5	15	77
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	28.1	31.1	12.7	11.3
HCM LOS	D	D	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	56%	8%	6%	5%
Vol Thru, %	26%	59%	87%	15%
Vol Right, %	19%	33%	7%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	535	540	97
LT Vol	75	45	30	5
Through Vol	35	315	470	15
RT Vol	25	175	40	77
Lane Flow Rate	135	535	540	97
Geometry Grp	1	1	1	1
Degree of Util (X)	0.266	0.815	0.84	0.181
Departure Headway (Hd)	7.1	5.481	5.602	6.717
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	505	663	648	533
Service Time	5.159	3.497	3.619	4.779
HCM Lane V/C Ratio	0.267	0.807	0.833	0.182
HCM Control Delay	12.7	28.1	31.1	11.3
HCM Lane LOS	B	D	D	B
HCM 95th-tile Q	1.1	8.5	9.2	0.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	515	30	30	408	61	15	14	40	148	37	45
Future Volume (vph)	80	515	30	30	408	61	15	14	40	148	37	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1628	0	1770	1637	0	0	1799	1411	0	1810	1439
Flt Permitted	0.458			0.410				0.832			0.749	
Satd. Flow (perm)	833	1628	0	759	1637	0	0	1532	1367	0	1397	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			18				40			45
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	7		11	11		7	4		9	9		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	3%	3%	3%	1%	1%	1%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	545	0	30	469	0	0	29	40	0	185	45
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0	50.0	25.0	25.0	50.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%	66.7%	33.3%	33.3%	66.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	51.6	51.6		51.6	51.6			14.4	51.6		14.4	51.6
Actuated g/C Ratio	0.69	0.69		0.69	0.69			0.19	0.69		0.19	0.69
v/c Ratio	0.14	0.49		0.06	0.41			0.10	0.04		0.69	0.05
Control Delay	7.6	10.2		5.6	7.2			23.1	2.2		41.0	2.1
Queue Delay	0.0	0.3		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	7.6	10.5		5.6	7.2			23.1	2.2		41.0	2.1
LOS	A	B		A	A			C	A		D	A
Approach Delay		10.1			7.1			11.0			33.4	
Approach LOS		B			A			B			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	

Intersection Signal Delay: 12.8 Intersection LOS: B
Intersection Capacity Utilization 74.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	393	15	0	0	435
Future Volume (vph)	40	393	15	0	0	435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	393	15	0	0	435
Future Vol, veh/h	40	393	15	0	0	435
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	100	100	100	100	100	100
Heavy Vehicles, %	7	7	0	0	4	4
Mvmt Flow	40	393	15	0	0	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	450	15	0	-	-	-
Stage 1	15	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Critical Hdwy	6.47	6.27	-	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.363	-	-	-	-
Pot Cap-1 Maneuver	558	1050	-	0	0	-
Stage 1	995	-	-	0	0	-
Stage 2	642	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	558	1050	-	-	-	-
Mov Cap-2 Maneuver	558	-	-	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	642	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	971	-
HCM Lane V/C Ratio	-	0.446	-
HCM Control Delay (s)	-	11.7	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	2.3	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	10	0	408	92
Future Volume (vph)	0	0	10	0	408	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

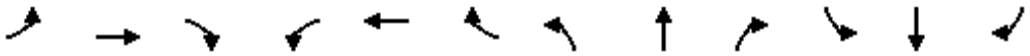
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	10	0	408	92
Future Vol, veh/h	0	0	10	0	408	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	5	5
Mvmt Flow	0	0	10	0	408	92

Major/Minor	Minor2		Major2	
Conflicting Flow All	908	92	0	0
Stage 1	908	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.15	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.245	-
Pot Cap-1 Maneuver	277	971	-	-
Stage 1	357	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	971	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	45	131	17	10	10	97	577	26	10	448	40
Future Volume (vph)	25	45	131	17	10	10	97	577	26	10	448	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	30		15	15		30	13		13	13		13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	4%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

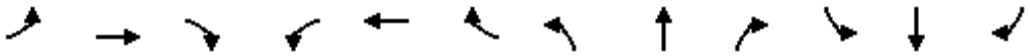
Intersection	
Int Delay, s/veh	10.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	45	131	17	10	10	97	577	26	10	448	40
Future Vol, veh/h	25	45	131	17	10	10	97	577	26	10	448	40
Conflicting Peds, #/hr	30	0	15	15	0	30	13	0	13	13	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	4	4	4
Mvmt Flow	25	45	131	17	10	10	97	577	26	10	448	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1325	1311	496	1388	1318	633	501	0	0	616	0	0
Stage 1	501	501	-	797	797	-	-	-	-	-	-	-
Stage 2	824	810	-	591	521	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	134	160	578	121	159	483	1063	-	-	954	-	-
Stage 1	556	546	-	383	401	-	-	-	-	-	-	-
Stage 2	370	396	-	497	535	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	105	132	563	59	131	463	1050	-	-	942	-	-
Mov Cap-2 Maneuver	105	132	-	59	131	-	-	-	-	-	-	-
Stage 1	472	531	-	325	341	-	-	-	-	-	-	-
Stage 2	294	337	-	339	521	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	61.2	64.3	1.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1050	-	-	248	96	942	-	-
HCM Lane V/C Ratio	0.092	-	-	0.81	0.385	0.011	-	-
HCM Control Delay (s)	8.8	0	-	61.2	64.3	8.9	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	6.2	1.6	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	0	41	34	0	10	82	362	33	5	288	10
Future Volume (vph)	5	0	41	34	0	10	82	362	33	5	288	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	18%	18%	18%	0%	0%	0%	3%	3%	3%	4%	4%	4%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

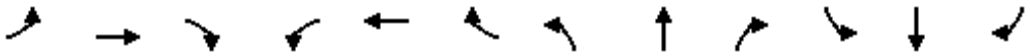
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	0	41	34	0	10	82	362	33	5	288	10
Future Vol, veh/h	5	0	41	34	0	10	82	362	33	5	288	10
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	18	18	18	0	0	0	3	3	3	4	4	4
Mvmt Flow	5	0	41	34	0	10	82	362	33	5	288	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	851	862	293	867	851	379	298	0	0	395	0	0
Stage 1	303	303	-	543	543	-	-	-	-	-	-	-
Stage 2	548	559	-	324	308	-	-	-	-	-	-	-
Critical Hdwy	7.28	6.68	6.38	7.1	6.5	6.2	4.13	-	-	4.14	-	-
Critical Hdwy Stg 1	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.28	5.68	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.662	4.162	3.462	3.5	4	3.3	2.227	-	-	2.236	-	-
Pot Cap-1 Maneuver	263	276	710	275	299	672	1258	-	-	1153	-	-
Stage 1	673	636	-	528	523	-	-	-	-	-	-	-
Stage 2	493	486	-	692	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	241	251	710	241	272	672	1258	-	-	1153	-	-
Mov Cap-2 Maneuver	241	251	-	241	272	-	-	-	-	-	-	-
Stage 1	616	633	-	484	479	-	-	-	-	-	-	-
Stage 2	445	445	-	649	661	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	20.1	1.4	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1258	-	-	586	282	1153	-	-
HCM Lane V/C Ratio	0.065	-	-	0.078	0.156	0.004	-	-
HCM Control Delay (s)	8.1	0	-	11.7	20.1	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.5	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	154	5	33	221	38	0	25	37	47	0	25
Future Volume (vph)	20	154	5	33	221	38	0	25	37	47	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	11%	11%	11%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

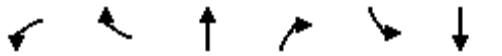
Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	20	154	5	33	221	38	0	25	37	47	0	25
Future Vol, veh/h	20	154	5	33	221	38	0	25	37	47	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	5	5	5	0	0	0	11	11	11	0	0	0
Mvmt Flow	20	154	5	33	221	38	0	25	37	47	0	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	259	0	0	159	0	0	516	522	157	534	505	240
Stage 1	-	-	-	-	-	-	197	197	-	306	306	-
Stage 2	-	-	-	-	-	-	319	325	-	228	199	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.21	6.61	6.31	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.61	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.599	4.099	3.399	3.5	4	3.3
Pot Cap-1 Maneuver	1288	-	-	1433	-	-	456	447	865	460	473	804
Stage 1	-	-	-	-	-	-	785	721	-	708	665	-
Stage 2	-	-	-	-	-	-	674	633	-	779	740	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1288	-	-	1433	-	-	427	427	865	407	452	804
Mov Cap-2 Maneuver	-	-	-	-	-	-	427	427	-	407	452	-
Stage 1	-	-	-	-	-	-	772	709	-	696	647	-
Stage 2	-	-	-	-	-	-	635	616	-	707	727	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.9	11.5	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	612	1288	-	-	1433	-	-	491
HCM Lane V/C Ratio	0.101	0.016	-	-	0.023	-	-	0.147
HCM Control Delay (s)	11.5	7.8	0	-	7.6	0	-	13.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.5



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	26	33	1122	47	63	345
Future Volume (vph)	26	33	1122	47	63	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	1058		1613			1660
Travel Time (s)	28.9		31.4			32.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	33	1122	47	63	345
Future Vol, veh/h	26	33	1122	47	63	345
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, %	3	3	3	3	3	3
Mvmt Flow	28	36	1220	51	68	375

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1757	1246	0	0	1271	0
Stage 1	1246	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	93	211	-	-	543	-
Stage 1	270	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	78	211	-	-	543	-
Mov Cap-2 Maneuver	78	-	-	-	-	-
Stage 1	270	-	-	-	-	-
Stage 2	505	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	65.1	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	120	543	-
HCM Lane V/C Ratio	-	-	0.534	0.126	-
HCM Control Delay (s)	-	-	65.1	12.6	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	2.5	0.4	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	108	54	416	182	82	257
Future Volume (vph)	108	54	416	182	82	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	892		1216			192
Travel Time (s)	24.3		23.7			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	108	54	416	182	82	257
Future Vol, veh/h	108	54	416	182	82	257
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	117	59	452	198	89	279

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1008	551	0	0	650	0
Stage 1	551	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	265	532	-	-	931	-
Stage 1	575	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	235	532	-	-	931	-
Mov Cap-2 Maneuver	235	-	-	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	564	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.3	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	235	532	931	-
HCM Lane V/C Ratio	-	-	0.5	0.11	0.096	-
HCM Control Delay (s)	-	-	34.7	12.6	9.3	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	2.6	0.4	0.3	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	645	139	346	732	114	359
Future Volume (vph)	645	139	346	732	114	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	156			2831	868	
Travel Time (s)	2.4			42.9	23.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	166

