EXHIBIT I

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Sandy Community Campus Park

Transportation Impact Study

Sandy, Oregon

Date:
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2. The trip generation calculations show that the proposed project is projected to generate 17 evening peak hour trips, 40 Saturday peak hour trips, and 50 Saturday peak hour trips when an event is being held at the pump track and/or skatepark.
3. No significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.
4. The projected traffic demand at the unsignalized intersections do not meet the ODOT preliminary traffic signal warrant thresholds under all analysis scenarios.
5. Left-turn lane warrants for either of the site accesses or the intersection of SE Meinig Avenue & Pleasant Street are not projected to be met under buildout year 2025. Accordingly, no left-turn lanes are necessary or recommended.
6. All study intersections are projected to meet ODOT and the City of Sandy standards under all analysis scenarios.
7. The parking analysis shows that there is adequate parking supply available to accommodate the anticipated parking demand.

Project Description

Introduction

The lower field area north of the old Cedar Ridge Middle School buildings in Sandy, Oregon has been proposed for redevelopment. The proposed Community Campus Park includes constructing a new park consisting of a pump track/skatepark, trails, playgrounds and other amenities. Based on the City of Sandy's Traffic Impact Analysis (TIA) requirements as well as correspondence with DKS Associates, the City's consulting transportation engineer, this report conducts safety and capacity/level of service analyses at the following intersections:

1. Scenic Street at Site Access
2. SE Meinig Avenue at Idleman Street / Site Access
3. SE Meinig Avenue at Pleasant Street
4. SE Meinig Avenue at Proctor Boulevard (US 26 westbound)
5. SE Meinig Avenue / Highway 211 at Pioneer Boulevard (US 26 eastbound)

All supporting data and calculations are included in the appendix to this report.

Location Description

The project site is located on several tax lots, which encompass an approximate total of 10.5 acres, north of Pleasant Street between SE Meinig Avenue and Strauss Avenue. The current site includes a few amenities such as the Sandy Skate Park and former school fields, but it is mostly undeveloped. The proposed development will include 40 on-site parking spaces.. The project site will take access along SE Meinig Avenue aligning with Idleman Street, and along Scenic Street. Figure 1 displays a vicinity map of the project area, with the project site outlined in yellow.

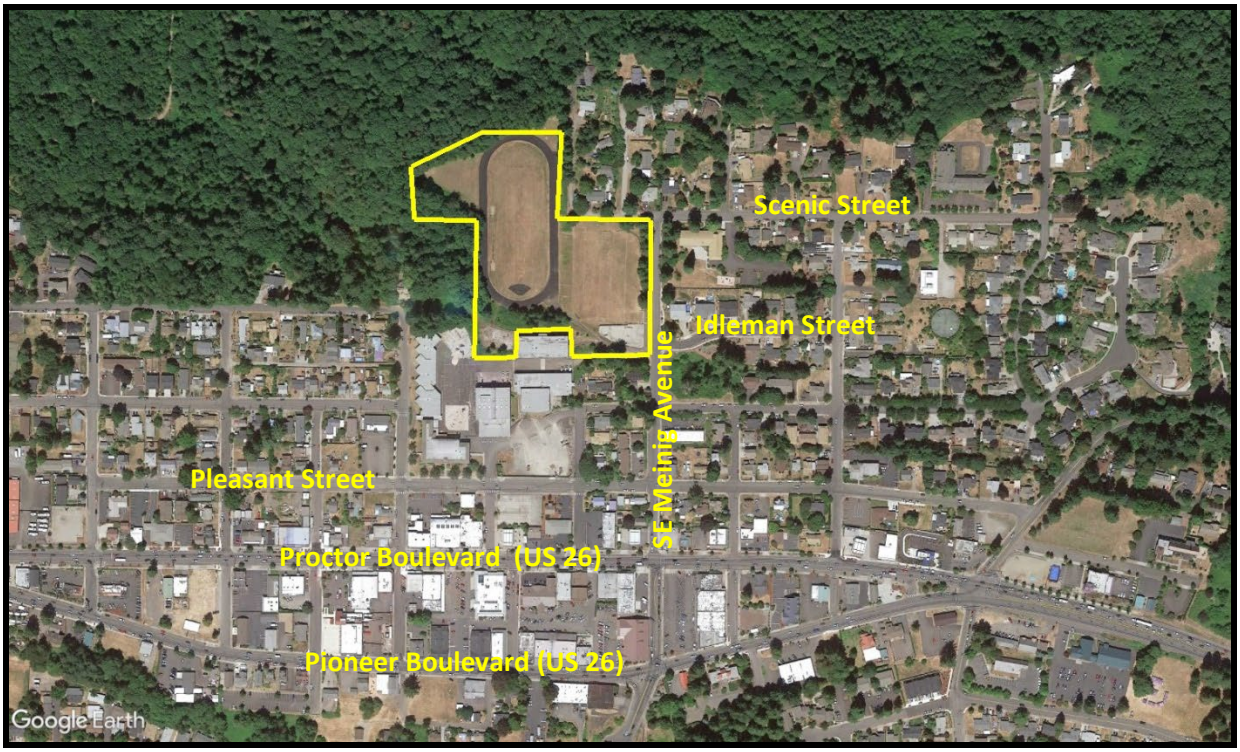

Figure 1: Aerial Photo of Site Vicinity (Image from Google Maps)

Vicinity Streets

The study area includes six roadways expected to be impacted by the proposed development. Table 1 provides a description of each of the vicinity roadways.

Table 1: Roadway Characteristics

Street Name	Jurisdiction	Functional Classification	Travel Lanes	Speed (mph)	Curbs & Sidewalks	On-Street Parking	Bicycle Facilities
SE Meinig Avenue	City of Sandy	Major Arterial / Collector	2	25	Intermittent	Intermittent	None
Idleman Street	City of Sandy	Local Street	2	25	Both Sides	Both Sides	None
Scenic Street	City of Sandy	Local Street	2	25	Intermittent	Both Sides	None
Pleasant Street	City of Sandy	Local Street	2	25	Both Sides	Both Sides	None
Proctor Boulevard (US 26 Westbound)	ODOT	Statewide Highway	2	25	Both Sides	Both Sides	North Side
Pioneer Boulevard (US 26 Eastbound)	ODOT	Statewide Highway	2	25	Both Sides	Both Sides	South Side

Notes: Functional Classification based on the Sandy Transportation System Plan and ODOT's TransGIS online website.

Study Intersections

Through coordination with the City of Sandy's consulting engineer, five study intersections were identified for evaluation. The existing characteristics of these intersections are summarized in Table 2.

Table 2: Vicinity Intersection Descriptions

Intersection		Geometry	Traffic Control	Phasing/Stopped Approaches
1	Scenic Street at Site Access	3-Leg[1]	Stop-Controlled	NB Stop-Controlled
2	Meinig Avenue at Idleman Street / Site Access	4-Leg	Stop-Controlled	EB/WB Stop-Controlled
3	Meinig Avenue at Pleasant Street	4-Leg	Stop-Controlled	EB/WB Stop-Controlled
4	Meinig Avenue at Proctor Boulevard (US 26 westbound)	4-Leg	Signalized	NB/WB Permitted Left
5	Meinig Avenue at Pioneer Boulevard (US 26 eastbound)	4-Leg	Signalized	EB Yield Controlled Channelized Right, SB Protected/Permitted Left

Notes: [1]South leg to be constructed by the proposed development

A vicinity map showing the project site, vicinity streets, and intersection configurations is shown in Figure 2.

Transit

Sandy Area Metro (SAM) Transit has three routes with bus stops located within a 1/2-mile walking/biking distance from the project site:

- The Shopping Shuttle Route has a stop located at the intersection of Proctor Boulevard and Strauss Avenue. The Shopping Shuttle Route loops through the city in a largely clockwise direction and provides service between the Fred Meyer and the Sandy Marketplace. The bus runs from 12:00 PM to 7:15 PM, Monday through Friday, and has no service on Saturday or Sunday. Headways are roughly one to three hours.
- The Sandy Local and Gresham Express route has a stop located at the intersection of Proctor Boulevard and Strauss Avenue, and another stop located at the Sandy Transit Center. This route provides service between the Sandy Transit Center and the Gresham Transit Center. The bus runs from 5:30 AM to 9:55 PM, Monday through Friday, with headways of approximately one-half hour. On Saturdays the bus runs from 5:30 AM to 10:25 PM with headways of approximately one hour, and on Sundays the bus runs from 7:00 AM to 9:55 PM, with headways of approximately one and a half hours to two hours.
- The Sandy and Estacada SAM Route has a stop located at the Sandy Transit Center. The route provides service between the Sandy Transit Center and Estacada City Hall. The bus runs from 7:00 AM to 7:30 PM, Monday through Saturday, with headways ranging from one and half hours to three and a half hours, and has no service on Sunday.

LEGEND

- STUDY INTERSECTION
- STOP SIGN
- TRAFFIC SIGNAL
- PROJECT SITE
- INTERSTATE
- ARTERIAL ROADWAY
- COLLECTOR ROADWAY
- LOCAL ROADWAY

No Scale

Figure 2
Community Campus Park
6/13/2023

VICINITY MAP

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Site Trips

Trip Generation

The Sandy Community Campus Park development will include the construction of a public park with a pump track and skatepark on an approximately 10.5-acre site. Based on the proposed site layout, approximately 0.72 acres of the site will be dedicated to a skatepark and pump track. Weekday PM peak hour and Saturday midday trips that will be generated by the proposed use were estimated using trip rates from the *Trip Generation Manual*[1].

Data from land use code 411, *Public Park*, was used based on the acreage for the 9.78-acre portion of the park. The skatepark and pump track facilities are anticipated to generate a higher trip generation than land use code 411, therefore, the 0.72-acre space was analyzed separately using alternative data. The *Trip Generation Manual* does not include trip generation data for skateparks and pump tracks, therefore, trip generation rates from another land use with similar trip generation characteristics were used.

Based on correspondence with the City's consulting transportation engineer, the most similar recreational ITE land use code to compare with the pump track and skatepark portion of the site is land use code 488, *Soccer Complex*. It is assumed that the trip generation of both the pump track and skatepark together would be equivalent to the trip generation of one soccer field.

Additionally, the pump track and skatepark are anticipated to hold occasional events on Saturdays. To account for a reasonable worst-case traffic impact scenario to the surrounding transportation network, trip generation estimates are provided for the Saturday peak hour when an event is being held.

As specific data is not readily available for a community park with the specific program elements identified in the Sandy Community Campus Park, trip generation data for a soccer complex was used for this study to determine the trips generated by the pump track and skatepark portion of the park. It is important to note that the trip generation characteristics of the soccer field may somewhat differ from the park's active elements such as the pump track and skatepark. For example, the soccer field may result in higher intensity trip generation over a shorter period of time compared to the pump track and skatepark, given sports teams, spectators, and/or referee officials will generally arrive and depart a soccer field within a one to two hour period, concurrent to scheduled game/practice times. This can also result in higher peaking for parking demand at soccer facilities compared to the pump track and skatepark.

Therefore, the total number of trips generated by the two land use types are expected to be similar, but utilizing data from land use code 488, *Soccer Complex*, may provide a more conservative evaluation of peak hour impacts to the transportation system.

The resulting trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included in Appendix A.

[1] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

Table 3: Trip Generation Summary

ITE Code	Intensity		Evening Peak Hour			Saturday Peak Hour			Saturday Peak Hour (Event)		
			In	Out	Total	In	Out	Total	In	Out	Total
411 – Public Park	9.78	Acres	1	0	1	2	1	3	2	1	3
488 - Soccer Complex	1	Field	11	5	16	18	19	37	38	9	47
Total:			**12**	**5**	**17**	**20**	**20**	**40**	**40**	**10**	**50**

Based on the above assumptions, the trip generation calculations show that the proposed project is projected to generate 20 evening peak hour trips, 40 Saturday peak hour trips, and 50 Saturday peak hour trips when an event is being held at the pump track and/or skatepark.

Trip Distribution

A preliminary directional distribution of site trips to and from the proposed development was estimated based on locations of likely destinations and locations of major transportation facilities in the site vicinity. The following trip distribution was used for analysis:

- Approximately 10 percent of site trips will travel to/from the west along Pleasant Street;
- Approximately 5 percent of trips will travel to/from the east along Pleasant Street;
- Approximately 20 percent of trips will travel to/from the south along Highway 211;
- Approximately 25 percent of site trips will travel to/from the east along US-26; and
- Approximately 40 percent of site trips will travel to/from the west along US-26.

Approximately 75% of vehicles are estimated to use the access along SE Meinig Avenue and 25% of vehicles are estimated to use the access along Scenic Street. The trip distribution and assignment for the total site trips generated during the morning and evening peak hours are shown in Figure 3.

LEGEND

XX% PERCENT OF PROJECT TRIPS

PROJECT TRIP GENERATION			
	IN	OUT	TOTAL
PM	15	9	24
Saturday	20	20	40
Saturday (Event)	40	10	50

SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

PM, Saturday, & Saturday (Event) Peak Hours

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Figure 3

Community Campus Park

6/13/2023

Traffic Volumes

Existing Conditions

Traffic counts were conducted at the study intersections on Thursday, March 18, 2023, between 4:00 PM and 6:00 PM, and Saturday, May 20, 2023, between 12:00 PM and 3:00 PM. Each intersection's respective evening and Saturday peak hours were used for analysis. There are 4 single family homes located to the west of the proposed site access along Scenic Street. Eastbound and westbound trips at the site access were estimated using data from land use code 210, *Single-Family Detached Housing*, using trip rates from the *Trip Generation Manual*[2].

ODOT Commuter Trends were used to develop a seasonal adjustment factor (SAF) of 1.03 that was applied to the 2023 traffic counts at the ODOT study intersections. The SAF is intended to adjust traffic volumes along ODOT intersections to reflect the 30th highest hour of traffic.

Background Conditions

For the general background growth, the annual linear growth rate of 2.0 percent per year were applied to the year 2023 existing traffic volumes for City of Sandy, and a liner growth rate of 0.96 percent per year were applied to ODOT intersections using ODOT's 2041 Future Volumes Table. Figure 5 shows the resulting year 2025 background traffic volumes.

Buildout Conditions

The trips to be generated by the proposed development, quantified earlier within the *Site Trips* section, were added to the year 2025 background traffic volumes in order to obtain the year 2025 traffic volumes with the full buildout and proposed development. Figure 6 shows the resulting year 2025 buildout traffic volumes.

[2] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

PM PEAK HOUR

SATURDAY PEAK HOUR

No Scale

Figure 4
Community Campus Park
6/13/2023

Traffic Volumes
Existing Conditions
PM & Saturday Peak Hours

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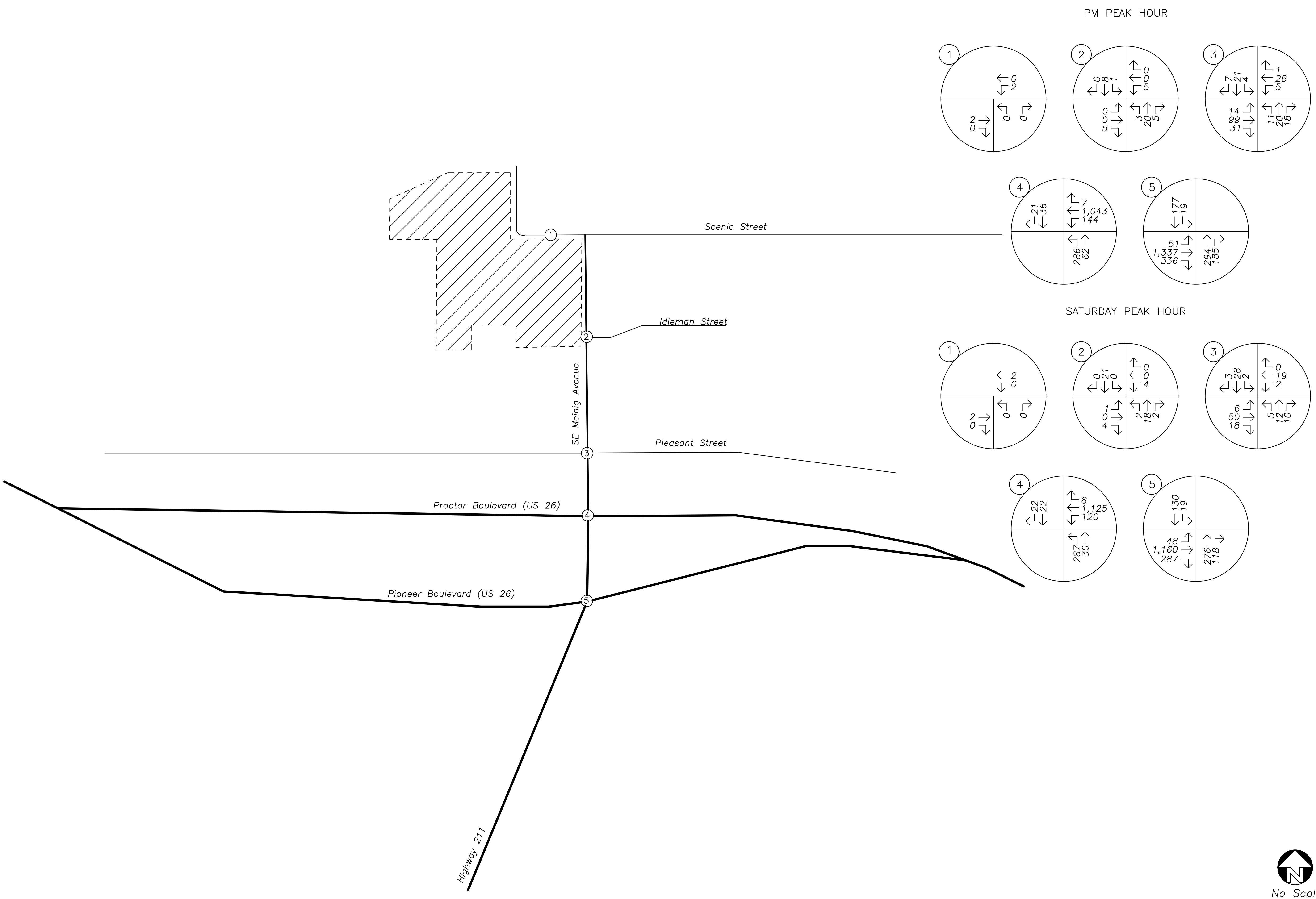

Figure 5
Community Campus Park
6/13/2023

Traffic Volumes
Background Conditions
PM & Saturday Peak Hours

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PM PEAK HOUR

SATURDAY PEAK HOUR

SATURDAY (EVENT) PEAK HOUR

No Scale

Figure 5
Community Campus Park
6/13/2023

TRAFFIC VOLUMES
Buildout Conditions
PM, Saturday & Saturday (Event) Peak Hours

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Safety Analysis

Crash History Review

Using data obtained from ODOT's Crash Data System, a review of approximately five years of the most recent available crash history (January 2017 through December 2021) was performed at the study intersections. The crash data was evaluated based on the number of crashes, the type of collisions, and the severity of the collisions. Crash severity is based on injuries sustained by people involved in the crash, and includes five categories:

- *PDO* – Property Damage Only
- *Injury C* – Possible Injury
- *Injury B* – Suspected Minor Injury
- *Injury A* – Suspected Serious Injury
- *Fatality*

Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak hour represents approximately 10 percent of the annual average daily traffic (AADT) at the intersection.

The study intersections adhere to the crash analysis methodologies within ODOT's Analysis Procedures Manual (APM). According to *Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control* of the APM, intersections which experience crash rates in excess of their respective 90th percentile crash rates should be "flagged for further analysis". Crash rates in excess of the 90th percentile crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

Table 4 provides a summary of crash types while Table 5 summarizes crash severities and rates for each of the study intersections. The intersection of SE Meinig Avenue at Idleman Street did not have any crashes reported within the five years of the most recent available crash history. Detailed crash data is provided in Appendix C.

Table 4: Crash Type Summary

Intersection		Crash Type					Total Crashes
		Turn	Rear End	Angle	Fixed Object	Ped	
1	Meinig Avenue at Pleasant Street	0	0	0	0	1	1
2	Meinig Avenue at Proctor Boulevard (US 26 westbound)	5	4	0	1	1	11
3	Meinig Avenue/Highway 211 at Pioneer Boulevard (US 26 eastbound)	1	8	5	0	1	15

Table 5: Crash Severity and Rate Summary

Intersection		Severity					Total Crashes	PHEV	Crash Rate	90th % Rate
		PDO	C	B	A	Fatal				
1	Meinig Avenue at Pleasant Street	0	1	0	0	0	1	247	0.222	0.408
2	Meinig Avenue at Proctor Boulevard (US 26 westbound)	6	5	0	0	0	11	1,511	0.384	0.860
3	Meinig Avenue/Highway 211 at Pioneer Boulevard (US 26 eastbound)	7	2	6	0	0	15	2,282	0.349	0.860

Crash Severity

None of the crashes reported in the five-year analysis period resulted in a fatality or an incapacitating injury (Injury A).

Pedestrian and Bicycle Collisions

Three of the reported crashes involved a pedestrian:

- At the intersection of Meinig Avenue at Pleasant Street, the driver of a right-turning vehicle struck a pedestrian crossing at the intersection. The directions of travel for the pedestrian and vehicle are reported as unknown. The pedestrian sustained injuries consistent with *Injury C* classification and the driver of the vehicle was not reported to have sustained any injuries. The driver of the vehicle was reported to have failed to yield the right of way. The collision occurred during the day under cloudy and dry conditions.
- At the intersection of Meinig Avenue at Proctor Boulevard (US 26 westbound), the driver of a northbound school bus turning left struck a southbound pedestrian traveling in the crosswalk. The pedestrian sustained injuries consistent with *Injury C* classification and the driver of the vehicle was not

reported to have sustained any injuries. The driver of the school bus was reported to have failed to yield the right of way due to inattention. The collision occurred during the daytime under rainy and wet conditions.

- At the intersection of Meinig Avenue at Pioneer Boulevard (US 26 eastbound), the driver of an eastbound left-turning vehicle struck a pedestrian traveling in the crosswalk. The pedestrian sustained injuries consistent with *Injury B* classification and the driver of the vehicle was not reported to have sustained any injuries. The driver of the vehicle was reported to have failed to yield the right of way. The collision occurred during the daytime under clear and dry conditions.

ODOT 90th Percentile Crash Rates

Intersection crash rates were calculated and none of the intersections had a rate above their respective ODOT 90th percentile crash rates.

Conclusion

Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections. No safety mitigation is recommended per the crash data analysis.

Traffic Signal Warrants

Preliminary traffic signal warrants were examined for all unsignalized study intersections to determine whether the installation of a new traffic signal will be warranted by the project buildout year 2025. Based on the preliminary analysis, traffic signal warrants are not projected to be met for any of the applicable study intersections. Accordingly, no signalization of the unsignalized study intersections is necessary or recommended.

Left-Turn Lane Warrants

A left-turn refuge is primarily a safety consideration for the major street, removing left-turning vehicles from the through traffic stream. Warrants were based on the methodology outlined in the National Cooperative Highway Research Program (NCHRP) Report Number 457[3]. This methodology evaluates the need for a left-turn lane based on the number of left-turning vehicles, the number of travel lanes, the number of advancing and opposing vehicles, and the roadway travel speed.

Detailed warrant analyses for each study intersection are included in the technical appendix to this report. Left-turn lane warrants were conducted at all intersections under year 2025 conditions where such treatment would be applicable.

Left-turn lane warrants are not projected to be met under buildout year 2025 for either of the site access intersections or the intersection of SE Meinig Avenue at Pleasant Street. Accordingly, no new left-turn lanes are necessary or recommended.

[3] Bonneson, James A. and Michael D. Fontaine, *NCHRP Report 457: An Engineering Study Guide for Evaluating Intersection Improvements*, Transportation Research Board, 2001.

Operational Analysis

An operational analysis was conducted for each of the study intersections per the signalized and unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)[4]. The Synchro/SimTraffic software was used for the analysis.

Two performance measures are assessed for intersection operations:

- The Level of service (LOS) is a measure based on average delay per vehicle that ranges from LOS A, which indicates little or no delay, to LOS F, which indicates a significant amount of congestion and delay.
- The volume to capacity (v/c) ratio is a measure that compares the traffic volume (demand) against the available capacity of an intersection, with v/c ratios above 1.0 indicating that an intersection is operating above capacity.

Performance Targets

For study intersections under ODOT jurisdiction, the applicable performance targets are established under the Oregon Highway Plan (OHP) and are based on the v/c ratio of the intersection. The target maximum allowable v/c ratio is 0.85 along US 26 within the study area.

The City of Sandy's Transportation System Plan states that both signalized and unsignalzied intersections are required to operate at LOS D or better.

Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 6. Detailed calculations as well as tables showing the relationship between delay and LOS are included in Appendix D.

As shown in Table 6, all study intersections meet ODOT and the City of Sandy standards under all analysis scenarios.

[4] Transportation Research Board, *Highway Capacity Manual 6th Edition*, 2016.

Table 6: Capacity Analysis Summary

Scenario	Evening Peak Hour			Saturday Peak Hour		
	LOS	Delay (s)	V/C	LOS	Delay (s)	V/C
1. Site Access at Scenic Street						
2025 Buildout Condition	A	8	0.01	A	8	0.01
2025 Buildout Condition (Saturday Event)	-	-	-	A	8	0.02
2. SE Meinig Avenue at Idleman Street / Site Access						
2023 Existing Condition	A	9	0.01	A	9	0.01
2025 Background Condition	A	9	0.01	A	9	0.01
2025 Buildout Condition	A	9	0.02	B	10	0.04
2025 Buildout Condition (Saturday Event)	-	-	-	B	11	0.05
3. SE Meinig Street at Pleasant Street						
2023 Existing Condition	B	10	0.18	B	10	0.14
2025 Background Condition	B	10	0.19	B	10	0.15
2025 Buildout Condition	B	10	0.19	B	11	0.16
2025 Buildout Condition (Saturday Event)	-	-	-	B	11	0.17
4. SE Meinig Avenue at Proctor Boulevard (US 26 westbound)						
2023 Existing Condition	B	14	0.73	B	13	0.73
2025 Background Condition	B	14	0.74	B	14	0.74
2025 Buildout Condition	B	15	0.75	B	15	0.76
2025 Buildout Condition (Saturday Event)	-	-	-	B	15	0.76
5. SE Meinig Avenue / Highway 211 at Pioneer Boulevard (US 26 eastbound)						
2023 Existing Condition	B	16	0.71	B	15	0.67
2025 Background Condition	B	17	0.72	B	15	0.68
2025 Buildout Condition	B	17	0.72	B	15	0.68
2025 Buildout Condition (Saturday Event)	-	-	-	B	16	0.69

BOLDED *results indicate operation above acceptable jurisdictional standards.*

Parking Analysis

The proposed development will provide 40 on-site parking spaces. On-street parking is also available on nearby streets such as SE Meinig Avenue, Scenic Street, Idleman Street, and Hood Street.

To estimate the parking demand that could be generated by the proposed development, parking generation rates from the *ITE Parking Generation Manual*[5] were used. While trip generation estimates using land use code 411, *Soccer Complex*, are deemed appropriate for hourly volumes, parking estimates will differ due to the difference in trip characteristics.

