NORTHWEST PARKWAY PUBLIC HIGHWAY AUTHORITY

BOARD OF DIRECTORS

AGENDA
SPECIAL MEETING OF THE BOARD OF DIRECTORS

Date: Wednesday, August 2, 2023
Time: 12:00 p.m.
Place: REMOTE VIDEO CONFERENCE

Please click the link below to join the webinar.

https://us06web.zoom.us/j/84886638325?pwd=NXVLWDV6TUhBZ1JLclphZllFTGhnZz09
Meeting ID: 848 8663 8325
Passcode: 986546
Dial in: 1 (720) 707-2699

1. Call to Order

2. Consent Agenda Items
   2(a) Approval of Minutes for April 24, 2023 Board Meeting (enclosure)

3. Public Comments (Limited to 3 Minutes Per Person)

4. Presentation of the Northwest Parkway Traffic Impact Study Report Prepared by Stantec Consulting Services Inc. (enclosure)

5. ADJOURN INTO EXECUTIVE SESSION IF DESIRED BY THE BOARD Pursuant to §24-6-402(4)(e), C.R.S., to receive legal advice, develop negotiating positions, strategy, or instruct negotiators, pursuant to §24-6-402(4)(b), C.R.S., to consult attorney on specific legal questions, pursuant to §24-6-402(4)(a), C.R.S., for the purposes of discussing the purchase, sale, acquisition, lease, transfer or sale of real, personal or other property related to the Redtail Ridge Off-site Improvements

6. Other Business

7. Next Regular Meeting Date – Monday, October 23rd, 2023 at 3:30 p.m.

8. Adjourn Meeting

RECORD OF PROCEEDINGS

MINUTES OF THE SPECIAL MEETING OF
THE BOARD OF DIRECTORS OF
NORTHWEST PARKWAY PUBLIC HIGHWAY AUTHORITY
Held at 3:30 PM on APRIL 24, 2023 via online meeting at:

Join Zoom Meeting
https://us06web.zoom.us/j/89802666717?pwd=Z0Y3N2ViRUNsM2pBL3VHYVpMVCszZz09
and via telephone conference at Dial In: +1 720 707 2699, Meeting ID: 898 0266 6717; Passcode: 595168

ATTENDANCE

The special meeting of the Board of Directors (the "Board") of the Northwest Parkway Public Highway Authority (the "Authority") was called and held via ZOOM virtual meeting as shown, in accordance with Colorado law. The following Directors were present:

Austin Ward, Chair and Secretary of the Board
(*Councilmember, City and County of Broomfield*)
Stephanie Walton, Vice Chair and Treasurer of the Board
(*Councilmember, City of Lafayette*)
Guyleen Castriotta, Alternate Director
(*Mayor, City and County of Broomfield*)

Also present was:
Joel Meggers, President, Community Resources Services of Colorado
Kayla Blair, Assistant Manager, Community Resources Services of Colorado
Pedro Costa, Executive Director, Northwest Parkway, LLC
Brenda Shuler, Engineering and Maintenance Manager, Northwest Parkway, LLC
Jennifer Hoffman, Broomfield City and County Manager
Nancy Rodgers, Counsel for the City and County of Broomfield
Karl Frundt, Counsel for the City and County of Broomfield
Alicia Corley, Icenogle, Seaver Pogue, P.C
Tamara Seaver, Icenogle, Seaver Pogue, P.C
Russ Dykstra, General Counsel for the Northwest Parkway, LLC
Marc Painter, Holland & Hart LLP
Mike Hancock, E-470
Jay Hardy, Land Asset
Michelle Brokaw, Centura
Rob Zuccaro, City of Louisville
Mark Hamilton, Holland & Hart, LLP
Evan Pesonen, Sterling Bay
Alec Shimell, Stantec
Andrew McLeod, Stantec
Tim Stalker, member of the public
Sherry Sommer, member of the public

RECORD OF PROCEEDINGS

CALL TO ORDER	Noting the presence of a quorum, Chair Ward called the meeting to order at 3:39 p.m.
PUBLIC COMMENT	None.
CONSENT AGENDA	Approval of Minutes for March 7, 2023, Board Meeting and the Financial Report: After discussion, upon motion by Chair Ward seconded by Vice Chair Walton, a vote was taken, and the motion carried unanimously approving the consent agenda, comprising the March 7, 2023 Board meeting minutes and the Authority's financial report.
GENERAL COUNSEL'S REPORT	Update on Traffic Study and Redtail Ridge Referral Process: Ms. Seaver reported that she has been working with counsel for the developer, and Stanec on this item, and anticipates the final traffic study at the end of June. Also, Ms. Seaver advised the Board that the Authority's comments on the Redtail Ridge preliminary plat application are due to the City of Louisville on April 27, 2023, and that the developer's counsel had requested that the Authority consider deferring its comments so that the developer could move forward with seeking preliminary plat approval. Mr. Painter was allowed to address the Board as a public comment matter, albeit out of order, and explained to the Board that the developer was requesting that the Authority allow it to move forward with the conditional preliminary plat application without any comments at this time, and that the Authority could present any objections following the conclusion of the final traffic study. Chair Walton asked about the process, objections, and pending application, which Ms. Seaver explained and the impact to the Authority.
EXECUTIVE SESSION	Upon motion of Vice Chair Walton and second by Chair Ward, the Board voted unanimously to retire into executive session pursuant to §24-6-402(4)(e), C.R.S., to receive legal advice, develop negotiating positions, strategy, or instruct negotiators, pursuant to §24-6-402(4)(b), C.R.S., to consult attorney on specific legal questions, and pursuant to §24-6-402(4)(a), C.R.S., for the purposes of discussing the purchase, sale, acquisition, lease, transfer or sale of real, personal or other property related to the Redtail Ridge Off-site Improvements. The executive session started at 3:54 p.m. and concluded at 4:40 p.m.

Chair Ward left the meeting, and Alternate Director Castriotta joined the meeting in place of Chair Ward to continue the meeting.

AUTHORITY BUSINESS

Northwest Parkway, LLC Quarterly Report from Pedro Costa: Mr. Costa reported to the Board on the 1stth quarter and mentioned that the traffic still has not recovered from COVID. He also spoke about the traffic breakdown and the toll revenue.

Independent Auditors Report of the Northwest Parkway, LLC for the Financial Statements for Years Ended December 31, 2022 and 2021: Mr. Costa presented this to the Board.

OTHER BUSINESS

Authority Overview Presentation: After discussion, upon motion by Alternate Director Castriotta seconded by Vice Chair Walton, a vote was taken, and the motion carried unanimously to table this item until a future meeting.

ADJOURNMENT

Upon a motion made, seconded and upon vote, unanimously carried, the meeting was adjourned at approximately 4:55 p.m.

Respectfully submitted,

_____

Secretary for the Meeting

TRAFFIC IMPACT STUDY REPORT
Redtail Ridge Centura Hospital Access

July 10, 2023

Prepared for:
Northwest Parkway Public Highway Authority

Prepared by:
Stantec Consulting Services Inc.

Project Number:
181711313

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
A	Original	BH	6/13/23 6/16/23	VE	6/14/23 6/16/23	MA	6/15/23
B	Traffic Volume Updates	BH	7/6/23	VE	7/9/23	MA	7/10/23

The conclusions in the Report titled Traffic Impact Study Report are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from Northwest Parkway Public Highway Authority (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by:	Brent Hypnarowski, PE	
	Printed Name	
Reviewed by:	Victoria Edington, PE, PTOE	
	Printed Name	
Approved by:	Matt Alexander, PE, CCM	
	Printed Name	

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1 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) has been retained by Northwest Parkway Public Highway Authority (PHA) to provide engineering services related to proposed future development adjacent to Northwest Parkway; specifically, the Centura Hospital and Redtail Ridge development (the project). The purpose of this *Traffic Impact Study Report* (TIS Report) is to determine and report the potential impacts of a proposed right-in right-out access for the Centura Hospital along Northwest Parkway.

This report does not attempt to quantify any impact to toll revenue nor take into consideration the possibility and/or timing of any changes to the operation of the Northwest Parkway, enhancements made to the Northwest Parkway, or the impact of any extension to the Northwest Parkway itself or to the tolled sections. For the purpose of this report, Northwest Parkway would continue to operate as it does today.

1.1 Previous Studies

The analysis presented in this report builds on two previous studies related to the Redtail Ridge and Centura Hospital developments. These studies are as follows:

- *Redtail Ridge Traffic and Mobility Study*, prepared by Fox Tuttle Transportation Group, LLC, dated March 24, 2023.
- *Redtail Ridge Centura Hospital – Access Traffic Evaluation Letter*, prepared by Kimley-Horn and Associates, Inc., dated August 8, 2022.

Parameters and assumptions adopted from these two previous studies are noted throughout this report. For clarity, the two sources will be referred to as the Fox Tuttle study and the Kimley-Horn study, respectively.

1.2 Study Area

The study area included within the scope of this TIS includes the portion of Northwest Parkway between 96th Street and Denver Boulder Turnpike (US 36), located in the City and County of Broomfield. There are a total of six intersections, as listed below. The full study area is illustrated in **Figure 1**.

1. 96th Street & Disc Drive
2. Northwest Parkway & 96th Street / Via Varra
3. Northwest Parkway & Via Lata Drive / New Access
4. Northwest Parkway & Tape Drive / Via Varra
5. Northwest Parkway & US 36 Westbound (WB) Ramps
6. Northwest Parkway & US 36 Eastbound (EB) Ramps

The New Access (at location #3) does not currently exist; it is presumed to be located directly opposite Northwest Parkway from the existing right-in right-out at Via Lata Drive.

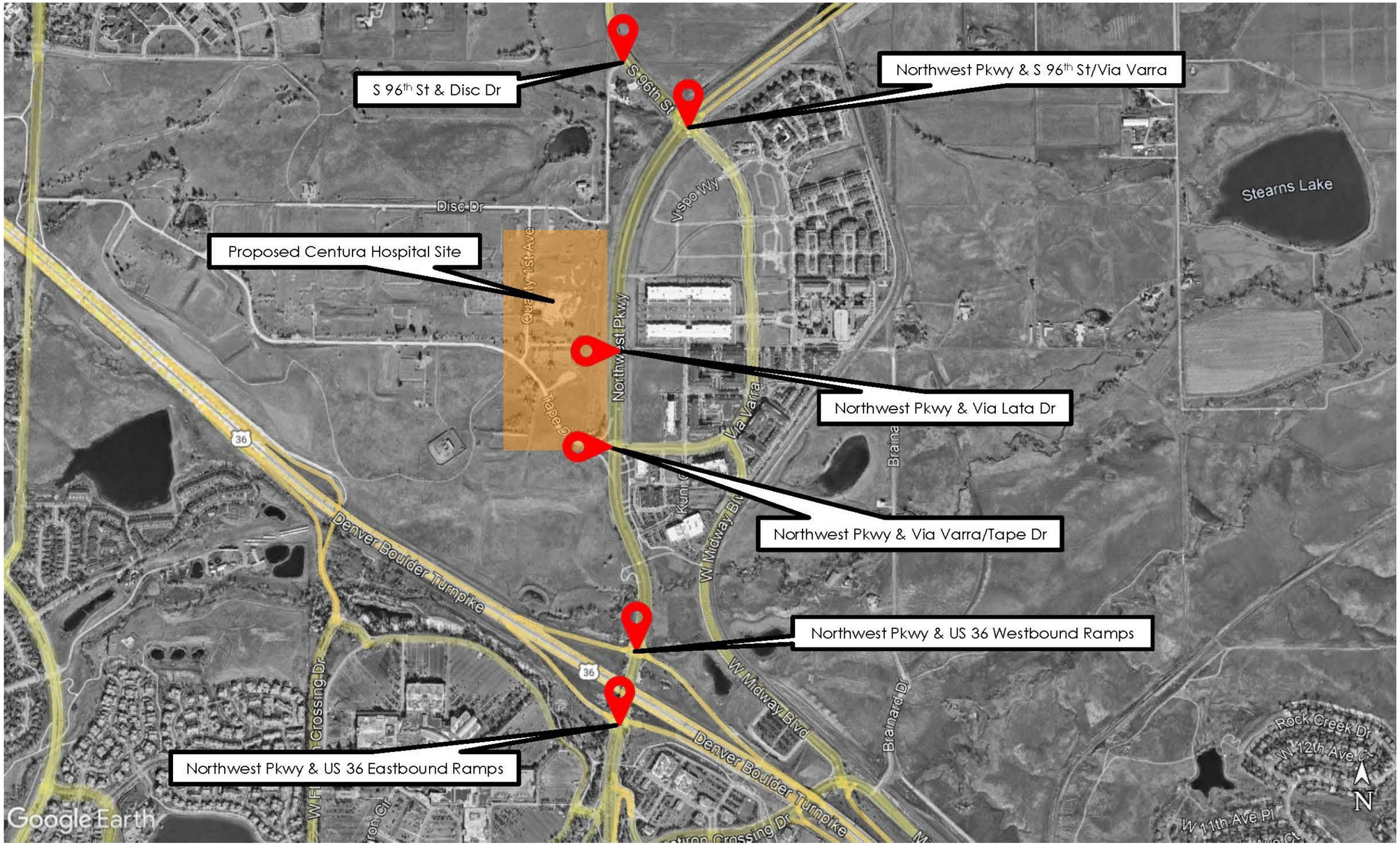
It should be noted that, at the US 36 interchange, Northwest Parkway transitions to become Interlocken Loop. For simplicity, this report will refer to the major street at both ramp terminal intersections (locations #5 and #6) as Northwest Parkway.

1.3 Modeling Parameters

The scope of this TIS included modeling existing, short-term, and long-term conditions in the study area, with the goal of completing an operational analysis of vehicular delay and Level of Service (LOS) at the study intersections. These models were created using Synchro 11 software. The delay and LOS analysis was completed using Highway Capacity Manual (HCM) methodologies within Synchro, an industry-standard procedure used for evaluating traffic operations.

Roadway geometrics and traffic control were identified by referencing Bing Maps and Google Earth aerials. Existing traffic data, including turning movement counts (TMCs), peak hour factors, and heavy vehicle percentages were provided through two separate data sets. The first set was provided by the Northwest Parkway PHA, collected by Idax Data Solutions, and included counts for four of the study intersections. The second set was collected by All Traffic Data Services, Inc. and included the remaining two study intersections along with a 24-hour Average Daily Traffic (ADT) count. Both morning (AM) and evening (PM) peak hour scenarios were evaluated.

Figure 1: Traffic Impact Study Area



2 EXISTING CONDITIONS REVIEW

The first step of the TIS process is to complete an assessment of the existing conditions within the study area. This includes a review of roadway geometry, traffic control, speeds, and traffic volumes, among other elements.

2.1 Existing Street Network

The existing roadways evaluated in this study are described herein.

- **Northwest Parkway** provides connectivity between Interstate 25 and E-470 to the east and the Denver Boulder Turnpike (US 36) to the west. Passing through the northern portion of Broomfield, Northwest Parkway is primarily a toll road. While it is not a tolled roadway in the immediate vicinity of the Centura Hospital and Redtail Ridge site, it is classified as a four-lane freeway/tollway. Within the study limits, Northwest Parkway has mostly flat grades and a speed limit ranging from 40 to 45 mph.
- **96th Street** connects Northwest Parkway to the south and Highway 42 to the north. In the vicinity of the project site, 96th Street is a two-lane, minor arterial. The posted speed limit is 40 mph, and the roadway has a flat grade.
- **Disc Drive** is a two-lane roadway that provides access to North Metro Fire Rescue Station and private property from 96th Street. There is no posted speed limit on this roadway. It is expected that Disc Drive will become one of the entrances to the Centura Hospital and Redtail Ridge development via the plan to extend Campus Drive to intersect with 96th Street.
- **Via Lata Drive** is a two-lane roadway that connects Broomfield Business Center to Via Varra and Northwest Parkway. Via Lata Drive is a right-in right-out access at Northwest Parkway. There is no posted speed limit, and the terrain is flat. This study assumes that the proposed right-in right-out access for Centura Hospital will be directly across Northwest Parkway from Via Lata Drive.
- **Tape Drive / Via Varra** connects 88th Street to the west and 96th Street to the east. Tape Drive, the segment of this roadway between 88th Street and Northwest Parkway, is a private street. As discussed in the Fox Tuttle study, Tape Drive will become one of the entrances to the new development and will be renamed Rockress Drive. Via Varra, which connects Northwest Parkway to 96th Street, is a four-lane connector street that provides direct access to residential and commercial properties. Via Varra has a flat grade and posted speed limit of 35 mph.
- **US 36**, also known as the Denver Boulder Turnpike, provides regional connectivity from the town of Lyons to Denver, Interstate 25, and Interstate 270. US 36 is classified as a four-lane freeway/tollway with HOV lanes in both directions. The roadway has mostly flat grades and a posted speed limit of 65 mph. Only the US 36 interchange ramp terminals at Northwest Parkway / Interlocken Loop have been included in this study, not the US 36 mainline itself. The ramps at this interchange have posted speed warning signs of 45 mph.

Roadway and intersection geometry was coded into the Synchro models to accurately reflect the present conditions. Features were observed using aerials and Street View photography from Google Earth and Bing Maps, including elements such as number of lanes, storage lengths, and type of traffic control. Traffic control types – signal or two-way stop control (TWSC) – for the existing study intersections are listed in **Table 1**.

Table 1: Existing Traffic Control Types

ID	Intersection	Traffic Signal	Two-Way Stop Control (TWSC)
1	96th St & Disc Dr		●
2	Northwest Pkwy & 96th St / Via Varra	●	
3	Northwest Pkwy & Via Lata Dr		●
4	Northwest Pkwy & Tape Dr / Via Varra	●	
5	Northwest Pkwy & US 36 WB Ramp	●	
6	Northwest Pkwy & US 36 EB Ramp	●	

Signal timing data for the corridor was obtained from the City of Broomfield.

There are buffered bike lanes along Northwest Parkway between US 36 and Tape Drive / Via Varra, on both sides of the roadway. In addition to this, there are bike lanes along both 96th Street and Via Varra, as well as a multi-use path which passes under Northwest Parkway north of the US 36 interchange.

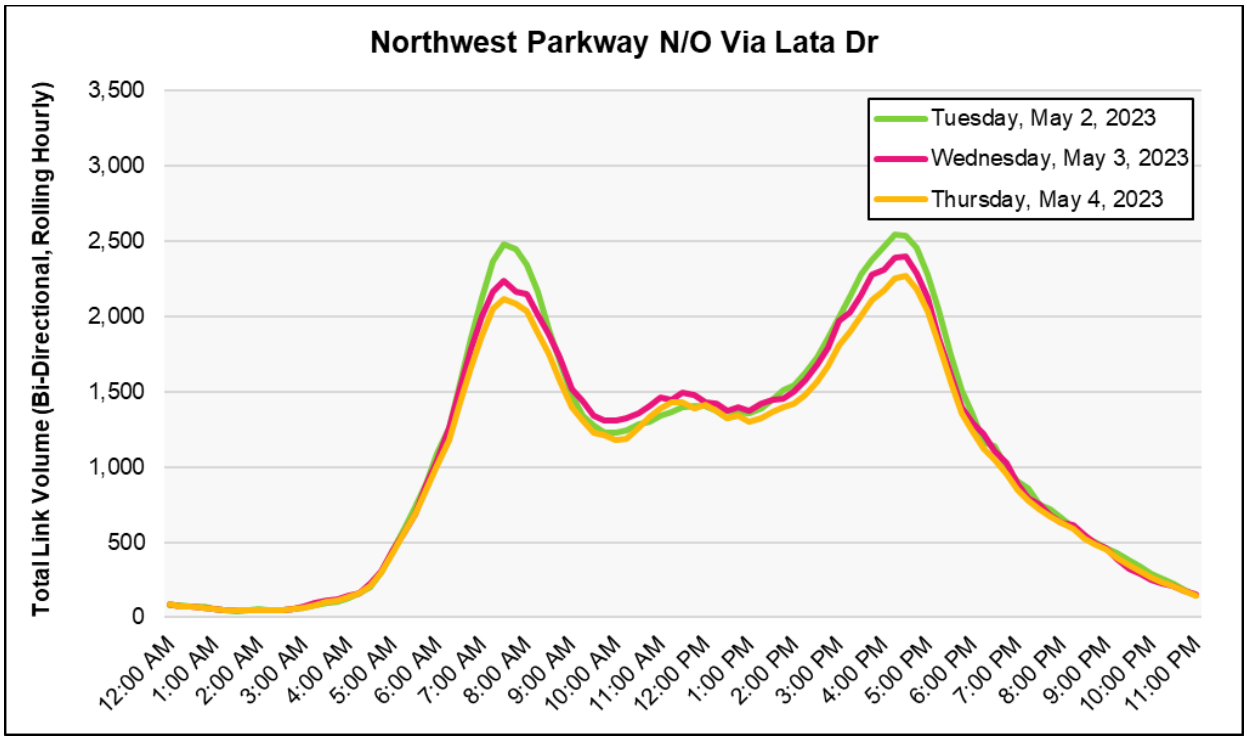
2.2 Existing Traffic Counts

Traffic counts within the study area were obtained from the Northwest Parkway PHA (previously collected by Idax Data Solutions) and All Traffic Data Services, Inc. The following types of counts were collected on January 19th, January 24th, and May 2nd – 4th, 2023:

- **Turning Movement Counts (TMCs):** Collected over the course of three weekdays (Thursday, January 19th, Tuesday, January 24th, and Tuesday, May 2nd), these counts show the number of vehicles making each movement (left-turn, through, or right-turn) on each approach at all study intersections. These counts are collected in 15-minute intervals and summed to identify AM and PM peak hour volumes at each intersection. Passenger vehicles and heavy vehicles are identified separately within the counts to allow for heavy vehicle percentages to be coded into the Synchro models. While the collection of TMCs also typically includes bicycle and pedestrian data at each location, there were no pedestrian or bicycles present during the time of collection.
- **24-Hour Tube Counts:** Collected over three days (Tuesday, May 2nd – Thursday, May 4th), these counts provide Average Daily Traffic (ADT) information for one location along Northwest Parkway, north of Via Lata Drive. These counts are collected in 15-minute intervals and summed to show the rolling peak hour totals over the course of each day. These counts are used to verify that the single day on which the turning movement counts were collected was indeed a typical day, without any unusual spikes or gaps in traffic volumes.

Figure 2 provides a representative visualization of the 24-Hour Tube Counts collected at a point on Northwest Parkway north of Via Lata Drive. The volumes presented in this chart include rolling hourly totals for traffic traveling in both directions along Northwest Parkway for each of the three days that the counts were collected.

Figure 2: Daily Traffic Counts – Northwest Parkway North of Via Lata Drive



Trends observed in the 24-Hour Tube Count data show that weekdays have two distinguished AM and PM peaks. It can also be seen that weekday volumes remain fairly consistent from day to day.

The existing traffic count data sheets are provided in **Appendix A**.

2.3 Existing Crash Data

Crash history for the study area was obtained from Colorado Department of Transportation Statewide Crash Data Listings, which included records for the most recent and complete five-year history. These records contained information pertaining to location, date, severity, and type of crash. Microsoft Power BI was used to create a digital dashboard for the corridor. This dashboard made it possible to map out, filter through, and summarize existing crashes.

3 FUTURE OPERATIONS OVERVIEW

This traffic study considered several different future scenarios for analysis, in addition to the Existing Conditions scenario, as listed here:

- Future Background Scenarios (Years 2025, 2030, and 2040): Traffic volumes in each model were adjusted to account for background population growth, the Monarch School and Centura Hospital sites, and the remainder of the Redtail Ridge development. This scenario assumes that the right-in right-out access along Northwest Parkway **is not** built.
- Future Project Scenarios (Years 2025, 2030, and 2040): Traffic volumes in each model were adjusted to account for background population growth, the Monarch School and Centura Hospital sites, and the remainder of the Redtail Ridge development. This scenario assumes that the right-in right-out access along Northwest Parkway **is** built.

This section summarizes the various inputs that were accounted for when developing the traffic volumes for each future modeling scenario.

3.1 Regional Growth

For the purpose of developing the future year scenarios, straight line growth was determined using Denver Regional Council of Governments (DRCOG) resources, which included 2020 and 2050 Model Assigned All-Day Volumes. Using the straight-line growth formula, shown below, a compound annual growth rate was determined for each section included within this study and averaged out to 2% for the entire study area.

$$F = P(1 + GR)^n$$

where:
F = Future Volume
P = Present Volume
GR = Growth Rate
n = number of years

The growth rate of 2% was then applied to the existing turning movement counts to create background population growth volumes in the vicinity of the site for all three future years (2025, 2030, and 2040).

3.2 Monarch School Trips

To account for effects of the proposed extension of Campus Drive to 96th Street, trips were calculated for the Monarch High School and K-8 buildings using *ITE Trip Generation Manual, 11th Edition*. Total trips for both buildings are shown in **Table 2**. ITE Land Use Code 525 was utilized for the High School. ITE Land Use Code 520, Elementary School, was utilized for the K-8 School because there is no specific land use for a combined elementary and middle school. Complete trip generation reports for these land uses are included in **Appendix B**.

Table 2: Monarch School Trip Generation Summary

Land Use	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
High School (ITE 525) – 1,540 Students	801	545	256	801	103	113	216
Elementary (ITE 520) – 685 Students	507	274	233	507	153	173	326

Trips associated with the Monarch schools were redistributed to include the Campus Drive extension using engineering judgement based on the *Monarch High School Attendance Zone Map*. To be conservative, it was assumed that 60% of the total trips will enter and exit the school site from the east using the existing intersection at 96th Street & Disc Drive. The remaining 40% of school trips are expected to enter and exit the site from 88th Street to the west, outside the limits of this study.

While trip distribution was assumed to vary slightly by peak period, it has been considered to be the same for both the Background and Project scenarios in this study. No growth was applied to these trips for the future years because the trip generation rates are not anticipated to vary over time.

Trip distribution percentages for the entire study area are shown on the following pages in **Figure 3** and **Figure 4**. The orange arrows identify all possible turning movements at each of the six study intersections. The green values denote the percent of the total entering (inbound) school trips assigned to the indicated movements at each intersection. Similarly, the red values denote the percent of the total exiting (outbound) school trips assigned to specific movements. In this way, the paths of vehicles entering and exiting the Monarch school site from the east via the 96th Street & Disc Drive intersection can be traced through the study area.

Figure 3: Campus Drive Extension – Monarch School Trip Distribution (AM Peak)

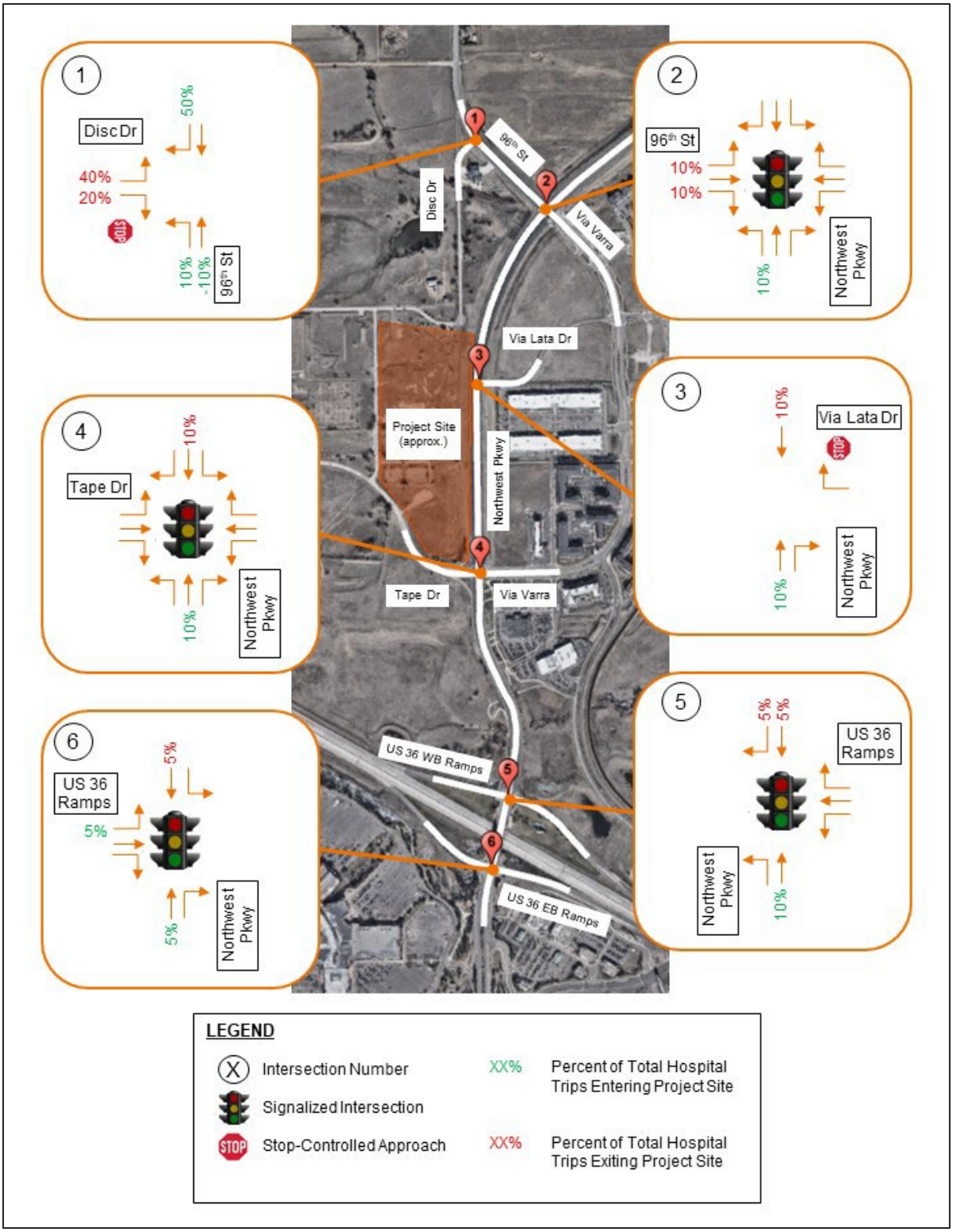
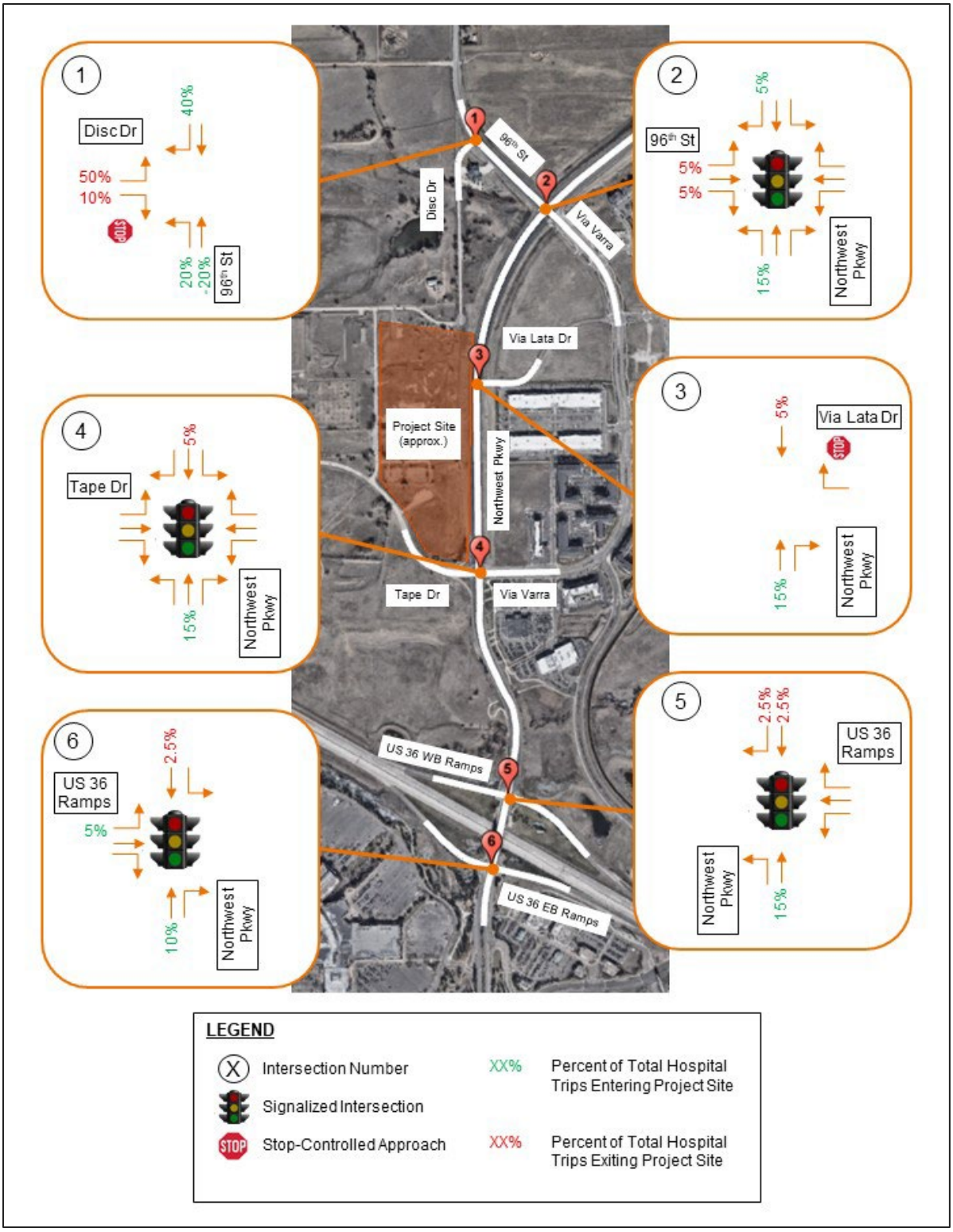


Figure 4. Campus Drive Extension – Monarch School Trip Distribution (PM Peak)



3.3 Hospital Trip Generation

The scope of this particular study is focused primarily on the impacts of the Centura Hospital campus on the operations of Northwest Parkway, starting in 2025 when the medical campus is expected to be constructed. The *ITE Trip Generation Manual, 11th Edition* was used to estimate trips generated by the Centura Hospital medical campus; the calculated values are consistent with those previously presented in the Kimley-Horn study and are shown in **Table 3**.

Table 3: Centura Hospital Medical Campus Trip Generation Summary

Land Use	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Hospital (ITE 610) – 265,000 SF	2,854	146	71	217	80	148	228
Medical-Dental Office Building – Stand-Alone (ITE 720) – 170,000 SF	5,416	369	87	456	121	362	483

To account for trips associated with the other proposed land uses in the Redtail Ridge development, a factor was applied to the total trips generated by the medical campus for the years 2030 and 2040. Based on the relative size of the medical campus compared to the rest of the Redtail Ridge development as outlined in the Fox Tuttle study, factors of 2.4 and 2.8 were used for 2030 and 2040, respectively. These factors were used to scale up the number of trips added into the future scenarios to reflect additional vehicles traveling in and out of the rest of the Redtail Ridge development.

3.4 Hospital Trip Distribution

For the Centura Hospital campus, trip distribution throughout this study area was extrapolated from the Kimley-Horn study. Trip distribution percentages are shown in figures on the following pages. The percentages shown illustrate how the peak period trips were distributed throughout the study area, both entering the site (in green) and exiting the site (in red). Background Conditions (**Figure 5**) are representative of future year scenarios where the proposed right-in right-out access **is not** built, while Project Conditions (**Figure 6**) are representative of future year scenarios where the proposed right-in right-out access **is** built. Therefore, trip distribution is different for each condition in order to reflect vehicles utilizing different access points to enter and exit the Centura Hospital site. The hospital trip distribution was assumed to be the same for the AM and PM peak periods.

Note that the total percentages shown in these figures do not add up to 100% of all trips generated by the site. To be consistent with assumptions made in the Kimley-Horn study, 10% of the medical campus trips were considered to enter and exit from the west, outside of the boundary of this study area.

Figure 5: Future Development – Background Scenario Trip Distribution

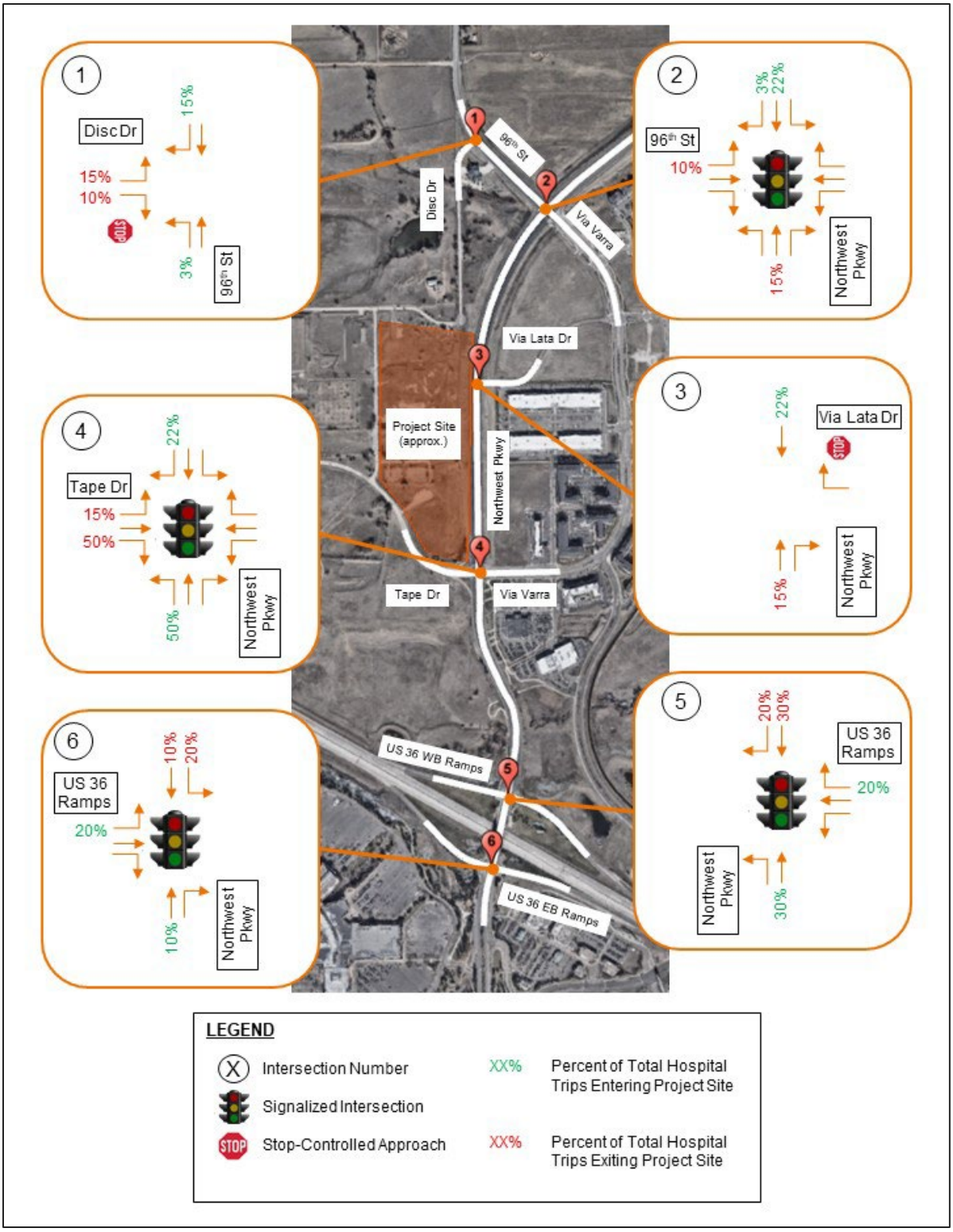
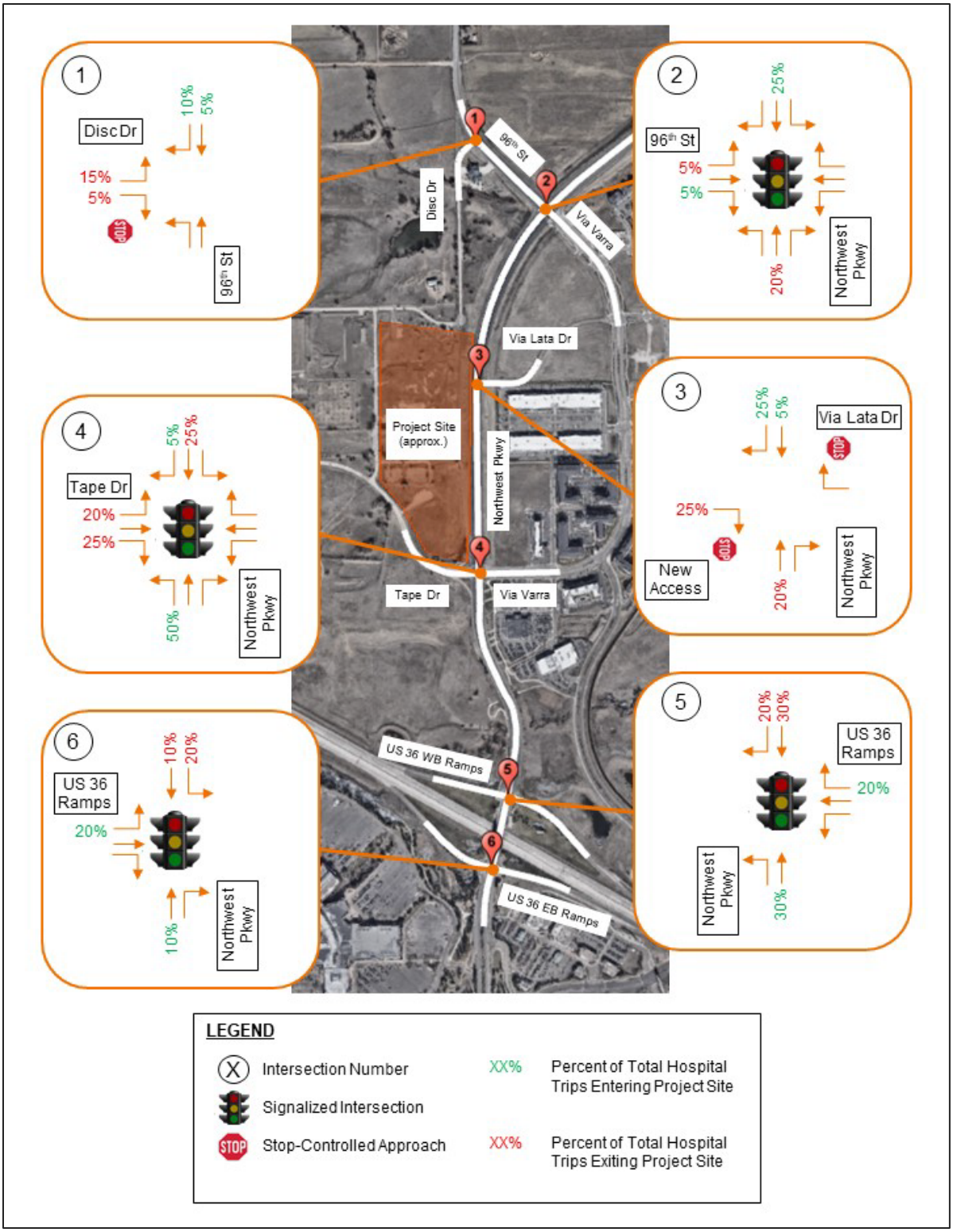


Figure 6: Future Development – Project Scenario Trip Distribution



4 Safety and Crash Analysis

By recognizing specific crash trends along the Northwest Parkway corridor, it is possible to locate safety concerns and problem areas. Limits of the safety and crash analysis are consistent with the study area described in this report. Data from the years 2017 through 2021 was used to develop the safety recommendations described in this section. This range represents the most recent five-years of crash records available, providing a basis for how the corridor is expected to operate from a safety standpoint.

Crash data was broken down into Year, Location, Severity, and Type. A total of 68 crashes occurred along the corridor from 2017 to 2021. **Figure 7** shows the breakdown of total corridor crashes by year, with the majority occurring in 2019. Of these 68 crashes, 51 were classified as property damage only (PDO) and 17 were classified as resulting in an injury (INJ). There were no recorded fatalities (FAT) during the five-year study period.

Figure 7: Study Area – Total Crashes by Year

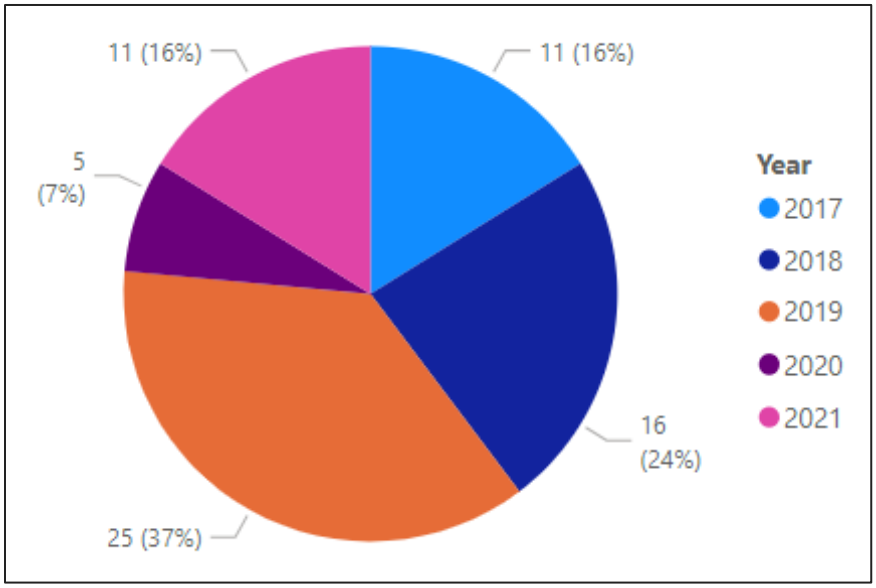
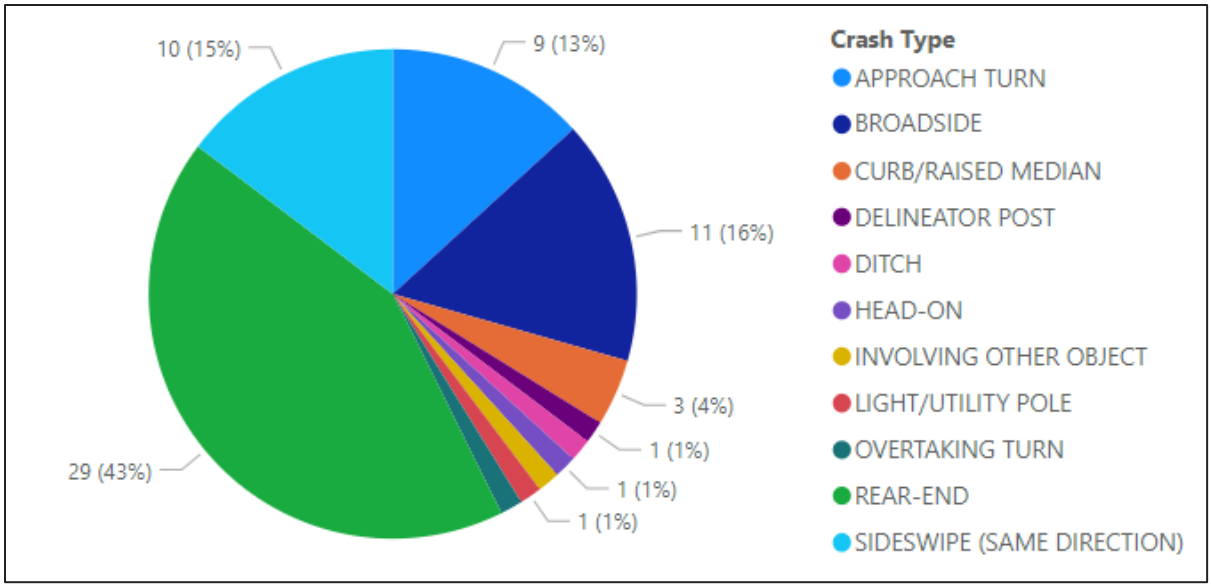


Figure 8 illustrates a breakdown of the different types of crashes that have been recorded within the study area. The most prominent types include Rear-End (43%), Broadside (16%), Sideswipe (Same Direction) (15%) and Approach Turn (13%). While there were some additional crashes along the corridor, only the intersections of Northwest Parkway & 96th Street / Via Varra and Northwest Parkway & Tape Drive / Via Varra demonstrated recognizable crash patterns.