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	645	139	346	732	114	359
Future Vol, veh/h	645	139	346	732	114	359
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	645	139	346	732	114	359

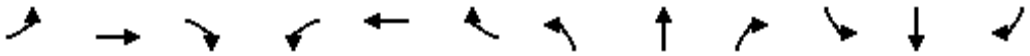
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	784	0	2139	715
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	1424	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	834	-	~ 54	431
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	222	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	834	-	~ 16	431
Mov Cap-2 Maneuver	-	-	-	-	~ 16	-
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	~ 67	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	$ 810.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	16	431	-	-	834	-
HCM Lane V/C Ratio	7.125	0.833	-	-	0.415	-
HCM Control Delay (s)	$ 3227	43.2	-	-	12.3	0
HCM Lane LOS	F	E	-	-	B	A
HCM 95th %tile Q(veh)	15.1	7.9	-	-	2.1	-

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

2037 with SEIS Alternative 6 Sunday PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	5	5	0	0	0	0	20	10	299	20	0
Future Volume (vph)	228	5	5	0	0	0	0	20	10	299	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1200			1208			347			614	
Travel Time (s)		18.2			18.3			6.8			12.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Free			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

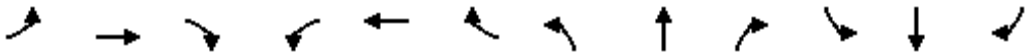
Intersection	
Int Delay, s/veh	17.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	228	5	5	0	0	0	0	20	10	299	20	0
Future Vol, veh/h	228	5	5	0	0	0	0	20	10	299	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	228	5	5	0	0	0	0	20	10	299	20	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	643	648	20	-	0	0	30	0	0
Stage 1	618	618	-	-	-	-	-	-	-
Stage 2	25	30	-	-	-	-	-	-	-
Critical Hdwy	6.41	6.51	6.21	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.41	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.41	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	439	391	1061	0	-	-	1596	-	0
Stage 1	540	482	-	0	-	-	-	-	0
Stage 2	1000	872	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	356	0	1061	-	-	-	1596	-	-
Mov Cap-2 Maneuver	356	0	-	-	-	-	-	-	-
Stage 1	540	0	-	-	-	-	-	-	-
Stage 2	811	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.3	0	7.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	361	1596	-
HCM Lane V/C Ratio	-	-	0.659	0.187	-
HCM Control Delay (s)	-	-	32.3	7.8	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	4.5	0.7	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	5	516	5	243	0	0	284	1064
Future Volume (vph)	0	0	0	35	5	516	5	243	0	0	284	1064
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1191			1224			614			1462	
Travel Time (s)		18.0			18.5			12.0			28.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

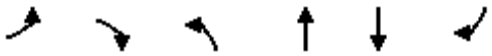
Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	35	5	516	5	243	0	0	284	1064
Future Vol, veh/h	0	0	0	35	5	516	5	243	0	0	284	1064
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	0	35	5	516	5	243	0	0	284	1064

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	1069	1601	243	1348	0	-	-	-	0
Stage 1	253	253	-	-	-	-	-	-	-
Stage 2	816	1348	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.2	4.1	-	-	-	-	-
Critical Hdwy Stg 1	5.4	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	2.2	-	-	-	-	-
Pot Cap-1 Maneuver	247	107	801	517	-	0	0	-	-
Stage 1	794	701	-	-	-	0	0	-	-
Stage 2	438	221	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	244	0	801	517	-	-	-	-	-
Mov Cap-2 Maneuver	244	0	-	-	-	-	-	-	-
Stage 1	785	0	-	-	-	-	-	-	-
Stage 2	438	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.9	0.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	517	-	700	-	-
HCM Lane V/C Ratio	0.01	-	0.794	-	-
HCM Control Delay (s)	12	0	26.9	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0	-	8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	105	40	719	1243	40
Future Volume (vph)	30	105	40	719	1243	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	100			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Link Speed (mph)	15			35	35	
Link Distance (ft)	535			2708	698	
Travel Time (s)	24.3			52.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

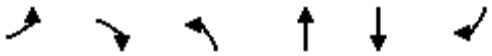
Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	105	40	719	1243	40
Future Vol, veh/h	30	105	40	719	1243	40
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	30	105	40	719	1243	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2062	1263	1283	0	-	0
Stage 1	1263	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.1	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.2	-	-	-
Pot Cap-1 Maneuver	59	205	548	-	-	-
Stage 1	264	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	55	205	548	-	-	-
Mov Cap-2 Maneuver	55	-	-	-	-	-
Stage 1	245	-	-	-	-	-
Stage 2	439	-	-	-	-	-

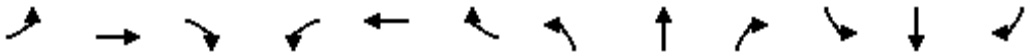
Approach	EB	NB	SB
HCM Control Delay, s	161.6	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	548	-	128	-	-
HCM Lane V/C Ratio	0.073	-	1.055	-	-
HCM Control Delay (s)	12.1	-	161.6	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	7.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	91	265	445	315	1028	110
Future Volume (vph)	91	265	445	315	1028	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			35	35	
Link Distance (ft)	708			1711	1296	
Travel Time (s)	19.3			33.3	25.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield			Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	30	0	0	0	50	295	0	0	1057	15
Future Volume (vph)	10	0	30	0	0	0	50	295	0	0	1057	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		888			397			1119			1103	
Travel Time (s)		24.2			10.8			21.8			21.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	7%	7%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	30	0	0	0	50	295	0	0	1057	15
Future Vol, veh/h	10	0	30	0	0	0	50	295	0	0	1057	15
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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	7	7	0	0	0	0	0	0	1	1	1
Mvmt Flow	10	0	30	0	0	0	50	295	0	0	1057	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1460	1460	1065	1475	1467	295	1072	0	0	295	0	0
Stage 1	1065	1065	-	395	395	-	-	-	-	-	-	-
Stage 2	395	395	-	1080	1072	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	104	126	264	106	129	749	658	-	-	1272	-	-
Stage 1	263	293	-	634	608	-	-	-	-	-	-	-
Stage 2	620	596	-	267	299	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	97	115	264	87	117	749	658	-	-	1272	-	-
Mov Cap-2 Maneuver	97	115	-	87	117	-	-	-	-	-	-	-
Stage 1	239	293	-	576	553	-	-	-	-	-	-	-
Stage 2	564	542	-	237	299	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.7	0	1.6	0
HCM LOS	D	A		

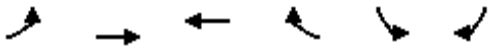
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	658	-	-	185	-	1272	-	-
HCM Lane V/C Ratio	0.076	-	-	0.216	-	-	-	-
HCM Control Delay (s)	10.9	0	-	29.7	0	0	-	-
HCM Lane LOS	B	A	-	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	-	0	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	775	455	154	151	397	297
Future Volume (vph)	775	455	154	151	397	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		35			35
Link Distance (ft)	3799		1103			660
Travel Time (s)	57.6		21.5			12.9
Confl. Peds. (#/hr)	1					
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)						
Sign Control	Yield		Yield			Yield

Intersection Summary	
Area Type:	Other

Control Type: Roundabout



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	706	1450	30	20	15
Future Volume (vph)	10	706	1450	30	20	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25	25		30	
Link Distance (ft)		2755	1314		535	
Travel Time (s)		75.1	35.8		12.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

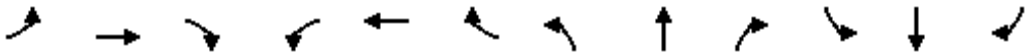
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	706	1450	30	20	15
Future Vol, veh/h	10	706	1450	30	20	15
Conflicting Peds, #/hr	5	0	0	5	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	10	706	1450	30	20	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1485	0	-	0	2196	1470
Stage 1	-	-	-	-	1470	-
Stage 2	-	-	-	-	726	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	456	-	-	-	50	158
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	483	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	454	-	-	-	48	157
Mov Cap-2 Maneuver	-	-	-	-	48	-
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	481	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	104.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	454	-	-	-	68
HCM Lane V/C Ratio	0.022	-	-	-	0.515
HCM Control Delay (s)	13.1	0	-	-	104.3
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	2.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	621	85	30	1309	30	201	0	90	10	10	25
Future Volume (vph)	5	621	85	30	1309	30	201	0	90	10	10	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1314			374			633			254	
Travel Time (s)		35.8			10.2			17.3			6.9	
Confl. Peds. (#/hr)			3	3								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	426

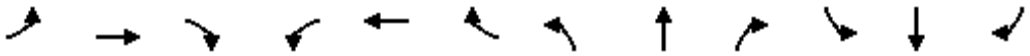
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	621	85	30	1309	30	201	0	90	10	10	25
Future Vol, veh/h	5	621	85	30	1309	30	201	0	90	10	10	25
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	621	85	30	1309	30	201	0	90	10	10	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1339	0	0	709	0	0	2079	2076	667	2103	2103	1324
Stage 1	-	-	-	-	-	-	677	677	-	1384	1384	-
Stage 2	-	-	-	-	-	-	1402	1399	-	719	719	-
Critical Hdwy	4.11	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	518	-	-	895	-	-	~ 39	53	457	38	52	193
Stage 1	-	-	-	-	-	-	441	451	-	179	213	-
Stage 2	-	-	-	-	-	-	~ 172	206	-	423	436	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	518	-	-	892	-	-	~ 25	45	456	27	44	193
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 25	45	-	27	44	-
Stage 1	-	-	-	-	-	-	433	442	-	176	185	-
Stage 2	-	-	-	-	-	-	~ 123	179	-	334	428	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	$ 3512.3	152.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	35	518	-	-	892	-	-	62
HCM Lane V/C Ratio	8.314	0.01	-	-	0.034	-	-	0.726
HCM Control Delay (s)	$ 3512.3	12	0	-	9.2	0	-	152.3
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	35.1	0	-	-	0.1	-	-	3.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	661	65	60	1278	50	96	20	15	10	0	5
Future Volume (vph)	25	661	65	60	1278	50	96	20	15	10	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		374			1851			514			309	
Travel Time (s)		8.5			42.1			14.0			8.4	
Confl. Peds. (#/hr)			4	4								
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	110.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	661	65	60	1278	50	96	20	15	10	0	5
Future Vol, veh/h	25	661	65	60	1278	50	96	20	15	10	0	5
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	0	0	0
Mvmt Flow	25	661	65	60	1278	50	96	20	15	10	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1328	0	0	730	0	0	2174	2196	698	2184	2203	1303
Stage 1	-	-	-	-	-	-	748	748	-	1423	1423	-
Stage 2	-	-	-	-	-	-	1426	1448	-	761	780	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	520	-	-	879	-	-	~ 34	45	440	33	45	198
Stage 1	-	-	-	-	-	-	404	420	-	170	204	-
Stage 2	-	-	-	-	-	-	168	196	-	401	409	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	520	-	-	876	-	-	~ 25	30	438	11	30	198
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 25	30	-	11	30	-
Stage 1	-	-	-	-	-	-	370	384	-	156	150	-
Stage 2	-	-	-	-	-	-	120	144	-	337	374	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.4	$ 1857.9	$ 524.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	29	520	-	-	876	-	-	16
HCM Lane V/C Ratio	4.517	0.048	-	-	0.068	-	-	0.938
HCM Control Delay (s)	$ 1857.9	12.3	0	-	9.4	0	-	$ 524.4
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	15.8	0.2	-	-	0.2	-	-	2.3