In the *ITE Parking Generation Manual*, it states that parking demand counts for land use code 488, *Soccer Complex*, were "…taken during a tournament or league games for which a series of back-to-back games were held on each field". It can be assumed that for a soccer complex, most patrons will arrive within a short time, specifically near the start of a game, and all remain parked during the duration of the game and again depart within a short time. The arrivals and departures as it relates to the skatepark and pump track will likely be more distributed during the peak hour because these amenities are not necessarily group or team sports. Due to this, using parking demand data for the land use code 488, *Soccer Complex*, from the *Parking Generation Manual* is not appropriate to capture the parking demand estimates for the pump track and skatepark.

The *Parking General Manual* states that the parks surveyed for parking demand data collection for the land use code 411, *Public Park*, varied widely in terms of location, type, and amenities such as hiking trails, picnic facilities, beaches, etc. Therefore, data from the land use code 411, *Public Park*, is more appropriate to estimate the proposed site's peak parking demand as a whole on a Saturday.

The average and 85th percentile parking demand estimates for an average Saturday are reported in Table 7. The 85th percentile parking demand rate is considered to be a conservatively high estimation of parking demand, whereas the average is more indicative of the most likely parking demand scenario throughout the day. However, in this case there is a wide disparity in the parking demand data, which leads to an abnormally high spread between the average and 85th percentile rates.

Table 7: Parking Generation Based on Park Acreage

ITE Code	Independent Variable	Average Rate	85th Percentile Rate	Average Parking Demand	85th Percentile Parking Demand
411 – Public Park	Acres	0.47	5.08	5	53

Using the standard assumption of 25 feet per parked vehicle, there will be approximately 14 on-street parking spaces along SE Meinig Avenue adjacent to the proposed park. Based on the size of the park and the amenities that are planned to be included, it is expected that the 40-space parking lot and 14 on-street parking spaces adjacent to the park on SE Meinig Avenue will provide sufficient parking supply to accommodate the anticipated parking demand.

[5] Institute of Transportation Engineers (ITE), Parking Generation Manual, 5th Edition

Conclusions

Key findings of this study include:

- No significant trends or crash patterns were identified at any of the study intersections. Accordingly, no specific safety mitigation is recommended.
- The projected traffic demand at the unsignalized intersections do not meet the ODOT preliminary traffic signal warrant thresholds under buildout conditions.
- Left-turn lane warrants for either of the site accesses or the intersection of SE Meinig Avenue & Pleasant Street are not projected to be met under buildout year 2025. Accordingly, no left-turn lanes are necessary or recommended.
- All study intersections are projected to meet ODOT and the City of Sandy standards under all analysis scenarios.
- The parking analysis shows that there is adequate parking supply available to accommodate the anticipated parking demand.

Appendix A – Site Information

Site Plan

Trip Generation Calculations

Parking Generation Calculations

THE MEANDER

PLAN NARRATIVE

The park design for The Meander recalls the fluid forms of the Sandy River and surrounding hillsides. The curving paths with woodland plantings bring visitors from the main entry on Meinig Avenue to a central plaza and then descends down into an open grass area. Vehicular access to the parking lot is from both Meinig Avenue and Scenic Street with a vehicular drop-off adjacent to the central plaza. The plaza hosts a shelter, a restroom facility, picnic tables and benches, all with views to the forest beyond. From the plaza, there is a connection to a sinuous walk that connects to other park elements including a play area nestled in the wooded hillside, a skate park at the bottom of a sloped grass seating area and a pump track. Fronting the walkways is a large open grass area along with an additional shelter, benches and planting.

PARK AMENITIES

1. PEDESTRIAN ENTRY
2. VEHICLE ENTRY
3. ENTRY PLAZA WITH SHELTER AND RESTROOM
4. SHELTER
5. BENCH, TYP
6. PICNIC TABLE, TYP
7. WOODLAND WALK
8. PLAY AREA WITH HILLSIDE SLIDE
9. SLOPED LAWN
10. SKATE PARK
11. PUMP TRACK
12. BIKE TRAIL
13. PEDESTRIAN PATH, TYP
14. OPEN LAWN
15. CITY OF SANDY PROPERTY ACCESS/ FUTURE PARK CONNECTION
16. SANDY RIVER PARK TRAIL CONNECTION
17. FUTURE PARK CONNECTION

0' 30' 60' N

SANDY WHERE INNOVATION MEETS ELEVATION

COMMUNITY CAMPUS PARK DEVELOPMENT PLAN 2.23.2023

lango hansen LANDSCAPE ARCHITECTS jla PUBLIC INVOLVEMENT american ramp company SKATE + PUMP TRACK

Soccer Complex
(488)

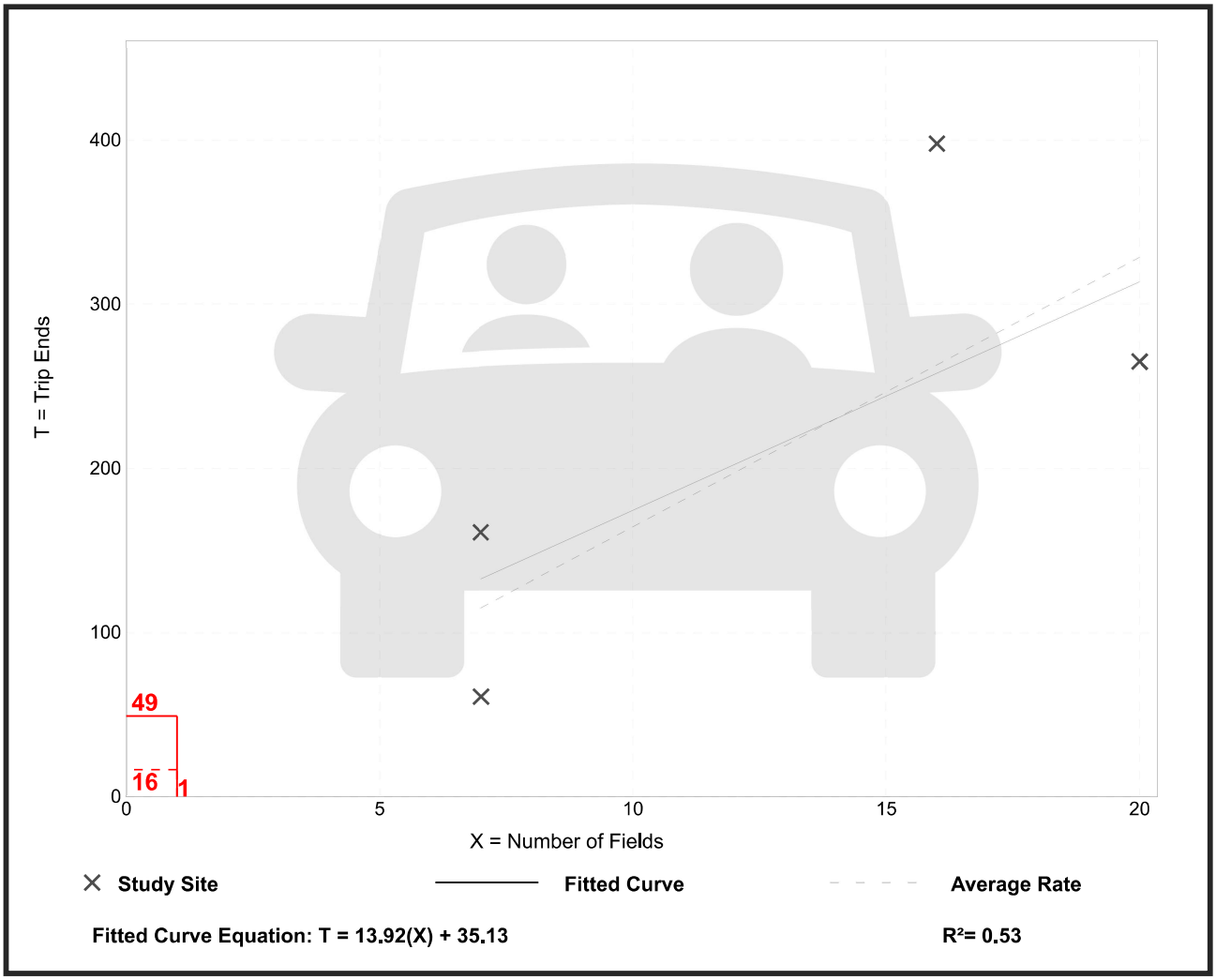
Vehicle Trip Ends vs: **Fields**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. Num. of Fields: 14
Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per Field

Average Rate	Range of Rates	Standard Deviation
16.43	8.71 - 24.88	6.36

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

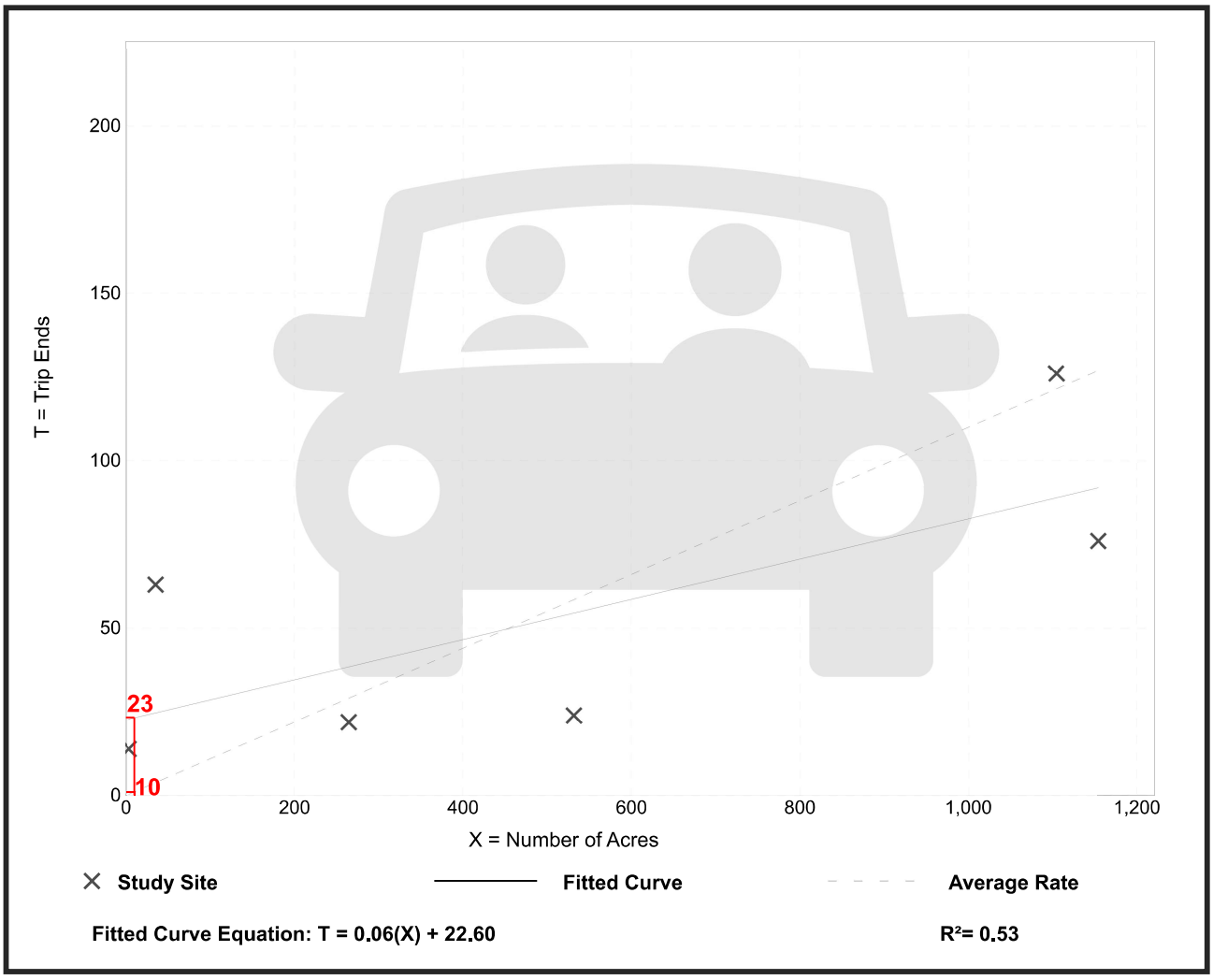
Public Park
(411)

Vehicle Trip Ends vs: **Acres**
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: 6
Avg. Num. of Acres: 516
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.11	0.05 - 3.50	0.24

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Public Park
(411)

Vehicle Trip Ends vs: **Acres**
On a: **Saturday, Peak Hour of Generator**

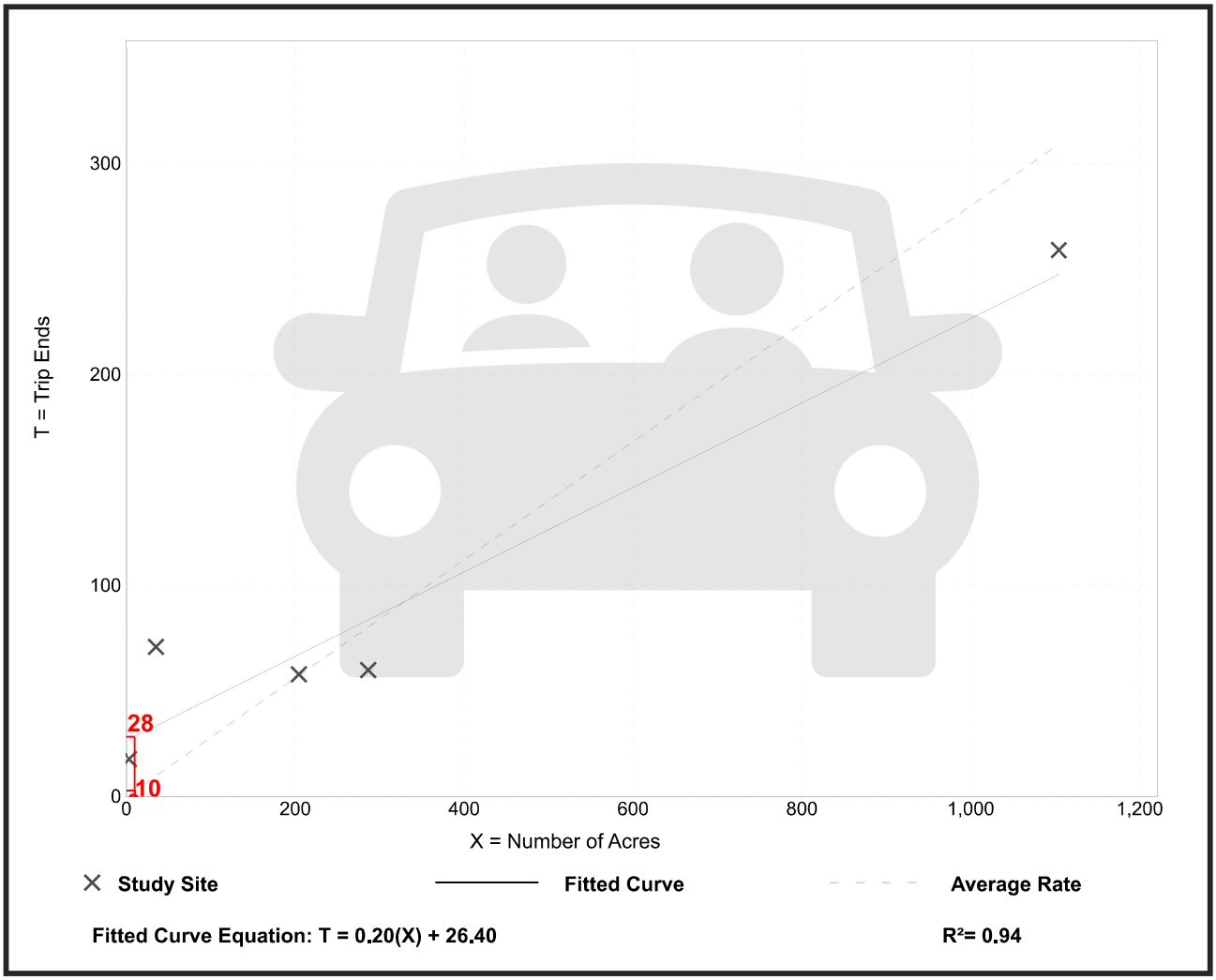
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. Num. of Acres: 327
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.28	0.21 - 4.50	0.37

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Soccer Complex
(488)

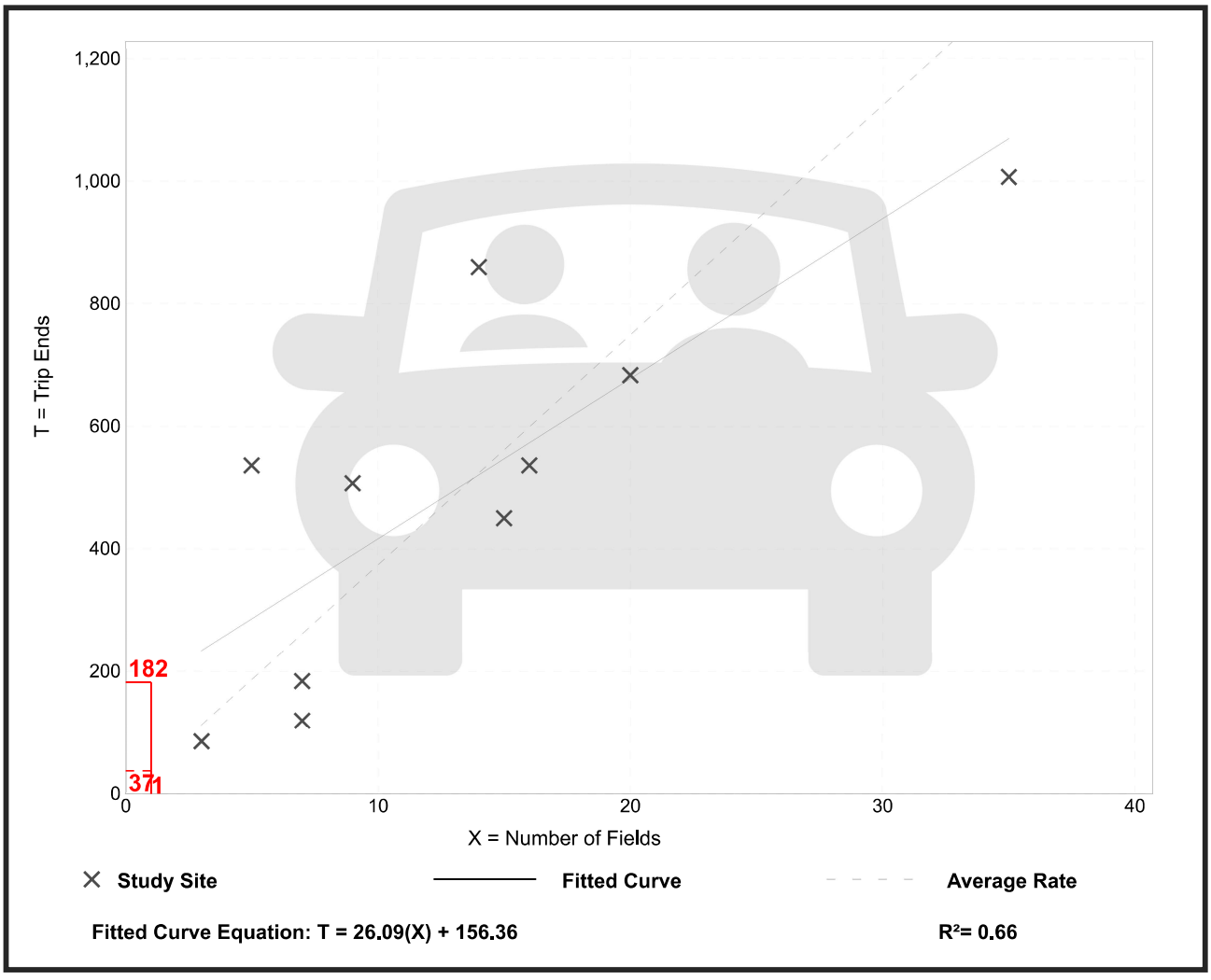
Vehicle Trip Ends vs: **Fields**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Fields: 14
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per Field

Average Rate	Range of Rates	Standard Deviation
37.48	17.14 - 107.40	17.87

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Public Park
(411)

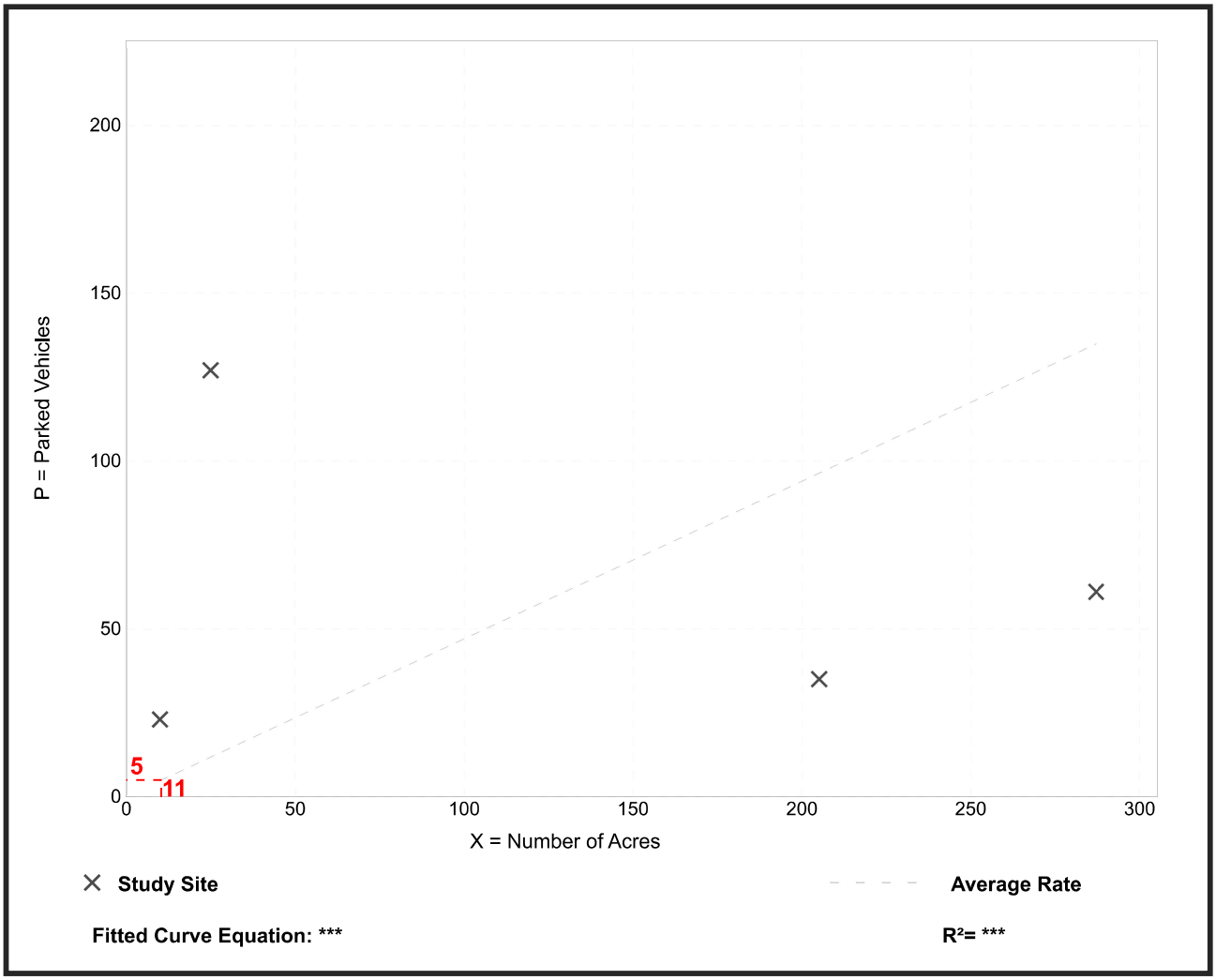
Peak Period Parking Demand vs: **Acres**
On a: **Saturday**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **9:00 a.m. - 3:00 p.m.**
Number of Studies: 4
Avg. Num. of Acres: 132

Peak Period Parking Demand per Acre

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.47	0.17 - 5.08	0.20 / 5.08	***	1.23 (262%)

Data Plot and Equation

Caution – Small Sample Size



Parking Generation Manual, 5th Edition ● Institute of Transportation Engineers

Appendix B – Traffic Volumes

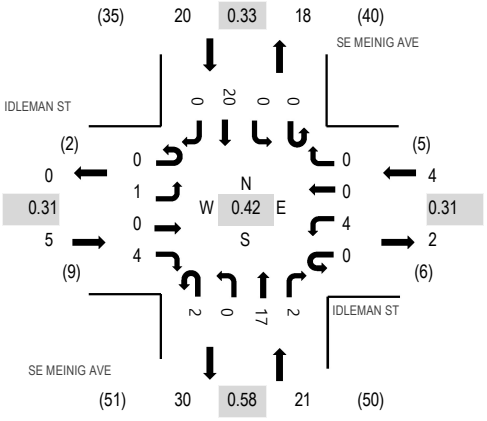
Traffic Counts

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

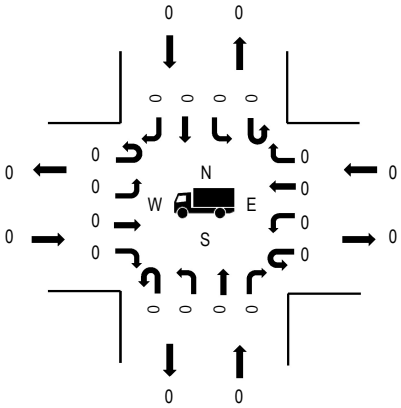
Location: 1 SE MEINIG AVE & IDLEMAN ST Noon
Date: Saturday, May 20, 2023
Peak Hour: 12:00 PM - 01:00 PM
Peak 15-Minutes: 12:15 PM - 12:30 PM

Peak Hour

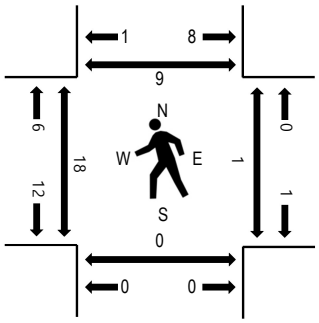
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.31
WB	0.0%	0.31
NB	0.0%	0.58
SB	0.0%	0.33
All	0.0%	0.42

Traffic Counts - Motorized Vehicles

Interval Start Time	IDLEMAN ST Eastbound				IDLEMAN ST Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
12:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	50
12:05 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	46
12:10 PM	0	0	0	1	0	0	0	0	0	0	3	1	0	0	0	0	5	45
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	4	42
12:20 PM	0	1	0	1	0	2	0	0	1	0	1	0	0	0	4	0	10	39
12:25 PM	0	0	0	2	0	1	0	0	1	0	3	0	0	0	9	0	16	31
12:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	15
12:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	21
12:40 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	21
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	22
12:50 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	25
12:55 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	25
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
1:05 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	27
1:10 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	27
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	26
1:20 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	27
1:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
1:30 PM	0	0	0	2	0	0	0	0	1	0	1	0	0	0	2	1	7	26
1:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	22
1:40 PM	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3	24
1:45 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	1	4	23
1:50 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	23
1:55 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	26
2:00 PM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	3	25
2:05 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
2:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
2:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	

2:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:25 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
2:35 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
2:40 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	4
2:50 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4
2:55 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Count Total	0	1	0	8	0	5	0	0	5	0	39	6	0	0	33	2	99
Peak Hour	0	1	0	4	0	4	0	0	2	0	17	2	0	0	20	0	50