Figure 8: Study Area – Crashes by Type

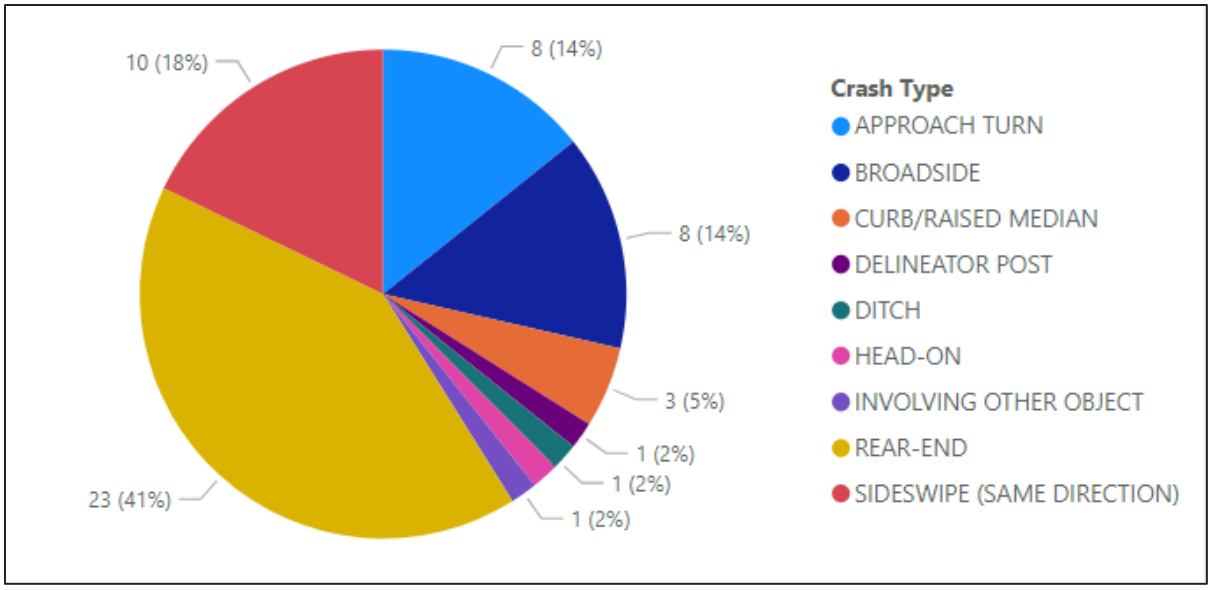


4.1 Northwest Parkway & 96th Street / Via Varra

The intersection of Northwest Parkway & 96th Street / Via Varra accounted for 56 of the recorded crashes, which is over 80 percent of the total number of crashes that occurred within the study area. 41 percent of these crashes were classified as Rear-End collisions. This crash type is typical for a signalized intersection, so it is not unexpected to see such a high number at this heavy-volume location, especially considering that this intersection marks the end of the Northwest Parkway Tollway when traveling west.

Additional crash types that were prominent at this intersection, as shown in **Figure 9**, included Sideswipe (Same Direction) (18%), Approach Turn (14%) and Broadside (14%). The majority of crashes resulted in property damage only (77%).

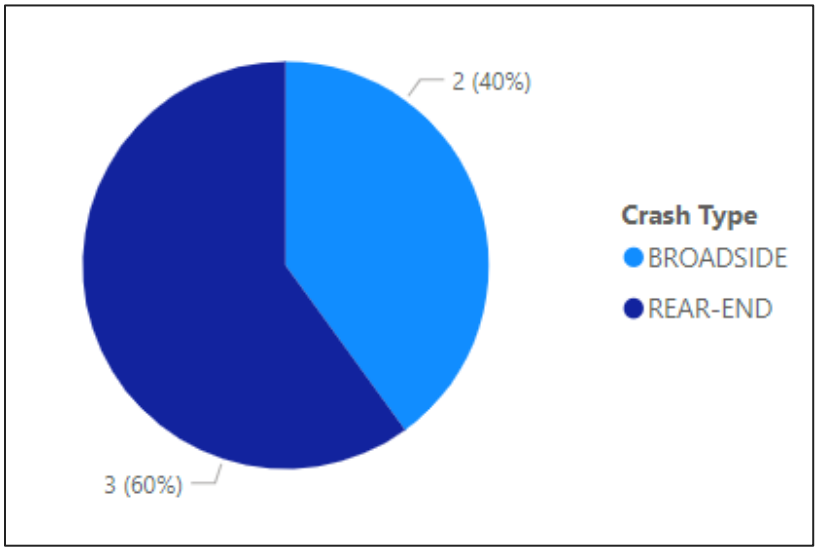
Figure 9: Northwest Parkway & 96th Street – Crashes by Type



4.2 Northwest Parkway & Tape Drive / Via Varra

Between 2019 and 2020 there were five recorded crashes at the intersection of Northwest Parkway & Tape Drive / Via Varra. This location accounts for 7 percent of all crashes that occurred within the study limits. It should be noted that there were no crashes at this location listed on the CDOT Statewide Crash Data Listings for the years 2017, 2018, and 2021. Of the five crashes, three were classified as Rear-End and two were classified as Broadside. Three of the crashes resulted in injury. The breakdown of crash types is shown in **Figure 10**.

Figure 10: Northwest Parkway & Tape Drive / Via Varra – Crashes by Type



4.3 Crash Mitigation

With Rear-End, Approach Turn, Sideswipe (Same Direction), and Broadside crashes being the most prevalent within the study area, it is reasonable to assume that there can be a reduction in crashes given the necessary countermeasures. While some crash patterns are easier to mitigate than others, it is always advised to overprovide roadway safety measures when considering any crashes, even if it may not directly reduce a specific type.

Based on a complete review of crash history within the study site, recommendations are provided below and supported by guidance from the US Department of Transportation (USDOT) Federal Highway Administration (FHWA) and the Manual on Uniform Traffic Control Devices (MUTCD). For countermeasures derived from the USDOT FHWA, a corresponding crash modification factor (CMF) is included, describing a statistical reduction in crashes based on case studies of implementing the measure.

Northwest Parkway & 96th Street / Via Varra

- Adding reflective backplates to each signal head can reduce crashes by 15%, per USDOT FHWA; particularly broadside collisions where red-light running is likely a factor.
- A solid white line should be added, separating the through lanes along each approach of the intersection (MUTCD). Further inspection of the crash data yielded the realization that 50 percent of the sideswipe (same direction) crashes were a result of changing lanes. The inclusion of solid lane lines can help promote the idea that lane changing should not occur near or within the intersection.

Northwest Parkway & Tape Drive / Via Varra

- Adding reflective backplates to each signal head can reduce crashes by 15%, per USDOT FHWA; particularly broadside collisions where red-light running is likely a factor.

4.4 Future Safety Concerns

While it is impossible to predict exactly what crashes may or may not happen in the future on roadways that do not yet exist, some conclusions can be drawn after reviewing similar crash histories. Regarding the proposed new right-in right-out access for the Centura Hospital, a comparison can be made with the existing right-in right-out access at Via Lata Drive. This location saw just one recorded crash in the past five years, which was classified as a Rear-End collision between two vehicles waiting to exit onto Northwest Parkway. Given the proper signage and markings, such collision types should also be rare at the proposed right-in right-out access.

5 DELAY AND LEVEL OF SERVICE ANALYSIS

Using Synchro 11 traffic modeling software, reports were generated using HCM methodologies for each intersection included in this study. Average vehicle delay and LOS were used when determining how a given intersection is performing.

Table 4 displays the relationship between average vehicle delay and the corresponding LOS for both signalized and unsignalized movements. Typically, in urban and suburban areas such as this, LOS D or better is considered acceptable, while LOS E or worse may be considered unacceptable. A color spectrum has been included in the results tables in the following sections to help illustrate acceptable and unacceptable intersection conditions.

Table 4: Highway Capacity Manual Level of Service Criteria

LOS	Avg. Vehicle Delay (sec/veh)	
	Signalized Movement	Unsignalized Movement
A	0 – 10	0 – 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	80+	50+

It must be noted that, at unsignalized intersections that have free-flowing movements (i.e., two-way stop-controlled (TWSC) intersections), it is not valid to report LOS for movements that are free-flowing. This condition also applies to the intersection overall. In the results tables that follow, values for average delay have been provided for such free-flowing approaches, but LOS values have not.

The tables in the following sections present an overview of the delay and LOS results for each scenario. Summary tables containing comparisons of the results across all of the scenarios for each peak period are available for review in **Appendix C**. Detailed results reports generated in Synchro are provided in **Appendix D**.

5.1 2023 Existing Conditions

Using existing traffic volumes, intersection geometry, and traffic control, Synchro 11 models were created for AM and PM peak hour conditions. Results of this model were used as a baseline for all other project scenarios. Delay and LOS results are shown in **Table 5**.

Most of the intersections operate with acceptable LOS during both the AM and PM peak periods, although some individual approaches do experience delays equating to LOS D. A particular concern is the eastbound approach of 96th Street & Disc Drive, which is found to operate at LOS F during the PM

peak period. While this approach currently carries very low traffic volumes, conditions can be expected to worsen as the study area continues to develop and more vehicles utilize this access in the future.

Table 5: Existing Conditions Scenario (Year 2023) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	1	15.0	C	2	60.4	F
		96th St	NB	1318	0.0	–	928	0.0	–
		96th St	SB	816	0.0	–	1262	0.0	–
		Total		**2135**	**0.0**	**–**	**2192**	**0.1**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	783	8.8	A	1055	11.7	B
		Via Varra	WB	196	36.6	D	185	30.8	C
		NWP	NB	979	32.4	C	1145	25.7	C
		NWP	SB	709	26.3	C	432	22.5	C
		Total		**2667**	**24.5**	**C**	**2817**	**20.4**	**C**
3	Northwest Pkwy & Via Lata Dr	Via Lata Dr	WB	2	13.9	B	28	16	C
		NWP	NB	1250	0.0	–	1450	0.0	–
		NWP	SB	1202	0.0	–	1365	0.0	–
		Total		**2454**	**0.0**	**–**	**2843**	**0.2**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	4	25.2	C	6	19.4	B
		Via Varra	WB	233	42.5	D	220	43.1	D
		NWP	NB	1324	15.7	B	1428	5.7	A
		NWP	SB	1366	12.8	B	1236	16.5	B
		Total		**2927**	**16.6**	**B**	**2890**	**13.1**	**B**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	732	10.3	B	532	14.1	B
		NWP	NB	756	4.3	A	1192	3.7	A
		NWP	SB	1363	4.2	A	1283	7.3	A
		Total		**2851**	**5.8**	**A**	**3007**	**7.1**	**A**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	334	22.3	C	496	32.5	C
		NWP	NB	656	13.5	B	1014	16.3	B
		NWP	SB	1118	8.2	A	1205	19.9	B
		Total		**2108**	**12.1**	**B**	**2715**	**20.8**	**C**

5.2 2025 Background Conditions

The 2025 Background scenario utilized a combination of existing traffic volumes with background growth along with hospital and school-generated traffic as described previously. The model for this condition does not include the proposed right-in right-out hospital access along Northwest Parkway.

Delay and LOS results for this scenario are shown in **Table 6**. Although certain movements do see a slight increase in the average amount of delay, LOS values remain acceptable at all locations except one. At the intersection of 96th Street & Disc Drive, the added school and hospital traffic is enough to push the volume-to-capacity ratio (V/C ratio) of the stop-controlled approach above 1.0 during both peak periods. Any V/C ratio over 1.0, no matter the estimated delay, is considered failing and automatically results in LOS F. With this intersection identified both as part of the extension of Campus Drive and as a primary access for the Centura Hospital site, major improvements should be considered to provide additional capacity and alleviate delays along Disc Drive / Campus Drive.

Table 6: Background Conditions Scenario (Year 2025) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	334	Error	F	233	Error	F
		96th St	NB	1386	1.0	–	972	0.5	–
		96th St	SB	1336	0.0	–	1404	0.0	–
		Total		**3056**	**Error**	**–**	**2609**	**Error**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	929	10.8	B	1166	13.2	B
		Via Varra	WB	214	36.8	D	193	30.9	C
		NWP	NB	1091	30.8	C	1294	26.0	C
		NWP	SB	864	35.8	D	508	23.9	C
		Total		**3098**	**27.0**	**C**	**3161**	**21.4**	**C**
3	Northwest Pkwy & Via Lata Dr	Via Lata Dr	WB	2	15.1	C	29	17.7	C
		NWP	NB	1406	0.0	–	1609	0.0	–
		NWP	SB	1413	0.0	–	1473	0.0	–
		Total		**2821**	**0.0**	**–**	**3111**	**0.2**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	107	12.0	B	338	11.9	B
		Via Varra	WB	242	42.5	D	229	43.1	D
		NWP	NB	1718	26.2	C	1610	11.4	B
		NWP	SB	1583	33.0	C	1339	25.5	C
		Total		**3650**	**28.8**	**C**	**3516**	**18.6**	**B**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	864	9.4	A	594	13.2	B
		NWP	NB	1023	4.6	A	1330	3.1	A
		NWP	SB	1546	10.9	B	1599	13.5	B
		Total		**3433**	**8.8**	**A**	**3523**	**9.5**	**A**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	491	30.5	C	563	37.9	D
		NWP	NB	775	17.4	B	1090	19.2	B
		NWP	SB	1235	10.5	B	1411	29.4	C
		Total		**2501**	**16.6**	**B**	**3064**	**27.2**	**C**

5.3 2025 Project Conditions

As described previously, the 2025 Project scenario has the same number of entering and exiting trips as the 2025 Background scenario, but includes the proposed right-in right-out access, which results in a different distribution of hospital trips throughout the study limits.

Delay and LOS results are summarized in **Table 7**. Similar to the 2025 Background scenario, most of the intersections operate with LOS that is considered acceptable. Certain movements, notably at the intersection of Northwest Parkway & Tape Drive / Via Varra, exhibit a slightly worse LOS than in the 2025 Background scenario.

The intersection of 96th Street & Disc Drive continues to fail along the stop-controlled approach during both peak periods, even with some of the hospital traffic directed to use the right-in right-out access instead. The V/C is still larger than 1.0, despite the redirection of traffic, due to the added volume from the Monarch school site. Major improvements should be considered to increase capacity and alleviate delays along Disc Drive / Campus Drive in this scenario as well.

Table 7: Project Conditions Scenario (Year 2025) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	326	Error	F	208	Error	F
		96th St	NB	1371	0.8	–	966	0.4	–
		96th St	SB	1336	0.0	–	1404	0.0	–
		Total		**3033**	**Error**	**–**	**2578**	**Error**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	947	10.3	B	1151	12.6	B
		Via Varra	WB	214	36.8	D	193	30.9	C
		NWP	NB	1099	30.1	C	1319	25.2	C
		NWP	SB	866	37.3	D	508	24.1	C
		Total		**3126**	**26.9**	**C**	**3171**	**21.0**	**C**
3	Northwest Pkwy & New Access / Via Lata Dr	New Access	EB	40	17.1	C	128	23.9	C
		Via Lata Dr	WB	2	15.2	C	29	17.9	C
		NWP	NB	1414	0.0	–	1634	0.0	–
		NWP	SB	1454	0.0	–	1489	0.0	–
		Total		**2910**	**0.3**	**–**	**3280**	**1.1**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	76	23.9	C	236	21.3	C
		Via Varra	WB	242	42.5	D	229	43.1	D
		NWP	NB	1718	26.2	C	1610	11.8	B
		NWP	SB	1535	36.4	D	1432	29.1	C
		Total		**3571**	**31.1**	**C**	**3507**	**21.4**	**C**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	864	9.4	A	594	13.2	B
		NWP	NB	1023	4.6	A	1323	3.1	A
		NWP	SB	1546	11.3	B	1599	14.3	B
		Total		**3433**	**8.9**	**A**	**3516**	**9.8**	**A**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	491	30.5	C	563	37.9	D
		NWP	NB	775	17.4	B	1090	19.2	B
		NWP	SB	1235	10.5	B	1411	30.8	C
		Total		**2501**	**16.6**	**B**	**3064**	**27.9**	**C**

5.4 2030 Background Conditions

Similar to the 2025 Background scenario, the 2030 Background scenario utilized a combination of existing traffic volumes with background growth, school-generated traffic, and trips generated by the hospital campus and Redtail Ridge overall as described previously. The model for this condition does not include the proposed right-in right-out access along Northwest Parkway.

Delay and LOS results are shown in **Table 8**. As discussed in the previous sections, the stop-controlled approach of 96th Street & Disc Drive continues to fail due to high V/C ratios and high delays during both the AM and PM peak periods.

A few other intersections also begin to exhibit a degradation in operations by the year 2030. During the AM peak period, the intersections of Northwest Parkway & 96th Street / Via Varra and Northwest Parkway & Tape Drive / Via Varra operate at LOS E, and each sees one or more approach operating at LOS E or LOS F. During the PM peak period, the southbound approach at the intersection of Northwest Parkway & US 36 EB Ramps operates at LOS E, although the overall intersection maintains an acceptable LOS D.

Table 8: Background Conditions Scenario (Year 2030) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	389	Error	F	412	Error	F
		96th St	NB	1551	1.4	–	1080	0.6	–
		96th St	SB	1532	0.0	–	1583	0.0	–
		Total		**3472**	**Error**	**–**	**3075**	**Error**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	1036	11.5	B	1351	14.9	B
		Via Varra	WB	236	36.7	D	212	30.7	C
		NWP	NB	1230	29.3	C	1524	25.8	C
		NWP	SB	1123	125.0	F	625	27.9	C
		Total		**3625**	**55.2**	**E**	**3712**	**22.6**	**C**
3	Northwest Pkwy & Via Lata Dr	Via Lata Dr	WB	2	16.6	C	32	21.2	C
		NWP	NB	1574	0.0	–	1872	0.0	–
		NWP	SB	1702	0.0	–	1683	0.0	–
		Total		**3278**	**0.0**	**–**	**3587**	**0.2**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	251	17.7	B	803	21.9	C
		Via Varra	WB	267	42.3	D	252	43.5	D
		NWP	NB	2222	78.5	E	1904	18.2	B
		NWP	SB	1890	55.9	E	1534	32.9	C
		Total		**4630**	**60.4**	**E**	**4493**	**25.1**	**C**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	1087	9.3	A	707	12.4	B
		NWP	NB	1321	5.2	A	1537	4.6	A
		NWP	SB	1804	13.9	B	2095	15.1	B
		Total		**4212**	**10.1**	**B**	**4339**	**10.9**	**B**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	671	41.8	D	674	51.3	D
		NWP	NB	918	21.4	C	1228	22.6	C
		NWP	SB	1422	11.5	B	1755	61.4	E
		Total		**3011**	**21.4**	**C**	**3657**	**46.1**	**D**

5.5 2030 Project Conditions

As described above, the 2030 Project scenario has the same number of entering and exiting trips as the 2030 Background scenario, but includes the proposed right-in right-out access, which results in a different distribution of hospital trips throughout the study limits.

Delay and LOS results are summarized in **Table 9**. Similar to the 2030 Background scenario, there are several intersections and approaches that exhibit failing LOS during the AM and PM peak periods. The intersection at Northwest Parkway & Tape Drive / Via Varra in particular sees higher average delays on the eastbound and southbound approaches in the 2030 Project scenario than in the 2030 Background scenario. As described previously, the stop-controlled approach at 96th Street & Disc Drive continues to fail in the 2030 Project scenario.

Additionally, it should be noted that the eastbound approach at the proposed right-in right-out access, also known as the “right-out” movement, is observed to be failing during the PM peak period due to the high volume. To be conservative, this study assigned trips associated with both the Centura Hospital site and the remainder of the Redtail Ridge development to use the proposed right-in right-out access. However, it is reasonable to assume that, once the Redtail Ridge development is fully built out as assumed under 2030 conditions, a number of vehicles will enter and exit the site to the west, and it is likely that fewer vehicles will utilize the proposed right-in right-out access than shown in this study.

Table 9: Project Conditions Scenario (Year 2030) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	370	Error	F	351	Error	F
		96th St	NB	1514	0.9	–	1066	0.4	–
		96th St	SB	1532	0.0	–	1583	0.0	–
		Total		**3416**	**Error**	**–**	**3000**	**Error**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	1078	10.6	B	1314	13.5	B
		Via Varra	WB	236	36.7	D	212	30.7	C
		NWP	NB	1249	27.8	C	1585	24.5	C
		NWP	SB	1123	144.0	F	625	27.9	C
		Total		**3686**	**59.7**	**E**	**3736**	**21.8**	**C**
3	Northwest Pkwy & New Access / Via Lata Dr	New Access	EB	95	28.3	D	306	171.1	F
		Via Lata Dr	WB	2	16.8	C	32	22.2	C
		NWP	NB	1593	0.0	–	1933	0.0	–
		NWP	SB	1800	0.0	–	1722	0.0	–
		Total		**3490**	**0.8**	**–**	**3993**	**13.7**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	175	65.3	E	558	88.1	F
		Via Varra	WB	267	42.3	D	252	43.5	D
		NWP	NB	2222	78.5	E	1904	18.2	B
		NWP	SB	1774	86.0	F	1758	57.3	E
		Total		**4438**	**77.8**	**E**	**4472**	**44.9**	**D**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	1087	9.3	A	707	12.4	B
		NWP	NB	1321	5.2	A	1537	4.6	A
		NWP	SB	1804	14.6	B	2095	16.4	B
		Total		**4212**	**10.4**	**B**	**4339**	**11.5**	**B**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	671	41.8	D	674	51.3	D
		NWP	NB	918	21.4	C	1228	22.6	C
		NWP	SB	1422	11.5	B	1755	61.8	E
		Total		**3011**	**21.4**	**C**	**3657**	**46.3**	**D**

5.6 2040 Background Conditions

The 2040 Background scenario represents a combination of existing traffic volumes with background growth, school-generated traffic, and trips generated by the hospital campus and Redtail Ridge overall as described previously. The model for this condition does not include the proposed right-in right-out access along Northwest Parkway.

Table 10 summarizes the delay and LOS results for this scenario. Four locations exhibit total intersection or movement delays that equate to LOS E or LOS F during at least one of the peak periods. This includes the stop-controlled approach at 96th Street & Disc Drive, which continues to fail in 2040.

The southbound approach of Northwest Parkway & 96th Street / Via Varra experiences delay equating to LOS F during the AM peak period. This leads to the overall intersection operating at LOS F during the same time period. During the PM peak period, this intersection operates at LOS C.

Both the northbound and southbound approaches at Northwest Parkway & Tape Drive / Via Varra exhibit delays equating to LOS F during the AM peak period, resulting in the overall intersection also being classified as LOS F. During the PM peak period, only the southbound approach fails at LOS E, with the overall intersection operating at LOS D.

During the PM peak period only, the eastbound and southbound approaches at the intersection of Northwest Parkway & US 36 EB Ramps both operate at LOS F, while delay for the intersection overall averages out to equate to LOS E.

Table 10: Background Conditions Scenario (Year 2040) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	405	Error	F	464	Error	F
		96th St	NB	1889	1.6	–	1316	0.7	–
		96th St	SB	1768	0.0	–	1912	0.0	–
		Total		**4062**	**Error**	**–**	**3692**	**Error**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	1238	12.0	B	1637	16.0	B
		Via Varra	WB	289	36.3	D	259	30.7	C
		NWP	NB	1485	37.1	D	1843	26.5	C
		NWP	SB	1353	279.9	F	754	35.6	D
		Total		**4365**	**107.0**	**F**	**4493**	**24.7**	**C**
3	Northwest Pkwy & Via Lata Dr	Via Lata Dr	WB	3	20.3	C	39	30.0	D
		NWP	NB	1898	0.0	–	2267	0.0	–
		NWP	SB	2049	0.0	–	2044	0.0	–
		Total		**3950**	**0.0**	**–**	**4350**	**0.3**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	293	25.9	C	937	41.8	D
		Via Varra	WB	326	41.8	D	308	45.0	D
		NWP	NB	2658	152.8	F	2304	26.4	C
		NWP	SB	2279	130.4	F	1863	56.8	E
		Total		**5556**	**122.1**	**F**	**5412**	**40.4**	**D**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	1313	11.1	B	857	12.8	B
		NWP	NB	1573	8.8	A	1861	8.2	A
		NWP	SB	2179	19.5	B	2519	18.9	B
		Total		**5065**	**14.1**	**B**	**5237**	**14.0**	**B**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	797	51.4	D	814	82.2	F
		NWP	NB	1104	25.4	C	1491	29.3	C
		NWP	SB	1723	9.4	A	2120	108.7	F
		Total		**3624**	**23.7**	**C**	**4425**	**76.3**	**E**

5.7 2040 Project Conditions

The 2040 Project scenario has the same number of entering and exiting trips as the 2040 Background scenario, but includes the proposed right-in right-out access along Northwest Parkway, which results in a different distribution of hospital trips throughout the study area.

The delay and LOS results for this scenario are summarized in **Table 11**. The results are similar to the 2040 Background scenario, with multiple locations considered to be failing in one or both of the peak periods. This includes the stop-controlled intersection of 96th Street & Disc Drive, which continues to fail in the 2040 Project scenario.

As in the 2040 Background scenario, the southbound approach of Northwest Parkway at 96th Street / Via Varra experiences delay equating to LOS F during the AM peak period. This leads to the overall intersection operating at LOS F during the same time period. The actual amount of delay is slightly worse in the 2040 Project scenario than in the 2040 Background scenario. During the PM peak period, this intersection operates at LOS C.

The intersections of Northwest Parkway & Tape Drive / Via Varra and Northwest Parkway & US 36 EB Ramps also exhibit approach and/or intersection delays equivalent to LOS F during at least one of the peak periods. Several approaches at these intersections, such as eastbound Tape Drive, see a worse LOS in the 2040 Project scenario than in the 2040 Background scenario.

Similar to the 2030 Project scenario, the eastbound approach of the proposed right-in right-out access (the “right-out” movement) exhibits a failing LOS F for both the AM and PM peak periods. As discussed previously, this is considered a conservative approach as some of the vehicles included in this study will likely utilize accesses west of the site rather than the proposed right-in right-out access.

Table 11: Project Conditions Scenario (Year 2040) Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	383	Error	F	392	Error	F
		96th St	NB	1845	0.9	–	1300	0.5	–
		96th St	SB	1768	0.0	–	1912	0.0	–
		Total		**3996**	**Error**	**–**	**3604**	**Error**	**–**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	1288	11.3	B	1594	14.4	B
		Via Varra	WB	289	36.3	D	259	30.7	C
		NWP	NB	1508	34.1	C	1914	24.2	C
		NWP	SB	1354	319.1	F	754	36.9	D
		Total		**4439**	**116.7**	**F**	**4521**	**23.6**	**C**
3	Northwest Pkwy & New Access / Via Lata Dr	New Access	EB	111	52.1	F	357	480.5	F
		Via Lata Dr	WB	3	20.6	C	39	31.8	D
		NWP	NB	1920	0.0	–	2339	0.0	–
		NWP	SB	2165	0.0	–	2089	0.0	–
		Total		**4199**	**1.4**	**–**	**4824**	**36.9**	**–**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	204	97.6	F	652	153.1	F
		Via Varra	WB	326	41.8	D	308	45.0	D
		NWP	NB	2658	152.8	F	2316	26.4	C
		NWP	SB	2145	177.7	F	2124	141.5	F
		Total		**5333**	**149.8**	**F**	**5400**	**89.5**	**F**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Ramp	WB	1313	11.1	B	857	12.8	B
		NWP	NB	1573	8.8	A	1861	8.2	A
		NWP	SB	2179	20.2	C	2519	20.0	C
		Total		**5065**	**14.5**	**B**	**5237**	**14.6**	**B**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Ramp	EB	797	51.4	D	814	82.2	F
		NWP	NB	1104	25.4	C	1491	29.3	C
		NWP	SB	1723	9.4	A	2120	109.0	F
		Total		**3624**	**23.7**	**C**	**4425**	**76.4**	**E**

5.8 Proposed Intersection Updates

Updates described here in this report are based directly on recommendations made in the Fox Tuttle study, in order to strengthen the discussion as to whether the proposed right-in right-out access is needed. While that study is ongoing, and the proposed changes have not yet been approved or committed, it was determined that a review of their impacts on the results of this study was needed.

The recommendations from the Fox Tuttle study that are relevant to this particular study area, as described below, were reviewed and tested to compare to the other results obtained in this study. It should be noted that the Fox Tuttle study refers to two of the streets within this study area by their proposed future names. In that report, Tape Drive is referred to as Rockcress Drive and Disc Drive is referred to as Campus Drive.

96th Street & Disc Drive: As part of the extension of Campus Drive from the west, it is recommended that this intersection be signalized and reconstructed with the following lane configuration:

- Northbound: three through lanes and two left-turn lanes
- Southbound: two through lanes and one right-turn lane
- Eastbound: two left-turn lanes and one right-turn lane

For the sake of this analysis, signal timing was developed using default parameters and the optimization function within Synchro.

Northwest Parkway & Tape Drive / Via Varra: The southbound and eastbound approaches at this location are recommended to be updated as follows:

- Eastbound: this approach should be reconstructed to provide only one left-turn lane
- Southbound: it is recommended to widen Northwest Parkway by 2040 to include a third southbound through lane from 96th Street through this intersection to the US 36 interchange

Using Synchro's optimization function, signal timing was updated at this location to better fit the projected volumes. It is strongly recommended that signal timing adjustments be further considered and analyzed here for implementation with each stage of development.

Updates to the Synchro models per these recommendations were tested using the 2040 Background Condition volumes. This was considered to be the worst-case scenario because the proposed right-in right-out access is not present in this model, requiring all of the Centura Hospital and Redtail Ridge traffic coming from the east to be routed through these two intersections.

Delay and LOS results for the two modified intersections in that scenario are summarized in **Table 12**. While the other intersections in this study area do see operational improvements from these changes, the benefit to delay and LOS are most visible at these two locations. Results from this scenario for the other four intersections are included in the summary tables in **Appendix C**.

Table 12: Proposed Intersection Updates Traffic Analysis Results

ID	Intersection	Approach		AM Peak			PM Peak		
				Volume (veh/hr)	Delay (sec/veh)	LOS	Volume (veh/hr)	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	405	16.6	B	464	24.2	C
		96th St	NB	1889	8.9	A	1316	6.9	A
		96th St	SB	1768	7.8	A	1912	14.2	B
		Total		**4062**	**9.8**	**A**	**3692**	**14.0**	**B**
4	Northwest Pkwy & Tape Dr / Via Varra	Tape Dr	EB	293	32.6	C	937	23.5	C
		Via Varra	WB	326	70.8	E	308	51.8	D
		NWP	NB	2658	47.9	D	2304	51.6	D
		NWP	SB	2279	63.9	E	1863	29.7	C
		Total		**5556**	**52.8**	**D**	**5412**	**38.7**	**D**

As these results show, the modifications to these two intersections proposed in the Fox Tuttle study are sufficient to return both intersections to acceptable LOS during both peak periods in the 2040 Background scenario. Additional adjustments to signal timing parameters have the potential to mitigate these delays even more.

These recommendations were tested in the 2040 Background scenario specifically because that scenario features higher traffic volumes at these two locations, which are the primary access points for the Centura Hospital site in the absence of the proposed right-in right-out. These results illustrate that, if the proper mitigations are applied to other intersections in the area, the need for the proposed right-in right-out access can be alleviated.

Because there is no clear operational benefit to building the proposed right-in right-out access along Northwest Parkway, it is recommended that the proposed access be used only for emergency vehicles. Acceleration and deceleration lanes should be included to improve safety and operations along Northwest Parkway. Due to intersection spacing, these auxiliary lanes should be made continuous to the upstream and downstream intersections, comparable to the auxiliary lanes north and south of the existing right-in right-out at Via Lata Drive.

6 CONCLUSIONS AND SUMMARY

The following conclusions and recommendations have been summarized based on the analysis presented in this report.

2023 – This scenario represents existing conditions along the Northwest Parkway corridor. 2023 traffic data was utilized to assess the baseline traffic conditions. It was observed that all intersections included in this study are operating with acceptable levels of delay and LOS under existing conditions.

2025 – This scenario combines background growth and trips related to the Centura Hospital site. 2025 Background Conditions excluded the proposed right-in right-out access and demonstrated acceptable delays and LOS for all intersections included in this study. When including the right-in right-out access into the network, under 2025 Project Conditions, there were no significant changes in overall intersection delay and LOS. The access at 96th Street & Disc Drive will likely require improvements regardless of whether the proposed right-in right-out access is built due to additional traffic demand caused by the proposed extension of Campus Drive.

2030 – With the addition of traffic not only from the Centura Hospital site, but also the majority of the Redtail Ridge development, intersections in the 2030 scenarios operate with more delay than in 2025. Two locations have been predicted to have failing LOS in either the AM or PM peak periods, for both the Background and Project conditions: Northwest Parkway & 96th Street / Via Varra and Northwest Parkway & Tape Drive / Via Varra. The access at 96th Street & Disc Drive continues to need improvements in either scenario.

2040 – Under 2040 conditions, the analysis results showed that three intersections would fail in either the AM or PM peak periods, for both the Background and Project conditions. These intersections include Northwest Parkway & 96th Street / Via Varra, Northwest Parkway & Tape Drive / Via Varra, and Northwest Parkway & US 36 EB Ramps. Operations at all three locations were observed to be worse in the Project scenario than in the Background scenario. Mitigation is recommended at these locations with or without the proposed right-in right-out access along Northwest Parkway, however, measures may need to be more significant in the case with the proposed right-in right-out access. The intersection of 96th Street & Disc Drive will require improvements in either scenario.

Proposed modifications to the network from the Fox Tuttle study were evaluated using the 2040 Background scenario volumes. This test resulted in acceptable operations at both of the modified locations, which are the two primary access points for the proposed Centura Health site in the absence of the proposed right-in right-out access. Implementing the following updates would allow for each of these intersections to be suitable for the estimated site generated traffic.

96th Street & Disc Drive: As part of the extension of Campus Drive from the west, it is recommended that this intersection be signalized and reconstructed with the following lane configuration:

- Northbound: three through lanes and two left-turn lanes
- Southbound: two through lanes and one right-turn lane
- Eastbound: two left-turn lanes and one right-turn lane

Northwest Parkway & Tape Drive / Via Varra: The southbound and eastbound approaches at this location are recommended to be updated as follows:

- Eastbound: this approach should be reconstructed to provide only one left-turn lane
- Southbound: it is recommended to widen Northwest Parkway by 2040 to include a third southbound through lane from 96th Street through this intersection to the US 36 interchange

Under both the Background and Project conditions, the existing accesses to the project site – 96th Street & Disc Drive and Northwest Parkway & Tape Drive / Via Varra – exhibit failing levels of operation during the 2040 future year scenarios. However, it is possible to alleviate these failing conditions by making improvements at each intersection, rather than relying on an additional access point to alleviate the traffic demand.

Based on this, the proposed right-in right-out access along Northwest Parkway opposite Via Lata Drive demonstrates no clear operational benefit to the study area. Therefore, it is recommended that the proposed access be used only for emergency vehicles, to provide them with the most expedient path to or from the site. If it is constructed, this access should be accompanied by continuous acceleration and deceleration lanes to the north and south.

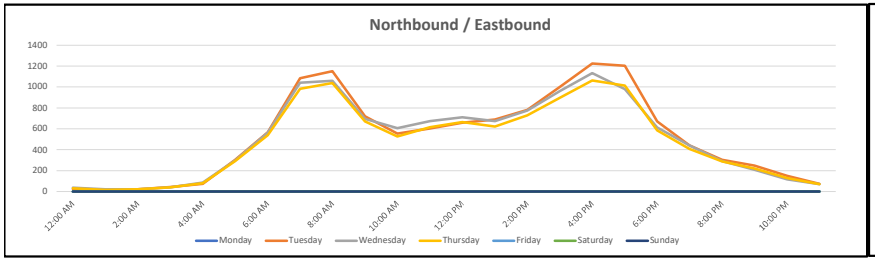
APPENDIX A

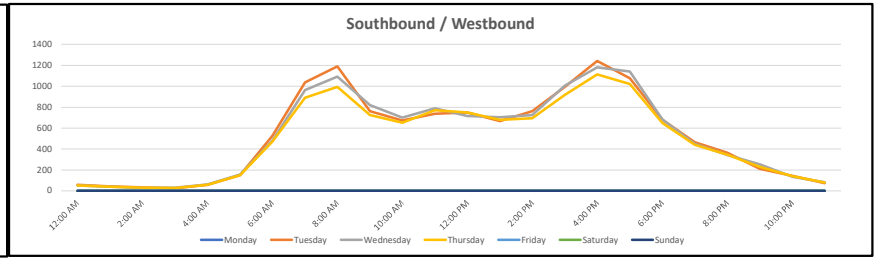
COLLECTED TRAFFIC COUNTS

Vehicle Volume Report - Hourly

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Time	Monday 5/8/23			Tuesday 5/2/23			Wednesday 5/3/23			Thursday 5/4/23			Friday 5/5/23			Saturday 5/6/23			Sunday 5/7/23			3 Day Avg Tue-Thu		5 Day Avg Mon-Fri		7 Day Avg Mon-Sun	
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	NB	SB	NB	SB
12:00 AM	-	-	-	25	56	81	37	50	87	32	53	85	-	-	-	-	-	-	-	-	-	31	53	-	-	-	-
1:00 AM	-	-	-	13	43	56	21	37	58	16	39	55	-	-	-	-	-	-	-	-	-	17	40	-	-	-	-
2:00 AM	-	-	-	21	34	55	21	26	47	22	30	52	-	-	-	-	-	-	-	-	-	21	30	-	-	-	-
3:00 AM	-	-	-	42	23	65	40	30	70	41	27	68	-	-	-	-	-	-	-	-	-	41	27	-	-	-	-
4:00 AM	-	-	-	73	58	131	85	60	145	78	58	136	-	-	-	-	-	-	-	-	-	79	59	-	-	-	-
5:00 AM	-	-	-	302	148	450	296	155	451	290	150	440	-	-	-	-	-	-	-	-	-	296	151	-	-	-	-
6:00 AM	-	-	-	566	526	1092	562	481	1043	539	471	1010	-	-	-	-	-	-	-	-	-	556	493	-	-	-	-
7:00 AM	-	-	-	1083	1038	2121	1040	963	2003	982	891	1873	-	-	-	-	-	-	-	-	-	1035	964	-	-	-	-
8:00 AM	-	-	-	1151	1191	2342	1060	1092	2152	1038	994	2032	-	-	-	-	-	-	-	-	-	1083	1092	-	-	-	-
9:00 AM	-	-	-	721	760	1481	695	821	1516	670	724	1394	-	-	-	-	-	-	-	-	-	695	768	-	-	-	-
10:00 AM	-	-	-	553	673	1226	607	700	1307	526	651	1177	-	-	-	-	-	-	-	-	-	562	675	-	-	-	-
11:00 AM	-	-	-	602	737	1339	673	789	1462	616	771	1387	-	-	-	-	-	-	-	-	-	630	766	-	-	-	-
12:00 PM	-	-	-	659	749	1408	709	717	1426	666	748	1414	-	-	-	-	-	-	-	-	-	678	738	-	-	-	-
1:00 PM	-	-	-	689	665	1354	674	703	1377	620	678	1298	-	-	-	-	-	-	-	-	-	661	682	-	-	-	-
2:00 PM	-	-	-	780	761	1541	774	726	1500	728	695	1423	-	-	-	-	-	-	-	-	-	761	727	-	-	-	-
3:00 PM	-	-	-	1002	994	1996	961	1007	1968	897	916	1813	-	-	-	-	-	-	-	-	-	953	972	-	-	-	-
4:00 PM	-	-	-	1224	1242	2466	1132	1180	2312	1062	1114	2176	-	-	-	-	-	-	-	-	-	1139	1179	-	-	-	-
5:00 PM	-	-	-	1203	1078	2281	980	1142	2122	1014	1022	2036	-	-	-	-	-	-	-	-	-	1066	1081	-	-	-	-
6:00 PM	-	-	-	669	678	1347	612	683	1295	584	649	1233	-	-	-	-	-	-	-	-	-	622	670	-	-	-	-
7:00 PM	-	-	-	439	466	905	439	451	890	407	440	847	-	-	-	-	-	-	-	-	-	428	452	-	-	-	-
8:00 PM	-	-	-	301	363	664	291	343	634	286	344	630	-	-	-	-	-	-	-	-	-	293	350	-	-	-	-
9:00 PM	-	-	-	249	211	460	208	253	461	221	228	449	-	-	-	-	-	-	-	-	-	226	231	-	-	-	-
10:00 PM	-	-	-	150	144	294	116	136	252	128	139	267	-	-	-	-	-	-	-	-	-	131	140	-	-	-	-
11:00 PM	-	-	-	75	74	149	70	82	152	71	78	149	-	-	-	-	-	-	-	-	-	72	78	-	-	-	-
6:00 AM - 9:00 AM	-	-	-	**2800**	**2755**	**5555**	**2662**	**2536**	**5198**	**2559**	**2356**	**4915**	-	-	-	-	-	-	-	-	-	**2674**	**2549**	-	-	-	-
3:00 PM - 6:00 PM	-	-	-	**3429**	**3314**	**6743**	**3073**	**3329**	**6402**	**2973**	**3052**	**6025**	-	-	-	-	-	-	-	-	-	**3158**	**3232**	-	-	-	-
6:00 AM - 7:00 PM	-	-	-	**10902**	**11092**	**21994**	**10479**	**11004**	**21483**	**9942**	**10324**	**20266**	-	-	-	-	-	-	-	-	-	**10441**	**10807**	-	-	-	-
12:00 AM - 12:00 AM	-	-	-	**12592**	**12712**	**25304**	**12103**	**12627**	**24730**	**11534**	**11910**	**23444**	-	-	-	-	-	-	-	-	-	**12076**	**12416**	-	-	-	-
Percent	-	-	-	***49.8%***	***50.2%***	***100.0%***	***48.9%***	***51.1%***	***100.0%***	***49.2%***	***50.8%***	***100.0%***	-	-	-	-	-	-	-	-	-	***49.3%***	***50.7%***	-	-	-	-
AM Peak	-	-		**8:00 AM**	**9:00 AM**		**8:00 AM**	**9:00 AM**		**8:00 AM**	**9:00 AM**		-	-		-	-		-	-							
PM Peak	-	-		**4:00 PM**	**5:00 PM**		**4:00 PM**	**5:00 PM**		**4:00 PM**	**5:00 PM**		-	-		-	-		-	-							





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Vehicle Classification Report - Hourly

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

		FHWA Vehicle Classification - Total Study												
	Total	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
Northbound	36229	131	27163	6126	33	1612	475	0	138	232	181	6	6	126
Percent	*100.0%*	*0.4%*	*75.0%*	*16.9%*	*0.1%*	*4.4%*	*1.3%*	*0.0%*	*0.4%*	*0.6%*	*0.5%*	*0.0%*	*0.0%*	*0.3%*
Southbound	37249	135	25272	7957	80	3143	139	0	208	180	87	5	1	42
Percent	*100.0%*	*0.4%*	*67.8%*	*21.4%*	*0.2%*	*8.4%*	*0.4%*	*0.0%*	*0.6%*	*0.5%*	*0.2%*	*0.0%*	*0.0%*	*0.1%*
Total	73478	266	52435	14083	113	4755	614	0	346	412	268	11	7	168
Percent	*100.0%*	*0.4%*	*71.4%*	*19.2%*	*0.2%*	*6.5%*	*0.8%*	*0.0%*	*0.5%*	*0.6%*	*0.4%*	*0.0%*	*0.0%*	*0.2%*

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Classification Report (Northbound - 05/02/2023)

Tuesday		Northbound												
		Classes												
	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
5/2/23														
12:00 AM	25	0	21	2	0	0	0	0	0	2	0	0	0	0
1:00 AM	13	0	12	1	0	0	0	0	0	0	0	0	0	0
2:00 AM	21	0	16	2	0	1	0	0	0	2	0	0	0	0
3:00 AM	42	0	30	7	0	5	0	0	0	0	0	0	0	0
4:00 AM	73	0	55	14	0	1	1	0	1	0	1	0	0	0
5:00 AM	302	1	255	36	0	4	2	0	1	1	1	0	0	1
6:00 AM	566	2	428	104	1	15	6	0	2	4	3	0	0	1
7:00 AM	1083	9	844	173	0	29	8	0	2	10	5	0	0	3
8:00 AM	1151	0	904	181	1	38	9	0	1	9	5	0	1	2
9:00 AM	721	3	547	106	0	37	12	0	0	8	4	0	0	4
10:00 AM	553	2	391	91	1	44	11	0	4	5	3	0	0	1
11:00 AM	602	2	424	119	1	31	11	0	4	2	4	0	1	3
12:00 PM	659	2	463	127	0	42	7	0	5	4	5	0	0	4
1:00 PM	689	1	492	118	1	55	7	0	1	7	5	0	0	2
2:00 PM	780	1	526	174	1	57	8	0	4	3	4	1	0	1
3:00 PM	1002	6	727	191	1	44	10	0	7	5	7	1	1	2
4:00 PM	1224	4	902	214	1	54	20	0	7	6	8	0	0	8
5:00 PM	1203	2	901	217	1	39	17	0	6	9	9	0	0	2
6:00 PM	669	0	552	87	0	17	3	0	1	3	4	0	0	2
7:00 PM	439	1	355	63	0	13	4	0	1	1	1	0	0	0
8:00 PM	301	0	250	33	0	12	3	0	1	2	0	0	0	0
9:00 PM	249	0	215	27	0	3	3	0	0	0	0	0	0	1
10:00 PM	150	0	133	14	1	0	1	0	0	1	0	0	0	0
11:00 PM	75	0	67	6	0	0	1	0	0	0	0	0	0	1
6:00 AM - 9:00 AM	2800	11	2176	458	2	82	23	0	5	23	13	0	1	6
3:00 PM - 6:00 PM	3429	12	2530	622	3	137	47	0	20	20	24	1	1	12
6:00 AM - 7:00 PM	10902	34	8101	1902	9	502	129	0	44	75	66	2	3	35
12:00 AM - 12:00 AM	12592	36	9510	2107	10	541	144	0	48	84	69	2	3	38
Percent	*100%*	*0.3%*	*75.5%*	*16.7%*	*0.1%*	*4.3%*	*1.1%*	*0.0%*	*0.4%*	*0.7%*	*0.5%*	*0.0%*	*0.0%*	*0.3%*

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Classification Report (Southbound - 05/02/2023)

Tuesday		Southbound												
		Classes												
	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
5/2/23														
12:00 AM	56	0	40	11	0	2	1	0	0	2	0	0	0	0
1:00 AM	43	0	36	5	0	2	0	0	0	0	0	0	0	0
2:00 AM	34	0	27	4	0	2	0	0	0	1	0	0	0	0
3:00 AM	23	0	15	4	0	2	0	0	0	1	0	0	1	0
4:00 AM	58	1	43	9	0	3	0	0	0	2	0	0	0	0
5:00 AM	148	0	97	32	1	17	0	0	1	0	0	0	0	0
6:00 AM	526	5	336	116	3	54	0	0	6	3	2	0	0	1
7:00 AM	1038	5	670	259	1	69	5	0	14	6	4	0	0	5
8:00 AM	1191	2	808	283	0	71	1	0	13	7	3	0	0	3
9:00 AM	760	3	482	185	3	61	6	0	8	6	5	1	0	0
10:00 AM	673	1	460	148	2	48	3	0	5	2	2	0	0	2
11:00 AM	737	0	521	157	2	40	6	0	2	5	2	0	0	2
12:00 PM	749	4	501	177	4	52	3	0	4	2	2	0	0	0
1:00 PM	665	2	460	147	1	44	3	0	2	3	1	1	0	1
2:00 PM	761	3	537	163	2	38	3	0	4	8	1	0	0	2
3:00 PM	994	2	715	211	1	51	4	0	3	3	3	0	0	1
4:00 PM	1242	7	916	249	0	55	3	0	6	1	2	1	0	2
5:00 PM	1078	4	808	209	4	41	5	0	3	2	1	0	0	1
6:00 PM	678	0	519	125	0	29	1	0	1	2	1	0	0	0
7:00 PM	466	0	365	77	0	20	1	0	3	0	0	0	0	0
8:00 PM	363	1	267	73	1	19	0	0	1	1	0	0	0	0
9:00 PM	211	0	160	40	0	9	0	0	1	0	0	1	0	0
10:00 PM	144	1	109	30	0	4	0	0	0	0	0	0	0	0
11:00 PM	74	0	58	12	0	1	0	0	0	3	0	0	0	0
6:00 AM - 9:00 AM	2755	12	1814	658	4	194	6	0	33	16	9	0	0	9
3:00 PM - 6:00 PM	3314	13	2439	669	5	147	12	0	12	6	6	1	0	4
6:00 AM - 7:00 PM	11092	38	7733	2429	23	653	43	0	71	50	29	3	0	20
12:00 AM - 12:00 AM	12712	41	8950	2726	25	734	45	0	77	60	29	4	1	20
Percent	*100%*	*0.3%*	*70.4%*	*21.4%*	*0.2%*	*5.8%*	*0.4%*	*0.0%*	*0.6%*	*0.5%*	*0.2%*	*0.0%*	*0.0%*	*0.2%*