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	15	95	10	20	266
Future Volume (vph)	25	15	95	10	20	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25			25	25	
Link Distance (ft)	358			633	311	
Travel Time (s)	9.8			17.3	8.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	5%	0%	0%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop			Stop	Stop	

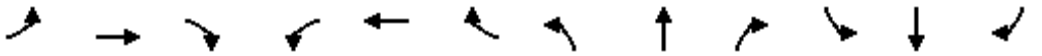
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	15	95	10	20	266
Future Vol, veh/h	25	15	95	10	20	266
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	5	5	0	0	4	4
Mvmt Flow	25	15	95	10	20	266
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.7	8.5	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	7%	0%	90%
Vol Thru, %	0%	62%	10%
Vol Right, %	93%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	286	40	105
LT Vol	20	0	95
Through Vol	0	25	10
RT Vol	266	15	0
Lane Flow Rate	286	40	105
Geometry Grp	1	1	1
Degree of Util (X)	0.3	0.05	0.138
Departure Headway (Hd)	3.776	4.464	4.722
Convergence, Y/N	Yes	Yes	Yes
Cap	955	804	764
Service Time	1.785	2.483	2.722
HCM Lane V/C Ratio	0.299	0.05	0.137
HCM Control Delay	8.4	7.7	8.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.2	0.5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	275	120	75	400	185	70	101	110	50	65	55
Future Volume (vph)	130	275	120	75	400	185	70	101	110	50	65	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	80		0	70		0	70		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		218			305			227			311	
Travel Time (s)		5.9			8.3			6.2			8.5	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	73.5

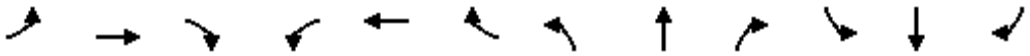
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	130	275	120	75	400	185	70	101	110	50	65	55
Future Vol, veh/h	130	275	120	75	400	185	70	101	110	50	65	55
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	80	-	-	70	-	0	70	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	0	0	0
Mvmt Flow	130	275	120	75	400	185	70	101	110	50	65	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	585	0	0	395	0	0	1299	1330	335	1344	1298	494
Stage 1	-	-	-	-	-	-	595	595	-	643	643	-
Stage 2	-	-	-	-	-	-	704	735	-	701	655	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	990	-	-	1164	-	-	138	155	707	130	163	579
Stage 1	-	-	-	-	-	-	491	492	-	465	472	-
Stage 2	-	-	-	-	-	-	428	425	-	433	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	990	-	-	1164	-	-	~ 67	126	707	~ 32	133	578
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 67	126	-	~ 32	133	-
Stage 1	-	-	-	-	-	-	427	428	-	404	442	-
Stage 2	-	-	-	-	-	-	309	398	-	243	405	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.9	$ 304	193.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	93	707	990	-	-	1164	-	-	32	206
HCM Lane V/C Ratio	1.839	0.156	0.131	-	-	0.064	-	-	1.563	0.583
HCM Control Delay (s)	$ 492.5	11	9.2	-	-	8.3	-	-	$ 552.5	44.3
HCM Lane LOS	F	B	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	14.2	0.5	0.5	-	-	0.2	-	-	5.6	3.2

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	370	5	60	545	40	20	56	65	5	75	50
Future Volume (vph)	75	370	5	60	545	40	20	56	65	5	75	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	75		0	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		494			1886			361			514	
Travel Time (s)		13.5			51.4			9.8			14.0	
Confl. Peds. (#/hr)	2		2	2		2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

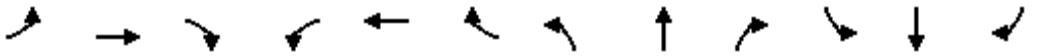
Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	370	5	60	545	40	20	56	65	5	75	50
Future Vol, veh/h	75	370	5	60	545	40	20	56	65	5	75	50
Conflicting Peds, #/hr	2	0	2	2	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	175	-	-	75	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	2	2	2	4	4	4	3	3	3
Mvmt Flow	75	370	5	60	545	40	20	56	65	5	75	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	587	0	0	377	0	0	1273	1232	375	1270	1214	567
Stage 1	-	-	-	-	-	-	525	525	-	687	687	-
Stage 2	-	-	-	-	-	-	748	707	-	583	527	-
Critical Hdwy	4.11	-	-	4.12	-	-	7.14	6.54	6.24	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.13	5.53	-
Follow-up Hdwy	2.209	-	-	2.218	-	-	3.536	4.036	3.336	3.527	4.027	3.327
Pot Cap-1 Maneuver	993	-	-	1181	-	-	143	176	667	144	181	521
Stage 1	-	-	-	-	-	-	532	526	-	435	446	-
Stage 2	-	-	-	-	-	-	401	435	-	496	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	1179	-	-	74	154	666	85	158	520
Mov Cap-2 Maneuver	-	-	-	-	-	-	74	154	-	85	158	-
Stage 1	-	-	-	-	-	-	491	485	-	402	422	-
Stage 2	-	-	-	-	-	-	283	412	-	366	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.8	46.3	48.3
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	120	666	991	-	-	1179	-	-	206
HCM Lane V/C Ratio	0.633	0.098	0.076	-	-	0.051	-	-	0.631
HCM Control Delay (s)	76.4	11	8.9	-	-	8.2	-	-	48.3
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	3.3	0.3	0.2	-	-	0.2	-	-	3.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	481	130	120	1001	50	426	15	30	10	20	36
Future Volume (vph)	35	481	130	120	1001	50	426	15	30	10	20	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	70		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1851			1050			401			441	
Travel Time (s)		50.5			28.6			10.9			12.0	
Confl. Peds. (#/hr)	8		3	3		8	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1727.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱			↕	
Traffic Vol, veh/h	35	481	130	120	1001	50	426	15	30	10	20	36
Future Vol, veh/h	35	481	130	120	1001	50	426	15	30	10	20	36
Conflicting Peds, #/hr	8	0	3	3	0	8	4	0	2	2	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	3	3	3	1	1	1	1	1	1	0	0	0
Mvmt Flow	35	481	130	120	1001	50	426	15	30	10	20	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1059	0	0	614	0	0	1917	1918	551	1915	1958	1038
Stage 1	-	-	-	-	-	-	619	619	-	1274	1274	-
Stage 2	-	-	-	-	-	-	1298	1299	-	641	684	-
Critical Hdwy	4.13	-	-	4.11	-	-	7.11	6.51	6.21	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.209	-	-	3.509	4.009	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	654	-	-	970	-	-	~ 51	68	536	52	64	283
Stage 1	-	-	-	-	-	-	478	482	-	207	240	-
Stage 2	-	-	-	-	-	-	~ 200	233	-	466	452	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	649	-	-	967	-	-	~ 20	43	533	26	41	280
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 20	43	-	26	41	-
Stage 1	-	-	-	-	-	-	437	441	-	188	166	-
Stage 2	-	-	-	-	-	-	~ 107	161	-	389	413	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.9	$ 8602.5	216.2
HCM LOS			F	F

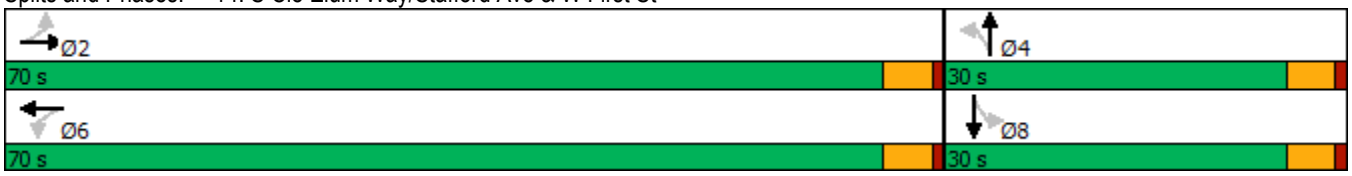
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	20	111	649	-	-	967	-	-	66
HCM Lane V/C Ratio	21.3	0.405	0.054	-	-	0.124	-	-	1
HCM Control Delay (s)	$ 9505.1	58	10.9	0	-	9.2	0	-	216.2
HCM Lane LOS	F	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	53.7	1.7	0.2	-	-	0.4	-	-	5

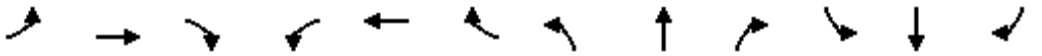
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	320	105	90	490	340	95	111	95	50	160	60
Future Volume (vph)	15	320	105	90	490	340	95	111	95	50	160	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	150		0	70		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1886			1034			457			401	
Travel Time (s)		51.4			28.2			12.5			10.9	
Confl. Peds. (#/hr)			1	1					2	2		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	33.6	33.6		32.6	32.6		31.6	31.6		28.6	28.6	
Total Split (s)	70.0	70.0		70.0	70.0		30.0	30.0		30.0	30.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Yellow Time (s)	3.6	3.6		3.6	3.6		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	4.6		4.6	4.6		4.6	4.6		4.6	4.6	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 92.1	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 14: S Cle Elum Way/Stafford Ave & W First St