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

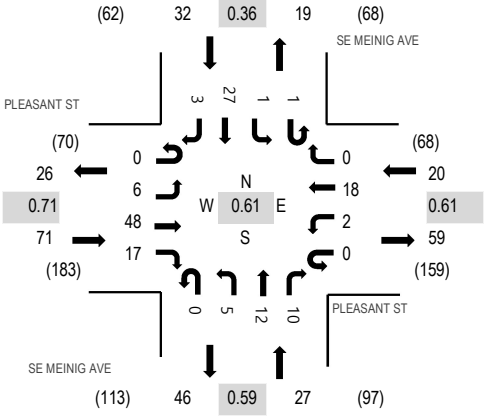
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0	12:00 PM	6	0	0	0	6
12:05 PM	0	0	0	0	0	12:05 PM	0	0	0	0	0	12:05 PM	1	0	0	1	2
12:10 PM	0	0	0	0	0	12:10 PM	0	0	0	0	0	12:10 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0	12:15 PM	1	0	0	0	1
12:20 PM	0	0	0	0	0	12:20 PM	0	0	0	0	0	12:20 PM	2	0	0	6	8
12:25 PM	0	0	0	0	0	12:25 PM	0	0	0	0	0	12:25 PM	5	0	0	2	7
12:30 PM	0	0	0	0	0	12:30 PM	0	0	0	0	0	12:30 PM	1	0	0	0	1
12:35 PM	0	0	0	0	0	12:35 PM	0	0	0	0	0	12:35 PM	0	0	0	0	0
12:40 PM	0	0	0	0	0	12:40 PM	0	0	0	0	0	12:40 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0	12:45 PM	0	0	0	0	0	12:45 PM	0	0	0	0	0
12:50 PM	0	0	0	0	0	12:50 PM	0	0	0	0	0	12:50 PM	0	0	0	0	0
12:55 PM	0	0	0	0	0	12:55 PM	0	0	0	0	0	12:55 PM	2	0	1	0	3
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0	0	1:00 PM	8	0	0	0	8
1:05 PM	0	0	0	0	0	1:05 PM	0	0	0	0	0	1:05 PM	1	0	1	0	2
1:10 PM	0	0	0	0	0	1:10 PM	0	0	0	0	0	1:10 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0	1:15 PM	0	0	0	0	0	1:15 PM	0	0	0	0	0
1:20 PM	0	0	0	0	0	1:20 PM	0	0	0	0	0	1:20 PM	0	0	1	0	1
1:25 PM	0	0	0	0	0	1:25 PM	0	0	0	0	0	1:25 PM	1	0	0	0	1
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0	1:30 PM	6	0	0	0	6
1:35 PM	0	0	0	0	0	1:35 PM	0	0	0	0	0	1:35 PM	0	0	0	0	0
1:40 PM	0	0	0	0	0	1:40 PM	0	0	0	0	0	1:40 PM	1	0	0	0	1
1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	0	0
1:50 PM	0	0	0	0	0	1:50 PM	0	0	0	0	0	1:50 PM	0	0	0	0	0
1:55 PM	0	0	0	0	0	1:55 PM	0	0	0	0	0	1:55 PM	0	0	1	0	1
2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0
2:05 PM	0	0	0	0	0	2:05 PM	0	0	0	0	0	2:05 PM	0	0	0	0	0
2:10 PM	0	0	0	0	0	2:10 PM	0	0	0	0	0	2:10 PM	0	0	0	2	2
2:15 PM	0	0	0	0	0	2:15 PM	0	0	0	0	0	2:15 PM	0	0	0	0	0
2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	1	1
2:25 PM	0	0	0	0	0	2:25 PM	0	0	0	0	0	2:25 PM	0	0	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0	0
2:35 PM	0	0	0	0	0	2:35 PM	0	0	0	0	0	2:35 PM	0	0	0	0	0
2:40 PM	0	0	0	0	0	2:40 PM	0	0	0	0	0	2:40 PM	0	0	0	0	0
2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0	0
2:50 PM	0	0	0	0	0	2:50 PM	0	0	0	0	0	2:50 PM	0	0	0	0	0
2:55 PM	0	0	0	0	0	2:55 PM	0	0	0	0	0	2:55 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	0	0	0	0	0	Count Total	35	0	4	12	51
Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0	Peak Hour	18	0	1	9	28

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

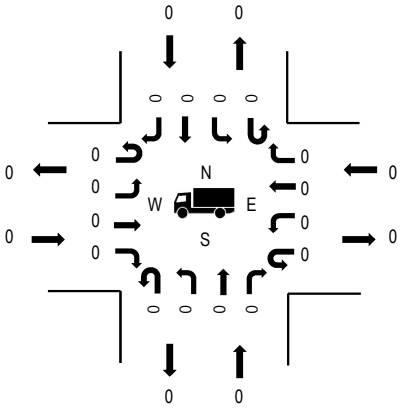
Location: 2 SE MEINIG AVE & PLEASANT ST Noon
Date: Saturday, May 20, 2023
Peak Hour: 12:10 PM - 01:10 PM
Peak 15-Minutes: 12:20 PM - 12:35 PM

Peak Hour

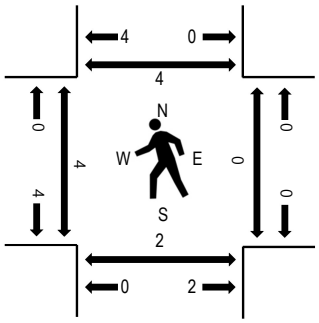
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.71
WB	0.0%	0.61
NB	0.0%	0.59
SB	0.0%	0.36
All	0.0%	0.61

Traffic Counts - Motorized Vehicles

Interval Start Time	PLEASANT ST Eastbound				PLEASANT ST Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
12:00 PM	0	1	0	4	0	0	0	0	0	2	0	2	0	0	1	0	10	149
12:05 PM	0	0	3	0	0	0	0	1	0	0	2	0	0	0	0	0	6	147
12:10 PM	0	1	4	2	0	0	3	0	0	0	2	0	1	0	1	1	15	150
12:15 PM	0	1	6	2	0	0	2	0	0	0	1	0	0	0	1	1	14	146
12:20 PM	0	1	6	2	0	0	2	0	0	2	2	1	0	0	9	0	25	140
12:25 PM	0	1	1	0	0	0	3	0	0	1	1	1	0	0	10	1	19	126
12:30 PM	0	0	5	3	0	1	2	0	0	0	1	2	0	1	2	0	17	116
12:35 PM	0	0	6	0	0	0	1	0	0	0	0	0	0	0	1	0	8	109
12:40 PM	0	0	1	3	0	0	1	0	0	0	1	1	0	0	1	0	8	108
12:45 PM	0	0	3	2	0	1	1	0	0	0	1	1	0	0	0	0	9	113
12:50 PM	0	1	4	0	0	0	0	0	0	0	2	0	0	0	0	0	7	123
12:55 PM	0	0	4	1	0	0	2	0	0	0	1	1	0	0	2	0	11	125
1:00 PM	0	1	4	1	0	0	1	0	0	0	0	1	0	0	0	0	8	129
1:05 PM	0	0	4	1	0	0	0	0	0	2	0	2	0	0	0	0	9	136
1:10 PM	0	2	3	1	0	1	2	0	0	0	1	0	0	0	1	0	11	139
1:15 PM	0	0	2	3	0	1	2	0	0	0	0	0	0	0	0	0	8	136
1:20 PM	0	0	2	1	0	2	2	0	0	0	2	1	0	0	1	0	11	136
1:25 PM	0	0	3	1	0	0	1	0	0	0	0	3	0	0	0	1	9	130
1:30 PM	0	1	3	0	0	0	0	0	0	0	1	0	0	0	4	1	10	136
1:35 PM	0	0	0	2	0	0	1	0	0	1	1	1	0	1	0	0	7	137
1:40 PM	0	1	4	1	0	1	2	0	0	0	1	2	0	0	0	1	13	142
1:45 PM	0	0	3	1	0	2	4	1	0	1	2	2	0	1	2	0	19	140
1:50 PM	0	0	2	0	0	3	0	0	0	1	2	1	0	0	0	0	9	135
1:55 PM	0	2	2	2	0	2	2	0	0	1	1	1	0	0	2	0	15	139
2:00 PM	0	1	8	1	0	2	0	0	0	0	1	1	0	0	1	0	15	132
2:05 PM	0	0	3	3	0	1	2	0	0	0	1	1	0	0	1	0	12	
2:10 PM	0	1	2	0	0	0	1	0	0	0	1	1	0	0	2	0	8	
2:15 PM	0	0	3	2	0	0	1	0	0	0	0	0	0	0	2	0	8	

2:20 PM	0	0	2	1	0	0	1	0	0	0	0	1	0	0	0	0	5
2:25 PM	0	1	4	2	0	0	1	2	0	2	1	2	0	0	0	0	15
2:30 PM	0	0	4	1	0	0	1	0	0	0	3	0	0	0	2	0	11
2:35 PM	0	1	3	1	0	0	2	0	0	0	3	1	0	0	0	1	12
2:40 PM	0	0	4	0	0	0	1	0	0	1	2	2	0	0	0	1	11
2:45 PM	0	0	6	0	0	1	1	0	0	0	3	1	0	0	2	0	14
2:50 PM	0	0	3	1	0	0	1	0	0	2	4	1	0	0	1	0	13
2:55 PM	0	0	4	0	0	0	0	0	0	0	2	1	0	0	1	0	8
Count Total	0	17	121	45	0	18	46	4	0	16	46	35	1	3	50	8	410
Peak Hour	0	6	48	17	0	2	18	0	0	5	12	10	1	1	27	3	150

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

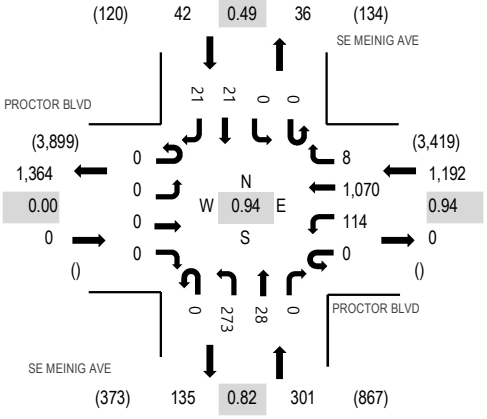
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0	12:00 PM	0	0	0	0	0
12:05 PM	0	0	0	0	0	12:05 PM	0	0	0	0	0	12:05 PM	0	0	0	0	0
12:10 PM	0	0	0	0	0	12:10 PM	0	0	0	0	0	12:10 PM	2	2	0	1	5
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0
12:20 PM	0	0	0	0	0	12:20 PM	0	0	0	0	0	12:20 PM	1	0	0	0	1
12:25 PM	0	0	0	0	0	12:25 PM	0	0	0	0	0	12:25 PM	0	0	0	1	1
12:30 PM	0	0	0	0	0	12:30 PM	0	0	0	0	0	12:30 PM	0	0	0	0	0
12:35 PM	0	0	0	0	0	12:35 PM	0	0	0	0	0	12:35 PM	0	0	0	2	2
12:40 PM	0	0	0	0	0	12:40 PM	0	0	0	0	0	12:40 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0	12:45 PM	0	0	0	0	0	12:45 PM	0	0	0	0	0
12:50 PM	0	0	0	0	0	12:50 PM	0	0	0	0	0	12:50 PM	0	0	0	0	0
12:55 PM	0	0	0	0	0	12:55 PM	0	0	0	0	0	12:55 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0	0	1:00 PM	0	0	0	0	0
1:05 PM	0	0	0	0	0	1:05 PM	0	0	0	0	0	1:05 PM	1	0	0	0	1
1:10 PM	0	0	0	0	0	1:10 PM	0	0	0	0	0	1:10 PM	0	0	0	0	0
1:15 PM	0	0	0	0	0	1:15 PM	3	0	0	0	3	1:15 PM	0	0	0	0	0
1:20 PM	0	0	0	0	0	1:20 PM	0	0	0	0	0	1:20 PM	0	0	0	0	0
1:25 PM	0	0	0	0	0	1:25 PM	0	0	0	0	0	1:25 PM	0	0	0	0	0
1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	0	0
1:35 PM	0	0	0	0	0	1:35 PM	0	0	0	0	0	1:35 PM	0	1	0	0	1
1:40 PM	0	0	0	0	0	1:40 PM	0	0	0	0	0	1:40 PM	0	0	0	0	0
1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	0	0
1:50 PM	0	0	0	0	0	1:50 PM	0	0	0	0	0	1:50 PM	0	0	0	0	0
1:55 PM	0	0	0	0	0	1:55 PM	0	0	0	0	0	1:55 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0
2:05 PM	0	0	0	0	0	2:05 PM	0	0	1	0	1	2:05 PM	0	0	0	0	0
2:10 PM	0	0	0	0	0	2:10 PM	0	0	0	0	0	2:10 PM	0	0	1	0	1
2:15 PM	0	0	0	0	0	2:15 PM	0	0	0	0	0	2:15 PM	0	0	2	0	2
2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	1	1
2:25 PM	0	0	1	0	1	2:25 PM	0	0	0	0	0	2:25 PM	0	0	0	0	0
2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	0	0
2:35 PM	0	0	0	0	0	2:35 PM	0	0	0	0	0	2:35 PM	0	0	0	0	0
2:40 PM	0	0	0	0	0	2:40 PM	0	0	0	0	0	2:40 PM	0	0	0	0	0
2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0	0
2:50 PM	0	0	0	0	0	2:50 PM	0	0	0	0	0	2:50 PM	0	4	0	0	4
2:55 PM	0	0	0	0	0	2:55 PM	0	0	0	0	0	2:55 PM	4	0	0	0	4
Count Total	0	0	1	0	1	Count Total	3	0	1	0	4	Count Total	8	7	3	5	23
Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0	Peak Hour	4	2	0	4	10

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

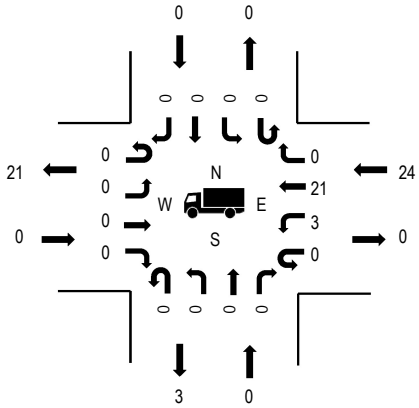
Location: 3 SE MEINIG AVE & PROCTOR BLVD Noon
Date: Saturday, May 20, 2023
Peak Hour: 12:25 PM - 01:25 PM
Peak 15-Minutes: 01:10 PM - 01:25 PM

Peak Hour

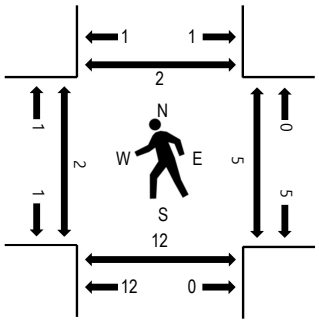
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	2.0%	0.94
NB	0.0%	0.82
SB	0.0%	0.49
All	1.6%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	PROCTOR BLVD Eastbound				PROCTOR BLVD Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
12:00 PM	0	0	0	0	0	4	104	0	0	20	5	0	0	0	4	1	138	1,513
12:05 PM	0	0	0	0	0	10	101	0	0	28	3	0	0	0	0	1	143	1,495
12:10 PM	0	0	0	0	0	5	87	0	0	29	5	0	0	0	2	1	129	1,474
12:15 PM	0	0	0	0	0	6	87	0	0	17	1	0	0	0	1	0	112	1,479
12:20 PM	0	0	0	0	0	9	60	1	0	20	5	0	0	0	2	9	106	1,503
12:25 PM	0	0	0	0	0	11	96	1	0	25	3	0	0	0	1	8	145	1,535
12:30 PM	0	0	0	0	0	10	87	3	0	22	3	0	0	0	2	3	130	1,499
12:35 PM	0	0	0	0	0	7	84	0	0	27	0	0	0	0	0	2	120	1,480
12:40 PM	0	0	0	0	0	11	98	0	0	14	2	0	0	0	2	1	128	1,467
12:45 PM	0	0	0	0	0	12	79	1	0	26	3	0	0	0	4	0	125	1,469
12:50 PM	0	0	0	0	0	11	72	0	0	22	4	0	0	0	1	1	111	1,482
12:55 PM	0	0	0	0	0	13	85	1	0	22	2	0	0	0	2	1	126	1,478
1:00 PM	0	0	0	0	0	8	89	1	0	19	1	0	0	0	1	1	120	1,463
1:05 PM	0	0	0	0	0	7	88	1	0	21	4	0	0	0	1	0	122	1,474
1:10 PM	0	0	0	0	0	7	96	0	0	27	2	0	0	0	0	2	134	1,471
1:15 PM	0	0	0	0	0	10	99	0	0	22	1	0	0	0	3	1	136	1,464
1:20 PM	0	0	0	0	0	7	97	0	0	26	3	0	0	0	4	1	138	1,450
1:25 PM	0	0	0	0	0	5	85	1	0	13	3	0	0	0	2	0	109	1,441
1:30 PM	0	0	0	0	0	5	72	2	0	25	3	0	0	0	0	4	111	1,453
1:35 PM	0	0	0	0	0	8	73	3	0	20	1	0	0	0	1	1	107	1,447
1:40 PM	0	0	0	0	0	13	79	0	0	33	3	0	0	0	2	0	130	1,462
1:45 PM	0	0	0	0	0	12	94	2	0	21	4	0	0	0	2	3	138	1,451
1:50 PM	0	0	0	0	0	5	65	0	0	30	4	0	0	0	1	2	107	1,438
1:55 PM	0	0	0	0	0	5	84	1	0	14	3	0	0	0	3	1	111	1,429
2:00 PM	0	0	0	0	0	11	96	0	0	15	3	0	0	0	1	5	131	1,430
2:05 PM	0	0	0	0	0	14	68	3	0	27	1	0	0	0	5	1	119	
2:10 PM	0	0	0	0	0	8	95	1	0	17	2	0	0	0	2	2	127	
2:15 PM	0	0	0	0	0	10	88	0	0	22	0	0	0	0	1	1	122	

2:20 PM	0	0	0	0	0	13	88	1	0	25	0	0	0	0	1	1	129
2:25 PM	0	0	0	0	0	13	80	2	0	20	5	0	0	0	0	1	121
2:30 PM	0	0	0	0	0	3	84	1	0	10	4	0	0	0	2	1	105
2:35 PM	0	0	0	0	0	10	96	0	0	12	3	0	0	0	1	0	122
2:40 PM	0	0	0	0	0	7	80	1	0	25	5	0	0	0	0	1	119
2:45 PM	0	0	0	0	0	8	91	2	0	16	3	0	0	0	4	1	125
2:50 PM	0	0	0	0	0	7	68	2	0	12	6	0	0	0	2	1	98
2:55 PM	0	0	0	0	0	8	80	0	0	20	3	0	0	0	0	1	112
Count Total	0	0	0	0	0	313	3,075	31	0	764	103	0	0	0	60	60	4,406
Peak Hour	0	0	0	0	0	114	1,070	8	0	273	28	0	0	0	21	21	1,535

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

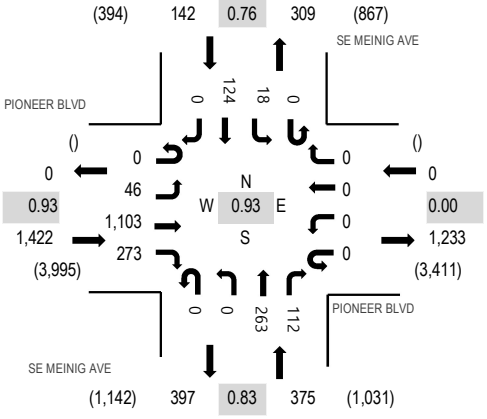
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
12:00 PM	0	0	2	0	2	12:00 PM	0	0	0	0	0	12:00 PM	6	7	0	4	17
12:05 PM	0	0	1	0	1	12:05 PM	0	0	0	0	0	12:05 PM	0	9	3	0	12
12:10 PM	0	0	0	0	0	12:10 PM	0	0	0	0	0	12:10 PM	0	5	2	0	7
12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0	12:15 PM	0	0	0	0	0
12:20 PM	0	0	0	0	0	12:20 PM	0	0	0	0	0	12:20 PM	1	0	0	1	2
12:25 PM	0	0	2	0	2	12:25 PM	0	0	0	0	0	12:25 PM	0	0	0	0	0
12:30 PM	0	0	3	0	3	12:30 PM	0	0	0	0	0	12:30 PM	0	5	0	0	5
12:35 PM	0	0	0	0	0	12:35 PM	0	0	0	0	0	12:35 PM	0	0	3	0	3
12:40 PM	0	0	0	0	0	12:40 PM	0	0	0	0	0	12:40 PM	0	0	0	0	0
12:45 PM	0	0	2	0	2	12:45 PM	0	0	0	0	0	12:45 PM	1	1	0	0	2
12:50 PM	0	0	5	0	5	12:50 PM	0	0	0	0	0	12:50 PM	0	0	2	0	2
12:55 PM	0	0	2	0	2	12:55 PM	0	0	3	0	3	12:55 PM	0	0	0	0	0
1:00 PM	0	0	2	0	2	1:00 PM	0	0	0	0	0	1:00 PM	0	3	0	0	3
1:05 PM	0	0	1	0	1	1:05 PM	0	0	0	0	0	1:05 PM	0	1	1	1	3
1:10 PM	0	0	2	0	2	1:10 PM	0	0	0	0	0	1:10 PM	0	1	0	0	1
1:15 PM	0	0	4	0	4	1:15 PM	0	0	0	0	0	1:15 PM	0	1	0	1	2
1:20 PM	0	0	1	0	1	1:20 PM	0	0	0	0	0	1:20 PM	1	0	0	0	1
1:25 PM	0	0	2	0	2	1:25 PM	0	0	0	0	0	1:25 PM	0	0	0	0	0
1:30 PM	0	0	6	0	6	1:30 PM	0	0	0	0	0	1:30 PM	0	0	0	1	1
1:35 PM	0	0	1	0	1	1:35 PM	0	0	0	0	0	1:35 PM	0	0	0	0	0
1:40 PM	0	0	4	0	4	1:40 PM	0	0	0	0	0	1:40 PM	1	2	0	0	3
1:45 PM	0	0	4	0	4	1:45 PM	0	0	0	0	0	1:45 PM	0	0	0	0	0
1:50 PM	0	0	0	0	0	1:50 PM	0	0	0	0	0	1:50 PM	0	0	2	0	2
1:55 PM	0	0	1	0	1	1:55 PM	0	0	0	0	0	1:55 PM	0	0	0	0	0
2:00 PM	0	0	1	0	1	2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0
2:05 PM	0	0	1	0	1	2:05 PM	0	0	0	0	0	2:05 PM	0	0	0	0	0
2:10 PM	0	0	1	0	1	2:10 PM	0	0	0	0	0	2:10 PM	0	0	0	0	0
2:15 PM	0	0	2	0	2	2:15 PM	0	0	0	0	0	2:15 PM	0	4	0	0	4
2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	0	0
2:25 PM	0	0	0	0	0	2:25 PM	0	0	0	0	0	2:25 PM	0	0	0	0	0
2:30 PM	0	0	3	0	3	2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	2	2
2:35 PM	0	0	3	0	3	2:35 PM	0	0	0	0	0	2:35 PM	0	2	0	0	2
2:40 PM	0	0	1	0	1	2:40 PM	0	0	0	0	0	2:40 PM	0	0	0	0	0
2:45 PM	0	0	2	0	2	2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	1	1
2:50 PM	0	0	0	0	0	2:50 PM	0	0	0	0	0	2:50 PM	0	0	0	1	1
2:55 PM	0	0	1	0	1	2:55 PM	0	0	0	0	0	2:55 PM	0	0	1	0	1
Count Total	0	0	60	0	60	Count Total	0	0	3	0	3	Count Total	10	41	14	12	77
Peak Hour	0	0	24	0	24	Peak Hour	0	0	3	0	3	Peak Hour	2	12	6	2	22

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

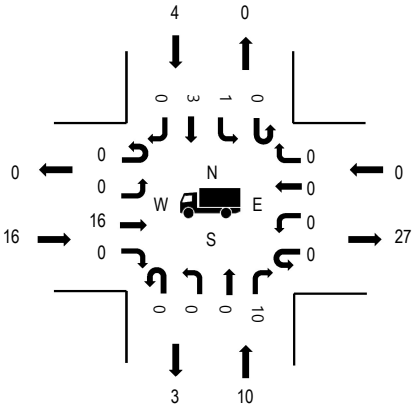
Location: 4 SE MEINIG AVE & PIONEER BLVD Noon
Date: Saturday, May 20, 2023
Peak Hour: 12:30 PM - 01:30 PM
Peak 15-Minutes: 12:40 PM - 12:55 PM

Peak Hour

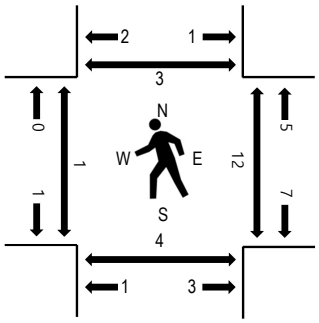
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.1%	0.93
WB	0.0%	0.00
NB	2.7%	0.83
SB	2.8%	0.76
All	1.5%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	PIONEER BLVD Eastbound				PIONEER BLVD Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
12:00 PM	0	5	81	18	0	0	0	0	0	0	23	14	0	3	6	0	150	1,860
12:05 PM	0	8	65	22	0	0	0	0	0	0	20	6	0	4	6	0	131	1,870
12:10 PM	0	6	78	26	0	0	0	0	0	0	22	8	0	0	9	0	149	1,894
12:15 PM	0	3	78	20	0	0	0	0	0	0	23	10	0	1	8	0	143	1,897
12:20 PM	0	2	86	21	0	0	0	0	0	0	20	6	0	2	9	0	146	1,932
12:25 PM	0	4	97	22	0	0	0	0	0	0	16	10	0	1	7	0	157	1,927
12:30 PM	0	4	95	23	0	0	0	0	0	0	22	6	0	0	13	0	163	1,939
12:35 PM	0	1	84	17	0	0	0	0	0	0	20	10	0	0	10	0	142	1,904
12:40 PM	0	5	113	24	0	0	0	0	0	0	14	11	0	3	13	0	183	1,935
12:45 PM	0	6	98	25	0	0	0	0	0	0	21	13	0	2	8	0	173	1,902
12:50 PM	0	2	102	11	0	0	0	0	0	0	25	9	0	3	12	0	164	1,901
12:55 PM	0	6	79	25	0	0	0	0	0	0	23	10	0	2	14	0	159	1,874
1:00 PM	0	4	86	21	0	0	0	0	0	0	26	15	0	1	7	0	160	1,870
1:05 PM	0	3	87	31	0	0	0	0	0	0	20	6	0	1	7	0	155	1,827
1:10 PM	0	4	70	20	0	0	0	0	0	0	35	15	0	1	7	0	152	1,814
1:15 PM	0	3	104	28	0	0	0	0	0	0	25	10	0	0	8	0	178	1,846
1:20 PM	0	2	83	18	0	0	0	0	0	0	16	5	0	4	13	0	141	1,812
1:25 PM	0	6	102	30	0	0	0	0	0	0	16	2	0	1	12	0	169	1,814
1:30 PM	0	2	63	29	0	0	0	0	0	0	22	6	0	1	5	0	128	1,791
1:35 PM	0	5	115	22	0	0	0	0	0	0	15	7	0	0	9	0	173	1,811
1:40 PM	0	5	74	18	0	0	0	0	0	0	29	13	0	2	9	0	150	1,755
1:45 PM	0	5	98	24	0	0	0	0	0	0	26	10	0	1	8	0	172	1,733
1:50 PM	0	2	74	17	0	0	0	0	0	0	25	6	0	1	12	0	137	1,698
1:55 PM	0	3	93	26	0	0	0	0	0	0	17	10	0	1	5	0	155	1,708
2:00 PM	0	4	51	20	0	0	0	0	0	0	18	7	0	0	17	0	117	1,690
2:05 PM	0	2	80	15	0	0	0	0	0	0	21	6	0	1	17	0	142	
2:10 PM	0	6	110	25	0	0	0	0	0	0	17	14	0	3	9	0	184	
2:15 PM	0	2	81	28	0	0	0	0	0	0	19	7	0	0	7	0	144	

