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124th Business Park

Transportation Impact Analysis

Tualatin, Oregon

Date:
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Executive Summary

1. The proposed 124th Business Park is a 199,170-square-foot, industrial development located north of Tualatin Sherwood Road, east of SW 124th Avenue, and south of SW Myslony Street. The project site is located on Tax Lots 2S127BB 00100 & 00200 which encompass approximately 37.3 acres. The property is surrounded by homogeneous land uses, consisting predominantly of industrial warehouses or undeveloped land.
2. The 124th Business Park is proposing two driveways on SW 124th Avenue:
   - One corresponds to the location specified in the Tualatin Development Code (TDC). This access is assumed to be limited to right-in/right-out movements only.
   - A second driveway which is not currently listed in the TDC. This access is assumed to be limited to right-in/right-out movements only and is necessary for emergency access.
3. The 124th Business Park site is projected to generate 147 trips during the morning peak hour, 129 trips during the evening peak hour, and 970 trips during the average weekday.
4. Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections that do not already have planned and funded improvements.
5. Left-turn lane warrants were not examined at the site accesses on SW 124th Avenue since they are proposed as right-in/right-out turning movements only.
6. Preliminary traffic signal warrants were not examined for the site accesses since they are proposed as right-in/right-out turning movements only.
7. Based on the sight distance analysis, the proposed site accesses will meet ISD recommendations and SSD requirements as long as foliage in the landscape strip is maintained at a height of 3 feet or less.
8. The north access to SW 124th Avenue will meet the TDC access spacing standards and will be limited to right turns with the median remaining intact.
9. Secondary access to the site is not available from either SW Myslony Street or SW Cimino Street; therefore, a south access is recommended. It could be limited to emergency use but allowing site traffic to use the access is expected to have a minimal impact on the transportation system.
10. All proposed driveways can accommodate trucks entering and exiting from the north or south.
11. All study area intersections are anticipated to operate within the acceptable jurisdiction standards. Therefore, no mitigation for traffic operations is required or recommended. The access configuration options have little effect on study area operations.
12. The analysis shows little change in queues between background and buildout conditions. The queues can all be accommodated within the available storage. Therefore, no mitigation for queuing operations is required or recommended.

Project Description

Introduction

The proposed 124th Business Park will include the construction of three industrial buildings, totaling approximately 199,170 square feet, located east of SW 124th Avenue, north of SW Tualatin Sherwood Road, and south of SW Myslony Street.

The 124th Business Park is proposing two driveways on SW 124th Avenue:

- One would utilize an existing curb cut located on SW 124th Avenue, which corresponds to the location specified in the Tualatin Development Code (TDC). The access is assumed to be limited to right-in/right-out movements only.
- The proposed development seeks to construct a second driveway which is not currently listed in the TDC. This access is assumed to be limited to right-in/right-out movements only.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the proposed development and to determine any mitigation that may be necessary to do so.

Based on prior scoping coordination with the City of Tualatin and Washington County, the report includes safety and capacity analyses at six intersections:

1. SW Cipole Road & SW Herman Road
2. SW Tualatin-Sherwood Road & SW Cipole Road
3. SW 124th Avenue & SW Herman Road
4. SW 124th Avenue & SW Myslony Street
5. SW 124th Avenue & SW Tualatin-Sherwood Road
6. SW 124th Avenue & Site Access

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

Location Description

The proposed 124th Business Park is located east of SW 124th Avenue, north of SW Tualatin-Sherwood Road, and south of SW Myslony Street, on Tax Lots 2S127BB 00100, and 00200, shown in red in Figure 1. The property is surrounded by homogenous land uses consisting of predominantly industrial warehouses or undeveloped land.

Figure 1: Project Location (Map © Google Earth)

The proposed development will include the construction of three industrial buildings, totaling approximately 199,170 square feet, as shown in the site plan in Appendix A. The limits of the work proposed are shown in yellow in Figure 1 and a property line adjustment is shown in blue. The developed area will not abut SW Cimino Street and will not extend to the eastern property line.

Vicinity Streets

The characteristics of roadways expected to be impacted by the proposed development are summarized in Table 1.

Table 1: Roadway Characteristics

Street Name	Jurisdiction	Functional Classification	Travel Lanes	Posted Speed	Curbs & Sidewalks	On-Street Parking	Bicycle Facilities
SW Tualatin-Sherwood Road	Washington County	Major Arterial	3-4*	45 mph	Partial Both Sides	Prohibited	Bike Lanes
SW Cipole Road	Washington County	Major Collector	2	45 mph	Partial Both Sides	Prohibited	None
SW 124th Avenue	City of Tualatin (adjacent to site)	Major Arterial	4-5	45 mph	Partial Both Sides	Prohibited	Bike Lanes
SW Myslony Street	City of Tualatin	Major Collector	2-3	Not Posted	Partial Both Sides	Partially Permitted	Partial Bike Lanes
SW Herman Road	City of Tualatin	Minor Arterial	2-3	45 mph	North Side	Prohibited	Bike Lanes

** The Tualatin-Sherwood Road expansion project is a Washington County Capital Improvement Program (CIP) Project that intends to expand the roadway to five lanes, improve bicycle and pedestrian facilities, improve storm drainage, and install street lighting.*

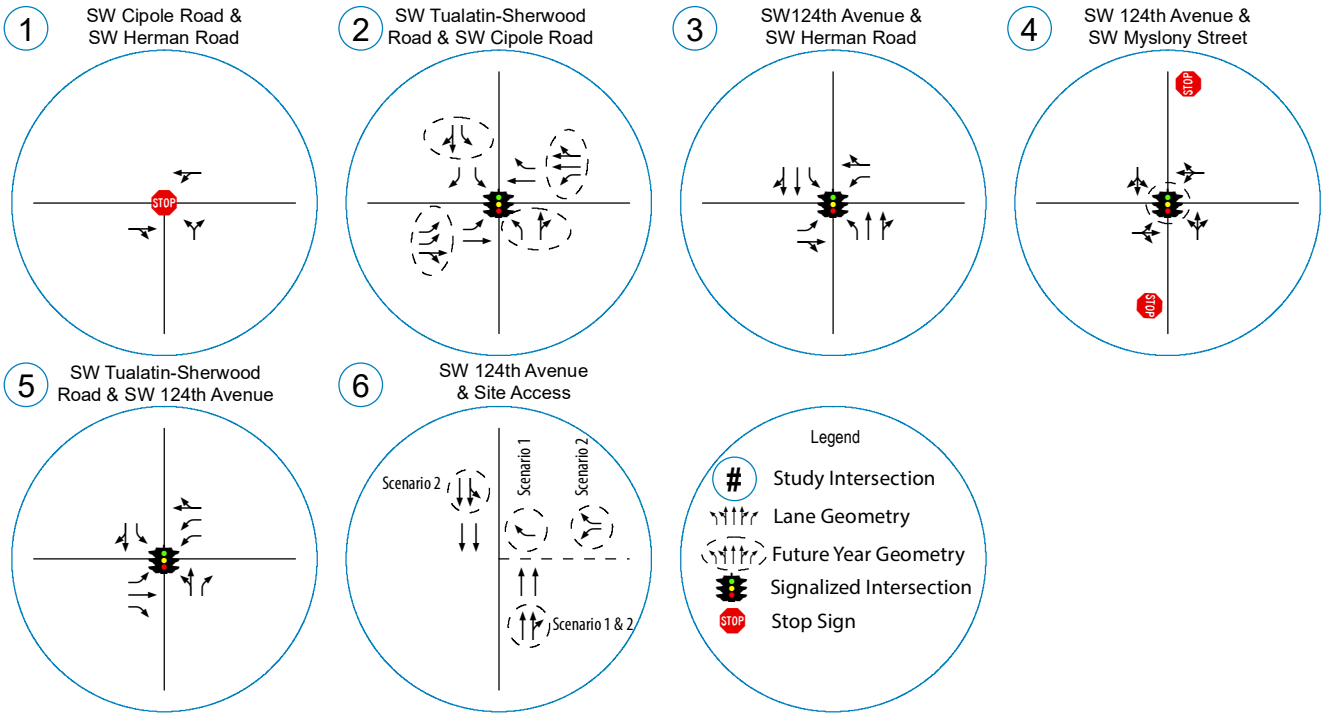
Study Intersections

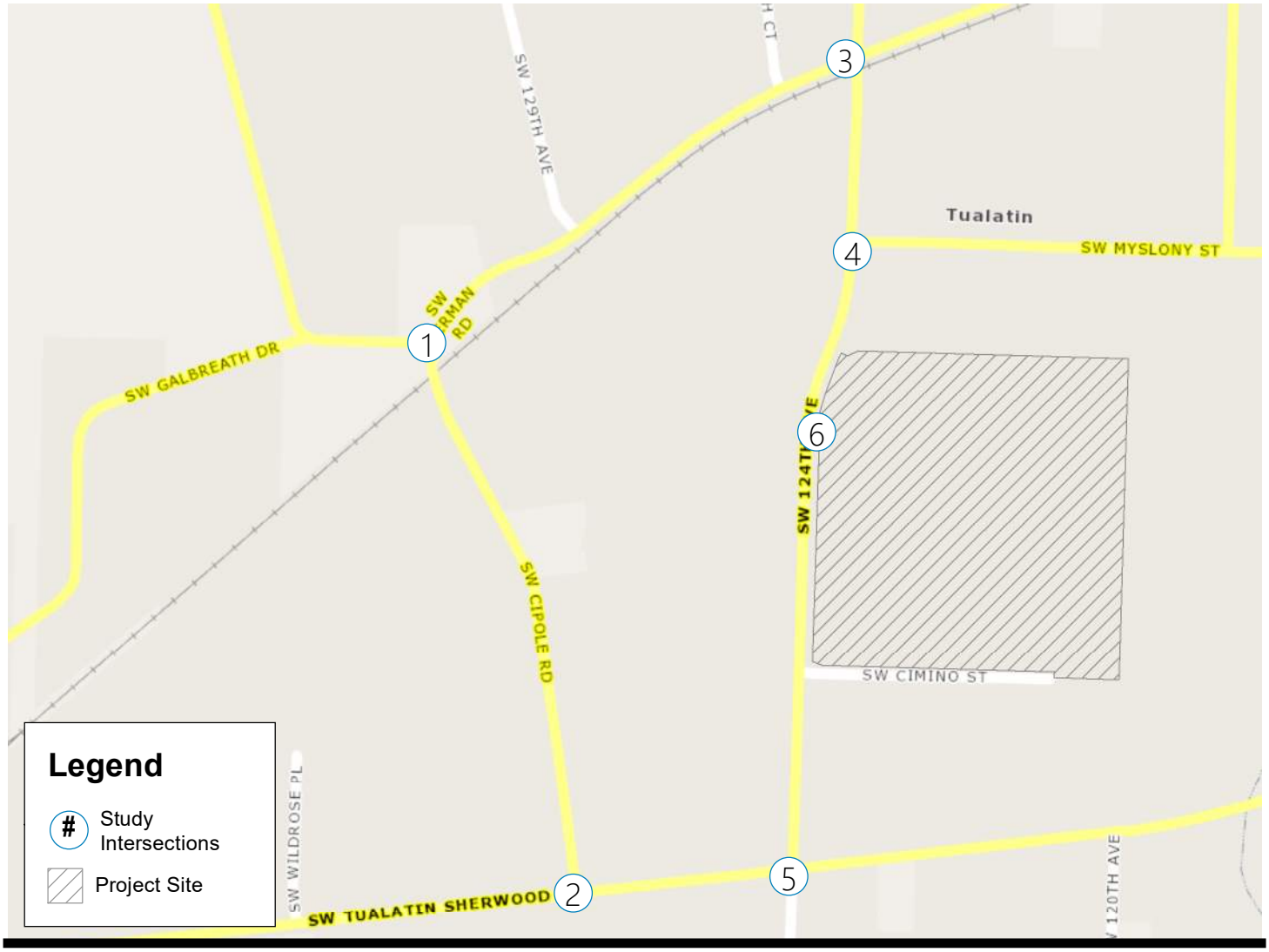
Through coordination with the City of Tualatin and Washington County, 6 study intersections were identified for evaluation. The existing characteristics of these intersections are summarized in Table 2. A vicinity map showing the project site, vicinity streets, and study intersection configurations is shown in Figure 2.

Table 2: Vicinity Intersection Descriptions

	Intersection	Geometry	Traffic Control	Phasing/Stopped Approaches
1	SW Cipole Road & SW Herman Road	Four Legs	Stop Controlled	All-Way Stop Signs
2	SW Tualatin-Sherwood Road & SW Cipole Road	Three Legs	Signal	EB Protected/Permitted SB Permitted*
3	SW 124th Avenue & SW Herman Road	Four Legs	Signalized	All Protected/Permitted Left
4	SW 124th Avenue & SW Myslony Street	Four Legs	Stop Controlled	EB/WB Stop-Controlled
5	SW 124th Avenue & SW Tualatin-Sherwood Road	Four Legs	Signal	All Protected/Permitted Left EB/WB/SB Right-Turn Overlap
6	SW 124th Avenue & Site Access	Three Legs	Stop Controlled	WB Stop-Controlled[1]

** The westbound leg will be constructed by the project and will be stop controlled.*





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Project Vicinity & Intersection Lane Geometry

NOT TO SCALE

Figure 2
124th Business Park TIA
7/25/2022

Public Transit

The project is located near one transit line that has stops within an approximate one-half mile walking/biking distance of the southern part of the site.

Route 97 – Tualatin-Sherwood Road provides weekday rush-hour service between W Langer Dr/Sherwood Plaza and the Tualatin WES Station. The nearest bus stops to the site are located near the intersection of SW Cipole Road and SW Tualatin-Sherwood Road. Weekday service is scheduled with four westbound and three eastbound trips in the morning at approximately 60-minute headways. Afternoon service is scheduled with four eastbound and three westbound trips at approximately 60-minute headways. There is currently no weekend or holiday service.

Site Trips

Trip Generation

To estimate trips that will be generated by the development, trip rates from the *Trip Generation Manual*[1] were used. Specifically, data from the land use code 110, *General Light Industrial*, was used based on the square footage of the development. The 124th Business Park proposes to develop the site with three industrial buildings enclosing a total of 199,170 SF of gross floor area.

The trip generation calculations show that the 124th Business Park site is projected to generate 147 trips during the morning peak hour, 129 trips during the evening peak hour, and 970 trips during the average weekday. Table 3 summarizes the estimated net trip generation of the site with the land use assumptions discussed above.

Table 3: Trip Generation Summary

Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour			Weekday Total
			In	Out	Total	In	Out	Total	
General Light Industrial (All Vehicles)	110	199,170 SF	129	18	147	18	111	129	970
General Light Industrial (Trucks)	110	199,170 SF	1	1	2	1	1	2	50

Trip Distribution and Assignment

The directional distribution of site trips to/from the project site is necessary to identify intersections to be included in the study area of the TIA. The following trip distribution was estimated based on the locations of likely trip destinations and locations of major transportation facilities in the site vicinity:

- Approximately 30 percent of site trips will travel to/from the south along SW 124th Avenue
- Approximately 20 percent of site trips will travel to/from the west along SW Tualatin-Sherwood Road
- Approximately 30 percent of site trips will travel to/from the east along SW Tualatin-Sherwood Road
- Approximately 20 percent of site trips will travel to/from the north along SW 124th Avenue

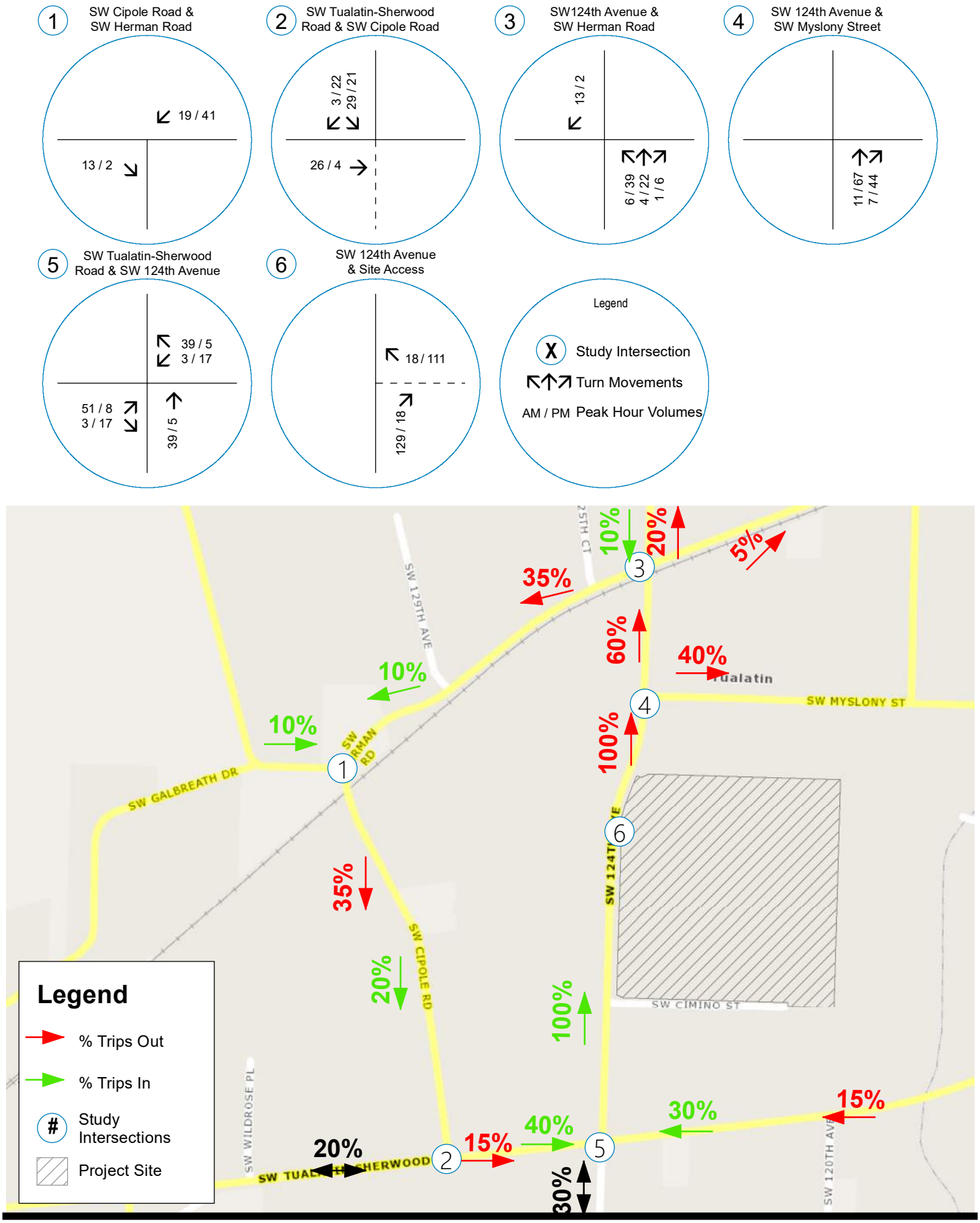
To address the right-in/right-out access on SW 124th Avenue, some of the traffic will not be able to travel along the most direct route to the site. Inbound traffic from the north will need to travel southward to SW Tualatin-Sherwood Road by another route and then turn northward on SW 124th Avenue. Outbound traffic destined for locations south, west, or east of the site will need to travel northward on SW 124th Avenue and then travel southward to SW Tualatin-Sherwood Road by an alternate route.