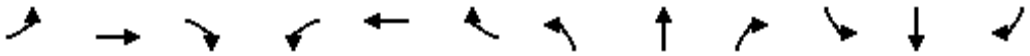
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	320	105	90	490	340	95	111	95	50	160	60
Future Volume (veh/h)	15	320	105	90	490	340	95	111	95	50	160	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	15	320	105	90	490	340	95	111	95	50	160	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	335	920	302	637	702	487	206	207	177	213	289	108
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	661	1348	442	962	1028	713	1167	936	801	1182	1305	489
Grp Volume(v), veh/h	15	0	425	90	0	830	95	0	206	50	0	220
Grp Sat Flow(s),veh/h/ln	661	0	1790	962	0	1741	1167	0	1737	1182	0	1794
Q Serve(g_s), s	1.3	0.0	9.5	4.1	0.0	27.7	7.5	0.0	10.0	3.7	0.0	10.4
Cycle Q Clear(g_c), s	29.0	0.0	9.5	13.6	0.0	27.7	18.0	0.0	10.0	13.8	0.0	10.4
Prop In Lane	1.00		0.25	1.00		0.41	1.00		0.46	1.00		0.27
Lane Grp Cap(c), veh/h	335	0	1222	637	0	1189	206	0	384	213	0	397
V/C Ratio(X)	0.04	0.00	0.35	0.14	0.00	0.70	0.46	0.00	0.54	0.24	0.00	0.55
Avail Cap(c_a), veh/h	335	0	1222	637	0	1189	258	0	461	265	0	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	6.3	9.1	0.0	9.2	41.1	0.0	33.0	39.0	0.0	33.1
Incr Delay (d2), s/veh	0.3	0.0	0.8	0.5	0.0	3.4	2.3	0.0	1.7	0.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.5	0.9	0.0	10.3	2.3	0.0	4.4	1.1	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	0.0	7.1	9.6	0.0	12.6	43.4	0.0	34.6	39.8	0.0	34.8
LnGrp LOS	B	A	A	A	A	B	D	A	C	D	A	C
Approach Vol, veh/h		440			920			301			270	
Approach Delay, s/veh		7.5			12.3			37.4			35.8	
Approach LOS		A			B			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		25.8		70.0		25.8				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		65.4		25.4		65.4		25.4				
Max Q Clear Time (g_c+I1), s		31.0		20.0		29.7		15.8				
Green Ext Time (p_c), s		3.4		1.0		9.2		1.4				

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

Notes

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	331	170	15	506	50	640	50	10	30	25	25
Future Volume (vph)	35	331	170	15	506	50	640	50	10	30	25	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1050			503			379			273	
Travel Time (s)		28.6			13.7			10.3			7.4	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	8%	8%	8%
Parking (#/hr)								0	0			
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	479.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	331	170	15	506	50	640	50	10	30	25	25
Future Vol, veh/h	35	331	170	15	506	50	640	50	10	30	25	25
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	8	8	8
Mvmt Flow	35	331	170	15	506	50	640	50	10	30	25	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	556	0	0	502	0	0	1073	1073	418	1078	1133	531
Stage 1	-	-	-	-	-	-	487	487	-	561	561	-
Stage 2	-	-	-	-	-	-	586	586	-	517	572	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.12	6.52	6.22	7.18	6.58	6.28
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.18	5.58	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.518	4.018	3.318	3.572	4.072	3.372
Pot Cap-1 Maneuver	1015	-	-	1068	-	-	~ 198	220	635	191	198	537
Stage 1	-	-	-	-	-	-	~ 562	550	-	502	500	-
Stage 2	-	-	-	-	-	-	~ 496	497	-	530	495	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1015	-	-	1067	-	-	~ 160	205	634	145	184	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 160	205	-	145	184	-
Stage 1	-	-	-	-	-	-	~ 534	523	-	477	490	-
Stage 2	-	-	-	-	-	-	~ 439	487	-	448	470	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	$ 1288.5	33.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	160	231	1015	-	-	1067	-	-	205
HCM Lane V/C Ratio	4	0.26	0.034	-	-	0.014	-	-	0.39
HCM Control Delay (s)	$ 1406.9	26	8.7	0	-	8.4	0	-	33.4
HCM Lane LOS	F	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	63.8	1	0.1	-	-	0	-	-	1.7

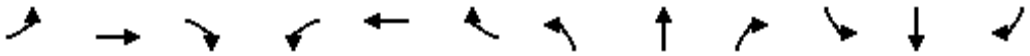
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	301	124	35	468	280	457	380	75	35	155	25
Future Volume (vph)	15	301	124	35	468	280	457	380	75	35	155	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	150		0	125		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		1034			490			313			379	
Travel Time (s)		28.2			13.4			8.5			10.3	
Confl. Peds. (#/hr)	12		13	13		12	8		5	5		8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Parking (#/hr)		0	0		0	0		0	0		0	0
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	29.5	29.5		28.5	28.5		27.5	27.5		29.5	29.5	
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0		32.0	32.0	
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%		35.6%	35.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Oakes Ave & W First St

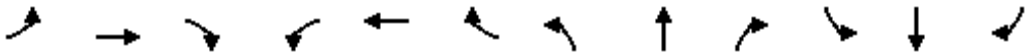




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	301	124	35	468	280	457	380	75	35	155	25
Future Volume (veh/h)	15	301	124	35	468	280	457	380	75	35	155	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	15	301	124	35	468	280	457	380	75	35	155	25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	502	671	276	512	589	352	342	416	82	114	428	69
Arrive On Green	0.59	0.59	0.59	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	711	1129	465	967	990	592	1194	1362	269	929	1400	226
Grp Volume(v), veh/h	15	0	425	35	0	748	457	0	455	35	0	180
Grp Sat Flow(s),veh/h/ln	711	0	1594	967	0	1582	1194	0	1631	929	0	1626
Q Serve(g_s), s	0.8	0.0	13.3	0.9	0.0	0.0	19.7	0.0	24.2	3.3	0.0	7.8
Cycle Q Clear(g_c), s	0.8	0.0	13.3	14.1	0.0	0.0	27.5	0.0	24.2	27.5	0.0	7.8
Prop In Lane	1.00		0.29	1.00		0.37	1.00		0.16	1.00		0.14
Lane Grp Cap(c), veh/h	502	0	947	512	0	941	342	0	498	114	0	497
V/C Ratio(X)	0.03	0.00	0.45	0.07	0.00	0.80	1.34	0.00	0.91	0.31	0.00	0.36
Avail Cap(c_a), veh/h	502	0	947	512	0	941	342	0	498	114	0	497
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.00	0.95	0.68	0.00	0.68	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	10.1	1.8	0.0	0.0	37.4	0.0	30.1	43.4	0.0	24.4
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.2	0.0	4.8	170.5	0.0	20.8	0.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.7	0.1	0.0	1.3	23.8	0.0	12.1	0.8	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	11.6	1.9	0.0	4.8	208.0	0.0	50.9	43.9	0.0	24.6
LnGrp LOS	A	A	B	A	A	A	F	A	D	D	A	C
Approach Vol, veh/h		440			783			912			215	
Approach Delay, s/veh		11.4			4.7			129.6			27.7	
Approach LOS		B			A			F			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		32.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		15.3		29.5		16.1		29.5				
Green Ext Time (p_c), s		3.4		0.0		7.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			56.5									
HCM 6th LOS			E									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	236	105	25	415	40	101	25	10	5	20	35
Future Volume (vph)	25	236	105	25	415	40	101	25	10	5	20	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		503			709			369			307	
Travel Time (s)		13.7			19.3			10.1			8.4	
Confl. Peds. (#/hr)	1		1	1		1			10	10		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

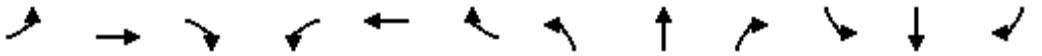
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	14.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	236	105	25	415	40	101	25	10	5	20	35
Future Vol, veh/h	25	236	105	25	415	40	101	25	10	5	20	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	1	1	1	0	0	0	0	0	0
Mvmt Flow	25	236	105	25	415	40	101	25	10	5	20	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.3	17.5	11.1	9.7
HCM LOS	B	C	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	74%	7%	5%	8%
Vol Thru, %	18%	64%	86%	33%
Vol Right, %	7%	29%	8%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	366	480	60
LT Vol	101	25	25	5
Through Vol	25	236	415	20
RT Vol	10	105	40	35
Lane Flow Rate	136	366	480	60
Geometry Grp	1	1	1	1
Degree of Util (X)	0.234	0.513	0.666	0.099
Departure Headway (Hd)	6.196	5.042	4.995	5.966
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	578	714	725	598
Service Time	4.247	3.077	3.027	4.026
HCM Lane V/C Ratio	0.235	0.513	0.662	0.1
HCM Control Delay	11.1	13.3	17.5	9.7
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	0.9	3	5.1	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	317	24	25	754	81	9	15	25	110	35	15
Future Volume (vph)	45	317	24	25	754	81	9	15	25	110	35	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	105		0	0		50	0		50
Storage Lanes	1		0	1		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1654	0	1770	1647	0	0	1866	1454	0	1830	1454
Flt Permitted	0.264			0.546				0.892			0.762	
Satd. Flow (perm)	491	1654	0	1010	1647	0	0	1691	1416	0	1442	1414
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			11				25			18
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		490			676			310			369	
Travel Time (s)		13.4			18.4			8.5			10.1	
Confl. Peds. (#/hr)	4		8	8		4	5		4	4		5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0	0		0	0			0			0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	341	0	25	835	0	0	24	25	0	145	15
Turn Type	Perm	NA		Perm	NA		Perm	NA	custom	Perm	NA	custom
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		2	4		6
Detector Phase	2	2		6	6		8	8	2	4	4	6
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		8.0	8.0	20.0	8.0	8.0	20.0
Minimum Split (s)	34.5	34.5		34.5	34.5		35.5	35.5	34.5	34.5	34.5	34.5
Total Split (s)	58.0	58.0		58.0	58.0		32.0	32.0	58.0	32.0	32.0	58.0
Total Split (%)	64.4%	64.4%		64.4%	64.4%		35.6%	35.6%	64.4%	35.6%	35.6%	64.4%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None	C-Min	None	None	C-Min
Act Effct Green (s)	65.9	65.9		65.9	65.9			15.1	65.9		15.1	65.9
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.17	0.73		0.17	0.73
v/c Ratio	0.13	0.28		0.03	0.69			0.08	0.02		0.60	0.01
Control Delay	4.8	4.2		5.5	12.6			28.2	2.7		43.4	2.7
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	4.8	4.2		5.5	12.6			28.2	2.7		43.4	2.7
LOS	A	A		A	B			C	A		D	A
Approach Delay		4.3			12.4			15.2			39.5	
Approach LOS		A			B			B			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	