2:20 PM	0	8	81	16	0	0	0	0	0	0	19	6	0	0	13	0	143
2:25 PM	0	1	87	21	0	0	0	0	0	0	18	5	0	0	14	0	146
2:30 PM	0	5	79	38	0	0	0	0	0	0	11	7	0	1	7	0	148
2:35 PM	0	4	66	18	0	0	0	0	0	0	12	7	0	0	10	0	117
2:40 PM	0	5	77	13	0	0	0	0	0	0	19	6	0	0	8	0	128
2:45 PM	0	3	86	20	0	0	0	0	0	0	14	3	0	3	8	0	137
2:50 PM	0	5	79	22	0	0	0	0	0	0	17	11	0	3	10	0	147
2:55 PM	0	1	75	22	0	0	0	0	0	0	19	9	0	2	9	0	137
Count Total	0	142	3,057	796	0	0	0	0	0	0	725	306	0	48	346	0	5,420
Peak Hour	0	46	1,103	273	0	0	0	0	0	0	263	112	0	18	124	0	1,939

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
12:00 PM	2	2	0	0	4	12:00 PM	0	0	0	0	0	12:00 PM	2	4	1	3	10
12:05 PM	0	0	0	0	0	12:05 PM	0	0	0	0	0	12:05 PM	0	3	0	1	4
12:10 PM	0	1	0	0	1	12:10 PM	0	0	0	0	0	12:10 PM	0	1	5	0	6
12:15 PM	3	0	0	0	3	12:15 PM	0	0	0	0	0	12:15 PM	0	0	4	0	4
12:20 PM	3	0	0	0	3	12:20 PM	0	0	0	0	0	12:20 PM	0	0	1	0	1
12:25 PM	4	1	0	0	5	12:25 PM	0	0	0	0	0	12:25 PM	0	0	0	2	2
12:30 PM	2	0	0	0	2	12:30 PM	0	0	0	0	0	12:30 PM	0	0	2	0	2
12:35 PM	0	0	0	0	0	12:35 PM	0	0	0	0	0	12:35 PM	0	0	1	0	1
12:40 PM	3	0	0	0	3	12:40 PM	0	0	0	0	0	12:40 PM	0	0	1	0	1
12:45 PM	0	1	0	0	1	12:45 PM	0	0	0	0	0	12:45 PM	0	0	2	1	3
12:50 PM	1	1	0	0	2	12:50 PM	0	0	0	0	0	12:50 PM	1	1	1	0	3
12:55 PM	1	0	0	0	1	12:55 PM	0	0	0	3	3	12:55 PM	0	1	3	0	4
1:00 PM	1	3	0	1	5	1:00 PM	0	0	0	0	0	1:00 PM	0	0	2	0	2
1:05 PM	1	0	0	0	1	1:05 PM	0	0	0	0	0	1:05 PM	0	0	1	1	2
1:10 PM	0	5	0	0	5	1:10 PM	0	0	0	0	0	1:10 PM	0	1	0	0	1
1:15 PM	2	0	0	1	3	1:15 PM	0	0	0	0	0	1:15 PM	0	0	1	0	1
1:20 PM	3	0	0	1	4	1:20 PM	0	0	0	0	0	1:20 PM	0	0	0	0	0
1:25 PM	2	0	0	1	3	1:25 PM	0	0	0	0	0	1:25 PM	0	1	0	1	2
1:30 PM	1	0	0	0	1	1:30 PM	0	0	0	0	0	1:30 PM	1	0	1	1	3
1:35 PM	2	0	0	0	2	1:35 PM	0	0	0	0	0	1:35 PM	0	0	1	0	1
1:40 PM	1	1	0	1	3	1:40 PM	0	0	0	0	0	1:40 PM	0	0	3	0	3
1:45 PM	2	0	0	1	3	1:45 PM	0	0	0	0	0	1:45 PM	0	1	2	5	8
1:50 PM	0	0	0	1	1	1:50 PM	0	0	0	0	0	1:50 PM	0	2	0	0	2
1:55 PM	2	0	0	0	2	1:55 PM	0	0	0	0	0	1:55 PM	0	0	0	0	0
2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0	2:00 PM	0	0	0	0	0
2:05 PM	2	0	0	0	2	2:05 PM	0	0	0	0	0	2:05 PM	0	0	0	1	1
2:10 PM	2	1	0	0	3	2:10 PM	0	0	0	0	0	2:10 PM	0	0	0	0	0
2:15 PM	0	1	0	0	1	2:15 PM	0	0	0	0	0	2:15 PM	0	0	1	0	1
2:20 PM	0	0	0	0	0	2:20 PM	0	0	0	0	0	2:20 PM	0	1	2	0	3
2:25 PM	0	1	0	0	1	2:25 PM	0	0	0	0	0	2:25 PM	0	0	0	1	1
2:30 PM	2	0	0	0	2	2:30 PM	0	0	0	0	0	2:30 PM	0	0	0	1	1
2:35 PM	2	0	0	0	2	2:35 PM	0	0	0	0	0	2:35 PM	0	5	1	0	6
2:40 PM	3	0	0	0	3	2:40 PM	0	0	0	0	0	2:40 PM	0	1	0	0	1
2:45 PM	1	0	0	0	1	2:45 PM	0	0	0	0	0	2:45 PM	0	2	3	0	5
2:50 PM	0	0	0	0	0	2:50 PM	0	0	0	0	0	2:50 PM	2	3	1	2	8
2:55 PM	1	1	0	0	2	2:55 PM	0	0	0	0	0	2:55 PM	0	1	0	0	1
Count Total	49	19	0	7	75	Count Total	0	0	0	3	3	Count Total	6	28	40	20	94
Peak Hour	16	10	0	4	30	Peak Hour	0	0	0	3	3	Peak Hour	1	4	14	3	22

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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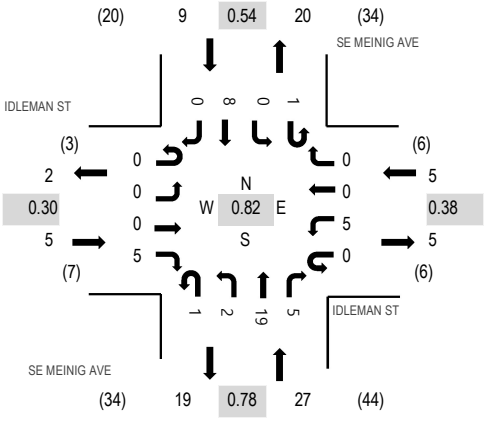
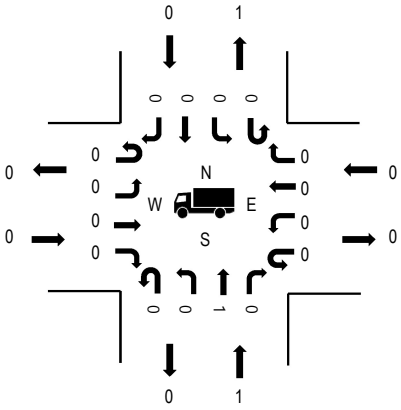
Location: 1 SE MEINIG AVE & IDLEMAN ST PM
Date: Thursday, May 18, 2023
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

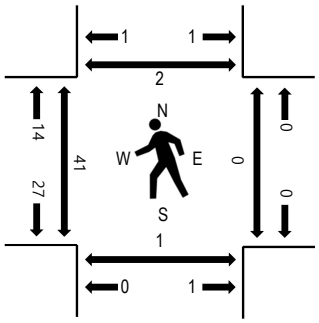
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.30
WB	0.0%	0.38
NB	3.7%	0.78
SB	0.0%	0.54
All	2.2%	0.82

Traffic Counts - Motorized Vehicles

Interval Start Time	IDLEMAN ST Eastbound				IDLEMAN ST Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	1	0	5	41
4:05 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	38
4:10 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	41
4:15 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	3	40
4:20 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	43
4:25 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	43
4:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	46
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	43
4:40 PM	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	0	4	43
4:45 PM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	3	39
4:50 PM	0	0	0	0	0	1	0	0	0	2	2	0	0	0	1	0	6	40
4:55 PM	0	0	0	1	0	0	0	0	0	0	3	1	0	0	0	0	5	37
5:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	36
5:05 PM	0	0	0	3	0	0	0	0	0	0	1	0	0	0	1	0	5	
5:10 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	1	0	2	0	6	
5:20 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	
5:25 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	0	6	
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
5:35 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	
5:40 PM	0	0	0	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	3	0	0	0	1	0	4	
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	
5:55 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	4	
Count Total	0	0	0	7	0	6	0	0	2	3	33	6	1	0	19	0	77	
Peak Hour	0	0	0	5	0	5	0	0	1	2	19	5	1	0	8	0	46	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	2	0	2	4	4:05 PM	0	1	0	0	1
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	2	0	0	0	2
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	7	0	0	0	7
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	11	0	0	0	11
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	6	1	0	0	7
4:35 PM	0	0	0	0	0	4:35 PM	0	2	0	0	2	4:35 PM	1	0	0	0	1
4:40 PM	0	0	0	0	0	4:40 PM	1	0	0	0	1	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	2	2	4:45 PM	1	0	0	0	1
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	1	0	0	1	4:55 PM	0	0	0	0	0	4:55 PM	3	0	0	1	4
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	2	0	0	0	2
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	4	0	0	0	4
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	1	0	0	0	1
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	6	0	0	0	6
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	6	0	0	1	7
5:25 PM	0	0	0	0	0	5:25 PM	0	3	0	0	3	5:25 PM	11	0	0	0	11
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	2	0	0	0	2
5:35 PM	0	0	0	0	0	5:35 PM	0	1	0	2	3	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	2	2	5:40 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	4	0	0	0	4
Count Total	0	1	0	0	1	Count Total	1	8	0	8	17	Count Total	68	2	0	2	72
Peak Hour	0	1	0	0	1	Peak Hour	1	5	0	2	8	Peak Hour	41	1	0	2	44

ALL TRAFFIC DATA SERVICES
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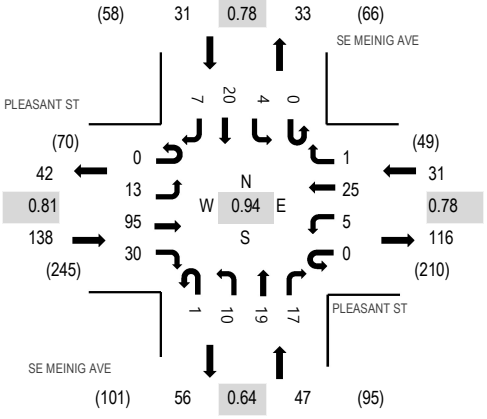
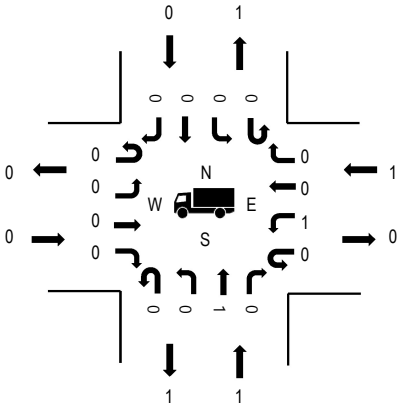
Location: 2 SE MEINIG AVE & PLEASANT ST PM
Date: Thursday, May 18, 2023
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:50 PM - 05:05 PM

Peak Hour

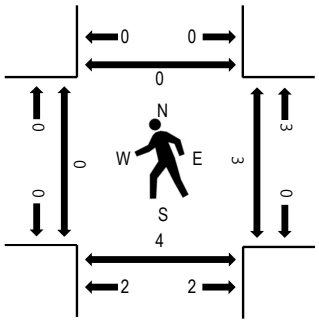
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.81
WB	3.2%	0.78
NB	2.1%	0.64
SB	0.0%	0.78
All	0.8%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	PLEASANT ST Eastbound				PLEASANT ST Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	2	7	0	0	1	3	0	0	2	2	5	0	1	1	0	24	234
4:05 PM	0	1	9	2	0	3	0	0	0	0	4	1	0	0	1	0	21	234
4:10 PM	0	1	3	2	0	0	0	0	0	2	2	1	0	1	2	1	15	234
4:15 PM	0	0	11	4	0	0	3	0	0	0	0	0	0	0	2	2	22	239
4:20 PM	0	3	6	3	0	0	3	0	0	1	1	2	0	0	1	1	21	238
4:25 PM	0	1	3	1	0	0	1	0	0	0	3	2	0	0	1	0	12	235
4:30 PM	0	2	6	6	0	0	1	0	0	0	2	3	0	0	1	0	21	247
4:35 PM	0	1	7	1	0	0	1	0	0	2	1	2	0	1	3	0	19	241
4:40 PM	0	2	6	2	0	0	2	0	0	0	2	0	0	0	1	0	15	233
4:45 PM	0	1	8	4	0	0	3	0	0	0	0	3	0	1	1	1	22	232
4:50 PM	0	2	4	4	0	2	1	1	0	0	1	2	0	0	3	1	21	224
4:55 PM	0	1	13	2	0	0	1	0	0	0	3	0	0	0	1	0	21	214
5:00 PM	0	0	13	0	0	1	3	0	0	1	1	3	0	0	2	0	24	213
5:05 PM	0	1	11	2	0	0	1	0	0	0	1	1	0	0	2	2	21	
5:10 PM	0	0	7	2	0	0	5	0	0	1	2	1	0	0	1	1	20	
5:15 PM	0	2	6	4	0	0	1	0	0	2	2	1	0	0	2	1	21	
5:20 PM	0	0	7	3	0	0	1	0	1	2	1	0	0	2	1	0	18	
5:25 PM	0	1	7	0	0	2	5	0	0	2	3	1	0	0	2	1	24	
5:30 PM	0	2	6	3	0	0	1	0	0	1	1	1	0	0	0	0	15	
5:35 PM	0	0	4	2	0	0	1	0	0	1	0	1	0	0	1	1	11	
5:40 PM	0	1	8	0	0	0	0	0	0	1	0	4	0	0	0	0	14	
5:45 PM	0	1	6	2	0	1	0	0	0	0	2	1	0	0	1	0	14	
5:50 PM	0	2	2	0	0	0	1	0	0	0	0	1	0	1	3	1	11	
5:55 PM	0	2	3	4	0	0	0	0	0	0	2	4	0	0	4	1	20	
Count Total	0	29	163	53	0	10	38	1	1	18	36	40	0	7	37	14	447	
Peak Hour	0	13	95	30	0	5	25	1	1	10	19	17	0	4	20	7	247	

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

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

ALL TRAFFIC DATA SERVICES
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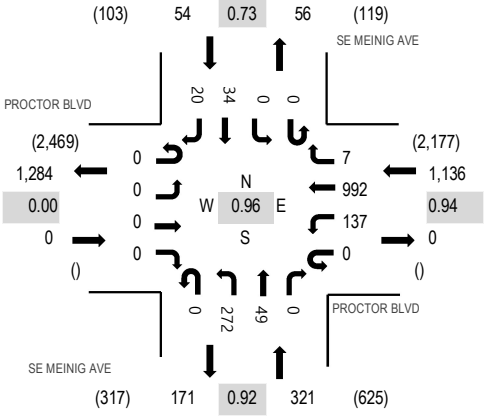
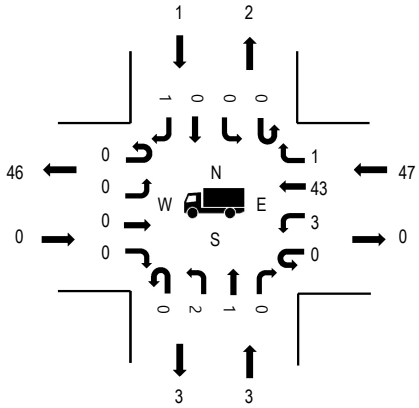
Location: 3 SE MEINIG AVE & PROCTOR BLVD PM
Date: Thursday, May 18, 2023
Peak Hour: 04:05 PM - 05:05 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

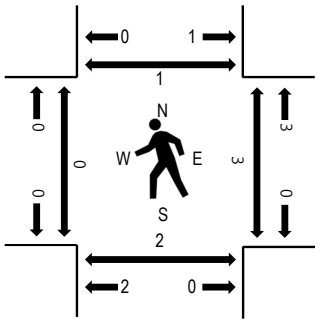
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	4.1%	0.94
NB	0.9%	0.92
SB	1.9%	0.73
All	3.4%	0.96

Traffic Counts - Motorized Vehicles

Interval Start Time	PROCTOR BLVD Eastbound				PROCTOR BLVD Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	0	0	0	6	65	1	0	12	9	0	0	0	1	2	96	1,483
4:05 PM	0	0	0	0	0	13	83	1	0	20	4	0	0	0	3	0	124	1,511
4:10 PM	0	0	0	0	0	10	77	0	0	24	6	0	0	0	3	2	122	1,510
4:15 PM	0	0	0	0	0	9	96	2	0	16	1	0	0	0	3	2	129	1,501
4:20 PM	0	0	0	0	0	10	96	0	0	22	5	0	0	0	4	1	138	1,489
4:25 PM	0	0	0	0	0	13	66	0	0	22	6	0	0	0	2	1	110	1,476
4:30 PM	0	0	0	0	0	14	82	1	0	22	4	0	0	0	4	1	128	1,508
4:35 PM	0	0	0	0	0	11	86	1	0	25	6	0	0	0	3	2	134	1,498
4:40 PM	0	0	0	0	0	7	68	0	0	29	3	0	0	0	1	0	108	1,477
4:45 PM	0	0	0	0	0	13	88	1	0	21	4	0	0	0	3	2	132	1,470
4:50 PM	0	0	0	0	0	15	67	0	0	29	3	0	0	0	3	5	122	1,454
4:55 PM	0	0	0	0	0	15	92	0	0	25	3	0	0	0	4	1	140	1,451
5:00 PM	0	0	0	0	0	7	91	1	0	17	4	0	0	0	1	3	124	1,422
5:05 PM	0	0	0	0	0	9	88	0	0	19	3	0	0	0	2	2	123	
5:10 PM	0	0	0	0	0	10	74	0	0	24	4	0	0	0	1	0	113	
5:15 PM	0	0	0	0	0	11	70	1	0	25	4	0	0	0	5	1	117	
5:20 PM	0	0	0	0	0	9	85	5	0	19	1	0	0	0	5	1	125	
5:25 PM	0	0	0	0	0	6	96	0	0	24	8	0	0	0	4	4	142	
5:30 PM	0	0	0	0	0	10	80	0	0	22	4	0	0	0	1	1	118	
5:35 PM	0	0	0	0	0	13	73	1	0	18	3	0	0	0	4	1	113	
5:40 PM	0	0	0	0	0	9	69	0	0	17	5	0	0	0	1	0	101	
5:45 PM	0	0	0	0	0	14	77	0	0	19	4	0	0	0	2	0	116	
5:50 PM	0	0	0	0	0	10	70	1	0	31	2	0	0	0	2	3	119	
5:55 PM	0	0	0	0	0	8	70	0	0	20	7	0	0	0	3	3	111	
Count Total	0	0	0	0	0	252	1,909	16	0	522	103	0	0	0	65	38	2,905	
Peak Hour	0	0	0	0	0	137	992	7	0	272	49	0	0	0	34	20	1,511	

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

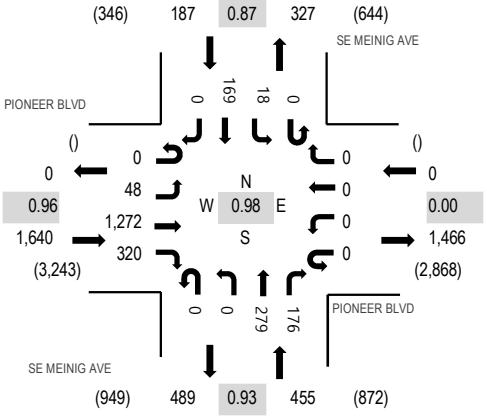
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	6	0	6	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	5	0	5	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	1	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	2	0	0	2
4:15 PM	0	0	5	0	5	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	7	0	7	4:20 PM	0	0	0	0	0	4:20 PM	0	0	1	0	1
4:25 PM	0	0	5	0	5	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	4	0	4	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	2	0	2	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	1	1
4:40 PM	0	1	2	0	3	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	1	1
4:45 PM	0	1	1	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	5	0	5	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	1	1
4:55 PM	0	1	5	1	7	4:55 PM	0	0	0	0	0	4:55 PM	0	1	1	0	2
5:00 PM	0	0	5	0	5	5:00 PM	0	0	0	0	0	5:00 PM	0	0	1	0	1
5:05 PM	0	0	5	0	5	5:05 PM	0	0	0	0	0	5:05 PM	0	0	1	0	1
5:10 PM	0	0	7	0	7	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	3	0	3	5:15 PM	0	0	0	0	0	5:15 PM	0	2	0	3	5
5:20 PM	0	0	5	0	5	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	2	0	2	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	2	0	2	5:30 PM	0	0	0	0	0	5:30 PM	5	0	0	0	5
5:35 PM	0	0	4	0	4	5:35 PM	0	0	0	0	0	5:35 PM	0	2	0	0	2
5:40 PM	0	0	3	0	3	5:40 PM	0	0	0	0	0	5:40 PM	0	0	5	0	5
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	2	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	3	0	3	5:55 PM	0	0	0	0	0	5:55 PM	1	0	0	2	3
Count Total	0	3	89	1	93	Count Total	0	0	0	0	0	Count Total	6	7	9	8	30
Peak Hour	0	3	47	1	51	Peak Hour	0	0	0	0	0	Peak Hour	0	3	3	3	9

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

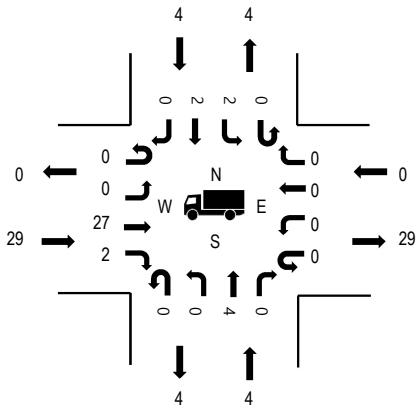
Location: 4 SE MEINIG AVE & PIONEER BLVD PM
Date: Thursday, May 18, 2023
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:35 PM - 04:50 PM

Peak Hour

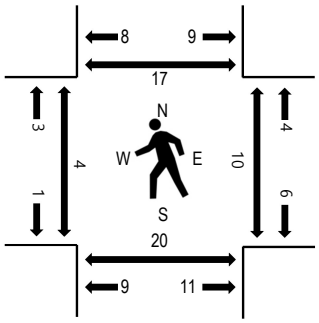
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.8%	0.96
WB	0.0%	0.00
NB	0.9%	0.93
SB	2.1%	0.87
All	1.6%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	PIONEER BLVD Eastbound				PIONEER BLVD Westbound				SE MEINIG AVE Northbound				SE MEINIG AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	8	110	27	0	0	0	0	0	0	14	10	0	3	9	0	181	2,282
4:05 PM	0	2	103	31	0	0	0	0	0	0	20	15	0	1	16	0	188	2,282
4:10 PM	0	4	108	24	0	0	0	0	0	0	25	22	0	0	13	0	196	2,279
4:15 PM	0	2	115	28	0	0	0	0	0	0	17	14	0	1	9	0	186	2,278
4:20 PM	0	3	109	28	0	0	0	0	0	0	27	13	0	2	16	0	198	2,279
4:25 PM	0	5	109	26	0	0	0	0	0	0	25	9	0	1	9	0	184	2,277
4:30 PM	0	1	102	21	0	0	0	0	0	0	23	14	0	0	22	0	183	2,264
4:35 PM	0	5	106	27	0	0	0	0	0	0	29	13	0	1	15	0	196	2,266
4:40 PM	0	9	105	30	0	0	0	0	0	0	24	16	0	3	13	0	200	2,268
4:45 PM	0	5	107	21	0	0	0	0	0	0	22	17	0	1	14	0	187	2,244
4:50 PM	0	3	99	26	0	0	0	0	0	0	30	18	0	3	15	0	194	2,213
4:55 PM	0	1	99	31	0	0	0	0	0	0	23	15	0	2	18	0	189	2,204
5:00 PM	0	4	100	28	0	0	0	0	0	0	24	13	0	2	10	0	181	2,179
5:05 PM	0	2	107	30	0	0	0	0	0	0	25	14	0	2	5	0	185	
5:10 PM	0	3	113	33	0	0	0	0	0	0	22	12	0	2	10	0	195	
5:15 PM	0	7	95	38	0	0	0	0	0	0	23	10	0	1	13	0	187	
5:20 PM	0	3	116	23	0	0	0	0	0	0	20	15	0	2	17	0	196	
5:25 PM	0	4	100	23	0	0	0	0	0	0	23	10	0	0	11	0	171	
5:30 PM	0	4	108	30	0	0	0	0	0	0	22	13	0	2	6	0	185	
5:35 PM	0	1	120	21	0	0	0	0	0	0	22	17	0	1	16	0	198	
5:40 PM	0	4	96	28	0	0	0	0	0	0	17	15	0	3	13	0	176	
5:45 PM	0	6	86	28	0	0	0	0	0	0	19	7	0	1	9	0	156	
5:50 PM	0	4	103	19	0	0	0	0	0	0	29	13	0	0	17	0	185	
5:55 PM	0	2	96	18	0	0	0	0	0	0	27	5	0	2	14	0	164	
Count Total	0	92	2,512	639	0	0	0	0	0	0	552	320	0	36	310	0	4,461	
Peak Hour	0	48	1,272	320	0	0	0	0	0	0	279	176	0	18	169	0	2,282	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	0	0	2	4	4:00 PM	0	0	0	0	0	4:00 PM	0	1	0	0	1
4:05 PM	4	0	0	0	4	4:05 PM	0	0	0	0	0	4:05 PM	0	5	0	1	6
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	1	2	4	7
4:15 PM	2	0	0	0	2	4:15 PM	0	0	0	0	0	4:15 PM	0	0	1	1	2
4:20 PM	5	0	0	0	5	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	1	1
4:25 PM	1	1	0	0	2	4:25 PM	0	0	0	0	0	4:25 PM	2	4	6	2	14
4:30 PM	2	1	0	2	5	4:30 PM	0	0	0	0	0	4:30 PM	0	1	1	0	2
4:35 PM	2	1	0	0	3	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	1	0	0	0	1	4:40 PM	1	0	0	0	1	4:40 PM	0	4	0	6	10
4:45 PM	2	1	0	0	3	4:45 PM	0	0	0	0	0	4:45 PM	2	4	0	2	8
4:50 PM	3	0	0	0	3	4:50 PM	0	0	0	0	0	4:50 PM	0	1	0	2	3
4:55 PM	5	0	0	0	5	4:55 PM	0	0	0	0	0	4:55 PM	0	1	2	0	3
5:00 PM	2	1	0	1	4	5:00 PM	0	0	0	0	0	5:00 PM	1	3	0	0	4
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	1	1
5:10 PM	3	0	0	1	4	5:10 PM	0	0	0	0	0	5:10 PM	0	1	0	1	2
5:15 PM	2	0	0	0	2	5:15 PM	0	0	0	0	0	5:15 PM	2	0	0	0	2
5:20 PM	1	0	0	0	1	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	1	1
5:25 PM	3	0	0	0	3	5:25 PM	0	0	0	0	0	5:25 PM	0	1	0	0	1
5:30 PM	0	1	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	2	6	8
5:35 PM	3	1	0	0	4	5:35 PM	0	0	0	0	0	5:35 PM	1	3	4	1	9
5:40 PM	3	0	0	1	4	5:40 PM	0	0	0	0	0	5:40 PM	0	2	0	0	2
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0	5:45 PM	1	0	5	1	7
5:50 PM	2	0	0	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	1	0	0	1
5:55 PM	4	1	0	1	6	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	1	1
Count Total	53	8	0	8	69	Count Total	1	0	0	0	1	Count Total	9	33	23	31	96
Peak Hour	29	4	0	4	37	Peak Hour	1	0	0	0	1	Peak Hour	4	22	12	19	57