[1] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2022.

The following indirect routes are assumed:

- Approximately half, 10 percent, of the inbound traffic from the north is assumed to use to SW Cipole Road from OR 99E instead of SW 124th Avenue.
- The remaining 10 percent from the north is assumed to travel along SW 124th Avenue to SW Herman Road to SW Cipole Road.
- Approximately 40 percent of the outbound traffic is assumed to travel northward along SW 124th Avenue, turn right onto SW Myslony Street, and travel to SW Tualatin-Sherwood Road.
- Approximately 5 percent of the outbound traffic is assumed to travel northward on SW 124th Avenue and turn east on SW Herman Road to access SW Tualatin-Sherwood Road via SW Teton Avenue or other connecting roadways.
- Approximately 35 percent of the outbound traffic is assumed to travel northward on SW 124th Avenue and turn west on SW Herman Road and turn south on SW Cipole Road to SW Tualatin-Sherwood Road.

The resulting trip assignment is shown in Figure 3.



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Traffic Volumes Trip Distribution & Assignment

NOT TO SCALE

Figure 3
124th Business Park TIA
7/25/2022

Traffic Volumes

Existing Conditions

The ongoing pandemic reduced traffic demand on most roadways due to policies on social distancing that have closed or limited business operations and reduced commuting as many people work from home. Restrictions have been lifted and schools are open, and many roadways are nearing "normal" traffic conditions.

New turning movement counts were collected at the study intersections on May 24, 2022. Based on conversations with city staff, the following methodology was used to find resulting 2022 existing traffic volumes. New turning movements counts were compared to historical counts at all study intersections. Each turning movement was compared with new counts and historical counts, and the maximum was used to develop the 2022 existing traffic volumes.

Figure 4 displays the Year 2022 existing condition traffic volumes. The new turning movement counts are included in Appendix B.

Background Year 2025 Conditions

To provide an analysis of the impact of the proposed development on the nearby transportation facilities, an estimate of future traffic volumes is required. Two components were included in the background traffic estimates: 1) general growth and 2) growth associated with planned developments. An analysis year of 2025 was evaluated to correspond with completion of the improvements along SW Tualatin-Sherwood Road.

For the background growth, an annual growth rate of 1.0 percent per year was applied to the adjusted year 2022 existing traffic volumes. This growth rate is generally consistent with historical growth rates on study area roadways.

In addition to the background growth, two nearby projects are currently under construction that are planned to be fully operational at the time of project buildout. These include:

- PGE Integrated Operations Center – this project is located on the southeast corner of SW Tualatin-Sherwood Road & SW 124th Avenue and is planned to be fully operational by 2022.
- T-S Corporate Park – this project is located on the southwest corner of SW Tualatin-Sherwood Road & SW 124th Avenue and is planned to be fully operational by the end of 2022.
- Tualatin Logistics Business Park – this project is located on the northwest corner of SW Tualatin-Sherwood Road & SW 124th Avenue and is planned to be fully operational by the end of 2023.
- Tualatin Industrial Park – this project is located north of SW Tualatin-Sherwood Road and east of SW 112th Avenue, at 11045 SW Tualatin-Sherwood Road. The industrial park is built and is currently looking for potential clients, it will be considered fully operational under background conditions.
- Avery I & II – this project is located north of SW Avery Street, and west of SW Teton Avenue, and is planned to be fully operational by the end of 2023.

- Walgraeve Industrial Park (Hedges Creek) – this project is located on the northeast corner of SW Myslony Street & SW 112th Avenue and is planned to be fully operational by 2024.

Therefore, trip assignments associated with all nearby developments were included in the background year condition. Detailed project information can be found in the appendix to this document.

Figure 5 displays the Year 2025 background volumes which include the general growth and growth from planned developments.

Tualatin-Sherwood Road (Langer Farms Parkway to Teton Avenue)

The Tualatin-Sherwood Road expansion project is a Washington County Capital Improvement Program (CIP) Project intends to expand the roadway to five lanes, improve bicycle and pedestrian facilities, improve storm drainage, and install street lighting. This project is currently applying for permits and starting the right-of-way acquisition process. Construction is planned to break ground in late Summer 2022, with a target completion of the in the fall of 2025. Thus, this project was assumed as part of the Background conditions.

Note, traffic forecasts were not available for the opening year of this project, so the background volumes shown in Figure 5 do not reflect any shifts in traffic due to latent demand that may occur with increased capacity on SW Tualatin-Sherwood Road.

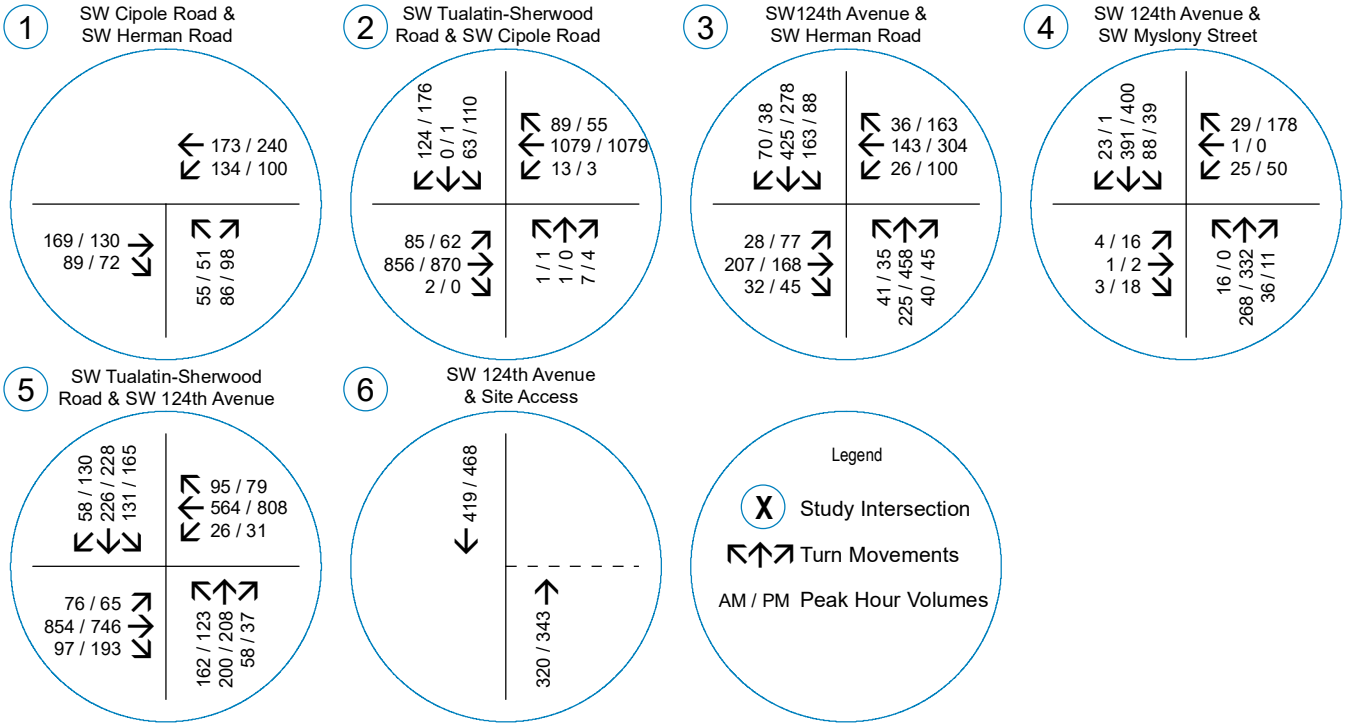
Traffic Signal at SW 124th Avenue & SW Myslony Street

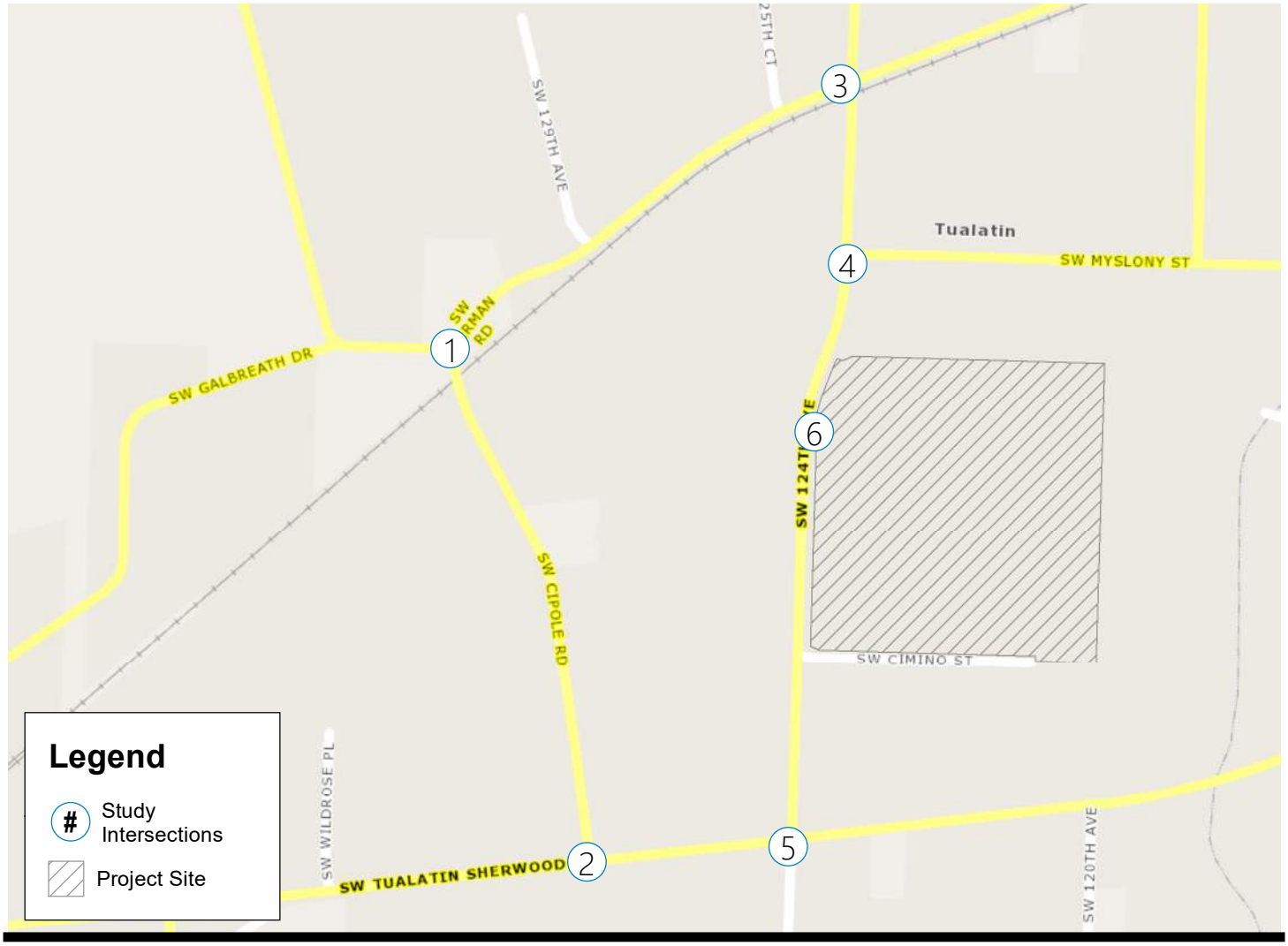
The Walgraeve Industrial Park (Hedges Creek) was approved in June 2022 with a condition requiring construction of a traffic signal at the intersection of SW 124th Avenue & SW Myslony Street. The signal is assumed to be in place by the year 2025.

Buildout Year 2025 Conditions

Peak hour trips calculated to be generated by the proposed development, as described earlier within the *Site Trips* section, were added to the Year 2025 background volumes to obtain the expected Year 2025 buildout conditions. Year 2025 buildout volumes which include the additional site trips projected to be generated by the proposed development are shown in Figure 6A for Access Scenario 1 and Figure 6B for Access Scenario 2.

Note, as a worst-case condition, all site traffic was assumed to use the north access.





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Traffic Volumes
Year 2022 Existing Condition

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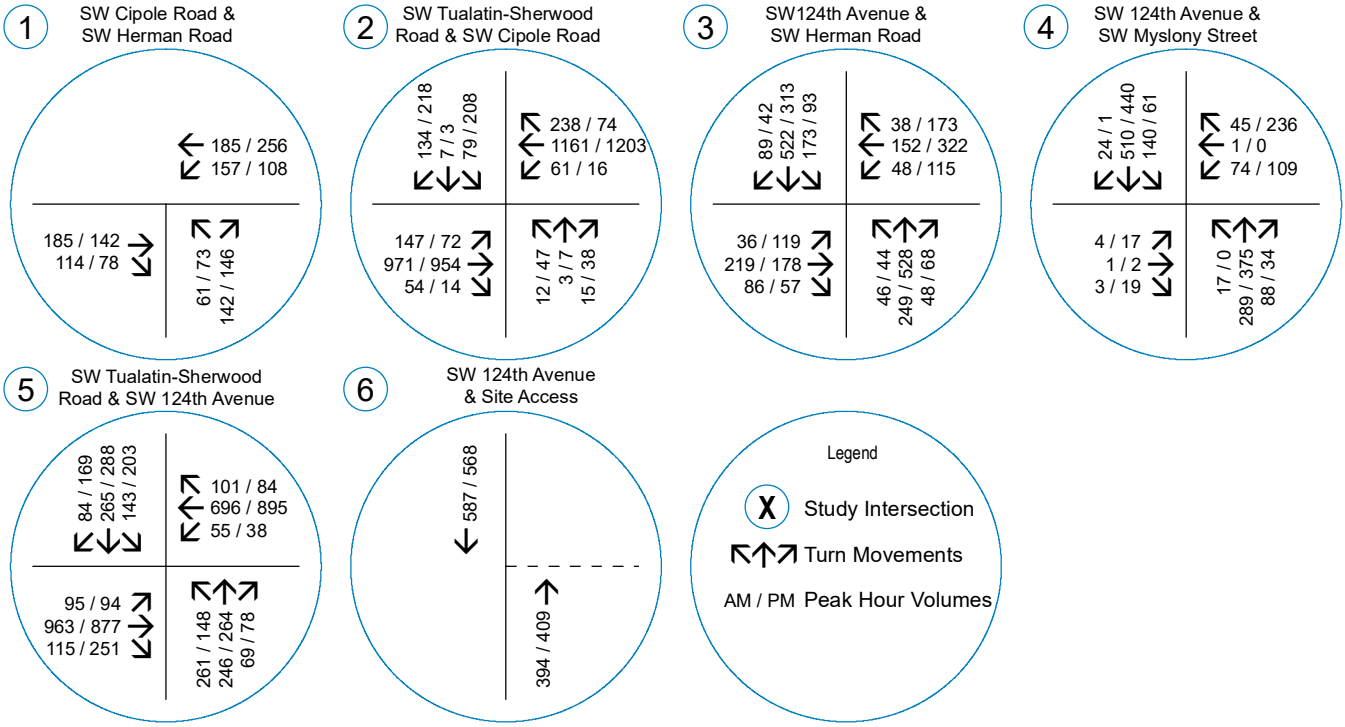
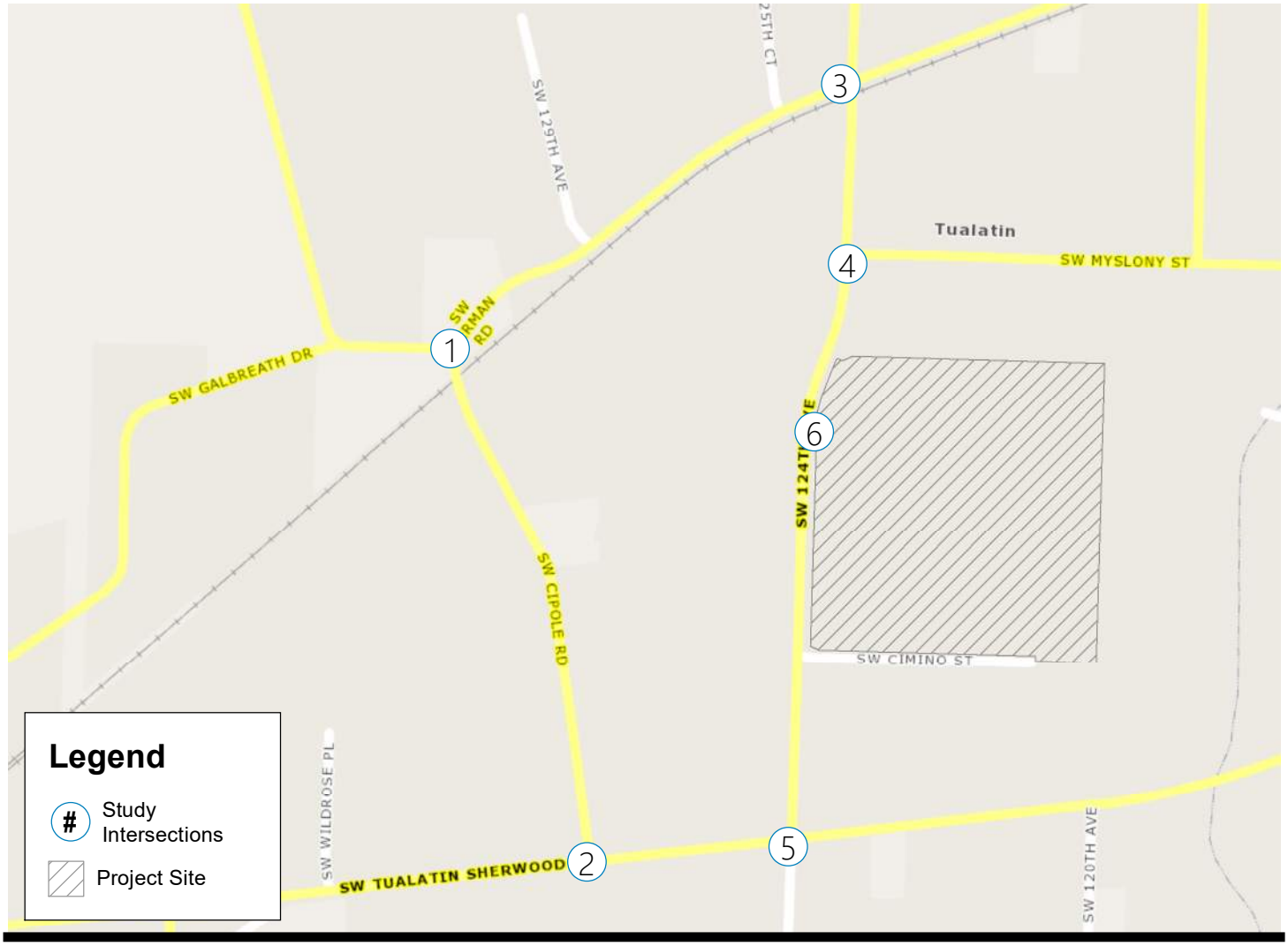
Figure 4
124th Business Park TIA
7/25/2022