Intersection Signal Delay: 13.3 Intersection LOS: B
Intersection Capacity Utilization 82.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 18: Pennsylvania Ave & W First St/First St





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	942	20	0	0	289
Future Volume (vph)	60	942	20	0	0	289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1328		651			197
Travel Time (s)	22.6		17.8			5.4
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	3%	5%	5%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	33.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	942	20	0	0	289
Future Vol, veh/h	60	942	20	0	0	289
Conflicting Peds, #/hr	0	0	0	1	1	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	100	100	100	100	100	100
Heavy Vehicles, %	3	3	5	5	3	3
Mvmt Flow	60	942	20	0	0	289

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	309	20	0	-	-	-
Stage 1	20	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	-	-
Pot Cap-1 Maneuver	681	1055	-	0	0	-
Stage 1	1000	-	-	0	0	-
Stage 2	758	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	681	1055	-	-	-	-
Mov Cap-2 Maneuver	681	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	758	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	44	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	1021	-
HCM Lane V/C Ratio	-	0.981	-
HCM Control Delay (s)	-	44	-
HCM Lane LOS	-	E	-
HCM 95th %tile Q(veh)	-	18.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	25	0	294	100
Future Volume (vph)	0	0	25	0	294	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40		25			25
Link Distance (ft)	1319		225			651
Travel Time (s)	22.5		6.1			17.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

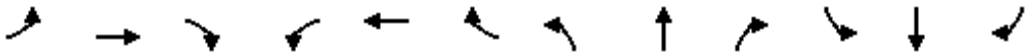
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	25	0	294	100
Future Vol, veh/h	0	0	25	0	294	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	2	2
Mvmt Flow	0	0	25	0	294	100

Major/Minor	Minor2		Major2	
Conflicting Flow All	688	100	0	0
Stage 1	688	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.218	-
Pot Cap-1 Maneuver	372	961	-	-
Stage 1	450	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	961	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NB	SB
HCM Control Delay, s		
HCM LOS	-	

Minor Lane/Major Mvmt	NBLn1	SBL	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	35	121	40	5	10	120	274	15	5	437	65
Future Volume (vph)	10	35	121	40	5	10	120	274	15	5	437	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		425			424			572			450	
Travel Time (s)		11.6			11.6			15.6			12.3	
Confl. Peds. (#/hr)	31		10	10		31	15		5	5		15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Parking (#/hr)	0	0	0	0	0	0						
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

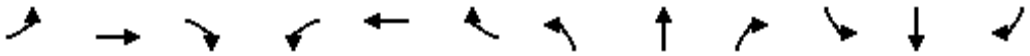
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	35	121	40	5	10	120	274	15	5	437	65
Future Vol, veh/h	10	35	121	40	5	10	120	274	15	5	437	65
Conflicting Peds, #/hr	31	0	10	10	0	31	15	0	5	5	0	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	2	2	2
Mvmt Flow	10	35	121	40	5	10	120	274	15	5	437	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1055	1029	495	1095	1054	318	517	0	0	294	0	0
Stage 1	495	495	-	527	527	-	-	-	-	-	-	-
Stage 2	560	534	-	568	527	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.218	-	-
Pot Cap-1 Maneuver	205	236	579	193	228	727	1059	-	-	1268	-	-
Stage 1	560	549	-	538	532	-	-	-	-	-	-	-
Stage 2	516	528	-	511	532	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	169	199	565	116	192	702	1044	-	-	1262	-	-
Mov Cap-2 Maneuver	169	199	-	116	192	-	-	-	-	-	-	-
Stage 1	477	538	-	462	457	-	-	-	-	-	-	-
Stage 2	421	454	-	370	521	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.4	45.1	2.6	0.1
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1044	-	-	370	143	1262	-	-
HCM Lane V/C Ratio	0.115	-	-	0.449	0.385	0.004	-	-
HCM Control Delay (s)	8.9	0	-	22.4	45.1	7.9	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	2.2	1.6	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	45	50	0	5	65	209	25	10	327	20
Future Volume (vph)	10	0	45	50	0	5	65	209	25	10	327	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		534			273			671			424	
Travel Time (s)		14.6			7.4			18.3			11.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

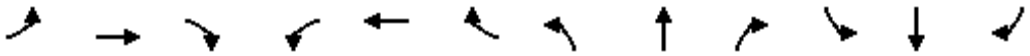
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	45	50	0	5	65	209	25	10	327	20
Future Vol, veh/h	10	0	45	50	0	5	65	209	25	10	327	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	0	45	50	0	5	65	209	25	10	327	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	711	721	337	732	719	222	347	0	0	234	0	0
Stage 1	357	357	-	352	352	-	-	-	-	-	-	-
Stage 2	354	364	-	380	367	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	351	356	710	339	357	823	1223	-	-	1345	-	-
Stage 1	665	632	-	669	635	-	-	-	-	-	-	-
Stage 2	667	627	-	646	626	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	330	331	710	301	332	823	1223	-	-	1345	-	-
Mov Cap-2 Maneuver	330	331	-	301	332	-	-	-	-	-	-	-
Stage 1	624	626	-	628	596	-	-	-	-	-	-	-
Stage 2	623	589	-	600	620	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	18.6	1.8	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1223	-	-	587	319	1345	-	-
HCM Lane V/C Ratio	0.053	-	-	0.094	0.172	0.007	-	-
HCM Control Delay (s)	8.1	0	-	11.8	18.6	7.7	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.6	0	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	236	5	17	159	13	10	0	13	48	0	5
Future Volume (vph)	10	236	5	17	159	13	10	0	13	48	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		591			657			282			328	
Travel Time (s)		16.1			17.9			7.7			8.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

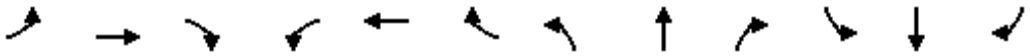
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	236	5	17	159	13	10	0	13	48	0	5
Future Vol, veh/h	10	236	5	17	159	13	10	0	13	48	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	236	5	17	159	13	10	0	13	48	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	172	0	0	241	0	0	461	465	239	465	461	166
Stage 1	-	-	-	-	-	-	259	259	-	200	200	-
Stage 2	-	-	-	-	-	-	202	206	-	265	261	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1417	-	-	1337	-	-	514	498	805	511	500	884
Stage 1	-	-	-	-	-	-	750	697	-	806	739	-
Stage 2	-	-	-	-	-	-	805	735	-	745	696	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1417	-	-	1337	-	-	503	487	805	494	489	884
Mov Cap-2 Maneuver	-	-	-	-	-	-	503	487	-	494	489	-
Stage 1	-	-	-	-	-	-	744	691	-	800	729	-
Stage 2	-	-	-	-	-	-	789	725	-	727	690	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.7	10.9	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	638	1417	-	-	1337	-	-	515
HCM Lane V/C Ratio	0.036	0.007	-	-	0.013	-	-	0.103
HCM Control Delay (s)	10.9	7.6	0	-	7.7	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	415	125	10	906	0	606	10	5	0	10	25
Future Volume (vph)	5	415	125	10	906	0	606	10	5	0	10	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			738			139			160	
Travel Time (s)		4.8			11.2			3.2			3.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	756.8

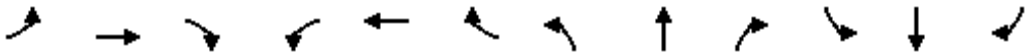
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	415	125	10	906	0	606	10	5	0	10	25
Future Vol, veh/h	5	415	125	10	906	0	606	10	5	0	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	1	1	1	3	3	3	0	0	0
Mvmt Flow	5	415	125	10	906	0	606	10	5	0	10	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	906	0	0	540	0	0	1432	1414	478	1421	1476	906
Stage 1	-	-	-	-	-	-	488	488	-	926	926	-
Stage 2	-	-	-	-	-	-	944	926	-	495	550	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	751	-	-	1034	-	-	~ 111	137	585	115	127	337
Stage 1	-	-	-	-	-	-	~ 559	548	-	325	350	-
Stage 2	-	-	-	-	-	-	~ 314	346	-	560	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	751	-	-	1034	-	-	~ 94	133	585	105	123	337
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 94	133	-	105	123	-
Stage 1	-	-	-	-	-	-	~ 553	543	-	322	343	-
Stage 2	-	-	-	-	-	-	~ 277	339	-	540	514	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 2578.4	23.9
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	95	751	-	-	1034	-	-	225
HCM Lane V/C Ratio	6.537	0.007	-	-	0.01	-	-	0.156
HCM Control Delay (s)	$ 2578.4	9.8	0	-	8.5	0	-	23.9
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	69.1	0	-	-	0	-	-	0.5

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	651	0	395	0	0	155	490
Future Volume (vph)	0	0	0	0	0	651	0	395	0	0	155	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		1099			1211			1321			778	
Travel Time (s)		18.7			20.6			30.0			17.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	5%	5%	5%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Free			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

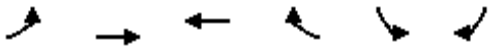
Intersection	
Int Delay, s/veh	23.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	651	0	395	0	0	155	490
Future Vol, veh/h	0	0	0	0	0	651	0	395	0	0	155	490
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	3	3	3	5	5	5	3	3	3
Mvmt Flow	0	0	0	0	0	651	0	395	0	0	155	490

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	395	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.23	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.327	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	652	0	-	0	0	-	-
Stage 1	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	-	0	652	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	60	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.998	-	-
HCM Control Delay (s)	-	60	-	-
HCM Lane LOS	-	F	-	-
HCM 95th %tile Q(veh)	-	15.6	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	360	5	0	0	185	0
Future Volume (vph)	360	5	0	0	185	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		40	40		30	
Link Distance (ft)		952	1145		1321	
Travel Time (s)		16.2	19.5		30.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	0%	0%	8%	8%
Shared Lane Traffic (%)						
Sign Control		Stop	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	360	5	0	0	185	0
Future Vol, veh/h	360	5	0	0	185	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	6	0	0	8	8
Mvmt Flow	360	5	0	0	185	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	11.9	10
HCM LOS	B	A