Nathan Warren: (720) 660-4048
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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Classification Report (Northbound - 05/03/2023)

Wednesday		Northbound												
		Classes												
	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
5/3/23														
12:00 AM	37	0	34	2	0	0	0	0	0	1	0	0	0	0
1:00 AM	21	0	20	1	0	0	0	0	0	0	0	0	0	0
2:00 AM	21	0	21	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	40	0	37	1	0	1	0	0	0	1	0	0	0	0
4:00 AM	85	1	70	12	0	0	1	0	0	1	0	0	0	0
5:00 AM	296	2	227	52	0	7	5	0	0	3	0	0	0	0
6:00 AM	562	3	420	105	0	15	7	0	2	5	0	0	0	5
7:00 AM	1040	6	816	164	0	28	9	0	1	7	4	1	0	4
8:00 AM	1060	2	840	153	0	39	6	0	0	9	6	0	0	5
9:00 AM	695	3	479	130	3	51	14	0	5	7	3	0	0	0
10:00 AM	607	2	400	110	2	61	13	0	7	3	8	0	0	1
11:00 AM	673	4	443	135	3	55	15	0	5	5	2	0	1	5
12:00 PM	709	5	522	124	2	40	7	0	3	3	1	0	0	2
1:00 PM	674	3	479	121	1	40	13	0	4	5	3	0	0	5
2:00 PM	774	1	538	162	1	47	11	0	4	4	4	0	0	2
3:00 PM	961	5	711	177	1	35	15	0	2	5	7	0	0	3
4:00 PM	1132	5	824	213	0	53	17	0	2	7	5	0	0	6
5:00 PM	980	6	723	187	0	32	17	0	4	1	5	0	0	5
6:00 PM	612	2	500	82	0	15	6	0	2	1	2	0	0	2
7:00 PM	439	2	350	64	0	15	4	0	1	0	3	0	0	0
8:00 PM	291	0	238	39	0	7	4	0	1	2	0	0	0	0
9:00 PM	208	1	176	21	1	8	1	0	0	0	0	0	0	0
10:00 PM	116	0	99	13	0	1	1	0	0	1	0	0	0	1
11:00 PM	70	0	65	5	0	0	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	2662	11	2076	422	0	82	22	0	3	21	10	1	0	14
3:00 PM - 6:00 PM	3073	16	2258	577	1	120	49	0	8	13	17	0	0	14
6:00 AM - 7:00 PM	10479	47	7695	1863	13	511	150	0	41	62	50	1	1	45
12:00 AM - 12:00 AM	12103	53	9032	2073	14	550	166	0	43	71	53	1	1	46
Percent	*100%*	*0.4%*	*74.6%*	*17.1%*	*0.1%*	*4.5%*	*1.4%*	*0.0%*	*0.4%*	*0.6%*	*0.4%*	*0.0%*	*0.0%*	*0.4%*

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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Classification Report (Southbound - 05/03/2023)

Wednesday		Southbound												
		Classes												
	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
5/3/23														
12:00 AM	50	0	41	6	0	3	0	0	0	0	0	0	0	0
1:00 AM	37	0	28	7	0	0	0	0	0	2	0	0	0	0
2:00 AM	26	0	17	2	0	5	1	0	1	0	0	0	0	0
3:00 AM	30	0	18	8	1	2	0	0	0	1	0	0	0	0
4:00 AM	60	0	37	11	0	9	0	0	0	3	0	0	0	0
5:00 AM	155	0	81	29	0	43	0	0	0	1	1	0	0	0
6:00 AM	481	4	270	108	3	84	2	0	5	1	2	0	0	2
7:00 AM	963	4	610	215	3	108	3	0	11	3	3	0	0	3
8:00 AM	1092	10	665	260	3	131	4	0	11	2	3	0	0	3
9:00 AM	821	2	503	193	2	96	4	0	6	9	4	0	0	2
10:00 AM	700	2	422	171	1	90	3	0	4	5	1	0	0	1
11:00 AM	789	4	509	178	0	87	2	0	3	2	4	0	0	0
12:00 PM	717	2	453	156	5	81	5	0	3	9	3	0	0	0
1:00 PM	703	5	467	137	2	79	4	0	3	6	0	0	0	0
2:00 PM	726	4	484	158	4	65	6	0	1	2	1	0	0	1
3:00 PM	1007	6	663	217	0	109	3	0	8	1	0	0	0	0
4:00 PM	1180	6	805	254	1	100	4	0	4	4	2	0	0	0
5:00 PM	1142	3	798	234	1	98	3	0	4	1	0	0	0	0
6:00 PM	683	3	465	142	0	67	2	0	0	2	2	0	0	0
7:00 PM	451	1	308	96	0	42	0	0	1	1	2	0	0	0
8:00 PM	343	0	267	51	0	23	2	0	0	0	0	0	0	0
9:00 PM	253	1	190	42	0	19	0	0	0	1	0	0	0	0
10:00 PM	136	0	102	21	0	12	0	0	0	1	0	0	0	0
11:00 PM	82	0	59	16	0	5	0	0	0	2	0	0	0	0
6:00 AM - 9:00 AM	2536	18	1545	583	9	323	9	0	27	6	8	0	0	8
3:00 PM - 6:00 PM	3329	15	2266	705	2	307	10	0	16	6	2	0	0	0
6:00 AM - 7:00 PM	11004	55	7114	2423	25	1195	45	0	63	47	25	0	0	12
12:00 AM - 12:00 AM	12627	57	8262	2712	26	1358	48	0	65	59	28	0	0	12
Percent	*100%*	*0.5%*	*65.4%*	*21.5%*	*0.2%*	*10.8%*	*0.4%*	*0.0%*	*0.5%*	*0.5%*	*0.2%*	*0.0%*	*0.0%*	*0.1%*

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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Classification Report (Northbound - 05/04/2023)

Thursday		Northbound												
		Classes												
	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
5/4/23														
12:00 AM	32	0	28	2	0	0	0	0	0	2	0	0	0	0
1:00 AM	16	0	16	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	22	0	20	1	0	0	0	0	0	1	0	0	0	0
3:00 AM	41	0	34	2	0	4	0	0	0	1	0	0	0	0
4:00 AM	78	0	60	14	0	1	1	0	1	0	1	0	0	0
5:00 AM	290	0	243	37	0	4	4	0	0	2	0	0	0	0
6:00 AM	539	3	402	98	1	15	8	0	2	5	2	0	0	3
7:00 AM	982	8	772	154	0	28	8	0	0	6	2	1	0	3
8:00 AM	1038	1	832	145	0	31	6	0	0	9	7	0	1	6
9:00 AM	670	4	484	105	2	45	13	0	2	8	4	0	0	3
10:00 AM	526	0	354	106	0	41	12	0	2	5	3	0	0	3
11:00 AM	616	4	420	127	1	41	6	0	4	6	5	0	0	2
12:00 PM	666	2	458	127	1	51	13	0	3	4	5	0	0	2
1:00 PM	620	1	441	120	2	33	12	0	3	2	4	0	0	2
2:00 PM	728	2	494	151	1	52	11	0	6	5	4	1	0	1
3:00 PM	897	5	657	169	0	35	10	0	5	6	6	1	1	2
4:00 PM	1062	3	771	185	0	52	23	0	8	8	3	0	0	9
5:00 PM	1014	4	742	191	0	38	18	0	8	2	7	0	0	4
6:00 PM	584	2	475	79	0	14	6	0	1	2	3	0	0	2
7:00 PM	407	3	318	59	0	16	6	0	1	1	3	0	0	0
8:00 PM	286	0	236	34	0	11	4	0	1	0	0	0	0	0
9:00 PM	221	0	188	23	0	8	2	0	0	0	0	0	0	0
10:00 PM	128	0	108	14	1	1	2	0	0	2	0	0	0	0
11:00 PM	71	0	68	3	0	0	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	2559	12	2006	397	1	74	22	0	2	20	11	1	1	12
3:00 PM - 6:00 PM	2973	12	2170	545	0	125	51	0	21	16	16	1	1	15
6:00 AM - 7:00 PM	9942	39	7302	1757	8	476	146	0	44	68	55	3	2	42
12:00 AM - 12:00 AM	11534	42	8621	1946	9	521	165	0	47	77	59	3	2	42
Percent	*100%*	*0.4%*	*74.7%*	*16.9%*	*0.1%*	*4.5%*	*1.4%*	*0.0%*	*0.4%*	*0.7%*	*0.5%*	*0.0%*	*0.0%*	*0.4%*

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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Classification Report (Southbound - 05/04/2023)

Thursday		Southbound												
		Classes												
	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
5/4/23														
12:00 AM	53	0	40	9	0	4	0	0	0	0	0	0	0	0
1:00 AM	39	0	29	8	0	2	0	0	0	0	0	0	0	0
2:00 AM	30	0	18	5	0	5	0	0	1	1	0	0	0	0
3:00 AM	27	0	18	3	1	4	0	0	0	1	0	0	0	0
4:00 AM	58	0	41	10	0	3	0	0	0	4	0	0	0	0
5:00 AM	150	0	90	26	1	31	0	0	0	1	1	0	0	0
6:00 AM	471	2	292	103	3	60	1	0	6	2	1	0	0	1
7:00 AM	891	3	578	217	3	68	4	0	7	4	5	0	0	2
8:00 AM	994	6	627	249	2	88	2	0	10	5	2	0	0	3
9:00 AM	724	2	452	177	2	71	5	0	4	6	5	0	0	0
10:00 AM	651	0	412	131	4	87	4	0	5	5	3	0	0	0
11:00 AM	771	3	486	155	2	102	4	0	9	10	0	0	0	0
12:00 PM	748	1	500	156	1	77	5	0	4	1	3	0	0	0
1:00 PM	678	3	455	127	2	73	3	0	5	4	4	0	0	2
2:00 PM	695	2	477	154	4	44	4	0	2	7	0	0	0	1
3:00 PM	916	4	627	192	1	81	5	0	4	2	0	0	0	0
4:00 PM	1114	7	771	251	1	72	2	0	3	3	3	0	0	1
5:00 PM	1022	1	740	210	2	60	4	0	4	1	0	0	0	0
6:00 PM	649	0	467	132	0	45	2	0	1	1	1	0	0	0
7:00 PM	440	1	339	67	0	31	0	0	0	0	2	0	0	0
8:00 PM	344	1	261	64	0	17	1	0	0	0	0	0	0	0
9:00 PM	228	0	173	37	0	16	0	0	1	0	0	1	0	0
10:00 PM	139	1	109	21	0	7	0	0	0	1	0	0	0	0
11:00 PM	78	0	58	15	0	3	0	0	0	2	0	0	0	0
6:00 AM - 9:00 AM	2356	11	1497	569	8	216	7	0	23	11	8	0	0	6
3:00 PM - 6:00 PM	3052	12	2138	653	4	213	11	0	11	6	3	0	0	1
6:00 AM - 7:00 PM	10324	34	6884	2254	27	928	45	0	64	51	27	0	0	10
12:00 AM - 12:00 AM	11910	37	8060	2519	29	1051	46	0	66	61	30	1	0	10
Percent	*100%*	*0.3%*	*67.7%*	*21.2%*	*0.2%*	*8.8%*	*0.4%*	*0.0%*	*0.6%*	*0.5%*	*0.3%*	*0.0%*	*0.0%*	*0.1%*

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ALL TRAFFIC DATA SERVICES

Vehicle Speed Report - Hourly

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Total Study Speed Summary		
	Northbound	Southbound
Average Speed	48.3 mph	49.8 mph
50th Percentile	48.3 mph	49.8 mph
85th Percentile	53.7 mph	55.2 mph
95th Percentile	57.3 mph	59.1 mph

Speed Range (MPH) - Total Study																					
	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
Northbound	36229	4	5	24	31	65	352	1699	7182	13518	9531	3100	603	81	22	5	3	3	1	0	0
Percent	*100.0%*	*0.0%*	*0.0%*	*0.1%*	*0.1%*	*0.2%*	*1.0%*	*4.7%*	*19.8%*	*37.3%*	*26.3%*	*8.6%*	*1.7%*	*0.2%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Southbound	37249	79	19	17	12	36	150	889	4926	13086	12106	4544	1133	171	51	19	5	1	0	3	2
Percent	*100.0%*	*0.2%*	*0.1%*	*0.0%*	*0.0%*	*0.1%*	*0.4%*	*2.4%*	*13.2%*	*35.1%*	*32.5%*	*12.2%*	*3.0%*	*0.5%*	*0.1%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Total	73478	83	24	41	43	101	502	2588	12108	26604	21637	7644	1736	252	73	24	8	4	1	3	2
Percent	*100.0%*	*0.1%*	*0.0%*	*0.1%*	*0.1%*	*0.1%*	*0.7%*	*3.5%*	*16.5%*	*36.2%*	*29.4%*	*10.4%*	*2.4%*	*0.3%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*

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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Speed Report (Northbound - 05/02/2023)

Tuesday	Northbound																				
5/2/23	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	25	0	0	0	0	0	0	1	3	11	6	2	1	0	0	1	0	0	0	0	0
1:00 AM	13	0	0	0	0	0	0	1	4	4	3	0	1	0	0	0	0	0	0	0	0
2:00 AM	21	0	0	0	0	0	0	3	4	8	4	1	1	0	0	0	0	0	0	0	0
3:00 AM	42	0	0	0	0	0	0	4	13	17	7	1	0	0	0	0	0	0	0	0	0
4:00 AM	73	0	0	0	0	0	0	6	13	27	16	9	2	0	0	0	0	0	0	0	0
5:00 AM	302	0	0	0	0	0	1	3	60	121	91	24	1	1	0	0	0	0	0	0	0
6:00 AM	566	0	0	0	0	0	2	25	138	277	107	12	5	0	0	0	0	0	0	0	0
7:00 AM	1083	0	0	0	1	4	47	180	354	338	130	26	3	0	0	0	0	0	0	0	0
8:00 AM	1151	2	4	16	8	21	68	210	437	295	79	9	1	1	0	0	0	0	0	0	0
9:00 AM	721	0	0	0	0	0	5	18	162	334	164	33	3	2	0	0	0	0	0	0	0
10:00 AM	553	0	0	0	0	0	0	21	77	201	178	63	13	0	0	0	0	0	0	0	0
11:00 AM	602	0	0	0	0	1	0	6	63	219	215	79	15	3	1	0	0	0	0	0	0
12:00 PM	659	0	0	0	0	0	1	8	68	240	243	75	18	4	2	0	0	0	0	0	0
1:00 PM	689	0	0	0	0	0	3	9	66	262	247	89	13	0	0	0	0	0	0	0	0
2:00 PM	780	0	0	0	1	1	1	13	77	251	311	104	20	0	1	0	0	0	0	0	0
3:00 PM	1002	0	0	0	0	1	9	46	198	413	260	66	7	1	1	0	0	0	0	0	0
4:00 PM	1224	0	0	0	0	1	5	70	341	478	264	59	6	0	0	0	0	0	0	0	0
5:00 PM	1203	0	0	0	0	0	12	89	354	429	238	70	10	0	1	0	0	0	0	0	0
6:00 PM	669	0	0	0	0	0	0	15	108	296	174	65	11	0	0	0	0	0	0	0	0
7:00 PM	439	0	0	0	0	0	0	8	85	202	115	23	5	1	0	0	0	0	0	0	0
8:00 PM	301	0	0	0	0	2	3	11	44	130	80	26	5	0	0	0	0	0	0	0	0
9:00 PM	249	0	0	0	0	0	2	5	54	95	62	27	3	0	1	0	0	0	0	0	0
10:00 PM	150	0	0	0	0	0	2	5	39	48	37	16	2	1	0	0	0	0	0	0	0
11:00 PM	75	0	0	0	0	0	0	5	18	30	15	5	0	0	2	0	0	0	0	0	0
6:00 AM - 9:00 AM	2800	2	4	16	9	25	117	415	929	910	316	47	9	1	0	0	0	0	0	0	0
3:00 PM - 6:00 PM	3429	0	0	0	0	2	26	205	893	1320	762	195	23	1	2	0	0	0	0	0	0
6:00 AM - 7:00 PM	10902	2	4	16	10	29	153	710	2443	4033	2610	750	125	11	6	0	0	0	0	0	0
12:00 AM - 12:00 AM	12592	2	4	16	10	31	161	762	2780	4726	3046	884	146	14	9	1	0	0	0	0	0
Percent	*100%*	*0.0%*	*0.0%*	*0.1%*	*0.1%*	*0.2%*	*1.3%*	*6.1%*	*22.1%*	*37.5%*	*24.2%*	*7.0%*	*1.2%*	*0.1%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
50th Percentile	47.7 mph																				
85th Percentile	53.0 mph																				
95th Percentile	56.4 mph																				

Nathan Warren: (720) 660-4048
nathanwarren@alltrafficdata.net

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Speed Report (Southbound - 05/02/2023)

Tuesday	Southbound																				
5/2/23	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	56	0	0	0	0	0	0	5	5	17	17	6	6	0	0	0	0	0	0	0	0
1:00 AM	43	0	0	0	0	0	0	4	6	12	9	7	5	0	0	0	0	0	0	0	0
2:00 AM	34	0	0	0	0	0	1	4	4	10	11	3	1	0	0	0	0	0	0	0	0
3:00 AM	23	0	0	0	0	0	1	1	1	5	8	5	1	1	0	0	0	0	0	0	0
4:00 AM	58	0	0	0	0	0	0	2	7	23	15	7	0	2	1	1	0	0	0	0	0
5:00 AM	148	0	0	0	0	0	0	1	14	37	58	29	9	0	0	0	0	0	0	0	0
6:00 AM	526	0	0	0	0	0	0	5	31	110	178	154	41	6	1	0	0	0	0	0	0
7:00 AM	1038	0	0	1	0	0	8	19	97	342	361	170	38	2	0	0	0	0	0	0	0
8:00 AM	1191	0	0	0	0	2	12	45	203	405	363	128	30	3	0	0	0	0	0	0	0
9:00 AM	760	0	0	0	1	0	6	24	101	246	250	110	22	0	0	0	0	0	0	0	0
10:00 AM	673	0	0	0	0	0	2	11	82	254	216	86	19	1	2	0	0	0	0	0	0
11:00 AM	737	0	0	0	0	0	3	18	93	280	241	81	20	1	0	0	0	0	0	0	0
12:00 PM	749	0	0	0	0	0	2	16	105	293	222	82	26	3	0	0	0	0	0	0	0
1:00 PM	665	0	0	0	0	2	3	15	94	251	201	80	18	1	0	0	0	0	0	0	0
2:00 PM	761	0	0	0	0	1	2	15	139	297	213	76	17	0	1	0	0	0	0	0	0
3:00 PM	994	0	0	0	0	3	3	19	144	394	294	120	16	1	0	0	0	0	0	0	0
4:00 PM	1242	0	0	0	0	0	2	22	163	450	430	142	29	3	1	0	0	0	0	0	0
5:00 PM	1078	0	0	0	0	0	2	25	104	416	392	116	23	0	0	0	0	0	0	0	0
6:00 PM	678	0	0	0	0	0	0	15	87	271	200	78	20	5	1	1	0	0	0	0	0
7:00 PM	466	0	0	0	0	0	0	19	77	166	138	49	14	3	0	0	0	0	0	0	0
8:00 PM	363	0	0	0	0	0	0	17	58	163	87	26	11	1	0	0	0	0	0	0	0
9:00 PM	211	0	0	0	0	0	1	6	37	83	51	23	8	2	0	0	0	0	0	0	0
10:00 PM	144	0	0	0	0	0	1	7	11	53	40	24	7	1	0	0	0	0	0	0	0
11:00 PM	74	0	0	0	0	0	0	1	13	15	22	19	3	1	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	2755	0	0	1	0	2	20	69	331	857	902	452	109	11	1	0	0	0	0	0	0
3:00 PM - 6:00 PM	3314	0	0	0	0	3	7	66	411	1260	1116	378	68	4	1	0	0	0	0	0	0
6:00 AM - 7:00 PM	11092	0	0	1	1	8	45	249	1443	4009	3561	1423	319	26	6	1	0	0	0	0	0
12:00 AM - 12:00 AM	12712	0	0	1	1	8	49	316	1676	4593	4017	1621	384	37	7	2	0	0	0	0	0
Percent	*100%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.1%*	*0.4%*	*2.5%*	*13.2%*	*36.1%*	*31.6%*	*12.8%*	*3.0%*	*0.3%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
50th Percentile	49.7 mph																				
85th Percentile	55.2 mph																				
95th Percentile	59.1 mph																				

Nathan Warren: (720) 660-4048
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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Speed Report (Northbound - 05/03/2023)

Wednesday	Northbound																				
5/3/23	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	37	0	0	0	0	0	0	4	8	9	12	3	1	0	0	0	0	0	0	0	0
1:00 AM	21	0	0	0	0	0	0	0	8	7	5	1	0	0	0	0	0	0	0	0	0
2:00 AM	21	0	0	0	0	0	0	0	6	8	6	0	1	0	0	0	0	0	0	0	0
3:00 AM	40	0	0	0	0	0	0	4	5	17	9	3	2	0	0	0	0	0	0	0	0
4:00 AM	85	0	0	0	0	0	0	4	18	31	25	5	1	0	1	0	0	0	0	0	0
5:00 AM	296	0	0	0	0	0	1	2	75	123	72	16	5	2	0	0	0	0	0	0	0
6:00 AM	562	0	0	0	0	0	3	23	137	257	113	23	5	1	0	0	0	0	0	0	0
7:00 AM	1040	0	0	0	0	0	10	80	382	395	144	26	2	1	0	0	0	0	0	0	0
8:00 AM	1060	0	0	0	7	9	26	122	341	396	127	27	3	2	0	0	0	0	0	0	0
9:00 AM	695	0	0	0	1	1	3	19	107	277	204	66	11	6	0	0	0	0	0	0	0
10:00 AM	607	0	0	0	0	0	4	16	75	235	200	57	15	4	0	0	1	0	0	0	0
11:00 AM	673	0	0	0	1	2	4	8	70	215	259	89	20	5	0	0	0	0	0	0	0
12:00 PM	709	2	0	0	0	1	1	5	48	238	268	118	25	2	1	0	0	0	0	0	0
1:00 PM	674	0	0	0	0	0	2	1	67	218	246	102	34	4	0	0	0	0	0	0	0
2:00 PM	774	0	0	0	0	0	1	7	72	275	287	104	25	2	1	0	0	0	0	0	0
3:00 PM	961	0	0	0	0	0	3	10	101	365	311	140	26	2	2	1	0	0	0	0	0
4:00 PM	1132	0	0	0	1	1	5	21	154	406	387	126	27	3	0	1	0	0	0	0	0
5:00 PM	980	0	0	0	0	0	8	36	141	329	305	124	33	4	0	0	0	0	0	0	0
6:00 PM	612	0	0	0	0	0	5	24	98	254	164	51	11	3	0	0	2	0	0	0	0
7:00 PM	439	0	0	0	0	0	1	5	63	184	132	46	6	2	0	0	0	0	0	0	0
8:00 PM	291	0	0	0	0	0	0	10	59	102	85	29	5	1	0	0	0	0	0	0	0
9:00 PM	208	0	0	0	0	0	0	6	59	87	36	14	3	0	1	0	0	1	1	0	0
10:00 PM	116	0	0	0	0	0	0	10	22	56	21	6	1	0	0	0	0	0	0	0	0
11:00 PM	70	0	0	0	0	0	2	4	16	21	16	10	1	0	0	0	0	0	0	0	0
6:00 AM - 9:00 AM	**2662**	**0**	**0**	**0**	**7**	**9**	**39**	**225**	**860**	**1048**	**384**	**76**	**10**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 6:00 PM	**3073**	**0**	**0**	**0**	**1**	**1**	**16**	**67**	**396**	**1100**	**1003**	**390**	**86**	**9**	**2**	**2**	**0**	**0**	**0**	**0**	**0**
6:00 AM - 7:00 PM	**10479**	**2**	**0**	**0**	**10**	**14**	**75**	**372**	**1793**	**3860**	**3015**	**1053**	**237**	**39**	**4**	**2**	**3**	**0**	**0**	**0**	**0**
12:00 AM - 12:00 AM	**12103**	**2**	**0**	**0**	**10**	**14**	**79**	**421**	**2132**	**4505**	**3434**	**1186**	**263**	**44**	**6**	**2**	**3**	**1**	**1**	**0**	**0**
Percent	***100%***	***0.0%***	***0.0%***	***0.0%***	***0.1%***	***0.1%***	***0.7%***	***3.5%***	***17.6%***	***37.2%***	***28.4%***	***9.8%***	***2.2%***	***0.4%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
50th Percentile	**48.8 mph**																				
85th Percentile	**54.3 mph**																				
95th Percentile	**58.0 mph**																				

Nathan Warren: (720) 660-4048
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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Speed Report (Southbound - 05/03/2023)

Wednesday	Southbound																				
5/3/23	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	50	0	0	0	0	0	1	2	3	14	14	12	4	0	0	0	0	0	0	0	0
1:00 AM	37	0	0	0	0	0	0	1	8	13	12	3	0	0	0	0	0	0	0	0	0
2:00 AM	26	0	0	0	0	1	0	0	7	7	5	3	2	1	0	0	0	0	0	0	0
3:00 AM	30	0	0	0	0	0	1	2	9	7	6	5	0	0	0	0	0	0	0	0	0
4:00 AM	60	0	0	0	0	0	0	5	11	5	23	9	4	1	0	2	0	0	0	0	0
5:00 AM	155	0	0	0	0	1	0	3	14	44	58	20	13	1	1	0	0	0	0	0	0
6:00 AM	481	0	0	0	0	0	3	4	37	90	185	115	39	5	2	1	0	0	0	0	0
7:00 AM	963	0	0	1	0	0	7	33	81	283	352	169	35	1	1	0	0	0	0	0	0
8:00 AM	1092	1	0	0	0	0	0	31	154	348	376	141	36	3	1	1	0	0	0	0	0
9:00 AM	821	0	0	0	0	1	5	13	101	279	306	81	28	5	1	1	0	0	0	0	0
10:00 AM	700	0	0	0	1	0	5	17	127	260	204	66	14	5	0	0	1	0	0	0	0
11:00 AM	789	0	1	0	0	0	1	22	109	316	265	58	13	2	2	0	0	0	0	0	0
12:00 PM	717	3	4	14	8	21	26	38	106	226	186	68	12	3	2	0	0	0	0	0	0
1:00 PM	703	67	14	1	1	0	4	12	84	225	191	73	23	5	2	0	0	0	0	1	0
2:00 PM	726	0	0	0	0	0	1	9	105	275	240	68	22	3	3	0	0	0	0	0	0
3:00 PM	1007	0	0	0	0	0	2	21	141	366	335	106	30	5	1	0	0	0	0	0	0
4:00 PM	1180	2	0	0	0	0	1	22	145	422	425	130	22	6	2	1	1	0	0	1	0
5:00 PM	1142	0	0	0	0	0	0	15	137	405	428	125	23	8	1	0	0	0	0	0	0
6:00 PM	683	1	0	0	0	0	3	12	87	232	219	87	27	10	4	0	0	0	0	0	1
7:00 PM	451	0	0	0	0	0	0	8	58	174	136	50	18	5	1	1	0	0	0	0	0
8:00 PM	343	0	0	0	0	0	2	12	53	136	86	35	14	3	2	0	0	0	0	0	0
9:00 PM	253	0	0	0	0	0	0	8	54	89	55	33	11	2	0	1	0	0	0	0	0
10:00 PM	136	0	0	0	0	0	0	8	22	38	46	14	6	2	0	0	0	0	0	0	0
11:00 PM	82	0	0	0	0	0	0	1	15	29	24	6	1	1	2	1	1	1	0	0	0
6:00 AM - 9:00 AM	2536	1	0	1	0	0	10	68	272	721	913	425	110	9	4	2	0	0	0	0	0
3:00 PM - 6:00 PM	3329	2	0	0	0	0	3	58	423	1193	1188	361	75	19	4	1	1	0	0	1	0
6:00 AM - 7:00 PM	11004	74	19	16	10	22	58	249	1414	3727	3712	1287	324	61	22	4	2	0	0	2	1
12:00 AM - 12:00 AM	12627	74	19	16	10	24	62	299	1668	4283	4177	1477	397	77	28	9	3	1	0	2	1
Percent	*100%*	*0.6%*	*0.2%*	*0.1%*	*0.1%*	*0.2%*	*0.5%*	*2.4%*	*13.2%*	*33.9%*	*33.1%*	*11.7%*	*3.1%*	*0.6%*	*0.2%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
50th Percentile	49.8 mph																				
85th Percentile	55.1 mph																				
95th Percentile	59.2 mph																				

Nathan Warren: (720) 660-4048
nathanwarren@alltrafficdata.net

Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Speed Report (Northbound - 05/04/2023)

Thursday	Northbound																				
5/4/23	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	32	0	0	0	0	0	0	3	3	12	11	2	0	0	0	1	0	0	0	0	0
1:00 AM	16	0	0	0	0	0	0	0	7	5	4	0	0	0	0	0	0	0	0	0	0
2:00 AM	22	0	0	0	0	0	0	0	4	11	5	1	1	0	0	0	0	0	0	0	0
3:00 AM	41	0	0	0	0	0	0	5	10	16	8	1	1	0	0	0	0	0	0	0	0
4:00 AM	78	0	0	0	0	0	0	4	17	24	24	9	0	0	0	0	0	0	0	0	0
5:00 AM	290	0	0	0	0	0	1	2	64	128	76	15	3	1	0	0	0	0	0	0	0
6:00 AM	539	0	0	0	0	0	3	24	134	241	115	17	4	1	0	0	0	0	0	0	0
7:00 AM	982	0	0	0	0	2	27	111	357	331	133	19	2	0	0	0	0	0	0	0	0
8:00 AM	1038	0	1	8	9	15	47	150	368	321	99	19	1	0	0	0	0	0	0	0	0
9:00 AM	670	0	0	0	1	1	2	15	125	299	174	40	9	4	0	0	0	0	0	0	0
10:00 AM	526	0	0	0	0	0	0	10	51	188	183	76	16	2	0	0	0	0	0	0	0
11:00 AM	616	0	0	0	0	0	2	8	44	207	230	99	22	4	0	0	0	0	0	0	0
12:00 PM	666	0	0	0	0	0	1	9	64	231	243	98	17	2	0	0	0	1	0	0	0
1:00 PM	620	0	0	0	0	0	0	5	55	205	227	103	22	3	0	0	0	0	0	0	0
2:00 PM	728	0	0	0	1	0	2	8	68	254	269	105	20	0	1	0	0	0	0	0	0
3:00 PM	897	0	0	0	0	1	4	25	129	356	273	89	16	2	2	0	0	0	0	0	0
4:00 PM	1062	0	0	0	0	0	7	33	226	396	294	90	15	0	0	1	0	0	0	0	0
5:00 PM	1014	0	0	0	0	0	9	53	222	355	255	95	23	1	1	0	0	0	0	0	0
6:00 PM	584	0	0	0	0	0	2	18	96	241	160	57	9	1	0	0	0	0	0	0	0
7:00 PM	407	0	0	0	0	0	1	7	73	192	105	28	1	0	0	0	0	0	0	0	0
8:00 PM	286	0	0	0	0	1	2	10	46	117	77	27	5	1	0	0	0	0	0	0	0
9:00 PM	221	0	0	0	0	0	1	3	64	86	44	16	4	0	2	0	0	1	0	0	0
10:00 PM	128	0	0	0	0	0	0	8	29	50	25	13	2	1	0	0	0	0	0	0	0
11:00 PM	71	0	0	0	0	0	1	5	14	21	17	11	1	0	1	0	0	0	0	0	0
6:00 AM - 9:00 AM	**2559**	**0**	**1**	**8**	**9**	**17**	**77**	**285**	**859**	**893**	**347**	**55**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 6:00 PM	**2973**	**0**	**0**	**0**	**0**	**1**	**20**	**111**	**577**	**1107**	**822**	**274**	**54**	**3**	**3**	**1**	**0**	**0**	**0**	**0**	**0**
6:00 AM - 7:00 PM	**9942**	**0**	**1**	**8**	**11**	**19**	**106**	**469**	**1939**	**3625**	**2655**	**907**	**176**	**20**	**4**	**1**	**0**	**1**	**0**	**0**	**0**
12:00 AM - 12:00 AM	**11534**	**0**	**1**	**8**	**11**	**20**	**112**	**516**	**2270**	**4287**	**3051**	**1030**	**194**	**23**	**7**	**2**	**0**	**2**	**0**	**0**	**0**
Percent	***100%***	***0.0%***	***0.0%***	***0.1%***	***0.1%***	***0.2%***	***1.0%***	***4.5%***	***19.7%***	***37.2%***	***26.5%***	***8.9%***	***1.7%***	***0.2%***	***0.1%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
50th Percentile	**48.4 mph**																				
85th Percentile	**53.8 mph**																				
95th Percentile	**57.3 mph**																				

Nathan Warren: (720) 660-4048
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Site Description: Northwest Pkwy N.O. Via Lata Dr
Site Number: 1
Start Date: 5/2/2023
End Date: 5/4/2023

Vehicle Speed Report (Southbound - 05/04/2023)

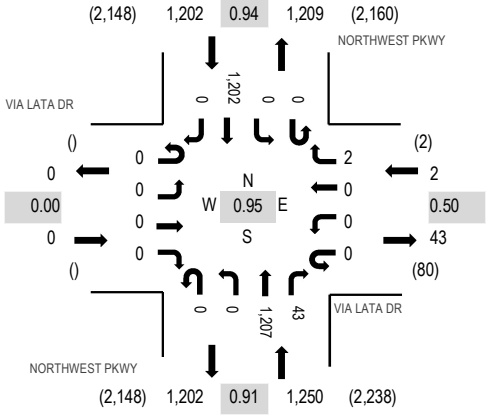
Thursday	Southbound																				
5/4/23	Total	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100+
12:00 AM	53	0	0	0	0	0	1	1	4	16	15	13	3	0	0	0	0	0	0	0	0
1:00 AM	39	0	0	0	0	0	0	4	7	8	13	6	1	0	0	0	0	0	0	0	0
2:00 AM	30	0	0	0	0	0	1	1	6	8	9	4	1	0	0	0	0	0	0	0	0
3:00 AM	27	0	0	0	0	0	1	3	6	5	6	4	1	1	0	0	0	0	0	0	0
4:00 AM	58	0	0	0	0	0	0	4	10	18	14	7	2	1	0	2	0	0	0	0	0
5:00 AM	150	0	0	0	0	0	0	2	14	36	64	20	13	0	1	0	0	0	0	0	0
6:00 AM	471	0	0	0	0	0	1	2	30	92	176	126	37	4	2	1	0	0	0	0	0
7:00 AM	891	0	0	0	0	0	4	20	77	286	307	162	31	3	1	0	0	0	0	0	0
8:00 AM	994	1	0	0	0	1	1	31	150	333	337	111	27	2	0	0	0	0	0	0	0
9:00 AM	724	0	0	0	0	0	5	13	94	239	259	88	24	1	0	1	0	0	0	0	0
10:00 AM	651	0	0	0	1	0	2	18	114	240	190	68	14	3	1	0	0	0	0	0	0
11:00 AM	771	0	0	0	0	0	5	27	111	280	255	72	14	7	0	0	0	0	0	0	0
12:00 PM	748	2	0	0	0	0	1	23	110	294	230	64	20	2	1	0	1	0	0	0	0
1:00 PM	678	0	0	0	0	2	7	18	94	276	192	63	17	8	1	0	0	0	0	0	0
2:00 PM	695	0	0	0	0	1	2	16	103	273	211	68	18	1	2	0	0	0	0	0	0
3:00 PM	916	0	0	0	0	0	2	15	125	339	305	105	20	5	0	0	0	0	0	0	0
4:00 PM	1114	1	0	0	0	0	1	16	136	398	413	123	21	1	2	1	0	0	0	1	0
5:00 PM	1022	0	0	0	0	0	1	15	123	364	374	115	22	7	1	0	0	0	0	0	0
6:00 PM	649	1	0	0	0	0	2	9	81	251	193	82	22	6	0	1	0	0	0	0	1
7:00 PM	440	0	0	0	0	0	0	15	63	161	140	46	13	0	1	1	0	0	0	0	0
8:00 PM	344	0	0	0	0	0	1	13	49	150	85	31	13	1	1	0	0	0	0	0	0
9:00 PM	228	0	0	0	0	0	1	2	46	80	54	31	11	2	0	1	0	0	0	0	0
10:00 PM	139	0	0	0	0	0	0	6	17	43	45	22	5	1	0	0	0	0	0	0	0
11:00 PM	78	0	0	0	0	0	0	0	12	20	25	15	2	1	2	0	1	0	0	0	0
6:00 AM - 9:00 AM	**2356**	**1**	**0**	**0**	**0**	**1**	**6**	**53**	**257**	**711**	**820**	**399**	**95**	**9**	**3**	**1**	**0**	**0**	**0**	**0**	**0**
3:00 PM - 6:00 PM	**3052**	**1**	**0**	**0**	**0**	**0**	**4**	**46**	**384**	**1101**	**1092**	**343**	**63**	**13**	**3**	**1**	**0**	**0**	**0**	**1**	**0**
6:00 AM - 7:00 PM	**10324**	**5**	**0**	**0**	**1**	**4**	**34**	**223**	**1348**	**3665**	**3442**	**1247**	**287**	**50**	**11**	**4**	**1**	**0**	**0**	**1**	**1**
12:00 AM - 12:00 AM	**11910**	**5**	**0**	**0**	**1**	**4**	**39**	**274**	**1582**	**4210**	**3912**	**1446**	**352**	**57**	**16**	**8**	**2**	**0**	**0**	**1**	**1**
Percent	***100%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.3%***	***2.3%***	***13.3%***	***35.3%***	***32.8%***	***12.1%***	***3.0%***	***0.5%***	***0.1%***	***0.1%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***
50th Percentile	**49.8 mph**																				
85th Percentile	**55.2 mph**																				
95th Percentile	**59.1 mph**																				

Nathan Warren: (720) 660-4048
nathanwarren@alltrafficdata.net

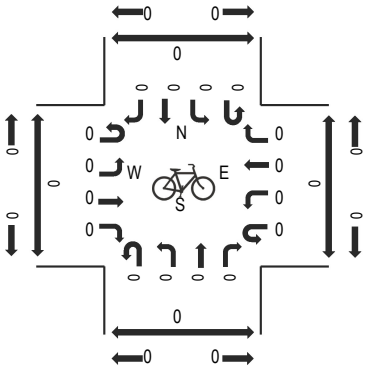
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 NORTHWEST PKWY & VIA LATA DR AM
Date: Tuesday, May 2, 2023
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

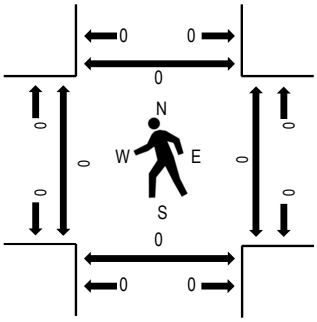
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	VIA LATA DR Eastbound				VIA LATA DR Westbound				NORTHWEST PKWY Northbound				NORTHWEST PKWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	0	0	0	0	0	200	8	0	0	196	0	404	2,080	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	214	4	0	0	226	0	444	2,294	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	292	8	0	0	285	0	585	2,413	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	331	12	0	0	303	0	647	2,454	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	291	11	0	0	316	0	618	2,308	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	290	9	0	0	264	0	563		0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	295	11	0	0	319	0	626		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	245	17	0	0	239	0	501		0	0	0	0
Count Total	0	0	0	0	0	0	0	2	0	0	2,158	80	0	0	2,148	0	4,388		0	0	0	0
Peak Hour	0	0	0	0	0	0	0	2	0	0	1,207	43	0	0	1,202	0	2,454		0	0	0	0

ALL TRAFFIC DATA SERVICES
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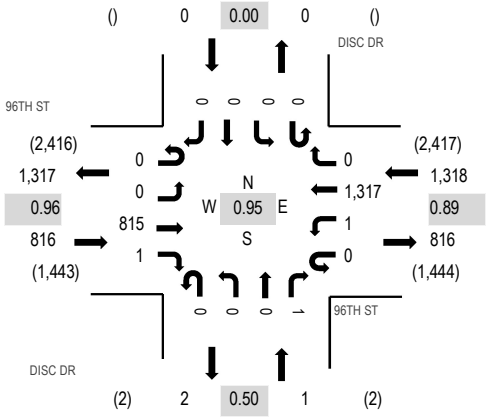
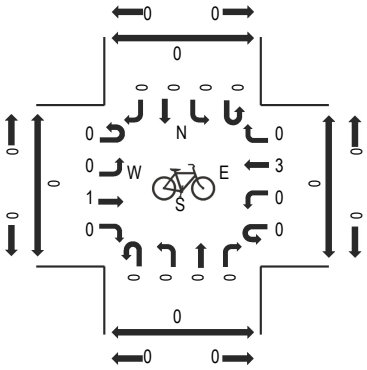
Location: 3 DISC DR & 96TH ST AM
Date: Tuesday, May 2, 2023
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

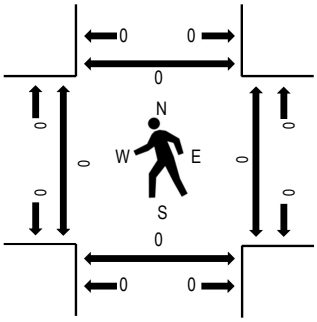
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

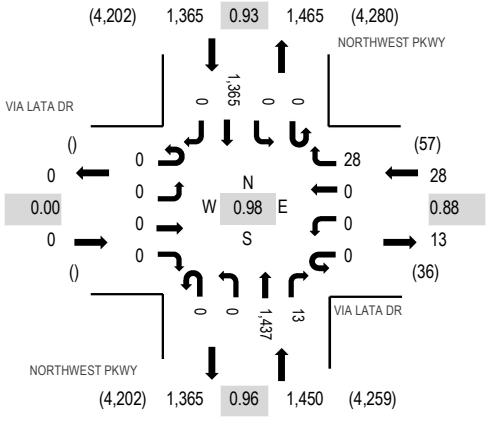
Traffic Counts - Motorized Vehicles

Interval Start Time	96TH ST Eastbound				96TH ST Westbound				DISC DR Northbound				DISC DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	125	0	0	0	210	0	0	0	0	0	0	0	0	0	335	1,782	0	0	0	0
7:15 AM	0	0	143	0	0	0	260	0	0	0	0	0	0	0	0	0	403	1,971	0	0	0	0
7:30 AM	0	0	185	0	0	0	295	0	0	0	0	0	0	0	0	0	480	2,105	0	0	0	0
7:45 AM	0	0	193	0	0	0	371	0	0	0	0	0	0	0	0	0	564	2,135	0	0	0	0
8:00 AM	0	0	200	0	0	0	324	0	0	0	0	0	0	0	0	0	524	2,080	0	0	0	0
8:15 AM	0	0	212	0	0	0	325	0	0	0	0	0	0	0	0	0	537		0	0	0	0
8:30 AM	0	0	210	1	0	1	297	0	0	0	0	1	0	0	0	0	510		0	0	0	0
8:45 AM	0	0	174	0	0	0	334	0	0	0	0	1	0	0	0	0	509		0	0	0	0
Count Total	0	0	1,442	1	0	1	2,416	0	0	0	0	2	0	0	0	0	3,862		0	0	0	0
Peak Hour	0	0	815	1	0	1	1,317	0	0	0	0	1	0	0	0	0	2,135		0	0	0	0

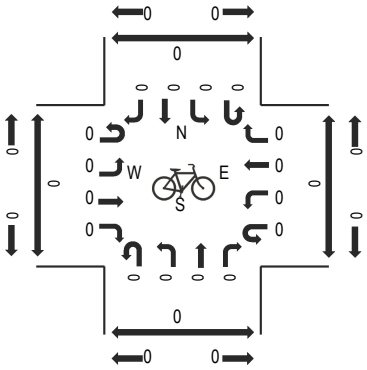
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 NORTHWEST PKWY & VIA LATA DR PM
Date: Tuesday, May 2, 2023
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

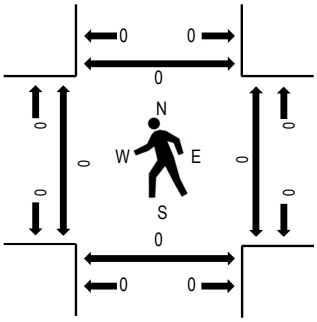
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

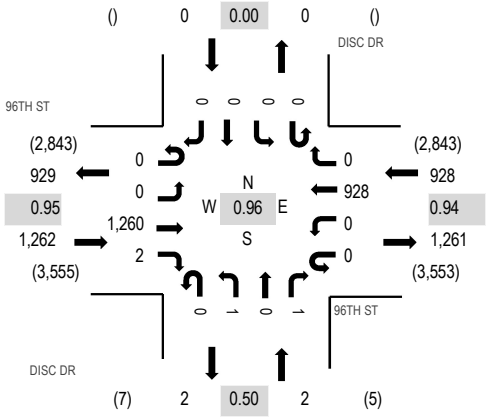
Traffic Counts - Motorized Vehicles

Interval Start Time	VIA LATA DR Eastbound				VIA LATA DR Westbound				NORTHWEST PKWY Northbound				NORTHWEST PKWY Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
2:30 PM	0	0	0	0	0	0	0	5	0	0	212	2	0	0	211	0	430	1,880	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	3	0	0	213	1	0	0	194	0	411	2,074	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	1	0	0	239	4	0	0	258	0	502	2,318	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	1	0	0	267	2	0	0	267	0	537	2,467	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	3	0	0	310	2	0	0	309	0	624	2,649	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	5	0	0	325	1	0	0	324	0	655	2,744	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	4	0	0	303	3	0	0	341	0	651	2,793	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	3	0	0	358	4	0	0	354	0	719	2,840	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	8	0	0	381	0	0	0	330	0	719	2,843	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	8	0	0	360	3	0	0	333	0	704	2,733	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	5	0	0	356	1	0	0	336	0	698	2,566	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	7	0	0	340	9	0	0	366	0	722		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	3	0	0	294	2	0	0	310	0	609		0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	265	2	0	0	269	0	537		0	0	0	0
Count Total	0	0	0	0	0	0	0	57	0	0	4,223	36	0	0	4,202	0	8,518		0	0	0	0
Peak Hour	0	0	0	0	0	0	0	28	0	0	1,437	13	0	0	1,365	0	2,843		0	0	0	0

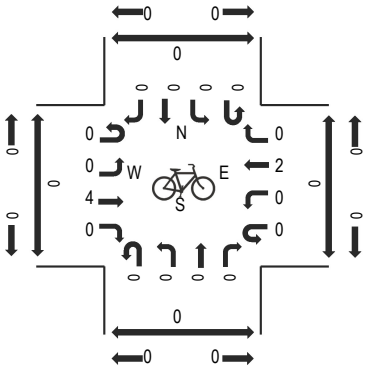
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 DISC DR & 96TH ST PM
Date: Tuesday, May 2, 2023
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

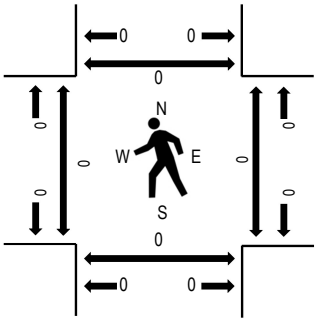
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