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Traffic Volumes
Year 2025 Background Condition

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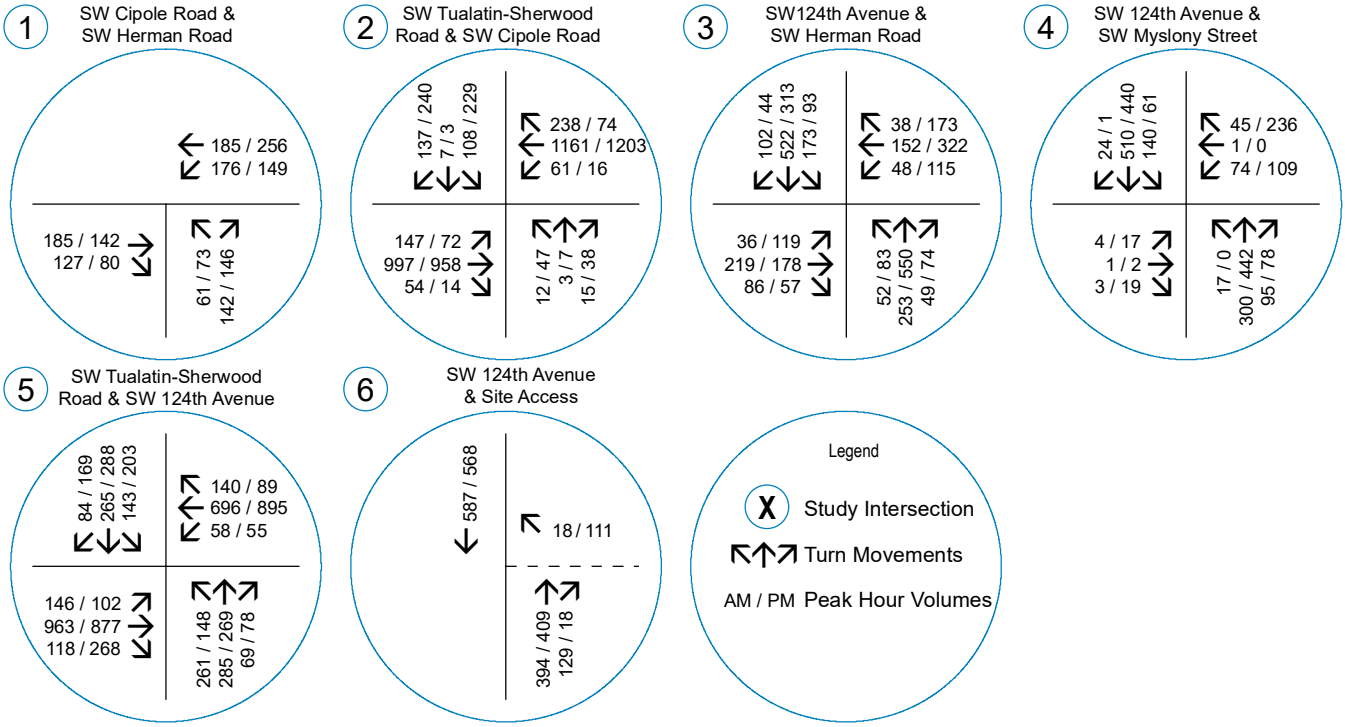
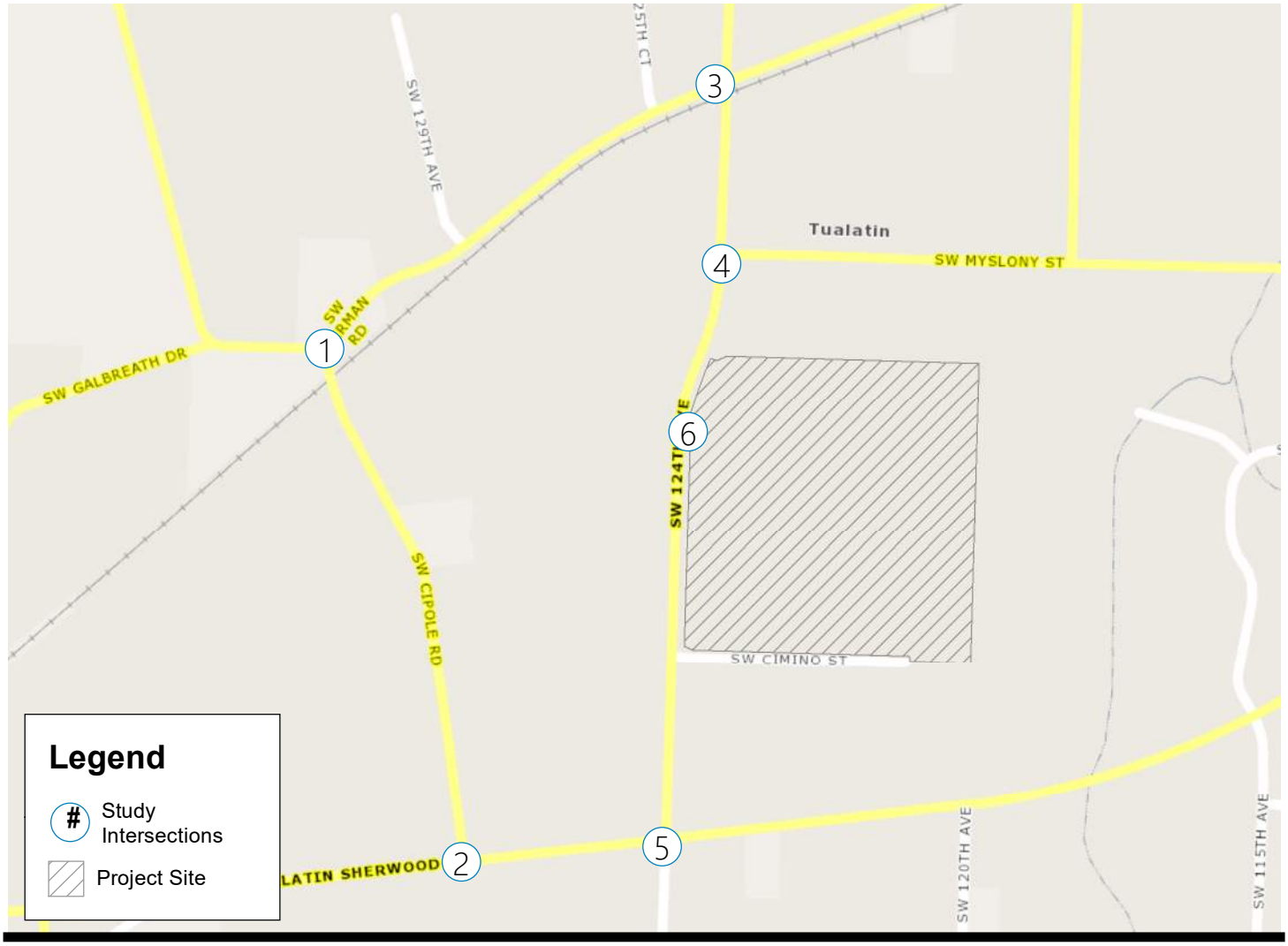
Figure 5
124th Business Park TIA
7/25/2022





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Traffic Volumes
Year 2025 Buildout Condition

NOT TO SCALE

Figure 6
124th Business ParkTIA
7/25/2022

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 2016 through December 2020) 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:

- Property Damage Only (PDO)
- Possible Injury (Injury C)
- Non-Incapacitating Injury (Injury B)
- Incapacitating Injury (Injury A)
- Fatality or Fatal Injury

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 period represents approximately 10 percent of the average daily traffic (ADT) at the intersection.

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

Pedestrian and Bicycle Collisions

No collisions with a pedestrian or bicyclist were reported during the five-year analysis period.

Crash Severity

None of the intersection crashes reported in the five-year analysis period resulted in a fatality but two of the crashes resulted in an incapacitating injury (Type A):

- A turning collision between a northbound left-turning vehicle on 124th Avenue and a westbound vehicle on SW Tualatin-Sherwood Road resulted in a Type A injury to the driver who did not have the right-of-way and a Type B injury to the driver of the vehicle that was struck.
- An angle collision between a northbound vehicle on SW 124th Avenue and a westbound vehicle on SW Herman Road resulted in a Type A injury to the driver who disregarded the signal and two Type B injuries in the vehicle that was struck.

Table 4: Crash Type Summary

	Intersection	Crash Type							Total Crashes
		Rear End	Turning/ Angle	Fixed Object	Side-swipe	Head-on	Bike/ Ped	Other	
1	SW Cipole Road & SW Herman Road	0	0	0	0	1	0	0	1
2	SW Tualatin-Sherwood Road & SW Cipole Road	21	0	0	0	0	0	0	21
3	SW 124th Avenue & SW Herman Road	5	7	0	0	0	0	1	13
4	SW 124th Avenue & SW Myslony Street	0	2	2	1	0	0	0	5
5	SW 124th Avenue & SW Tualatin-Sherwood Road	87	9	2	1	0	0	1	100

Table 5: Crash Severity and Rate Summary

	Intersection	Crash Severity					Total Crashes	PHV	Crash Rate	90th % Rate
		PDO	C	B	A	Fatal				
1	SW Cipole Road & SW Herman Road	0	0	1	0	0	1	693	0.079	0.408
2	SW Tualatin-Sherwood Road & SW Cipole Road	6	13	2	0	0	21	2,361	0.487	0.509
3	SW 124th Avenue & SW Herman Road	8	4	0	1	0	13	1,799	0.396	0.860
4	SW 124th Avenue & SW Myslony Street	2	2	1	0	0	5	1,047	0.261	0.408
5	SW 124th Avenue & SW Tualatin-Sherwood Road	43	48	8	1	0	100	2,813	1.947	0.860

ODOT 90th Percentile Crash Rates

Intersection crash rates were compared to the published statewide 90th percentile crash rates within ODOT's Analysis Procedures Manual (APM). According to Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control in the APM, intersections which experience crash rates in excess of 90th percentile crash rates should be "flagged for further analysis".

One intersection along SW Tualatin-Sherwood Road was identified as having a crash rate that exceeds the ODOT 90th percentile threshold. Historically, this corridor has experienced significant queuing that begins at the intersection with OR Highway 99W in Sherwood and often extends into Tualatin. Many of the rear-end collisions in the corridor occurred hundreds of feet from the associated intersection.

Washington County has two planned improvements along SW Tualatin-Sherwood Road that will help to relieve the congestion and should consequently reduce the crash rates in this corridor:

- The first is the project at SW Tualatin-Sherwood Road and Highway 99W in Sherwood. This project will add significant capacity to the highway intersection and widen SW Tualatin-Sherwood Road to SW Olds Place. Construction began in September 2022 and is expected to be completed in the spring of 2025.
- The second is the project on SW Tualatin-Sherwood Road from Langer Farms Parkway to Teton Avenue. This project will widen SW Tualatin-Sherwood Road to provide two through travel lanes in each direction and will add turn lanes to some intersections.

Reducing congestion will have a particularly strong influence on reducing rear-end type collisions, which accounted for nearly 85% of the crashes in the corridor. Therefore, no additional mitigation is recommended.

Washington County SPIS List

Two of the study area intersections is listed in the Washington County SPIS List:

1. SW Tualatin-Sherwood Road & SW Cipole Road
2. SW Tualatin-Sherwood Road & SW 124th Avenue

These listings are consistent with the crash rate findings and should be similarly improved with the Washington County planned and funded improvements in the corridor.

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 that do not already have planned and funded improvements.

Warrant Analysis

Turn lane warrants and preliminary traffic signal warrants were examined for the study intersections where such treatments would be applicable.

Left-Turn Lane Warrants

Left-turn lane warrants were not examined at the site accesses on SW 124th Avenue since they are proposed as right-in/right-out turning movements only.

Preliminary Traffic Signal Warrants

Preliminary traffic signal warrants were not examined for the site accesses since they are proposed as right-in/right-out turning movements only.

Sight Distance

A sight distance analysis was performed for the planned project driveways. Both intersection sight distance (ISD) and stopping sight distance (SSD) are assessed. The ISD is an operational measure, intended to provide sufficient line of sight along the major street so that a driver could turn from the minor street without impeding traffic flow. The SSD is the minimum requirement to ensure safe operation of the roadway. Stopping sight distance allows an oncoming driver to see a hazard in the roadway, react, and come to a complete stop if

necessary to avoid a collision. As long as the available intersection sight distance is at least equal to the minimum required stopping sight distance for the design speed of the roadway, adequate sight distance is available for safe operation of the intersection.

Intersection Sight Distance

For SW 124th Avenue, sight distance is measured and evaluated in accordance with standards established in *A Policy on Geometric Design of Highway and Streets*[2]. For intersection sight distance, the driver's eye is assumed to be 14.5 feet from the near edge of the nearest travel lane of the intersecting street and at a height of 3.5 feet above the minor-street approach pavement. The oncoming vehicle driver's eye height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement. A speed study on SW 124th Avenue south of SW Myslony Street measured the northbound 85th percentile speed at 52 mph and the southbound 85th percentile speed at 48 mph. The study is included in Appendix B.

Stopping Sight Distance

Stopping sight distance (SSD) is considered the minimum requirement to ensure safe operation of the driveway access. This distance allows the driver of a vehicle traveling on the major street to react to a turning vehicle or other object in the roadway and come to a complete stop to avoid a collision. To ensure safe operation of a driveway, the available sight distance must at least equal the minimum required stopping sight distance. SSD is the same for both passenger vehicles and trucks.

Available Sight Distance

Table 6 compares the available sight distance measured in the field with the calculated recommendations and requirements for the traffic movements at the site driveways.

North Access to SW 124th Avenue

The site access to SW 124th Avenue will be limited to right-turn movements. Sight lines to the south should meet the ISD recommendations and SSD requirements if foliage in the landscape strip is maintained at a height of 3 feet or less. Sight lines to the north are not necessary.

South Access to SW 124th Avenue

The south site access to SW 124th Avenue would be limited to right-turn movements. Sight lines to the south meet the ISD recommendations and SSD requirements if foliage in the landscape strip is maintained at a height of 3 feet or less. Sight lines to the north are not necessary.

Table 6: Sight Distance Comparison

Access	Recommended ISD	Required SSD	Available Sight Distance
North Access (Looking to South)	500 ft	455 ft	>1,000 ft
South Access (Looking to South	500 ft	455 ft	>1,000 ft

[2] American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 7th Edition, 2018.

Conclusion

Based on the sight distance analysis, the proposed site accesses will meet ISD recommendations and SSD requirements as long as foliage in the landscape strip is maintained at a height of 3 feet or less.