Lane	EBLn1	SBLn1
Vol Left, %	99%	100%
Vol Thru, %	1%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	365	185
LT Vol	360	185
Through Vol	5	0
RT Vol	0	0
Lane Flow Rate	365	185
Geometry Grp	1	1
Degree of Util (X)	0.476	0.264
Departure Headway (Hd)	4.694	5.139
Convergence, Y/N	Yes	Yes
Cap	766	699
Service Time	2.72	3.174
HCM Lane V/C Ratio	0.477	0.265
HCM Control Delay	11.9	10
HCM Lane LOS	B	A
HCM 95th-tile Q	2.6	1.1



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	400	5	505	801	125	0
Future Volume (vph)	400	5	505	801	125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	200		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Link Speed (mph)	45			45	30	
Link Distance (ft)	732			222	60	
Travel Time (s)	11.1			3.4	1.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	134.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	400	5	505	801	125	0
Future Vol, veh/h	400	5	505	801	125	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	400	5	505	801	125	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	405	0	2214	403
Stage 1	-	-	-	-	403	-
Stage 2	-	-	-	-	1811	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1159	-	~ 48	647
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	143	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1159	-	~ 27	647
Mov Cap-2 Maneuver	-	-	-	-	~ 27	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	~ 81	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	$ 1927
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	27	-	-	1159	-
HCM Lane V/C Ratio	4.63	-	-	0.436	-
HCM Control Delay (s)	$ 1927	-	-	10.5	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	15.3	-	-	2.3	-

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	37	48	712	37	47	1246
Future Volume (vph)	37	48	712	37	47	1246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	729		1562			1711
Travel Time (s)	19.9		30.4			33.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	12.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	48	712	37	47	1246
Future Vol, veh/h	37	48	712	37	47	1246
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, %	3	3	3	3	3	3
Mvmt Flow	40	52	774	40	51	1354

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2250	794	0	0	814	0
Stage 1	794	-	-	-	-	-
Stage 2	1456	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	45	386	-	-	809	-
Stage 1	443	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 34	386	-	-	809	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	159	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 317.4	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	70	809	-
HCM Lane V/C Ratio	-	-	1.32	0.063	-
HCM Control Delay (s)	-	-	$ 317.4	9.8	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.5	0.2	-

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



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	108	54	291	115	57	1030
Future Volume (vph)	108	54	291	115	57	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	965		1296			114
Travel Time (s)	26.3		25.2			2.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	16.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	108	54	291	115	57	1030
Future Vol, veh/h	108	54	291	115	57	1030
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	117	59	316	125	62	1120

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1623	379	0	0	441	0
Stage 1	379	-	-	-	-	-
Stage 2	1244	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	~ 112	666	-	-	1114	-
Stage 1	690	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 96	666	-	-	1114	-
Mov Cap-2 Maneuver	~ 96	-	-	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	230	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	166.8	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	96	666	1114	-
HCM Lane V/C Ratio	-	-	1.223	0.088	0.056	-
HCM Control Delay (s)	-	-	244.8	10.9	8.4	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	8.1	0.3	0.2	-

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



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	455	83	339	1126	140	260
Future Volume (vph)	455	83	339	1126	140	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	25	
Link Distance (ft)	231			2755	804	
Travel Time (s)	3.5			41.7	21.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	455	83	339	1126	140	260
Future Vol, veh/h	455	83	339	1126	140	260
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	495	90	368	1224	152	283

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	585	0	2500	540
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	1960	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	985	-	~ 31	540
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	~ 119	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	985	-	0	540
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	540	-	-	985	-
HCM Lane V/C Ratio	-	0.523	-	-	0.374	-
HCM Control Delay (s)	-	18.8	-	-	10.8	0
HCM Lane LOS	-	C	-	-	B	A
HCM 95th %tile Q(veh)	-	3	-	-	1.8	-

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

APPENDIX D

Trip Generation Calculations for SEIS Alternative 5

47 North
Previous FEIS Alt 5 Land Use (YEAR 2025 SCENARIO)
Weekday PM Peak Hour Trip Generation Summary

Land Use		Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY PM PEAK HOUR									
Proposed Use:									
Single-Family Detached Housing		319 DU	210	63%	37%	Ln(T) = 0.96Ln(X)+0.20	195	114	309
	Internal Trips	*see below*					*-3*	*-1*	*-4*
						Subtotal (less internal) =	192	113	305
Multifamily Housing (Low-Rise)		469 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	147	87	234
	Internal Trips	*see below*					*-2*	*-1*	*-3*
						Subtotal (less internal) =	145	86	231
Business Park		105 employees	770	22%	78%	Ln(T) = 0.81Ln(X)+0.54	16	58	74
	Internal Trips	*10%*					*-2*	*-5*	*-7*
						Subtotal (less internal) =	14	53	67
						Gross Proposed PM Peak Hour Trips =	**358**	**259**	**617**
						Less Total Internal Trips =	*-7*	*-7*	*-14*
						Net New PM Peak Hour Trips =	**351**	**252**	**603**

Notes:

[1] DU = Dwelling Units, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

47 North
Previous FEIS Alt 5 Land Use (YEAR 2030 SCENARIO)
Weekday PM Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY PM PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	433 DU	210	63%	37%	Ln(T) = 0.96Ln(X)+0.20	261	154	415
Internal Trips	*see below*					*-9*	*-3*	*-12*
					Subtotal (less internal) =	252	151	403
Multifamily Housing (Low-Rise)	524 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	163	95	258
Internal Trips	*see below*					*-6*	*-2*	*-8*
					Subtotal (less internal) =	157	93	250
Business Park	365 employees	770	22%	78%	Ln(T) = 0.81Ln(X)+0.54	45	159	204
Internal Trips	*10%*					*-5*	*-15*	*-20*
					Subtotal (less internal) =	40	144	184
					Gross Proposed PM Peak Hour Trips =	**469**	**408**	**877**
					Less Total Internal Trips =	*-20*	*-20*	*-40*
					Net New PM Peak Hour Trips =	**449**	**388**	**837**

Notes:

[1] DU = Dwelling Units, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

47 North
Previous FEIS Alt 5 Land Use (YEAR 2037 SCENARIO)
Weekday PM Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY PM PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	609 DU	210	63%	37%	Ln(T) = 0.96Ln(X)+0.20	363	213	576
Internal Trips	*see below*					*-19*	*-6*	*-25*
					Subtotal (less internal) =	344	207	551
Multifamily Housing (Low-Rise)	524 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	163	95	258
Internal Trips	*see below*					*-9*	*-2*	*-11*
					Subtotal (less internal) =	154	93	247
Business Park	740 employees	770	22%	78%	Ln(T) = 0.81Ln(X)+0.54	80	282	362
Internal Trips	*10%*					*-8*	*-28*	*-36*
					Subtotal (less internal) =	72	254	326
					Gross Proposed PM Peak Hour Trips =	**606**	**590**	**1,196**
					Less Total Internal Trips =	*-36*	*-36*	*-72*
					Net New PM Peak Hour Trips =	**570**	**554**	**1,124**

Notes:

[1] DU = Dwelling Units, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

47 North
Previous FEIS Alt 5 Land Use (YEAR 2025 SCENARIO)
Sunday Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	319 DU	210	53%	47%	(T) = 0.79(X)+11.02	139	124	263
Internal Trips	*see below*					*0*	*0*	*0*
					Subtotal (less internal) =	139	124	263
Multifamily Housing (Low-Rise)	469 DU	220	50%	50%	0.67	157	157	314
Internal Trips	*see below*					*0*	*0*	*0*
					Subtotal (less internal) =	157	157	314
Business Park [3]	105 employees	770	50%	50%	0.03	1	2	3
Internal Trips	*10%*					*0*	*0*	*0*
					Subtotal (less internal) =	1	2	3
					Gross Proposed PM Peak Hour Trips =	**297**	**283**	**580**
					Less Total Internal Trips =	*0*	*0*	*0*
					Net New PM Peak Hour Trips =	**297**	**283**	**580**

Notes:

[1] DU = Dwelling Units, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] ITE Trip Generation does not contain trip rates for a Business Park for the Sunday peak hour, therefore the rate was estimated based on the ratio of weekday PM peak hour of generator to weekday daily.

47 North
Previous FEIS Alt 5 Land Use (YEAR 2030 SCENARIO)
Sunday Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	433 DU	210	53%	47%	(T) = 0.79(X)+11.02	187	166	353
Internal Trips	*see below*					*0*	*-1*	*-1*
					Subtotal (less internal) =	187	165	352
Multifamily Housing (Low-Rise)	524 DU	220	50%	50%	0.67	175	176	351
Internal Trips	*see below*					*0*	*0*	*0*
					Subtotal (less internal) =	175	176	351
Business Park [3]	365 employees	770	50%	50%	0.03	5	6	11
Internal Trips	*10%*					*-1*	*0*	*-1*
					Subtotal (less internal) =	4	6	10
					Gross Proposed PM Peak Hour Trips =	**367**	**348**	**715**
					Less Total Internal Trips =	*-1*	*-1*	*-2*
					Net New PM Peak Hour Trips =	**366**	**347**	**713**

Notes:

[1] DU = Dwelling Units, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] ITE Trip Generation does not contain trip rates for a Business Park for the Sunday peak hour, therefore the rate was estimated based on the ratio of weekday PM peak hour of generator to weekday daily.

47 North
Previous FEIS Alt 5 Land Use (YEAR 2037 SCENARIO)
Sunday Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	609 DU	210	53%	47%	(T) = 0.79(X)+11.02	261	231	492
Internal Trips	*see below*					*-1*	*-1*	*-2*
					Subtotal (less internal) =	260	230	490
Multifamily Housing (Low-Rise)	524 DU	220	50%	50%	0.67	175	176	351
Internal Trips	*see below*					*0*	*0*	*0*
					Subtotal (less internal) =	175	176	351
Business Park [3]	740 employees	770	50%	50%	0.03	11	11	22
Internal Trips	*10%*					*-1*	*-1*	*-2*
					Subtotal (less internal) =	10	10	20
					Gross Proposed PM Peak Hour Trips =	**447**	**418**	**865**
					Less Total Internal Trips =	*-2*	*-2*	*-4*
					Net New PM Peak Hour Trips =	**445**	**416**	**861**

Notes:

[1] DU = Dwelling Units, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] ITE Trip Generation does not contain trip rates for a Business Park for the Sunday peak hour, therefore the rate was estimated based on the ratio of weekday PM peak hour of generator to weekday daily.