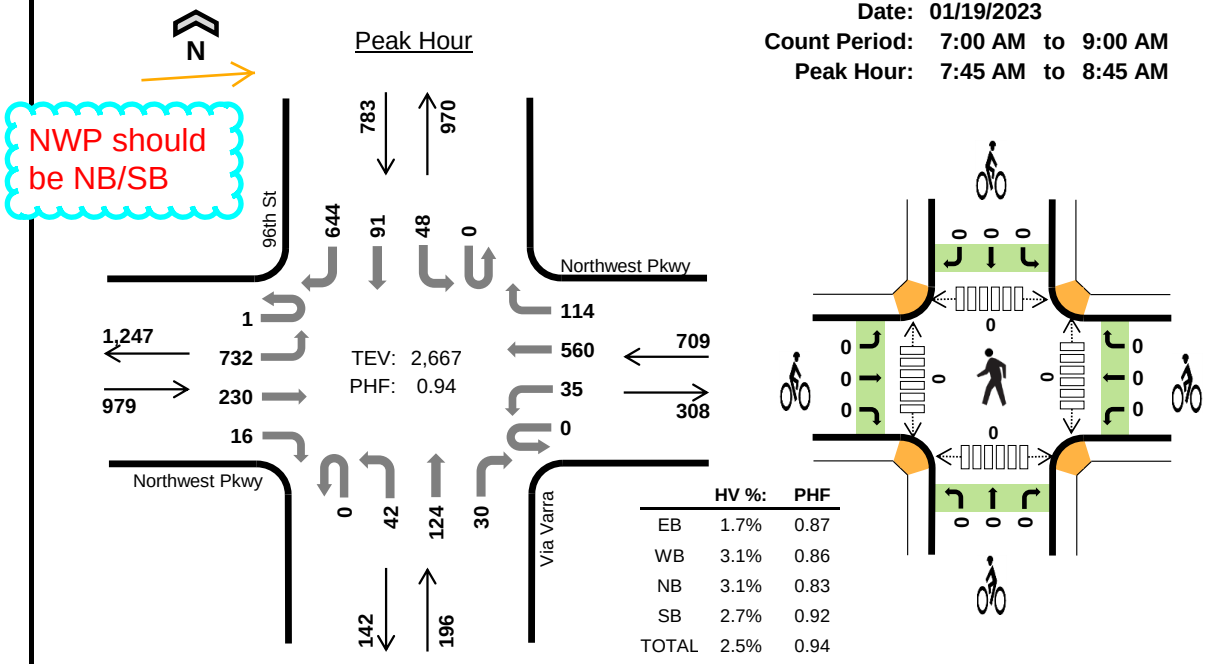
Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	96TH ST Eastbound				96TH ST Westbound				DISC DR Northbound				DISC DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
2:30 PM	0	0	181	0	0	0	164	0	0	0	0	0	0	0	0	0	345	1,431	0	0	0	0
2:45 PM	0	0	165	0	0	1	156	0	0	0	0	0	0	0	0	0	322	1,517	0	0	0	0
3:00 PM	0	0	206	1	0	0	151	0	0	0	0	0	0	0	0	0	358	1,656	0	0	0	0
3:15 PM	0	0	228	1	0	0	176	0	0	0	0	1	0	0	0	0	406	1,808	0	0	0	0
3:30 PM	0	0	243	0	0	0	188	0	0	0	0	0	0	0	0	0	431	1,916	0	0	0	0
3:45 PM	0	0	260	0	0	0	201	0	0	0	0	0	0	0	0	0	461	2,049	0	0	0	0
4:00 PM	0	0	285	0	0	0	225	0	0	0	0	0	0	0	0	0	510	2,131	0	0	0	0
4:15 PM	0	0	333	0	0	0	181	0	0	0	0	0	0	0	0	0	514	2,192	0	0	0	0
4:30 PM	0	0	306	1	0	0	257	0	0	0	0	0	0	0	0	0	564	2,186	0	0	0	0
4:45 PM	0	0	300	0	0	0	242	0	0	1	0	0	0	0	0	0	543	2,083	0	0	0	0
5:00 PM	0	0	321	1	0	0	248	0	0	0	0	1	0	0	0	0	571	1,949	0	0	0	0
5:15 PM	0	0	285	0	0	0	223	0	0	0	0	0	0	0	0	0	508		0	0	0	0
5:30 PM	0	0	238	2	0	0	219	0	0	0	0	2	0	0	0	0	461		0	0	0	0
5:45 PM	0	0	198	0	0	0	211	0	0	0	0	0	0	0	0	0	409		0	0	0	0
Count Total	0	0	3,549	6	0	1	2,842	0	0	1	0	4	0	0	0	0	6,403		0	0	0	0
Peak Hour	0	0	1,260	2	0	0	928	0	0	1	0	1	0	0	0	0	2,192		0	0	0	0

96th St
Northwest Pkwy

Date: 01/19/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.7%	0.87
WB	3.1%	0.86
NB	3.1%	0.83
SB	2.7%	0.92
TOTAL	2.5%	0.94

Two-Hour Count Summaries

Interval Start	Northwest Pkwy Eastbound				Northwest Pkwy Westbound				Via Varra Northbound				96th St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	111	47	2	0	4	61	26	0	9	28	0	0	7	14	93	402	0
7:15 AM	0	153	45	1	0	12	87	23	0	3	22	5	0	8	13	92	464	0
7:30 AM	0	152	70	2	0	5	109	35	0	6	28	6	0	9	17	121	560	0
7:45 AM	**0**	**207**	**69**	**4**	**0**	**10**	**124**	**35**	**0**	**17**	**37**	**5**	**0**	**19**	**13**	**140**	**680**	2,106
8:00 AM	**0**	**192**	**51**	**2**	**0**	**6**	**134**	**33**	**0**	**10**	**32**	**9**	**0**	**11**	**31**	**155**	**666**	2,370
8:15 AM	**0**	**184**	**63**	**2**	**0**	**9**	**171**	**25**	**0**	**4**	**27**	**11**	**0**	**11**	**22**	**179**	**708**	2,614
8:30 AM	**1**	**149**	**47**	**8**	**0**	**10**	**131**	**21**	**0**	**11**	**28**	**5**	**0**	**7**	**25**	**170**	**613**	**2,667**
8:45 AM	0	194	58	3	0	14	111	28	0	7	26	5	0	10	17	124	597	2,584
Count Total	1	1,342	450	24	0	70	928	226	0	67	228	46	0	82	152	1,074	4,690	0
Peak Hour All	**1**	**732**	**230**	**16**	**0**	**35**	**560**	**114**	**0**	**42**	**124**	**30**	**0**	**48**	**91**	**644**	**2,667**	**0**
Peak Hour HV	**0**	**14**	**3**	**0**	**0**	**1**	**16**	**5**	**0**	**1**	**0**	**5**	**0**	**1**	**2**	**18**	**66**	**0**
Peak Hour HV%	**0%**	**2%**	**1%**	**0%**	**-**	**3%**	**3%**	**4%**	**-**	**2%**	**0%**	**17%**	**-**	**2%**	**2%**	**3%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	4	1	1	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	6	1	4	*12*	0	0	1	0	*1*	0	0	0	0	*0*
7:30 AM	2	4	0	3	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**3**	**6**	**1**	**4**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**7**	**5**	**2**	**3**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**5**	**4**	**3**	**3**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**2**	**7**	**0**	**11**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	9	7	1	3	*20*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	32	43	9	32	*116*	0	0	1	0	*1*	0	0	0	0	*0*
Peak Hour	**17**	**22**	**6**	**21**	***66***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Northwest Pkwy Eastbound				Northwest Pkwy Westbound				Via Varra Northbound				96th St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	2	0	0	1	3	0	0	1	0	0	0	0	0	1	9	0
7:15 AM	0	1	0	0	0	0	6	0	0	0	0	1	0	0	1	3	12	0
7:30 AM	0	2	0	0	0	0	3	1	0	0	0	0	0	0	0	3	9	0
7:45 AM	**0**	**2**	**1**	**0**	**0**	**1**	**4**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**14**	44
8:00 AM	**0**	**5**	**2**	**0**	**0**	**0**	**2**	**3**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**3**	**17**	52
8:15 AM	**0**	**5**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**2**	**15**	55
8:30 AM	**0**	**2**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**9**	**20**	**66**
8:45 AM	0	7	2	0	0	1	6	0	0	0	0	1	0	0	0	3	20	72
Count Total	0	25	7	0	0	3	34	6	0	2	0	7	0	1	3	28	116	0
Peak Hour	**0**	**14**	**3**	**0**	**0**	**1**	**16**	**5**	**0**	**1**	**0**	**5**	**0**	**1**	**2**	**18**	**66**	**0**

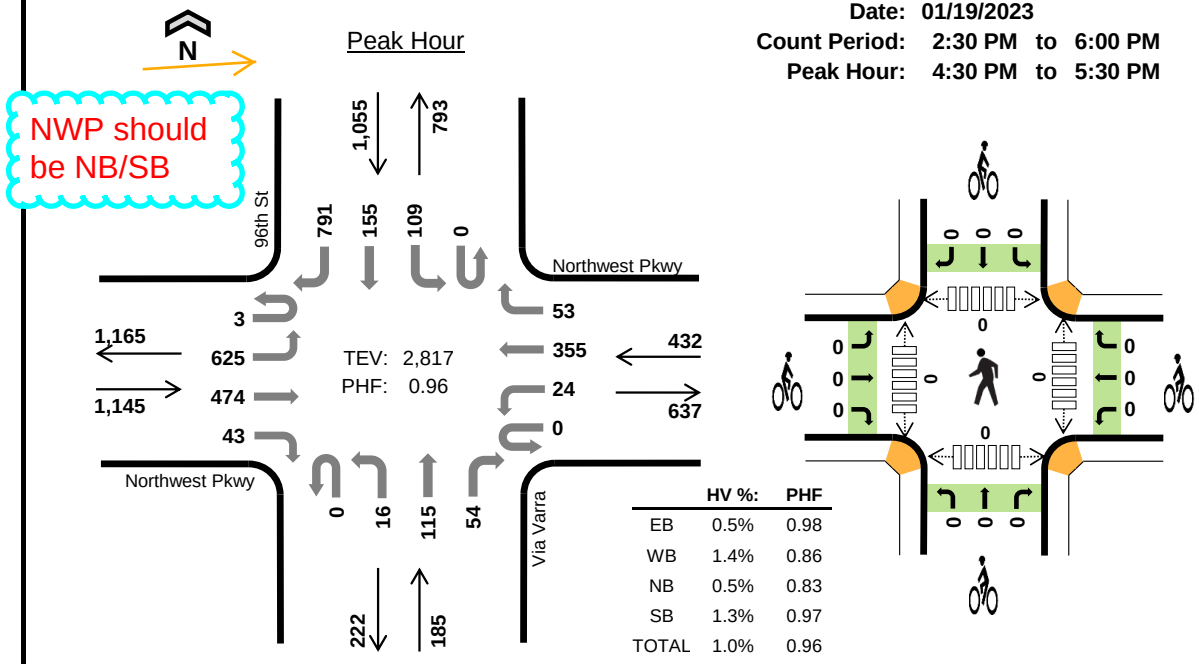
Two-Hour Count Summaries - Bikes

Interval Start	Northwest Pkwy Eastbound			Northwest Pkwy Westbound			Via Varra Northbound			96th St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

96th St
Northwest Pkwy

Date: 01/19/2023
Count Period: 2:30 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.5%	0.98
WB	1.4%	0.86
NB	0.5%	0.83
SB	1.3%	0.97
TOTAL	1.0%	0.96

Three-and-a-Half-Hour Count Summaries

Interval Start		Northwest Pkwy Eastbound				Northwest Pkwy Westbound				Via Varra Northbound				96th St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	158	110	13	0	3	77	7	0	0	24	10	0	22	37	208	669	0
4:45 PM		1	153	119	10	0	6	82	17	0	6	17	20	0	20	47	204	702	0
5:00 PM		2	157	120	11	0	5	95	14	0	8	40	8	0	32	30	188	710	0
5:15 PM		0	157	125	9	0	10	101	15	0	2	34	16	0	35	41	191	736	2,817
Peak Hour	All	3	625	474	43	0	24	355	53	0	16	115	54	0	109	155	791	2,817	0
	HV	0	2	4	0	0	1	5	0	0	0	0	1	0	2	0	12	27	0
	HV%	0%	0%	1%	0%	-	4%	1%	0%	-	0%	0%	2%	-	2%	0%	2%	1%	0

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

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

Three-and-a-Half-Hour Count Summaries

Interval Start	Northwest Pkwy Eastbound				Northwest Pkwy Westbound				Via Varra Northbound				96th St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	110	89	8	0	0	41	7	0	5	19	2	0	16	18	120	435	0
2:45 PM	0	123	64	7	0	3	52	19	0	6	37	8	0	21	18	116	474	0
3:00 PM	0	92	91	6	0	6	53	6	0	0	20	9	0	19	19	162	483	0
3:15 PM	1	127	69	6	0	2	66	11	0	6	14	9	0	29	27	162	529	1,921
3:30 PM	1	135	90	7	0	6	68	12	0	5	21	12	0	21	26	171	575	2,061
3:45 PM	0	154	100	8	0	4	76	12	0	4	27	6	0	17	20	171	599	2,186
4:00 PM	1	139	111	12	0	3	87	7	0	8	27	9	0	30	42	214	690	2,393
4:15 PM	0	160	136	11	1	7	78	14	0	5	21	4	1	27	36	214	715	2,579
4:30 PM	**0**	**158**	**110**	**13**	**0**	**3**	**77**	**7**	**0**	**0**	**24**	**10**	**0**	**22**	**37**	**208**	**669**	2,673
4:45 PM	**1**	**153**	**119**	**10**	**0**	**6**	**82**	**17**	**0**	**6**	**17**	**20**	**0**	**20**	**47**	**204**	**702**	2,776
5:00 PM	**2**	**157**	**120**	**11**	**0**	**5**	**95**	**14**	**0**	**8**	**40**	**8**	**0**	**32**	**30**	**188**	**710**	2,796
5:15 PM	**0**	**157**	**125**	**9**	**0**	**10**	**101**	**15**	**0**	**2**	**34**	**16**	**0**	**35**	**41**	**191**	**736**	**2,817**
5:30 PM	0	161	101	7	0	7	107	10	0	2	27	15	0	26	26	176	665	2,813
5:45 PM	0	143	85	11	0	10	70	21	0	5	18	7	0	29	45	152	596	2,707
Count Total	6	1,969	1,410	126	1	72	1,053	172	0	62	346	135	1	344	432	2,449	8,578	0
Peak Hour All	**3**	**625**	**474**	**43**	**0**	**24**	**355**	**53**	**0**	**16**	**115**	**54**	**0**	**109**	**155**	**791**	**2,817**	**0**
Peak Hour HV	**0**	**2**	**4**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**12**	**27**	**0**
Peak Hour HV%	**0%**	**0%**	**1%**	**0%**	**-**	**4%**	**1%**	**0%**	**-**	**0%**	**0%**	**2%**	**-**	**2%**	**0%**	**2%**	**1%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:30 PM	4	3	1	8	*16*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	8	4	2	5	*19*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 PM	3	0	1	4	*8*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	11	1	0	9	*21*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	3	2	0	2	*7*	0	0	0	1	*1*	0	0	0	0	*0*
3:45 PM	7	6	0	4	*17*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	8	3	1	6	*18*	0	0	0	0	*0*	0	0	0	1	*1*
4:15 PM	5	0	2	6	*13*	0	0	0	0	*0*	0	0	0	1	*1*
4:30 PM	**2**	**0**	**0**	**7**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**3**	**0**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**2**	**2**	**0**	**3**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**1**	**1**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	1	3	0	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	1	1	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	57	29	9	65	*160*	0	0	0	1	*1*	0	0	0	2	*2*
Peak Hour	**6**	**6**	**1**	**14**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Three-and-a-Half-Hour Count Summaries - Heavy Vehicles

Interval Start	Northwest Pkwy Eastbound				Northwest Pkwy Westbound				Via Varra Northbound				96th St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	3	1	0	0	0	3	0	0	0	1	0	0	2	0	6	16	0
2:45 PM	0	5	3	0	0	1	2	1	0	1	1	0	0	0	0	5	19	0
3:00 PM	0	2	1	0	0	0	0	0	0	0	0	1	0	0	1	3	8	0
3:15 PM	0	8	3	0	0	0	1	0	0	0	0	0	0	4	1	4	21	64
3:30 PM	0	1	2	0	0	0	1	1	0	0	0	0	0	0	0	2	7	55
3:45 PM	0	4	3	0	0	2	4	0	0	0	0	0	0	1	1	2	17	53
4:00 PM	0	4	4	0	0	0	3	0	0	0	0	1	0	1	0	5	18	63
4:15 PM	0	4	1	0	0	0	0	0	0	0	1	1	0	3	0	3	13	55
4:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**9**	57
4:45 PM	**0**	**0**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	46
5:00 PM	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**7**	35
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**5**	**27**
5:30 PM	0	1	0	0	0	0	3	0	0	0	0	0	0	1	0	2	7	25
5:45 PM	0	1	0	0	0	1	0	0	0	0	0	1	0	1	0	3	7	26
Count Total	0	35	22	0	0	5	22	2	0	1	3	5	0	15	3	47	160	0
Peak Hour	**0**	**2**	**4**	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**12**	**27**	**0**

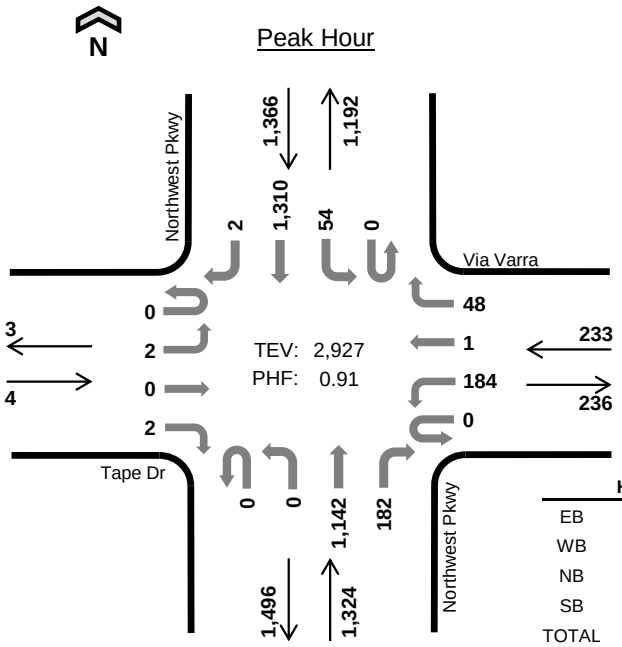
Three-and-a-Half-Hour Count Summaries - Bikes

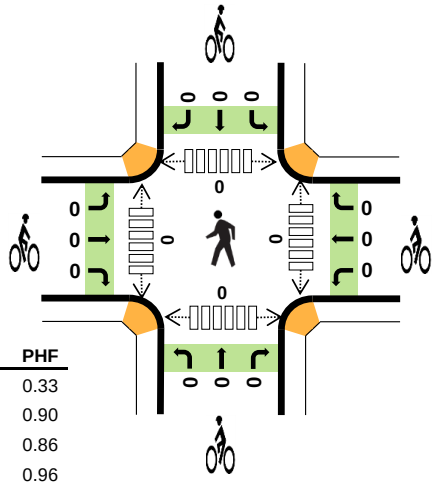
Interval Start	Northwest Pkwy Eastbound			Northwest Pkwy Westbound			Via Varra Northbound			96th St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Northwest Pkwy
Via Varra

Date: 01/24/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	0.0%	0.33
WB	2.6%	0.90
NB	2.6%	0.86
SB	3.4%	0.96
TOTAL	3.0%	0.91

Two-Hour Count Summaries

Interval Start	Tape Dr Eastbound				Via Varra Westbound				Northwest Pkwy Northbound				Northwest Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	19	0	10	0	0	180	15	1	8	172	0	405	0
7:15 AM	0	0	0	0	0	24	0	15	0	0	191	32	0	9	214	0	485	0
7:30 AM	0	0	0	1	0	42	0	13	0	0	249	36	0	15	252	1	609	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**49**	**0**	**8**	**0**	**0**	**341**	**46**	**0**	**17**	**339**	**1**	**802**	2,301
8:00 AM	**0**	**0**	**0**	**0**	**0**	**46**	**0**	**19**	**0**	**0**	**260**	**43**	**0**	**17**	**320**	**0**	**705**	2,601
8:15 AM	**0**	**1**	**0**	**2**	**0**	**48**	**1**	**12**	**0**	**0**	**288**	**45**	**0**	**11**	**338**	**1**	**747**	2,863
8:30 AM	**0**	**0**	**0**	**0**	**0**	**41**	**0**	**9**	**0**	**0**	**253**	**48**	**0**	**9**	**313**	**0**	**673**	**2,927**
8:45 AM	0	0	0	0	0	47	0	10	0	0	259	42	0	13	257	0	628	2,753
Count Total	0	2	0	3	0	316	1	96	0	0	2,021	307	1	99	2,205	3	5,054	0
Peak Hour All	**0**	**2**	**0**	**2**	**0**	**184**	**1**	**48**	**0**	**0**	**1,142**	**182**	**0**	**54**	**1,310**	**2**	**2,927**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**0**	**0**	**30**	**5**	**0**	**2**	**45**	**0**	**88**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**2%**	**0%**	**4%**	**-**	**-**	**3%**	**3%**	**-**	**4%**	**3%**	**0%**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	4	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	5	6	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	10	10	*20*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**0**	**3**	**7**	**10**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**10**	**12**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**3**	**11**	**11**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**0**	**7**	**14**	***21***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	1	2	9	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	7	56	77	*140*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**6**	**35**	**47**	***88***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Garrett Strang
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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Tape Dr				Via Varra				Northwest Pkwy				Northwest Pkwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	5	0	9	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	3	2	0	0	6	0	11	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	7	3	0	0	10	0	20	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**5**	**2**	**0**	**1**	**9**	**0**	**20**	60
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**1**	**0**	**1**	**11**	**0**	**22**	73
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**10**	**1**	**0**	**0**	**11**	**0**	**25**	87
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**14**	**0**	**21**	**88**
8:45 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	1	8	0	12	80
Count Total	0	0	0	0	0	5	0	2	0	0	45	11	0	3	74	0	140	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**0**	**0**	**30**	**5**	**0**	**2**	**45**	**0**	**88**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Tape Dr			Via Varra			Northwest Pkwy			Northwest Pkwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

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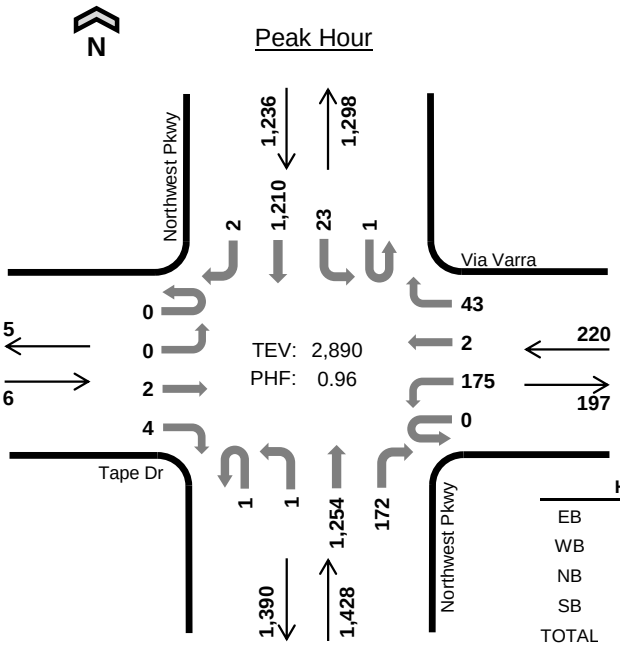
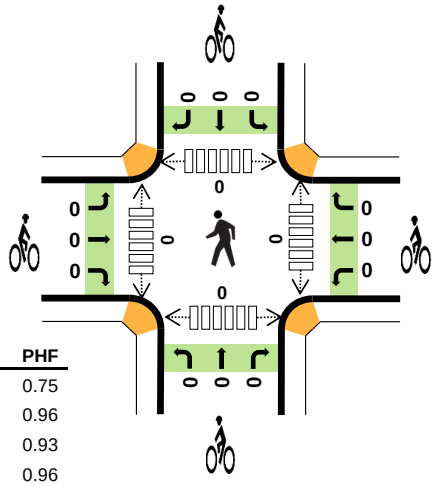
Northwest Pkwy
Via Varra

Date: 01/24/2023
Count Period: 2:30 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.0%	0.75
WB	1.4%	0.96
NB	1.4%	0.93
SB	1.6%	0.96
TOTAL	1.5%	0.96

Three-and-a-Half-Hour Count Summaries

Interval Start		Tape Dr Eastbound				Via Varra Westbound				Northwest Pkwy Northbound				Northwest Pkwy Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	1	0	42	0	11	0	0	289	40	0	10	312	0	705	0
4:45 PM		0	0	0	1	0	42	1	13	0	0	303	37	0	6	290	0	693	0
5:00 PM		0	0	1	1	0	42	1	11	0	1	326	48	1	5	298	1	736	0
5:15 PM		0	0	1	1	0	49	0	8	1	0	336	47	0	2	310	1	756	2,890
Peak Hour	All	0	0	2	4	0	175	2	43	1	1	1,254	172	1	23	1,210	2	2,890	0
	HV	0	0	0	0	0	1	0	2	0	0	18	2	0	1	19	0	43	0
	HV%	-	-	0%	0%	-	1%	0%	5%	0%	0%	1%	1%	0%	4%	2%	0%	1%	0

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	0	1	7	4	*12*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	2	4	7	*13*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	0	6	5	*11*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	3	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	3	20	20	*43*	0	0	0	0	*0*	0	0	0	0	*0*

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Three-and-a-Half-Hour Count Summaries

Interval Start	Tape Dr Eastbound				Via Varra Westbound				Northwest Pkwy Northbound				Northwest Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	0	0	0	1	27	0	4	0	0	200	33	0	7	183	0	455	0
2:45 PM	0	0	0	1	0	31	0	10	0	0	184	26	0	8	189	0	449	0
3:00 PM	0	0	0	0	0	34	0	10	0	0	197	32	0	5	186	0	464	0
3:15 PM	0	0	1	0	0	23	0	10	0	0	219	35	0	3	229	1	521	1,889
3:30 PM	0	1	0	0	0	27	0	6	0	0	231	31	0	4	265	0	565	1,999
3:45 PM	0	0	0	0	0	25	0	6	0	0	255	35	0	9	236	0	566	2,116
4:00 PM	0	0	0	0	0	28	0	9	0	0	308	33	0	7	270	0	655	2,307
4:15 PM	0	0	0	0	1	34	0	2	0	0	290	47	0	9	275	0	658	2,444
4:30 PM	**0**	**0**	**0**	**1**	**0**	**42**	**0**	**11**	**0**	**0**	**289**	**40**	**0**	**10**	**312**	**0**	**705**	2,584
4:45 PM	**0**	**0**	**0**	**1**	**0**	**42**	**1**	**13**	**0**	**0**	**303**	**37**	**0**	**6**	**290**	**0**	**693**	2,711
5:00 PM	**0**	**0**	**1**	**1**	**0**	**42**	**1**	**11**	**0**	**1**	**326**	**48**	**1**	**5**	**298**	**1**	**736**	2,792
5:15 PM	**0**	**0**	**1**	**1**	**0**	**49**	**0**	**8**	**1**	**0**	**336**	**47**	**0**	**2**	**310**	**1**	**756**	**2,890**
5:30 PM	0	0	0	0	0	27	0	12	0	0	294	44	0	6	245	0	628	2,813
5:45 PM	0	0	0	1	3	30	0	4	0	0	229	52	0	2	218	1	540	2,660
Count Total	0	1	3	6	5	461	2	116	1	1	3,661	540	1	83	3,506	4	8,391	0
Peak Hour All	**0**	**0**	**2**	**4**	**0**	**175**	**2**	**43**	**1**	**1**	**1,254**	**172**	**1**	**23**	**1,210**	**2**	**2,890**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**18**	**2**	**0**	**1**	**19**	**0**	**43**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**1%**	**0%**	**5%**	**0%**	**0%**	**1%**	**1%**	**0%**	**4%**	**2%**	**0%**	**1%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:30 PM	0	1	10	9	*20*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	0	4	10	10	*24*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 PM	0	0	9	6	*15*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	0	0	9	5	*14*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	0	2	10	9	*21*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	3	7	8	*18*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	1	6	8	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	14	4	*18*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**1**	**7**	**4**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**2**	**4**	**7**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**6**	**5**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**3**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	0	5	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	1	2	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	15	102	82	*199*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**3**	**20**	**20**	***43***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

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Three-and-a-Half-Hour Count Summaries - Heavy Vehicles

Interval Start	Tape Dr				Via Varra				Northwest Pkwy				Northwest Pkwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	0	0	0	0	1	0	0	0	0	9	1	0	0	9	0	20	0
2:45 PM	0	0	0	0	0	4	0	0	0	0	10	0	0	1	9	0	24	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	8	1	0	1	5	0	15	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14	73
3:30 PM	0	0	0	0	0	1	0	1	0	0	9	1	0	0	9	0	21	74
3:45 PM	0	0	0	0	0	2	0	1	0	0	7	0	0	0	8	0	18	68
4:00 PM	0	0	0	0	0	1	0	0	0	0	5	1	0	1	7	0	15	68
4:15 PM	0	0	0	0	0	0	0	0	0	0	12	2	0	0	4	0	18	72
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**1**	**3**	**0**	**12**	63
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**7**	**0**	**13**	58
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**0**	**5**	**0**	**11**	54
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**7**	**43**
5:30 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	2	0	7	38
5:45 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	4	29
Count Total	0	0	0	0	0	11	0	4	0	0	93	9	0	4	78	0	199	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**18**	**2**	**0**	**1**	**19**	**0**	**43**	**0**

Three-and-a-Half-Hour Count Summaries - Bikes

Interval Start	Tape Dr			Via Varra			Northwest Pkwy			Northwest Pkwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

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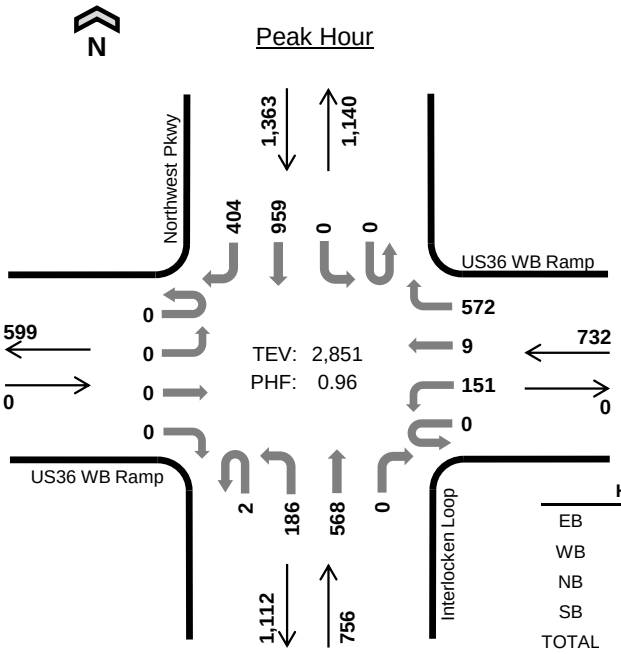
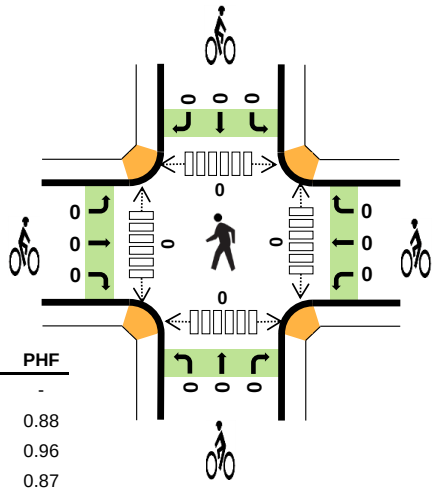
Interlocken Loop
US36 WB Ramp

Date: 01/19/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	-	-
WB	2.6%	0.88
NB	2.2%	0.96
SB	2.9%	0.87
TOTAL	2.6%	0.96

Two-Hour Count Summaries

Interval Start	US36 WB Ramp Eastbound				US36 WB Ramp Westbound				Interlocken Loop Northbound				Northwest Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	14	0	81	0	17	94	0	0	0	151	35	392	0
7:15 AM	0	0	0	0	0	27	2	109	1	53	126	0	0	0	143	59	520	0
7:30 AM	0	0	0	0	0	22	1	123	0	40	143	0	0	0	208	80	617	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**44**	**3**	**161**	**1**	**50**	**146**	**0**	**0**	**0**	**235**	**90**	**730**	2,259
8:00 AM	**0**	**0**	**0**	**0**	**0**	**46**	**2**	**154**	**0**	**40**	**146**	**0**	**0**	**0**	**223**	**76**	**687**	2,554
8:15 AM	**0**	**0**	**0**	**0**	**0**	**30**	**1**	**127**	**0**	**43**	**153**	**0**	**0**	**0**	**269**	**121**	**744**	2,778
8:30 AM	**0**	**0**	**0**	**0**	**0**	**31**	**3**	**130**	**1**	**53**	**123**	**0**	**0**	**0**	**232**	**117**	**690**	**2,851**
8:45 AM	0	0	0	0	0	36	2	153	0	36	142	0	0	0	219	76	664	2,785
Count Total	0	0	0	0	0	250	14	1,038	3	332	1,073	0	0	0	1,680	654	5,044	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**151**	**9**	**572**	**2**	**186**	**568**	**0**	**0**	**0**	**959**	**404**	**2,851**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**14**	**0**	**7**	**10**	**0**	**0**	**0**	**26**	**13**	**75**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**1%**	**44%**	**2%**	**0%**	**4%**	**2%**	**-**	**-**	**-**	**3%**	**3%**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	2	4	5	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	4	1	10	*15*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	4	2	6	*12*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**0**	**2**	**6**	**9**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**6**	**5**	**7**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**5**	**3**	**9**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**6**	**3**	**14**	***23***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	10	9	13	*32*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	39	33	73	*145*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**19**	**17**	**39**	***75***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	US36 WB Ramp				US36 WB Ramp				Interlocken Loop				Northwest Pkwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	2	0	0	4	0	0	0	3	2	11	0
7:15 AM	0	0	0	0	0	0	2	2	0	0	1	0	0	0	8	2	15	0
7:30 AM	0	0	0	0	0	0	1	3	0	1	1	0	0	0	4	2	12	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**3**	**3**	**0**	**0**	**0**	**7**	**2**	**17**	55
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**1**	**4**	**0**	**0**	**0**	**4**	**3**	**18**	62
8:15 AM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	**0**	**1**	**2**	**0**	**0**	**0**	**5**	**4**	**17**	64
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**2**	**1**	**0**	**0**	**0**	**10**	**4**	**23**	**75**
8:45 AM	0	0	0	0	0	1	1	8	0	4	5	0	0	0	8	5	32	90
Count Total	0	0	0	0	0	2	8	29	0	12	21	0	0	0	49	24	145	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**14**	**0**	**7**	**10**	**0**	**0**	**0**	**26**	**13**	**75**	**0**

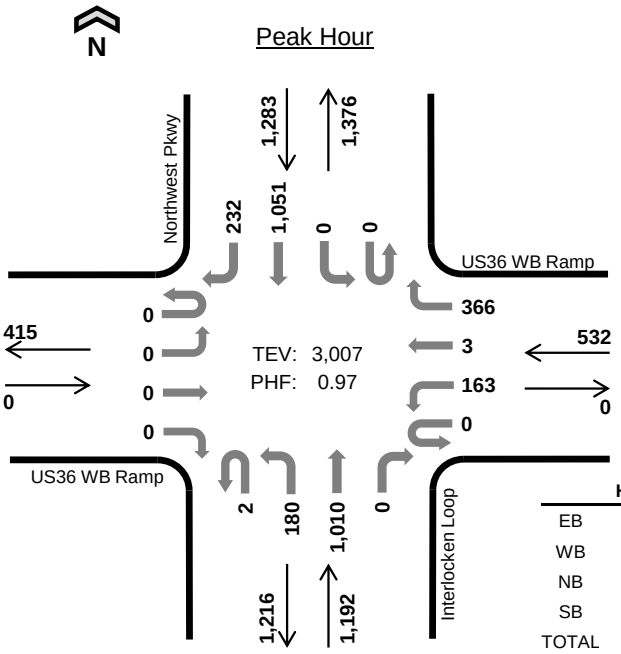
Two-Hour Count Summaries - Bikes

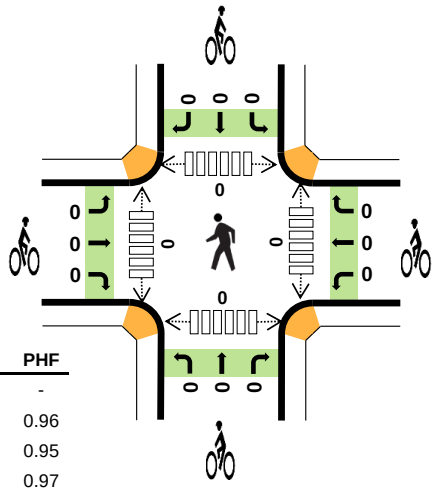
Interval Start	US36 WB Ramp			US36 WB Ramp			Interlocken Loop			Northwest Pkwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Interlocken Loop
US36 WB Ramp

Date: 01/19/2023
Count Period: 2:30 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	-	-
WB	0.6%	0.96
NB	1.9%	0.95
SB	1.8%	0.97
TOTAL	1.6%	0.97

Three-and-a-Half-Hour Count Summaries

Interval Start		US36 WB Ramp Eastbound				US36 WB Ramp Westbound				Interlocken Loop Northbound				Northwest Pkwy Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	0	0	0	0	43	2	80	0	42	272	0	0	0	270	49	758	0
4:30 PM		0	0	0	0	0	44	0	94	0	45	224	0	0	0	247	61	715	0
4:45 PM		0	0	0	0	0	45	1	90	1	40	254	0	0	0	260	66	757	0
5:00 PM		0	0	0	0	0	31	0	102	1	53	260	0	0	0	274	56	777	3,007
Peak Hour	All	0	0	0	0	0	163	3	366	2	180	1,010	0	0	0	1,051	232	3,007	0
	HV	0	0	0	0	0	0	2	1	0	2	21	0	0	0	18	5	49	0
	HV%	-	-	-	-	-	0%	67%	0%	0%	1%	2%	-	-	-	2%	2%	2%	0

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	0	2	5	6	*13*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	6	5	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	1	6	5	*12*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	0	6	7	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	3	23	23	*49*	0	0	0	0	*0*	0	0	0	0	*0*

Three-and-a-Half-Hour Count Summaries

Interval Start	US36 WB Ramp Eastbound				US36 WB Ramp Westbound				Interlocken Loop Northbound				Northwest Pkwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	0	0	0	0	31	1	69	0	37	169	0	0	0	139	34	480	0
2:45 PM	0	0	0	0	0	31	1	72	0	35	148	0	0	0	143	48	478	0
3:00 PM	0	0	0	0	0	29	1	58	0	32	153	0	0	0	200	43	516	0
3:15 PM	0	0	0	0	0	28	1	72	1	34	163	0	0	0	204	55	558	2,032
3:30 PM	0	0	0	0	0	29	2	74	0	32	212	0	0	0	203	46	598	2,150
3:45 PM	0	0	0	0	0	39	2	85	0	39	202	0	0	0	224	48	639	2,311
4:00 PM	0	0	0	0	0	37	2	66	0	35	251	0	0	0	279	52	722	2,517
4:15 PM	**0**	**0**	**0**	**0**	**0**	**43**	**2**	**80**	**0**	**42**	**272**	**0**	**0**	**0**	**270**	**49**	**758**	2,717
4:30 PM	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**94**	**0**	**45**	**224**	**0**	**0**	**0**	**247**	**61**	**715**	2,834
4:45 PM	**0**	**0**	**0**	**0**	**0**	**45**	**1**	**90**	**1**	**40**	**254**	**0**	**0**	**0**	**260**	**66**	**757**	2,952
5:00 PM	**0**	**0**	**0**	**0**	**0**	**31**	**0**	**102**	**1**	**53**	**260**	**0**	**0**	**0**	**274**	**56**	**777**	**3,007**
5:15 PM	0	0	0	0	0	40	1	96	2	51	245	0	0	0	256	57	748	2,997
5:30 PM	0	0	0	0	0	0	2	81	0	45	230	0	0	0	238	69	665	2,947
5:45 PM	0	0	0	0	0	35	1	76	0	30	195	0	0	0	203	55	595	2,785
Count Total	0	0	0	0	0	462	17	1,115	5	550	2,978	0	0	0	3,140	739	9,006	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**163**	**3**	**366**	**2**	**180**	**1,010**	**0**	**0**	**0**	**1,051**	**232**	**3,007**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**21**	**0**	**0**	**0**	**18**	**5**	**49**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**67%**	**0%**	**0%**	**1%**	**2%**	**-**	**-**	**-**	**2%**	**2%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
2:30 PM	0	2	4	9	*15*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	0	4	5	11	*20*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 PM	0	5	3	7	*15*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	0	10	4	7	*21*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	0	4	4	3	*11*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	4	5	9	*18*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	3	8	11	*22*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**0**	**2**	**5**	**6**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**0**	**6**	**5**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**1**	**6**	**5**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**6**	**7**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	0	2	1	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	2	2	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	1	3	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	40	62	90	*192*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**3**	**23**	**23**	***49***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Three-and-a-Half-Hour Count Summaries - Heavy Vehicles

Interval Start	US36 WB Ramp				US36 WB Ramp				Interlocken Loop				Northwest Pkwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	0	0	0	0	1	1	0	0	0	4	0	0	0	7	2	15	0
2:45 PM	0	0	0	0	0	0	1	3	0	0	5	0	0	0	8	3	20	0
3:00 PM	0	0	0	0	0	1	1	3	0	1	2	0	0	0	7	0	15	0
3:15 PM	0	0	0	0	0	3	1	6	0	0	4	0	0	0	6	1	21	71
3:30 PM	0	0	0	0	0	1	1	2	0	0	4	0	0	0	3	0	11	67
3:45 PM	0	0	0	0	0	0	1	3	0	0	5	0	0	0	7	2	18	65
4:00 PM	0	0	0	0	0	0	1	2	0	1	7	0	0	0	10	1	22	72
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**6**	**0**	**13**	64
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**5**	**0**	**11**	64
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**2**	**3**	**12**	58
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**5**	**2**	**13**	**49**
5:15 PM	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	1	5	41
5:30 PM	0	0	0	0	0	0	2	0	0	0	2	0	0	0	5	0	9	39
5:45 PM	0	0	0	0	0	0	1	0	0	0	3	0	0	0	2	1	7	34
Count Total	0	0	0	0	0	6	13	21	0	4	58	0	0	0	74	16	192	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**21**	**0**	**0**	**0**	**18**	**5**	**49**	**0**

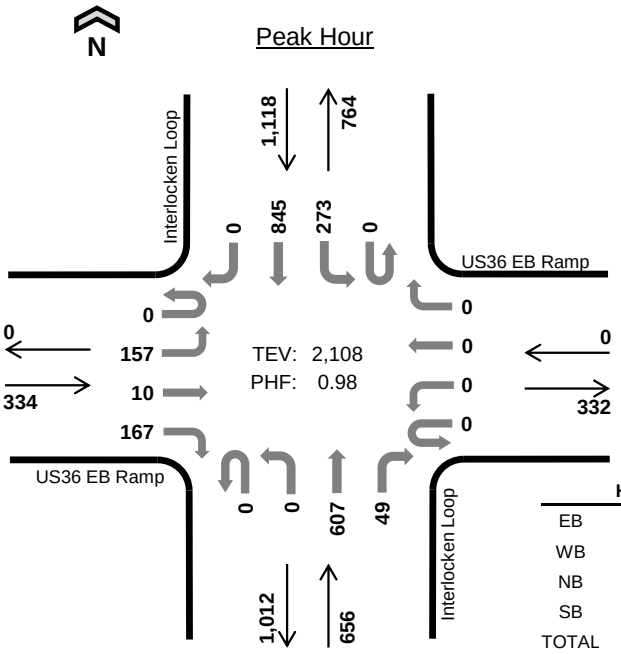
Three-and-a-Half-Hour Count Summaries - Bikes

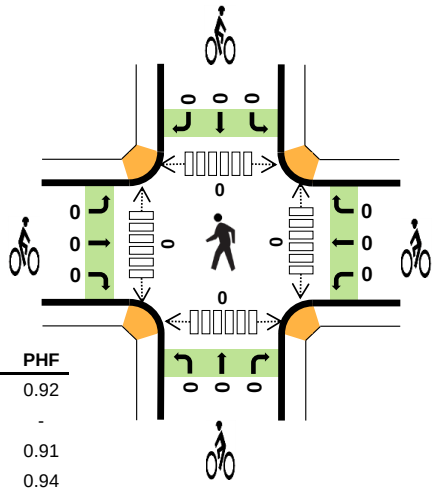
Interval Start	US36 WB Ramp			US36 WB Ramp			Interlocken Loop			Northwest Pkwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Interlocken Loop
US36 EB Ramp

Date: 01/19/2023
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	3.6%	0.92
WB	-	-
NB	2.3%	0.91
SB	2.6%	0.94
TOTAL	2.7%	0.98

Two-Hour Count Summaries

Interval Start	US36 EB Ramp Eastbound				US36 EB Ramp Westbound				Interlocken Loop Northbound				Interlocken Loop Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	25	2	20	0	0	0	0	0	0	88	9	0	60	100	0	304	0
7:15 AM	0	40	1	17	0	0	0	0	0	0	137	6	0	56	115	0	372	0
7:30 AM	0	32	1	27	0	0	0	0	0	0	141	10	1	71	159	0	442	0
7:45 AM	**0**	**36**	**2**	**34**	**0**	**0**	**0**	**0**	**0**	**0**	**167**	**14**	**0**	**74**	**207**	**0**	**534**	1,652
8:00 AM	**0**	**45**	**4**	**42**	**0**	**0**	**0**	**0**	**0**	**0**	**145**	**15**	**0**	**61**	**214**	**0**	**526**	1,874
8:15 AM	**0**	**39**	**3**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**148**	**11**	**0**	**68**	**230**	**0**	**540**	2,042
8:30 AM	**0**	**37**	**1**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**147**	**9**	**0**	**70**	**194**	**0**	**508**	**2,108**
8:45 AM	0	44	1	44	0	0	0	0	0	0	138	10	0	66	189	0	492	2,066
Count Total	0	298	15	275	0	0	0	0	0	0	1,111	84	1	526	1,408	0	3,718	0
Peak Hour All	**0**	**157**	**10**	**167**	**0**	**0**	**0**	**0**	**0**	**0**	**607**	**49**	**0**	**273**	**845**	**0**	**2,108**	**0**
Peak Hour HV	**0**	**5**	**4**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**4**	**0**	**10**	**19**	**0**	**56**	**0**
Peak Hour HV%	**-**	**3%**	**40%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**8%**	**-**	**4%**	**2%**	**-**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	0	1	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	0	6	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	3	0	1	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**2**	**0**	**6**	**7**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**5**	**0**	**3**	**5**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**2**	**0**	**3**	**6**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**3**	**0**	**3**	**11**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	3	0	9	10	*22*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	23	0	26	52	*101*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**12**	**0**	**15**	**29**	***56***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	US36 EB Ramp				US36 EB Ramp				Interlocken Loop				Interlocken Loop				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	3	1	0	0	0	0	0	0	0	1	0	0	0	2	0	7	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	4	0	7	0
7:30 AM	0	2	1	0	0	0	0	0	0	0	1	0	0	4	1	0	9	0
7:45 AM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**3**	**4**	**0**	**15**	38
8:00 AM	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**1**	**4**	**0**	**13**	44
8:15 AM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**4**	**2**	**0**	**11**	48
8:30 AM	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**9**	**0**	**17**	**56**
8:45 AM	0	2	1	0	0	0	0	0	0	0	9	0	0	2	8	0	22	63
Count Total	0	12	8	3	0	0	0	0	0	0	22	4	0	18	34	0	101	0
Peak Hour	**0**	**5**	**4**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**4**	**0**	**10**	**19**	**0**	**56**	**0**