Access Spacing

The site accesses on SW 124th Avenue fall under the City of Tualatin access spacing standards. The following access standards for the City of Tualatin are found in TDC Chapter 75.140 Section 6c:

> *(6) 124TH AVENUE.*
>
> *(c) Herman Road to Tualatin-Sherwood Road. On the east side of 124th Avenue between Herman Road and Tualatin-Sherwood Road the area will be served by the following streets or driveways:*
>
> *(i) A street intersection at Myslony Street.*
>
> *(ii) A street or driveway intersection approximately 800 feet south of the Myslony Street/124th Avenue intersection extending east with an alternative to extend north to connect with Myslony Street a minimum of 150 feet east of 124th Avenue. Access may be limited to right in/right out as determined by the City Manager.*
>
> *(iii) Cimino Street extending east and south to an intersection at Tualatin-Sherwood Road across from 120th Avenue. The exact location and configuration of the streets and driveways shall be determined by the City Manager.*

The 124th Business Park is proposing two driveways on SW 124th Avenue, as shown in the attached site plan (Appendix A). In general, all passenger vehicles and the trucks for Buildings B and C are anticipated to use the north access. Most trucks departing from Building A are also anticipated to use the north access. The south will primarily serve as access for trucks arriving at Building A and as an emergency access for the rest of the development.

The advantages and disadvantages of each access location are presented below.

North Access to SW 124th Avenue

The north access would utilize the existing curb cut located on SW 124th Avenue, which corresponds to the location specified in the Tualatin Development Code (TDC). Access would be limited to right-in/right-out movements only.

Advantages of this access location and configuration include:

- The access location corresponds with the TDC description for access between SW Myslony Street and SW Cimino Street.
- With the access limited to right turns, the center median on SW 124th Avenue would remain intact.
- The potential for collision is typically lower with limited access driveways because there are fewer conflict points.

Disadvantages of this access location and configuration include:

- By limiting the access to right-turn movements, some traffic will need to take more circuitous routes to/from the site.
- Traffic volumes on SW Herman Road, SW Myslony Street, SW 112th Avenue, and SW Cipole Road will be higher as drivers use these roadways for alternative routes.
- Vehicle miles of travel for site employees and trucks will likely be higher as travel routes for some movements will be longer.

South Access to SW 124th Avenue

The south access would be located approximately 450 feet south of the north access and approximately 550 feet north of SW Cimino Street. The access is not currently identified in the TDC. This access is proposed to be limited to right-in/right-out movements only.

Advantages of this access location and configuration include:

- The south access is proposed as secondary access to the site with very low usage anticipated.
- The south access will serve as an emergency access for the rest of the development. The TDC notes a possible access extending to the north to connect with Myslony Street; however. No right-of-way is available through properties developed to the north of the project, therefore, no options to connect to Myslony Street are available. To the south of the project site, topographical features, such as wetlands and a stream, hinder the ability for a site access to intersect with Cimino Street.

Disadvantages of this access location and configuration include:

- The NE Access to SW 124th Avenue does not meet the TDC 75.140 specifications. It would be a new driveway approach and would need to follow the procedures and criteria in TDC 75.020.
- Another access on SW 124th Avenue could increase the potential for collisions although the total volume on the roadway would not change.

Conclusion

The north access to SW 124th Avenue will meet the TDC access spacing standards and will be limited to right turns with the median remaining intact.

Secondary access to the site is not available from either SW Myslony Street or SW Cimino Street; therefore, a south access is recommended. It could be limited to emergency use but allowing site traffic to use the access is expected to have a minimal impact on the transportation system.

Truck Access

Truck turning templates for the site driveways are included in drawing *G1.0 Site Plan* of the application packet. All driveways can accommodate trucks entering and exiting from the north or south.

Operational Analysis

Methodology

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)[3]. Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little, or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection. The analysis was performed using the Synchro software which applies the HCM6 methodologies.

Performance Standards

The following agency performance standards are applicable in the study area:

- The City of Tualatin requires intersections to operate at a minimum D and E for signalized and unsignalized intersections, respectively.
- Washington County requires intersections to operate with a v/c ratio of 0.99 or less.

Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 7 for the morning and evening peak hours. Traffic signal timing along SW Tualatin-Sherwood Road was optimized and coordinated for the new lane configuration. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Although two site accesses are proposed, the analysis presented in Table 7 conservatively evaluates a single site access to demonstrate that a single access can accommodate all site traffic, if necessary. A second site access to the south would reduce delays for the north access but would not change and of the off-site intersection results. The delay at second access would be minimal since volumes would be low and all movements would be right turns.

As shown in Table 7, all study area intersections are anticipated to meet jurisdictional standards for the buildout condition. Therefore, no mitigation for traffic operations is required or recommended.

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

Table 7: Capacity Analysis Summary

Intersection & Scenario	Performance Standard	AM Peak Hour			PM Peak Hour		
		LOS	Delay (s)	V/C	LOS	Delay (s)	V/C
1. SW Cipole Road & SW Herman Road							
2022 Existing	LOS E	B	14	0.60	B	12	0.55
2025 Background		C	19	0.73	B	14	0.63
2025 Buildout		C	21	0.78	C	16	0.70
2. SW Tualatin-Sherwood Road & SW Cipole Road							
2022 Existing	0.99	B	11	0.84	B	13	0.82
2025 Background		B	11	0.73	B	15	0.69
2025 Buildout		B	12	0.76	B	16	0.70
3. SW 124th Avenue & SW Herman Road							
2022 Existing	LOS D	B	15	0.49	B	18	0.70
2025 Background		B	16	0.57	C	20	0.76
2025 Buildout		B	16	0.59	C	21	0.77
4. SW 124th Avenue & SW Myslony Street[1]							
2022 Existing	LOS D	C	20	0.22	C	22	0.57
2025 Background		B	11	0.52	B	16	0.66
2025 Buildout		B	11	0.52	B	18	0.70
5. SW Tualatin-Sherwood Road & SW 124th Avenue							
2022 Existing	0.99	C	34	0.89	C	25	0.74
2025 Background		C	25	0.70	C	27	0.59
2025 Buildout		C	28	0.71	C	27	0.60
6. SW 124th Avenue & Site Access							
2025 Buildout	LOS E	B	11	0.03	B	11	0.19

Notes:
Locations that do not meet standards are BOLDED.
[1]SW 124th Avenue & SW Myslony Street is assumed to be signalized under background conditions, per a condition of approval for the Walgraeve Industrial development.

Queuing Analysis

An analysis of queuing was conducted for key study intersections. The analysis was conducted using the Synchro/SimTraffic software, with the reported values representing 95th percentile queue lengths. The 95th percentile queue is a statistical measurement which indicates there is a 5 percent chance that the queue may exceed this length during the analysis period; however, given this is a probability, the 95th percentile queue length may not be frequently observed in the field. Note, this analysis does not account for upstream congestion outside of the study area.

The effective storage for the turning lanes was obtained from the Washington County plans for the SW Tualatin-Sherwood Road improvements from SW Langer Farms Parkway to SW Teton Avenue, the site plan, or from Google Earth. Where dual left-turn lanes are planned, the storage for each lane is estimated.

The resulting 95th percentile queue estimates are summarized in Table 8.

Table 8: Queuing Analysis Summary

Movement	Effective Storage (ft)	AM/PM Peak Hour - 95th Percentile Queue (ft)	
		2025 Background	2025 Buildout
1. SW Cipole Road & SW Herman Road			
EB	340	150/75	150/75
WB	325	150/150	150/150
NB	425	100/100	100/75
2. SW Tualatin-Sherwood Road & SW Cipole Road			
EB L	615	150/75	175/100
WB L	285	225/75	175/100
NB L	150	50/100	50/100
SB L	300	150/250	200/275
3. SW 124th Avenue & SW Herman Road			
EB L	235	50/150	50/125
WB L	265	75/225	75/250
NB L	360	75/75	75/125
SB L	315	100/75	100/100
4. SW 124th Avenue & SW Myslony Street			
EB LTR	85	50/50	50/50
WB LTR	275	125/250	150/250
NB L	240	50/<25	50/<25
SB L	280	150/100	150/100

Table 8: Queuing Analysis Summary

Movement	Effective Storage (ft)	AM/PM Peak Hour - 95th Percentile Queue (ft)	
		2025 Background	2025 Buildout
5. SW Tualatin-Sherwood Road & SW 124th Avenue			
EB L1	275	75/75	100/75
EB L2	350	175/75	150/125
EB R	350	75/75	75/100
WB L1	380	50/25	50/50
WB L2	470	100/50	100/100
WB R	380	75/50	100/50
NB L1	300	225/100	200/125
NB L2	300	250/150	250/175
SB L1	200	125/125	125/125
SB L2	240	225/175	225/200
SB R	250	75/100	75/125
6. SW 124th Avenue & Site Access			
WBR	100	-/-	50/75

The analysis shows little change in queues between background and buildout conditions. The queues can all be accommodated within the available storage. Therefore, no mitigation for queuing operations is required or recommended.

Conclusions

Key findings of this study include:

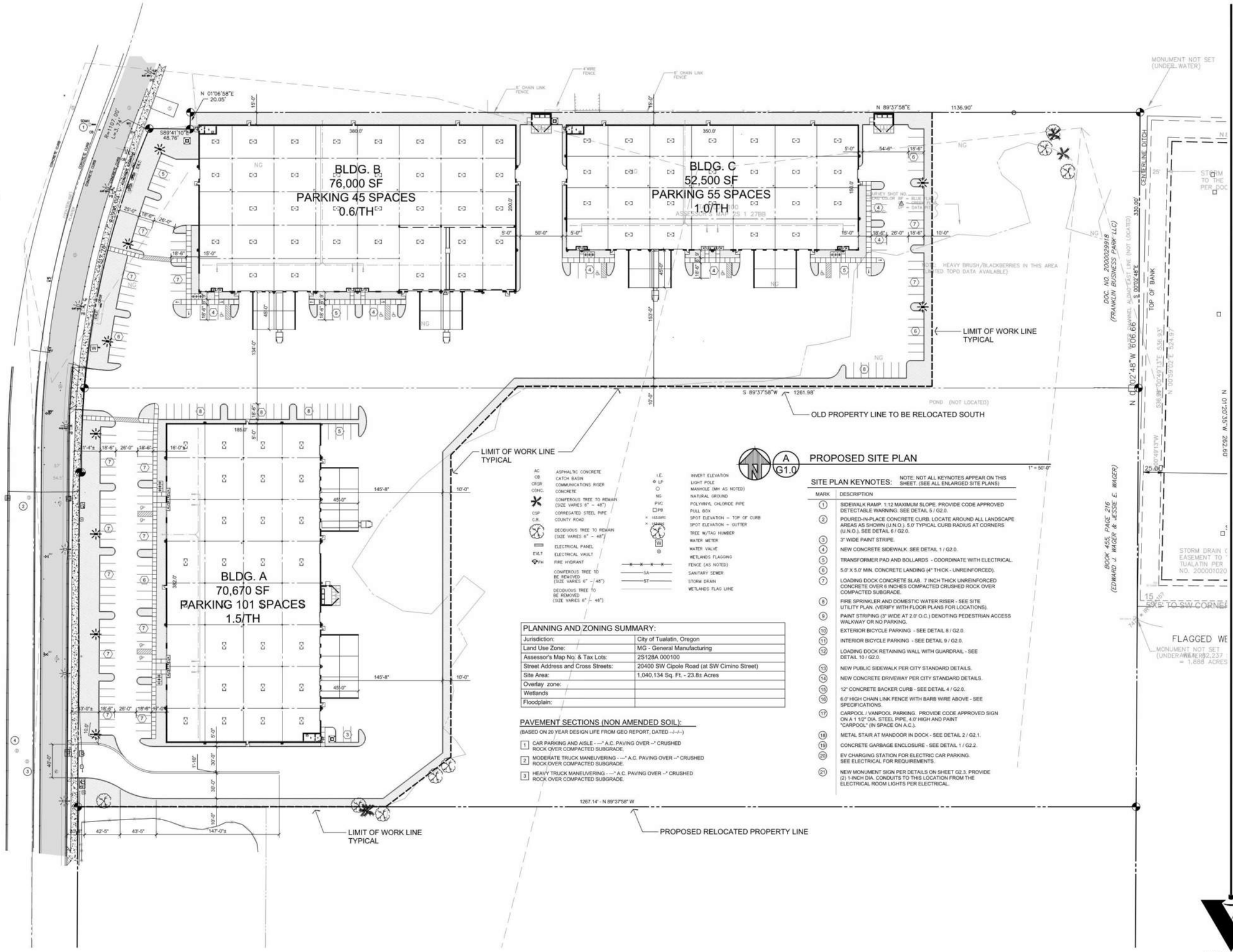
- Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections that do not already have planned and funded improvements.
- Left-turn lane warrants were not examined at the site accesses on SW 124th Avenue since they are proposed as right-in/right-out turning movements only.
- Preliminary traffic signal warrants were not examined for the site accesses since they are proposed as right-in/right-out turning movements only.
- Based on the sight distance analysis, the proposed site accesses will meet ISD recommendations and SSD requirements as long as foliage in the landscape strip is maintained at a height of 3 feet or less.
- The north access to SW 124th Avenue will meet the TDC access spacing standards and will be limited to right turns with the median remaining intact.
- Secondary access to the site is not available from either SW Myslony Street or SW Cimino Street; therefore, a south access is recommended. It could be limited to emergency use but allowing site traffic to use the access is expected to have a minimal impact on the transportation system.
- All proposed driveways can accommodate trucks entering and exiting from the north or south.
- All study area intersections are anticipated to operate within the acceptable jurisdiction standards. Therefore, no mitigation for traffic operations is required or recommended. The access configuration options have little effect on study area operations.
- The analysis shows little change in queues between background and buildout conditions. The queues can all be accommodated within the available storage. Therefore, no mitigation for queuing operations is required or recommended.
-

Appendix A – Site Information

Site Plan

Trip Generation Calculations

Scoping Memo



A G1.0 PROPOSED SITE PLAN

1" = 50'-0"

SITE PLAN KEYNOTES: NOTE: NOT ALL KEYNOTES APPEAR ON THIS SHEET. (SEE ALL ENLARGED SITE PLANS)

MARK	DESCRIPTION
1	SIDEWALK RAMP. 1:12 MAXIMUM SLOPE. PROVIDE CODE APPROVED DETECTABLE WARNING. SEE DETAIL 5 / G2.0.
2	POURED-IN-PLACE CONCRETE CURB. LOCATE AROUND ALL LANDSCAPE AREAS AS SHOWN (U.N.O.). 5.0' TYPICAL CURB RADIUS AT CORNERS (U.N.O.). SEE DETAIL 6 / G2.0.
3	3" WIDE PAINT STRIPE.
4	NEW CONCRETE SIDEWALK. SEE DETAIL 1 / G2.0.
5	TRANSFORMER PAD AND BOLLARDS - COORDINATE WITH ELECTRICAL.
6	5.0' X 5.0' MIN. CONCRETE LANDING (4" THICK - UNREINFORCED).
7	LOADING DOCK CONCRETE SLAB. 7 INCH THICK UNREINFORCED CONCRETE OVER 6 INCHES COMPACTED CRUSHED ROCK OVER COMPACTED SUBGRADE.
8	FIRE SPRINKLER AND DOMESTIC WATER RISER - SEE SITE UTILITY PLAN. (VERIFY WITH FLOOR PLANS FOR LOCATIONS).
9	PAINT STRIPING (3" WIDE AT 2.0' O.C.) DENOTING PEDESTRIAN ACCESS WALKWAY OR NO PARKING.
10	EXTERIOR BICYCLE PARKING - SEE DETAIL 8 / G2.0.
11	INTERIOR BICYCLE PARKING - SEE DETAIL 9 / G2.0.
12	LOADING DOCK RETAINING WALL WITH GUARDRAIL - SEE DETAIL 10 / G2.0.
13	NEW PUBLIC SIDEWALK PER CITY STANDARD DETAILS.
14	NEW CONCRETE DRIVEWAY PER CITY STANDARD DETAILS.
15	12" CONCRETE BACKER CURB - SEE DETAIL 4 / G2.0.
16	6.0' HIGH CHAIN LINK FENCE WITH BARB WIRE ABOVE - SEE SPECIFICATIONS.
17	CARPOOL / VANPOOL PARKING. PROVIDE CODE APPROVED SIGN ON A 1 1/2" DIA. STEEL PIPE, 4.0' HIGH AND PAINT "CARPOOL" (IN SPACE ON A.C.).
18	METAL STAIR AT MANDOOR IN DOCK - SEE DETAIL 2 / G2.1.
19	CONCRETE GARBAGE ENCLOSURE - SEE DETAIL 1 / G2.2.
20	EV CHARGING STATION FOR ELECTRIC CAR PARKING. SEE ELECTRICAL FOR REQUIREMENTS.
21	NEW MONUMENT SIGN PER DETAILS ON SHEET G2.3. PROVIDE (2) 1-INCH DIA. CONDUITS TO THIS LOCATION FROM THE ELECTRICAL ROOM LIGHTS PER ELECTRICAL.