Appendix C – Safety

Crash Reports

Signal Warrants

e t urn ane arrants

CITY OF SANDY, CLACKAMAS COUNTY

MEINIG AVE at PLEASANT ST, City of Sandy, Clackamas County, 01/01/2017 to 12/31/2021

1 - 1 of 1 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D R G S	M J U N V	S I C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	SPCL USE / TRLR QTY / OWNER / V# / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
02827	N	N	N	N			10/19/2020	17	MEINIG AVE	INTER	CROSS	N	N	CLD	PED	01 NONE 0	TURN-R										02
CITY							MO	0	PLEASANT ST	UN		STOP SIGN	N	DRY	PED	PRVTE	UN-UN									015	00
N							1P			06	0		N	DAY	INJ	PSNGR CAR		01	DRVR	NONE	26	M	OR-Y		029	000	02
N							45 23 52.7	-122 15 35.04																OR<25				
																	-										
																	STRGHT	01	PED	INJC	16	M		I XWK?	000	034	00
																	UN UN										

CITY OF SANDY, CLACKAMAS COUNTY

MEINIG AVE and PIONEER BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

1 - 5 of 30 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J U G S V	I N H L	S C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
04182	N	N	N	N			11/22/2019	14	MEINIG AVE	INTER	CROSS	N	N	CLR	PED	01	NONE 0	TURN-L										02
NO RPT							FR		PIONEER BLVD	N		TRF SIGNAL	N	DRY	PED		PRVTE	W -N									000	00
N							12P			05	1		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	35	M	OR-Y		029	000	02
N							45 23 46.73	-122 15 35.13	002600100S00															OR<25				
																		- STRGHT	01	PED	INJB	00	F		I XWLK	000	035	00
																		UN UN										
86854	N	N	N	N			10/28/2021	16	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NONE							TH	0	PIONEER BLVD	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S									000	00
N							6P			06	0		N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.73	-122 15 35.13																UNK				
																02	NONE 9	STOP										
																	N/A	N -S									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
04757	N	Y	N	N	N	N	10/14/2016	16	MEINIG AVE	INTER	CROSS	N	Y	UNK	FIX OBJ	01	NONE 9	TURN-R									100	08
CITY							FR		PIONEER BLVD	S		TRF SIGNAL	N	WET	FIX		N/A	W -S									000	00
N							11P			06	1		N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 45.91	-122 15 35.58	017200100S00															UNK				
02544	N	N	N	N			06/27/2017	14	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NONE							TU		PIONEER BLVD	SW		YIELD	N	DRY	REAR		N/A	NW-SE									000	00
N							2P			09	1		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.73	-122 15 35.13	002600100S00															UNK				
																02	NONE 9	STOP										
																	N/A	NW-SE									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
04274	N	N	N	N			10/10/2017	14	MEINIG AVE	INTER	CROSS	N	N	UNK	S-1STOP	01	NONE 9	STRGHT										29
NONE							TU		PIONEER BLVD	SW		YIELD	N	WET	REAR		N/A	NW-SE									000	00
N							4P			09	1		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.73	-122 15 35.13	002600100S00		(02)													UNK				
																02	NONE 9	STOP										
																	N/A	NW-SE									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				

MEINIG AVE and PIONEER BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

6 - 10 of 30 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S D M / P R J S W / E A U I C O / E L G N H R / D C S V L K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A / G / E	S / E / X	LICNS / RES	PED / LOC	ERROR	ACT EVENT	CAUSE
01186	N N N N	04/11/2019	14	MEINIG AVE	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 9	STRGHT										29
NONE		TH		PIONEER BLVD	SW		YIELD	N	WET	REAR		N/A	NW-SE									000	00
N		1P			09	1		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 23 46.73	-122 15 35.13	002600100S00															UNK				
											02	NONE 9	STOP										
												N/A	NW-SE									011	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				
01847	N N N N	04/22/2016	14	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
NONE		FR		PIONEER BLVD	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N		5P			05	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	45	M	OR-Y		026	000	29
N		45 23 46.73	-122 15 35.13	002600100S00															OR<25				
											02	NONE 0	STOP										
												PRVTE	W -E									011	00
												PSNGR CAR		01	DRVR	INJC	22	M	OR-Y		000	000	00
																			OR<25				
02932	N N N N	10/31/2020	14	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NONE		SA		PIONEER BLVD	W		TRF SIGNAL	N	DRY	REAR		N/A	W -E									000	00
N		UNK			06	1		N	DAWN	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 23 46.74	-122 15 35.12	002600100S00															UNK				
											02	NONE 9	STOP										
												N/A	W -E									011	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				
03085	N N N N	07/08/2016	14	MEINIG AVE	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										04
CITY		FR		PIONEER BLVD	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	W -E									000	00
N		8A			01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	51	F	OR-Y		000	000	00
N		45 23 46.73	-122 15 35.13	002600100S00															OR<25				
											02	NONE 0	STRGHT										
												PRVTE	N -S									000	00
												PSNGR CAR		01	DRVR	INJB	51	F	OR-Y		020	000	04
																			OR<25				
01981	N N N N N N	06/09/2018	14	MEINIG AVE	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT										27,04
CITY		SA		PIONEER BLVD	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	W -E									000	00
N		12A			01	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	20	M	OTH-Y		020	000	27,04
N		45 23 46.73	-122 15 35.13	002600100S00															N-RES				
											02	NONE 0	STRGHT										
												PRVTE	N -S									000	00
												PSNGR CAR		01	DRVR	INJB	27	M	OR-Y		000	000	00
																			OR<25				

CITY OF SANDY, CLACKAMAS COUNTY

MEINIG AVE and PIONEER BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

	S D M																							
SER#	P R J S W	DATE	CLASS	CITY STREET		INT-TYPE						SPCL USE												
INVEST	E A U I C O	DAY	DIST	FIRST STREET	RD CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH		TRLR QTY	MOVE				A	S						
RD DPT	E L G N H R	TIME	FROM	SECOND STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL		OWNER	FROM		PRTC	INJ	G	E	LICNS	PED				
UNLOC?	D C S V L K	LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE
04447	N N N N	12/10/2019	14	MEINIG AVE	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 9	TURN-R											02,08
NO RPT		TU		PIONEER BLVD	CN		TRF SIGNAL	N	WET	TURN		N/A	S -E									016		00
N		5P			04	1		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N		45 23 46.73	-122 15	002600100S00															UNK					
			35.13																					
											02	NONE 9	STRGHT											
												N/A	W -E									000		00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																			UNK					
02445	N N N N N N	09/06/2020	14	MEINIG AVE	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
CITY		SU		PIONEER BLVD	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	W -E									000		00
N		6P			01	1		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	28	F	OTH-Y		020	000		04
N		45 23 46.74	-122 15	002600100S00															OR<25					
			35.13																					
											02	NONE 0	STRGHT											
												PRVTE	N -S									000		00
												PSNGR CAR		01	DRVR	INJB	34	F	OR-Y		000	000		00
																			OR<25					
02725	N N N N N N	10/09/2020	14	MEINIG AVE	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	POLCE 0	STRGHT										084	02
STATE		FR		PIONEER BLVD	CN		TRF SIGNAL	N	WET	ANGL		PUBLC	W -E									000		00
N		10P			01	1		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	30	M	OR-Y		000	000		00
N		45 23 46.73	-122 15	002600100S00															OR<25					
			35.14																					
											02	NONE 0	STRGHT											
												PRVTE	N -S									000		00
												PSNGR CAR		01	DRVR	INJC	68	F	OR-Y		028	000	084	02
																			OR<25					
02439	N N N N	09/06/2021	14	MEINIG AVE	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04,27
CITY		MO		PIONEER BLVD	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	W -E									000		00
N		5A			03	1		N	DAWN	INJ		PSNGR CAR		01	DRVR	NONE	51	M	OR-Y		020,016	026		04,27
N		45 23 46.73	-122 15	002600100S00															OR>25					
			35.12																					
											02	NONE 0	STRGHT											
												PRVTE	N -S									000		00
												PSNGR CAR		01	DRVR	INJB	36	F	OR-Y		000	000		00
																			OR<25					
											02	NONE 0	STRGHT											
												PRVTE	N -S									000		00
												PSNGR CAR		02	PSNG	INJB	11	F			000	000		00
											02	NONE 0	STRGHT											
												PRVTE	N -S									000		00
												PSNGR CAR		03	PSNG	INJB	12	F			000	000		00

CITY OF SANDY, CLACKAMAS COUNTY

MEINIG AVE and PIONEER BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

14 - 18 of 30 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S H L	W R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0 PRVTE PSNGR CAR	STRGHT N -S	04	PSNG	INJB	07	F			000 000	000 000		00 00
03554	N	N	N	N	N	N	11/20/2021	14	MEINIG AVE	INTER	CROSS	N	N	FOG	ANGL-OTH	01	NONE 0	STRGHT										04
CITY			SA						PIONEER BLVD	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	W -E								000		00
N N			9P				45 23 46.73	-122 15 35.13	002600100S00	04	1		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	42	F	OR-Y OR<25		020	000		04
																02	NONE 0 PRVTE PSNGR CAR	STRGHT S -N	01	DRVR	INJB	41	F	OR-Y OR<25		000	000 000		00 00
																02	NONE 0 PRVTE PSNGR CAR	STRGHT S -N	02	PSNG	INJB	07	F			000	000 000		00 00
04132	N	N	N	N			09/08/2016	14	PIONEER BLVD	ALLEY		N	N	CLR	ANGL-OTH	01	NONE 0	TURN-L										001	08
CITY			TH						MEINIG AVE	E	(NONE)	NONE	N	DRY	TURN		PRVTE	N -E								018		00
N N			10A				45 23 46.97	-122 15 33.63	002600100S00	03	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	80	F	OR-Y OR<25		007	000		08
																02	NONE 0 PRVTE MTRCYCLE	STRGHT W -E	01	DRVR	INJB	59	M	OTH-Y N-RES		000	000 000	001	00 00
01465	N	N	N	N			05/06/2019	14	MEINIG AVE	ALLEY		N	N	CLR	ANGL-OTH	01	NONE 9	TURN-L											02
NONE			MO						PIONEER BLVD	E	(NONE)	NONE	N	DRY	TURN		N/A	N -E								018		00
N N			3P				45 23 46.98	-122 15 33.63	002600100S00	04	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																02	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000		00 00
03598	N	N	N	N			11/24/2021	14	PIONEER BLVD	ALLEY		N	N	CLR	ANGL-OTH	01	NONE 9	TURN-L										040	02
NONE			WE						MEINIG AVE	W	(NONE)	ONE-WAY	N	DRY	TURN		N/A	N -E								018		00
N N			2P				45 23 46.53	-122 15 36.74	002600100S00	04	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																02	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000		00 00

CITY OF SANDY, CLACKAMAS COUNTY

MEINIG AVE and PIONEER BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

19 - 23 of 30 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N I V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / INJ / SVRTY	A G E	S E X	LICNS / RES / LOC	PED / ERROR	ACT EVENT	CAUSE
00429	N	N	N	N			02/01/2017	14	PIONEER BLVD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT								13
NONE							WE		MEINIG AVE	E	(NONE)	UNKNOWN	N	DRY	SS-O		N/A	W -E							000	00
N							6P			03			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
N							45 23 46.97	-122 15 33.63	002600100S00		(02)													UNK			
																02	NONE 9	STRGHT								
																	N/A	W -E							000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
																								UNK			
02991	N	N	N	N			07/23/2017	14	PIONEER BLVD	STRGHT		N	N	CLR	S-OTHER	01	NONE 9	PARKNG								02
NONE							SU		MEINIG AVE	E	(NONE)	UNKNOWN	N	DRY	PARK		N/A	W -E							008	00
N							7P			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
N							45 23 46.97	-122 15 33.63	002600100S00		(02)													UNK			
																02	NONE 9	STRGHT								
																	N/A	W -E							000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
																								UNK			
02578	N	N	N	N			09/24/2020	14	PIONEER BLVD	STRGHT		N	N	CLR	S-OTHER	01	NONE 9	PARKNG								02
CITY							TH		MEINIG AVE	E	(NONE)	NONE	N	DRY	PARK		N/A	W -E							008	00
N							3P			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
N							45 23 46.97	-122 15 33.63	002600100S00		(02)													UNK			
																02	NONE 9	STRGHT								
																	N/A	W -E							000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
																								UNK			
02790	N	N	N	N			09/21/2021	14	PIONEER BLVD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT								13
NONE							TU		MEINIG AVE	E	(NONE)	ONE-WAY	N	DRY	SS-O		N/A	W -E							000	00
N							10A			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
N							45 23 46.85	-122 15 34.38	002600100S00		(02)													UNK			
																02	NONE 9	STRGHT								
																	N/A	W -E							000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
																								UNK			
04716	N	N	N	N	N	N	10/12/2016	16	MEINIG AVE	STRGHT		N	N	CLR	PED	01	NONE 0	STRGHT								18
CITY							WE		PIONEER BLVD	S	(NONE)	UNKNOWN	N	DRY	PED		PRVTE	N -S							000	00
N							5P			04			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	53	F	OR-Y	000	000	00
N							45 23 45.91	-122 15 35.58	017200100S00		(02)													OR<25			
																		- STRGHT		01	PED	INJB	09	M	ROAD 057	037	18
																		E W								

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S V	I H L	C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02738	N	N	N	N				09/17/2021	16	MEINIG AVE	STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT										003	29,27
NONE								FR	40	PIONEER BLVD	S	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	S -N									006		00
N								4P			06			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	34	F	OR-Y		026,016	038	003	29,27
N								45 23 45.99	-122 15 35.54			(02)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	S -N									011		00
																		PSNGR CAR		01	DRVR	INJC	57	F	OR-Y		000	000		00
																									OR>25					
																	02	NONE 0	STOP											
																		PRVTE	S -N									011		00
																		PSNGR CAR		02	PSNG	INJC	27	F			000	000		00
																	02	NONE 0	STOP											
																		PRVTE	S -N									011		00
																		PSNGR CAR		03	PSNG	INJC	37	F			000	000		00
																	02	NONE 0	STOP											
																		PRVTE	S -N									011		00
																		PSNGR CAR		04	PSNG	INJC	00	M			000	000		00
02872	N	N	N	N	N	N		06/25/2016	14	PIONEER BLVD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29,32
CITY								SA		MEINIG AVE	W	(NONE)	TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000		00
N								7A			03			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	31	M	OR-Y		026,052	026		29,32
N								45 23 46.48	-122 15 36.61	002600100S00		(02)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W -E									011		00
																		PSNGR CAR		01	DRVR	INJC	52	F	OR-Y		000	000		00
																									OR<25					
04684	N	N	N	N				12/24/2019	14	PIONEER BLVD	STRGHT		Y	N	CLR	S-1STOP	01	NONE	STRGHT										013	29
NONE								TU		MEINIG AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E									000		00
N								10A			03			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	31	M	OTH-Y		026	000		29
N								45 23 46.53	-122 15 36.11	002600100S00		(02)													N-RES					
																	02	NONE	STOP											
																		PRVTE	W -E									011	013	00
																		PSNGR CAR		01	DRVR	INJB	54	F	OR-Y		000	000		00
																									OR<25					
																	03	NONE	STOP											
																		PRVTE	W -E									011		00
																		PSNGR CAR		01	DRVR	NONE	57	M	OR-Y		000	000		00
																									OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
03721	N	N	N	N			10/23/2019	14	PIONEER BLVD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT										13
NONE							WE		MEINIG AVE	W	(NONE)	NONE	N	DRY	SS-O		N/A	W -E									000	00
N							5P			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.45	-122 15 37.64	002600100S00		(02)													UNK				
																02	NONE 9	STRGHT										
																	N/A	W -E									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
01351	N	N	N	N			05/21/2020	14	PIONEER BLVD	STRGHT		N	N	RAIN	S-STRGHT	01	NONE 9	STRGHT										13
NONE							TH		MEINIG AVE	W	(NONE)	NONE	N	WET	SS-O		N/A	W -E									000	00
N							5P			04			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.45	-122 15 38.66	002600100S00		(02)													UNK				
																02	NONE 9	STRGHT										
																	N/A	W -E									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
01586	N	N	N	N			06/21/2020	14	PIONEER BLVD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NO RPT							SU		MEINIG AVE	W	(NONE)	TRF SIGNAL	N	DRY	REAR		N/A	W -E									000	00
N							11A			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.53	-122 15 36.11	002600100S00		(02)													UNK				
																02	NONE 9	STOP										
																	N/A	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
02269	N	N	N	N			08/20/2020	14	PIONEER BLVD	STRGHT		N	N	CLR	S-1TURN	01	NONE 9	TURN-L										08
NONE							TH		MEINIG AVE	W	(NONE)	ONE-WAY	N	DRY	TURN		N/A	W -N									000	00
N							8A			03			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 46.85	-122 15 34.38	002600100S00		(02)													UNK				
																02	NONE 9	STRGHT										
																	N/A	W -E									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				

MEINIG AVE and PROCTOR BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

1 - 3 of 13 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	SPEED	ALC	DRUGS	MJINV	SCHL	WORK	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
05213	N	N	N	N	N	N	12/08/2017	14	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	27,29
CITY							FR		PROCTOR BLVD	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W									000		00
N							3P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	M	OR-Y		038,016	000		27,29
N							45 23 50.2	-122 15 34.98	002600200S00															OR<25					
																01	NONE 0	STRGHT											
																	PRVTE	E -W									000		00
																	PSNGR CAR		02	PSNG	INJC	19	M			000	000		00
																02	NONE 0	STOP											
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		01	DRVR	INJC	28	M	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		02	PSNG	INJC	29	F			000	000		00
																03	NONE 0	STOP											
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	INJC	17	M	OR-Y		000	000		00
																								OR<25					
01314	N	N	N	N			04/14/2018	14	MEINIG AVE	INTER	CROSS	N	Y	RAIN	FIX OBJ	01	NONE 9	TURN-L										042	08
NONE							SA		PROCTOR BLVD	E		TRF SIGNAL	N	WET	FIX		N/A	E -S									000		00
N							1A			05	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 23 50.21	-122 15 34.99	002600200S00															UNK					
00809	N	N	N	N	N	N	03/06/2019	14	MEINIG AVE	INTER	CROSS	N	N	SNOW	S-1STOP	01	NONE 0	STRGHT										124	07,29,32
CITY							WE		PROCTOR BLVD	E		TRF SIGNAL	N	WET	REAR		PRVTE	E -W									000		00
N							10A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	38	M	SUSP		043,026,052	000		07,29,32
N							45 23 50.21	-122 15 34.99	002600200S00															OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011		00
																	PSNGR CAR		01	DRVR	INJC	20	F	NONE		000	000		00
																								OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011		00
																	PSNGR CAR		02	PSNG	INJC	24	F			000	000		00
02290	N	N	N	N	N	N	08/08/2021	14	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											27,29
CITY							SU		PROCTOR BLVD	E		UNKNOWN	N	DRY	REAR		N/A	E -W									000		00
N							11A			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 23 50.22	-122 15 34.99	002600200S00															UNK					

MEINIG AVE and PROCTOR BLVD, City of Sandy, Clackamas County, 01/01/2016 to 12/31/2021

SER# INVEST RD DPT UNLOC?	S D M P R J S W E A U I C O E L G N H R D C S V L K	DATE DAY TIME LAT	CLASS DIST FROM LONG	CITY STREET FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	SPCL USE TRLR QTY OWNER V# TYPE	MOVE FROM TO	PRTC P# TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
											02 NONE 9	STOP									
											N/A	E -W								012	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
00093	N N N N N N	01/09/2018	14	MEINIG AVE	INTER	CROSS	N	N	RAIN	PED	01 NONE 0	TURN-L								002	27,02
CITY		TU		PROCTOR BLVD	W		TRF SIGNAL	N	WET	PED	PUBLC	S -W								000	00
N		7A			06	0		N	DLIT	INJ	SCHL BUS		01 DRVR	NONE	60	M	OR-Y		029	038	27,02
N		45 23 50.2	-122 15 34.98	002600200S00													OR<25				
												-									
												STRGHT	01 PED	INJC	28	F		I XWLK	000	035	00
												N S									
02920	N N N N N N	07/19/2017	14	MEINIG AVE	INTER	CROSS	N	N	CLR	O-1 L-TURN	01 NONE 9	STRGHT									27,02,08
CITY		WE		PROCTOR BLVD	CN		TRF SIGNAL	N	DRY	TURN	N/A	N -S								000	00
N		5P			04	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 23 50.2	-122 15 34.98	002600200S00													UNK				
											02 NONE 9	TURN-L									
											N/A	S -W								000	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
05343	N N N N	12/14/2017	14	MEINIG AVE	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 9	STRGHT									02
NO RPT		TH		PROCTOR BLVD	CN		TRF SIGNAL	N	DRY	TURN	N/A	E -W								000	00
N		12P			04	1		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 23 50.2	-122 15 34.98	002600200S00		(02)											UNK				
											02 NONE 9	TURN-L									
											N/A	S -W								000	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
00574	N N N N	02/16/2018	14	MEINIG AVE	INTER	CROSS	N	N	CLR	S-1TURN	01 NONE 9	STRGHT									08
NONE		FR		PROCTOR BLVD	CN		TRF SIGNAL	N	DRY	TURN	N/A	E -W								000	00
N		12P			03	0		N	DAY	PDO	MTRCYCLE		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 23 50.2	-122 15 34.98	002600200S00													UNK				
											02 NONE 9	TURN-L									
											N/A	E -S								000	00
											SEMI TOW		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
00738	N N N N N N	02/01/2019	14	MEINIG AVE	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01 NONE 9	TURN-L									02
STATE		FR		PROCTOR BLVD	CN		TRF SIGNAL	N	WET	TURN	N/A	S -W								000	00
N		9A			03	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 23 50.21	-122 15 34.98	002600200S00													UNK				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT EVENT	CAUSE
																02	NONE 9 N/A PSNGR CAR	STRGHT N -S	01	DRVR	NONE	00	Unk	UNK UNK		000	000	00 00
03528	N	N	N	N			11/18/2021	14	MEINIG AVE	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	TURN-L										02,08
NONE							TH		PROCTOR BLVD	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	S -W									000	00
N N							7A 45 23 50.2	-122 15 34.98	002600200S00	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	16	M	OR-Y OR<25		028,004	000	02,08
																02	NONE 0 PRVTE PSNGR CAR	STRGHT N -S	01	DRVR	INJC	64	F	OR-Y OR<25		000	000	00 00
00282	N	N	N	N			01/17/2016	14	PROCTOR BLVD	ALLEY		N	N	RAIN	S-1TURN	01	NONE 9	TURN-L										08
NONE							SU		MEINIG AVE	E	(NONE)	UNKNOWN	N	WET	TURN		N/A	E -S									019	00
N N							8A 45 23 50.21	-122 15 33.53	002600200S00	04	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000	00
																02	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	000	00 00
00996	N	N	N	N			03/01/2016	14	PROCTOR BLVD	STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										29
NONE							TU		MEINIG AVE	E	(NONE)	UNKNOWN	N	WET	REAR		UNKN	E -W									000	00
N N							2P 45 23 50.21	-122 15 33.53	002600200S00	06	(02)		N	DAY	INJ		UNKNOWN		01	DRVR	NONE	00	M	OTH-Y UNK		026	000	29
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	33	F	OR-Y OR<25		000	011 000	00 00
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	02	PSNG	INJC	39	M			000	011 000	00 00
00684	N	N	N	N			02/27/2019	14	PROCTOR BLVD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
NONE							WE		MEINIG AVE	E	(NONE)	NONE	N	DRY	REAR		PRVTE	E -W									000	00
N N							3P 45 23 50.22	-122 15 34.27	002600200S00	04	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	62	M	OR-Y OR<25		026	000	29
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	51	M	OR-Y OR<25		000	011 000	00 00

Preliminary Traffic Signal Warrant Analysis

Project: 23011 - Community Campus Park
Date: 6/15/2023
Scenario: 2025 Buildout PM peak hour

Major Street:	Scenic Street		Minor Street:	Site Access	
Number of Lanes:	1		Number of Lanes:	1	
PM Peak Hour Volumes:	7		PM Peak Hour Volumes:	1 1 0%	Total Rights RT Discount

Warrant Used:

X — 100 percent of standard warrants used

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

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

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

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	70	8,850	
Minor Street*	10	2,650	No
Condition B: Interruption of Continuous Traffic			
Major Street	70	13,300	
Minor Street*	10	1,350	No
Combination Warrant			
Major Street	70	10,640	
Minor Street*	10	2,120	No

* Minor street right-turning traffic volumes reduced by 00%.

Preliminary Traffic Signal Warrant Analysis

Project: 23011 - Community Campus Park
Date: 6/15/2023
Scenario: 2025 Buildout PM peak hour

Major Street:	Meinig Avenue		Minor Street:	Site Access	
Number of Lanes:	1		Number of Lanes:	1	
PM Peak Hour Volumes:	50		PM Peak Hour Volumes:	9	Total
				1	Rights
				0%	RT Discount

Warrant Used:

X — 100 percent of standard warrants used

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

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

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

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	500	8,850	
Minor Street*	90	2,650	No
Condition B: Interruption of Continuous Traffic			
Major Street	500	13,300	
Minor Street*	90	1,350	No
Combination Warrant			
Major Street	500	10,640	
Minor Street*	90	2,120	No

* Minor street right-turning traffic volumes reduced by 00%.