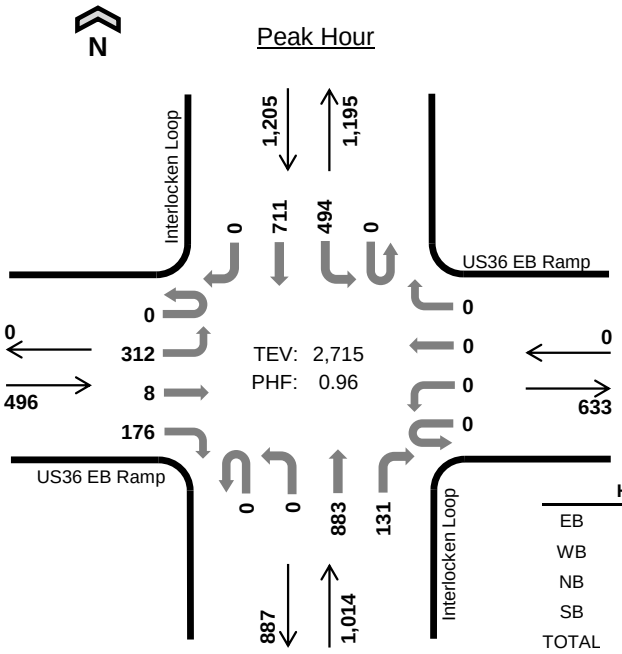
Two-Hour Count Summaries - Bikes

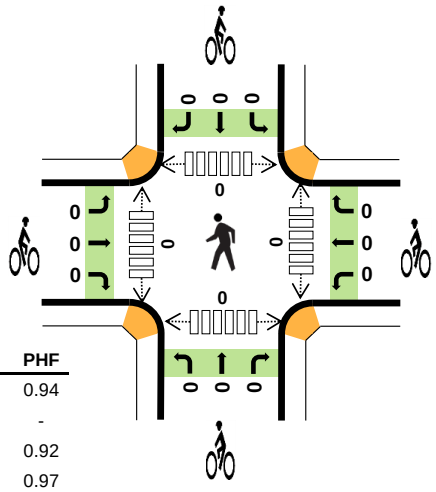
Interval Start	US36 EB Ramp			US36 EB Ramp			Interlocken Loop			Interlocken Loop			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Interlocken Loop
US36 EB Ramp

Date: 01/19/2023
Count Period: 2:30 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	3.8%	0.94
WB	-	-
NB	1.7%	0.92
SB	1.5%	0.97
TOTAL	2.0%	0.96

Three-and-a-Half-Hour Count Summaries

Interval Start		US36 EB Ramp Eastbound				US36 EB Ramp Westbound				Interlocken Loop Northbound				Interlocken Loop Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	88	4	40	0	0	0	0	0	0	231	32	0	125	185	0	705	0
4:30 PM		0	69	1	45	0	0	0	0	0	0	198	27	0	123	159	0	622	0
4:45 PM		0	74	0	56	0	0	0	0	0	0	223	27	0	126	186	0	692	0
5:00 PM		0	81	3	35	0	0	0	0	0	0	231	45	0	120	181	0	696	2,715
Peak Hour	All	0	312	8	176	0	0	0	0	0	0	883	131	0	494	711	0	2,715	0
	HV	0	8	3	8	0	0	0	0	0	0	14	3	0	13	5	0	54	0
	HV%	-	3%	38%	5%	-	-	-	-	-	-	2%	2%	-	3%	1%	-	2%	0

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	4	0	6	5	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	3	0	6	6	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	6	0	3	3	*12*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	6	0	2	4	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	19	0	17	18	*54*	0	0	0	0	*0*	0	0	0	0	*0*

Three-and-a-Half-Hour Count Summaries

Interval Start	US36 EB Ramp				US36 EB Ramp				Interlocken Loop				Interlocken Loop				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	59	1	30	0	0	0	0	0	0	150	22	0	71	100	0	433	0
2:45 PM	0	46	4	37	0	0	0	0	0	0	138	25	0	65	102	0	417	0
3:00 PM	0	49	2	31	0	0	0	0	0	0	133	24	0	97	121	0	457	0
3:15 PM	0	59	0	35	0	0	0	0	0	0	138	23	0	91	145	0	491	1,798
3:30 PM	0	59	1	37	0	0	0	0	0	0	183	23	0	105	131	0	539	1,904
3:45 PM	0	71	2	26	0	0	0	0	0	0	169	20	0	101	163	0	552	2,039
4:00 PM	0	83	0	43	0	0	0	0	0	0	212	27	0	124	177	0	666	2,248
4:15 PM	**0**	**88**	**4**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**231**	**32**	**0**	**125**	**185**	**0**	**705**	2,462
4:30 PM	**0**	**69**	**1**	**45**	**0**	**0**	**0**	**0**	**0**	**0**	**198**	**27**	**0**	**123**	**159**	**0**	**622**	2,545
4:45 PM	**0**	**74**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**223**	**27**	**0**	**126**	**186**	**0**	**692**	2,685
5:00 PM	**0**	**81**	**3**	**35**	**0**	**0**	**0**	**0**	**0**	**0**	**231**	**45**	**0**	**120**	**181**	**0**	**696**	**2,715**
5:15 PM	0	69	3	46	0	0	0	0	0	0	220	20	0	96	203	0	657	2,667
5:30 PM	0	63	1	58	0	0	0	0	0	0	214	25	0	96	174	0	631	2,676
5:45 PM	0	58	1	39	0	0	0	0	0	0	163	25	0	93	147	0	526	2,510
Count Total	0	928	23	558	0	0	0	0	0	0	2,603	365	0	1,433	2,174	0	8,084	0
Peak Hour All	**0**	**312**	**8**	**176**	**0**	**0**	**0**	**0**	**0**	**0**	**883**	**131**	**0**	**494**	**711**	**0**	**2,715**	**0**
Peak Hour HV	**0**	**8**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**3**	**0**	**13**	**5**	**0**	**54**	**0**
Peak Hour HV%	**-**	**3%**	**38%**	**5%**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**2%**	**-**	**3%**	**1%**	**-**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:30 PM	2	0	3	8	*13*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	5	0	7	8	*20*	0	0	0	0	*0*	0	0	0	0	*0*
3:00 PM	4	0	0	6	*10*	0	0	0	0	*0*	0	1	0	1	*2*
3:15 PM	5	0	2	9	*16*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	5	0	3	5	*13*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	6	0	4	7	*17*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	3	0	7	8	*18*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**4**	**0**	**6**	**5**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**3**	**0**	**6**	**6**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**6**	**0**	**3**	**3**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**6**	**0**	**2**	**4**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	2	0	1	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	2	0	1	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	3	0	1	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	56	0	46	76	*178*	0	0	0	0	*0*	0	1	0	1	*2*
Peak Hour	**19**	**0**	**17**	**18**	***54***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Three-and-a-Half-Hour Count Summaries - Heavy Vehicles

Interval Start	US36 EB Ramp Eastbound				US36 EB Ramp Westbound				Interlocken Loop Northbound				Interlocken Loop Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:30 PM	0	0	0	2	0	0	0	0	0	0	3	0	0	4	4	0	13	0
2:45 PM	0	2	2	1	0	0	0	0	0	0	6	1	0	6	2	0	20	0
3:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	4	2	0	10	0
3:15 PM	0	4	0	1	0	0	0	0	0	0	2	0	0	3	6	0	16	59
3:30 PM	0	2	1	2	0	0	0	0	0	0	3	0	0	2	3	0	13	59
3:45 PM	0	1	2	3	0	0	0	0	0	0	3	1	0	4	3	0	17	56
4:00 PM	0	3	0	0	0	0	0	0	0	0	6	1	0	2	6	0	18	64
4:15 PM	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**4**	**1**	**0**	**15**	63
4:30 PM	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**4**	**2**	**0**	**15**	65
4:45 PM	**0**	**2**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**12**	60
5:00 PM	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**2**	**0**	**12**	**54**
5:15 PM	0	0	1	1	0	0	0	0	0	0	1	0	0	1	1	0	5	44
5:30 PM	0	1	1	0	0	0	0	0	0	0	1	0	0	1	3	0	7	36
5:45 PM	0	2	1	0	0	0	0	0	0	0	1	0	0	0	1	0	5	29
Count Total	0	24	12	20	0	0	0	0	0	0	40	6	0	40	36	0	178	0
Peak Hour	**0**	**8**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**3**	**0**	**13**	**5**	**0**	**54**	**0**

Three-and-a-Half-Hour Count Summaries - Bikes

Interval Start	US36 EB Ramp Eastbound			US36 EB Ramp Westbound			Interlocken Loop Northbound			Interlocken Loop Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

APPENDIX B

TRIP GENERATION REPORTS

Land Use: 520
Elementary School

Description

An elementary school is a public school that typically serves students attending kindergarten through the fifth or sixth grade. An elementary school is usually centrally located in a residential community to facilitate student access. Bus service is commonly provided to students living beyond a specified distance from the school. Middle school/junior high school (Land Use 522), private school (K-8) (Land Use 530), private school (K-12) (Land Use 532), charter elementary school (Land Use 536), and charter school (K-12) (Land Use 538) are related uses.

Additional Data

Elementary school students generally used school buses more than regular transit and were dropped off and picked up more than high school students, who were apt to walk longer distances, ride bicycles, or, in some cases, drive to school. The percentage of students at the sites who were transported to school via bus varied considerably. Some sites experienced higher than average trip rates because many students did not utilize the available school bus service. Due to the varied transit and school bus usage at these sites, it is desirable that future studies report additional detail on the percentage of students who were bused to school and the percentage that were dropped off and picked up.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alabama, Arizona, British Columbia (CAN), California, Connecticut, Florida, Hawaii, Minnesota, Montana, Nevada, New York, Oregon, Texas, Utah, Washinton, and West Virginia.

Source Numbers

186, 383, 390, 395, 533, 536, 572, 579, 583, 609, 611, 612, 613, 632, 707, 852, 856, 858, 866, 877, 878, 896, 940, 1039, 1048, 1067, 1083

Elementary School
(520)

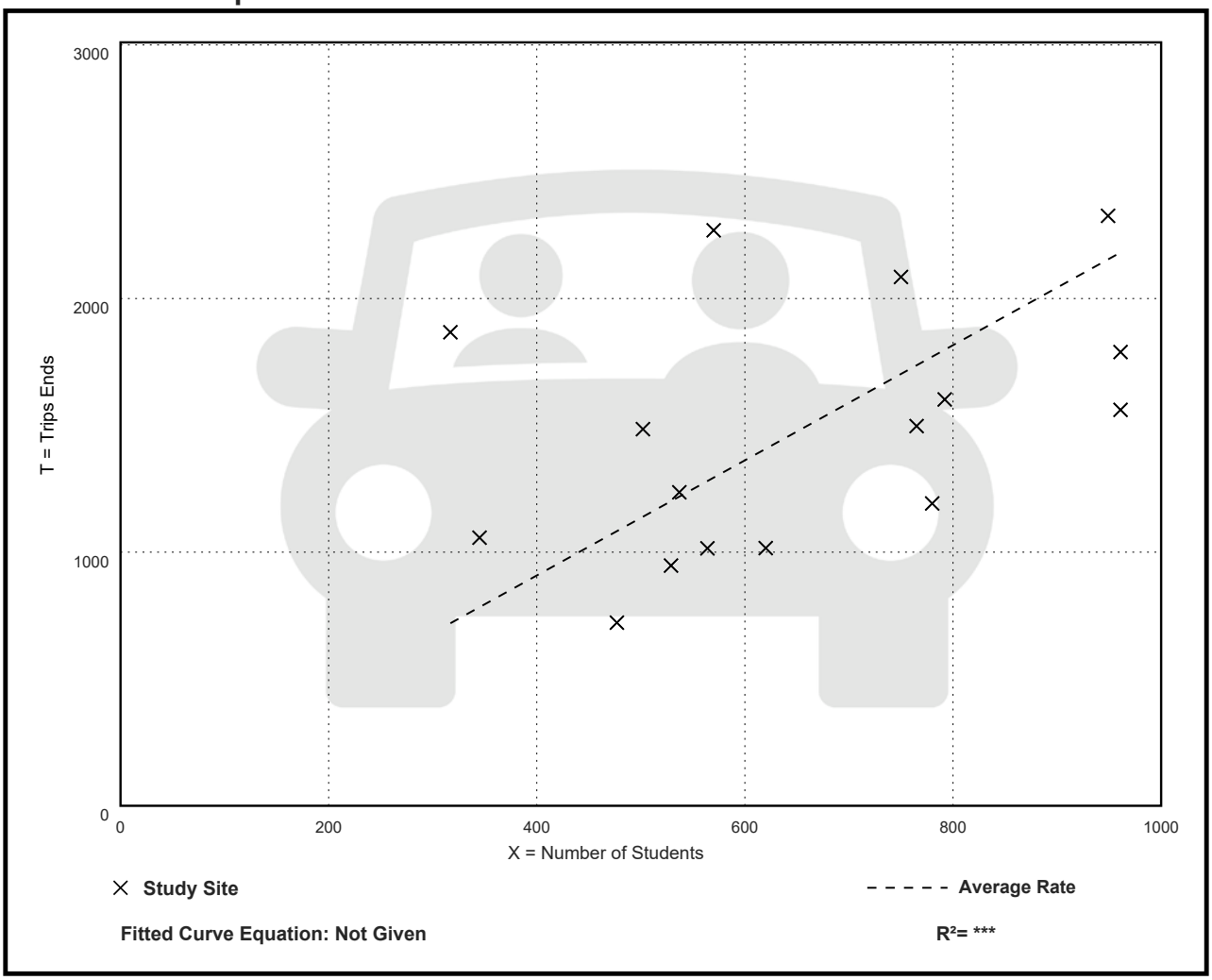
Vehicle Trip Ends vs: Students
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. Num. of Students: 651
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.27	1.51 - 5.89	0.93

Data Plot and Equation



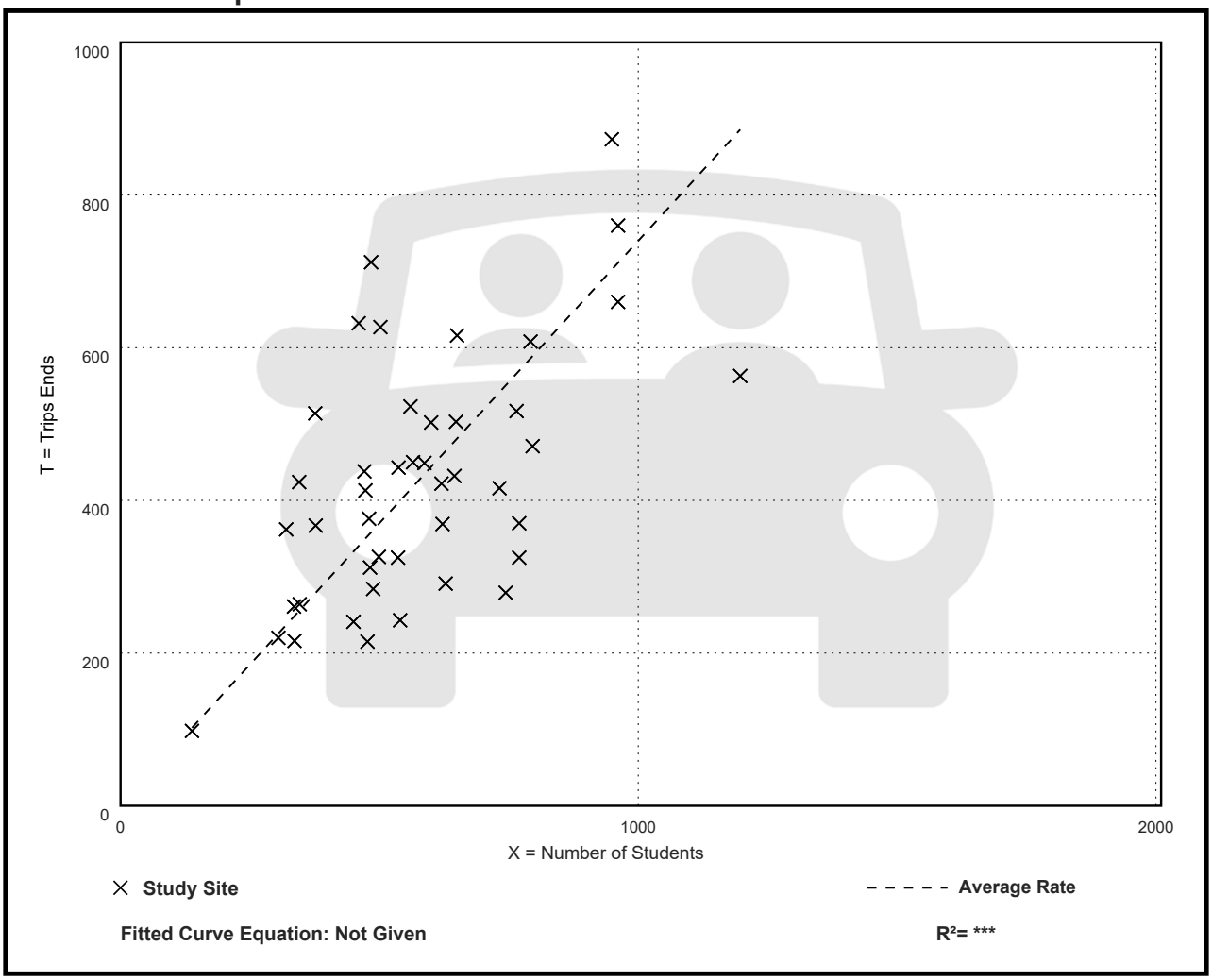
Elementary School
(520)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 44
Avg. Num. of Students: 575
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.74	0.38 - 1.47	0.25

Data Plot and Equation



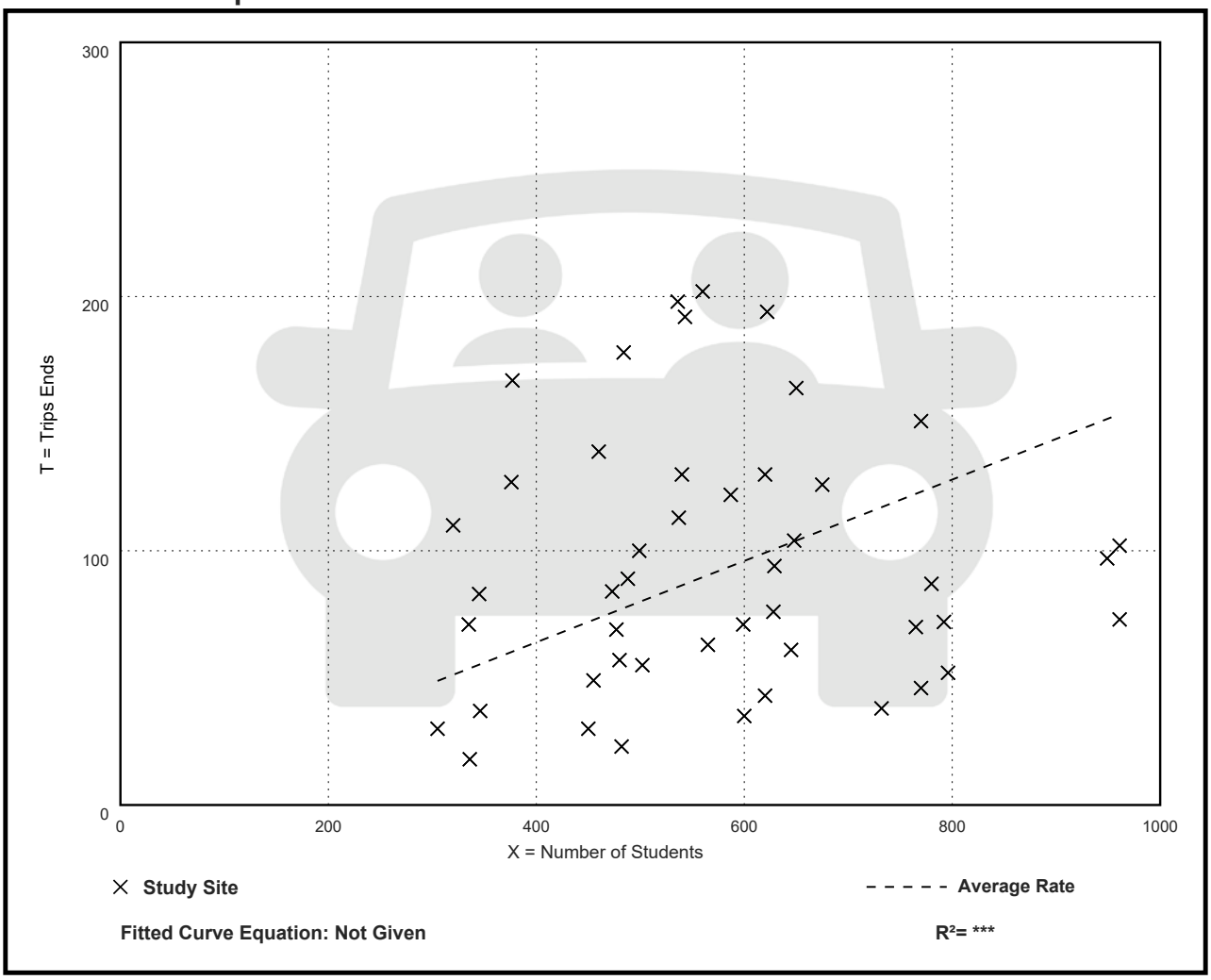
Elementary School
(520)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 47
Avg. Num. of Students: 576
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.16	0.05 - 0.44	0.10

Data Plot and Equation



Land Use 525
High School

Description

A high school is a public school that serves students who have completed middle or junior high school. Middle school/junior high school (Land Use 522), private school (K-12) (Land Use 532), private high school (Land Use (534), and charter school (K-12) (Land Use 538) are related uses.

Additional Data

The trip generation for weekend time periods varied considerably; therefore, caution should be used when applying weekend statistics. Information describing the weekend activities conducted at the high schools was not available.

The percentage of students at the sites who were transported to school via bus varied considerably. Due to the varied transit and school bus usage at these sites, it is desirable that future studies include additional detail on the percentage of students who were bused to school and the percentage who were dropped off and picked up.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), Arizona, California, Connecticut, Delaware, Florida, Minnesota, New Jersey, North Carolina, Oregon, Texas, Vermont, Washington, and West Virginia.

Source Numbers

293, 383, 409, 422, 444, 533, 536, 550, 564, 579, 598, 611, 620, 751, 854, 905, 915, 926, 936, 954, 971, 1026, 1048, 1067, 1083

High School
(525)

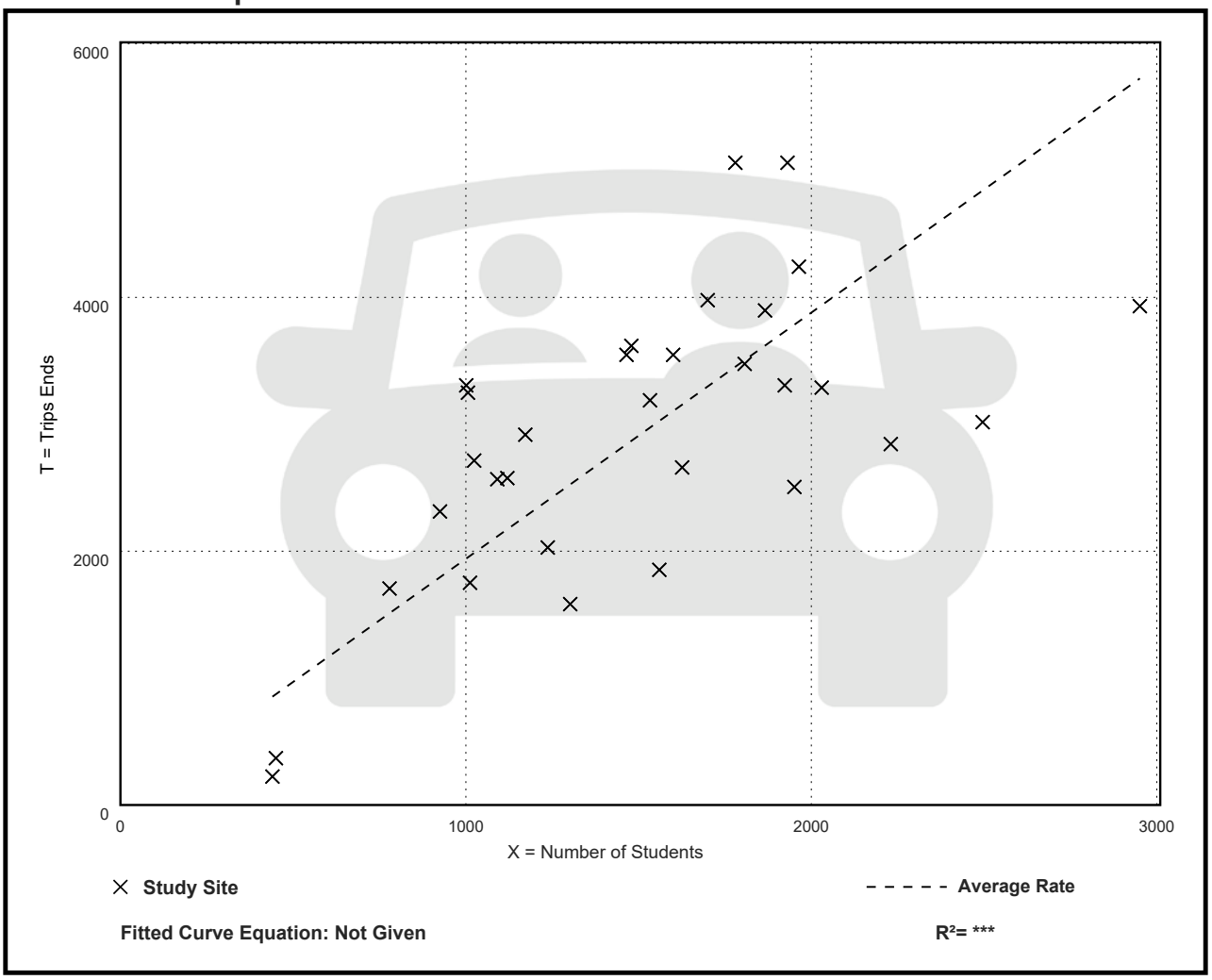
Vehicle Trip Ends vs: Students
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. Num. of Students: 1498
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
1.94	0.51 - 3.30	0.61

Data Plot and Equation



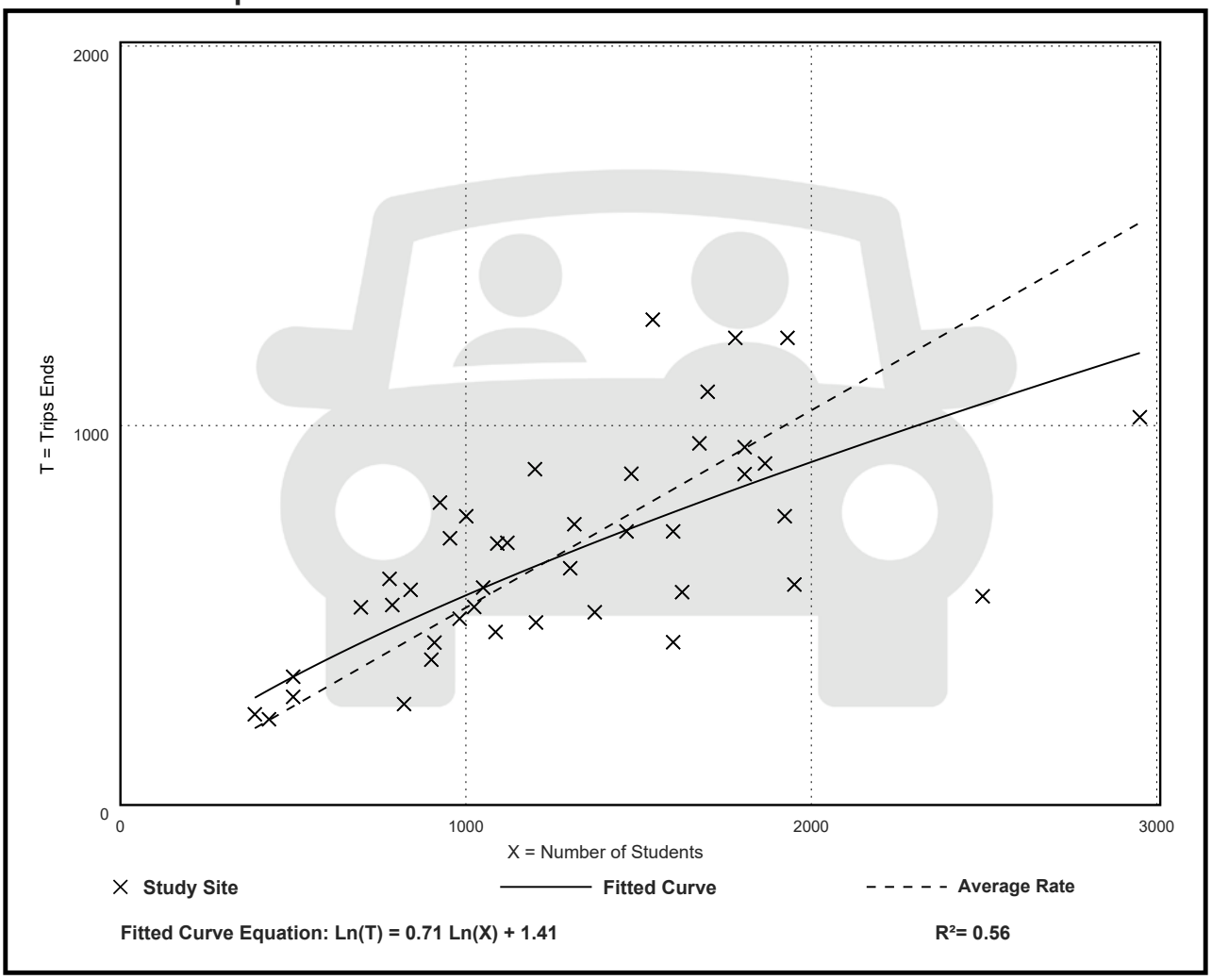
High School
(525)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 42
Avg. Num. of Students: 1295
Directional Distribution: 68% entering, 32% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.52	0.22 - 0.86	0.16

Data Plot and Equation



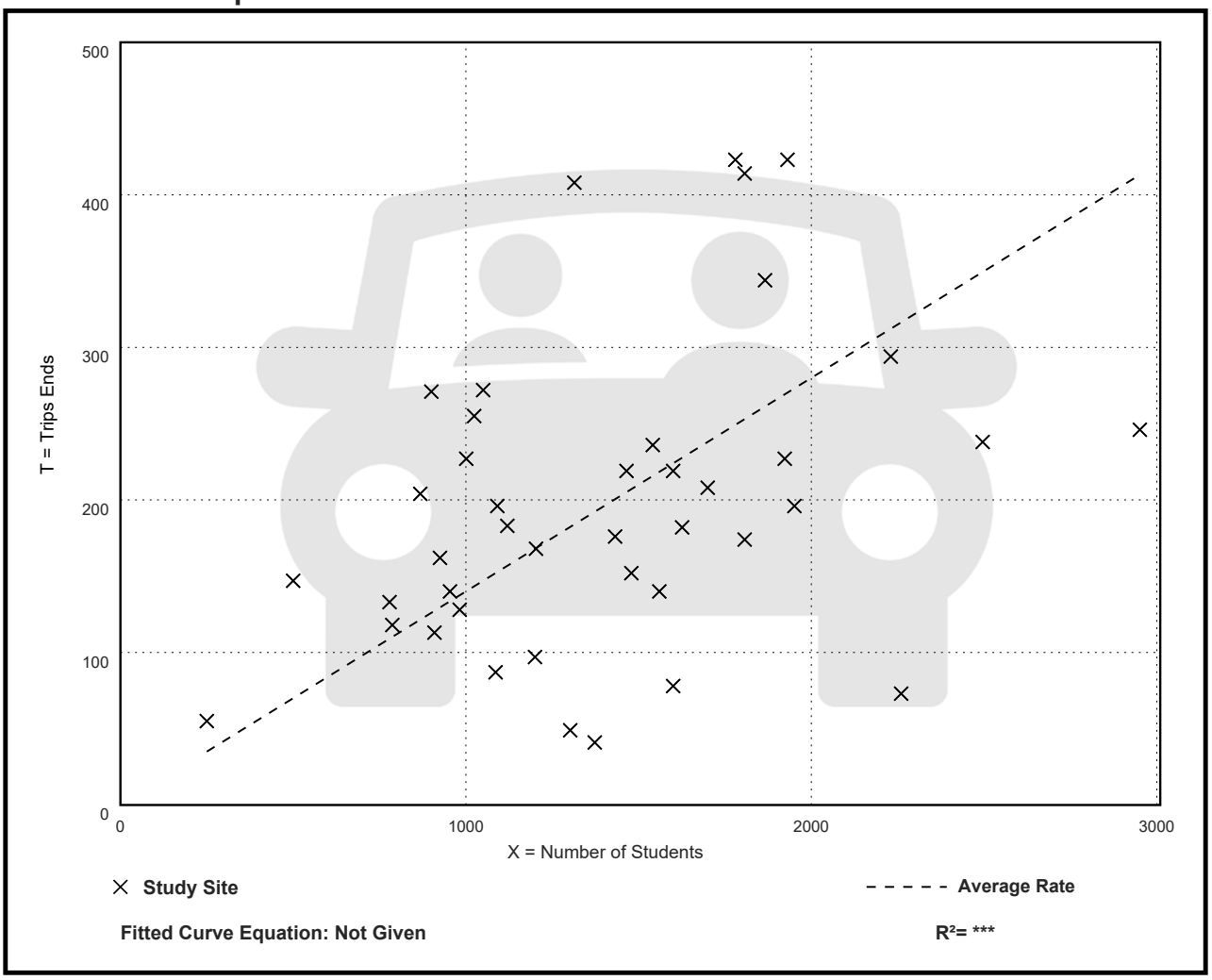
High School
(525)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 41
Avg. Num. of Students: 1405
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.14	0.03 - 0.31	0.07

Data Plot and Equation



Land Use: 610
Hospital

Description

A hospital is any institution where medical or surgical care and overnight accommodations are provided to non-ambulatory and ambulatory patients. In this context, the term “hospital” does not refer to a medical clinic (a facility that provides diagnoses and outpatient care only) or a nursing home (a facility devoted to the care of persons unable to care for themselves), which are covered elsewhere in this report. Clinic (Land Use 630) and free-standing emergency room (Land Use 650) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The average numbers of person trips per vehicle trip at the four general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.6 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.6 during Weekday, AM Peak Hour of Generator
- 1.7 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.7 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Maryland, New Jersey, New York, Pennsylvania, Texas, and Washington.

Source Numbers

112, 186, 253, 262, 423, 429, 533, 573, 591, 601, 630, 719, 749, 878, 901, 904, 908, 909, 971, 1018

Hospital
(610)

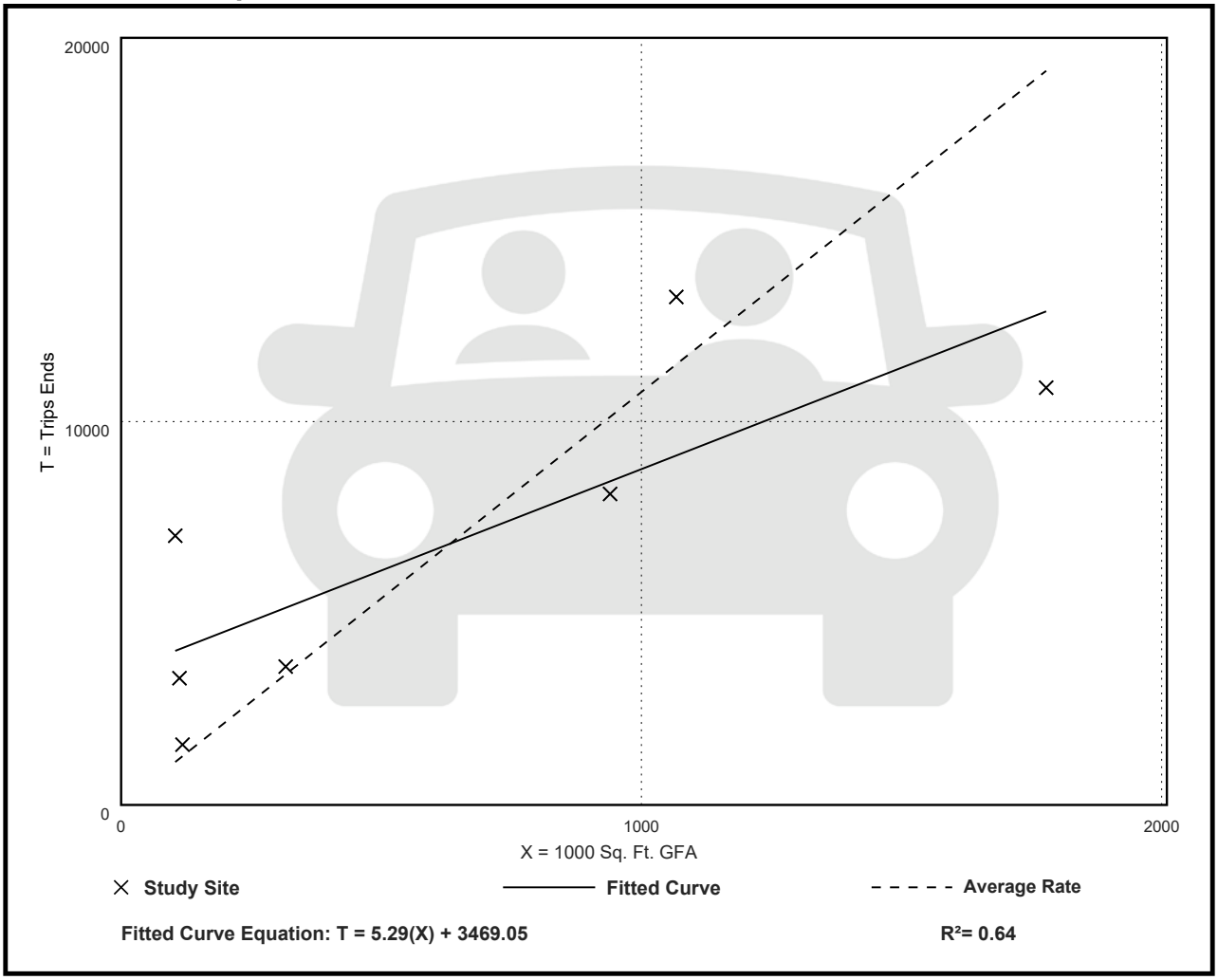
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 7
Avg. 1000 Sq. Ft. GFA: 634
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.77	6.12 - 67.52	10.52

Data Plot and Equation



Fitted Curve Equation: T = 5.29(X) + 3469.05

R^2= 0.64

Hospital
(610)

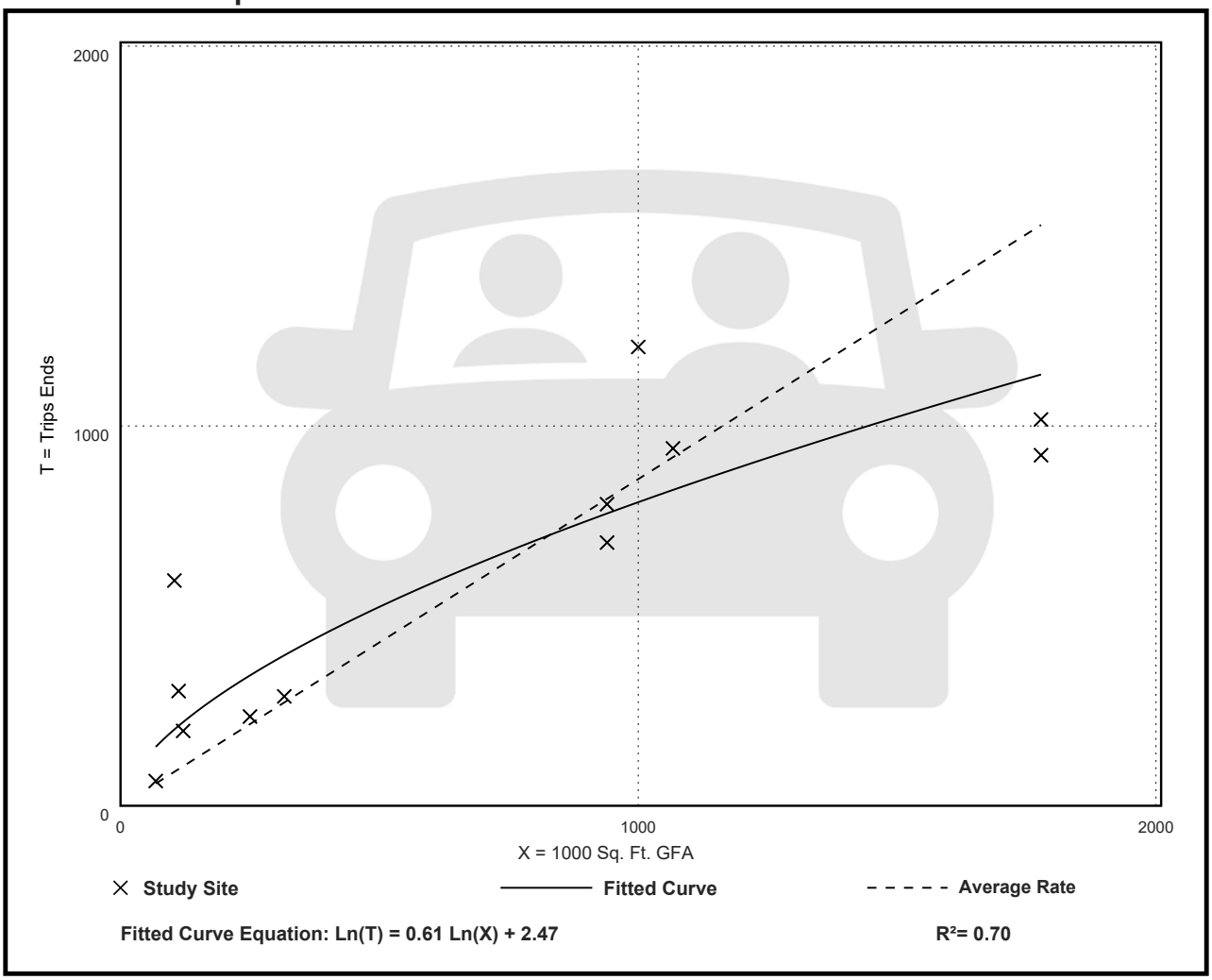
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 706
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.86	0.52 - 5.70	0.66

Data Plot and Equation



Hospital
(610)

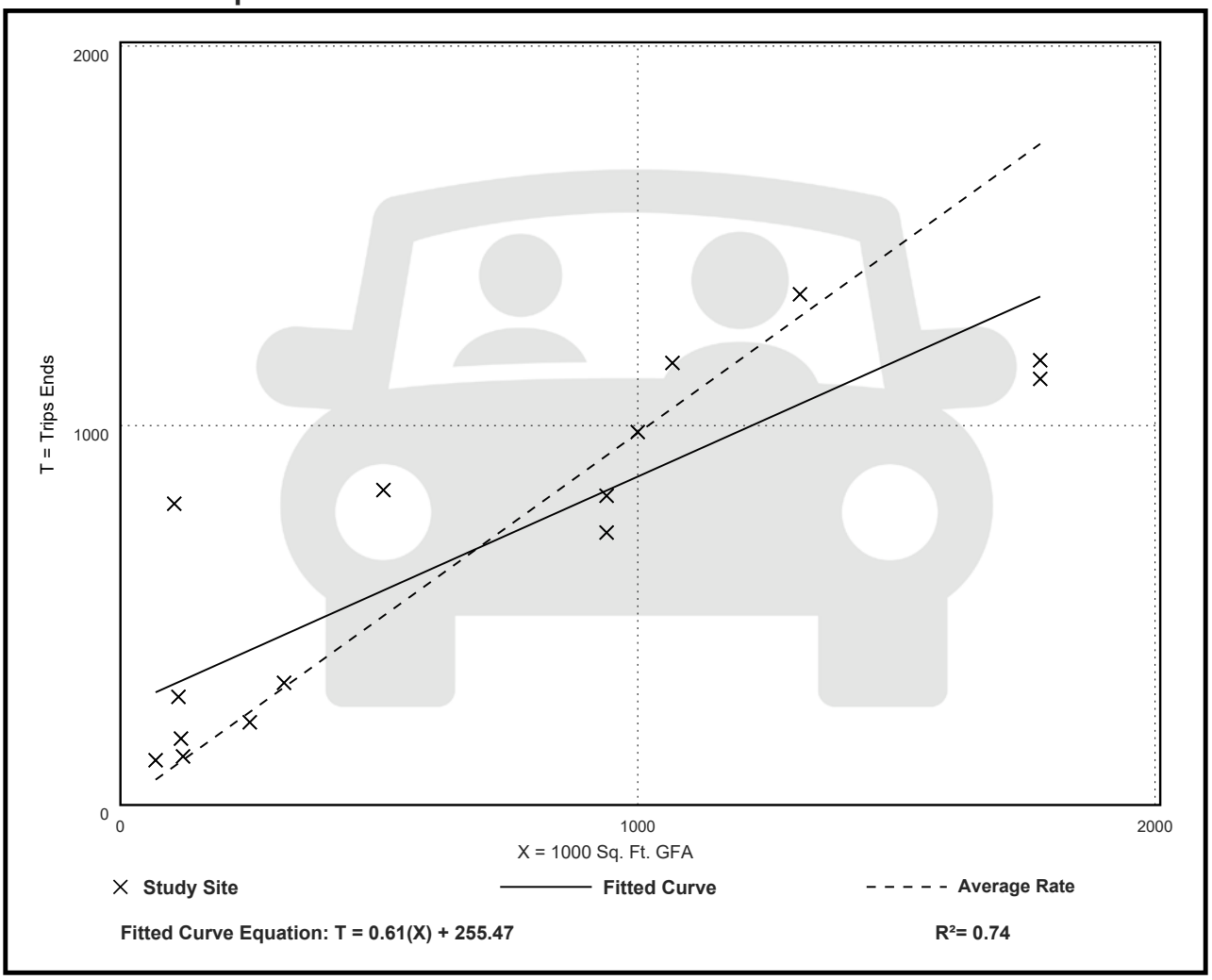
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 15
Avg. 1000 Sq. Ft. GFA: 694
Directional Distribution: 39% entering, 61% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.98	0.63 - 7.63	0.76

Data Plot and Equation



Land Use: 720
Medical-Dental Office Building

Description

A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility. General office building (Land Use 710) and clinic (Land Use 630) are related uses.

Land Use Subcategory

Analysis of medical-dental office building data found that trip generation rates are measurably different for sites located within or adjacent to a hospital campus and sites that are stand-alone. Data plots are presented for these two land use subcategories.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Connecticut, Kentucky, Maryland, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Virginia, Washington, and Wisconsin.