PLANNING AND ZONING SUMMARY:

Jurisdiction:	City of Tualatin, Oregon
Land Use Zone:	MG - General Manufacturing
Assessor's Map No. & Tax Lots:	2S128A 000100
Street Address and Cross Streets:	20400 SW Cipole Road (at SW Cimino Street)
Site Area:	1,040,134 Sq. Ft. - 23.8± Acres
Overlay zone:	
Wetlands	
Floodplain:	

PAVEMENT SECTIONS (NON AMENDED SOIL):

(BASED ON 20 YEAR DESIGN LIFE FROM GEO REPORT, DATED --/--/--)

1 CAR PARKING AND AISLE - ---" A.C. PAVING OVER --" CRUSHED ROCK OVER COMPACTED SUBGRADE.

2 MODERATE TRUCK MANEUVERING - ---" A.C. PAVING OVER --" CRUSHED ROCK OVER COMPACTED SUBGRADE.

3 HEAVY TRUCK MANEUVERING - ---" A.C. PAVING OVER --" CRUSHED ROCK OVER COMPACTED SUBGRADE.

VLMK
ENGINEERING + DESIGN
3933 S Kelly Avenue
Portland, Oregon 97239
503.222.4453
VLMK.COM

PROJECT NAME
124th AVENUE BUSINESS PARK

124th AVENUE
TUALATIN, OREGON

REVISIONS

	DATE	DESCRIPTION
1	-	

DATE DECEMBER 2021

SCALE	PROJ. NO.
AS NOTED	20200748
DRAWN: KAN	CHECKED: HGK

PROPOSED SITE PLAN

G1.0

NOT FOR CONSTRUCTION

G:\Acad2020\20200748\0-Drawings\100 G1.0 Site Plan.dwg8/8/2022 12:16 PM

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: General Light Industrial
Land Use Code: 110
Land Use Subcategory: All Sites
Setting/Location General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 265.5

AM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Split	88%	12%	
Trip Ends	172	24	196

PM PEAK HOUR

Trip Rate: 0.65

	Enter	Exit	Total
Directional Split	14%	86%	
Trip Ends	24	149	173

WEEKDAY

Trip Rate: 4.87

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	646	646	1,292

SATURDAY

Trip Rate: 0.69

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	92	92	184

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: General Light Industrial
Land Use Code: 110
Land Use Subcategory: All Sites
Setting/Location General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Truck
Variable Quantity: 265.5

WARNING: Variable Quantity is greater than Maximum Survey Size for Peak Hours

AM PEAK HOUR

Trip Rate: 0.01

	Enter	Exit	Total
Directional Split	60%	40%	
Trip Ends	2	1	3

PM PEAK HOUR

Trip Rate: 0.01

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	2	2	3

WEEKDAY

Trip Rate: 0.25

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	33	33	66

SATURDAY

Trip Rate: 0

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	NA	NA	NA

321 SW 4th Ave., Suite 400
Portland, OR 97204
503.248.0313
lancastermobley.com

Memorandum

To: **Mike McCarthy, Tony Doran, City of Tualatin**

Copy: **Tracy Bowers, Shredding Systems, Inc.**
Havlin Kemp, VLMK Engineering + Design

From: **Myla Cross**
Jennifer Danziger, PE

Date: **April 7, 2022**

Subject: **124th Business Park Traffic Study Scoping Memorandum**

This memorandum proposes a scope of work for the transportation impact analysis (TIA) of the approximately 199,170-square-foot (SF) industrial project located on the east side of SW 124th Avenue in Tualatin, Oregon.

Project Description

The proposed 124th Business Park is located east of SW 124th Avenue, north and south of other commercial warehouse properties, on Tax Lots 2S127BB 00100, and 00200. The proposed development will include the construction of three industrial buildings, encompassing a total of approximately 199,170 square feet. A site plan is attached to this memorandum.

Access Spacing

The following access standards for the City of Tualatin are found in the Tualatin Development Code (TDC) Chapter 75.140 Section 6c:

(6) *124TH AVENUE.*

(c) Herman Road to Tualatin-Sherwood Road. On the east side of 124th Avenue between Herman Road and Tualatin-Sherwood Road the area will be served by the following streets or driveways:

(i) A street intersection at Myslony Street.

(ii) A street or driveway intersection approximately 800 feet south of the Myslony Street/124th Avenue intersection extending east with an alternative to extend north to connect with Myslony Street a minimum of 150 feet east of 124th Avenue. Access may be limited to right in/right out as determined by the City Manager.

(iii) Cimino Street extending east and south to an intersection at Tualatin-Sherwood Road across from 120th Avenue. The exact location and configuration of the streets and driveways shall be determined by the City Manager.

The 124th Business Park is proposing two driveways on SW 124th Avenue:

- One would utilize an existing curb cut located on SW 124th Avenue, which corresponds to the location specified in the TDC. The preferred configuration would be full access to allow the most direct travel routes to the site. Full access would require removal of a portion of the median on SW 124th Avenue. The TDC notes the access may be limited to right-in/right-out movements only.
- The proposed development seeks to construct a second driveway at the south property line, which is not currently listed in the Tualatin Access Management Plan. This access is assumed to be limited to right-in/right-out movements only.

No right-of-way is available through properties developed to the north of the project, therefore, no options to connect to Myslony Street are available. To the south of the project site, topographical features, such as wetlands and a stream, hinder the ability for a site access to intersect with Cimino Street.

Based on the proposed development and the TDC language, we anticipate that two access scenarios will need to be addressed:

- Scenario 1 would assume that full movements are allowed at the proposed northern access.
- Scenario 2 would assume that the proposed northern access would be limited with right-in/right-out movements only.

Operations with a single site access will be considered with both scenarios but that difference will not affect the overall transportation network.

Trip Generation

To estimate trips that will be generated by the development, trip rates from the *Trip Generation Manual*[1] were used. Specifically, data from the land use code 110, *General Light Industrial*, was used based on the square footage of the development. The 124th Business Park proposes to develop the site with three industrial buildings enclosing a total of 199,170 SF of gross floor area.

The trip generation calculations show that the 124th Business Park site is projected to generate 147 trips during the morning peak hour, 129 trips during the evening peak hour, and 970 trips during the average weekday. Table 1 summarizes the estimated net trip generation of the site with the land use assumptions discussed above.

Table 1: Trip Generation Summary

Land Use	AM Peak Hour			PM Peak Hour			Weekday Total
	In	Out	Total	In	Out	Total	
General Light Industrial (All Vehicles)	129	18	147	18	111	129	970
General Light Industrial (Trucks)	1	1	2	1	1	2	50

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

Trip Distribution

The directional distribution of site trips to/from the project site is necessary to identify intersections to be included in the study area of the TIA. The following trip distribution was estimated based on the locations of likely trip destinations and locations of major transportation facilities in the site vicinity:

- Approximately 30 percent of site trips will travel to/from the south along SW 124th Avenue
- Approximately 20 percent of site trips will travel to/from the west along SW Tualatin-Sherwood Road
- Approximately 30 percent of site trips will travel to/from the east along SW Tualatin-Sherwood Road
- Approximately 20 percent of site trips will travel to/from the north along SW 124th Avenue

Study Intersections

The proposed project lies within the City of Tualatin's planning area boundary, but traffic is also anticipated to affect Washington County roadway facilities. Tualatin Development Code (TDC) 74.440 does not establish criteria for determining the study area traffic studies; the need for a traffic study and the study area are determined by city staff. However, staff have provided a general guideline of 60 peak hour trips and 500 daily trips through an intersection. Washington County (Resolution & Order 86-95) defines the impact area for developments as "those road links where site-generated traffic equals or exceeds 10% of existing average daily traffic" (ADT).

Using the trip generation and distribution and the criteria discussed above, up to three intersections meet the City or County thresholds, depending on the access scenario. We propose the following intersections for the study area:

1. SW Tualatin-Sherwood Road & SW 124th Avenue
2. SW 124th Avenue & SW Myslony Road
3. SW 124th Avenue & SW Herman Road
4. SW 124th Avenue & Site Access #1
5. SW 124th Avenue & Site Access #2

The specific calculations for the two access scenarios are attached to this memorandum.

Existing Traffic Volumes

The ongoing pandemic reduced traffic demand on most roadways due to policies on social distancing that have closed or limited business operations and reduced commuting as many people work from home. Most restrictions have been lifted and schools are open, and many roadways are nearing "normal" traffic conditions.

Two approaches could be used to estimate traffic volumes.

1. The first approach would collect new traffic count data at the study area intersections. Volumes could be compared with historical trends to determine if adjustments are necessary.
2. Follow an approach like the one used in preparing the TIA for the Tualatin Logistics Park to be located across SW 124th Avenue from the proposed development. That TIA relied on estimates of year 2021

traffic volumes from the approved TIA for the T-S Corporate Park located in the southwest corner of the SW Tualatin-Sherwood Road intersection with SW 124th Avenue. That TIA estimated 2021 background conditions by applying a 1.5 percent annual growth rate and adding trips generated by approved projects. Some minor adjustments were made to these projects based on data collected in November 2021.

Please advise us on the preferred methodology.

Traffic Volume Projections

To develop future volumes, we propose using a background growth rate of 2 percent per year plus the traffic volumes from approved projects. The projects to be included in the background condition are:

- T-S Corporate Park – Construction of this project is completed but not all spaces may be leased yet. If new counts are used, we will need to confirm the percentage of the project that is occupied and prorate the trip assignment accordingly. If historical volumes are used, then all traffic from this site would be included in the background condition.
- PGE Integrated Operations Center – This project was completed and is at least partially occupied. If new counts are used, we will need to confirm the percentage of the project this project is occupied and prorate the trip assignment accordingly. If historical volumes are used, then all traffic from this site would be included in the background condition.
- Tualatin Logistics Park– this project is planned to be constructed by the summer of 2023.

The Tualatin-Sherwood Road expansion project is a Washington County Capital Improvement Program (CIP) Project intends to expand the roadway to five lanes, improve bicycle and pedestrian facilities, improve storm drainage, and install street lighting. This project is currently applying for permits and starting the right-of-way acquisition process. Construction is planned to begin the Summer 2022, with a target completion of Fall 2025. Thus, this project will be assumed as part of the Background conditions.

The buildout analysis year for the 124th Avenue Business Park is proposed to be 2025, to include the completion of the Tualatin-Sherwood Road expansion project.

Summary of Scoping Proposal

Please review our proposed scope of analysis and confirm the following:

- Trip generation and distribution is acceptable.
- Confirm the study area intersections proposal is acceptable or identify what other intersections should be included in the TIA.
- Should existing traffic volumes developed by collecting new counts or using historical data (like the volumes from the Tualatin Logistics Park TIA)?
- Our background growth rate of 2 percent per year is acceptable.

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: General Light Industrial
Land Use Code: 110
Land Use Subcategory: All Sites
Setting/Location General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Variable Quantity: 199.17

AM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Split	88%	12%	
Trip Ends	129	18	147

PM PEAK HOUR

Trip Rate: 0.65

	Enter	Exit	Total
Directional Split	14%	86%	
Trip Ends	18	111	129

WEEKDAY

Trip Rate: 4.87

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	485	485	970

SATURDAY

Trip Rate: 0.69

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	69	69	138

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition

Land Use: General Light Industrial
Land Use Code: 110
Land Use Subcategory: All Sites
Setting/Location General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Truck
Variable Quantity: 199.17

WARNING: Variable Quantity is greater than Maximum Survey Size for Peak Hours

AM PEAK HOUR

Trip Rate: 0.01

	Enter	Exit	Total
Directional Split	60%	40%	
Trip Ends	1	1	2

PM PEAK HOUR

Trip Rate: 0.01

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	1	1	2

WEEKDAY

Trip Rate: 0.25

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	25	25	50

SATURDAY

Trip Rate: 0

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	NA	NA	NA

FULL ACCESS SCENARIO

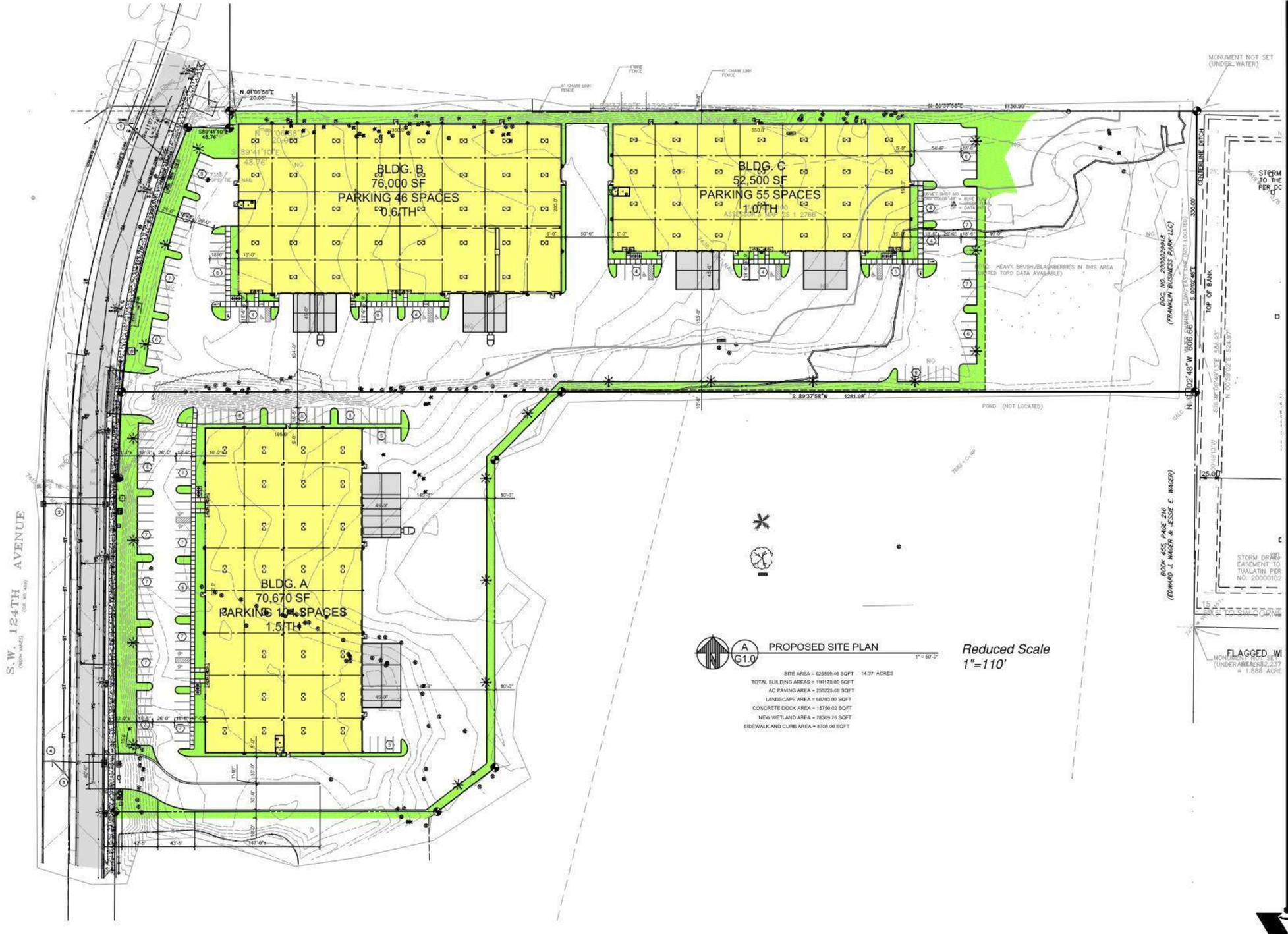
Trip Distribution - 124th Business Park	Distribution		AM Peak			PM Peak			Daily		
	In	Out	129	18	147	18	111	129	485	485	970
SW Tualatin-Sherwood Rd & SW Oregon St	20%	20%	26	4	30	4	22	26	97	97	194
SW Tualatin-Sherwood Rd & SW Cipole Rd	20%	20%	26	4	30	4	22	26	97	97	194
SW Tualatin-Sherwood Rd & SW 124th Ave	80%	80%	103	14	117	14	89	103	388	388	776
SW Tualatin-Sherwood Rd & SW 120th Ave	30%	30%	39	5	44	5	33	38	146	146	292
SW Tualatin-Sherwood Rd & SW 115th Ave	30%	30%	39	5	44	5	33	38	146	146	292
SW Tualatin-Sherwood Rd & SW Avery St/112th Ave	30%	30%	39	5	44	5	33	38	146	146	292
SW 124th Ave & SW Myslony Rd	20%	20%	26	4	30	4	22	26	97	97	194
SW 124th Ave & SW Herman Rd	20%	20%	26	4	30	4	22	26	97	97	194
SW Cipole Road & SW Herman Road	0%	0%	0	0	0	0	0	0	0	0	0

Trip Distribution - 124th Business Park	Distribution		AM Peak			PM Peak			Daily			2019	2019	%
	In	Out	129	18	147	18	111	129	485	485	970	WaCo	OTMS	AADT
SW Tualatin-Sherwood Rd														
West of SW Oregon St	13%	13%	17	2	19	2	14	16	63	63	126		23,746	1%
SW Oregon St to SW Cipole Rd	20%	20%	26	4	30	4	22	26	97	97	194			
SW Cipole Rd to SW 124th Ave	20%	20%	26	4	30	4	22	26	97	97	194		22,407	1%
SW 124th Ave to SW 120th Ave	30%	30%	39	5	44	5	33	38	146	146	292		29,914	1%
SW 120th Ave to SW 115th Ave	30%	30%	39	5	44	5	33	38	146	146	292			
SW 115th Ave to SW Avery/112th Ave	30%	30%	39	5	44	5	33	38	146	146	292			
East of SW Avery/112th Ave	18%	18%	23	3	26	3	20	23	87	87	174			
SW Oregon St														
South of SW Tualatin-Sherwood Rd	7%	7%	9	1	10	1	8	9	34	34	68	9,006		1%
SW 124th Avenue														
South of SW Tualatin to Sherwood Rd	30%	30%	39	5	44	5	33	38	146	146	292	7,761		4%
SW Tualatin-Sherwood Rd to Site Access	80%	80%	103	14	117	14	89	103	388	388	776			
Site Access to SW Myslony Rd	20%	20%	26	4	30	4	22	26	97	97	194			
SW Myslony Rd to SW Herman Rd	20%	20%	26	4	30	4	22	26	97	97	194		6,073	3%
North of SW Herman Rd	20%	20%	26	4	30	4	22	26	97	97	194			
SW Cipole Rd														
SW Tualatin-Sherwood Rd to SW Herman Rd	0%	0%	0	0	0	0	0	0	0	0	0	3,464		0%
North of SW Herman Rd	0%	0%	0	0	0	0	0	0	0	0	0			
SW Avery St/112th Ave														
South of SW Tualatin-Sherwood Rd	12%	12%	15	2	17	2	13	15	58	58	116			
North of SW Tualatin-Sherwood Rd	0%	0%	0	0	0	0	0	0	0	0	0			
SW Herman Rd														
SW Cipole Rd to SW 124th Ave	0%	0%	0	0	0	0	0	0	0	0	0			
SW 124th Ave to SW Teton Ave	0%	0%	0	0	0	0	0	0	0	0	0			