Preliminary Traffic Signal Warrant Analysis

Project: 23011 - Community Campus Park
Date: 6/15/2023
Scenario: 2025 Buildout PM peak hour

Major Street:	Pleasant Street		Minor Street:	Meinig Avenue	
Number of Lanes:	1		Number of Lanes:	1	
PM Peak Hour Volumes:	178		PM Peak Hour Volumes:	59	Total
				18	Rights
				0%	RT Discount

Warrant Used:

X — 100 percent of standard warrants used

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

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

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

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	1,780	8,850	
Minor Street*	590	2,650	No
Condition B: Interruption of Continuous Traffic			
Major Street	1,780	13,300	
Minor Street*	590	1,350	No
Combination Warrant			
Major Street	1,780	10,640	
Minor Street*	590	2,120	No

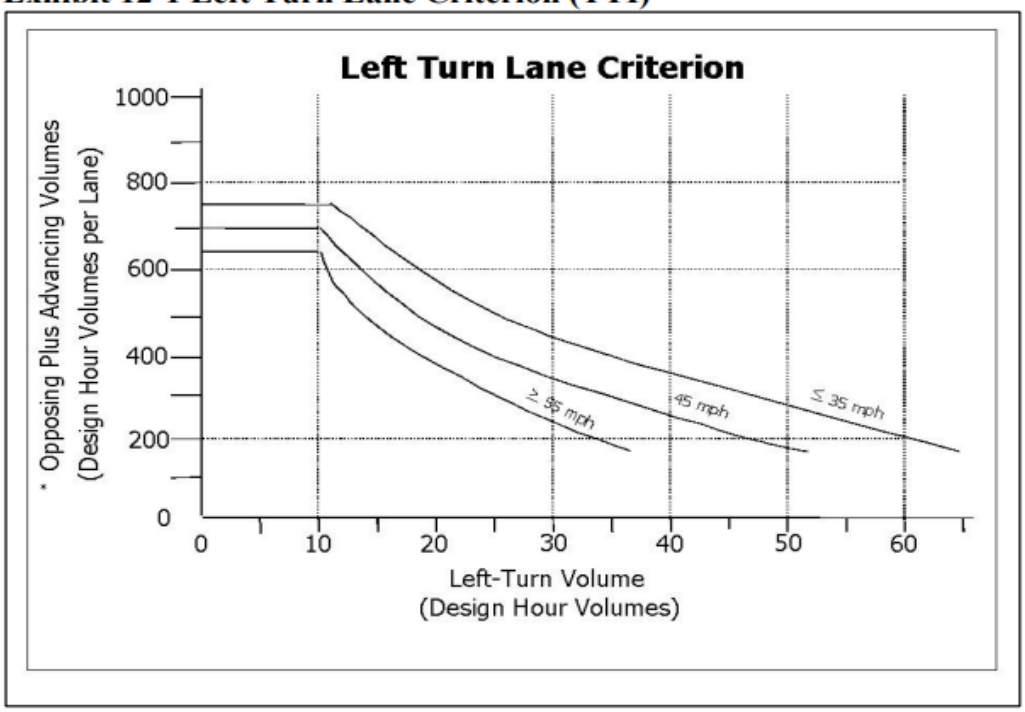
* Minor street right-turning traffic volumes reduced by 00%.

Project: 23011 - Community Campus Park
Intersection: Scenic Street & Site Access
Date: 6/15/2023
Scenario: 2025 Buildout Saturday (Event) peak hour

Speed? 25 mph

	BO (Event) EB	BO (Event) WB
Left-Turn Volume	0	10
Approaching DHV	2	12
# of Advancing Through Lanes	1	1
Opposing DHV	2	2
# of Opposing Through Lanes	1	1
O+A DHV	4	14
Lane Needed?	No	No

Exhibit 12-1 Left Turn Lane Criterion (TTI)



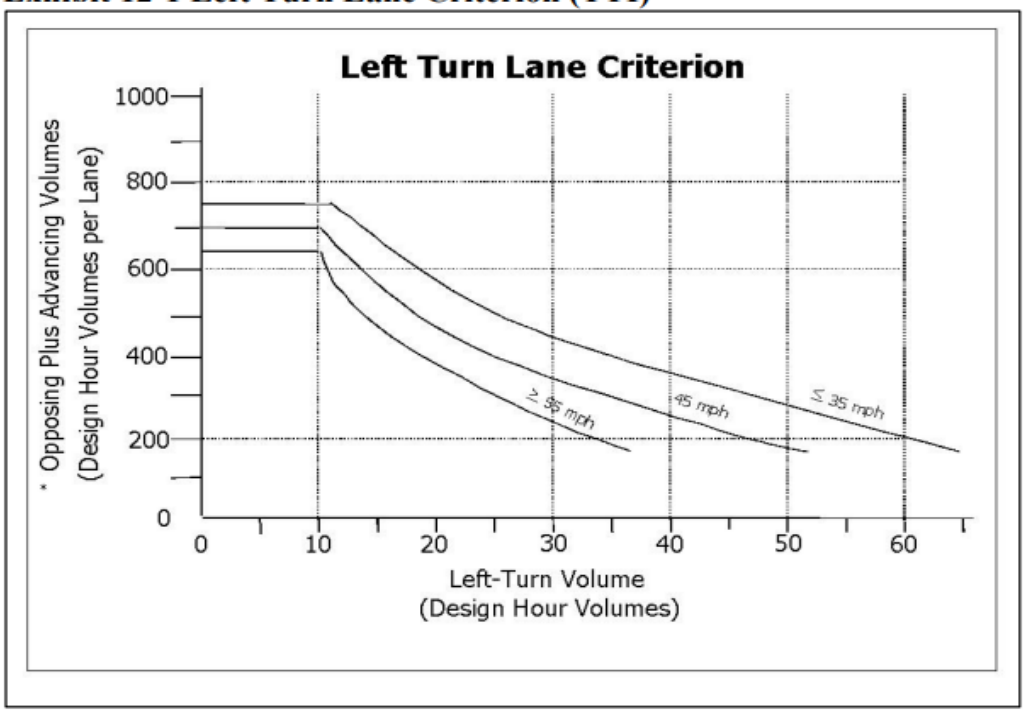
*(Advancing Volume/Number of Advancing Through Lanes) + (Opposing Volume/Number of Opposing Through Lanes)
Opposing left turns are not counted as opposing volumes

Project: 23011 - Community Campus Park
Intersection: SE Meinig Avenue & Idleman Street / Site Access
Date: 6/15/2023
Scenario: 2025 Buildout Saturday (Event) peak hour

Speed? 25 mph

	NB	SB
Left-Turn Volume	30	0
Approaching DHV	60	23
# of Advancing Through Lanes	1	1
Opposing DHV	23	30
# of Opposing Through Lanes	1	1
O+A DHV	83	53
Lane Needed?	No	No

Exhibit 12-1 Left Turn Lane Criterion (TTI)



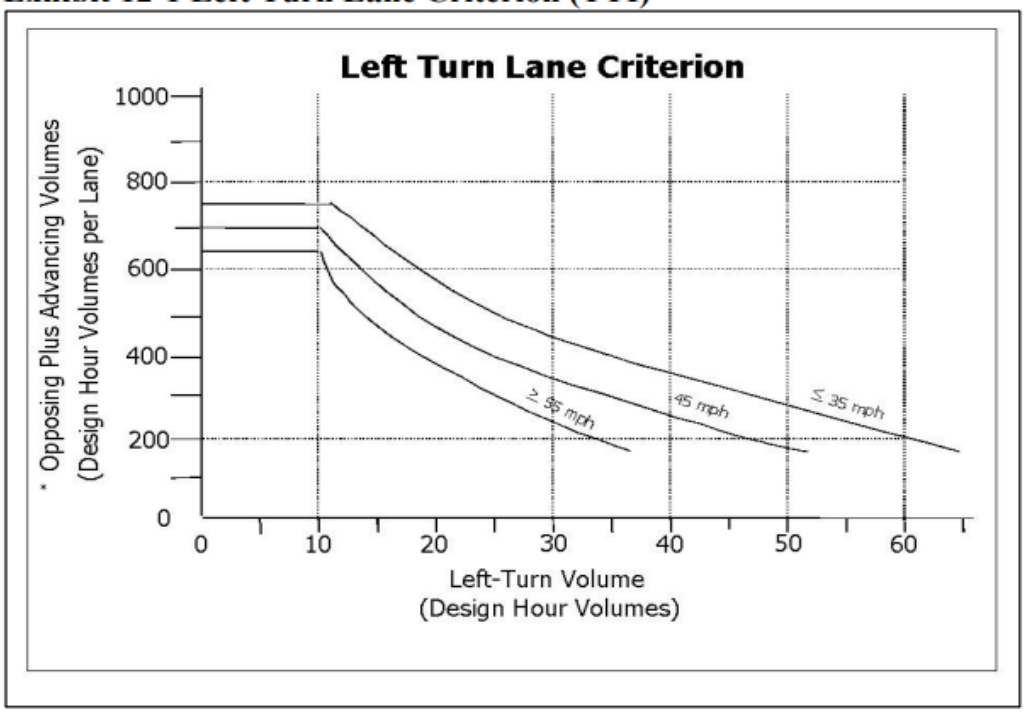
*(Advancing Volume/Number of Advancing Through Lanes) + (Opposing Volume/Number of Opposing Through Lanes)
Opposing left turns are not counted as opposing volumes

Project: 23011 - Community Campus Park
Intersection: SE Meinig Avenue & Pleasant Street
Date: 6/15/2023
Scenario: 2025 Buildout Friday peak hour

Speed? 25 mph

	Friday PM Peak Hour	
	EB	WB
Left-Turn Volume	15	5
Approaching DHV	145	33
# of Advancing Through Lanes	1	1
Opposing DHV	28	130
# of Opposing Through Lanes	1	1
O+A DHV	173	163
Lane Needed?	No	No

Exhibit 12-1 Left Turn Lane Criterion (TTI)



*(Advancing Volume/Number of Advancing Through Lanes) + (Opposing Volume/Number of Opposing Through Lanes)
Opposing left turns are not counted as opposing volumes

Appendix D – Operations

Synchro Operations Reports

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	2	0	0
Future Vol, veh/h	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	0	0	2	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	4	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	2	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1634	-	1023	1088
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1026	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1634	-	1023	1088
Mov Cap-2 Maneuver	-	-	-	-	1023	-
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1026	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1634	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	5	5	0	0	3	19	5	1	8	0
Future Vol, veh/h	0	0	5	5	0	0	3	19	5	1	8	0
Conflicting Peds, #/hr	2	0	1	1	0	2	41	0	0	0	0	41
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	4	4	4	0	0	0
Mvmt Flow	0	0	6	6	0	0	4	23	6	1	10	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	89	90	52	50	87	28	51	0	0	29	0	0
Stage 1	53	53	-	34	34	-	-	-	-	-	-	-
Stage 2	36	37	-	16	53	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.236	-	-	2.2	-	-
Pot Cap-1 Maneuver	901	804	1021	955	807	1053	1542	-	-	1597	-	-
Stage 1	965	855	-	987	871	-	-	-	-	-	-	-
Stage 2	985	868	-	1009	855	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	861	769	980	945	772	1051	1482	-	-	1597	-	-
Mov Cap-2 Maneuver	861	769	-	945	772	-	-	-	-	-	-	-
Stage 1	924	821	-	984	868	-	-	-	-	-	-	-
Stage 2	980	865	-	1001	821	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.8	0.8	0.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	980	945	1597	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.006	0.001	-	-
HCM Control Delay (s)	7.4	0	-	8.7	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

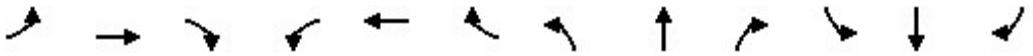
Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	13	95	30	5	25	1	11	19	17	4	20	7
Future Vol, veh/h	13	95	30	5	25	1	11	19	17	4	20	7
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	0	0	0
Mvmt Flow	14	101	32	5	27	1	12	20	18	4	21	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	100	98	29	159	92	32	28	0	0	41	0	0
Stage 1	33	33	-	56	56	-	-	-	-	-	-	-
Stage 2	67	65	-	103	36	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	886	796	1052	804	796	1039	1585	-	-	1581	-	-
Stage 1	988	872	-	954	846	-	-	-	-	-	-	-
Stage 2	948	845	-	900	863	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	855	785	1048	692	785	1036	1585	-	-	1576	-	-
Mov Cap-2 Maneuver	855	785	-	692	785	-	-	-	-	-	-	-
Stage 1	980	869	-	944	837	-	-	-	-	-	-	-
Stage 2	910	836	-	766	860	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	9.9	1.7	0.9
HCM LOS	B	A		

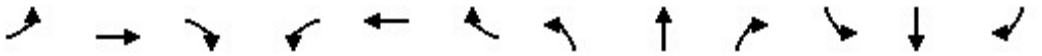
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1585	-	-	837	774	1576	-	-
HCM Lane V/C Ratio	0.007	-	-	0.175	0.043	0.003	-	-
HCM Control Delay (s)	7.3	0	-	10.2	9.9	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	141	1023	7	281	61	0	0	35	21
Future Volume (vph)	0	0	0	141	1023	7	281	61	0	0	35	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			1.00	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.95	
Flt Protected					0.99			0.96			1.00	
Satd. Flow (prot)					3264			1712			1674	
Flt Permitted					0.99			0.72			1.00	
Satd. Flow (perm)					3264			1291			1674	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	147	1066	7	293	64	0	0	36	22
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	0	0	0	1220	0	0	357	0	0	44	0
Confl. Peds. (#/hr)	1		2	2		1			3	3		
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	1%	1%	1%	2%	2%	2%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					40.6			30.4			30.4	
Effective Green, g (s)					40.6			30.4			30.4	
Actuated g/C Ratio					0.51			0.38			0.38	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1656			490			636	
v/s Ratio Prot											0.03	
v/s Ratio Perm					0.37			c0.28				
v/c Ratio					0.74			0.73			0.07	
Uniform Delay, d1					15.5			21.3			15.8	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					1.7			5.4			0.0	
Delay (s)					17.2			26.6			15.8	
Level of Service					B			C			B	
Approach Delay (s)		0.0			17.2			26.6			15.8	
Approach LOS		A			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

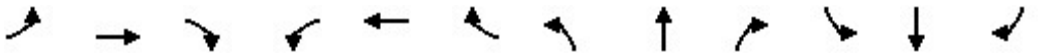
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	141	1023	7	281	61	0	0	35	21
Future Volume (veh/h)	0	0	0	141	1023	7	281	61	0	0	35	21
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1744	1744	1744	1786	1786	0	0	1772	1772
Adj Flow Rate, veh/h				147	1066	7	293	64	0	0	36	22
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				4	4	4	1	1	0	0	2	2
Cap, veh/h				205	1565	11	471	79	0	0	344	210
Arrive On Green				0.51	0.51	0.51	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				398	3045	21	1079	236	0	0	1030	629
Grp Volume(v), veh/h				636	0	584	357	0	0	0	0	58
Grp Sat Flow(s),veh/h/ln				1724	0	1740	1315	0	0	0	0	1659
Q Serve(g_s), s				16.9	0.0	14.6	13.8	0.0	0.0	0.0	0.0	1.4
Cycle Q Clear(g_c), s				16.9	0.0	14.6	15.2	0.0	0.0	0.0	0.0	1.4
Prop In Lane				0.23		0.01	0.82		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				886	0	894	550	0	0	0	0	555
V/C Ratio(X)				0.72	0.00	0.65	0.65	0.00	0.00	0.00	0.00	0.10
Avail Cap(c_a), veh/h				1671	0	1686	1354	0	0	0	0	1496
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				11.1	0.0	10.5	18.9	0.0	0.0	0.0	0.0	13.6
Incr Delay (d2), s/veh				1.1	0.0	0.8	1.3	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.7	0.0	4.9	4.4	0.0	0.0	0.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				12.2	0.0	11.4	20.2	0.0	0.0	0.0	0.0	13.7
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1220			357			58	
Approach Delay, s/veh					11.8			20.2			13.7	
Approach LOS					B			C			B	

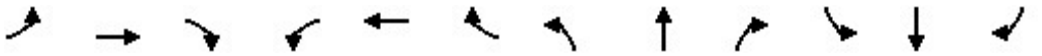
Timer - Assigned Phs	2			6		8						
Phs Duration (G+Y+Rc), s	24.3			24.3		35.0						
Change Period (Y+Rc), s	4.5			4.5		4.5						
Max Green Setting (Gmax), s	53.5			53.5		57.5						
Max Q Clear Time (g_c+I1), s	17.2			3.4		18.9						
Green Ext Time (p_c), s	2.6			0.3		11.6						

Intersection Summary		
HCM 6th Ctrl Delay	13.7	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1312	330	0	0	0	0	288	182	19	174	0
Future Volume (vph)	50	1312	330	0	0	0	0	288	182	19	174	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.93					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3342	1401					1782	1476	1674	1765	
Flt Permitted		1.00	1.00					1.00	1.00	0.29	1.00	
Satd. Flow (perm)		3342	1401					1782	1476	518	1765	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	51	1339	337	0	0	0	0	294	186	19	178	0
RTOR Reduction (vph)	0	0	121	0	0	0	0	0	72	0	0	0
Lane Group Flow (vph)	0	1390	216	0	0	0	0	294	114	19	178	0
Confl. Peds. (#/hr)	17		20	20		17	4		10	10		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	2%	2%	2%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		47.8	47.8					20.4	20.4	26.5	26.5	
Effective Green, g (s)		47.8	47.8					20.4	20.4	26.5	26.5	
Actuated g/C Ratio		0.57	0.57					0.24	0.24	0.32	0.32	
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)		1917	803					436	361	186	561	
v/s Ratio Prot								c0.16		0.00	c0.10	
v/s Ratio Perm		0.42	0.15						0.08	0.03		
v/c Ratio		0.73	0.27					0.67	0.31	0.10	0.32	
Uniform Delay, d1		13.0	8.9					28.4	25.7	20.5	21.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.4	0.2					4.1	0.5	0.2	0.3	
Delay (s)		14.3	9.1					32.5	26.2	20.8	21.9	
Level of Service		B	A					C	C	C	C	
Approach Delay (s)		13.3			0.0			30.1			21.8	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	83.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1312	330	0	0	0	0	288	182	19	174	0
Future Volume (veh/h)	50	1312	330	0	0	0	0	288	182	19	174	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772				0	1786	1786	1772	1772	0
Adj Flow Rate, veh/h	51	1339	0				0	294	148	19	178	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2				0	1	1	2	2	0
Cap, veh/h	67	1835					0	406	339	214	559	0
Arrive On Green	0.55	0.55	0.00				0.00	0.23	0.23	0.02	0.32	0.00
Sat Flow, veh/h	121	3328	1502				0	1786	1494	1688	1772	0
Grp Volume(v), veh/h	745	645	0				0	294	148	19	178	0
Grp Sat Flow(s),veh/h/ln	1766	1683	1502				0	1786	1494	1688	1772	0
Q Serve(g_s), s	22.2	18.9	0.0				0.0	10.3	5.8	0.6	5.2	0.0
Cycle Q Clear(g_c), s	22.2	18.9	0.0				0.0	10.3	5.8	0.6	5.2	0.0
Prop In Lane	0.07		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	974	928					0	406	339	214	559	0
V/C Ratio(X)	0.76	0.70					0.00	0.72	0.44	0.09	0.32	0.00
Avail Cap(c_a), veh/h	1446	1379					0	1212	1014	301	1451	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.8	11.1	0.0				0.0	24.2	22.5	19.0	17.6	0.0
Incr Delay (d2), s/veh	1.4	0.9	0.0				0.0	2.5	0.9	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	6.3	0.0				0.0	4.5	2.0	0.2	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	12.0	0.0				0.0	26.7	23.3	19.1	18.0	0.0
LnGrp LOS	B	B					A	C	C	B	B	A
Approach Vol, veh/h		1390						442			197	
Approach Delay, s/veh		12.6						25.6			18.1	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.0	19.9		41.9		25.9
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5
Max Q Clear Time (g_c+I1), s	2.6	12.3		24.2		7.2
Green Ext Time (p_c), s	0.0	2.5		13.2		1.2

Intersection Summary		
HCM 6th Ctrl Delay		16.0
HCM 6th LOS		B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	2	0	0
Future Vol, veh/h	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	5	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	10	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1630	-	1015	1084
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	1023	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1630	-	1015	1084
Mov Cap-2 Maneuver	-	-	-	-	1015	-
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	1023	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1630	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	4	4	0	0	2	17	2	0	20	0
Future Vol, veh/h	1	0	4	4	0	0	2	17	2	0	20	0
Conflicting Peds, #/hr	9	0	0	0	0	9	18	0	1	1	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	42	42	42	42	42	42	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	10	10	0	0	5	40	5	0	48	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	128	122	66	107	120	53	66	0	0	46	0	0
Stage 1	66	66	-	54	54	-	-	-	-	-	-	-
Stage 2	62	56	-	53	66	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	850	772	1003	877	774	1020	1549	-	-	1575	-	-
Stage 1	950	844	-	963	854	-	-	-	-	-	-	-
Stage 2	954	852	-	965	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	826	756	986	866	758	1010	1522	-	-	1574	-	-
Mov Cap-2 Maneuver	826	756	-	866	758	-	-	-	-	-	-	-
Stage 1	931	830	-	959	851	-	-	-	-	-	-	-
Stage 2	943	849	-	956	830	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.2	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1522	-	-	949	866	1574	-	-
HCM Lane V/C Ratio	0.003	-	-	0.013	0.011	-	-	-
HCM Control Delay (s)	7.4	0	-	8.8	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

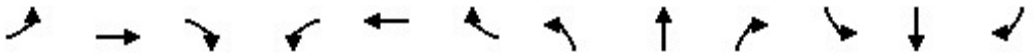
Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	48	17	2	18	0	5	12	10	2	27	3
Future Vol, veh/h	6	48	17	2	18	0	5	12	10	2	27	3
Conflicting Peds, #/hr	4	0	2	2	0	4	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	79	28	3	30	0	8	20	16	3	44	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	120	109	53	152	103	32	53	0	0	36	0	0
Stage 1	57	57	-	44	44	-	-	-	-	-	-	-
Stage 2	63	52	-	108	59	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	860	785	1020	820	791	1048	1566	-	-	1588	-	-
Stage 1	960	851	-	975	862	-	-	-	-	-	-	-
Stage 2	953	856	-	902	850	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	825	776	1014	731	782	1044	1560	-	-	1588	-	-
Mov Cap-2 Maneuver	825	776	-	731	782	-	-	-	-	-	-	-
Stage 1	951	846	-	970	858	-	-	-	-	-	-	-
Stage 2	912	852	-	793	845	-	-	-	-	-	-	-

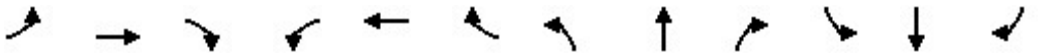
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9.8	1.4	0.5
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1560	-	-	827	777	1588	-	-
HCM Lane V/C Ratio	0.005	-	-	0.141	0.042	0.002	-	-
HCM Control Delay (s)	7.3	0	-	10.1	9.8	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	118	1104	8	282	29	0	0	22	22
Future Volume (vph)	0	0	0	118	1104	8	282	29	0	0	22	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			0.99	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.93	
Flt Protected					1.00			0.96			1.00	
Satd. Flow (prot)					3328			1718			1666	
Flt Permitted					1.00			0.71			1.00	
Satd. Flow (perm)					3328			1280			1666	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	126	1174	9	300	31	0	0	23	23
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	15	0
Lane Group Flow (vph)	0	0	0	0	1309	0	0	331	0	0	31	0
Confl. Peds. (#/hr)	2		12	12		2	2		5	5		2
Confl. Bikes (#/hr)						3						
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					42.2			28.9			28.9	
Effective Green, g (s)					42.2			28.9			28.9	
Actuated g/C Ratio					0.53			0.36			0.36	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1753			461			601	
v/s Ratio Prot											0.02	
v/s Ratio Perm					0.39			c0.26				
v/c Ratio					0.75			0.72			0.05	
Uniform Delay, d1					14.8			22.1			16.7	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					1.8			5.3			0.0	
Delay (s)					16.6			27.4			16.7	
Level of Service					B			C			B	
Approach Delay (s)		0.0			16.6			27.4			16.7	
Approach LOS		A			B			C			B	

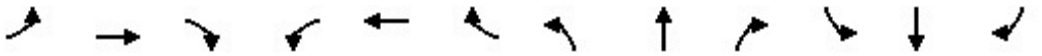
Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	80.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	118	1104	8	282	29	0	0	22	22
Future Volume (veh/h)	0	0	0	118	1104	8	282	29	0	0	22	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1772	1772	1772	1800	1800	0	0	1800	1800
Adj Flow Rate, veh/h				126	1174	9	300	31	0	0	23	23
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	0	0	0	0	0	0
Cap, veh/h				175	1714	14	485	38	0	0	256	256
Arrive On Green				0.54	0.54	0.54	0.31	0.31	0.00	0.00	0.31	0.31
Sat Flow, veh/h				324	3173	25	1196	124	0	0	825	825
Grp Volume(v), veh/h				684	0	625	331	0	0	0	0	46
Grp Sat Flow(s),veh/h/ln				1756	0	1766	1320	0	0	0	0	1650
Q Serve(g_s), s				17.7	0.0	15.2	13.1	0.0	0.0	0.0	0.0	1.2
Cycle Q Clear(g_c), s				17.7	0.0	15.2	14.3	0.0	0.0	0.0	0.0	1.2
Prop In Lane				0.18		0.01	0.91		0.00	0.00		0.50
Lane Grp Cap(c), veh/h				949	0	954	523	0	0	0	0	512
V/C Ratio(X)				0.72	0.00	0.66	0.63	0.00	0.00	0.00	0.00	0.09
Avail Cap(c_a), veh/h				1675	0	1686	1338	0	0	0	0	1465
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.4	0.0	9.9	19.8	0.0	0.0	0.0	0.0	14.7
Incr Delay (d2), s/veh				1.0	0.0	0.8	1.3	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.9	0.0	5.1	4.2	0.0	0.0	0.0	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				11.5	0.0	10.6	21.1	0.0	0.0	0.0	0.0	14.8
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1309			331			46	
Approach Delay, s/veh					11.1			21.1			14.8	
Approach LOS					B			C			B	

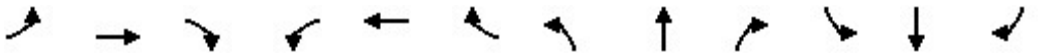
Timer - Assigned Phs	2			6		8					
Phs Duration (G+Y+Rc), s	23.2			23.2		37.1					
Change Period (Y+Rc), s	4.5			4.5		4.5					
Max Green Setting (Gmax), s	53.5			53.5		57.5					
Max Q Clear Time (g_c+I1), s	16.3			3.2		19.7					
Green Ext Time (p_c), s	2.4			0.3		12.9					