APPENDIX E

Trip Generation Calculations for SEIS Alternative 6

47 North
Current Land Use Plan (Alternative 6) - YEAR 2025 SCENARIO
Weekday PM Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY PM PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	264 DU	210	63%	37%	Ln(T) = 0.96Ln(X)+0.20	163	95	258
Internal Trips[3]	*5%*					*-8*	*-5*	*-13*
					Subtotal (less internal) =	155	90	245
Multifamily Housing (Low-Rise)	180 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	63	37	100
Internal Trips[3]	*5%*					*-3*	*-2*	*-5*
					Subtotal (less internal) =	60	35	95
RV Park	627 occ. sites	416	65%	35%	0.27	110	59	169
Internal Trips[3]	*5%*					*-5*	*-3*	*-8*
					Subtotal (less internal) =	105	56	161
Retail	8,500 SF	820	48%	52%	Ln(T) = 0.74Ln(X)+2.89	42	46	88
Internal Trips[3]	*see above*					*-5*	*-11*	*-16*
Passby Trips[4]	*34%*					*-12*	*-12*	*-24*
					Subtotal (less internal and passby) =	25	23	48
Restaurant	6,500 SF	932	62%	38%	9.77	40	24	64
Internal Trips[3]	*see above*					*-5*	*-5*	*-10*
Passby Trips[4]	*43%*					*-14*	*-9*	*-23*
					Subtotal (less internal and passby) =	21	10	31
					Gross Proposed PM Peak Hour Trips =	**418**	**261**	**679**
					Less Total Internal Trips =	*-26*	*-26*	*-52*
					Less Total Pass-By Trips =	*-26*	*-21*	*-47*
					Net New PM Peak Hour Trips =	**366**	**214**	**580**

Notes:

[1] DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

[4] Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	47 North	**Organization:**	
Project Location:		**Performed By:**	TENW
Scenario Description:	Alternative 6	**Date:**	1/21/2020
Analysis Year:	2025 Weekday PM Peak	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	8,500	SF	88	42	46
Restaurant	932	6,500	SF	64	40	24
Cinema/Entertainment				0		
Residential	210/220/416	1,071	DU's	527	336	191
Hotel				0		
All Other Land Uses[2]				0		
Total				679	418	261

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		12	0	12	0
Restaurant	0	10		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	6	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	679	418	261
Internal Capture Percentage	14%	11%	18%
External Vehicle-Trips[3]	583	370	213
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	33%	52%
Restaurant	45%	58%
Cinema/Entertainment	N/A	N/A
Residential	5%	5%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	47 North
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	42	42	1.00	46	46
Restaurant	1.00	40	40	1.00	24	24
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	336	336	1.00	191	191
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		13	2	12	2
Restaurant	1	10		2	4	2
Cinema/Entertainment	0	0	0		0	0
Residential	8	80	40	0		6
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	1	0	13	0
Retail	0		12	0	155	0
Restaurant	0	21		0	54	0
Cinema/Entertainment	0	2	1		13	0
Residential	0	4	6	0		0
Hotel	0	1	2	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	14	28	42	28	0	0
Restaurant	18	22	40	22	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	16	320	336	320	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	24	22	46	22	0	0
Restaurant	14	10	24	10	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	10	181	191	181	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

47 North
Current Land Use Plan (Alternative 6) - YEAR 2030 SCENARIO
Weekday PM Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY PM PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	527 DU	210	63%	37%	Ln(T) = 0.96Ln(X)+0.20	316	185	501
Internal Trips [3]						*-54*	*-27*	*-81*
					Subtotal (less internal) =	262	158	420
Multifamily Housing (Low-Rise)	180 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	63	37	100
Internal Trips [3]						*-11*	*-5*	*-16*
					Subtotal (less internal) =	52	32	84
RV Park	627 occ. sites	416	65%	35%	0.27	110	59	169
Internal Trips [3]						*-19*	*-8*	*-27*
					Subtotal (less internal) =	91	51	142
Grocery	45,000 SF	850	51%	49%	Ln(T) = 0.75Ln(X)+3.21	220	211	431
Internal Trips [3]						*-24*	*-53*	*-77*
Passby Trips [4]	*36%*					*-65*	*-62*	*-127*
					Subtotal (less internal and passby) =	131	96	227
Retail	17,000 SF	820	48%	52%	Ln(T) = 0.74Ln(X)+2.89	70	76	146
Internal Trips [3]						*-7*	*-19*	*-26*
Passby Trips [4]	*34%*					*-20*	*-21*	*-41*
					Subtotal (less internal and passby) =	43	36	79
Restaurant	13,000 SF	932	62%	38%	9.77	79	48	127
Internal Trips [3]						-9	-12	*-21*
Passby Trips [4]	*43%*					*-29*	*-17*	*-46*
					Subtotal (less internal and passby) =	41	19	60
					Gross Proposed PM Peak Hour Trips =	**858**	**616**	**1,474**
					Less Total Internal Trips =	*-124*	*-124*	*-248*
					Less Total Pass-By Trips =	*-114*	*-100*	*-214*
					Net New PM Peak Hour Trips =	**620**	**392**	**1,012**

Notes:

[1] DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

[4] Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	47 North	**Organization:**	
Project Location:		**Performed By:**	TENW
Scenario Description:	Alternative 6	**Date:**	1/21/2020
Analysis Year:	2030 Weekday PM Peak	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office						
Retail	850/820	62,000	SF	577	290	287
Restaurant	932	13,000	SF	127	79	48
Cinema/Entertainment				0		
Residential	210/220/416	1,334	DU's	770	489	281
Hotel				0		
All Other Land Uses[2]				0		
Total				1474	858	616

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		23	0	75	0
Restaurant	0	20		0	9	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	29	11	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,474	858	616
Internal Capture Percentage	23%	19%	27%
External Vehicle-Trips[3]	1,140	691	449
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	17%	34%
Restaurant	43%	60%
Cinema/Entertainment	N/A	N/A
Residential	17%	14%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	47 North
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	290	290	1.00	287	287
Restaurant	1.00	79	79	1.00	48	48
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	489	489	1.00	281	281
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	6		83	11	75	14
Restaurant	1	20		4	9	3
Cinema/Entertainment	0	0	0		0	0
Residential	11	118	59	0		8
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		23	2	0	20	0
Retail	0		23	0	225	0
Restaurant	0	145		0	78	0
Cinema/Entertainment	0	12	2		20	0
Residential	0	29	11	0		0
Hotel	0	6	4	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	49	241	290	241	0	0
Restaurant	34	45	79	45	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	84	405	489	405	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	98	189	287	189	0	0
Restaurant	29	19	48	19	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	40	241	281	241	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

47 North
Current Land Use Plan (Alternative 6) - YEAR 2037 SCENARIO
Weekday PM Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
WEEKDAY PM PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	527 DU	210	63%	37%	Ln(T) = 0.96Ln(X)+0.20	316	185	501
Internal Trips [3]						*-63*	*-39*	*-102*
					Subtotal (less internal) =	253	146	399
Multifamily Housing (Low-Rise)	180 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	63	37	100
Internal Trips [3]						*-12*	*-8*	*-20*
					Subtotal (less internal) =	51	29	80
RV Park	627 occ. sites	416	65%	35%	0.27	110	59	169
Internal Trips [3]						*-22*	*-12*	*-34*
					Subtotal (less internal) =	88	47	135
Grocery	45,000 SF	850	51%	49%	Ln(T) = 0.75Ln(X)+3.21	220	211	431
Internal Trips [3]						*-26*	*-38*	*-64*
Passby Trips [4]	*36%*					*-67*	*-65*	*-132*
					Subtotal (less internal and passby) =	127	108	235
Retail	25,000 SF	820	48%	52%	Ln(T) = 0.74Ln(X)+2.89	94	101	195
Internal Trips [3]						*-11*	*-18*	*-29*
Passby Trips [4]	*34%*					*-27*	*-29*	*-56*
					Subtotal (less internal and passby) =	56	54	110
Restaurant	20,000 SF	932	62%	38%	9.77	121	74	195
Internal Trips [3]						*-15*	*-13*	*-28*
Passby Trips [4]	*43%*					*-45*	*-27*	*-72*
					Subtotal (less internal and passby) =	61	34	95
Medical Office	60,000 SF	720	28%	72%	(T) = 3.39(X)+2.02	57	148	205
Internal Trips [3]						*-7*	*-27*	*-34*
					Subtotal (less internal) =	50	121	171
					Gross Proposed PM Peak Hour Trips =	**981**	**815**	**1,796**
					Less Total Internal Trips =	*-156*	*-155*	*-311*
					Less Total Pass-By Trips =	*-139*	*-121*	*-260*
					Net New PM Peak Hour Trips =	**686**	**539**	**1,225**

Notes:

[1] DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

[4] Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	47 North	**Organization:**	
Project Location:		**Performed By:**	TENW
Scenario Description:	Alternative 6	**Date:**	1/21/2020
Analysis Year:	2037 Weekday PM Peak	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	720	60,000	SF	205	57	148
Retail	850/820	70,000	SF	626	314	312
Restaurant	932	20,000	SF	195	121	74
Cinema/Entertainment				0		
Residential	210/220/416	1,334	DU's	770	489	281
Hotel				0		
All Other Land Uses[2]				0		
Total				1796	981	815

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		25	2	0	3	0
Retail	6		35	0	81	0
Restaurant	2	30		0	13	0
Cinema/Entertainment	0	0	0		0	0
Residential	11	31	17	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,796	981	815
Internal Capture Percentage	29%	26%	31%
External Vehicle-Trips[3]	1,284	725	559
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	33%	20%
Retail	27%	39%
Restaurant	45%	61%
Cinema/Entertainment	N/A	N/A
Residential	20%	21%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	47 North
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	57	57	1.00	148	148
Retail	1.00	314	314	1.00	312	312
Restaurant	1.00	121	121	1.00	74	74
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	489	489	1.00	281	281
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		30	6	0	3	0
Retail	6		90	12	81	16
Restaurant	2	30		6	13	5
Cinema/Entertainment	0	0	0		0	0
Residential	11	118	59	0		8
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		25	2	0	20	0
Retail	18		35	0	225	0
Restaurant	17	157		0	78	0
Cinema/Entertainment	3	13	4		20	0
Residential	32	31	17	0		0
Hotel	0	6	6	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	19	38	57	38	0	0
Retail	86	228	314	228	0	0
Restaurant	54	67	121	67	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	97	392	489	392	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	30	118	148	118	0	0
Retail	122	190	312	190	0	0
Restaurant	45	29	74	29	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	59	222	281	222	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