RIRO ACCESS SCENARIO

Trip Distribution - 124th Business Park	Distribution		AM Peak			PM Peak			Daily		
	In	Out	129	18	147	18	111	129	485	485	970
SW Tualatin-Sherwood Rd & SW Oregon St	20%	20%	26	4	30	4	22	26	97	97	194
SW Tualatin-Sherwood Rd & SW Cipole Rd	40%	35%	52	6	58	7	39	46	194	170	364
SW Tualatin-Sherwood Rd & SW 124th Ave	100%	30%	129	5	134	18	33	51	485	146	631
SW Tualatin-Sherwood Rd & SW 120th Ave	30%	15%	39	3	42	5	17	22	146	73	219
SW Tualatin-Sherwood Rd & SW 115th Ave	30%	15%	39	3	42	5	17	22	146	73	219
SW Tualatin-Sherwood Rd & SW Avery St/112th Ave	30%	40%	39	7	46	5	44	49	146	194	340
SW 124th Ave & SW Myslony Rd	20%	100%	26	18	44	4	111	115	97	485	582
SW 124th Ave & SW Herman Rd	20%	60%	26	11	37	4	67	71	97	291	388
SW Cipole Road & SW Herman Road	0%	35%	0	6	6	0	39	39	0	170	170

Trip Distribution - 124th Business Park	Distribution		AM Peak			PM Peak			Daily			2019	2019	%
	In	Out	129	18	147	18	111	129	485	485	970	WaCo	OTMS	AADT
SW Tualatin-Sherwood Rd														
West of SW Oregon St	13%	13%	17	2	19	2	14	16	63	63	126		23,746	1%
SW Oregon St to SW Cipole Rd	20%	20%	26	4	30	4	22	26	97	97	194			
SW Cipole Rd to SW 124th Ave	40%	15%	52	3	55	7	17	24	194	73	267		22,407	1%
SW 124th Ave to SW 120th Ave	30%	15%	39	3	42	5	17	22	146	73	219		29,914	1%
SW 120th Ave to SW 115th Ave	30%	15%	39	3	42	5	17	22	146	73	219			
SW 115th Ave to SW Avery/112th Ave	30%	15%	39	3	42	5	17	22	146	73	219			
East of SW Avery/112th Ave	18%	13%	23	2	25	3	14	17	87	63	150			
SW Oregon St														
South of SW Tualatin-Sherwood Rd	7%	7%	9	1	10	1	8	9	34	34	68	9,006		1%
SW 124th Avenue														
South of SW Tualatin to Sherwood Rd	30%	30%	39	5	44	5	33	38	146	146	292	7,761		4%
SW Tualatin-Sherwood Rd to Site Access	100%	0%	129	0	129	18	0	18	485	0	485			
Site Access to SW Myslony Rd	0%	100%	0	18	18	0	111	111	0	485	485			
SW Myslony Rd to SW Herman Rd	0%	60%	0	11	11	0	67	67	0	291	291		6,073	5%
North of SW Herman Rd	20%	20%	26	4	30	4	22	26	97	97	194			
SW Cipole Rd														
SW Tualatin-Sherwood Rd to SW Herman Rd	0%	35%	0	6	6	0	39	39	0	170	170	3,464		5%
North of SW Herman Rd	0%	0%	0	0	0	0	0	0	0	0	0			
SW Avery St/112th Ave														
South of SW Tualatin-Sherwood Rd	12%	12%	15	2	17	2	13	15	58	58	116			
North of SW Tualatin-Sherwood Rd	0%	0%	0	0	0	0	0	0	0	0	0			
SW Herman Rd														
SW Cipole Rd to SW 124th Ave	0%	35%	0	6	6	0	39	39	0	170	170			
SW 124th Ave to SW Teton Ave	0%	5%	0	1	1	0	6	6	0	24	24			



A G1.0 PROPOSED SITE PLAN
1" = 50'-0"

Reduced Scale
1"=110'

SITE AREA = 625899.46 SQFT 14.37 ACRES
TOTAL BUILDING AREAS = 199170.00 SQFT
AC PAVING AREA = 255225.68 SQFT
LANDSCAPE AREA = 68700.00 SQFT
CONCRETE DOCK AREA = 15750.02 SQFT
NEW WETLAND AREA = 78305.76 SQFT
SIDEWALK AND CURB AREA = 8708.00 SQFT

VLMK
ENGINEERING + DESIGN
3933 S Kelly Avenue
Portland, Oregon 97239
503.222.4453
VLMK.COM

PROJECT NAME
124th AVENUE
BUSINESS PARK

124th AVENUE
TUALATIN, OREGON

REVISIONS

	DATE	DESCRIPTION

DATE
DECEMBER 2021

SCALE	PROJ. NO.
AS NOTED	20200748
DRAWN	CHECKED
KAN	HGK

PROPOSED
SITE PLAN

G1.0

NOT FOR CONSTRUCTION

G:\Acad\2020\20200748\Drawings\100 G1.0 Site Plan.dwg4/5/2022 11:23 AM

DKS 720 SW WASHINGTON STREET, SUITE 500, PORTLAND, OR 97205 • 503.243.3500 • DKSASSOCIATES.COM

DATE: May 16, 2022

REQUEST: 124th Avenue Business Park Transportation Impact Study Scope Review

TASK NO: Tualatin On-Call - Task 6 (P#21208-000-006)

REVIEWER: Randy Johnson, PE, PTOE | DKS Associates

DKS Associates has reviewed the transportation impact study (TIS) scope and site plan for the proposed 124th Avenue Business Park development. The proposed 124th Business Park is located east of SW 124th Avenue, north and south of other commercial warehouse properties, on Tax Lots 2S127BB 00100, and 00200. The proposed development will include the construction of three industrial buildings, encompassing a total of approximately 199,170 square feet.

TIS SCOPE REVIEW

Key comments related to the proposed project analysis scope:

- The trip generation is acceptable as proposed
- The Trip Distribution looks good but recommend changing the 30% east along T-S Rd to 25% and adding 5% east on Herman as it is common to take Herman Road to Tualatin Road to Lower Boones Ferry to access I-5.
- Add study intersections Cipole Road/Herman Road and Tualatin-Sherwood Road/Cipole Road for the RIRO scenario
- Collect new count data. We would like to see a comparison of available historic counts with the new counts before deciding if we need to make any COVID related adjustments.
- 2% growth rate is acceptable

Key comments related to the proposed project site plan:

- Per the Tualatin Development Code (TDC) [Ch 75.140 Sec.6c], the access proposed 800 feet south of Myslony Street is the planned location for this development. The City requires this access to be right-in/right-out given the functional class, speed, volume and truck percentage of 124th Avenue.
- The City recommends the secondary access conform to the TDC by providing access to Myslony Street via an access easement or construction of a driveway to Cimino Street. Either location would provide left-in and left-out for the proposed development via Cimino Street or Myslony Street.

Appendix B – Traffic Data

Turning Movement Counts

Speed Data

In-Process Projects

Tualatin-Sherwood Road Improvements

Count Comparison - AM Peak Hour

DATE TIME	Year	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TEV
Cipole & Herman	Est.	86	1	97	2	0	0	2	168	42	39	115	1	553
	2022	51	0	86	0	0	0	0	54	89	134	173	0	587
	2021	55	1	62	2	0	0	2	169	40	39	74	1	445
		55	1	86	2	0	0	2	169	89	134	173	1	
TSR & Cipole	Est.	4	0	3	48	2	31	112	1094	16	15	723	77	2125
	2022	1	1	7	53	0	54	85	854	2	13	698	89	1857
	2019	0	0	0	63	0	124	37	856	0	0	1079	14	2173
		1	1	7	63	0	124	85	856	2	13	1079	89	
124 & Herman	Est.	38	314	63	176	375	64	31	223	56	53	155	39	1587
	2022	41	225	40	104	425	70	17	136	28	26	81	30	1223
	2017	19	128	31	163	181	59	28	207	32	25	143	36	1052
		41	225	40	163	425	70	28	207	32	26	143	36	
124 & Myslony	Est.	17	393	39	43	417	24	4	1	3	29	1	18	989
	2022	1	268	36	88	391	2	0	1	2	9	0	29	827
	2018	16	178	34	28	228	23	4	1	3	25	1	16	557
		16	268	36	88	391	23	4	1	3	25	1	29	
TSR & 124	Est.	177	218	90	170	212	57	70	963	112	99	579	193	2940
	2022	162	200	50	103	226	58	76	698	97	26	564	51	2311
	2019	131	179	54	143	134	45	53	839	31	11	546	108	2274
		162	200	54	143	226	58	76	839	97	26	564	108	
TSR & 124	Est.	177	218	90	170	212	57	70	963	112	99	579	193	2940
	2022	162	200	50	103	226	58	76	698	97	26	564	51	2311
	2019	109	180	58	131	138	47	60	854	50	16	516	95	2254
		162	200	58	131	226	58	76	854	97	26	564	95	

Count Comparison - PM Peak Hour

DATE	TIME	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TEV
Cipole & Herman		Est.	48	0	62	1	0	0	0	119	73	117	245	1	666
		2022	51	0	98	0	0	0	0	130	72	58	54	0	463
		2021	45	0	61	1	0	0	0	102	63	100	240	1	613
			51	0	98	1	0	0	0	130	72	100	240	1	
TSR & Cipole		Est.	14	2	11	64	0	126	38	982	4	4	1227	14	2486
		2022	1	0	4	110	1	176	62	870	0	3	893	55	2175
		2019	0	0	0	63	0	124	37	856	0	0	1079	14	2173
			1	0	4	110	1	176	62	870	0	3	1079	55	
124 & Herman		Est.	15	346	65	95	403	29	84	182	32	149	328	176	1904
		2022	35	458	27	59	278	38	77	116	45	95	196	134	1558
		2017	10	200	45	88	260	26	77	168	22	100	304	163	1463
			35	458	45	88	278	38	77	168	45	100	304	163	
124 & Myslony		Est.	0	379	11	8	574	1	17	1	19	64	0	31	1105
		2022	0	332	11	39	374	0	3	2	5	38	0	178	982
		2018	0	198	11	6	400	1	16	1	18	50	0	24	725
			0	332	11	39	400	1	16	2	18	50	0	178	
TSR & 124		Est.	134	205	120	199	288	205	51	848	158	74	906	120	3308
		2022	123	208	37	96	228	130	65	712	193	31	690	55	2568
		2019	90	112	8	165	184	115	57	746	108	20	808	79	2492
			123	208	37	165	228	130	65	746	193	31	808	79	
TSR & 124		Est.	134	205	120	199	288	205	51	848	158	74	906	120	3308
		2022	123	208	37	96	228	130	65	712	193	31	690	55	2568
		2019	109	180	58	131	138	47	60	854	50	16	816	95	2554
			123	208	58	131	228	130	65	854	193	31	816	95	

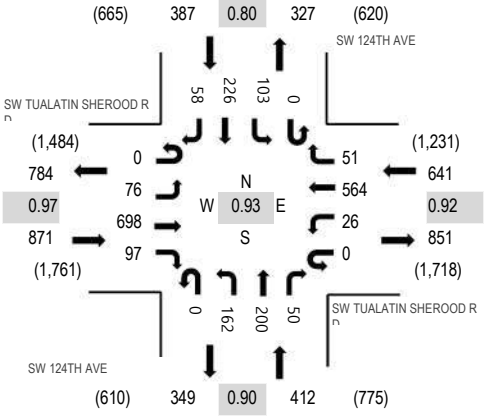
Notes: Est. = Volumes for the Tualatin Logistics Park TIA (December 15, 2021) which were developed from historical volumes when the Covid19 pandemic was still impacting traffic counts.
2022 = Counts collected on May 24, 2022.
2017-2021 = Historical count data collected for other projects.

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

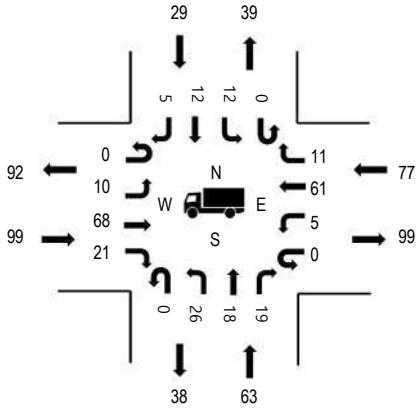
Location: 1 SW 124TH AVE & SW TUALATIN SHEROOD RD AM
Date: Tuesday, May 24, 2022
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

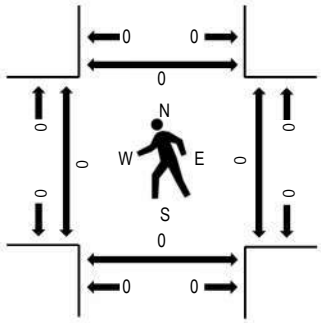
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	11.4%	0.97
WB	12.0%	0.92
NB	15.3%	0.90
SB	7.5%	0.80
All	11.6%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	SW TUALATIN SHEROOD RD Eastbound				SW TUALATIN SHEROOD RD Westbound				SW 124TH AVE Northbound				SW 124TH AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	2	65	12	0	2	37	2	0	17	12	4	0	7	3	3	166	2,193
7:05 AM	0	5	55	5	0	5	32	4	0	9	12	3	0	5	13	3	151	2,214
7:10 AM	0	5	68	11	0	3	29	9	0	15	7	4	0	10	5	5	171	2,258
7:15 AM	0	8	67	2	0	3	33	3	0	10	23	3	0	4	13	1	170	2,270
7:20 AM	0	7	56	9	0	4	43	3	0	16	8	3	0	4	3	3	159	2,272
7:25 AM	0	9	65	4	0	3	42	6	0	9	17	3	0	7	12	4	181	2,293
7:30 AM	0	1	72	4	0	1	50	6	0	14	19	6	0	10	14	4	201	2,301
7:35 AM	0	8	62	10	0	1	39	5	0	11	17	4	0	6	15	6	184	2,291
7:40 AM	0	8	64	6	0	5	54	5	0	13	7	3	0	7	8	6	186	2,308
7:45 AM	0	7	58	9	0	4	45	3	0	14	24	5	0	6	18	9	202	2,311
7:50 AM	0	9	69	10	0	0	52	4	0	13	10	7	0	14	16	6	210	2,301
7:55 AM	0	8	63	7	0	6	50	4	0	10	22	7	0	10	15	10	212	2,267
8:00 AM	0	4	64	2	0	2	55	4	0	16	23	3	0	5	7	2	187	2,239
8:05 AM	0	7	62	7	0	1	45	8	0	16	14	3	0	10	16	6	195	
8:10 AM	0	6	45	6	0	2	52	5	0	18	20	3	0	13	8	5	183	
8:15 AM	0	7	63	12	0	1	38	3	0	11	11	6	0	7	11	2	172	
8:20 AM	0	3	53	8	0	3	42	5	0	13	18	6	0	9	19	1	180	
8:25 AM	0	6	60	8	0	1	43	4	0	11	14	0	0	6	31	5	189	
8:30 AM	0	6	52	5	0	0	43	3	0	15	17	4	0	10	30	6	191	
8:35 AM	0	5	55	16	0	3	52	5	0	11	13	4	0	5	28	4	201	
8:40 AM	0	8	54	7	0	3	47	3	0	14	14	2	0	8	27	2	189	
8:45 AM	0	6	58	10	0	0	38	5	0	8	15	7	0	12	28	5	192	
8:50 AM	0	5	45	11	0	4	39	6	0	18	16	2	0	10	17	3	176	
8:55 AM	0	4	54	7	0	1	63	5	0	13	13	2	0	10	7	5	184	
Count Total	0	144	1,429	188	0	58	1,063	110	0	315	366	94	0	195	364	106	4,432	
Peak Hour	0	76	698	97	0	26	564	51	0	162	200	50	0	103	226	58	2,311	