Source Numbers

104, 109, 120, 157, 184, 209, 211, 253, 287, 294, 295, 304, 357, 384, 404, 407, 423, 444, 509, 601, 715, 867, 879, 901, 902, 908, 959, 972

Medical-Dental Office Building - Stand-Alone (720)

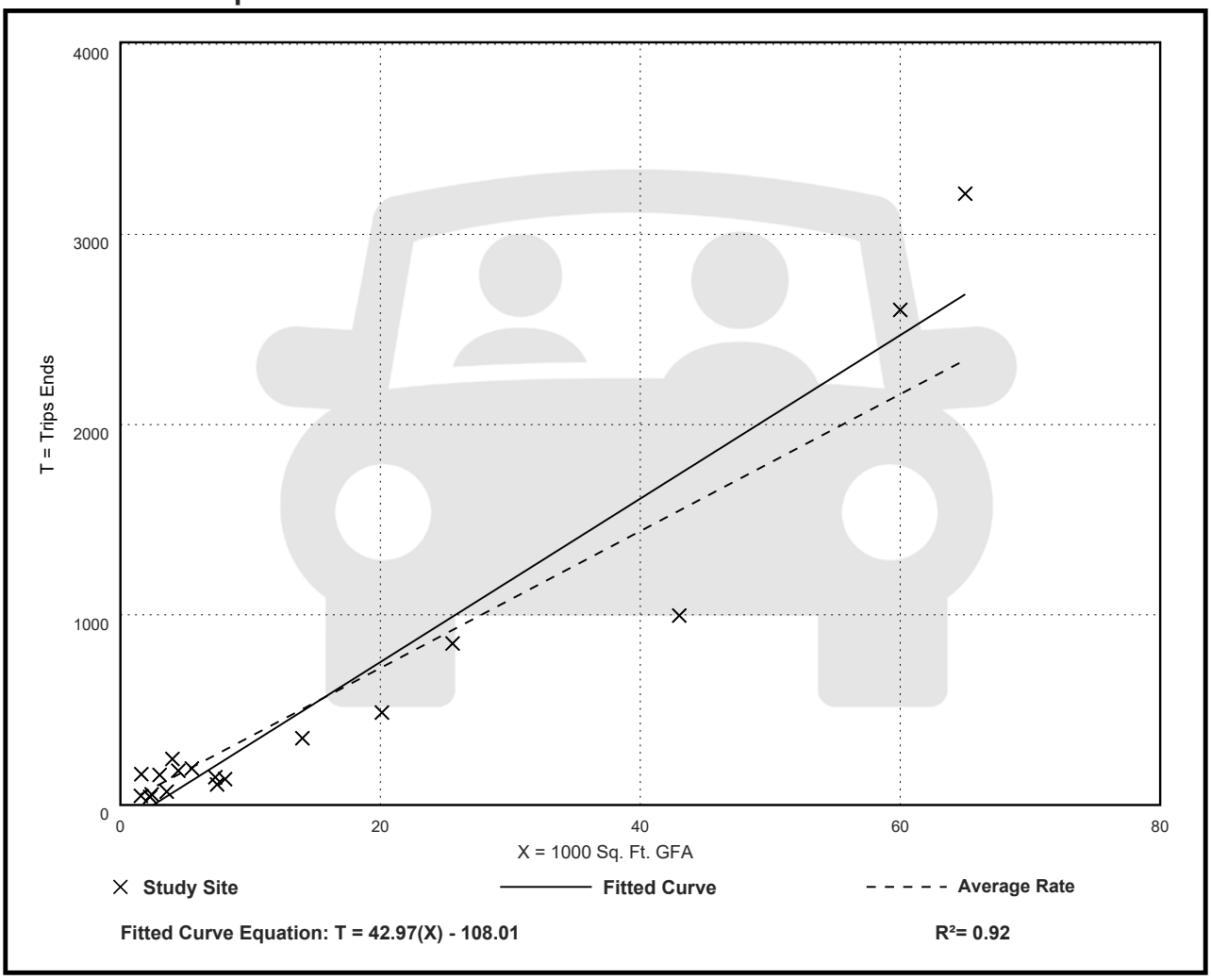
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. 1000 Sq. Ft. GFA: 15
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
36.00	14.52 - 100.75	13.38

Data Plot and Equation



Medical-Dental Office Building - Stand-Alone (720)

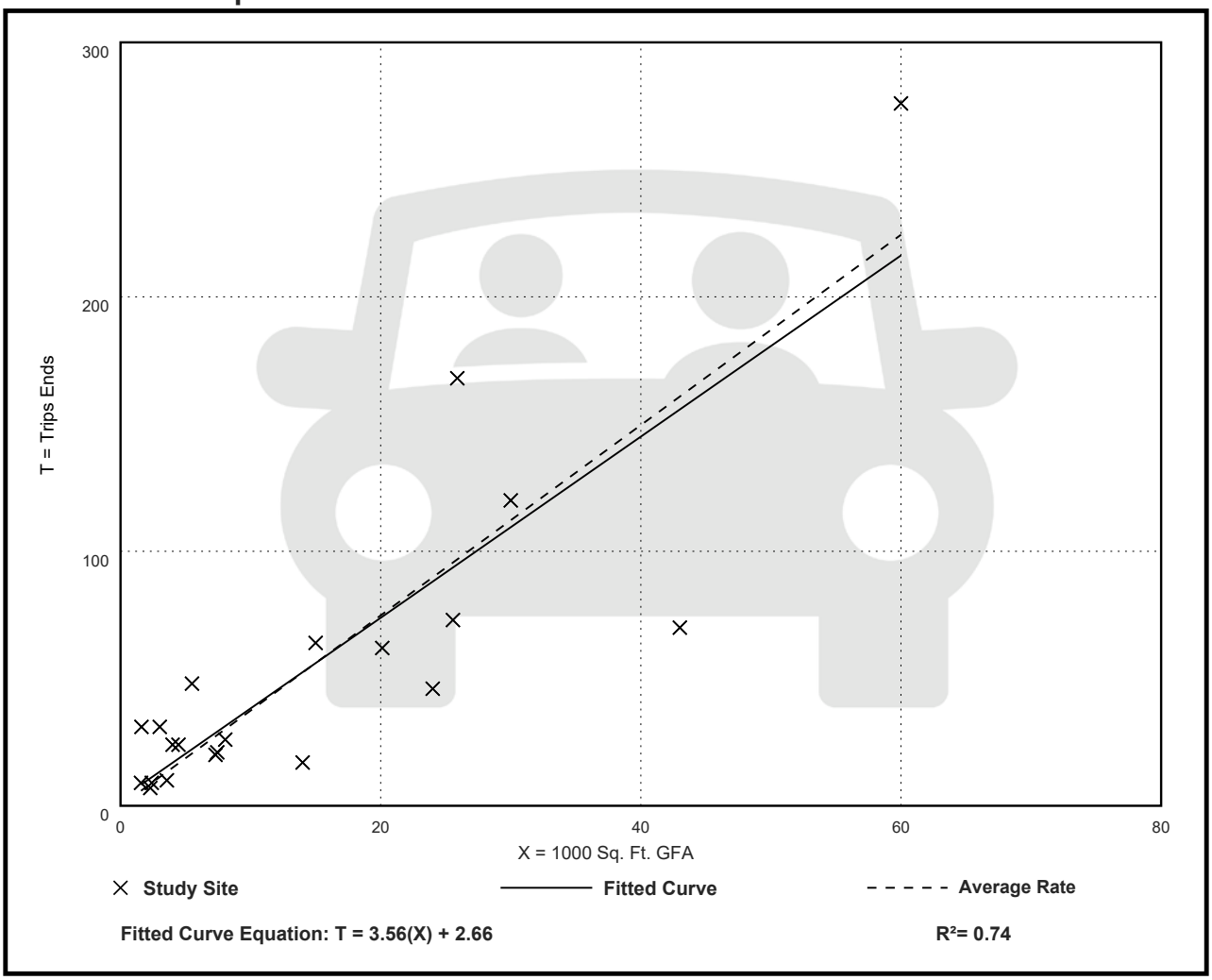
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 21
Avg. 1000 Sq. Ft. GFA: 15
Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.74	1.21 - 19.28	2.14

Data Plot and Equation



Fitted Curve Equation: T = 3.56(X) + 2.66

R^2= 0.74

Medical-Dental Office Building - Stand-Alone (720)

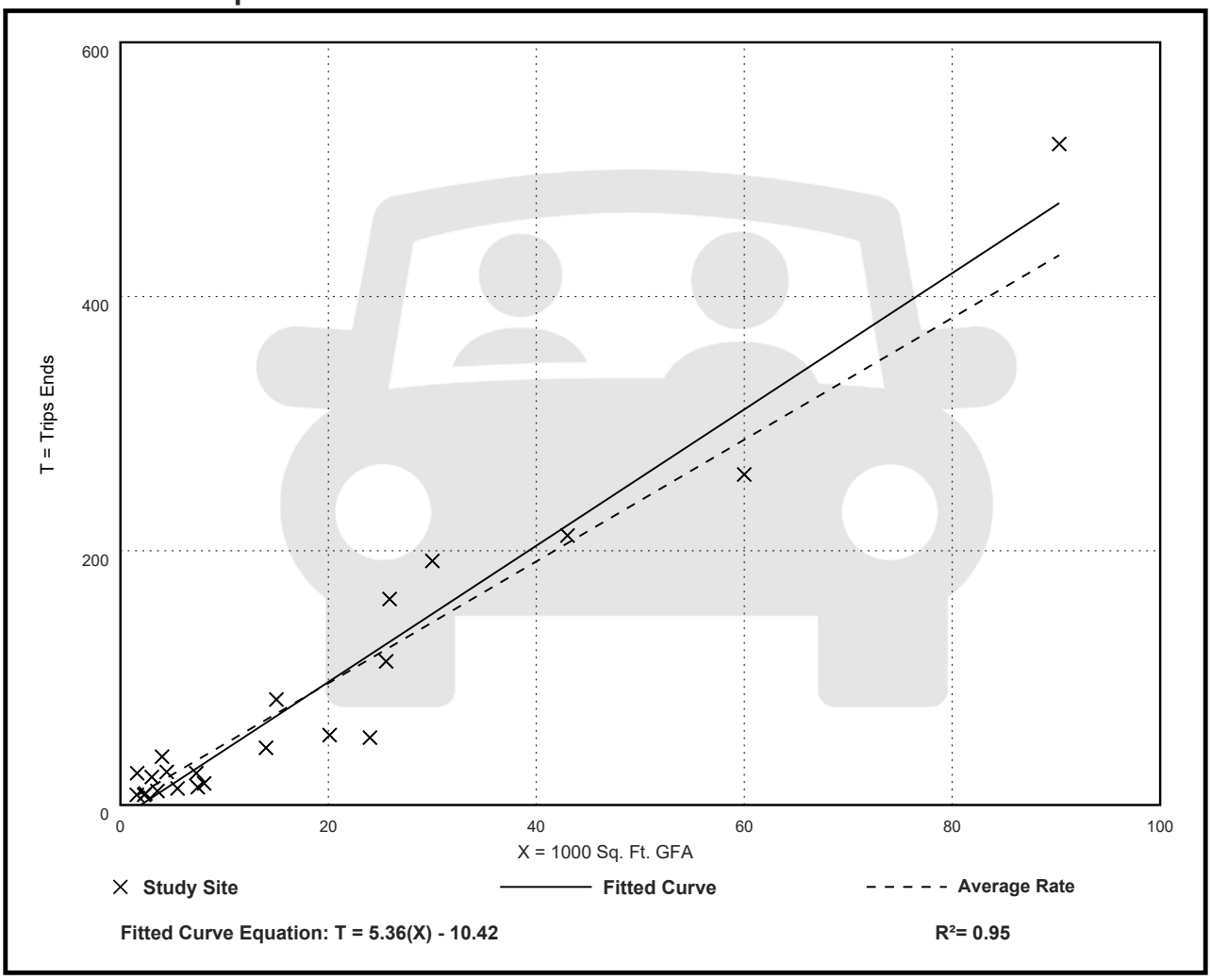
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 18
Directional Distribution: 40% entering, 60% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.79	1.88 - 15.55	1.62

Data Plot and Equation



Fitted Curve Equation: T = 5.36(X) - 10.42

R^2= 0.95

APPENDIX C

DELAY AND LOS SUMMARY TABLES

Delay and LOS Summary Table

AM Peak Period

ID	Intersection	Approach		Year 2023 Existing Conditions		Year 2025 Background Conditions		Year 2025 Project Conditions		Year 2030 Background Conditions		Year 2030 Project Conditions		Year 2040 Background Conditions		Year 2040 Project Conditions		Year 2040 Background with Updates	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	15.0	C	12383.6	F	12083.7	F	29331.5	F	23857.1	F	73892.4	F	58203.5	F	16.6	B
		96th St	NB	0.0	-	1.0	-	0.8	-	1.4	-	0.9	-	1.6	-	0.9	-	8.9	A
		96th St	SB	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	7.8	A
		Total		**0.0**	**-**	**2287.5**	**-**	**2198.5**	**-**	**5544.1**	**-**	**4373.5**	**-**	**12537.6**	**-**	**9525.4**	**-**	**9.8**	**A**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	8.8	A	10.8	B	10.3	B	11.5	B	10.6	B	12.0	B	11.3	B	12.0	B
		Via Varra	WB	36.6	D	36.8	D	36.8	D	36.7	D	36.7	D	36.3	D	36.3	D	36.3	D
		Northwest Pkwy	NB	32.4	C	30.8	C	30.1	C	29.3	C	27.8	C	37.1	D	34.1	C	48.6	D
		Northwest Pkwy	SB	26.3	C	35.8	D	37.3	D	125.0	F	144.0	F	279.9	F	319.1	F	99.2	F
		Total		**24.5**	**C**	**27.0**	**C**	**26.9**	**C**	**55.2**	**E**	**59.7**	**E**	**107.0**	**F**	**116.7**	**F**	**53.8**	**D**
3	Northwest Pkwy & New Access / Via Lata Dr	New Access	EB	N/A	N/A	N/A	N/A	17.1	C	N/A	N/A	28.3	D	N/A	N/A	52.1	F	N/A	N/A
		Via Lata Dr	WB	13.9	B	15.1	C	15.2	C	16.6	C	16.8	C	20.3	C	20.6	C	20.3	C
		Northwest Pkwy	NB	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
		Northwest Pkwy	SB	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
		Total		**0.0**	**-**	**0.0**	**-**	**0.3**	**-**	**0.0**	**-**	**0.8**	**-**	**0.0**	**-**	**1.4**	**-**	**0.0**	**-**
4	Northwest Pkwy & Via Varra / Tape Dr	Tape Dr	EB	25.2	C	12.0	B	23.9	C	17.7	B	65.3	E	25.9	C	97.6	F	32.6	C
		Via Varra	WB	42.5	D	42.5	D	42.5	D	42.3	D	42.3	D	41.8	D	41.8	D	70.8	E
		Northwest Pkwy	NB	15.7	B	26.2	C	26.2	C	78.5	E	78.5	E	152.8	F	152.8	F	47.9	D
		Northwest Pkwy	SB	12.8	B	33.0	C	36.4	D	55.9	E	86.0	F	130.4	F	177.7	F	63.9	E
		Total		**16.6**	**B**	**28.8**	**C**	**31.1**	**C**	**60.4**	**E**	**77.8**	**E**	**122.1**	**F**	**149.8**	**F**	**52.8**	**D**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Off-Ramp	WB	10.3	B	9.4	A	9.4	A	9.3	A	9.3	A	11.1	B	11.1	B	11.1	B
		Northwest Pkwy	NB	4.3	A	4.6	A	4.6	A	5.2	A	5.2	A	8.8	A	8.8	A	8.8	A
		Northwest Pkwy	SB	4.2	A	10.9	B	11.3	B	13.9	B	14.6	B	19.5	B	20.2	C	14.7	B
		Total		**5.8**	**A**	**8.8**	**A**	**8.9**	**A**	**10.1**	**B**	**10.4**	**A**	**14.1**	**B**	**14.5**	**B**	**12.0**	**B**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Off-Ramp	EB	22.3	C	30.5	C	30.5	C	41.8	D	41.8	D	51.4	D	51.4	D	51.4	D
		Northwest Pkwy	NB	13.5	B	17.4	B	17.4	B	21.4	C	21.4	C	25.4	C	25.4	C	25.4	C
		Northwest Pkwy	SB	8.2	A	10.5	B	10.5	B	11.5	B	11.5	B	9.4	A	9.4	A	9.6	A
		Total		**12.1**	**B**	**16.6**	**B**	**16.6**	**B**	**21.4**	**C**	**21.4**	**C**	**23.7**	**C**	**23.7**	**C**	**23.7**	**C**

ID	Intersection	Approach		Year 2023 Existing Conditions		Year 2025 Background Conditions		Year 2025 Project Conditions		Year 2030 Background Conditions		Year 2030 Project Conditions		Year 2040 Background Conditions		Year 2040 Project Conditions		Year 2040 Background with Updates	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	96th St & Disc Dr	Disc Dr	EB	60.4	F	5269.3	F	4962.1	F	14096.5	F	13021.0	F	42035.8	F	35555.9	F	24.2	C
		96th St	NB	0.0	-	0.5	-	0.4	-	0.6	-	0.4	-	0.7	-	0.5	-	6.9	A
		96th St	SB	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	14.2	B
		Total		**0.1**	**-**	**824.7**	**-**	**706.7**	**-**	**3191.9**	**-**	**2610.0**	**-**	**8987.2**	**-**	**6669.6**	**-**	**14.0**	**B**
2	Northwest Pkwy & 96th St / Via Varra	96th St	EB	11.7	B	13.2	B	12.6	B	14.9	B	13.5	B	16.0	B	14.4	B	16.0	B
		Via Varra	WB	30.8	C	30.9	C	30.9	C	30.7	C	30.7	C	30.7	C	30.7	C	30.7	C
		Northwest Pkwy	NB	25.7	C	26.0	C	25.2	C	25.8	C	24,5	C	26.5	C	24.2	C	32.3	C
		Northwest Pkwy	SB	22.5	C	23.9	C	24.1	C	27.9	C	27.9	C	35.6	D	36.9	D	29.7	C
		Total		**20.4**	**C**	**21.4**	**C**	**21.0**	**C**	**22.6**	**C**	**21.8**	**C**	**24.7**	**C**	**23.6**	**C**	**25.9**	**C**
3	Northwest Pkwy & New Access / Via Lata Dr	New Access	EB	N/A	N/A	N/A	N/A	23.9	C	N/A	N/A	171.1	F	N/A	N/A	480.5	F	N/A	N/A
		Via Lata Dr	WB	16.0	C	17.7	C	17.9	C	21.2	C	22.2	C	30.0	D	31.8	D	30.0	D
		Northwest Pkwy	NB	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
		Northwest Pkwy	SB	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
		Total		**0.2**	**-**	**0.2**	**-**	**1.1**	**-**	**0.2**	**-**	**13.7**	**-**	**0.3**	**-**	**36.9**	**-**	**0.3**	**-**
4	Northwest Pkwy & Via Varra / Tape Dr	Tape Dr	EB	19.4	B	11.9	B	21.3	C	21.9	C	88.1	F	41.8	D	153.1	F	23.5	C
		Via Varra	WB	43.1	D	43.1	D	43.1	D	43.5	D	43.5	D	45.0	D	45.0	D	51.8	D
		Northwest Pkwy	NB	5.7	A	11.4	B	11.8	B	18.2	B	18.2	B	26.4	C	26.4	C	51.6	D
		Northwest Pkwy	SB	16.5	B	25.5	C	29.1	C	32.9	C	57.3	E	56.8	E	141.5	F	29.7	C
		Total		**13.1**	**B**	**18.6**	**B**	**21.4**	**C**	**25.1**	**C**	**44.9**	**D**	**40.4**	**D**	**89.5**	**F**	**38.7**	**D**
5	Northwest Pkwy & US 36 WB Ramps	US 36 Off-Ramp	WB	14.1	B	13.2	B	13.2	B	12.4	B	12.4	B	12.8	B	12.8	B	12.8	B
		Northwest Pkwy	NB	3.7	A	3.1	A	3.1	A	4.6	A	4.6	A	8.2	A	8.2	A	8.2	A
		Northwest Pkwy	SB	7.3	A	13.5	B	14.3	B	15.1	B	16.4	B	18.9	B	20.0	C	12.5	B
		Total		**7.1**	**A**	**9.5**	**A**	**9.8**	**A**	**10.9**	**B**	**11.5**	**B**	**14.0**	**B**	**14.6**	**B**	**11.0**	**B**
6	Northwest Pkwy & US 36 EB Ramps	US 36 Off-Ramp	EB	32.5	C	37.9	D	37.9	D	51.3	D	51.3	D	82.2	F	82.2	F	82.2	F
		Northwest Pkwy	NB	16.3	B	19.2	B	19.2	B	22.6	C	22.6	C	29.3	C	29.3	C	29.3	C
		Northwest Pkwy	SB	19.9	B	29.4	C	30.8	C	61.4	E	61.8	E	108.7	F	109.0	F	107.1	F
		Total		**20.8**	**C**	**27.2**	**C**	**27.9**	**C**	**46.1**	**D**	**46.3**	**D**	**76.3**	**E**	**76.4**	**E**	**75.5**	**E**

APPENDIX D

SYNCHRO ANALYSIS REPORTS

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	1	1317	815	1
Future Vol, veh/h	0	1	1	1317	815	1
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	2	1	1480	849	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2332	850	850	0	-	0
Stage 1	850	-	-	-	-	-
Stage 2	1482	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	41	363	793	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	41	363	793	-	-	-
Mov Cap-2 Maneuver	41	-	-	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	210	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	793	-	363	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	9.5	-	15	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	91	644	42	124	30	1	732	230	16	35	560
Future Volume (vph)	48	91	644	42	124	30	1	732	230	16	35	560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	52	99	700	51	149	36	1	841	264	18	41	651
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	99	700	51	149	36	0	842	264	18	41	651
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	6.9	6.9	100.0	9.6	9.6	100.0		29.3	58.1	100.0	4.4	32.2
Effective Green, g (s)	6.9	6.9	100.0	9.6	9.6	100.0		29.3	58.1	100.0	4.4	32.2
Actuated g/C Ratio	0.07	0.07	1.00	0.10	0.10	1.00		0.29	0.58	1.00	0.04	0.32
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	234	241	1568	326	336	1568		1005	2056	1583	149	1128
v/s Ratio Prot	0.02	0.03		0.02	0.04			c0.25	0.07		0.01	c0.19
v/s Ratio Perm			c0.45			0.02				0.01		
v/c Ratio	0.22	0.41	0.45	0.16	0.44	0.02		0.84	0.13	0.01	0.28	0.58
Uniform Delay, d1	44.0	44.6	0.0	41.5	42.7	0.0		33.1	9.5	0.0	46.3	28.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.01	1.56	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.1	0.9	0.2	0.9	0.0		5.2	0.1	0.0	1.0	2.2
Delay (s)	44.5	45.7	0.9	41.7	43.6	0.0		38.6	14.9	0.0	47.3	30.4
Level of Service	D	D	A	D	D	A		D	B	A	D	C
Approach Delay (s)		8.8			36.6				32.4			26.3
Approach LOS		A			D				C			C

Intersection Summary			
HCM 2000 Control Delay	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	114
Future Volume (vph)	114
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	133
RTOR Reduction (vph)	0
Lane Group Flow (vph)	133
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.08
v/c Ratio	0.08
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1207	43	0	1202
Future Vol, veh/h	0	2	1207	43	0	1202
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	91	91	94	94
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	4	1326	47	0	1279

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	663	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	409	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	409	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	409	-
HCM Lane V/C Ratio	-	0.01	-
HCM Control Delay (s)	-	13.9	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	2	184	1	48	0	1142	182	54	1310	2
Future Volume (vph)	2	0	2	184	1	48	0	1142	182	54	1310	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0		6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00		0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568		3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568		3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	6	0	6	204	1	53	0	1328	212	56	1365	2
RTOR Reduction (vph)	0	0	0	0	0	47	0	0	86	0	0	0
Lane Group Flow (vph)	6	0	6	204	1	6	0	1328	126	56	1365	2
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	1.2		100.0	11.3	11.3	11.3		59.5	59.5	6.0	69.5	100.0
Effective Green, g (s)	1.2		100.0	11.3	11.3	11.3		59.5	59.5	6.0	69.5	100.0
Actuated g/C Ratio	0.01		1.00	0.11	0.11	0.11		0.60	0.60	0.06	0.70	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0		6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	42		1615	384	208	177		2085	932	204	2435	1568
v/s Ratio Prot	c0.00			c0.06	0.00			c0.38		0.02	c0.39	
v/s Ratio Perm			0.00			0.00			0.08			0.00
v/c Ratio	0.14		0.00	0.53	0.00	0.03		0.64	0.14	0.27	0.56	0.00
Uniform Delay, d1	48.9		0.0	41.9	39.4	39.5		13.2	8.9	44.9	7.6	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00		1.06	1.92	0.82	1.43	1.00
Incremental Delay, d2	1.6		0.0	1.4	0.0	0.1		1.5	0.3	0.7	0.9	0.0
Delay (s)	50.5		0.0	43.3	39.4	39.6		15.5	17.4	37.6	11.8	0.0
Level of Service	D		A	D	D	D		B	B	D	B	A
Approach Delay (s)		25.2			42.5			15.7			12.8	
Approach LOS		C			D			B			B	

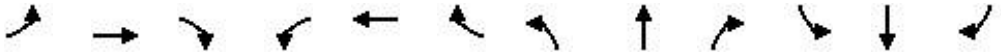
Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	151	9	572	2	186	568	0	0	959
Future Volume (vph)	0	0	0	151	9	572	2	186	568	0	0	959
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1678	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.21	1.00			1.00
Satd. Flow (perm)				1665	1678	1568		396	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	172	10	650	2	194	592	0	0	1102
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	91	91	650	0	196	592	0	0	1102
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				10.8	10.8	100.0		77.2	77.2			63.8
Effective Green, g (s)				10.8	10.8	100.0		77.2	77.2			63.8
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.64
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				179	181	1568		421	2732			3212
v/s Ratio Prot								0.04	0.17			0.22
v/s Ratio Perm				0.05	0.05	c0.41		c0.32				
v/c Ratio				0.51	0.50	0.41		0.47	0.22			0.34
Uniform Delay, d1				42.1	42.1	0.0		3.7	3.1			8.4
Progression Factor				1.00	1.00	1.00		3.09	0.47			0.66
Incremental Delay, d2				2.3	2.2	0.8		0.8	0.2			0.3
Delay (s)				44.4	44.3	0.8		12.2	1.7			5.8
Level of Service				D	D	A		B	A			A
Approach Delay (s)		0.0			10.3				4.3			4.2
Approach LOS		A			B				A			A

Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	404
Future Volume (vph)	404
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	464
RTOR Reduction (vph)	0
Lane Group Flow (vph)	464
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.30
v/c Ratio	0.30
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	0.4
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	10	167	0	0	0	0	607	49	273	845	0
Future Volume (vph)	157	10	167	0	0	0	0	607	49	273	845	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1662	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1662	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	171	11	182	0	0	0	0	667	54	290	899	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	91	91	182	0	0	0	0	667	54	290	899	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	10.8	10.8	100.0					52.2	100.0	20.0	77.2	
Effective Green, g (s)	10.8	10.8	100.0					52.2	100.0	20.0	77.2	
Actuated g/C Ratio	0.11	0.11	1.00					0.52	1.00	0.20	0.77	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	178	179	1553					1847	1583	680	2705	
v/s Ratio Prot								c0.19		c0.09	0.26	
v/s Ratio Perm	c0.06	0.05	0.12						0.03			
v/c Ratio	0.51	0.51	0.12					0.36	0.03	0.43	0.33	
Uniform Delay, d1	42.1	42.1	0.0					14.1	0.0	35.0	3.5	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.88	0.11	
Incremental Delay, d2	2.5	2.3	0.2					0.5	0.0	0.4	0.3	
Delay (s)	44.6	44.4	0.2					14.6	0.0	31.4	0.7	
Level of Service	D	D	A					B	A	C	A	
Approach Delay (s)		22.3			0.0			13.5			8.2	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	0	928	1260	2
Future Vol, veh/h	1	1	0	928	1260	2
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	2	2	0	987	1326	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2314	1327	1328	0	-	0
Stage 1	1327	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	42	192	523	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	42	192	523	-	-	-
Mov Cap-2 Maneuver	42	-	-	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	364	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	60.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	523	-	69	-	-
HCM Lane V/C Ratio	-	-	0.058	-	-
HCM Control Delay (s)	0	-	60.4	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	109	155	791	16	115	54	3	625	474	43	24	355
Future Volume (vph)	109	155	791	16	115	54	3	625	474	43	24	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	112	160	815	19	139	65	3	638	484	44	28	413
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	112	160	815	19	139	65	0	641	484	44	28	413
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	9.8	9.8	100.0	9.2	9.2	100.0		23.5	55.9	100.0	4.1	35.5
Effective Green, g (s)	9.8	9.8	100.0	9.2	9.2	100.0		23.5	55.9	100.0	4.1	35.5
Actuated g/C Ratio	0.10	0.10	1.00	0.09	0.09	1.00		0.24	0.56	1.00	0.04	0.36
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	339	350	1599	318	328	1599		814	1997	1599	142	1268
v/s Ratio Prot	0.03	0.04		0.01	0.04			c0.18	0.14		0.01	0.12
v/s Ratio Perm			c0.51			0.04				0.03		
v/c Ratio	0.33	0.46	0.51	0.06	0.42	0.04		0.79	0.24	0.03	0.20	0.33
Uniform Delay, d1	42.0	42.6	0.0	41.5	42.9	0.0		35.9	11.2	0.0	46.4	23.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.79	1.64	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.9	1.2	0.1	0.9	0.0		4.6	0.3	0.0	0.7	0.7
Delay (s)	42.6	43.5	1.2	41.5	43.8	0.0		32.8	18.7	0.0	47.0	24.2
Level of Service	D	D	A	D	D	A		C	B	A	D	C
Approach Delay (s)		11.7			30.8				25.7			22.5
Approach LOS		B			C				C			C

Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	53
Future Volume (vph)	53
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	62
RTOR Reduction (vph)	0
Lane Group Flow (vph)	62
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.04
v/c Ratio	0.04
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	28	1437	13	0	1365
Future Vol, veh/h	0	28	1437	13	0	1365
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	96	96	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	32	1497	14	0	1468

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	749	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	359	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	359	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	359	-
HCM Lane V/C Ratio	-	0.089	-
HCM Control Delay (s)	-	16	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	4	175	2	43	2	1254	172	24	1210	2
Future Volume (vph)	0	2	4	175	2	43	2	1254	172	24	1210	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor		1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	0	3	5	182	2	45	2	1348	185	25	1260	2
RTOR Reduction (vph)	0	0	0	0	0	40	0	0	67	0	0	0
Lane Group Flow (vph)	0	3	5	182	2	5	2	1348	118	25	1260	2
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)		1.2	100.0	10.2	10.2	10.2	1.2	63.8	63.8	2.8	65.4	100.0
Effective Green, g (s)		1.2	100.0	10.2	10.2	10.2	1.2	63.8	63.8	2.8	65.4	100.0
Actuated g/C Ratio		0.01	1.00	0.10	0.10	0.10	0.01	0.64	0.64	0.03	0.65	1.00
Clearance Time (s)		6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		22	1615	353	191	163	41	2280	1020	96	2314	1583
v/s Ratio Prot		c0.00		c0.05	0.00		0.00	c0.38		c0.01	0.36	
v/s Ratio Perm			c0.00			0.00			0.07			0.00
v/c Ratio		0.14	0.00	0.52	0.01	0.03	0.05	0.59	0.12	0.26	0.54	0.00
Uniform Delay, d1		48.9	0.0	42.6	40.4	40.4	48.8	10.5	7.1	47.6	9.3	0.0
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.39	0.49	0.11	0.87	1.63	1.00
Incremental Delay, d2		2.8	0.0	1.3	0.0	0.1	0.5	1.1	0.2	1.4	0.9	0.0
Delay (s)		51.7	0.0	43.8	40.4	40.5	68.2	6.2	1.0	42.7	16.0	0.0
Level of Service		D	A	D	D	D	E	A	A	D	B	A
Approach Delay (s)		19.4			43.1			5.7			16.5	
Approach LOS		B			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	163	3	366	2	180	1010	0	0	1051
Future Volume (vph)	0	0	0	163	3	366	2	180	1010	0	0	1051
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1705	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.22	1.00			1.00
Satd. Flow (perm)				1698	1705	1599		406	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	170	3	381	2	189	1063	0	0	1084
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	87	86	381	0	191	1063	0	0	1084
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				10.4	10.4	100.0		77.6	77.6			64.0
Effective Green, g (s)				10.4	10.4	100.0		77.6	77.6			64.0
Actuated g/C Ratio				0.10	0.10	1.00		0.78	0.78			0.64
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				176	177	1599		432	2746			3254
v/s Ratio Prot								0.04	c0.30			0.21
v/s Ratio Perm				c0.05	0.05	0.24		c0.30				
v/c Ratio				0.49	0.49	0.24		0.44	0.39			0.33
Uniform Delay, d1				42.3	42.3	0.0		3.5	3.6			8.2
Progression Factor				1.00	1.00	1.00		0.67	0.98			1.05
Incremental Delay, d2				2.2	2.1	0.4		0.6	0.3			0.2
Delay (s)				44.5	44.4	0.4		3.0	3.9			8.9
Level of Service				D	D	A		A	A			A
Approach Delay (s)		0.0			14.1				3.7			7.3
Approach LOS		A			B				A			A

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	232
Future Volume (vph)	232
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	239
RTOR Reduction (vph)	0
Lane Group Flow (vph)	239
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.15
v/c Ratio	0.15
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	312	8	176	0	0	0	0	883	131	494	711	0
Future Volume (vph)	312	8	176	0	0	0	0	883	131	494	711	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1657	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1657	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	332	9	187	0	0	0	0	960	142	509	733	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	169	172	187	0	0	0	0	960	142	509	733	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	14.5	14.5	100.0					49.5	100.0	19.0	73.5	
Effective Green, g (s)	14.5	14.5	100.0					49.5	100.0	19.0	73.5	
Actuated g/C Ratio	0.14	0.14	1.00					0.50	1.00	0.19	0.74	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	239	240	1553					1751	1583	652	2601	
v/s Ratio Prot								c0.27		c0.15	0.21	
v/s Ratio Perm	0.10	0.10	0.12						0.09			
v/c Ratio	0.71	0.72	0.12					0.55	0.09	0.78	0.28	
Uniform Delay, d1	40.7	40.8	0.0					17.5	0.0	38.5	4.4	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.83	1.60	
Incremental Delay, d2	9.2	9.8	0.2					1.2	0.1	5.8	0.3	
Delay (s)	49.9	50.6	0.2					18.7	0.1	37.9	7.3	
Level of Service	D	D	A					B	A	D	A	
Approach Delay (s)		32.5			0.0			16.3			19.9	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	2287.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	219	115	98	1288	848	488
Future Vol, veh/h	219	115	98	1288	848	488
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	438	230	110	1447	883	508

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2804	1137	1391	0	-	0
Stage 1	1137	-	-	-	-	-
Stage 2	1667	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 21	248	495	-	-	-
Stage 1	~ 309	-	-	-	-	-
Stage 2	~ 170	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 16	248	495	-	-	-
Mov Cap-2 Maneuver	~ 16	-	-	-	-	-
Stage 1	~ 240	-	-	-	-	-
Stage 2	~ 170	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 12383.6	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	495	-	24	-	-
HCM Lane V/C Ratio	0.222	-	-27.833	-	-
HCM Control Delay (s)	14.3	-	$ 12383.6	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.8	-	83.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	115	95	719	54	129	31	1	810	263	17	36	696
Future Volume (vph)	115	95	719	54	129	31	1	810	263	17	36	696
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	125	103	782	65	155	37	1	931	302	20	42	809
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	125	103	782	65	155	37	0	932	302	20	42	809
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	8.7	8.7	100.0	9.8	9.8	100.0		31.7	56.1	100.0	4.4	27.8
Effective Green, g (s)	8.7	8.7	100.0	9.8	9.8	100.0		31.7	56.1	100.0	4.4	27.8
Actuated g/C Ratio	0.09	0.09	1.00	0.10	0.10	1.00		0.32	0.56	1.00	0.04	0.28
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	295	304	1568	333	343	1568		1088	1985	1583	149	974
v/s Ratio Prot	0.04	0.03		0.02	0.04			c0.27	0.09		0.01	c0.23
v/s Ratio Perm			c0.50			0.02				0.01		
v/c Ratio	0.42	0.34	0.50	0.20	0.45	0.02		0.86	0.15	0.01	0.28	0.83
Uniform Delay, d1	43.3	42.9	0.0	41.5	42.6	0.0		32.0	10.5	0.0	46.3	33.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.93	2.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	0.7	1.1	0.3	0.9	0.0		5.0	0.1	0.0	1.0	8.2
Delay (s)	44.3	43.6	1.1	41.8	43.5	0.0		34.6	21.2	0.0	47.3	42.1
Level of Service	D	D	A	D	D	A		C	C	A	D	D
Approach Delay (s)		10.8			36.8				30.8			35.8
Approach LOS		B			D				C			D

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	134
Future Volume (vph)	134
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	156
RTOR Reduction (vph)	0
Lane Group Flow (vph)	156
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.10
v/c Ratio	0.10
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1361	45	0	1413
Future Vol, veh/h	0	2	1361	45	0	1413
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	91	91	94	94
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	4	1496	49	0	1503

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	748	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	359	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	359	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	359	-
HCM Lane V/C Ratio	-	0.011	-
HCM Control Delay (s)	-	15.1	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	0	81	191	1	50	258	1271	189	56	1412	115
Future Volume (vph)	26	0	81	191	1	50	258	1271	189	56	1412	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	79	0	245	212	1	56	300	1478	220	58	1471	120
RTOR Reduction (vph)	0	0	0	0	0	50	0	0	97	0	0	0
Lane Group Flow (vph)	79	0	245	212	1	6	300	1478	123	58	1471	120
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	4.8		100.0	11.5	11.5	11.5	13.7	55.7	55.7	6.0	48.0	100.0
Effective Green, g (s)	4.8		100.0	11.5	11.5	11.5	13.7	55.7	55.7	6.0	48.0	100.0
Actuated g/C Ratio	0.05		1.00	0.12	0.12	0.12	0.14	0.56	0.56	0.06	0.48	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	168		1615	391	212	180	465	1952	873	204	1682	1568
v/s Ratio Prot	c0.02			c0.06	0.00		c0.09	0.42		0.02	c0.42	
v/s Ratio Perm			0.15			0.00			0.08			0.08
v/c Ratio	0.47		0.15	0.54	0.00	0.04	0.65	0.76	0.14	0.28	0.87	0.08
Uniform Delay, d1	46.4		0.0	41.8	39.2	39.3	40.8	17.0	10.6	44.9	23.3	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.02	1.15	2.59	0.69	1.29	1.00
Incremental Delay, d2	2.1		0.2	1.5	0.0	0.1	2.9	2.7	0.3	0.6	5.5	0.1
Delay (s)	48.4		0.2	43.3	39.2	39.4	44.7	22.1	27.9	31.7	35.7	0.1
Level of Service	D		A	D	D	D	D	C	C	C	D	A
Approach Delay (s)		12.0			42.5			26.2			33.0	
Approach LOS		B			D			C			C	

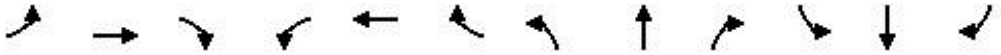
Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	157	9	698	2	194	827	0	0	1070
Future Volume (vph)	0	0	0	157	9	698	2	194	827	0	0	1070
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1677	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.18	1.00			1.00
Satd. Flow (perm)				1665	1677	1568		334	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	178	10	793	2	202	861	0	0	1230
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	94	94	793	0	204	861	0	0	1230
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				11.0	11.0	100.0		77.0	77.0			62.6
Effective Green, g (s)				11.0	11.0	100.0		77.0	77.0			62.6
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.63
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				183	184	1568		392	2725			3152
v/s Ratio Prot								0.05	0.24			0.24
v/s Ratio Perm				0.06	0.06	c0.51		0.35				
v/c Ratio				0.51	0.51	0.51		0.52	0.32			0.39
Uniform Delay, d1				42.0	42.0	0.0		4.3	3.5			9.3
Progression Factor				1.00	1.00	1.00		3.68	0.38			1.66
Incremental Delay, d2				2.4	2.4	1.2		1.1	0.3			0.3
Delay (s)				44.4	44.3	1.2		17.1	1.6			15.6
Level of Service				D	D	A		B	A			B
Approach Delay (s)		0.0			9.4				4.6			10.9
Approach LOS		A			A				A			B

Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	476
Future Volume (vph)	476
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	547
RTOR Reduction (vph)	0
Lane Group Flow (vph)	547
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.35
v/c Ratio	0.35
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	0.4
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	10	174	0	0	0	0	724	51	316	919	0
Future Volume (vph)	307	10	174	0	0	0	0	724	51	316	919	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1658	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1658	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	334	11	189	0	0	0	0	796	56	336	978	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	174	171	189	0	0	0	0	796	56	336	978	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	15.4	15.4	100.0					47.6	100.0	20.0	72.6	
Effective Green, g (s)	15.4	15.4	100.0					47.6	100.0	20.0	72.6	
Actuated g/C Ratio	0.15	0.15	1.00					0.48	1.00	0.20	0.73	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	253	255	1553					1684	1583	680	2544	
v/s Ratio Prot								c0.22		c0.10	0.28	
v/s Ratio Perm	c0.11	0.10	0.12						0.04			
v/c Ratio	0.69	0.67	0.12					0.47	0.04	0.49	0.38	
Uniform Delay, d1	40.0	39.9	0.0					17.7	0.0	35.5	5.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.93	0.41	
Incremental Delay, d2	7.6	6.8	0.2					1.0	0.0	0.5	0.4	
Delay (s)	47.6	46.7	0.2					18.7	0.0	33.5	2.6	
Level of Service	D	D	A					B	A	C	A	
Approach Delay (s)		30.5			0.0			17.4			10.5	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	824.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	69	37	935	1311	93
Future Vol, veh/h	164	69	37	935	1311	93
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	328	138	39	995	1380	98

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2502	1429	1478	0	-	0
Stage 1	1429	-	-	-	-	-
Stage 2	1073	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 32	167	459	-	-	-
Stage 1	~ 223	-	-	-	-	-
Stage 2	331	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 29	167	459	-	-	-
Mov Cap-2 Maneuver	~ 29	-	-	-	-	-
Stage 1	~ 204	-	-	-	-	-
Stage 2	331	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 5269.3	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	459	-	38	-	-
HCM Lane V/C Ratio	0.086	-	-12.263	-	-
HCM Control Delay (s)	13.6	-	$ -5269.3	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	56.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	173	161	832	17	120	56	3	676	570	45	25	414
Future Volume (vph)	173	161	832	17	120	56	3	676	570	45	25	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	178	166	858	20	145	67	3	690	582	46	29	481
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	178	166	858	20	145	67	0	693	582	46	29	481
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	10.6	10.6	100.0	9.4	9.4	100.0		24.4	54.9	100.0	4.1	33.6
Effective Green, g (s)	10.6	10.6	100.0	9.4	9.4	100.0		24.4	54.9	100.0	4.1	33.6
Actuated g/C Ratio	0.11	0.11	1.00	0.09	0.09	1.00		0.24	0.55	1.00	0.04	0.34
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	367	378	1599	325	335	1599		845	1962	1599	142	1200
v/s Ratio Prot	0.05	0.05		0.01	0.04			c0.20	0.16		0.01	0.13
v/s Ratio Perm			c0.54			0.04				0.03		
v/c Ratio	0.49	0.44	0.54	0.06	0.43	0.04		0.82	0.30	0.03	0.20	0.40
Uniform Delay, d1	42.1	41.9	0.0	41.3	42.8	0.0		35.7	12.1	0.0	46.4	25.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.78	1.58	1.00	1.00	1.00
Incremental Delay, d2	1.0	0.8	1.3	0.1	0.9	0.0		5.4	0.3	0.0	0.7	1.0
Delay (s)	43.1	42.7	1.3	41.4	43.7	0.0		33.1	19.5	0.0	47.1	26.5
Level of Service	D	D	A	D	D	A		C	B	A	D	C
Approach Delay (s)		13.2			30.9				26.0			23.9
Approach LOS		B			C				C			C

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	69
Future Volume (vph)	69
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	80
RTOR Reduction (vph)	0
Lane Group Flow (vph)	80
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.05
v/c Ratio	0.05
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	29	1595	14	0	1473
Future Vol, veh/h	0	29	1595	14	0	1473
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	96	96	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	33	1661	15	0	1584

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	831	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	317	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	317	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	317	-
HCM Lane V/C Ratio	-	0.104	-
HCM Control Delay (s)	-	17.7	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	2	259	182	2	45	103	1328	179	25	1268	46
Future Volume (vph)	77	2	259	182	2	45	103	1328	179	25	1268	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	103	3	345	190	2	47	111	1428	192	26	1321	48
RTOR Reduction (vph)	0	0	0	0	0	42	0	0	78	0	0	0
Lane Group Flow (vph)	103	3	345	190	2	5	111	1428	114	26	1321	48
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	5.3	5.3	100.0	10.4	10.4	10.4	8.6	59.5	59.5	2.8	53.7	100.0
Effective Green, g (s)	5.3	5.3	100.0	10.4	10.4	10.4	8.6	59.5	59.5	2.8	53.7	100.0
Actuated g/C Ratio	0.05	0.05	1.00	0.10	0.10	0.10	0.09	0.60	0.60	0.03	0.54	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	185	100	1615	360	195	166	298	2126	951	96	1900	1583
v/s Ratio Prot	c0.03	0.00		c0.05	0.00		c0.03	c0.40		0.01	0.37	
v/s Ratio Perm			0.21			0.00			0.07			0.03
v/c Ratio	0.56	0.03	0.21	0.53	0.01	0.03	0.37	0.67	0.12	0.27	0.70	0.03
Uniform Delay, d1	46.2	44.9	0.0	42.5	40.2	40.3	43.2	13.7	8.8	47.6	17.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.39	0.53	0.15	0.88	1.41	1.00
Incremental Delay, d2	3.6	0.1	0.3	1.4	0.0	0.1	0.7	1.6	0.2	1.4	2.0	0.0
Delay (s)	49.8	45.0	0.3	43.9	40.2	40.3	60.6	8.9	1.6	43.3	26.1	0.0
Level of Service	D	D	A	D	D	D	E	A	A	D	C	A
Approach Delay (s)		11.9			43.1			11.4			25.5	
Approach LOS		B			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	170	3	421	2	194	1134	0	0	1251
Future Volume (vph)	0	0	0	170	3	421	2	194	1134	0	0	1251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1705	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.16	1.00			1.00
Satd. Flow (perm)				1698	1705	1599		307	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	177	3	439	2	204	1194	0	0	1290
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	90	90	439	0	206	1194	0	0	1290
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				10.6	10.6	100.0		77.4	77.4			62.2
Effective Green, g (s)				10.6	10.6	100.0		77.4	77.4			62.2
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.62
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				179	180	1599		386	2739			3162
v/s Ratio Prot								c0.05	0.34			0.25
v/s Ratio Perm				c0.05	0.05	0.27		c0.36				
v/c Ratio				0.50	0.50	0.27		0.53	0.44			0.41
Uniform Delay, d1				42.2	42.2	0.0		4.6	3.9			9.6
Progression Factor				1.00	1.00	1.00		0.78	0.64			1.76
Incremental Delay, d2				2.2	2.2	0.4		1.1	0.4			0.3
Delay (s)				44.4	44.4	0.4		4.7	2.8			17.2
Level of Service				D	D	A		A	A			B
Approach Delay (s)		0.0			13.2				3.1			13.5
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	348
Future Volume (vph)	348
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	359
RTOR Reduction (vph)	0
Lane Group Flow (vph)	359
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.23
v/c Ratio	0.23
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	0.3
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	372	8	183	0	0	0	0	954	136	616	795	0
Future Volume (vph)	372	8	183	0	0	0	0	954	136	616	795	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	396	9	195	0	0	0	0	1037	148	635	820	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	202	203	195	0	0	0	0	1037	148	635	820	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	15.5	15.5	100.0					46.7	100.0	20.8	72.5	
Effective Green, g (s)	15.5	15.5	100.0					46.7	100.0	20.8	72.5	
Actuated g/C Ratio	0.16	0.16	1.00					0.47	1.00	0.21	0.72	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	255	256	1553					1652	1583	714	2565	
v/s Ratio Prot								c0.29		c0.18	0.23	
v/s Ratio Perm	0.12	0.12	0.13						0.09			
v/c Ratio	0.79	0.79	0.13					0.63	0.09	0.89	0.32	
Uniform Delay, d1	40.7	40.7	0.0					20.1	0.0	38.5	4.9	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	2.51	
Incremental Delay, d2	15.4	15.4	0.2					1.8	0.1	12.3	0.3	
Delay (s)	56.1	56.1	0.2					21.9	0.1	50.9	12.7	
Level of Service	E	E	A					C	A	D	B	
Approach Delay (s)		37.9			0.0			19.2			29.4	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	2198.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	219	107	83	1288	874	462
Future Vol, veh/h	219	107	83	1288	874	462
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	438	214	93	1447	910	481