47 North
Current Land Use Plan (Alternative 6) - YEAR 2025 SCENARIO
Sunday Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	264 DU	210	53%	47%	(T) = 0.79(X)+11.02	117	103	220
Internal Trips[3]	*5%*					*-6*	*-5*	*-11*
					Subtotal (less internal) =	111	98	209
Multifamily Housing (Low-Rise)	180 DU	220	50%	50%	0.67	60	61	121
Internal Trips[3]	*5%*					*-3*	*-3*	*-6*
					Subtotal (less internal) =	57	58	115
RV Park[5]	627 occ. sites	416	50%	50%	0.27	84	85	169
Internal Trips[3]	*5%*					*-4*	*-4*	*-8*
					Subtotal (less internal) =	80	81	161
Retail	8,500 SF	820	49%	51%	2.79	12	12	24
Internal Trips[3]	*from above*					*-5*	*-6*	*-11*
Passby Trips[4]	*34%*					*-2*	*-2*	*-4*
					Subtotal (less internal and passby) =	5	4	9
Restaurant[6]	6,500 SF	932	55%	45%	5.42	19	16	35
Internal Trips[3]	*from above*					*-7*	*-7*	*-14*
Passby Trips[4]	*43%*					*-5*	*-4*	*-9*
					Subtotal (less internal and passby) =	7	5	12
					Gross Proposed Sunday Peak Hour Trips =	**292**	**277**	**569**
					Less Total Internal Trips =	*-25*	*-25*	*-50*
					Less Total Pass-By Trips =	*-7*	*-6*	*-13*
					Net New Sunday Peak Hour Trips =	**260**	**246**	**506**

Notes:

[1] DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

[4] Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017. Sunday peak hour pass-by rates assumed to be equal to weekday PM peak h

[5] There are no Sunday trip rates for an RV park. Therefore, the Sunday trip rates and directional distribution were assumed to be equal to the Weekday trip rates.

[6] Sunday peak hour trip rate for restaurant based on hourly distribution data in ITE Trip Generation Handbook, 3rd Edition, 2017.

47 North
Current Land Use Plan (Alternative 6) - YEAR 2030 SCENARIO
Sunday Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	527 DU	210	53%	47%	(T) = 0.79(X)+11.02	226	201	427
Internal Trips[3]	*16%*					*-36*	*-32*	*-68*
					Subtotal (less internal) =	190	169	359
Multifamily Housing (Low-Rise)	180 DU	220	50%	50%	0.67	60	61	121
Internal Trips[3]	*16%*					*-10*	*-9*	*-19*
					Subtotal (less internal) =	50	52	102
RV Park[5]	627 occ. sites	416	50%	50%	0.27	84	85	169
Internal Trips[3]	*16%*					*-13*	*-14*	*-27*
					Subtotal (less internal) =	71	71	142
Grocery [6]	45,000 SF	850	50%	50%	13.98	314	315	629
Internal Trips[3]	*from above*					*-46*	*-50*	*-96*
Passby Trips[4]	*36%*					*-96*	*-96*	*-192*
					Subtotal (less internal and passby) =	172	169	341
Retail	17,000 SF	820	49%	51%	2.79	23	24	47
Internal Trips[3]	*from above*					*-3*	*-4*	*-7*
Passby Trips[4]	*34%*					*-7*	*-7*	*-14*
					Subtotal (less internal and passby) =	13	13	26
Restaurant [6]	13,000 SF	932	55%	45%	5.42	38	32	70
Internal Trips[3]	*from above*					*-6*	*-5*	*-11*
Passby Trips[4]	*43%*					*-14*	*-11*	*-25*
					Subtotal (less internal and passby) =	18	16	34
					Gross Proposed Sunday Peak Hour Trips =	**745**	**718**	**1,463**
					Less Total Internal Trips =	*-114*	*-114*	*-228*
					Less Total Pass-By Trips =	*-117*	*-114*	*-231*
					Net New Sunday Peak Hour Trips =	**514**	**490**	**1,004**

Notes:

[1] DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

[4] Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017. Sunday peak hour pass-by rates assumed to be equal to weekday PM peak h

[5] There are no Sunday trip rates for an RV park. Therefore, the Sunday trip rates and directional distribution were assumed to be equal to the Weekday trip rates.

[6] Sunday peak hour trip rate for grocery and restaurant based on hourly distribution data in ITE Trip Generation Handbook, 3rd Edition, 2017.

47 North
Current Land Use Plan (Alternative 6) - YEAR 2037 SCENARIO
Sunday Peak Hour Trip Generation Summary

Land Use	Units[1]	ITE LUC[2]	Directional Distribution[2] In	Directional Distribution[2] Out	Trip Rate or Equation[2]	Trips Generated In	Trips Generated Out	Trips Generated Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	527 DU	210	53%	47%	(T) = 0.79(X)+11.02	226	201	427
Internal Trips[3]	*20%*					*-45*	*-40*	*-85*
					Subtotal (less internal) =	181	161	342
Multifamily Housing (Low-Rise)	180 DU	220	50%	50%	0.67	60	61	121
Internal Trips[3]	*20%*					*-12*	*-12*	*-24*
					Subtotal (less internal) =	48	49	97
RV Park[5]	627 occ. sites	416	50%	50%	0.27	84	85	169
Internal Trips[3]	*20%*					*-17*	*-17*	*-34*
					Subtotal (less internal) =	67	68	135
Grocery [6]	45,000 SF	850	50%	50%	13.98	314	315	629
Internal Trips[3]	*from above*					*-51*	*-56*	*-107*
Passby Trips[4]	*36%*					*-94*	*-94*	*-188*
					Subtotal (less internal and passby) =	169	165	334
Retail	25,000 SF	820	49%	51%	2.79	34	36	70
Internal Trips[3]	*from above*					*-6*	*-7*	*-13*
Passby Trips[4]	*34%*					*-9*	*-10*	*-19*
					Subtotal (less internal and passby) =	19	19	38
Restaurant [6]	20,000 SF	932	55%	45%	5.42	59	49	108
Internal Trips[3]	*from above*					*-10*	*-9*	*-19*
Passby Trips[4]	*43%*					*-21*	*-17*	*-38*
					Subtotal (less internal and passby) =	28	23	51
Medical Office	60,000 SF	720	52%	48%	0.32	10	9	19
Internal Trips[3]	*from above*					*-2*	*-2*	*-4*
					Subtotal (less internal) =	8	7	15
					Gross Proposed Sunday Peak Hour Trips =	**787**	**756**	**1,543**
					Less Total Internal Trips =	*-143*	*-143*	*-286*
					Less Total Pass-By Trips =	*-124*	*-121*	*-245*
					Net New Sunday Peak Hour Trips =	**520**	**492**	**1,012**

Notes:

[1] DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

[2] Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

[3] Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

[4] Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017. Sunday peak hour pass-by rates assumed to be equal to weekday PM peak h

[5] There are no Sunday trip rates for an RV park. Therefore, the Sunday trip rates and directional distribution were assumed to be equal to the Weekday trip rates.

[6] Sunday peak hour trip rate for grocery and restaurant based on hourly distribution data in ITE Trip Generation Handbook, 3rd Edition, 2017.

APPENDIX F

Detailed Pro-Rata Share Calculations

WEEKDAY PM PEAK HOUR TRAFFIC VOLUMES (TEV) FOR PRO-RATA CALCULATIONS
WITH SEIS ALTERNATIVE 6

#	Intersection	Year/Scenario Improvement is Needed	Existing (2019) Traffic Volumes	Year 2025						Year 2031						Year 2037					
				Baseline Traffic Volumes	SEIS Alternative 6					Baseline Traffic Volumes	SEIS Alternative 6					Baseline Traffic Volumes	SEIS Alternative 6				
					SEIS Alt 6 Project Trips	Traffic Volumes with SEIS Alt 6	SEIS Alt 6 Pro-Rata Share	47 North Share (87%)	Commercial Share (13%)		SEIS Alt 6 Project Trips	Traffic Volumes with SEIS Alt 6	SEIS Alt 6 Pro-Rata Share	47 North Share (64%)	Commercial Share (36%)		SEIS Alt 6 Project Trips	Traffic Volumes with SEIS Alt 6	SEIS Alt 6 Pro-Rata Share	47 North Share (50%)	Commercial Share (50%)
1	Bullfrog Rd / I 90 EB Ramps	2037 Alt 5 & Alt 6	244													605	162	767	100.0%	0.0%	100.0%
2	Bullfrog Rd / I 90 WB Ramps	2037 Alt 6	346													1,165	260	1,425	100.0%	0.0%	100.0%
3	Tumble Creek Dr / Bullfrog Rd	2037 Alt 5 & Alt 6	382													1,220	285	1,505	100.0%	0.0%	100.0%
7	Denny Ave / W Second St (SR 903)	2031 Alt 5 & Alt 6	695							1190	558	1748	100.0%	64.0%	36.0%						
8	Ranger Station Rd / Miller Ave / W Second St (SR 903)	2025 Alt 5 & Alt 6	741	1110	340	1450	100.0%	87.0%	13.0%												
9	N Pine St / W Second St (SR 903)	2031 Alt 5 & Alt 6	613							1200	468	1668	100.0%	64.0%	36.0%						
11	Douglas Munro Blvd / W First St	2025 baseline	1022	1185	40	1225	3.3%	2.9%	0.4%												
12	Pine St / W First St	2025 baseline	1001	1085	29	1114	2.6%	2.3%	0.3%												
13	N Stafford Ave / W Second St (SR 903)	2025 baseline	667	1080	259	1339	19.3%	16.8%	2.5%												
15	N Oakes Ave / W Second St	2031 baseline	512							1170	261	1431	18.2%	11.6%	6.6%						
21	SR 903 / Pennsylvania Ave	2037 Alt 5 & Alt 6	711													1,120	171	1,291	100.0%	0.0%	100.0%