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

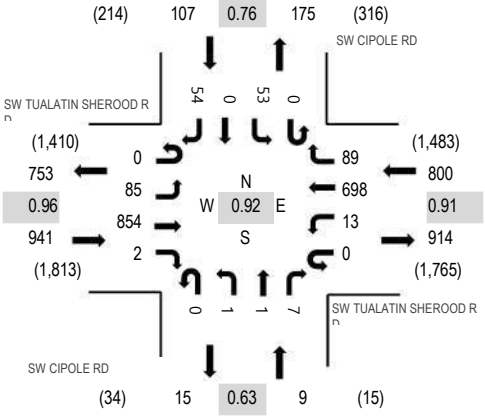
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	8	2	3	3	16	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	11	2	4	7	24	7:05 AM	0	0	0	0	0	7:05 AM	0	1	0	0	1
7:10 AM	17	3	4	2	26	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	9	7	3	2	21	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	8	6	8	2	24	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	8	4	5	5	22	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	4	4	5	4	17	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	8	3	2	4	17	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	8	6	7	1	22	7:40 AM	0	0	0	0	0	7:40 AM	0	0	1	0	1
7:45 AM	9	5	8	3	25	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	6	6	6	2	20	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	7	4	9	2	22	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	10	5	4	1	20	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	9	4	8	2	23	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	14	8	6	4	32	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	9	6	3	0	18	8:15 AM	1	0	0	0	1	8:15 AM	0	0	0	0	0
8:20 AM	4	10	7	4	25	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	6	2	8	4	20	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	9	7	7	3	26	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	8	4	4	2	18	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	8	2	7	2	19	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	6	6	7	6	25	8:45 AM	1	0	0	0	1	8:45 AM	0	0	0	0	0
8:50 AM	7	3	4	2	16	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	7	1	14	2	24	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	1	1
Count Total	200	110	143	69	522	Count Total	2	0	0	0	2	Count Total	0	1	1	1	3
Peak Hour	99	63	77	29	268	Peak Hour	1	0	0	0	1	Peak Hour	0	0	0	0	0

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

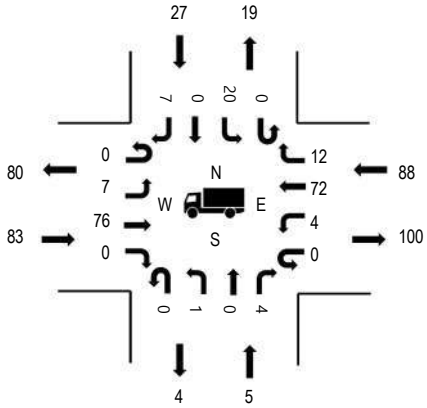
Location: 2 SW CIPOLE RD & SW TUALATIN SHEROOD RD AM
Date: Tuesday, May 24, 2022
Peak Hour: 07:20 AM - 08:20 AM
Peak 15-Minutes: 07:50 AM - 08:05 AM

Peak Hour

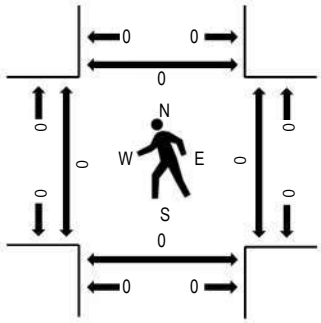
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	8.8%	0.96
WB	11.0%	0.91
NB	55.6%	0.63
SB	25.2%	0.76
All	10.9%	0.92

Traffic Counts - Motorized Vehicles

Interval Start Time	SW TUALATIN SHEROOD RD Eastbound				SW TUALATIN SHEROOD RD Westbound				SW CIPOLE RD Northbound				SW CIPOLE RD Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	4	84	0	0	2	47	8	0	0	0	0	0	1	0	4	150	1,808
7:05 AM	0	6	61	1	0	2	35	6	0	0	0	0	0	7	0	2	120	1,807
7:10 AM	0	11	79	0	0	1	43	8	0	0	0	0	0	3	0	3	148	1,833
7:15 AM	0	9	67	1	0	4	30	8	0	1	0	0	0	1	0	5	126	1,842
7:20 AM	0	9	79	0	0	1	52	8	0	0	0	1	0	3	0	1	154	1,857
7:25 AM	0	4	71	0	0	2	48	5	0	0	0	0	0	2	0	5	137	1,842
7:30 AM	0	6	77	1	0	1	57	16	0	0	0	2	0	1	0	5	166	1,837
7:35 AM	0	4	72	0	0	1	47	5	0	0	0	0	0	6	0	4	139	1,821
7:40 AM	0	6	76	0	0	2	72	5	0	0	0	0	0	4	0	3	168	1,835
7:45 AM	0	8	58	0	0	1	53	8	0	0	0	0	0	8	0	7	143	1,806
7:50 AM	0	10	90	0	0	0	75	6	0	0	0	1	0	3	0	7	192	1,797
7:55 AM	0	15	69	1	0	0	54	10	0	1	0	0	0	7	0	8	165	1,750
8:00 AM	0	5	62	0	0	1	65	10	0	0	0	0	0	1	0	5	149	1,717
8:05 AM	0	6	66	0	0	2	57	4	0	0	0	2	0	5	0	4	146	
8:10 AM	0	7	63	0	0	1	69	6	0	0	0	1	0	7	0	3	157	
8:15 AM	0	5	71	0	0	1	49	6	0	0	1	0	0	6	0	2	141	
8:20 AM	0	7	68	0	0	1	50	4	0	0	0	1	0	3	0	5	139	
8:25 AM	0	4	66	0	0	0	48	4	0	0	0	0	0	4	0	6	132	
8:30 AM	0	4	65	0	0	1	62	4	0	0	0	0	0	8	0	6	150	
8:35 AM	0	4	67	0	0	0	67	7	0	0	0	0	0	4	0	4	153	
8:40 AM	0	12	62	1	0	0	55	3	0	0	0	0	0	4	0	2	139	
8:45 AM	0	8	62	0	0	1	46	2	0	0	0	2	0	7	0	6	134	
8:50 AM	0	1	66	3	0	0	61	4	0	0	0	2	0	3	1	4	145	
8:55 AM	0	4	45	0	0	0	60	9	0	0	0	0	0	9	0	5	132	
Count Total	0	159	1,646	8	0	25	1,302	156	0	2	1	12	0	107	1	106	3,525	
Peak Hour	0	85	854	2	0	13	698	89	0	1	1	7	0	53	0	54	1,857	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	8	0	5	2	15	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	10	0	3	7	20	7:05 AM	0	0	0	0	0	7:05 AM	0	1	0	0	1
7:10 AM	12	0	4	2	18	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	9	1	4	2	16	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	6	1	9	0	16	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	8	0	7	1	16	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	3	1	4	1	9	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	9	0	7	3	19	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	5	0	8	3	16	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	6	0	9	3	18	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	7	0	8	3	18	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	4	1	9	5	19	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	11	0	7	0	18	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	5	2	8	3	18	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	11	0	8	4	23	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	8	0	4	1	13	8:15 AM	1	0	0	0	1	8:15 AM	0	0	0	0	0
8:20 AM	4	1	8	0	13	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	8	0	6	2	16	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	8	0	11	3	22	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	5	0	4	1	10	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	7	0	5	3	15	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	4	1	10	3	18	8:45 AM	1	0	0	0	1	8:45 AM	0	0	0	0	0
8:50 AM	7	0	6	1	14	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	7	0	11	3	21	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	172	8	165	56	401	Count Total	2	0	0	0	2	Count Total	0	1	0	0	1
Peak Hour	83	5	88	27	203	Peak Hour	1	0	0	0	1	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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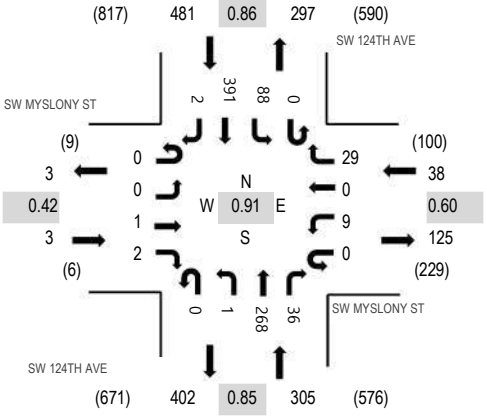
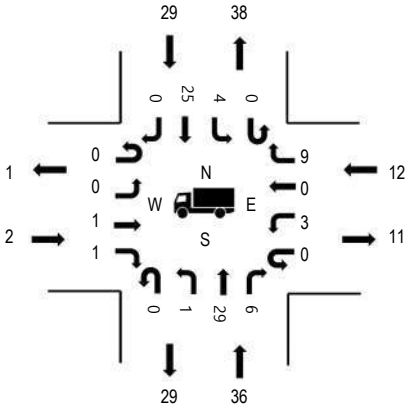
Location: 3 SW 124TH AVE & SW MYSLONY ST AM
Date: Tuesday, May 24, 2022
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour

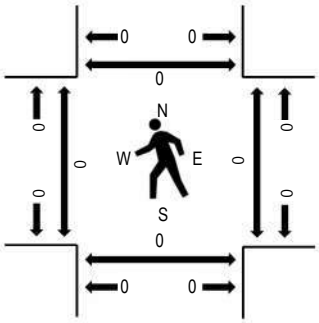
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	66.7%	0.42
WB	31.6%	0.60
NB	11.8%	0.85
SB	6.0%	0.86
All	9.6%	0.91

Traffic Counts - Motorized Vehicles

Interval Start Time	SW MYSLONY ST Eastbound				SW MYSLONY ST Westbound				SW 124TH AVE Northbound				SW 124TH AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	0	0	0	0	2	0	4	0	0	19	2	0	14	17	0	58	712
7:05 AM	0	0	0	0	0	4	0	1	0	0	17	0	0	5	17	0	44	718
7:10 AM	0	0	0	0	0	0	2	2	0	0	20	2	0	4	16	1	47	727
7:15 AM	0	0	0	0	0	0	0	2	0	0	26	3	0	6	13	0	50	754
7:20 AM	0	0	0	0	0	1	1	4	0	0	14	3	0	9	24	0	56	761
7:25 AM	0	2	0	0	0	2	0	3	0	0	21	6	0	7	12	1	54	767
7:30 AM	0	0	0	0	0	1	0	2	0	0	23	3	0	2	28	1	60	786
7:35 AM	0	0	0	1	0	1	0	4	0	0	22	2	0	6	28	0	64	793
7:40 AM	0	0	0	0	0	1	0	4	0	0	21	2	0	11	23	0	62	808
7:45 AM	0	0	1	0	0	0	0	3	0	0	12	4	0	10	34	0	64	827
7:50 AM	0	0	0	0	0	0	0	1	0	0	26	1	0	9	42	0	79	822
7:55 AM	0	0	0	0	0	1	0	4	0	1	20	3	0	18	27	0	74	811
8:00 AM	0	0	0	0	0	1	0	0	0	0	22	8	0	8	24	1	64	787
8:05 AM	0	0	0	0	0	0	0	2	0	0	30	1	0	5	15	0	53	
8:10 AM	0	0	0	1	0	2	0	4	0	0	27	3	0	7	30	0	74	
8:15 AM	0	0	0	0	0	0	0	4	0	0	19	3	0	7	24	0	57	
8:20 AM	0	0	0	0	0	0	0	2	0	0	19	4	0	8	29	0	62	
8:25 AM	0	0	0	0	0	1	0	1	0	0	22	2	0	3	44	0	73	
8:30 AM	0	0	0	0	0	2	0	1	0	0	23	3	0	5	32	1	67	
8:35 AM	0	0	0	0	0	2	0	5	0	0	18	4	0	5	45	0	79	
8:40 AM	0	0	0	1	0	0	0	2	0	0	30	0	0	3	45	0	81	
8:45 AM	0	0	0	0	0	0	0	5	0	0	22	0	0	7	25	0	59	
8:50 AM	0	0	0	0	0	2	0	9	0	0	24	0	0	3	30	0	68	
8:55 AM	0	0	0	0	0	0	0	5	0	0	17	2	0	5	21	0	50	
Count Total	0	2	1	3	0	23	3	74	0	1	514	61	0	167	645	5	1,499	
Peak Hour	0	0	1	2	0	9	0	29	0	1	268	36	0	88	391	2	827	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	2	0	6	8	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	1	1	2	4	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	4	3	3	10	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	3	0	2	5	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	3	2	4	9	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	2	5	0	4	11	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	5	1	3	9	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	1	0	3	2	6	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	5	2	4	11	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	1	1	3	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	2	0	3	5	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	1	2	3	6	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	3	1	1	5	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	5	1	1	7	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	3	3	3	9	8:10 AM	0	0	0	1	1	8:10 AM	0	0	0	0	0
8:15 AM	0	2	1	2	5	8:15 AM	0	1	0	0	1	8:15 AM	0	0	0	0	0
8:20 AM	0	5	0	3	8	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	4	1	5	10	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	5	1	1	7	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	3	1	2	6	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	1	3	0	4	8	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	4	2	4	10	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	2	2	3	7	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	2	3	1	6	8:55 AM	0	0	0	0	0	8:55 AM	0	1	0	0	1
Count Total	5	72	31	67	175	Count Total	0	1	0	1	2	Count Total	0	1	0	0	1
Peak Hour	2	36	12	29	79	Peak Hour	0	1	0	1	2	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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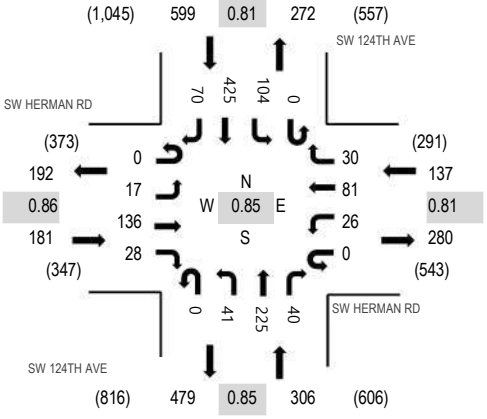
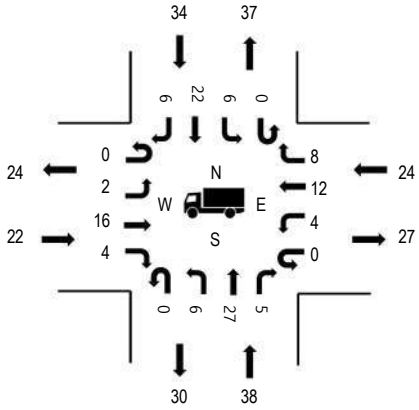
Location: 4 SW 124TH AVE & SW HERMAN RD AM
Date: Tuesday, May 24, 2022
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

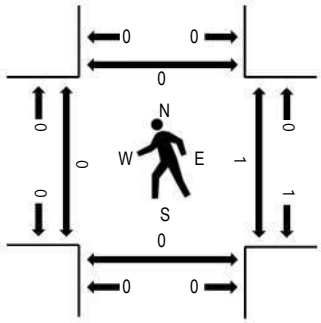
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	12.2%	0.86
WB	17.5%	0.81
NB	12.4%	0.85
SB	5.7%	0.81
All	9.6%	0.85

Traffic Counts - Motorized Vehicles

Interval Start Time	SW HERMAN RD Eastbound				SW HERMAN RD Westbound				SW 124TH AVE Northbound				SW 124TH AVE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	4	9	1	0	2	10	3	0	5	20	5	0	10	29	2	100	1,177
7:05 AM	0	3	6	0	0	3	3	3	0	1	11	1	0	5	21	4	61	1,176
7:10 AM	0	7	10	2	0	1	8	3	0	4	13	3	0	18	19	3	91	1,196
7:15 AM	0	2	11	0	0	2	14	0	0	2	19	3	0	4	15	3	75	1,196
7:20 AM	0	5	11	2	0	1	8	1	0	4	22	4	0	11	28	5	102	1,202
7:25 AM	0	2	14	2	0	4	7	1	0	3	19	4	0	14	15	4	89	1,200
7:30 AM	0	2	8	4	0	4	12	4	0	7	15	2	0	8	28	4	98	1,212
7:35 AM	0	1	16	2	0	2	8	1	0	2	18	4	0	14	25	4	97	1,207
7:40 AM	0	0	14	5	0	2	11	1	0	1	26	3	0	8	30	5	106	1,213
7:45 AM	0	1	12	0	0	3	10	4	0	4	14	1	0	11	40	10	110	1,223
7:50 AM	0	2	17	2	0	4	10	3	0	5	22	4	0	10	43	9	131	1,195
7:55 AM	0	1	16	3	0	2	14	3	0	5	8	2	0	13	39	11	117	1,157
8:00 AM	0	0	14	3	0	3	7	2	0	4	20	7	0	5	27	7	99	1,112
8:05 AM	0	2	5	2	0	0	5	4	0	7	21	5	0	7	18	5	81	
8:10 AM	0	0	4	0	0	1	7	0	0	2	24	4	0	9	36	4	91	
8:15 AM	0	1	12	3	0	3	5	0	0	3	18	1	0	5	23	7	81	
8:20 AM	0	3	11	4	0	1	5	4	0	4	18	1	0	11	35	3	100	
8:25 AM	0	4	12	5	0	4	2	0	0	2	18	3	0	5	42	4	101	
8:30 AM	0	1	10	3	0	1	8	4	0	1	18	2	0	10	34	1	93	
8:35 AM	0	1	8	1	0	2	1	4	0	1	22	2	0	14	43	4	103	
8:40 AM	0	1	15	2	0	2	7	2	0	3	22	8	0	4	45	5	116	
8:45 AM	0	3	6	1	0	4	9	0	0	1	25	0	0	7	24	2	82	
8:50 AM	0	0	8	1	0	2	9	1	0	2	25	1	0	12	29	3	93	
8:55 AM	0	1	1	2	0	1	6	3	0	3	21	1	0	7	24	2	72	
Count Total	0	47	250	50	0	54	186	51	0	76	459	71	0	222	712	111	2,289	
Peak Hour	0	17	136	28	0	26	81	30	0	41	225	40	0	104	425	70	1,223	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	7	2	2	6	17	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	2	1	2	4	9	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	4	4	4	13	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	1	3	2	2	8	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	2	7	2	3	14	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	4	4	2	10	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	1	4	0	3	8	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	4	2	1	1	8	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	2	4	2	3	11	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	4	1	6	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	1	2	1	2	6	7:50 AM	0	0	0	0	0	7:50 AM	0	0	1	0	1
7:55 AM	4	1	0	3	8	7:55 AM	0	0	1	0	1	7:55 AM	0	0	0	0	0
8:00 AM	2	3	2	1	8	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	7	1	2	10	8:05 AM	1	0	0	0	1	8:05 AM	0	0	0	0	0
8:10 AM	1	5	2	4	12	8:10 AM	0	0	1	0	1	8:10 AM	0	0	0	0	0
8:15 AM	2	1	3	6	12	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	2	4	2	7	15	8:20 AM	0	1	0	0	1	8:20 AM	0	0	0	0	0
8:25 AM	6	5	1	3	15	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	1	3	4	1	9	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	4	2	1	7	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	2	3	2	3	10	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	1	6	4	2	13	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	2	3	2	5	12	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	5	3	3	11	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	45	83	52	72	252	Count Total	1	1	2	0	4	Count Total	0	0	1	0	1
Peak Hour	22	38	24	34	118	Peak Hour	1	1	2	0	4	Peak Hour	0	0	1	0	1