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2784	1151	1391	0	-	0
Stage 1	1151	-	-	-	-	-
Stage 2	1633	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 21	243	495	-	-	-
Stage 1	~ 304	-	-	-	-	-
Stage 2	~ 177	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 17	243	495	-	-	-
Mov Cap-2 Maneuver	~ 17	-	-	-	-	-
Stage 1	~ 247	-	-	-	-	-
Stage 2	~ 177	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 12083.7	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	495	-	24	-	-
HCM Lane V/C Ratio	0.188	-	-27.167	-	-
HCM Control Delay (s)	14	-	$ 12083.7	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	81.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	107	95	745	54	129	31	1	810	271	17	36	711
Future Volume (vph)	107	95	745	54	129	31	1	810	271	17	36	711
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	116	103	810	65	155	37	1	931	311	20	42	827
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	116	103	810	65	155	37	0	932	311	20	42	827
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	8.5	8.5	100.0	9.8	9.8	100.0		31.8	56.3	100.0	4.4	27.9
Effective Green, g (s)	8.5	8.5	100.0	9.8	9.8	100.0		31.8	56.3	100.0	4.4	27.9
Actuated g/C Ratio	0.08	0.08	1.00	0.10	0.10	1.00		0.32	0.56	1.00	0.04	0.28
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	289	297	1568	333	343	1568		1091	1992	1583	149	977
v/s Ratio Prot	0.03	0.03		0.02	0.04			c0.27	0.09		0.01	c0.24
v/s Ratio Perm			c0.52			0.02				0.01		
v/c Ratio	0.40	0.35	0.52	0.20	0.45	0.02		0.85	0.16	0.01	0.28	0.85
Uniform Delay, d1	43.3	43.1	0.0	41.5	42.6	0.0		31.9	10.5	0.0	46.3	34.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.91	1.97	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.7	1.2	0.3	0.9	0.0		4.8	0.1	0.0	1.0	9.0
Delay (s)	44.3	43.8	1.2	41.8	43.5	0.0		33.8	20.8	0.0	47.3	43.0
Level of Service	D	D	A	D	D	A		C	C	A	D	D
Approach Delay (s)		10.3			36.8				30.1			37.3
Approach LOS		B			D				C			D

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	119
Future Volume (vph)	119
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	138
RTOR Reduction (vph)	0
Lane Group Flow (vph)	138
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.09
v/c Ratio	0.09
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

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	0	0	40	0	0	2	0	1369	45	0	1325	129
Future Vol, veh/h	0	0	40	0	0	2	0	1369	45	0	1325	129
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	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	50	92	50	92	91	91	94	94	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	1	1	1	2
Mvmt Flow	0	0	43	0	0	4	0	1504	49	0	1410	140

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	775	-	-	752	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	341	0	0	357	0	-	0	0	-	-
Stage 1	0	0	-	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	0	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	341	-	-	357	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.1	15.2	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	341	357	-	-
HCM Lane V/C Ratio	-	0.128	0.011	-	-
HCM Control Delay (s)	-	17.1	15.2	-	-
HCM Lane LOS	-	C	C	-	-
HCM 95th %tile Q(veh)	-	0.4	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	0	42	191	1	50	258	1271	189	56	1451	28
Future Volume (vph)	34	0	42	191	1	50	258	1271	189	56	1451	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	103	0	127	212	1	56	300	1478	220	58	1511	29
RTOR Reduction (vph)	0	0	0	0	0	50	0	0	97	0	0	0
Lane Group Flow (vph)	103	0	127	212	1	6	300	1478	123	58	1511	29
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	4.8		100.0	11.5	11.5	11.5	13.7	55.7	55.7	6.0	48.0	100.0
Effective Green, g (s)	4.8		100.0	11.5	11.5	11.5	13.7	55.7	55.7	6.0	48.0	100.0
Actuated g/C Ratio	0.05		1.00	0.12	0.12	0.12	0.14	0.56	0.56	0.06	0.48	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	168		1615	391	212	180	465	1952	873	204	1682	1568
v/s Ratio Prot	c0.03			c0.06	0.00		c0.09	0.42		0.02	c0.43	
v/s Ratio Perm			0.08			0.00			0.08			0.02
v/c Ratio	0.61		0.08	0.54	0.00	0.04	0.65	0.76	0.14	0.28	0.90	0.02
Uniform Delay, d1	46.7		0.0	41.8	39.2	39.3	40.8	17.0	10.6	44.9	23.8	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.02	1.15	2.59	0.71	1.28	1.00
Incremental Delay, d2	6.5		0.1	1.5	0.0	0.1	2.9	2.7	0.3	0.6	6.7	0.0
Delay (s)	53.2		0.1	43.3	39.2	39.4	44.7	22.1	27.9	32.4	37.3	0.0
Level of Service	D		A	D	D	D	D	C	C	C	D	A
Approach Delay (s)		23.9			42.5			26.2			36.4	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	157	9	698	2	194	827	0	0	1070
Future Volume (vph)	0	0	0	157	9	698	2	194	827	0	0	1070
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1677	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.18	1.00			1.00
Satd. Flow (perm)				1665	1677	1568		334	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	178	10	793	2	202	861	0	0	1230
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	94	94	793	0	204	861	0	0	1230
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				11.0	11.0	100.0		77.0	77.0			62.6
Effective Green, g (s)				11.0	11.0	100.0		77.0	77.0			62.6
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.63
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				183	184	1568		392	2725			3152
v/s Ratio Prot								0.05	0.24			0.24
v/s Ratio Perm				0.06	0.06	c0.51		0.35				
v/c Ratio				0.51	0.51	0.51		0.52	0.32			0.39
Uniform Delay, d1				42.0	42.0	0.0		4.3	3.5			9.3
Progression Factor				1.00	1.00	1.00		3.68	0.38			1.71
Incremental Delay, d2				2.4	2.4	1.2		1.1	0.3			0.2
Delay (s)				44.4	44.3	1.2		17.1	1.6			16.1
Level of Service				D	D	A		B	A			B
Approach Delay (s)		0.0			9.4				4.6			11.3
Approach LOS		A			A				A			B

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	476
Future Volume (vph)	476
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	547
RTOR Reduction (vph)	0
Lane Group Flow (vph)	547
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.35
v/c Ratio	0.35
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	0.4
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	10	174	0	0	0	0	724	51	316	919	0
Future Volume (vph)	307	10	174	0	0	0	0	724	51	316	919	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1658	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1658	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	334	11	189	0	0	0	0	796	56	336	978	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	174	171	189	0	0	0	0	796	56	336	978	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	15.4	15.4	100.0					47.6	100.0	20.0	72.6	
Effective Green, g (s)	15.4	15.4	100.0					47.6	100.0	20.0	72.6	
Actuated g/C Ratio	0.15	0.15	1.00					0.48	1.00	0.20	0.73	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	253	255	1553					1684	1583	680	2544	
v/s Ratio Prot								c0.22		c0.10	0.28	
v/s Ratio Perm	c0.11	0.10	0.12						0.04			
v/c Ratio	0.69	0.67	0.12					0.47	0.04	0.49	0.38	
Uniform Delay, d1	40.0	39.9	0.0					17.7	0.0	35.5	5.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.93	0.42	
Incremental Delay, d2	7.6	6.8	0.2					1.0	0.0	0.5	0.4	
Delay (s)	47.6	46.7	0.2					18.7	0.0	33.4	2.6	
Level of Service	D	D	A					B	A	C	A	
Approach Delay (s)		30.5			0.0			17.4			10.5	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	706.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	44	31	935	1321	83
Future Vol, veh/h	164	44	31	935	1321	83
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	328	88	33	995	1391	87

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2496	1435	1478	0	-	0
Stage 1	1435	-	-	-	-	-
Stage 2	1061	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 32	166	459	-	-	-
Stage 1	~ 222	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 30	166	459	-	-	-
Mov Cap-2 Maneuver	~ 30	-	-	-	-	-
Stage 1	~ 206	-	-	-	-	-
Stage 2	336	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 4962.1	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	459	-	36	-	-
HCM Lane V/C Ratio	0.072	-	-11.556	-	-
HCM Control Delay (s)	13.4	-	$ -4962.1	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	50.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	148	161	842	17	120	56	3	676	595	45	25	420
Future Volume (vph)	148	161	842	17	120	56	3	676	595	45	25	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	153	166	868	20	145	67	3	690	607	46	29	488
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	153	166	868	20	145	67	0	693	607	46	29	488
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	10.0	10.0	100.0	9.4	9.4	100.0		24.7	55.5	100.0	4.1	33.9
Effective Green, g (s)	10.0	10.0	100.0	9.4	9.4	100.0		24.7	55.5	100.0	4.1	33.9
Actuated g/C Ratio	0.10	0.10	1.00	0.09	0.09	1.00		0.25	0.56	1.00	0.04	0.34
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	346	357	1599	325	335	1599		856	1983	1599	142	1211
v/s Ratio Prot	0.04	0.05		0.01	0.04			c0.20	0.17		0.01	0.14
v/s Ratio Perm			c0.54			0.04				0.03		
v/c Ratio	0.44	0.46	0.54	0.06	0.43	0.04		0.81	0.31	0.03	0.20	0.40
Uniform Delay, d1	42.4	42.5	0.0	41.3	42.8	0.0		35.4	11.9	0.0	46.4	25.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.78	1.56	1.00	1.00	1.00
Incremental Delay, d2	0.9	1.0	1.3	0.1	0.9	0.0		4.7	0.3	0.0	0.7	1.0
Delay (s)	43.3	43.4	1.3	41.4	43.7	0.0		32.4	18.9	0.0	47.1	26.3
Level of Service	D	D	A	D	D	A		C	B	A	D	C
Approach Delay (s)		12.6			30.9				25.2			24.1
Approach LOS		B			C				C			C

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	63
Future Volume (vph)	63
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	73
RTOR Reduction (vph)	0
Lane Group Flow (vph)	73
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.05
v/c Ratio	0.05
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	128	0	0	29	0	1620	14	0	1439	50
Future Vol, veh/h	0	0	128	0	0	29	0	1620	14	0	1439	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	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	88	92	88	92	96	96	93	93	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	1	1	1	2
Mvmt Flow	0	0	139	0	0	33	0	1688	15	0	1547	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	801	-	-	844	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	327	0	0	311	0	-	0	0	-	-
Stage 1	0	0	-	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	0	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	327	-	-	311	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.9	17.9	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	327	311	-	-
HCM Lane V/C Ratio	-	0.425	0.106	-	-
HCM Control Delay (s)	-	23.9	17.9	-	-
HCM Lane LOS	-	C	C	-	-
HCM 95th %tile Q(veh)	-	2	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	2	132	182	2	45	103	1328	179	25	1395	12
Future Volume (vph)	102	2	132	182	2	45	103	1328	179	25	1395	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	136	3	176	190	2	47	111	1428	192	26	1453	12
RTOR Reduction (vph)	0	0	0	0	0	42	0	0	81	0	0	0
Lane Group Flow (vph)	136	3	176	190	2	5	111	1428	111	26	1453	13
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.9	6.9	100.0	10.4	10.4	10.4	8.6	57.9	57.9	2.8	52.1	100.0
Effective Green, g (s)	6.9	6.9	100.0	10.4	10.4	10.4	8.6	57.9	57.9	2.8	52.1	100.0
Actuated g/C Ratio	0.07	0.07	1.00	0.10	0.10	0.10	0.09	0.58	0.58	0.03	0.52	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	241	131	1615	360	195	166	298	2069	925	96	1843	1583
v/s Ratio Prot	c0.04	0.00		c0.05	0.00		c0.03	c0.40		0.01	c0.41	
v/s Ratio Perm			0.11			0.00			0.07			0.01
v/c Ratio	0.56	0.02	0.11	0.53	0.01	0.03	0.37	0.69	0.12	0.27	0.79	0.01
Uniform Delay, d1	45.1	43.4	0.0	42.5	40.2	40.3	43.2	14.8	9.5	47.6	19.5	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.39	0.51	0.15	0.90	1.32	1.00
Incremental Delay, d2	3.0	0.1	0.1	1.4	0.0	0.1	0.7	1.8	0.3	1.4	3.3	0.0
Delay (s)	48.1	43.5	0.1	43.9	40.2	40.3	60.9	9.4	1.7	44.3	29.1	0.0
Level of Service	D	D	A	D	D	D	E	A	A	D	C	A
Approach Delay (s)		21.3			43.1			11.8			29.1	
Approach LOS		C			D			B			C	

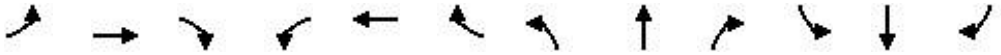
Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	170	3	421	2	187	1134	0	0	1251
Future Volume (vph)	0	0	0	170	3	421	2	187	1134	0	0	1251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1705	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.17	1.00			1.00
Satd. Flow (perm)				1698	1705	1599		308	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	177	3	439	2	197	1194	0	0	1290
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	90	90	439	0	199	1194	0	0	1290
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				10.6	10.6	100.0		77.4	77.4			62.5
Effective Green, g (s)				10.6	10.6	100.0		77.4	77.4			62.5
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.62
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				179	180	1599		383	2739			3178
v/s Ratio Prot								0.05	c0.34			0.25
v/s Ratio Perm				c0.05	0.05	0.27		c0.35				
v/c Ratio				0.50	0.50	0.27		0.52	0.44			0.41
Uniform Delay, d1				42.2	42.2	0.0		4.5	3.9			9.4
Progression Factor				1.00	1.00	1.00		0.82	0.64			1.90
Incremental Delay, d2				2.2	2.2	0.4		0.9	0.4			0.3
Delay (s)				44.4	44.4	0.4		4.6	2.8			18.2
Level of Service				D	D	A		A	A			B
Approach Delay (s)		0.0			13.2				3.1			14.3
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	348
Future Volume (vph)	348
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	359
RTOR Reduction (vph)	0
Lane Group Flow (vph)	359
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.23
v/c Ratio	0.23
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	372	8	183	0	0	0	0	954	136	616	795	0
Future Volume (vph)	372	8	183	0	0	0	0	954	136	616	795	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	396	9	195	0	0	0	0	1037	148	635	820	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	202	203	195	0	0	0	0	1037	148	635	820	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	15.5	15.5	100.0					46.7	100.0	20.8	72.5	
Effective Green, g (s)	15.5	15.5	100.0					46.7	100.0	20.8	72.5	
Actuated g/C Ratio	0.16	0.16	1.00					0.47	1.00	0.21	0.72	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	255	256	1553					1652	1583	714	2565	
v/s Ratio Prot								c0.29		c0.18	0.23	
v/s Ratio Perm	0.12	0.12	0.13						0.09			
v/c Ratio	0.79	0.79	0.13					0.63	0.09	0.89	0.32	
Uniform Delay, d1	40.7	40.7	0.0					20.1	0.0	38.5	4.9	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.08	2.59	
Incremental Delay, d2	15.4	15.4	0.2					1.8	0.1	12.3	0.3	
Delay (s)	56.1	56.1	0.2					21.9	0.1	53.8	13.0	
Level of Service	E	E	A					C	A	D	B	
Approach Delay (s)		37.9			0.0			19.2			30.8	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	5544.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	252	137	120	1431	936	596
Future Vol, veh/h	252	137	120	1431	936	596
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	504	274	135	1608	975	621

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3164	1286	1596	0	-	0
Stage 1	1286	-	-	-	-	-
Stage 2	1878	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 12	~ 203	413	-	-	-
Stage 1	~ 262	-	-	-	-	-
Stage 2	~ 134	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	~ 203	413	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	~ 176	-	-	-	-	-
Stage 2	~ 134	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 29331.5	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	413	-	12	-	-
HCM Lane V/C Ratio	0.326		-64.833	-	-
HCM Control Delay (s)	17.9		$ 29331.5	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	1.4	-	98.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	142	105	789	60	142	34	1	890	321	18	40	915
Future Volume (vph)	142	105	789	60	142	34	1	890	321	18	40	915
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	154	114	858	72	171	41	1	1023	369	21	47	1064
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	154	114	858	72	171	41	0	1024	369	21	47	1064
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	9.1	9.1	100.0	10.2	10.2	100.0		34.0	55.2	100.0	4.5	24.7
Effective Green, g (s)	9.1	9.1	100.0	10.2	10.2	100.0		34.0	55.2	100.0	4.5	24.7
Actuated g/C Ratio	0.09	0.09	1.00	0.10	0.10	1.00		0.34	0.55	1.00	0.04	0.25
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	309	318	1568	346	357	1568		1167	1953	1583	153	865
v/s Ratio Prot	0.05	0.03		0.02	0.05			c0.30	0.10		0.01	c0.30
v/s Ratio Perm			c0.55			0.03				0.01		
v/c Ratio	0.50	0.36	0.55	0.21	0.48	0.03		0.88	0.19	0.01	0.31	1.23
Uniform Delay, d1	43.3	42.7	0.0	41.2	42.4	0.0		31.0	11.2	0.0	46.2	37.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.92	1.90	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.7	1.4	0.3	1.0	0.0		4.3	0.1	0.0	1.1	113.7
Delay (s)	44.5	43.4	1.4	41.5	43.4	0.0		32.8	21.4	0.0	47.4	151.3
Level of Service	D	D	A	D	D	A		C	C	A	D	F
Approach Delay (s)		11.5			36.7				29.3			125.0
Approach LOS		B			D				C			F

Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	168
Future Volume (vph)	168
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	195
RTOR Reduction (vph)	0
Lane Group Flow (vph)	195
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.12
v/c Ratio	0.12
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1525	49	0	1702
Future Vol, veh/h	0	2	1525	49	0	1702
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	91	91	94	94
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	4	1676	54	0	1811

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	838	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	314	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	314	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	314	-
HCM Lane V/C Ratio	-	0.013	-
HCM Control Delay (s)	-	16.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	0	192	211	1	55	618	1395	209	62	1554	274
Future Volume (vph)	59	0	192	211	1	55	618	1395	209	62	1554	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	179	0	582	234	1	61	719	1622	243	65	1619	285
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	113	0	0	0
Lane Group Flow (vph)	179	0	582	234	1	7	719	1622	130	65	1619	285
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.0		100.0	12.2	12.2	12.2	15.8	53.6	53.6	6.2	44.0	100.0
Effective Green, g (s)	6.0		100.0	12.2	12.2	12.2	15.8	53.6	53.6	6.2	44.0	100.0
Actuated g/C Ratio	0.06		1.00	0.12	0.12	0.12	0.16	0.54	0.54	0.06	0.44	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	210		1615	414	225	191	537	1878	840	210	1542	1568
v/s Ratio Prot	c0.05			c0.07	0.00		c0.21	0.46		0.02	c0.46	
v/s Ratio Perm			0.36			0.00			0.08			0.18
v/c Ratio	0.85		0.36	0.57	0.00	0.04	1.34	0.86	0.16	0.31	1.05	0.18
Uniform Delay, d1	46.6		0.0	41.4	38.6	38.7	42.1	20.0	11.7	44.9	28.0	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.05	1.17	2.54	0.68	1.25	1.00
Incremental Delay, d2	26.8		0.6	1.8	0.0	0.1	163.7	5.1	0.4	0.5	31.8	0.1
Delay (s)	73.4		0.6	43.2	38.6	38.8	207.8	28.5	30.2	30.8	66.7	0.1
Level of Service	E		A	D	D	D	F	C	C	C	E	A
Approach Delay (s)		17.7			42.3			78.5			55.9	
Approach LOS		B			D			E			E	

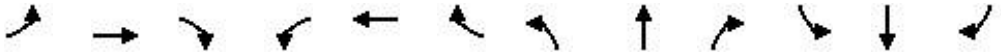
Intersection Summary			
HCM 2000 Control Delay	60.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	173	10	904	2	214	1105	0	0	1240
Future Volume (vph)	0	0	0	173	10	904	2	214	1105	0	0	1240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1677	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.13	1.00			1.00
Satd. Flow (perm)				1665	1677	1568		244	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	197	11	1027	2	223	1151	0	0	1425
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	104	104	1027	0	225	1151	0	0	1425
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				11.6	11.6	100.0		76.4	76.4			58.3
Effective Green, g (s)				11.6	11.6	100.0		76.4	76.4			58.3
Actuated g/C Ratio				0.12	0.12	1.00		0.76	0.76			0.58
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				193	194	1568		386	2703			2935
v/s Ratio Prot								0.08	0.33			0.28
v/s Ratio Perm				0.06	0.06	c0.65		0.37				
v/c Ratio				0.54	0.54	0.65		0.58	0.43			0.49
Uniform Delay, d1				41.7	41.7	0.0		7.3	4.1			12.1
Progression Factor				1.00	1.00	1.00		2.95	0.31			1.62
Incremental Delay, d2				2.9	2.8	2.1		1.7	0.4			0.3
Delay (s)				44.6	44.5	2.1		23.2	1.6			20.0
Level of Service				D	D	A		C	A			B
Approach Delay (s)		0.0			9.3				5.2			13.9
Approach LOS		A			A				A			B

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	564
Future Volume (vph)	564
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	648
RTOR Reduction (vph)	0
Lane Group Flow (vph)	648
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.41
v/c Ratio	0.41
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	0.4
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	468	11	192	0	0	0	0	862	56	389	1033	0
Future Volume (vph)	468	11	192	0	0	0	0	862	56	389	1033	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1657	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1657	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	509	12	209	0	0	0	0	947	62	414	1099	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	260	261	209	0	0	0	0	947	62	414	1099	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	18.6	18.6	100.0					44.4	100.0	20.0	69.4	
Effective Green, g (s)	18.6	18.6	100.0					44.4	100.0	20.0	69.4	
Actuated g/C Ratio	0.19	0.19	1.00					0.44	1.00	0.20	0.69	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	306	308	1553					1571	1583	680	2432	
v/s Ratio Prot								c0.27		c0.12	0.31	
v/s Ratio Perm	c0.16	0.16	0.13						0.04			
v/c Ratio	0.85	0.85	0.13					0.60	0.04	0.61	0.45	
Uniform Delay, d1	39.3	39.3	0.0					21.1	0.0	36.4	6.8	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.90	0.34	
Incremental Delay, d2	19.3	18.9	0.2					1.7	0.0	1.4	0.6	
Delay (s)	58.6	58.3	0.2					22.8	0.0	34.2	2.9	
Level of Service	E	E	A					C	A	C	A	
Approach Delay (s)		41.8			0.0			21.4			11.5	
Approach LOS		D			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3191.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	271	141	45	1035	1447	136
Future Vol, veh/h	271	141	45	1035	1447	136
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	542	282	48	1101	1523	143

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2792	1595	1666	0	-	0
Stage 1	1595	-	-	-	-	-
Stage 2	1197	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 21	~ 133	388	-	-	-
Stage 1	~ 185	-	-	-	-	-
Stage 2	~ 289	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 18	~ 133	388	-	-	-
Mov Cap-2 Maneuver	~ 18	-	-	-	-	-
Stage 1	~ 162	-	-	-	-	-
Stage 2	~ 289	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 14096.5	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	388	-	26	-	-
HCM Lane V/C Ratio	0.123	-	-31.692	-	-
HCM Control Delay (s)	15.6	-	$ 14096.5	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.4	-	102.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	256	178	917	18	132	62	3	744	728	49	28	514
Future Volume (vph)	256	178	917	18	132	62	3	744	728	49	28	514
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	264	184	945	22	159	75	3	759	743	50	33	598
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	264	184	945	22	159	75	0	762	743	50	33	598
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	12.3	12.3	100.0	9.7	9.7	100.0		25.8	52.8	100.0	4.2	30.2
Effective Green, g (s)	12.3	12.3	100.0	9.7	9.7	100.0		25.8	52.8	100.0	4.2	30.2
Actuated g/C Ratio	0.12	0.12	1.00	0.10	0.10	1.00		0.26	0.53	1.00	0.04	0.30
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	426	439	1599	336	346	1599		894	1887	1599	145	1079
v/s Ratio Prot	0.08	0.05		0.01	0.04			c0.22	0.21		0.01	0.17
v/s Ratio Perm			c0.59			0.05				0.03		
v/c Ratio	0.62	0.42	0.59	0.07	0.46	0.05		0.85	0.39	0.03	0.23	0.55
Uniform Delay, d1	41.6	40.5	0.0	41.0	42.7	0.0		35.3	14.1	0.0	46.3	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.78	1.39	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.6	1.6	0.1	1.0	0.1		5.5	0.4	0.0	0.8	2.1
Delay (s)	44.3	41.2	1.6	41.1	43.6	0.1		33.2	19.9	0.0	47.1	31.3
Level of Service	D	D	A	D	D	A		C	B	A	D	C
Approach Delay (s)		14.9			30.7				25.8			27.9
Approach LOS		B			C				C			C

Intersection Summary			
HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	83
Future Volume (vph)	83
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	97
RTOR Reduction (vph)	0
Lane Group Flow (vph)	97
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.06
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	32	1857	15	0	1683
Future Vol, veh/h	0	32	1857	15	0	1683
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	96	96	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	36	1934	16	0	1810

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	967	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	258	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	258	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	258	-
HCM Lane V/C Ratio	-	0.141	-
HCM Control Delay (s)	-	21.2	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	2	617	201	2	49	243	1463	198	27	1399	108
Future Volume (vph)	184	2	617	201	2	49	243	1463	198	27	1399	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	245	3	823	209	2	51	261	1573	213	28	1457	112
RTOR Reduction (vph)	0	0	0	0	0	46	0	0	94	0	0	0
Lane Group Flow (vph)	245	3	823	209	2	5	261	1573	119	28	1457	113
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	7.3	7.3	100.0	10.7	10.7	10.7	10.7	55.9	55.9	4.1	49.3	100.0
Effective Green, g (s)	7.3	7.3	100.0	10.7	10.7	10.7	10.7	55.9	55.9	4.1	49.3	100.0
Actuated g/C Ratio	0.07	0.07	1.00	0.11	0.11	0.11	0.11	0.56	0.56	0.04	0.49	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	255	138	1615	370	201	171	370	1997	893	140	1744	1583
v/s Ratio Prot	c0.07	0.00		0.06	0.00		c0.08	0.44		0.01	c0.41	
v/s Ratio Perm			c0.51			0.00			0.07			0.07
v/c Ratio	0.96	0.02	0.51	0.56	0.01	0.03	0.71	0.79	0.13	0.20	0.84	0.07
Uniform Delay, d1	46.2	43.0	0.0	42.4	39.9	40.0	43.1	17.4	10.5	46.4	21.9	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.32	0.58	0.21	0.85	1.41	1.00
Incremental Delay, d2	45.3	0.1	1.2	2.0	0.0	0.1	5.5	3.0	0.3	0.6	4.4	0.1
Delay (s)	91.6	43.1	1.2	44.4	39.9	40.1	62.3	13.1	2.5	40.0	35.3	0.1
Level of Service	F	D	A	D	D	D	E	B	A	D	D	A
Approach Delay (s)		21.9			43.5			18.2			32.9	
Approach LOS		C			D			B			C	

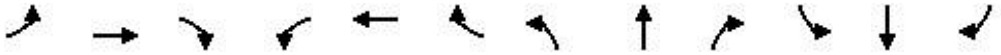
Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	187	3	517	2	207	1328	0	0	1579
Future Volume (vph)	0	0	0	187	3	517	2	207	1328	0	0	1579
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1704	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.10	1.00			1.00
Satd. Flow (perm)				1698	1704	1599		190	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	195	3	539	2	218	1398	0	0	1628
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	99	99	539	0	220	1398	0	0	1628
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				11.1	11.1	100.0		76.9	76.9			60.9
Effective Green, g (s)				11.1	11.1	100.0		76.9	76.9			60.9
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.61
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				188	189	1599		319	2721			3096
v/s Ratio Prot								c0.08	0.40			0.32
v/s Ratio Perm				c0.06	0.06	0.34		c0.45				
v/c Ratio				0.53	0.52	0.34		0.69	0.51			0.53
Uniform Delay, d1				42.0	42.0	0.0		13.7	4.4			11.2
Progression Factor				1.00	1.00	1.00		1.06	0.47			1.73
Incremental Delay, d2				2.7	2.6	0.6		3.7	0.4			0.5
Delay (s)				44.6	44.6	0.6		18.2	2.5			19.9
Level of Service				D	D	A		B	A			B
Approach Delay (s)		0.0			12.4				4.6			15.1
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	516
Future Volume (vph)	516
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	532
RTOR Reduction (vph)	0
Lane Group Flow (vph)	532
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.34
v/c Ratio	0.34
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	0.4
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	463	9	202	0	0	0	0	1078	150	812	943	0
Future Volume (vph)	463	9	202	0	0	0	0	1078	150	812	943	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	493	10	215	0	0	0	0	1172	163	837	972	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	251	252	215	0	0	0	0	1172	163	837	972	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	16.7	16.7	100.0					45.0	100.0	21.3	71.3	
Effective Green, g (s)	16.7	16.7	100.0					45.0	100.0	21.3	71.3	
Actuated g/C Ratio	0.17	0.17	1.00					0.45	1.00	0.21	0.71	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	275	276	1553					1592	1583	731	2523	
v/s Ratio Prot								c0.33		c0.24	0.27	
v/s Ratio Perm	c0.15	0.15	0.14						0.10			
v/c Ratio	0.91	0.91	0.14					0.74	0.10	1.15	0.39	
Uniform Delay, d1	40.9	40.9	0.0					22.6	0.0	39.4	5.7	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.92	2.51	
Incremental Delay, d2	32.2	32.2	0.2					3.1	0.1	79.3	0.4	
Delay (s)	73.1	73.1	0.2					25.7	0.1	115.7	14.6	
Level of Service	E	E	A					C	A	F	B	
Approach Delay (s)		51.3			0.0			22.6			61.4	
Approach LOS		D			A			C			E	

Intersection Summary			
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	4373.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	252	118	83	1431	998	534
Future Vol, veh/h	252	118	83	1431	998	534
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	504	236	93	1608	1040	556

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3112	1318	1596	0	-	0
Stage 1	1318	-	-	-	-	-
Stage 2	1794	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 13	~ 194	413	-	-	-
Stage 1	~ 253	-	-	-	-	-
Stage 2	~ 147	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 10	~ 194	413	-	-	-
Mov Cap-2 Maneuver	~ 10	-	-	-	-	-
Stage 1	~ 196	-	-	-	-	-
Stage 2	~ 147	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 23857.1	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	413	-	14	-	-
HCM Lane V/C Ratio	0.226		-52.857	-	-
HCM Control Delay (s)	16.2		$ 23857.1	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.9	-	93.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	123	105	850	60	142	34	1	890	340	18	40	952
Future Volume (vph)	123	105	850	60	142	34	1	890	340	18	40	952
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	134	114	924	72	171	41	1	1023	391	21	47	1107
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	134	114	924	72	171	41	0	1024	391	21	47	1107
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	8.8	8.8	100.0	10.2	10.2	100.0		34.1	55.5	100.0	4.5	24.9
Effective Green, g (s)	8.8	8.8	100.0	10.2	10.2	100.0		34.1	55.5	100.0	4.5	24.9
Actuated g/C Ratio	0.09	0.09	1.00	0.10	0.10	1.00		0.34	0.56	1.00	0.04	0.25
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	299	308	1568	346	357	1568		1170	1964	1583	153	872
v/s Ratio Prot	0.04	0.03		0.02	0.05			c0.30	0.11		0.01	c0.32
v/s Ratio Perm			c0.59			0.03				0.01		
v/c Ratio	0.45	0.37	0.59	0.21	0.48	0.03		0.88	0.20	0.01	0.31	1.27
Uniform Delay, d1	43.3	43.0	0.0	41.2	42.4	0.0		31.0	11.1	0.0	46.2	37.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.88	1.85	1.00	1.00	1.00
Incremental Delay, d2	1.1	0.8	1.6	0.3	1.0	0.0		3.9	0.1	0.0	1.1	130.3
Delay (s)	44.4	43.7	1.6	41.5	43.4	0.0		31.0	20.7	0.0	47.4	167.9
Level of Service	D	D	A	D	D	A		C	C	A	D	F
Approach Delay (s)		10.6			36.7				27.8			144.0
Approach LOS		B			D				C			F

Intersection Summary			
HCM 2000 Control Delay	59.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	131
Future Volume (vph)	131
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	152
RTOR Reduction (vph)	0
Lane Group Flow (vph)	152
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.10
v/c Ratio	0.10
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

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	0	0	95	0	0	2	0	1544	49	0	1491	309
Future Vol, veh/h	0	0	95	0	0	2	0	1544	49	0	1491	309
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	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	50	92	50	92	91	91	94	94	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	1	1	1	2
Mvmt Flow	0	0	103	0	0	4	0	1697	54	0	1586	336

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	961	-	-	849	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	256	0	0	308	0	-	0	0	-	-
Stage 1	0	0	-	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	0	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	256	-	-	308	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.3	16.8	0	0
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	256	308	-	-
HCM Lane V/C Ratio	-	0.403	0.013	-	-
HCM Control Delay (s)	-	28.3	16.8	-	-
HCM Lane LOS	-	D	C	-	-
HCM 95th %tile Q(veh)	-	1.8	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	0	97	211	1	55	618	1395	209	62	1648	64
Future Volume (vph)	78	0	97	211	1	55	618	1395	209	62	1648	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	236	0	294	234	1	61	719	1622	243	65	1717	67
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	113	0	0	0
Lane Group Flow (vph)	236	0	294	234	1	7	719	1622	130	65	1717	67
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.0		100.0	12.2	12.2	12.2	15.8	53.6	53.6	6.2	44.0	100.0
Effective Green, g (s)	6.0		100.0	12.2	12.2	12.2	15.8	53.6	53.6	6.2	44.0	100.0
Actuated g/C Ratio	0.06		1.00	0.12	0.12	0.12	0.16	0.54	0.54	0.06	0.44	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	210		1615	414	225	191	537	1878	840	210	1542	1568
v/s Ratio Prot	c0.07			c0.07	0.00		c0.21	0.46		0.02	c0.49	
v/s Ratio Perm			0.18			0.00			0.08			0.04
v/c Ratio	1.12		0.18	0.57	0.00	0.04	1.34	0.86	0.16	0.31	1.11	0.04
Uniform Delay, d1	47.0		0.0	41.4	38.6	38.7	42.1	20.0	11.7	44.9	28.0	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.05	1.17	2.54	0.70	1.23	1.00
Incremental Delay, d2	99.3		0.2	1.8	0.0	0.1	163.7	5.1	0.4	0.5	57.0	0.0
Delay (s)	146.3		0.2	43.2	38.6	38.8	207.8	28.5	30.2	32.0	91.4	0.0
Level of Service	F		A	D	D	D	F	C	C	C	F	A
Approach Delay (s)		65.3			42.3			78.5			86.0	
Approach LOS		E			D			E			F	

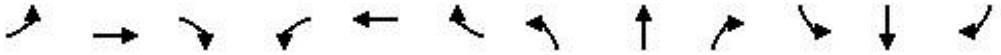
Intersection Summary			
HCM 2000 Control Delay	77.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	173	10	904	2	214	1105	0	0	1240
Future Volume (vph)	0	0	0	173	10	904	2	214	1105	0	0	1240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1677	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.13	1.00			1.00
Satd. Flow (perm)				1665	1677	1568		244	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	197	11	1027	2	223	1151	0	0	1425
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	104	104	1027	0	225	1151	0	0	1425
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				11.6	11.6	100.0		76.4	76.4			58.3
Effective Green, g (s)				11.6	11.6	100.0		76.4	76.4			58.3
Actuated g/C Ratio				0.12	0.12	1.00		0.76	0.76			0.58
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				193	194	1568		386	2703			2935
v/s Ratio Prot								0.08	0.33			0.28
v/s Ratio Perm				0.06	0.06	c0.65		0.37				
v/c Ratio				0.54	0.54	0.65		0.58	0.43			0.49
Uniform Delay, d1				41.7	41.7	0.0		7.3	4.1			12.1
Progression Factor				1.00	1.00	1.00		2.95	0.31			1.72
Incremental Delay, d2				2.9	2.8	2.1		1.7	0.4			0.2
Delay (s)				44.6	44.5	2.1		23.2	1.6			21.1
Level of Service				D	D	A		C	A			C
Approach Delay (s)		0.0			9.3				5.2			14.6
Approach LOS		A			A				A			B

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	564
Future Volume (vph)	564
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	648
RTOR Reduction (vph)	0
Lane Group Flow (vph)	648
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.41
v/c Ratio	0.41
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	0.3
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	468	11	192	0	0	0	0	862	56	389	1033	0
Future Volume (vph)	468	11	192	0	0	0	0	862	56	389	1033	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1657	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1657	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	509	12	209	0	0	0	0	947	62	414	1099	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	260	261	209	0	0	0	0	947	62	414	1099	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	18.6	18.6	100.0					44.4	100.0	20.0	69.4	
Effective Green, g (s)	18.6	18.6	100.0					44.4	100.0	20.0	69.4	
Actuated g/C Ratio	0.19	0.19	1.00					0.44	1.00	0.20	0.69	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	306	308	1553					1571	1583	680	2432	
v/s Ratio Prot								c0.27		c0.12	0.31	
v/s Ratio Perm	c0.16	0.16	0.13						0.04			
v/c Ratio	0.85	0.85	0.13					0.60	0.04	0.61	0.45	
Uniform Delay, d1	39.3	39.3	0.0					21.1	0.0	36.4	6.8	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.90	0.36	
Incremental Delay, d2	19.3	18.9	0.2					1.7	0.0	1.4	0.6	
Delay (s)	58.6	58.3	0.2					22.8	0.0	34.2	3.0	
Level of Service	E	E	A					C	A	C	A	
Approach Delay (s)		41.8			0.0			21.4			11.5	
Approach LOS		D			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	2610

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	271	80	31	1035	1471	112
Future Vol, veh/h	271	80	31	1035	1471	112
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	542	160	33	1101	1548	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2774	1607	1666	0	-	0
Stage 1	1607	-	-	-	-	-
Stage 2	1167	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 21	~ 131	388	-	-	-
Stage 1	~ 183	-	-	-	-	-
Stage 2	~ 299	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 19	~ 131	388	-	-	-
Mov Cap-2 Maneuver	~ 19	-	-	-	-	-
Stage 1	~ 167	-	-	-	-	-
Stage 2	~ 299	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 13021	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	388	-	24	-	-
HCM Lane V/C Ratio	0.085	-	29.25	-	-
HCM Control Delay (s)	15.1	-	$ 13021	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	87.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	195	178	941	18	132	62	3	744	789	49	28	528
Future Volume (vph)	195	178	941	18	132	62	3	744	789	49	28	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	201	184	970	22	159	75	3	759	805	50	33	614
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	201	184	970	22	159	75	0	762	805	50	33	614
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	11.0	11.0	100.0	9.7	9.7	100.0		26.1	54.1	100.0	4.2	31.2
Effective Green, g (s)	11.0	11.0	100.0	9.7	9.7	100.0		26.1	54.1	100.0	4.2	31.2
Actuated g/C Ratio	0.11	0.11	1.00	0.10	0.10	1.00		0.26	0.54	1.00	0.04	0.31
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	381	393	1599	336	346	1599		904	1933	1599	145	1115
v/s Ratio Prot	0.06	0.05		0.01	0.04			c0.22	0.23		0.01	0.17
v/s Ratio Perm			c0.61			0.05				0.03		
v/c Ratio	0.53	0.47	0.61	0.07	0.46	0.05		0.84	0.42	0.03	0.23	0.55
Uniform Delay, d1	42.0	41.8	0.0	41.0	42.7	0.0		35.0	13.6	0.0	46.3	28.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.81	1.32	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.9	1.7	0.1	1.0	0.1		4.3	0.4	0.0	0.8	2.0
Delay (s)	43.4	42.6	1.7	41.1	43.6	0.1		32.6	18.4	0.0	47.1	30.5
Level of Service	D	D	A	D	D	A		C	B	A	D	C
Approach Delay (s)		13.5			30.7				24.5			27.9
Approach LOS		B			C				C			C

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	69
Future Volume (vph)	69
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	80
RTOR Reduction (vph)	0
Lane Group Flow (vph)	80
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.05
v/c Ratio	0.05
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

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	0	0	306	0	0	32	0	1918	15	0	1601	121
Future Vol, veh/h	0	0	306	0	0	32	0	1918	15	0	1601	121
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	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	88	92	88	92	96	96	93	93	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	1	1	1	2
Mvmt Flow	0	0	333	0	0	36	0	1998	16	0	1722	132

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	927	-	-	999	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	~ 270	0	0	245	0	-	0	0	-	-
Stage 1	0	0	-	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	0	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	~ 270	-	-	245	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	171.1	22.2	0	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	270	245	-	-
HCM Lane V/C Ratio	-	1.232	0.148	-	-
HCM Control Delay (s)	-	171.1	22.2	-	-
HCM Lane LOS	-	F	C	-	-
HCM 95th %tile Q(veh)	-	15.7	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	2	311	201	2	49	243	1463	198	27	1705	26
Future Volume (vph)	245	2	311	201	2	49	243	1463	198	27	1705	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	327	3	415	209	2	51	261	1573	213	28	1776	27
RTOR Reduction (vph)	0	0	0	0	0	46	0	0	94	0	0	0
Lane Group Flow (vph)	327	3	415	209	2	5	261	1573	119	28	1776	27
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	7.3	7.3	100.0	10.7	10.7	10.7	10.7	55.9	55.9	4.1	49.3	100.0
Effective Green, g (s)	7.3	7.3	100.0	10.7	10.7	10.7	10.7	55.9	55.9	4.1	49.3	100.0
Actuated g/C Ratio	0.07	0.07	1.00	0.11	0.11	0.11	0.11	0.56	0.56	0.04	0.49	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	255	138	1615	370	201	171	370	1997	893	140	1744	1583
v/s Ratio Prot	c0.09	0.00		c0.06	0.00		c0.08	0.44		0.01	c0.50	
v/s Ratio Perm			0.26			0.00			0.07			0.02
v/c Ratio	1.28	0.02	0.26	0.56	0.01	0.03	0.71	0.79	0.13	0.20	1.02	0.02
Uniform Delay, d1	46.4	43.0	0.0	42.4	39.9	40.0	43.1	17.4	10.5	46.4	25.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.32	0.58	0.21	0.87	1.30	1.00
Incremental Delay, d2	153.6	0.1	0.4	2.0	0.0	0.1	5.5	3.0	0.3	0.7	25.4	0.0
Delay (s)	199.9	43.1	0.4	44.4	39.9	40.1	62.3	13.1	2.5	40.9	58.5	0.0
Level of Service	F	D	A	D	D	D	E	B	A	D	E	A
Approach Delay (s)		88.1			43.5			18.2			57.3	
Approach LOS		F			D			B			E	

Intersection Summary			
HCM 2000 Control Delay	44.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	187	3	517	2	207	1328	0	0	1579
Future Volume (vph)	0	0	0	187	3	517	2	207	1328	0	0	1579
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1704	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.10	1.00			1.00
Satd. Flow (perm)				1698	1704	1599		190	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	195	3	539	2	218	1398	0	0	1628
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	99	99	539	0	220	1398	0	0	1628
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				11.1	11.1	100.0		76.9	76.9			60.9
Effective Green, g (s)				11.1	11.1	100.0		76.9	76.9			60.9
Actuated g/C Ratio				0.11	0.11	1.00		0.77	0.77			0.61
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				188	189	1599		319	2721			3096
v/s Ratio Prot								c0.08	0.40			0.32
v/s Ratio Perm				c0.06	0.06	0.34		c0.45				
v/c Ratio				0.53	0.52	0.34		0.69	0.51			0.53
Uniform Delay, d1				42.0	42.0	0.0		13.7	4.4			11.2
Progression Factor				1.00	1.00	1.00		1.06	0.47			1.90
Incremental Delay, d2				2.7	2.6	0.6		3.7	0.4			0.3
Delay (s)				44.6	44.6	0.6		18.2	2.5			21.7
Level of Service				D	D	A		B	A			C
Approach Delay (s)		0.0			12.4				4.6			16.4
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	516
Future Volume (vph)	516
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	532
RTOR Reduction (vph)	0
Lane Group Flow (vph)	532
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.34
v/c Ratio	0.34
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	0.3
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	463	9	202	0	0	0	0	1078	150	812	943	0
Future Volume (vph)	463	9	202	0	0	0	0	1078	150	812	943	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	493	10	215	0	0	0	0	1172	163	837	972	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	251	252	215	0	0	0	0	1172	163	837	972	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	16.7	16.7	100.0					45.0	100.0	21.3	71.3	
Effective Green, g (s)	16.7	16.7	100.0					45.0	100.0	21.3	71.3	
Actuated g/C Ratio	0.17	0.17	1.00					0.45	1.00	0.21	0.71	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	275	276	1553					1592	1583	731	2523	
v/s Ratio Prot								c0.33		c0.24	0.27	
v/s Ratio Perm	c0.15	0.15	0.14						0.10			
v/c Ratio	0.91	0.91	0.14					0.74	0.10	1.15	0.39	
Uniform Delay, d1	40.9	40.9	0.0					22.6	0.0	39.4	5.7	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.93	2.61	
Incremental Delay, d2	32.2	32.2	0.2					3.1	0.1	79.3	0.4	
Delay (s)	73.1	73.1	0.2					25.7	0.1	115.9	15.2	
Level of Service	E	E	A					C	A	F	B	
Approach Delay (s)		51.3			0.0			22.6			61.8	
Approach LOS		D			A			C			E	

Intersection Summary			
HCM 2000 Control Delay	46.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	12537.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	262	143	127	1762	1141	627
Future Vol, veh/h	262	143	127	1762	1141	627
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	524	286	143	1980	1189	653

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3782	1516	1842	0	-	0
Stage 1	1516	-	-	-	-	-
Stage 2	2266	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 5	~ 148	332	-	-	-
Stage 1	~ 202	-	-	-	-	-
Stage 2	~ 85	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 3	~ 148	332	-	-	-
Mov Cap-2 Maneuver	~ 3	-	-	-	-	-
Stage 1	~ 115	-	-	-	-	-
Stage 2	~ 85	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 73892.4	1.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	332	-	5	-	-
HCM Lane V/C Ratio	0.43	-	162	-	-
HCM Control Delay (s)	23.8	-	$ 73892.4	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	2.1	-	103.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	160	127	951	73	174	42	1	1074	388	22	49	1101
Future Volume (vph)	160	127	951	73	174	42	1	1074	388	22	49	1101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	174	138	1034	88	210	51	1	1234	446	25	57	1280
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	174	138	1034	88	210	51	0	1235	446	25	57	1280
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	9.3	9.3	100.0	11.3	11.3	100.0		35.4	52.4	100.0	6.0	22.0
Effective Green, g (s)	9.3	9.3	100.0	11.3	11.3	100.0		35.4	52.4	100.0	6.0	22.0
Actuated g/C Ratio	0.09	0.09	1.00	0.11	0.11	1.00		0.35	0.52	1.00	0.06	0.22
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	316	325	1568	384	396	1568		1215	1854	1583	204	771
v/s Ratio Prot	0.05	0.04		0.03	0.06			c0.36	0.13		0.02	c0.37
v/s Ratio Perm			c0.66			0.03				0.02		
v/c Ratio	0.55	0.42	0.66	0.23	0.53	0.03		1.02	0.24	0.02	0.28	1.66
Uniform Delay, d1	43.4	42.8	0.0	40.4	41.8	0.0		32.3	13.0	0.0	44.9	39.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.93	1.88	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.9	2.2	0.3	1.4	0.0		12.3	0.0	0.0	0.8	302.8
Delay (s)	45.4	43.7	2.2	40.7	43.2	0.0		42.5	24.5	0.0	45.7	341.8
Level of Service	D	D	A	D	D	A		D	C	A	D	F
Approach Delay (s)		12.0			36.3				37.1			279.9
Approach LOS		B			D				D			F

Intersection Summary			
HCM 2000 Control Delay	107.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	203
Future Volume (vph)	203
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	236
RTOR Reduction (vph)	0
Lane Group Flow (vph)	236
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.15
v/c Ratio	0.15
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	1838	60	0	2049
Future Vol, veh/h	0	3	1838	60	0	2049
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	91	91	94	94
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	6	2020	66	0	2180