Intersection Summary		
HCM 6th Ctrl Delay	13.1	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	1138	282	0	0	0	0	271	116	19	128	0
Future Volume (vph)	47	1138	282	0	0	0	0	271	116	19	128	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.97					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3379	1472					1748	1445	1657	1748	
Flt Permitted		1.00	1.00					1.00	1.00	0.32	1.00	
Satd. Flow (perm)		3379	1472					1748	1445	559	1748	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	51	1224	303	0	0	0	0	291	125	20	138	0
RTOR Reduction (vph)	0	0	125	0	0	0	0	0	78	0	0	0
Lane Group Flow (vph)	0	1275	178	0	0	0	0	291	47	20	138	0
Confl. Peds. (#/hr)	3		4	4		3	1		12	12		1
Confl. Bikes (#/hr)												3
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		42.5	42.5					20.2	20.2	26.2	26.2	
Effective Green, g (s)		42.5	42.5					20.2	20.2	26.2	26.2	
Actuated g/C Ratio		0.55	0.55					0.26	0.26	0.34	0.34	
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)		1848	805					454	375	209	589	
v/s Ratio Prot								c0.17		0.00	c0.08	
v/s Ratio Perm		0.38	0.12						0.03	0.03		
v/c Ratio		0.69	0.22					0.64	0.12	0.10	0.23	
Uniform Delay, d1		12.8	9.1					25.5	22.0	18.1	18.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.1	0.1					3.1	0.1	0.2	0.2	
Delay (s)		13.9	9.2					28.6	22.1	18.3	18.7	
Level of Service		B	A					C	C	B	B	
Approach Delay (s)		13.0			0.0			26.7			18.7	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	1138	282	0	0	0	0	271	116	19	128	0
Future Volume (veh/h)	47	1138	282	0	0	0	0	271	116	19	128	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1786	1786	1786				0	1758	1758	1758	1758	0
Adj Flow Rate, veh/h	51	1224	0				0	291	85	20	138	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1				0	3	3	3	3	0
Cap, veh/h	70	1751					0	412	344	238	581	0
Arrive On Green	0.52	0.52	0.00				0.00	0.23	0.23	0.02	0.33	0.00
Sat Flow, veh/h	133	3343	1514				0	1758	1467	1674	1758	0
Grp Volume(v), veh/h	683	592	0				0	291	85	20	138	0
Grp Sat Flow(s),veh/h/ln	1779	1697	1514				0	1758	1467	1674	1758	0
Q Serve(g_s), s	18.3	15.8	0.0				0.0	9.4	2.9	0.5	3.5	0.0
Cycle Q Clear(g_c), s	18.3	15.8	0.0				0.0	9.4	2.9	0.5	3.5	0.0
Prop In Lane	0.07		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	932	889					0	412	344	238	581	0
V/C Ratio(X)	0.73	0.67					0.00	0.71	0.25	0.08	0.24	0.00
Avail Cap(c_a), veh/h	1598	1524					0	1308	1092	334	1579	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.4	10.8	0.0				0.0	21.7	19.2	16.8	15.0	0.0
Incr Delay (d2), s/veh	1.1	0.9	0.0				0.0	2.2	0.4	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	5.2	0.0				0.0	3.9	1.0	0.2	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	11.6	0.0				0.0	23.9	19.6	17.0	15.2	0.0
LnGrp LOS	B	B					A	C	B	B	B	A
Approach Vol, veh/h		1275						376			158	
Approach Delay, s/veh		12.1						23.0			15.5	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	6.0	19.0		36.9		24.9						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5						
Max Q Clear Time (g_c+I1), s	2.5	11.4		20.3		5.5						
Green Ext Time (p_c), s	0.0	2.3		12.0		0.9						

Intersection Summary			
HCM 6th Ctrl Delay			14.7
HCM 6th LOS			B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	2	0	0
Future Vol, veh/h	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	0	0	2	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	4	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	2	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1634	-	1023	1088
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1026	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1634	-	1023	1088
Mov Cap-2 Maneuver	-	-	-	-	1023	-
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1026	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1634	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	5	5	0	0	3	20	5	1	8	0
Future Vol, veh/h	0	0	5	5	0	0	3	20	5	1	8	0
Conflicting Peds, #/hr	2	0	1	1	0	2	41	0	0	0	0	41
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	4	4	4	0	0	0
Mvmt Flow	0	0	6	6	0	0	4	24	6	1	10	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	90	91	52	51	88	29	51	0	0	30	0	0
Stage 1	53	53	-	35	35	-	-	-	-	-	-	-
Stage 2	37	38	-	16	53	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.236	-	-	2.2	-	-
Pot Cap-1 Maneuver	900	803	1021	953	806	1052	1542	-	-	1596	-	-
Stage 1	965	855	-	986	870	-	-	-	-	-	-	-
Stage 2	984	867	-	1009	855	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	860	768	980	943	771	1050	1482	-	-	1596	-	-
Mov Cap-2 Maneuver	860	768	-	943	771	-	-	-	-	-	-	-
Stage 1	924	821	-	983	867	-	-	-	-	-	-	-
Stage 2	979	864	-	1001	821	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.8	0.8	0.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	980	943	1596	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.006	0.001	-	-
HCM Control Delay (s)	7.4	0	-	8.7	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

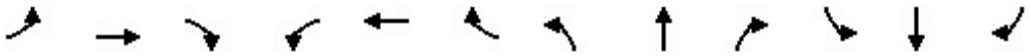
Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	99	31	5	26	1	11	20	18	4	21	7
Future Vol, veh/h	14	99	31	5	26	1	11	20	18	4	21	7
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	0	0	0
Mvmt Flow	15	105	33	5	28	1	12	21	19	4	22	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	103	101	30	165	95	34	29	0	0	43	0	0
Stage 1	34	34	-	58	58	-	-	-	-	-	-	-
Stage 2	69	67	-	107	37	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	882	793	1050	797	793	1036	1584	-	-	1579	-	-
Stage 1	987	871	-	951	845	-	-	-	-	-	-	-
Stage 2	946	843	-	896	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	850	782	1046	682	782	1033	1584	-	-	1574	-	-
Mov Cap-2 Maneuver	850	782	-	682	782	-	-	-	-	-	-	-
Stage 1	979	868	-	941	836	-	-	-	-	-	-	-
Stage 2	906	834	-	757	859	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	9.9	1.6	0.9
HCM LOS	B	A		

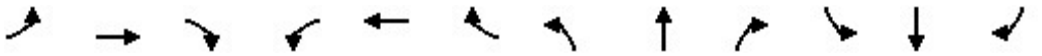
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1584	-	-	834	770	1574	-	-
HCM Lane V/C Ratio	0.007	-	-	0.184	0.044	0.003	-	-
HCM Control Delay (s)	7.3	0	-	10.3	9.9	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	144	1043	7	286	62	0	0	36	21
Future Volume (vph)	0	0	0	144	1043	7	286	62	0	0	36	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			1.00	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.95	
Flt Protected					0.99			0.96			1.00	
Satd. Flow (prot)					3264			1712			1677	
Flt Permitted					0.99			0.72			1.00	
Satd. Flow (perm)					3264			1289			1677	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	150	1086	7	298	65	0	0	38	22
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	0	0	0	1243	0	0	363	0	0	46	0
Confl. Peds. (#/hr)	1		2	2		1			3	3		
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	1%	1%	1%	2%	2%	2%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					42.3			31.4			31.4	
Effective Green, g (s)					42.3			31.4			31.4	
Actuated g/C Ratio					0.51			0.38			0.38	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1669			489			636	
v/s Ratio Prot											0.03	
v/s Ratio Perm					0.38			c0.28				
v/c Ratio					0.74			0.74			0.07	
Uniform Delay, d1					15.9			22.2			16.4	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					1.8			6.0			0.0	
Delay (s)					17.8			28.2			16.4	
Level of Service					B			C			B	
Approach Delay (s)		0.0			17.8			28.2			16.4	
Approach LOS		A			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	82.7	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

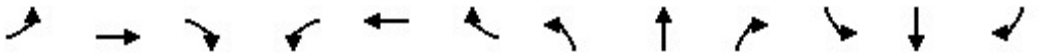
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	144	1043	7	286	62	0	0	36	21
Future Volume (veh/h)	0	0	0	144	1043	7	286	62	0	0	36	21
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1744	1744	1744	1786	1786	0	0	1772	1772
Adj Flow Rate, veh/h				150	1086	7	298	65	0	0	38	22
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				4	4	4	1	1	0	0	2	2
Cap, veh/h				206	1576	11	469	79	0	0	355	206
Arrive On Green				0.52	0.52	0.52	0.34	0.34	0.00	0.00	0.34	0.34
Sat Flow, veh/h				399	3045	20	1076	235	0	0	1053	609
Grp Volume(v), veh/h				648	0	595	363	0	0	0	0	60
Grp Sat Flow(s),veh/h/ln				1724	0	1740	1311	0	0	0	0	1662
Q Serve(g_s), s				18.0	0.0	15.5	14.7	0.0	0.0	0.0	0.0	1.5
Cycle Q Clear(g_c), s				18.0	0.0	15.5	16.2	0.0	0.0	0.0	0.0	1.5
Prop In Lane				0.23		0.01	0.82		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				892	0	901	548	0	0	0	0	560
V/C Ratio(X)				0.73	0.00	0.66	0.66	0.00	0.00	0.00	0.00	0.11
Avail Cap(c_a), veh/h				1656	0	1671	1247	0	0	0	0	1382
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				11.6	0.0	11.0	19.7	0.0	0.0	0.0	0.0	14.1
Incr Delay (d2), s/veh				1.1	0.0	0.8	1.4	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.1	0.0	5.3	4.7	0.0	0.0	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				12.7	0.0	11.8	21.1	0.0	0.0	0.0	0.0	14.2
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1243			363			60	
Approach Delay, s/veh					12.3			21.1			14.2	
Approach LOS					B			C			B	

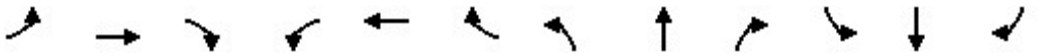
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		25.4				25.4		36.6				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		51.5				51.5		59.5				
Max Q Clear Time (g_c+I1), s		18.2				3.5		20.0				
Green Ext Time (p_c), s		2.6				0.4		12.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1337	336	0	0	0	0	294	185	19	177	0
Future Volume (vph)	51	1337	336	0	0	0	0	294	185	19	177	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.93					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3342	1399					1782	1476	1674	1765	
Flt Permitted		1.00	1.00					1.00	1.00	0.28	1.00	
Satd. Flow (perm)		3342	1399					1782	1476	498	1765	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	52	1364	343	0	0	0	0	300	189	19	181	0
RTOR Reduction (vph)	0	0	119	0	0	0	0	0	71	0	0	0
Lane Group Flow (vph)	0	1416	224	0	0	0	0	300	118	19	181	0
Confl. Peds. (#/hr)	17		20	20		17	4		10	10		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	2%	2%	2%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		49.4	49.4					20.8	20.8	26.9	26.9	
Effective Green, g (s)		49.4	49.4					20.8	20.8	26.9	26.9	
Actuated g/C Ratio		0.58	0.58					0.24	0.24	0.32	0.32	
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)		1935	810					434	359	179	556	
v/s Ratio Prot								c0.17		0.00	c0.10	
v/s Ratio Perm		0.42	0.16						0.08	0.03		
v/c Ratio		0.73	0.28					0.69	0.33	0.11	0.33	
Uniform Delay, d1		13.1	9.0					29.3	26.5	21.2	22.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.5	0.2					4.7	0.5	0.3	0.3	
Delay (s)		14.6	9.2					34.0	27.0	21.5	22.6	
Level of Service		B	A					C	C	C	C	
Approach Delay (s)		13.5			0.0			31.3			22.5	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	85.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1337	336	0	0	0	0	294	185	19	177	0
Future Volume (veh/h)	51	1337	336	0	0	0	0	294	185	19	177	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772				0	1786	1786	1772	1772	0
Adj Flow Rate, veh/h	52	1364	0				0	300	151	19	181	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2				0	1	1	2	2	0
Cap, veh/h	67	1849					0	408	341	209	558	0
Arrive On Green	0.56	0.56	0.00				0.00	0.23	0.23	0.02	0.32	0.00
Sat Flow, veh/h	121	3328	1502				0	1786	1494	1688	1772	0
Grp Volume(v), veh/h	758	658	0				0	300	151	19	181	0
Grp Sat Flow(s),veh/h/ln	1766	1683	1502				0	1786	1494	1688	1772	0
Q Serve(g_s), s	23.3	19.8	0.0				0.0	10.8	6.0	0.6	5.4	0.0
Cycle Q Clear(g_c), s	23.3	19.8	0.0				0.0	10.8	6.0	0.6	5.4	0.0
Prop In Lane	0.07		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	981	935					0	408	341	209	558	0
V/C Ratio(X)	0.77	0.70					0.00	0.74	0.44	0.09	0.32	0.00
Avail Cap(c_a), veh/h	1409	1343					0	1181	988	293	1414	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	11.3	0.0				0.0	24.9	23.0	19.5	18.2	0.0
Incr Delay (d2), s/veh	1.7	1.0	0.0				0.0	2.6	0.9	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	6.7	0.0				0.0	4.7	2.1	0.2	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	12.2	0.0				0.0	27.5	23.9	19.7	18.5	0.0
LnGrp LOS	B	B					A	C	C	B	B	A
Approach Vol, veh/h		1416						451			200	
Approach Delay, s/veh		13.0						26.3			18.6	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.0	20.4		43.1		26.4
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5
Max Q Clear Time (g_c+I1), s	2.6	12.8		25.3		7.4
Green Ext Time (p_c), s	0.0	2.6		13.4		1.2

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	0	2	0	0
Future Vol, veh/h	2	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	5	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	10	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1630	-	1015	1084
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	1023	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1630	-	1015	1084
Mov Cap-2 Maneuver	-	-	-	-	1015	-
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	1023	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1630	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	4	4	0	0	2	18	2	0	21	0
Future Vol, veh/h	1	0	4	4	0	0	2	18	2	0	21	0
Conflicting Peds, #/hr	9	0	0	0	0	9	18	0	1	1	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	42	42	42	42	42	42	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	10	10	0	0	5	43	5	0	50	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	133	127	68	112	125	56	68	0	0	49	0	0
Stage 1	68	68	-	57	57	-	-	-	-	-	-	-
Stage 2	65	59	-	55	68	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	844	767	1001	870	769	1016	1546	-	-	1571	-	-
Stage 1	947	842	-	960	851	-	-	-	-	-	-	-
Stage 2	951	850	-	962	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	820	751	984	859	753	1006	1519	-	-	1570	-	-
Mov Cap-2 Maneuver	820	751	-	859	753	-	-	-	-	-	-	-
Stage 1	928	828	-	956	848	-	-	-	-	-	-	-
Stage 2	940	847	-	953	828	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.2	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1519	-	-	946	859	1570	-	-
HCM Lane V/C Ratio	0.003	-	-	0.013	0.011	-	-	-
HCM Control Delay (s)	7.4	0	-	8.9	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

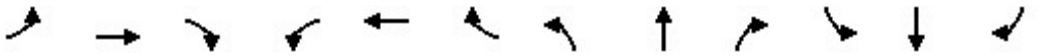
Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	50	18	2	19	0	5	12	10	2	28	3
Future Vol, veh/h	6	50	18	2	19	0	5	12	10	2	28	3
Conflicting Peds, #/hr	4	0	2	2	0	4	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	82	30	3	31	0	8	20	16	3	46	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	123	111	55	157	105	32	55	0	0	36	0	0
Stage 1	59	59	-	44	44	-	-	-	-	-	-	-
Stage 2	64	52	-	113	61	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	856	783	1018	814	789	1048	1563	-	-	1588	-	-
Stage 1	958	850	-	975	862	-	-	-	-	-	-	-
Stage 2	952	856	-	897	848	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	819	774	1012	721	780	1044	1557	-	-	1588	-	-
Mov Cap-2 Maneuver	819	774	-	721	780	-	-	-	-	-	-	-
Stage 1	949	845	-	970	858	-	-	-	-	-	-	-
Stage 2	909	852	-	783	843	-	-	-	-	-	-	-

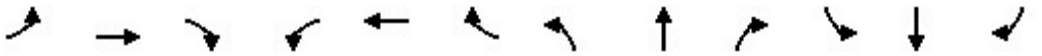
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	9.9	1.4	0.4
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1557	-	-	825	774	1588	-	-
HCM Lane V/C Ratio	0.005	-	-	0.147	0.044	0.002	-	-
HCM Control Delay (s)	7.3	0	-	10.1	9.9	7.3	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	120	1125	8	287	30	0	0	22	22
Future Volume (vph)	0	0	0	120	1125	8	287	30	0	0	22	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			0.99	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.93	
Flt Protected					1.00			0.96			1.00	
Satd. Flow (prot)					3328			1718			1666	
Flt Permitted					1.00			0.71			1.00	
Satd. Flow (perm)					3328			1280			1666	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	128	1197	9	305	32	0	0	23	23
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	15	0
Lane Group Flow (vph)	0	0	0	0	1334	0	0	337	0	0	31	0
Confl. Peds. (#/hr)	2		12	12		2	2		5	5		2
Confl. Bikes (#/hr)						3						
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					44.3			30.0			30.0	
Effective Green, g (s)					44.3			30.0			30.0	
Actuated g/C Ratio					0.53			0.36			0.36	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1769			460			600	
v/s Ratio Prot											0.02	
v/s Ratio Perm					0.40			c0.26				
v/c Ratio					0.75			0.73			0.05	
Uniform Delay, d1					15.2			23.2			17.4	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					1.9			5.9			0.0	
Delay (s)					17.1			29.1			17.4	
Level of Service					B			C			B	
Approach Delay (s)		0.0			17.1			29.1			17.4	
Approach LOS		A			B			C			B	

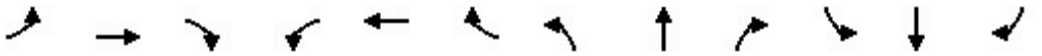
Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	83.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	120	1125	8	287	30	0	0	22	22
Future Volume (veh/h)	0	0	0	120	1125	8	287	30	0	0	22	22
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1772	1772	1772	1800	1800	0	0	1800	1800
Adj Flow Rate, veh/h				128	1197	9	305	32	0	0	23	23
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	0	0	0	0	0	0
Cap, veh/h				176	1729	14	482	39	0	0	257	257
Arrive On Green				0.54	0.54	0.54	0.31	0.31	0.00	0.00	0.31	0.31
Sat Flow, veh/h				323	3175	25	1196	125	0	0	825	825
Grp Volume(v), veh/h				697	0	637	337	0	0	0	0	46
Grp Sat Flow(s),veh/h/ln				1756	0	1766	1321	0	0	0	0	1650
Q Serve(g_s), s				18.8	0.0	16.1	14.0	0.0	0.0	0.0	0.0	1.2
Cycle Q Clear(g_c), s				18.8	0.0	16.1	15.2	0.0	0.0	0.0	0.0	1.2
Prop In Lane				0.18		0.01	0.91		0.00	0.00		0.50
Lane Grp Cap(c), veh/h				956	0	962	522	0	0	0	0	515
V/C Ratio(X)				0.73	0.00	0.66	0.65	0.00	0.00	0.00	0.00	0.09
Avail Cap(c_a), veh/h				1663	0	1673	1237	0	0	0	0	1352
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				10.8	0.0	10.2	20.7	0.0	0.0	0.0	0.0	15.3
Incr Delay (d2), s/veh				1.1	0.0	0.8	1.3	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.4	0.0	5.5	4.5	0.0	0.0	0.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				11.9	0.0	11.0	22.0	0.0	0.0	0.0	0.0	15.4
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1334			337			46	
Approach Delay, s/veh					11.5			22.0			15.4	
Approach LOS					B			C			B	

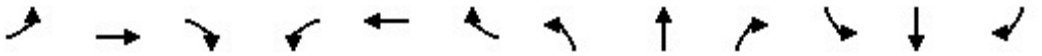
Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	24.1		24.1		38.7			
Change Period (Y+Rc), s	4.5		4.5		4.5			
Max Green Setting (Gmax), s	51.5		51.5		59.5			
Max Q Clear Time (g_c+I1), s	17.2		3.2		20.8			
Green Ext Time (p_c), s	2.4		0.3		13.4			

Intersection Summary		
HCM 6th Ctrl Delay	13.6	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	1160	287	0	0	0	0	276	118	19	130	0
Future Volume (vph)	48	1160	287	0	0	0	0	276	118	19	130	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.97					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3378	1471					1748	1445	1657	1748	
Flt Permitted		1.00	1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)		3378	1471					1748	1445	544	1748	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	52	1247	309	0	0	0	0	297	127	20	140	0
RTOR Reduction (vph)	0	0	125	0	0	0	0	0	77	0	0	0
Lane Group Flow (vph)	0	1299	184	0	0	0	0	297	50	20	140	0
Confl. Peds. (#/hr)	3		4	4		3	1		12	12		1
Confl. Bikes (#/hr)												3
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		43.6	43.6					20.6	20.6	26.6	26.6	
Effective Green, g (s)		43.6	43.6					20.6	20.6	26.6	26.6	
Actuated g/C Ratio		0.55	0.55					0.26	0.26	0.34	0.34	
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)		1859	809					454	375	203	587	
v/s Ratio Prot								c0.17		0.00	c0.08	
v/s Ratio Perm		0.38	0.13						0.03	0.03		
v/c Ratio		0.70	0.23					0.65	0.13	0.10	0.24	
Uniform Delay, d1		13.0	9.1					26.1	22.5	18.5	19.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.2	0.1					3.4	0.2	0.2	0.2	
Delay (s)		14.2	9.3					29.5	22.6	18.8	19.2	
Level of Service		B	A					C	C	B	B	
Approach Delay (s)		13.2			0.0			27.4			19.1	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	1160	287	0	0	0	0	276	118	19	130	0
Future Volume (veh/h)	48	1160	287	0	0	0	0	276	118	19	130	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1786	1786	1786				0	1758	1758	1758	1758	0
Adj Flow Rate, veh/h	52	1247	0				0	297	87	20	140	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1				0	3	3	3	3	0
Cap, veh/h	70	1766					0	414	345	232	580	0
Arrive On Green	0.53	0.53	0.00				0.00	0.24	0.24	0.02	0.33	0.00
Sat Flow, veh/h	133	3343	1514				0	1758	1467	1674	1758	0
Grp Volume(v), veh/h	696	603	0				0	297	87	20	140	0
Grp Sat Flow(s),veh/h/ln	1779	1697	1514				0	1758	1467	1674	1758	0
Q Serve(g_s), s	19.2	16.5	0.0				0.0	9.9	3.1	0.5	3.7	0.0
Cycle Q Clear(g_c), s	19.2	16.5	0.0				0.0	9.9	3.1	0.5	3.7	0.0
Prop In Lane	0.07		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	940	896					0	414	345	232	580	0
V/C Ratio(X)	0.74	0.67					0.00	0.72	0.25	0.09	0.24	0.00
Avail Cap(c_a), veh/h	1558	1485					0	1275	1064	324	1539	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.6	10.9	0.0				0.0	22.3	19.7	17.3	15.5	0.0
Incr Delay (d2), s/veh	1.2	0.9	0.0				0.0	2.4	0.4	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	5.5	0.0				0.0	4.1	1.0	0.2	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	11.8	0.0				0.0	24.7	20.1	17.5	15.7	0.0
LnGrp LOS	B	B					A	C	C	B	B	A
Approach Vol, veh/h		1299						384			160	
Approach Delay, s/veh		12.3						23.6			15.9	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.0	19.4		38.0		25.4
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5
Max Q Clear Time (g_c+I1), s	2.5	11.9		21.2		5.7
Green Ext Time (p_c), s	0.0	2.3		12.3		0.9

Intersection Summary		
HCM 6th Ctrl Delay		15.0
HCM 6th LOS		B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	3	2	0	1
Future Vol, veh/h	2	0	3	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	0	4	2	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	12	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	10	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1634	-	1013	1088
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1018	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1634	-	1011	1088
Mov Cap-2 Maneuver	-	-	-	-	1011	-
Stage 1	-	-	-	-	1026	-
Stage 2	-	-	-	-	1016	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.3	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1088	-	-	1634	-
HCM Lane V/C Ratio	0.001	-	-	0.002	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	9	5	0	0	12	23	5	1	9	0
Future Vol, veh/h	0	0	9	5	0	0	12	23	5	1	9	0
Conflicting Peds, #/hr	2	0	1	1	0	2	41	0	0	0	0	41
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	4	4	4	0	0	0
Mvmt Flow	0	0	11	6	0	0	15	28	6	1	11	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	117	118	53	81	115	33	52	0	0	34	0	0
Stage 1	54	54	-	61	61	-	-	-	-	-	-	-
Stage 2	63	64	-	20	54	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.236	-	-	2.2	-	-
Pot Cap-1 Maneuver	864	776	1020	912	779	1046	1541	-	-	1591	-	-
Stage 1	963	854	-	955	848	-	-	-	-	-	-	-
Stage 2	953	846	-	1004	854	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	822	737	979	894	740	1044	1481	-	-	1591	-	-
Mov Cap-2 Maneuver	822	737	-	894	740	-	-	-	-	-	-	-
Stage 1	916	820	-	945	840	-	-	-	-	-	-	-
Stage 2	942	838	-	991	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	9.1	2.2	0.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1481	-	-	979	894	1591	-	-
HCM Lane V/C Ratio	0.01	-	-	0.011	0.007	0.001	-	-
HCM Control Delay (s)	7.5	0	-	8.7	9.1	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

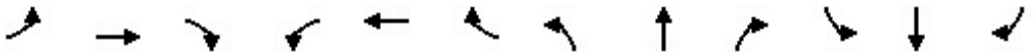
Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	99	31	5	26	2	11	30	18	4	25	8
Future Vol, veh/h	15	99	31	5	26	2	11	30	18	4	25	8
Conflicting Peds, #/hr	0	0	4	4	0	0	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	0	0	0
Mvmt Flow	16	105	33	5	28	2	12	32	19	4	27	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	121	118	36	182	113	45	36	0	0	54	0	0
Stage 1	40	40	-	69	69	-	-	-	-	-	-	-
Stage 2	81	78	-	113	44	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	859	776	1042	777	775	1022	1575	-	-	1564	-	-
Stage 1	980	866	-	939	835	-	-	-	-	-	-	-
Stage 2	932	834	-	890	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	826	765	1038	663	764	1019	1575	-	-	1560	-	-
Mov Cap-2 Maneuver	826	765	-	663	764	-	-	-	-	-	-	-
Stage 1	972	863	-	929	826	-	-	-	-	-	-	-
Stage 2	892	825	-	751	853	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	10	1.4	0.8
HCM LOS	B	B		

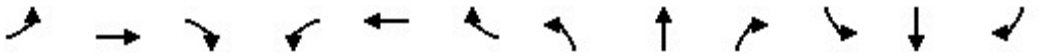
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1575	-	-	817	758	1560	-	-
HCM Lane V/C Ratio	0.007	-	-	0.189	0.046	0.003	-	-
HCM Control Delay (s)	7.3	0	-	10.4	10	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	144	1043	10	286	69	0	0	38	23
Future Volume (vph)	0	0	0	144	1043	10	286	69	0	0	38	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			1.00	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.95	
Flt Protected					0.99			0.96			1.00	
Satd. Flow (prot)					3263			1713			1675	
Flt Permitted					0.99			0.72			1.00	
Satd. Flow (perm)					3263			1291			1675	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	150	1086	10	298	72	0	0	40	24
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	15	0
Lane Group Flow (vph)	0	0	0	0	1246	0	0	370	0	0	49	0
Confl. Peds. (#/hr)	1		2	2		1			3	3		
Heavy Vehicles (%)	0%	0%	0%	4%	4%	4%	1%	1%	1%	2%	2%	2%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					42.8			32.1			32.1	
Effective Green, g (s)					42.8			32.1			32.1	
Actuated g/C Ratio					0.51			0.38			0.38	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1664			493			640	
v/s Ratio Prot											0.03	
v/s Ratio Perm					0.38			c0.29				
v/c Ratio					0.75			0.75			0.08	
Uniform Delay, d1					16.3			22.4			16.5	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					1.9			6.3			0.1	
Delay (s)					18.2			28.8			16.5	
Level of Service					B			C			B	
Approach Delay (s)		0.0			18.2			28.8			16.5	
Approach LOS		A			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	83.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