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1010	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	241	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	241	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	241	-
HCM Lane V/C Ratio	-	0.025	-
HCM Control Delay (s)	-	20.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	0	224	258	1	67	721	1682	255	76	1883	320
Future Volume (vph)	69	0	224	258	1	67	721	1682	255	76	1883	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	209	0	679	287	1	74	838	1956	297	79	1961	333
RTOR Reduction (vph)	0	0	0	0	0	64	0	0	131	0	0	0
Lane Group Flow (vph)	209	0	679	287	1	10	838	1956	166	79	1961	333
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.0		100.0	13.8	13.8	13.8	14.2	51.7	51.7	6.5	44.0	100.0
Effective Green, g (s)	6.0		100.0	13.8	13.8	13.8	14.2	51.7	51.7	6.5	44.0	100.0
Actuated g/C Ratio	0.06		1.00	0.14	0.14	0.14	0.14	0.52	0.52	0.06	0.44	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	210		1615	469	254	216	482	1812	810	221	1542	1568
v/s Ratio Prot	c0.06			c0.08	0.00		c0.25	0.56		0.02	c0.56	
v/s Ratio Perm			0.42			0.01			0.11			0.21
v/c Ratio	1.00		0.42	0.61	0.00	0.05	1.74	1.08	0.21	0.36	1.27	0.21
Uniform Delay, d1	47.0		0.0	40.6	37.2	37.4	42.9	24.1	13.0	44.8	28.0	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.03	1.16	1.94	0.65	1.21	1.00
Incremental Delay, d2	60.4		0.8	2.4	0.0	0.1	339.7	44.9	0.5	0.1	122.8	0.0
Delay (s)	107.4		0.8	42.9	37.2	37.5	384.0	73.0	25.7	29.4	156.6	0.0
Level of Service	F		A	D	D	D	F	E	C	C	F	A
Approach Delay (s)		25.9			41.8			152.8			130.4	
Approach LOS		C			D			F			F	

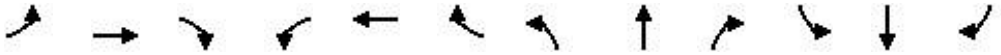
Intersection Summary			
HCM 2000 Control Delay	122.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	211	13	1089	3	260	1310	0	0	1500
Future Volume (vph)	0	0	0	211	13	1089	3	260	1310	0	0	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1678	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.07	1.00			1.00
Satd. Flow (perm)				1665	1678	1568		136	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	240	15	1238	3	271	1365	0	0	1724
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	127	128	1238	0	274	1365	0	0	1724
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				13.0	13.0	100.0		75.0	75.0			49.7
Effective Green, g (s)				13.0	13.0	100.0		75.0	75.0			49.7
Actuated g/C Ratio				0.13	0.13	1.00		0.75	0.75			0.50
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				216	218	1568		433	2654			2502
v/s Ratio Prot								0.13	0.39			0.34
v/s Ratio Perm				0.08	0.08	c0.79		0.35				
v/c Ratio				0.59	0.59	0.79		0.63	0.51			0.69
Uniform Delay, d1				41.0	41.0	0.0		23.6	5.1			19.2
Progression Factor				1.00	1.00	1.00		1.70	0.34			1.45
Incremental Delay, d2				4.0	4.0	4.1		1.7	0.4			0.4
Delay (s)				45.0	45.0	4.1		41.8	2.1			28.2
Level of Service				D	D	A		D	A			C
Approach Delay (s)		0.0			11.1				8.8			19.5
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	679
Future Volume (vph)	679
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	780
RTOR Reduction (vph)	0
Lane Group Flow (vph)	780
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.50
v/c Ratio	0.50
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	0.3
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	549	14	234	0	0	0	0	1035	69	471	1252	0
Future Volume (vph)	549	14	234	0	0	0	0	1035	69	471	1252	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1657	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1657	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	597	15	254	0	0	0	0	1137	76	501	1332	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	304	308	254	0	0	0	0	1137	76	501	1332	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	19.8	19.8	100.0					43.2	100.0	20.0	68.2	
Effective Green, g (s)	19.8	19.8	100.0					43.2	100.0	20.0	68.2	
Actuated g/C Ratio	0.20	0.20	1.00					0.43	1.00	0.20	0.68	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	326	328	1553					1528	1583	680	2390	
v/s Ratio Prot								c0.32		c0.15	0.38	
v/s Ratio Perm	0.18	0.19	0.16						0.05			
v/c Ratio	0.93	0.94	0.16					0.74	0.05	0.74	0.56	
Uniform Delay, d1	39.4	39.5	0.0					23.8	0.0	37.5	8.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.74	0.06	
Incremental Delay, d2	32.6	33.7	0.2					3.3	0.1	3.2	0.7	
Delay (s)	72.1	73.2	0.2					27.1	0.1	31.2	1.2	
Level of Service	E	E	A					C	A	C	A	
Approach Delay (s)		51.4			0.0			25.4			9.4	
Approach LOS		D			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	8987.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	302	162	47	1269	1764	148
Future Vol, veh/h	302	162	47	1269	1764	148
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	604	324	50	1350	1857	156

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3385	1935	2013	0	-	0
Stage 1	1935	-	-	-	-	-
Stage 2	1450	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 9	~ 83	285	-	-	-
Stage 1	~ 125	-	-	-	-	-
Stage 2	~ 218	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 7	~ 83	285	-	-	-
Mov Cap-2 Maneuver	~ 7	-	-	-	-	-
Stage 1	~ 103	-	-	-	-	-
Stage 2	~ 218	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 42035.8	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	285	-	10	-	-
HCM Lane V/C Ratio	0.175	-	92.8	-	-
HCM Control Delay (s)	20.3	$ 42035.8		-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.6	-	117.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	304	217	1116	22	161	76	4	901	878	60	34	621
Future Volume (vph)	304	217	1116	22	161	76	4	901	878	60	34	621
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	313	224	1151	27	194	92	4	919	896	61	40	722
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	313	224	1151	27	194	92	0	923	896	61	40	722
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	13.0	13.0	100.0	10.4	10.4	100.0		28.6	51.3	100.0	4.3	26.0
Effective Green, g (s)	13.0	13.0	100.0	10.4	10.4	100.0		28.6	51.3	100.0	4.3	26.0
Actuated g/C Ratio	0.13	0.13	1.00	0.10	0.10	1.00		0.29	0.51	1.00	0.04	0.26
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	450	464	1599	360	371	1599		991	1833	1599	149	929
v/s Ratio Prot	0.09	0.06		0.01	0.05			c0.27	0.25		0.01	0.20
v/s Ratio Perm			c0.72			0.06				0.04		
v/c Ratio	0.70	0.48	0.72	0.07	0.52	0.06		0.93	0.49	0.04	0.27	0.78
Uniform Delay, d1	41.6	40.4	0.0	40.5	42.4	0.0		34.7	15.8	0.0	46.3	34.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.74	1.33	1.00	1.00	1.00
Incremental Delay, d2	4.6	0.8	2.8	0.1	1.3	0.1		7.6	0.4	0.0	1.0	6.4
Delay (s)	46.2	41.2	2.8	40.5	43.8	0.1		33.2	21.4	0.0	47.3	40.7
Level of Service	D	D	A	D	D	A		C	C	A	D	D
Approach Delay (s)		16.0			30.7				26.5			35.6
Approach LOS		B			C				C			D

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	99
Future Volume (vph)	99
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	115
RTOR Reduction (vph)	0
Lane Group Flow (vph)	115
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.07
v/c Ratio	0.07
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	39	2249	18	0	2044
Future Vol, veh/h	0	39	2249	18	0	2044
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	96	96	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	44	2343	19	0	2198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1172	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	188	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	188	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	188	-
HCM Lane V/C Ratio	-	0.236	-
HCM Control Delay (s)	-	30	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.9	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	214	3	720	245	3	60	284	1779	241	33	1703	127
Future Volume (vph)	214	3	720	245	3	60	284	1779	241	33	1703	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	285	4	960	255	3	62	305	1913	259	34	1774	132
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	114	0	0	0
Lane Group Flow (vph)	285	4	960	255	3	7	305	1913	145	34	1774	132
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.7	6.7	100.0	11.3	11.3	11.3	10.9	55.8	55.8	4.2	49.1	100.0
Effective Green, g (s)	6.7	6.7	100.0	11.3	11.3	11.3	10.9	55.8	55.8	4.2	49.1	100.0
Actuated g/C Ratio	0.07	0.07	1.00	0.11	0.11	0.11	0.11	0.56	0.56	0.04	0.49	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	234	127	1615	391	212	180	377	1994	892	144	1737	1583
v/s Ratio Prot	c0.08	0.00		0.07	0.00		c0.09	0.54		0.01	c0.50	
v/s Ratio Perm			c0.59			0.00			0.09			0.08
v/c Ratio	1.22	0.03	0.59	0.65	0.01	0.04	0.81	0.96	0.16	0.24	1.02	0.08
Uniform Delay, d1	46.6	43.6	0.0	42.5	39.4	39.5	43.5	21.0	10.7	46.3	25.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.30	0.56	0.23	0.83	1.45	1.00
Incremental Delay, d2	130.4	0.1	1.6	3.9	0.0	0.1	10.4	11.2	0.3	0.7	24.6	0.1
Delay (s)	177.1	43.7	1.6	46.3	39.4	39.6	67.2	23.1	2.8	39.3	61.4	0.1
Level of Service	F	D	A	D	D	D	E	C	A	D	E	A
Approach Delay (s)		41.8			45.0			26.4			56.8	
Approach LOS		D			D			C			E	

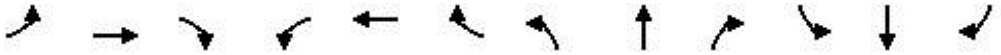
Intersection Summary			
HCM 2000 Control Delay	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	228	4	625	3	252	1606	0	0	1904
Future Volume (vph)	0	0	0	228	4	625	3	252	1606	0	0	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1705	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.06	1.00			1.00
Satd. Flow (perm)				1698	1705	1599		120	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	238	4	651	3	265	1691	0	0	1963
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	121	121	651	0	268	1691	0	0	1963
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				12.4	12.4	100.0		75.6	75.6			57.1
Effective Green, g (s)				12.4	12.4	100.0		75.6	75.6			57.1
Actuated g/C Ratio				0.12	0.12	1.00		0.76	0.76			0.57
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				210	211	1599		313	2675			2903
v/s Ratio Prot								c0.12	0.48			0.39
v/s Ratio Perm				0.07	0.07	c0.41		c0.53				
v/c Ratio				0.58	0.57	0.41		0.86	0.63			0.68
Uniform Delay, d1				41.3	41.3	0.0		28.9	5.7			15.0
Progression Factor				1.00	1.00	1.00		1.11	0.49			1.61
Incremental Delay, d2				3.8	3.7	0.8		7.7	0.4			0.6
Delay (s)				45.1	45.0	0.8		39.7	3.2			24.8
Level of Service				D	D	A		D	A			C
Approach Delay (s)		0.0			12.8				8.2			18.9
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	615
Future Volume (vph)	615
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	634
RTOR Reduction (vph)	0
Lane Group Flow (vph)	634
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.40
v/c Ratio	0.40
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.4
Delay (s)	0.4
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	557	11	246	0	0	0	0	1308	183	977	1143	0
Future Volume (vph)	557	11	246	0	0	0	0	1308	183	977	1143	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	593	12	262	0	0	0	0	1422	199	1007	1178	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	302	303	262	0	0	0	0	1422	199	1007	1178	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	17.0	17.0	100.0					45.0	100.0	21.0	71.0	
Effective Green, g (s)	17.0	17.0	100.0					45.0	100.0	21.0	71.0	
Actuated g/C Ratio	0.17	0.17	1.00					0.45	1.00	0.21	0.71	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	280	281	1553					1592	1583	720	2512	
v/s Ratio Prot								c0.40		c0.29	0.33	
v/s Ratio Perm	c0.18	0.18	0.17						0.13			
v/c Ratio	1.08	1.08	0.17					0.89	0.13	1.40	0.47	
Uniform Delay, d1	41.5	41.5	0.0					25.3	0.0	39.5	6.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.83	2.25	
Incremental Delay, d2	76.3	76.1	0.2					8.1	0.2	185.8	0.5	
Delay (s)	117.8	117.6	0.2					33.4	0.2	218.8	14.6	
Level of Service	F	F	A					C	A	F	B	
Approach Delay (s)		82.2			0.0			29.3			108.7	
Approach LOS		F			A			C			F	

Intersection Summary			
HCM 2000 Control Delay	76.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	9525.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	262	121	83	1762	1213	555
Future Vol, veh/h	262	121	83	1762	1213	555
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	524	242	93	1980	1264	578

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3719	1553	1842	0	-	0
Stage 1	1553	-	-	-	-	-
Stage 2	2166	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 5	~ 141	332	-	-	-
Stage 1	~ 194	-	-	-	-	-
Stage 2	~ 96	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 4	~ 141	332	-	-	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	~ 140	-	-	-	-	-
Stage 2	~ 96	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 58203.5	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	332	-	6	-	-
HCM Lane V/C Ratio	0.281	-	127.667	-	-
HCM Control Delay (s)	20	-	$ 58203.5	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	1.1	-	97.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	138	127	1023	73	174	42	1	1074	411	22	49	1145
Future Volume (vph)	138	127	1023	73	174	42	1	1074	411	22	49	1145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	3505
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	150	138	1112	88	210	51	1	1234	472	25	57	1331
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	150	138	1112	88	210	51	0	1235	472	25	57	1331
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	9.1	9.1	100.0	11.3	11.3	100.0		35.7	52.6	100.0	6.0	21.9
Effective Green, g (s)	9.1	9.1	100.0	11.3	11.3	100.0		35.7	52.6	100.0	6.0	21.9
Actuated g/C Ratio	0.09	0.09	1.00	0.11	0.11	1.00		0.36	0.53	1.00	0.06	0.22
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	309	318	1568	384	396	1568		1225	1861	1583	204	767
v/s Ratio Prot	0.04	0.04		0.03	0.06			c0.36	0.13		0.02	c0.38
v/s Ratio Perm			c0.71			0.03				0.02		
v/c Ratio	0.49	0.43	0.71	0.23	0.53	0.03		1.01	0.25	0.02	0.28	1.74
Uniform Delay, d1	43.2	43.0	0.0	40.4	41.8	0.0		32.1	13.0	0.0	44.9	39.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.90	1.84	1.00	1.00	1.00
Incremental Delay, d2	1.2	1.0	2.7	0.3	1.4	0.0		9.8	0.0	0.0	0.8	336.3
Delay (s)	44.4	44.0	2.7	40.7	43.2	0.0		38.7	23.9	0.0	45.7	375.4
Level of Service	D	D	A	D	D	A		D	C	A	D	F
Approach Delay (s)		11.3			36.3				34.1			319.1
Approach LOS		B			D				C			F

Intersection Summary			
HCM 2000 Control Delay	116.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	160
Future Volume (vph)	160
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	186
RTOR Reduction (vph)	0
Lane Group Flow (vph)	186
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.12
v/c Ratio	0.12
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

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	111	0	0	3	0	1860	60	0	1804	361
Future Vol, veh/h	0	0	111	0	0	3	0	1860	60	0	1804	361
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	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	50	92	50	92	91	91	94	94	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	1	1	1	2
Mvmt Flow	0	0	121	0	0	6	0	2044	66	0	1919	392

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1156	-	-	1022	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	190	0	0	237	0	-	0	0	-	-
Stage 1	0	0	-	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	0	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	190	-	-	237	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	52.1	20.6	0	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	190	237	-	-
HCM Lane V/C Ratio	-	0.635	0.025	-	-
HCM Control Delay (s)	-	52.1	20.6	-	-
HCM Lane LOS	-	F	C	-	-
HCM 95th %tile Q(veh)	-	3.7	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	0	113	258	1	67	721	1682	255	76	1994	75
Future Volume (vph)	91	0	113	258	1	67	721	1682	255	76	1994	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502		1615	3400	1845	1568	3400	3505	1568	3400	3505	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	276	0	342	287	1	74	838	1956	297	79	2077	78
RTOR Reduction (vph)	0	0	0	0	0	64	0	0	131	0	0	0
Lane Group Flow (vph)	276	0	342	287	1	10	838	1956	166	79	2077	78
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.0		100.0	13.8	13.8	13.8	14.2	51.7	51.7	6.5	44.0	100.0
Effective Green, g (s)	6.0		100.0	13.8	13.8	13.8	14.2	51.7	51.7	6.5	44.0	100.0
Actuated g/C Ratio	0.06		1.00	0.14	0.14	0.14	0.14	0.52	0.52	0.06	0.44	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	210		1615	469	254	216	482	1812	810	221	1542	1568
v/s Ratio Prot	c0.08			c0.08	0.00		c0.25	0.56		0.02	c0.59	
v/s Ratio Perm			0.21			0.01			0.11			0.05
v/c Ratio	1.31		0.21	0.61	0.00	0.05	1.74	1.08	0.21	0.36	1.35	0.05
Uniform Delay, d1	47.0		0.0	40.6	37.2	37.4	42.9	24.1	13.0	44.8	28.0	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.03	1.16	1.94	0.68	1.19	1.00
Incremental Delay, d2	171.1		0.3	2.4	0.0	0.1	339.7	44.9	0.5	0.1	156.5	0.0
Delay (s)	218.1		0.3	42.9	37.2	37.5	384.0	73.0	25.7	30.6	189.9	0.0
Level of Service	F		A	D	D	D	F	E	C	C	F	A
Approach Delay (s)		97.6			41.8			152.8			177.7	
Approach LOS		F			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	149.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	103.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	211	13	1089	3	260	1310	0	0	1500
Future Volume (vph)	0	0	0	211	13	1089	3	260	1310	0	0	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1678	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.07	1.00			1.00
Satd. Flow (perm)				1665	1678	1568		136	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	240	15	1238	3	271	1365	0	0	1724
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	127	128	1238	0	274	1365	0	0	1724
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				13.0	13.0	100.0		75.0	75.0			49.7
Effective Green, g (s)				13.0	13.0	100.0		75.0	75.0			49.7
Actuated g/C Ratio				0.13	0.13	1.00		0.75	0.75			0.50
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				216	218	1568		433	2654			2502
v/s Ratio Prot								0.13	0.39			0.34
v/s Ratio Perm				0.08	0.08	c0.79		0.35				
v/c Ratio				0.59	0.59	0.79		0.63	0.51			0.69
Uniform Delay, d1				41.0	41.0	0.0		23.6	5.1			19.2
Progression Factor				1.00	1.00	1.00		1.70	0.34			1.51
Incremental Delay, d2				4.0	4.0	4.1		1.7	0.4			0.1
Delay (s)				45.0	45.0	4.1		41.8	2.1			29.3
Level of Service				D	D	A		D	A			C
Approach Delay (s)		0.0			11.1				8.8			20.2
Approach LOS		A			B				A			C

Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	679
Future Volume (vph)	679
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	780
RTOR Reduction (vph)	0
Lane Group Flow (vph)	780
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.50
v/c Ratio	0.50
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	549	14	234	0	0	0	0	1035	69	471	1252	0
Future Volume (vph)	549	14	234	0	0	0	0	1035	69	471	1252	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1657	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1657	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	597	15	254	0	0	0	0	1137	76	501	1332	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	304	308	254	0	0	0	0	1137	76	501	1332	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	19.8	19.8	100.0					43.2	100.0	20.0	68.2	
Effective Green, g (s)	19.8	19.8	100.0					43.2	100.0	20.0	68.2	
Actuated g/C Ratio	0.20	0.20	1.00					0.43	1.00	0.20	0.68	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	326	328	1553					1528	1583	680	2390	
v/s Ratio Prot								c0.32		c0.15	0.38	
v/s Ratio Perm	0.18	0.19	0.16						0.05			
v/c Ratio	0.93	0.94	0.16					0.74	0.05	0.74	0.56	
Uniform Delay, d1	39.4	39.5	0.0					23.8	0.0	37.5	8.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.74	0.06	
Incremental Delay, d2	32.6	33.7	0.2					3.3	0.1	3.2	0.7	
Delay (s)	72.1	73.2	0.2					27.1	0.1	31.1	1.2	
Level of Service	E	E	A					C	A	C	A	
Approach Delay (s)		51.4			0.0			25.4			9.4	
Approach LOS		D			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	6669.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	302	90	31	1269	1792	120
Future Vol, veh/h	302	90	31	1269	1792	120
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	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	94	94	95	95
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	604	180	33	1350	1886	126

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3365	1949	2012	0	-	0
Stage 1	1949	-	-	-	-	-
Stage 2	1416	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	~ 9	~ 82	285	-	-	-
Stage 1	~ 123	-	-	-	-	-
Stage 2	~ 226	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	~ 82	285	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	~ 109	-	-	-	-	-
Stage 2	~ 226	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 35555.9	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	285	-	10	-	-
HCM Lane V/C Ratio	0.116	-	78.4	-	-
HCM Control Delay (s)	19.3	$ 35555.9	-	-	
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.4	-	99.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	233	217	1144	22	161	76	4	901	949	60	34	638
Future Volume (vph)	233	217	1144	22	161	76	4	901	949	60	34	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	3574
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	240	224	1179	27	194	92	4	919	968	61	40	742
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	240	224	1179	27	194	92	0	923	968	61	40	742
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	12.0	12.0	100.0	10.4	10.4	100.0		29.3	52.3	100.0	4.3	26.3
Effective Green, g (s)	12.0	12.0	100.0	10.4	10.4	100.0		29.3	52.3	100.0	4.3	26.3
Actuated g/C Ratio	0.12	0.12	1.00	0.10	0.10	1.00		0.29	0.52	1.00	0.04	0.26
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	416	428	1599	360	371	1599		1015	1869	1599	149	939
v/s Ratio Prot	0.07	0.06		0.01	0.05			c0.27	0.27		0.01	0.21
v/s Ratio Perm			c0.74			0.06				0.04		
v/c Ratio	0.58	0.52	0.74	0.07	0.52	0.06		0.91	0.52	0.04	0.27	0.79
Uniform Delay, d1	41.6	41.3	0.0	40.5	42.4	0.0		34.1	15.6	0.0	46.3	34.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		0.77	1.26	1.00	1.00	1.00
Incremental Delay, d2	1.9	1.2	3.1	0.1	1.3	0.1		3.8	0.3	0.0	1.0	6.7
Delay (s)	43.5	42.5	3.1	40.5	43.8	0.1		30.2	20.0	0.0	47.3	41.0
Level of Service	D	D	A	D	D	A		C	B	A	D	D
Approach Delay (s)		14.4			30.7				24.2			36.9
Approach LOS		B			C				C			D

Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	82
Future Volume (vph)	82
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	95
RTOR Reduction (vph)	0
Lane Group Flow (vph)	95
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.06
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	36.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	357	0	0	39	0	2321	18	0	1948	141
Future Vol, veh/h	0	0	357	0	0	39	0	2321	18	0	1948	141
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	-	-	Free	-	-	None
Storage Length	-	-	0	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	88	92	88	92	96	96	93	93	92
Heavy Vehicles, %	2	2	2	0	2	0	2	1	1	1	1	2
Mvmt Flow	0	0	388	0	0	44	0	2418	19	0	2095	153

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1124	-	-	1209	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.9	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	~ 200	0	0	178	0	-	0	0	-	-
Stage 1	0	0	-	0	0	-	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	0	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	~ 200	-	-	178	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 480.5	31.8	0	0
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	200	178	-	-
HCM Lane V/C Ratio	-	1.94	0.249	-	-
HCM Control Delay (s)	-	$ 480.5	31.8	-	-
HCM Lane LOS	-	F	D	-	-
HCM 95th %tile Q(veh)	-	28.6	0.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	3	363	245	3	60	284	1779	241	33	2060	31
Future Volume (vph)	286	3	363	245	3	60	284	1779	241	33	2060	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	3467	1881	1599	3467	3574	1599	3433	3539	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	381	4	484	255	3	62	305	1913	259	34	2146	32
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	114	0	0	0
Lane Group Flow (vph)	381	4	484	255	3	7	305	1913	145	34	2146	32
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	6.7	6.7	100.0	11.3	11.3	11.3	10.9	55.8	55.8	4.2	49.1	100.0
Effective Green, g (s)	6.7	6.7	100.0	11.3	11.3	11.3	10.9	55.8	55.8	4.2	49.1	100.0
Actuated g/C Ratio	0.07	0.07	1.00	0.11	0.11	0.11	0.11	0.56	0.56	0.04	0.49	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	234	127	1615	391	212	180	377	1994	892	144	1737	1583
v/s Ratio Prot	c0.11	0.00		c0.07	0.00		c0.09	0.54		0.01	c0.61	
v/s Ratio Perm			0.30			0.00			0.09			0.02
v/c Ratio	1.63	0.03	0.30	0.65	0.01	0.04	0.81	0.96	0.16	0.24	1.24	0.02
Uniform Delay, d1	46.6	43.6	0.0	42.5	39.4	39.5	43.5	21.0	10.7	46.3	25.4	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.30	0.56	0.23	0.86	1.37	1.00
Incremental Delay, d2	301.4	0.1	0.5	3.9	0.0	0.1	10.4	11.2	0.3	0.7	110.4	0.0
Delay (s)	348.0	43.7	0.5	46.3	39.4	39.6	67.2	23.1	2.8	40.5	145.3	0.0
Level of Service	F	D	A	D	D	D	E	C	A	D	F	A
Approach Delay (s)		153.1			45.0			26.4			141.5	
Approach LOS		F			D			C			F	

Intersection Summary			
HCM 2000 Control Delay	89.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	228	4	625	3	252	1606	0	0	1904
Future Volume (vph)	0	0	0	228	4	625	3	252	1606	0	0	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1705	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.06	1.00			1.00
Satd. Flow (perm)				1698	1705	1599		120	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	238	4	651	3	265	1691	0	0	1963
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	121	121	651	0	268	1691	0	0	1963
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				12.4	12.4	100.0		75.6	75.6			57.1
Effective Green, g (s)				12.4	12.4	100.0		75.6	75.6			57.1
Actuated g/C Ratio				0.12	0.12	1.00		0.76	0.76			0.57
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				210	211	1599		313	2675			2903
v/s Ratio Prot								c0.12	0.48			0.39
v/s Ratio Perm				0.07	0.07	c0.41		c0.53				
v/c Ratio				0.58	0.57	0.41		0.86	0.63			0.68
Uniform Delay, d1				41.3	41.3	0.0		28.9	5.7			15.0
Progression Factor				1.00	1.00	1.00		1.11	0.49			1.76
Incremental Delay, d2				3.8	3.7	0.8		7.7	0.4			0.1
Delay (s)				45.1	45.0	0.8		39.7	3.2			26.5
Level of Service				D	D	A		D	A			C
Approach Delay (s)		0.0			12.8				8.2			20.0
Approach LOS		A			B				A			C

Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	615
Future Volume (vph)	615
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	634
RTOR Reduction (vph)	0
Lane Group Flow (vph)	634
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.40
v/c Ratio	0.40
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

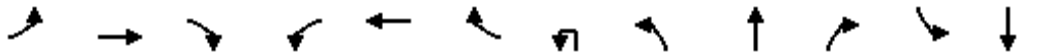
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	557	11	246	0	0	0	0	1308	183	977	1143	0
Future Volume (vph)	557	11	246	0	0	0	0	1308	183	977	1143	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	593	12	262	0	0	0	0	1422	199	1007	1178	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	302	303	262	0	0	0	0	1422	199	1007	1178	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	17.0	17.0	100.0					45.0	100.0	21.0	71.0	
Effective Green, g (s)	17.0	17.0	100.0					45.0	100.0	21.0	71.0	
Actuated g/C Ratio	0.17	0.17	1.00					0.45	1.00	0.21	0.71	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	280	281	1553					1592	1583	720	2512	
v/s Ratio Prot								c0.40		c0.29	0.33	
v/s Ratio Perm	c0.18	0.18	0.17						0.13			
v/c Ratio	1.08	1.08	0.17					0.89	0.13	1.40	0.47	
Uniform Delay, d1	41.5	41.5	0.0					25.3	0.0	39.5	6.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.84	2.28	
Incremental Delay, d2	76.3	76.1	0.2					8.1	0.2	185.8	0.5	
Delay (s)	117.8	117.6	0.2					33.4	0.2	219.1	14.9	
Level of Service	F	F	A					C	A	F	B	
Approach Delay (s)		82.2			0.0			29.3			109.0	
Approach LOS		F			A			C			F	

Intersection Summary			
HCM 2000 Control Delay	76.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	262	143	127	1762	1141	627
Future Volume (vph)	262	143	127	1762	1141	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	1.00	0.97	0.91	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3502	1615	3467	5136	3574	1599
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3502	1615	3467	5136	3574	1599
Peak-hour factor, PHF	0.50	0.50	0.89	0.89	0.96	0.96
Adj. Flow (vph)	524	286	143	1980	1189	653
RTOR Reduction (vph)	0	34	0	0	0	278
Lane Group Flow (vph)	524	252	143	1980	1189	375
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		2!		6!	
Permitted Phases		4		2		6
Actuated Green, G (s)	13.5	13.5	27.1	27.1	27.1	27.1
Effective Green, g (s)	13.5	13.5	27.1	27.1	27.1	27.1
Actuated g/C Ratio	0.27	0.27	0.55	0.55	0.55	0.55
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	953	439	1894	2806	1952	873
v/s Ratio Prot	0.15		0.04		0.33	
v/s Ratio Perm		c0.16		c0.39		0.23
v/c Ratio	0.55	0.57	0.08	0.71	0.61	0.43
Uniform Delay, d1	15.4	15.6	5.3	8.3	7.6	6.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	1.8	0.0	0.8	0.5	0.3
Delay (s)	16.1	17.4	5.3	9.1	8.2	7.0
Level of Service	B	B	A	A	A	A
Approach Delay (s)	16.6			8.9	7.8	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	160	127	951	73	174	42	1	1074	388	22	49	1101
Future Volume (vph)	160	127	951	73	174	42	1	1074	388	22	49	1101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.91
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	5036
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3400	3505	1568	3400	3505	1568		3433	3539	1583	3400	5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.86	0.86
Adj. Flow (vph)	174	138	1034	88	210	51	1	1234	446	25	57	1280
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	174	138	1034	88	210	51	0	1235	446	25	57	1280
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	9.3	9.3	100.0	11.3	11.3	100.0		35.4	52.4	100.0	6.0	22.0
Effective Green, g (s)	9.3	9.3	100.0	11.3	11.3	100.0		35.4	52.4	100.0	6.0	22.0
Actuated g/C Ratio	0.09	0.09	1.00	0.11	0.11	1.00		0.35	0.52	1.00	0.06	0.22
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	316	325	1568	384	396	1568		1215	1854	1583	204	1107
v/s Ratio Prot	0.05	0.04		0.03	0.06			c0.36	0.13		0.02	c0.25
v/s Ratio Perm			c0.66			0.03				0.02		
v/c Ratio	0.55	0.42	0.66	0.23	0.53	0.03		1.02	0.24	0.02	0.28	1.16
Uniform Delay, d1	43.4	42.8	0.0	40.4	41.8	0.0		32.3	13.0	0.0	44.9	39.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.9	2.2	0.3	1.4	0.0		30.0	0.3	0.0	0.8	80.8
Delay (s)	45.4	43.7	2.2	40.7	43.2	0.0		62.3	13.3	0.0	45.7	119.8
Level of Service	D	D	A	D	D	A		E	B	A	D	F
Approach Delay (s)		12.0			36.3				48.6			99.2
Approach LOS		B			D				D			F

Intersection Summary			
HCM 2000 Control Delay	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	203
Future Volume (vph)	203
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	236
RTOR Reduction (vph)	0
Lane Group Flow (vph)	236
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.15
v/c Ratio	0.15
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.2
Delay (s)	0.2
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

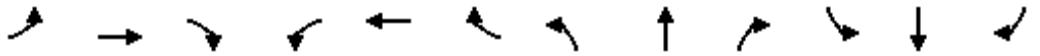
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	1838	60	0	2049
Future Vol, veh/h	0	3	1838	60	0	2049
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	91	91	94	94
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	6	2020	66	0	2180

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1010	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	241	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	241	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	241	-
HCM Lane V/C Ratio	-	0.025	-
HCM Control Delay (s)	-	20.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	0	224	258	1	67	721	1682	255	76	1883	320
Future Volume (vph)	69	0	224	258	1	67	721	1682	255	76	1883	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	1.00		1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1805		1615	3400	1845	1568	3400	3505	1568	3400	5036	1568
Flt Permitted	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1805		1615	3400	1845	1568	3400	3505	1568	3400	5036	1568
Peak-hour factor, PHF	0.33	0.33	0.33	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96
Adj. Flow (vph)	209	0	679	287	1	74	838	1956	297	79	1961	333
RTOR Reduction (vph)	0	0	0	0	0	66	0	0	101	0	0	0
Lane Group Flow (vph)	209	0	679	287	1	8	838	1956	196	79	1961	333
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split		Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	17.0		150.0	16.6	16.6	16.6	37.4	89.3	89.3	5.1	57.0	150.0
Effective Green, g (s)	17.0		150.0	16.6	16.6	16.6	37.4	89.3	89.3	5.1	57.0	150.0
Actuated g/C Ratio	0.11		1.00	0.11	0.11	0.11	0.25	0.60	0.60	0.03	0.38	1.00
Clearance Time (s)	6.0			6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	204		1615	376	204	173	847	2086	933	115	1913	1568
v/s Ratio Prot	c0.12			c0.08	0.00		c0.25	0.56		0.02	c0.39	
v/s Ratio Perm			0.42			0.01			0.13			0.21
v/c Ratio	1.02		0.42	0.76	0.00	0.05	0.99	0.94	0.21	0.69	1.03	0.21
Uniform Delay, d1	66.5		0.0	64.8	59.4	59.6	56.1	27.8	14.0	71.7	46.5	0.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	69.5		0.8	8.9	0.0	0.1	28.0	9.7	0.5	15.7	27.2	0.3
Delay (s)	136.0		0.8	73.7	59.4	59.7	84.1	37.5	14.6	87.4	73.7	0.3
Level of Service	F		A	E	E	E	F	D	B	F	E	A
Approach Delay (s)		32.6			70.8			47.9			63.9	
Approach LOS		C			E			D			E	

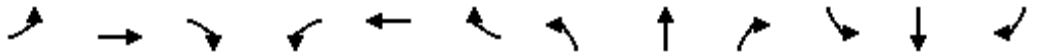
Intersection Summary			
HCM 2000 Control Delay	52.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	211	13	1089	3	260	1310	0	0	1500
Future Volume (vph)	0	0	0	211	13	1089	3	260	1310	0	0	1500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.96	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1665	1678	1568		1770	3539			5036
Flt Permitted				0.95	0.96	1.00		0.07	1.00			1.00
Satd. Flow (perm)				1665	1678	1568		136	3539			5036
Peak-hour factor, PHF	0.92	0.92	0.92	0.88	0.88	0.88	0.96	0.96	0.96	0.96	0.87	0.87
Adj. Flow (vph)	0	0	0	240	15	1238	3	271	1365	0	0	1724
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	127	128	1238	0	274	1365	0	0	1724
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	3%	3%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				13.0	13.0	100.0		75.0	75.0			49.7
Effective Green, g (s)				13.0	13.0	100.0		75.0	75.0			49.7
Actuated g/C Ratio				0.13	0.13	1.00		0.75	0.75			0.50
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				216	218	1568		433	2654			2502
v/s Ratio Prot								0.13	0.39			0.34
v/s Ratio Perm				0.08	0.08	c0.79		0.35				
v/c Ratio				0.59	0.59	0.79		0.63	0.51			0.69
Uniform Delay, d1				41.0	41.0	0.0		23.6	5.1			19.2
Progression Factor				1.00	1.00	1.00		1.70	0.34			1.00
Incremental Delay, d2				4.0	4.0	4.1		1.7	0.4			1.6
Delay (s)				45.0	45.0	4.1		41.8	2.1			20.8
Level of Service				D	D	A		D	A			C
Approach Delay (s)		0.0			11.1				8.8			14.7
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	679
Future Volume (vph)	679
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1568
Flt Permitted	1.00
Satd. Flow (perm)	1568
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	780
RTOR Reduction (vph)	0
Lane Group Flow (vph)	780
Heavy Vehicles (%)	3%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1568
v/s Ratio Prot	
v/s Ratio Perm	0.50
v/c Ratio	0.50
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	1.1
Delay (s)	1.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



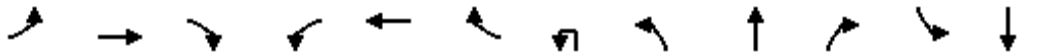
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	549	14	234	0	0	0	0	1035	69	471	1252	0
Future Volume (vph)	549	14	234	0	0	0	0	1035	69	471	1252	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1657	1553					3539	1583	3400	3505	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1657	1553					3539	1583	3400	3505	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	597	15	254	0	0	0	0	1137	76	501	1332	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	304	308	254	0	0	0	0	1137	76	501	1332	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	19.8	19.8	100.0					43.2	100.0	20.0	68.2	
Effective Green, g (s)	19.8	19.8	100.0					43.2	100.0	20.0	68.2	
Actuated g/C Ratio	0.20	0.20	1.00					0.43	1.00	0.20	0.68	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	326	328	1553					1528	1583	680	2390	
v/s Ratio Prot								c0.32		c0.15	0.38	
v/s Ratio Perm	0.18	0.19	0.16						0.05			
v/c Ratio	0.93	0.94	0.16					0.74	0.05	0.74	0.56	
Uniform Delay, d1	39.4	39.5	0.0					23.8	0.0	37.5	8.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.76	0.06	
Incremental Delay, d2	32.6	33.7	0.2					3.3	0.1	3.2	0.7	
Delay (s)	72.1	73.2	0.2					27.1	0.1	31.7	1.2	
Level of Service	E	E	A					C	A	C	A	
Approach Delay (s)		51.4			0.0			25.4			9.6	
Approach LOS		D			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	302	162	47	1269	1764	148
Future Volume (vph)	302	162	47	1269	1764	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	1.00	0.97	0.91	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3502	1615	3467	5136	3574	1599
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3502	1615	3467	5136	3574	1599
Peak-hour factor, PHF	0.50	0.50	0.94	0.94	0.95	0.95
Adj. Flow (vph)	604	324	50	1350	1857	156
RTOR Reduction (vph)	0	10	0	0	0	38
Lane Group Flow (vph)	604	314	50	1350	1857	118
Heavy Vehicles (%)	0%	0%	1%	1%	1%	1%
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		2!		6!	
Permitted Phases		4		2		6
Actuated Green, G (s)	16.0	16.0	36.5	36.5	36.5	36.5
Effective Green, g (s)	16.0	16.0	36.5	36.5	36.5	36.5
Actuated g/C Ratio	0.26	0.26	0.59	0.59	0.59	0.59
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	911	420	2057	3048	2121	949
v/s Ratio Prot	0.17		0.01		c0.52	
v/s Ratio Perm		c0.19		0.26		0.07
v/c Ratio	0.66	0.75	0.02	0.44	0.88	0.12
Uniform Delay, d1	20.3	20.9	5.2	6.9	10.6	5.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	7.1	0.0	0.1	4.4	0.1
Delay (s)	22.2	28.0	5.2	7.0	15.0	5.5
Level of Service	C	C	A	A	B	A
Approach Delay (s)	24.2			6.9	14.2	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	61.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	304	217	1116	22	161	76	4	901	878	60	34	621
Future Volume (vph)	304	217	1116	22	161	76	4	901	878	60	34	621
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	5.0	5.0	4.0		6.0	6.0	4.0	5.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.95	1.00	0.97	0.91
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	5136
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	3574	1599	3467	3574	1599		3467	3574	1599	3467	5136
Peak-hour factor, PHF	0.97	0.97	0.97	0.83	0.83	0.83	0.98	0.98	0.98	0.98	0.86	0.86
Adj. Flow (vph)	313	224	1151	27	194	92	4	919	896	61	40	722
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	313	224	1151	27	194	92	0	923	896	61	40	722
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Free	Split	NA	Free	Prot	Prot	NA	Free	Prot	NA
Protected Phases	7	7		8	8		5	5	2		1	6
Permitted Phases			Free			Free				Free		
Actuated Green, G (s)	13.0	13.0	100.0	10.4	10.4	100.0		28.6	51.3	100.0	4.3	26.0
Effective Green, g (s)	13.0	13.0	100.0	10.4	10.4	100.0		28.6	51.3	100.0	4.3	26.0
Actuated g/C Ratio	0.13	0.13	1.00	0.10	0.10	1.00		0.29	0.51	1.00	0.04	0.26
Clearance Time (s)	5.0	5.0		5.0	5.0			6.0	6.0		5.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	450	464	1599	360	371	1599		991	1833	1599	149	1335
v/s Ratio Prot	0.09	0.06		0.01	0.05			c0.27	0.25		0.01	0.14
v/s Ratio Perm			c0.72			0.06				0.04		
v/c Ratio	0.70	0.48	0.72	0.07	0.52	0.06		0.93	0.49	0.04	0.27	0.54
Uniform Delay, d1	41.6	40.4	0.0	40.5	42.4	0.0		34.7	15.8	0.0	46.3	31.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.6	0.8	2.8	0.1	1.3	0.1		14.8	0.9	0.0	1.0	1.6
Delay (s)	46.2	41.2	2.8	40.5	43.8	0.1		49.5	16.8	0.0	47.3	33.4
Level of Service	D	D	A	D	D	A		D	B	A	D	C
Approach Delay (s)		16.0			30.7				32.3			29.7
Approach LOS		B			C				C			C

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	99
Future Volume (vph)	99
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1599
Flt Permitted	1.00
Satd. Flow (perm)	1599
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	115
RTOR Reduction (vph)	0
Lane Group Flow (vph)	115
Heavy Vehicles (%)	1%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1599
v/s Ratio Prot	
v/s Ratio Perm	0.07
v/c Ratio	0.07
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	0.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

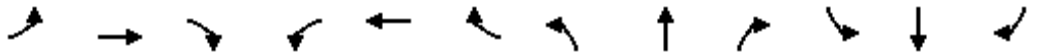
Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	39	2249	18	0	2044
Future Vol, veh/h	0	39	2249	18	0	2044
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	-	0	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	96	96	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	0	44	2343	19	0	2198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1172	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	188	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	188	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

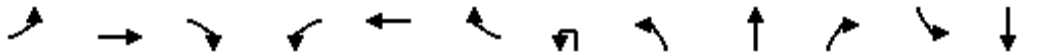
Approach	WB	NB	SB
HCM Control Delay, s	30	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	188	-
HCM Lane V/C Ratio	-	0.236	-
HCM Control Delay (s)	-	30	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.9	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	214	3	720	245	3	60	284	1779	241	33	1703	127
Future Volume (vph)	214	3	720	245	3	60	284	1779	241	33	1703	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1805	1900	1615	3467	1881	1599	3467	3574	1599	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1805	1900	1615	3467	1881	1599	3467	3574	1599	3433	5085	1583
Peak-hour factor, PHF	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	285	4	960	255	3	62	305	1913	259	34	1774	132
RTOR Reduction (vph)	0	0	0	0	0	56	0	0	120	0	0	0
Lane Group Flow (vph)	285	4	960	255	3	7	305	1913	139	34	1774	132
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA	Free	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Free
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			Free			8			2			Free
Actuated Green, G (s)	17.5	17.5	110.0	11.5	11.5	11.5	11.9	57.2	57.2	1.8	47.1	110.0
Effective Green, g (s)	17.5	17.5	110.0	11.5	11.5	11.5	11.9	57.2	57.2	1.8	47.1	110.0
Actuated g/C Ratio	0.16	0.16	1.00	0.10	0.10	0.10	0.11	0.52	0.52	0.02	0.43	1.00
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	287	302	1615	362	196	167	375	1858	831	56	2177	1583
v/s Ratio Prot	c0.16	0.00		0.07	0.00		0.09	c0.54		0.01	0.35	
v/s Ratio Perm			c0.59			0.00			0.09			0.08
v/c Ratio	0.99	0.01	0.59	0.70	0.02	0.04	0.81	1.03	0.17	0.61	0.81	0.08
Uniform Delay, d1	46.2	39.0	0.0	47.6	44.2	44.3	48.0	26.4	13.9	53.7	27.6	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	51.0	0.0	1.6	6.1	0.0	0.1	12.7	28.9	0.4	17.2	3.5	0.1
Delay (s)	97.2	39.0	1.6	53.7	44.2	44.4	60.6	55.3	14.3	71.0	31.1	0.1
Level of Service	F	D	A	D	D	D	E	E	B	E	C	A
Approach Delay (s)		23.5			51.8			51.6			29.7	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

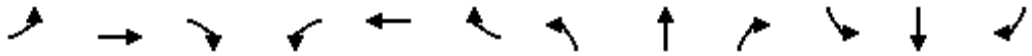


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	228	4	625	3	252	1606	0	0	1904
Future Volume (vph)	0	0	0	228	4	625	3	252	1606	0	0	1904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0	6.0	4.0		5.0	6.0			6.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.91
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1698	1705	1599		1770	3539			5085
Flt Permitted				0.95	0.95	1.00		0.06	1.00			1.00
Satd. Flow (perm)				1698	1705	1599		120	3539			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.97	0.97
Adj. Flow (vph)	0	0	0	238	4	651	3	265	1691	0	0	1963
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	121	121	651	0	268	1691	0	0	1963
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type				Perm	NA	Free	pm+pt	pm+pt	NA			NA
Protected Phases					8		5	5	2			6
Permitted Phases				8		Free	2	2				
Actuated Green, G (s)				12.4	12.4	100.0		75.6	75.6			57.1
Effective Green, g (s)				12.4	12.4	100.0		75.6	75.6			57.1
Actuated g/C Ratio				0.12	0.12	1.00		0.76	0.76			0.57
Clearance Time (s)				6.0	6.0			5.0	6.0			6.0
Vehicle Extension (s)				3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)				210	211	1599		313	2675			2903
v/s Ratio Prot								c0.12	0.48			0.39
v/s Ratio Perm				0.07	0.07	c0.41		c0.53				
v/c Ratio				0.58	0.57	0.41		0.86	0.63			0.68
Uniform Delay, d1				41.3	41.3	0.0		28.9	5.7			15.0
Progression Factor				1.00	1.00	1.00		1.11	0.49			1.00
Incremental Delay, d2				3.8	3.7	0.8		7.7	0.4			1.3
Delay (s)				45.1	45.0	0.8		39.7	3.2			16.3
Level of Service				D	D	A		D	A			B
Approach Delay (s)		0.0			12.8				8.2			12.5
Approach LOS		A			B				A			B

Intersection Summary			
HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	615
Future Volume (vph)	615
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	634
RTOR Reduction (vph)	0
Lane Group Flow (vph)	634
Heavy Vehicles (%)	2%
Turn Type	Free
Protected Phases	
Permitted Phases	Free
Actuated Green, G (s)	100.0
Effective Green, g (s)	100.0
Actuated g/C Ratio	1.00
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	1583
v/s Ratio Prot	
v/s Ratio Perm	0.40
v/c Ratio	0.40
Uniform Delay, d1	0.0
Progression Factor	1.00
Incremental Delay, d2	0.8
Delay (s)	0.8
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	557	11	246	0	0	0	0	1308	183	977	1143	0
Future Volume (vph)	557	11	246	0	0	0	0	1308	183	977	1143	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0					6.0	4.0	5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1649	1656	1553					3539	1583	3433	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1649	1656	1553					3539	1583	3433	3539	
Peak-hour factor, PHF	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	593	12	262	0	0	0	0	1422	199	1007	1178	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	302	303	262	0	0	0	0	1422	199	1007	1178	0
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Free					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		Free						Free			
Actuated Green, G (s)	17.0	17.0	100.0					45.0	100.0	21.0	71.0	
Effective Green, g (s)	17.0	17.0	100.0					45.0	100.0	21.0	71.0	
Actuated g/C Ratio	0.17	0.17	1.00					0.45	1.00	0.21	0.71	
Clearance Time (s)	6.0	6.0						6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0						3.0		3.0	3.0	
Lane Grp Cap (vph)	280	281	1553					1592	1583	720	2512	
v/s Ratio Prot								c0.40		c0.29	0.33	
v/s Ratio Perm	c0.18	0.18	0.17						0.13			
v/c Ratio	1.08	1.08	0.17					0.89	0.13	1.40	0.47	
Uniform Delay, d1	41.5	41.5	0.0					25.3	0.0	39.5	6.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.78	2.07	
Incremental Delay, d2	76.3	76.1	0.2					8.1	0.2	185.8	0.5	
Delay (s)	117.8	117.6	0.2					33.4	0.2	216.5	13.5	
Level of Service	F	F	A					C	A	F	B	
Approach Delay (s)		82.2			0.0			29.3			107.1	
Approach LOS		F			A			C			F	

Intersection Summary			
HCM 2000 Control Delay	75.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			