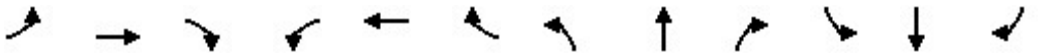
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	144	1043	10	286	69	0	0	38	23
Future Volume (veh/h)	0	0	0	144	1043	10	286	69	0	0	38	23
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1744	1744	1744	1786	1786	0	0	1772	1772
Adj Flow Rate, veh/h				150	1086	10	298	72	0	0	40	24
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				4	4	4	1	1	0	0	2	2
Cap, veh/h				205	1564	15	463	87	0	0	355	213
Arrive On Green				0.52	0.52	0.52	0.34	0.34	0.00	0.00	0.34	0.34
Sat Flow, veh/h				398	3035	29	1053	254	0	0	1037	622
Grp Volume(v), veh/h				650	0	596	370	0	0	0	0	64
Grp Sat Flow(s),veh/h/ln				1724	0	1739	1307	0	0	0	0	1660
Q Serve(g_s), s				18.6	0.0	16.0	15.3	0.0	0.0	0.0	0.0	1.7
Cycle Q Clear(g_c), s				18.6	0.0	16.0	17.0	0.0	0.0	0.0	0.0	1.7
Prop In Lane				0.23		0.02	0.81		0.00	0.00		0.37
Lane Grp Cap(c), veh/h				888	0	896	550	0	0	0	0	569
V/C Ratio(X)				0.73	0.00	0.67	0.67	0.00	0.00	0.00	0.00	0.11
Avail Cap(c_a), veh/h				1620	0	1633	1217	0	0	0	0	1350
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				11.9	0.0	11.3	20.0	0.0	0.0	0.0	0.0	14.2
Incr Delay (d2), s/veh				1.2	0.0	0.9	1.4	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.4	0.0	5.5	4.9	0.0	0.0	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.1	0.0	12.2	21.5	0.0	0.0	0.0	0.0	14.3
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1246			370			64	
Approach Delay, s/veh					12.7			21.5			14.3	
Approach LOS					B			C			B	

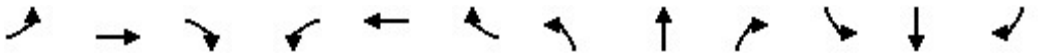
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		26.2				26.2		37.1				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		51.5				51.5		59.5				
Max Q Clear Time (g_c+I1), s		19.0				3.7		20.6				
Green Ext Time (p_c), s		2.7				0.4		12.1				

Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1337	336	0	0	0	0	296	185	20	178	0
Future Volume (vph)	56	1337	336	0	0	0	0	296	185	20	178	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.93					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3341	1399					1782	1476	1674	1765	
Flt Permitted		1.00	1.00					1.00	1.00	0.28	1.00	
Satd. Flow (perm)		3341	1399					1782	1476	495	1765	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	57	1364	343	0	0	0	0	302	189	20	182	0
RTOR Reduction (vph)	0	0	119	0	0	0	0	0	70	0	0	0
Lane Group Flow (vph)	0	1421	224	0	0	0	0	302	119	20	182	0
Confl. Peds. (#/hr)	17		20	20		17	4		10	10		4
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	2%	2%	2%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		49.5	49.5					20.9	20.9	27.0	27.0	
Effective Green, g (s)		49.5	49.5					20.9	20.9	27.0	27.0	
Actuated g/C Ratio		0.58	0.58					0.24	0.24	0.32	0.32	
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)		1934	809					435	360	178	557	
v/s Ratio Prot								c0.17		0.00	c0.10	
v/s Ratio Perm		0.43	0.16						0.08	0.03		
v/c Ratio		0.73	0.28					0.69	0.33	0.11	0.33	
Uniform Delay, d1		13.2	9.0					29.4	26.5	21.3	22.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.5	0.2					4.8	0.5	0.3	0.3	
Delay (s)		14.7	9.2					34.2	27.1	21.5	22.7	
Level of Service		B	A					C	C	C	C	
Approach Delay (s)		13.6			0.0			31.4			22.6	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	85.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1337	336	0	0	0	0	296	185	20	178	0
Future Volume (veh/h)	56	1337	336	0	0	0	0	296	185	20	178	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1772	1772	1772				0	1786	1786	1772	1772	0
Adj Flow Rate, veh/h	57	1364	0				0	302	151	20	182	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2				0	1	1	2	2	0
Cap, veh/h	73	1844					0	408	341	208	560	0
Arrive On Green	0.56	0.56	0.00				0.00	0.23	0.23	0.02	0.32	0.00
Sat Flow, veh/h	132	3316	1502				0	1786	1494	1688	1772	0
Grp Volume(v), veh/h	761	660	0				0	302	151	20	182	0
Grp Sat Flow(s),veh/h/ln	1765	1683	1502				0	1786	1494	1688	1772	0
Q Serve(g_s), s	23.6	20.1	0.0				0.0	11.0	6.1	0.6	5.5	0.0
Cycle Q Clear(g_c), s	23.6	20.1	0.0				0.0	11.0	6.1	0.6	5.5	0.0
Prop In Lane	0.07		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	981	936					0	408	341	208	560	0
V/C Ratio(X)	0.78	0.71					0.00	0.74	0.44	0.10	0.33	0.00
Avail Cap(c_a), veh/h	1397	1332					0	1172	980	290	1402	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.2	11.4	0.0				0.0	25.1	23.2	19.6	18.3	0.0
Incr Delay (d2), s/veh	1.8	1.0	0.0				0.0	2.6	0.9	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	6.8	0.0				0.0	4.8	2.2	0.2	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	12.4	0.0				0.0	27.8	24.1	19.8	18.6	0.0
LnGrp LOS	B	B					A	C	C	B	B	A
Approach Vol, veh/h		1421						453			202	
Approach Delay, s/veh		13.2						26.5			18.7	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.1	20.5		43.5		26.6
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5
Max Q Clear Time (g_c+I1), s	2.6	13.0		25.6		7.5
Green Ext Time (p_c), s	0.0	2.6		13.4		1.2

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	5	2	0	5
Future Vol, veh/h	2	0	5	2	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	12	5	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	34	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1630	-	984	1084
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	999	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1630	-	977	1084
Mov Cap-2 Maneuver	-	-	-	-	977	-
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	992	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.2	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1630	-
HCM Lane V/C Ratio	0.011	-	-	0.007	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	15	4	0	0	15	23	2	0	26	0
Future Vol, veh/h	0	0	15	4	0	0	15	23	2	0	26	0
Conflicting Peds, #/hr	9	0	0	0	0	9	18	0	1	1	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	42	42	42	42	42	42	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	36	10	0	0	36	55	5	0	62	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	219	213	80	211	211	68	80	0	0	61	0	0
Stage 1	80	80	-	131	131	-	-	-	-	-	-	-
Stage 2	139	133	-	80	80	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	741	688	986	750	690	1001	1531	-	-	1555	-	-
Stage 1	934	832	-	877	792	-	-	-	-	-	-	-
Stage 2	869	790	-	934	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	708	658	969	708	660	991	1505	-	-	1554	-	-
Mov Cap-2 Maneuver	708	658	-	708	660	-	-	-	-	-	-	-
Stage 1	895	818	-	854	771	-	-	-	-	-	-	-
Stage 2	840	769	-	900	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	10.2	2.8	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1505	-	-	969	708	1554	-	-
HCM Lane V/C Ratio	0.024	-	-	0.037	0.013	-	-	-
HCM Control Delay (s)	7.5	0	-	8.9	10.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

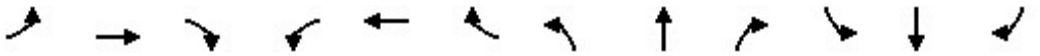
Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	50	18	2	19	1	5	29	10	3	45	5
Future Vol, veh/h	8	50	18	2	19	1	5	29	10	3	45	5
Conflicting Peds, #/hr	4	0	2	2	0	4	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	82	30	3	31	2	8	48	16	5	74	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	185	172	84	218	168	60	86	0	0	64	0	0
Stage 1	92	92	-	72	72	-	-	-	-	-	-	-
Stage 2	93	80	-	146	96	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	780	725	981	743	728	1011	1523	-	-	1551	-	-
Stage 1	920	823	-	943	839	-	-	-	-	-	-	-
Stage 2	919	832	-	861	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	743	716	975	652	719	1007	1517	-	-	1551	-	-
Mov Cap-2 Maneuver	743	716	-	652	719	-	-	-	-	-	-	-
Stage 1	912	817	-	938	835	-	-	-	-	-	-	-
Stage 2	876	828	-	747	813	-	-	-	-	-	-	-

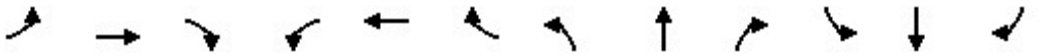
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	10.2	0.8	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1517	-	-	767	722	1551	-	-
HCM Lane V/C Ratio	0.005	-	-	0.162	0.05	0.003	-	-
HCM Control Delay (s)	7.4	0	-	10.6	10.2	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	120	1125	13	287	42	0	0	31	30
Future Volume (vph)	0	0	0	120	1125	13	287	42	0	0	31	30
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			0.99	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.93	
Flt Protected					1.00			0.96			1.00	
Satd. Flow (prot)					3325			1721			1668	
Flt Permitted					1.00			0.71			1.00	
Satd. Flow (perm)					3325			1271			1668	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	128	1197	14	305	45	0	0	33	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	20	0
Lane Group Flow (vph)	0	0	0	0	1339	0	0	350	0	0	45	0
Confl. Peds. (#/hr)	2		12	12		2	2		5	5		2
Confl. Bikes (#/hr)						3						
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					45.6			31.7			31.7	
Effective Green, g (s)					45.6			31.7			31.7	
Actuated g/C Ratio					0.53			0.37			0.37	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1756			466			612	
v/s Ratio Prot											0.03	
v/s Ratio Perm					0.40			c0.28				
v/c Ratio					0.76			0.75			0.07	
Uniform Delay, d1					16.1			23.9			17.7	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					2.0			6.7			0.1	
Delay (s)					18.1			30.6			17.8	
Level of Service					B			C			B	
Approach Delay (s)		0.0			18.1			30.6			17.8	
Approach LOS		A			B			C			B	

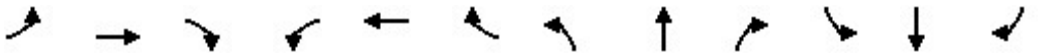
Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	86.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	120	1125	13	287	42	0	0	31	30
Future Volume (veh/h)	0	0	0	120	1125	13	287	42	0	0	31	30
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1772	1772	1772	1800	1800	0	0	1800	1800
Adj Flow Rate, veh/h				128	1197	14	305	45	0	0	33	32
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	0	0	0	0	0	0
Cap, veh/h				172	1695	21	468	54	0	0	275	267
Arrive On Green				0.54	0.54	0.54	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				321	3159	39	1118	165	0	0	839	813
Grp Volume(v), veh/h				700	0	639	350	0	0	0	0	65
Grp Sat Flow(s),veh/h/ln				1756	0	1763	1283	0	0	0	0	1652
Q Serve(g_s), s				20.5	0.0	17.6	15.5	0.0	0.0	0.0	0.0	1.8
Cycle Q Clear(g_c), s				20.5	0.0	17.6	17.4	0.0	0.0	0.0	0.0	1.8
Prop In Lane				0.18		0.02	0.87		0.00	0.00		0.49
Lane Grp Cap(c), veh/h				942	0	946	522	0	0	0	0	543
V/C Ratio(X)				0.74	0.00	0.68	0.67	0.00	0.00	0.00	0.00	0.12
Avail Cap(c_a), veh/h				1567	0	1574	1144	0	0	0	0	1276
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				11.9	0.0	11.2	21.7	0.0	0.0	0.0	0.0	15.6
Incr Delay (d2), s/veh				1.2	0.0	0.9	1.5	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.2	0.0	6.2	5.0	0.0	0.0	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.1	0.0	12.1	23.2	0.0	0.0	0.0	0.0	15.7
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1339			350			65	
Approach Delay, s/veh					12.6			23.2			15.7	
Approach LOS					B			C			B	

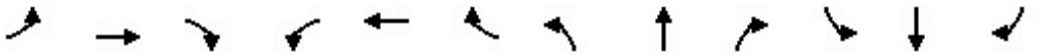
Timer - Assigned Phs	2			6		8					
Phs Duration (G+Y+Rc), s	26.4			26.4		40.3					
Change Period (Y+Rc), s	4.5			4.5		4.5					
Max Green Setting (Gmax), s	51.5			51.5		59.5					
Max Q Clear Time (g_c+I1), s	19.4			3.8		22.5					
Green Ext Time (p_c), s	2.5			0.4		13.3					

Intersection Summary		
HCM 6th Ctrl Delay	14.8	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	1160	287	0	0	0	0	280	118	24	134	0
Future Volume (vph)	56	1160	287	0	0	0	0	280	118	24	134	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.97					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3377	1471					1748	1444	1657	1748	
Flt Permitted		1.00	1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)		3377	1471					1748	1444	537	1748	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	60	1247	309	0	0	0	0	301	127	26	144	0
RTOR Reduction (vph)	0	0	123	0	0	0	0	0	74	0	0	0
Lane Group Flow (vph)	0	1307	186	0	0	0	0	301	53	26	144	0
Confl. Peds. (#/hr)	3		4	4		3	1		12	12		1
Confl. Bikes (#/hr)												3
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		44.9	44.9					21.3	21.3	27.3	27.3	
Effective Green, g (s)		44.9	44.9					21.3	21.3	27.3	27.3	
Actuated g/C Ratio		0.55	0.55					0.26	0.26	0.34	0.34	
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)		1867	813					458	378	201	587	
v/s Ratio Prot								c0.17		0.00	c0.08	
v/s Ratio Perm		0.39	0.13						0.04	0.04		
v/c Ratio		0.70	0.23					0.66	0.14	0.13	0.25	
Uniform Delay, d1		13.2	9.3					26.7	22.9	19.1	19.5	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.2	0.1					3.4	0.2	0.3	0.2	
Delay (s)		14.4	9.4					30.1	23.1	19.4	19.7	
Level of Service		B	A					C	C	B	B	
Approach Delay (s)		13.5			0.0			28.0			19.7	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	81.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	1160	287	0	0	0	0	280	118	24	134	0
Future Volume (veh/h)	56	1160	287	0	0	0	0	280	118	24	134	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1786	1786	1786				0	1758	1758	1758	1758	0
Adj Flow Rate, veh/h	60	1247	0				0	301	87	26	144	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1				0	3	3	3	3	0
Cap, veh/h	80	1753					0	414	345	235	587	0
Arrive On Green	0.53	0.53	0.00				0.00	0.24	0.24	0.03	0.33	0.00
Sat Flow, veh/h	152	3323	1514				0	1758	1467	1674	1758	0
Grp Volume(v), veh/h	700	607	0				0	301	87	26	144	0
Grp Sat Flow(s),veh/h/ln	1778	1697	1514				0	1758	1467	1674	1758	0
Q Serve(g_s), s	19.9	17.1	0.0				0.0	10.2	3.1	0.7	3.9	0.0
Cycle Q Clear(g_c), s	19.9	17.1	0.0				0.0	10.2	3.1	0.7	3.9	0.0
Prop In Lane	0.09		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	938	895					0	414	345	235	587	0
V/C Ratio(X)	0.75	0.68					0.00	0.73	0.25	0.11	0.25	0.00
Avail Cap(c_a), veh/h	1522	1452					0	1247	1041	316	1504	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.9	11.3	0.0				0.0	22.9	20.1	17.6	15.7	0.0
Incr Delay (d2), s/veh	1.2	0.9	0.0				0.0	2.5	0.4	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	5.8	0.0				0.0	4.3	1.1	0.3	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	12.2	0.0				0.0	25.3	20.5	17.8	15.9	0.0
LnGrp LOS	B	B					A	C	C	B	B	A
Approach Vol, veh/h		1307						388			170	
Approach Delay, s/veh		12.7						24.3			16.2	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	19.8		38.7		26.1
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5
Max Q Clear Time (g_c+I1), s	2.7	12.2		21.9		5.9
Green Ext Time (p_c), s	0.0	2.3		12.3		0.9

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	10	2	0	2
Future Vol, veh/h	2	0	10	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	24	5	0	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	58	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1630	-	954	1084
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1630	-	940	1084
Mov Cap-2 Maneuver	-	-	-	-	940	-
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	960	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1630	-
HCM Lane V/C Ratio	0.004	-	-	0.015	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	8	4	0	0	30	28	2	0	23	0
Future Vol, veh/h	0	0	8	4	0	0	30	28	2	0	23	0
Conflicting Peds, #/hr	9	0	0	0	0	9	18	0	1	1	0	18
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	42	42	42	42	42	42	42	42	42	42	42	42
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	19	10	0	0	71	67	5	0	55	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	294	288	73	278	286	80	73	0	0	73	0	0
Stage 1	73	73	-	213	213	-	-	-	-	-	-	-
Stage 2	221	215	-	65	73	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	662	625	995	678	627	986	1540	-	-	1540	-	-
Stage 1	942	838	-	794	730	-	-	-	-	-	-	-
Stage 2	786	729	-	951	838	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	621	584	978	639	586	977	1514	-	-	1539	-	-
Mov Cap-2 Maneuver	621	584	-	639	586	-	-	-	-	-	-	-
Stage 1	881	824	-	754	694	-	-	-	-	-	-	-
Stage 2	741	693	-	932	824	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	10.7	3.7	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1514	-	-	978	639	1539	-	-
HCM Lane V/C Ratio	0.047	-	-	0.019	0.015	-	-	-
HCM Control Delay (s)	7.5	0	-	8.8	10.7	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

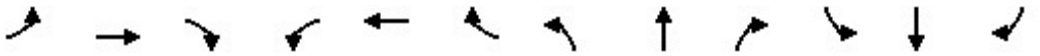
Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	50	18	2	19	2	5	46	10	2	37	4
Future Vol, veh/h	10	50	18	2	19	2	5	46	10	2	37	4
Conflicting Peds, #/hr	4	0	2	2	0	4	4	0	0	0	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	61	61	61	61	61	61	61	61	61	61	61	61
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	16	82	30	3	31	3	8	75	16	3	61	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	195	182	71	228	177	87	72	0	0	91	0	0
Stage 1	75	75	-	99	99	-	-	-	-	-	-	-
Stage 2	120	107	-	129	78	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	769	716	997	731	720	977	1541	-	-	1517	-	-
Stage 1	939	836	-	912	817	-	-	-	-	-	-	-
Stage 2	889	811	-	880	834	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	731	707	991	641	711	973	1535	-	-	1517	-	-
Mov Cap-2 Maneuver	731	707	-	641	711	-	-	-	-	-	-	-
Stage 1	930	831	-	907	812	-	-	-	-	-	-	-
Stage 2	844	806	-	767	829	-	-	-	-	-	-	-

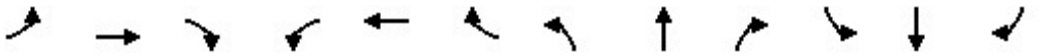
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	10.3	0.6	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1535	-	-	760	721	1517	-	-
HCM Lane V/C Ratio	0.005	-	-	0.168	0.052	0.002	-	-
HCM Control Delay (s)	7.4	0	-	10.7	10.3	7.4	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	120	1125	18	287	54	0	0	27	26
Future Volume (vph)	0	0	0	120	1125	18	287	54	0	0	27	26
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)					4.5			4.5			4.5	
Lane Util. Factor					0.95			1.00			1.00	
Frpb, ped/bikes					1.00			1.00			0.99	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.93	
Flt Protected					1.00			0.96			1.00	
Satd. Flow (prot)					3323			1723			1668	
Flt Permitted					1.00			0.72			1.00	
Satd. Flow (perm)					3323			1293			1668	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	128	1197	19	305	57	0	0	29	28
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	18	0
Lane Group Flow (vph)	0	0	0	0	1343	0	0	362	0	0	39	0
Confl. Peds. (#/hr)	2		12	12		2	2		5	5		2
Confl. Bikes (#/hr)						3						
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					46.0			32.4			32.4	
Effective Green, g (s)					46.0			32.4			32.4	
Actuated g/C Ratio					0.53			0.37			0.37	
Clearance Time (s)					4.5			4.5			4.5	
Vehicle Extension (s)					3.0			3.0			3.0	
Lane Grp Cap (vph)					1748			479			618	
v/s Ratio Prot											0.02	
v/s Ratio Perm					0.40			c0.28				
v/c Ratio					0.77			0.76			0.06	
Uniform Delay, d1					16.5			24.0			17.7	
Progression Factor					1.00			1.00			1.00	
Incremental Delay, d2					2.1			6.7			0.0	
Delay (s)					18.6			30.7			17.8	
Level of Service					B			C			B	
Approach Delay (s)		0.0			18.6			30.7			17.8	
Approach LOS		A			B			C			B	

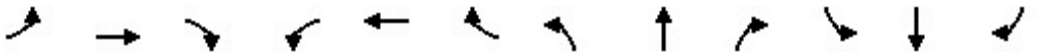
Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	87.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	120	1125	18	287	54	0	0	27	26
Future Volume (veh/h)	0	0	0	120	1125	18	287	54	0	0	27	26
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1772	1772	1772	1800	1800	0	0	1800	1800
Adj Flow Rate, veh/h				128	1197	19	305	57	0	0	29	28
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	0	0	0	0	0	0
Cap, veh/h				172	1687	28	464	68	0	0	277	268
Arrive On Green				0.54	0.54	0.54	0.33	0.33	0.00	0.00	0.33	0.33
Sat Flow, veh/h				320	3144	52	1109	207	0	0	841	812
Grp Volume(v), veh/h				703	0	641	362	0	0	0	0	57
Grp Sat Flow(s),veh/h/ln				1756	0	1760	1316	0	0	0	0	1652
Q Serve(g_s), s				20.9	0.0	17.9	16.0	0.0	0.0	0.0	0.0	1.6
Cycle Q Clear(g_c), s				20.9	0.0	17.9	17.6	0.0	0.0	0.0	0.0	1.6
Prop In Lane				0.18		0.03	0.84		0.00	0.00		0.49
Lane Grp Cap(c), veh/h				942	0	945	533	0	0	0	0	545
V/C Ratio(X)				0.75	0.00	0.68	0.68	0.00	0.00	0.00	0.00	0.10
Avail Cap(c_a), veh/h				1549	0	1553	1148	0	0	0	0	1261
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				12.1	0.0	11.4	21.8	0.0	0.0	0.0	0.0	15.7
Incr Delay (d2), s/veh				1.2	0.0	0.9	1.5	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.4	0.0	6.3	5.3	0.0	0.0	0.0	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.3	0.0	12.3	23.3	0.0	0.0	0.0	0.0	15.8
LnGrp LOS				B	A	B	C	A	A	A	A	B
Approach Vol, veh/h					1344			362			57	
Approach Delay, s/veh					12.8			23.3			15.8	
Approach LOS					B			C			B	

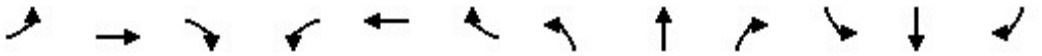
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		26.8				26.8		40.7				
Change Period (Y+Rc), s		4.5				4.5		4.5				
Max Green Setting (Gmax), s		51.5				51.5		59.5				
Max Q Clear Time (g_c+I1), s		19.6				3.6		22.9				
Green Ext Time (p_c), s		2.6				0.3		13.3				

Intersection Summary												
HCM 6th Ctrl Delay			15.1									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1160	287	0	0	0	0	284	118	22	132	0
Future Volume (vph)	64	1160	287	0	0	0	0	284	118	22	132	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	0.97					1.00	0.97	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3376	1471					1748	1444	1657	1748	
Flt Permitted		1.00	1.00					1.00	1.00	0.30	1.00	
Satd. Flow (perm)		3376	1471					1748	1444	527	1748	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	69	1247	309	0	0	0	0	305	127	24	142	0
RTOR Reduction (vph)	0	0	122	0	0	0	0	0	74	0	0	0
Lane Group Flow (vph)	0	1316	187	0	0	0	0	305	53	24	142	0
Confl. Peds. (#/hr)	3		4	4		3	1		12	12		1
Confl. Bikes (#/hr)												3
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		45.4	45.4					21.5	21.5	27.5	27.5	
Effective Green, g (s)		45.4	45.4					21.5	21.5	27.5	27.5	
Actuated g/C Ratio		0.55	0.55					0.26	0.26	0.34	0.34	
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)		1871	815					458	379	197	586	
v/s Ratio Prot								c0.17		0.00	c0.08	
v/s Ratio Perm		0.39	0.13						0.04	0.04		
v/c Ratio		0.70	0.23					0.67	0.14	0.12	0.24	
Uniform Delay, d1		13.3	9.3					27.0	23.1	19.3	19.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.2	0.1					3.6	0.2	0.3	0.2	
Delay (s)		14.6	9.5					30.6	23.3	19.6	19.9	
Level of Service		B	A					C	C	B	B	
Approach Delay (s)		13.6			0.0			28.5			19.8	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	13.5
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	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1160	287	0	0	0	0	284	118	22	132	0
Future Volume (veh/h)	64	1160	287	0	0	0	0	284	118	22	132	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1786	1786	1786				0	1758	1758	1758	1758	0
Adj Flow Rate, veh/h	69	1247	0				0	305	87	24	142	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1				0	3	3	3	3	0
Cap, veh/h	92	1748					0	416	347	230	585	0
Arrive On Green	0.53	0.53	0.00				0.00	0.24	0.24	0.03	0.33	0.00
Sat Flow, veh/h	174	3300	1514				0	1758	1467	1674	1758	0
Grp Volume(v), veh/h	704	612	0				0	305	87	24	142	0
Grp Sat Flow(s),veh/h/ln	1777	1697	1514				0	1758	1467	1674	1758	0
Q Serve(g_s), s	20.2	17.3	0.0				0.0	10.5	3.1	0.7	3.8	0.0
Cycle Q Clear(g_c), s	20.2	17.3	0.0				0.0	10.5	3.1	0.7	3.8	0.0
Prop In Lane	0.10		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	941	899					0	416	347	230	585	0
V/C Ratio(X)	0.75	0.68					0.00	0.73	0.25	0.10	0.24	0.00
Avail Cap(c_a), veh/h	1509	1441					0	1237	1033	313	1493	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	11.3	0.0				0.0	23.0	20.2	17.7	15.8	0.0
Incr Delay (d2), s/veh	1.2	0.9	0.0				0.0	2.5	0.4	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	5.9	0.0				0.0	4.4	1.1	0.3	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	12.2	0.0				0.0	25.5	20.6	17.9	16.0	0.0
LnGrp LOS	B	B					A	C	C	B	B	A
Approach Vol, veh/h		1316						392			166	
Approach Delay, s/veh		12.7						24.4			16.3	
Approach LOS		B						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.3	20.0		39.1		26.2
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	5.0	46.0		55.5		55.5
Max Q Clear Time (g_c+I1), s	2.7	12.5		22.2		5.8
Green Ext Time (p_c), s	0.0	2.4		12.4		0.9

Intersection Summary		
HCM 6th Ctrl Delay		15.5
HCM 6th LOS		B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.