ALL TRAFFIC DATA SERVICES
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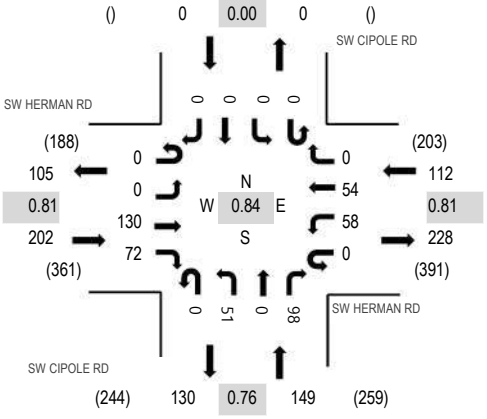
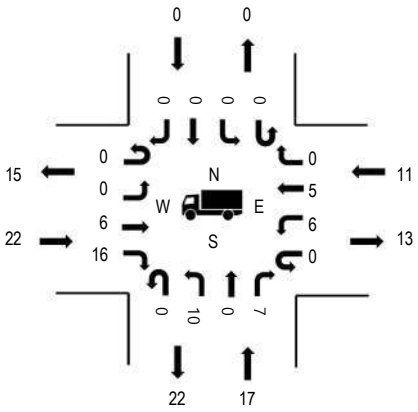
Location: 5 SW CIPOLE RD & SW HERMAN RD AM
Date: Tuesday, May 24, 2022
Peak Hour: 07:10 AM - 08:10 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

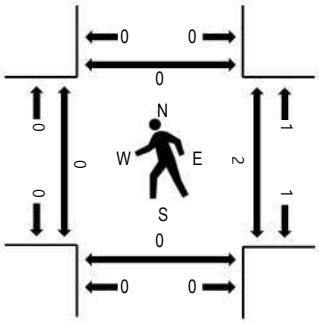
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	10.9%	0.81
WB	9.8%	0.81
NB	11.4%	0.76
SB	0.0%	0.00
All	10.8%	0.84

Traffic Counts - Motorized Vehicles

Interval Start Time	SW HERMAN RD Eastbound				SW HERMAN RD Westbound				SW CIPOLE RD Northbound				SW CIPOLE RD Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	0	13	6	0	7	3	0	0	4	0	4	0	0	0	0	37	461
7:05 AM	0	0	10	8	0	2	3	0	0	2	0	3	0	0	0	0	28	462
7:10 AM	0	0	10	2	0	2	5	0	0	9	0	10	0	0	0	0	38	463
7:15 AM	0	0	8	6	0	6	4	0	0	5	0	9	0	0	0	0	38	455
7:20 AM	0	0	8	5	0	4	6	0	0	3	0	13	0	0	0	0	39	453
7:25 AM	0	0	13	5	0	4	2	0	0	2	0	7	0	0	0	0	33	447
7:30 AM	0	0	10	5	0	2	6	0	0	5	0	9	0	0	0	0	37	443
7:35 AM	0	0	13	5	0	7	4	0	0	3	0	6	0	0	0	0	38	439
7:40 AM	0	0	13	6	0	6	4	0	0	2	0	5	0	0	0	0	36	431
7:45 AM	0	0	12	6	0	11	3	0	0	4	0	6	0	0	0	0	42	429
7:50 AM	0	0	15	7	0	5	7	0	0	5	0	11	0	0	0	0	50	412
7:55 AM	0	0	12	13	0	5	3	0	0	4	0	8	0	0	0	0	45	385
8:00 AM	0	0	11	5	0	5	4	0	0	4	0	9	0	0	0	0	38	362
8:05 AM	0	0	5	7	0	1	6	0	0	5	0	5	0	0	0	0	29	
8:10 AM	0	0	5	5	0	2	6	0	0	3	0	9	0	0	0	0	30	
8:15 AM	0	0	11	3	0	7	6	0	0	1	0	8	0	0	0	0	36	
8:20 AM	0	0	10	3	0	2	5	0	0	2	0	11	0	0	0	0	33	
8:25 AM	0	0	10	8	0	2	2	0	0	3	0	4	0	0	0	0	29	
8:30 AM	0	0	7	6	0	7	5	0	0	1	0	7	0	0	0	0	33	
8:35 AM	0	0	7	10	0	2	1	0	0	3	0	7	0	0	0	0	30	
8:40 AM	0	0	7	6	0	3	3	0	0	4	0	11	0	0	0	0	34	
8:45 AM	0	0	1	3	0	5	5	0	0	7	0	4	0	0	0	0	25	
8:50 AM	0	0	8	5	0	2	5	0	0	2	0	1	0	0	0	0	23	
8:55 AM	0	0	2	5	0	5	1	0	0	6	0	3	0	0	0	0	22	
Count Total	0	0	221	140	0	104	99	0	0	89	0	170	0	0	0	0	823	
Peak Hour	0	0	130	72	0	58	54	0	0	51	0	98	0	0	0	0	463	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	4	1	2	0	7	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	6	0	1	0	7	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	2	0	0	3	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	3	1	1	0	5	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	1	0	2	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	1	2	1	0	4	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	2	2	0	0	4	7:30 AM	0	0	1	0	1	7:30 AM	0	0	0	0	0
7:35 AM	4	3	1	0	8	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	4	0	1	0	5	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	2	0	0	2	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	2	1	1	0	4	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	1	1	2	0	4	7:55 AM	0	0	1	0	1	7:55 AM	0	0	0	0	0
8:00 AM	2	1	1	0	4	8:00 AM	0	0	0	0	0	8:00 AM	0	0	1	0	1
8:05 AM	2	1	2	0	5	8:05 AM	0	1	0	0	1	8:05 AM	0	0	1	0	1
8:10 AM	1	0	4	0	5	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	2	4	0	6	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	2	1	1	0	4	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	3	4	2	0	9	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	2	0	2	0	4	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	7	0	1	0	8	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	6	3	2	0	11	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	2	0	0	0	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	1	1	2	0	4	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	3	3	0	6	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	56	32	35	0	123	Count Total	0	1	2	0	3	Count Total	0	0	2	0	2
Peak Hour	22	17	11	0	50	Peak Hour	0	1	2	0	3	Peak Hour	0	0	2	0	2

ALL TRAFFIC DATA SERVICES
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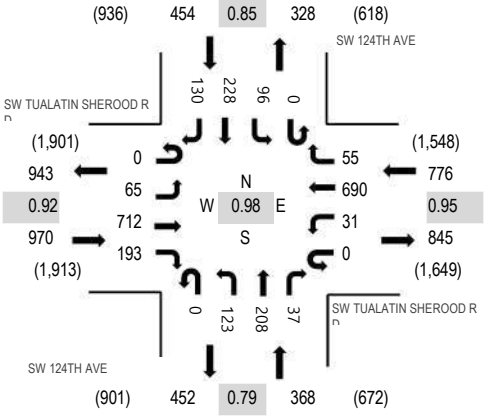
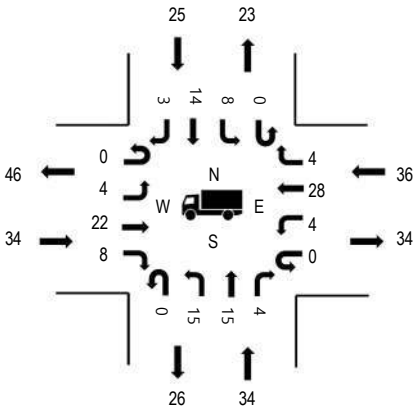
Location: 1 SW 124TH AVE & SW TUALATIN SHEROOD RD PM
Date: Tuesday, May 24, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:35 PM - 04:50 PM

Peak Hour

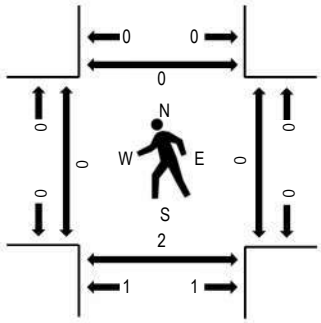
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	3.5%	0.92
WB	4.6%	0.95
NB	9.2%	0.79
SB	5.5%	0.85
All	5.0%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	SW TUALATIN SHEROOD RD Eastbound				SW TUALATIN SHEROOD RD Westbound				SW 124TH AVE Northbound				SW 124TH 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	55	16	0	1	53	6	0	15	32	5	0	6	25	9	223	2,568
4:05 PM	0	9	50	12	0	3	61	5	0	8	27	2	0	8	20	12	217	2,557
4:10 PM	0	7	55	14	0	2	51	3	0	3	24	1	0	7	17	19	203	2,550
4:15 PM	0	6	58	19	0	2	57	4	0	17	17	1	0	10	16	8	215	2,555
4:20 PM	0	7	67	15	0	4	70	2	0	7	19	9	0	2	10	7	219	2,563
4:25 PM	0	4	54	15	0	1	56	4	0	7	9	3	0	6	26	12	197	2,564
4:30 PM	0	8	58	16	0	4	51	5	0	14	16	1	0	8	20	9	210	2,564
4:35 PM	0	6	52	15	0	3	51	7	0	8	16	3	0	14	29	12	216	2,548
4:40 PM	0	4	65	17	0	3	55	8	0	12	17	7	0	9	19	12	228	2,543
4:45 PM	0	7	73	18	0	5	66	4	0	13	4	1	0	3	9	11	214	2,527
4:50 PM	0	1	56	23	0	0	64	0	0	7	16	1	0	9	18	7	202	2,537
4:55 PM	0	6	69	13	0	3	55	7	0	12	11	3	0	14	19	12	224	2,538
5:00 PM	0	6	59	19	0	3	61	1	0	8	10	4	0	10	22	9	212	2,501
5:05 PM	0	10	47	6	0	1	51	7	0	8	19	2	0	8	33	18	210	
5:10 PM	0	1	49	21	0	2	41	7	0	12	22	3	0	6	25	19	208	
5:15 PM	0	6	67	20	0	3	58	8	0	11	9	0	0	11	14	16	223	
5:20 PM	0	5	59	17	0	3	67	1	0	8	19	4	0	8	20	9	220	
5:25 PM	0	8	53	13	0	4	49	3	0	9	18	1	0	6	16	17	197	
5:30 PM	0	9	57	15	0	0	45	1	0	13	10	0	0	4	23	17	194	
5:35 PM	0	4	56	14	0	2	53	11	0	8	12	4	0	4	24	19	211	
5:40 PM	0	5	66	15	0	3	66	10	0	7	8	4	0	6	17	5	212	
5:45 PM	0	6	60	13	0	3	69	1	0	12	13	2	0	12	17	16	224	
5:50 PM	0	8	66	12	0	3	64	4	0	6	17	2	0	3	8	10	203	
5:55 PM	0	2	54	15	0	7	59	1	0	10	8	1	0	6	16	8	187	
Count Total	0	135	1,405	373	0	65	1,373	110	0	235	373	64	0	180	463	293	5,069	
Peak Hour	0	65	712	193	0	31	690	55	0	123	208	37	0	96	228	130	2,568	

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	6	7	1	16	4:00 PM	0	0	1	0	1	4:00 PM	1	0	0	0	1
4:05 PM	4	3	2	4	13	4:05 PM	0	0	0	0	0	4:05 PM	0	1	0	0	1
4:10 PM	3	1	3	4	11	4:10 PM	0	1	1	0	2	4:10 PM	0	0	0	0	0
4:15 PM	2	3	2	1	8	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	3	3	3	3	12	4:20 PM	1	0	1	0	2	4:20 PM	0	0	0	0	0
4:25 PM	3	1	3	2	9	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	6	3	6	4	19	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	2	7	2	1	12	4:35 PM	0	0	1	0	1	4:35 PM	0	0	0	0	0
4:40 PM	2	0	3	1	6	4:40 PM	0	0	0	15	15	4:40 PM	0	0	0	0	0
4:45 PM	3	2	0	1	6	4:45 PM	0	0	0	15	15	4:45 PM	0	1	0	0	1
4:50 PM	3	1	2	2	8	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	1	4	3	1	9	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	3	1	4	1	9	5:00 PM	0	1	0	0	1	5:00 PM	0	0	0	0	0
5:05 PM	1	2	0	0	3	5:05 PM	0	1	0	0	1	5:05 PM	0	0	0	0	0
5:10 PM	3	3	2	5	13	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	2	0	2	0	4	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	3	1	2	1	7	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	1	1	0	1	3	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	4	0	2	0	6	5:30 PM	0	0	0	0	0	5:30 PM	0	0	1	0	1
5:35 PM	1	1	1	2	5	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	4	1	3	1	9	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	1	1	1	4	5:45 PM	1	0	0	0	1	5:45 PM	0	1	0	0	1
5:50 PM	4	1	2	0	7	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	2	0	5	1	8	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	63	46	60	38	207	Count Total	2	3	4	30	39	Count Total	1	3	1	0	5
Peak Hour	34	34	36	25	129	Peak Hour	1	1	4	30	36	Peak Hour	1	2	0	0	3

ALL TRAFFIC DATA SERVICES
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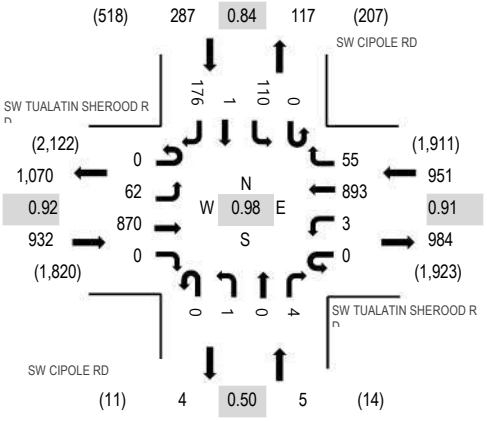
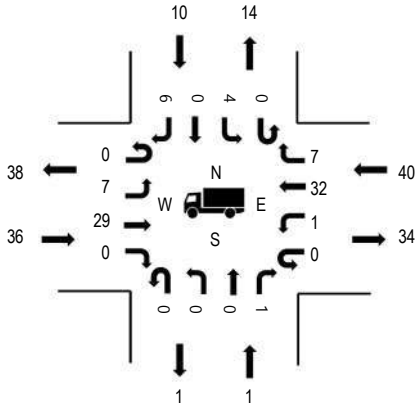
Location: 2 SW CIPOLE RD & SW TUALATIN SHEROOD RD PM
Date: Tuesday, May 24, 2022
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour

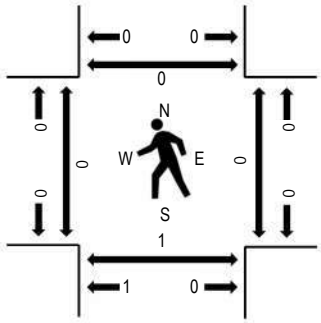
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	3.9%	0.92
WB	4.2%	0.91
NB	20.0%	0.50
SB	3.5%	0.84
All	4.0%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	SW TUALATIN SHEROOD RD Eastbound				SW TUALATIN SHEROOD RD Westbound				SW CIPOLE RD Northbound				SW CIPOLE RD 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	6	63	0	0	0	70	3	0	0	0	2	0	13	0	16	173	2,161
4:05 PM	0	5	49	0	0	1	76	3	0	0	0	0	0	22	0	16	172	2,163
4:10 PM	0	5	70	0	0	0	69	3	0	0	1	1	0	11	0	10	170	2,164
4:15 PM	0	5	81	0	0	1	80	5	0	0	0	1	0	12	0	16	201	2,175
4:20 PM	0	10	72	0	0	0	73	5	0	0	0	0	0	6	0	15	181	2,152
4:25 PM	0	4	58	0	0	0	78	4	0	0	0	1	0	8	0	10	163	2,150
4:30 PM	0	8	76	0	0	0	69	6	0	0	0	0	0	8	1	15	183	2,150
4:35 PM	0	9	81	0	0	1	74	3	0	0	0	0	0	12	0	13	193	2,143
4:40 PM	0	6	73	0	0	0	74	4	0	0	0	0	0	5	0	6	168	2,125
4:45 PM	0	3	68	0	0	0	75	5	0	0	0	2	0	12	0	18	183	2,138
4:50 PM	0	4	78	0	0	0	73	5	0	0	0	0	0	7	0	19	186	2,152
4:55 PM	0	5	80	0	0	0	77	9	0	0	0	0	0	5	0	12	188	2,131
5:00 PM	0	3	67	0	0	0	69	4	0	0	0	0	0	16	0	16	175	2,102
5:05 PM	0	2	65	0	0	1	73	3	0	1	0	0	0	4	0	24	173	
5:10 PM	0	3	71	0	0	0	78	2	0	0	0	0	0	15	0	12	181	
5:15 PM	0	4	69	0	0	1	75	5	0	0	0	0	0	9	0	15	178	
5:20 PM	0	10	64	0	0	1	67	4	0	0	0	2	0	11	0	20	179	
5:25 PM	0	5	67	0	0	0	74	6	0	0	1	0	0	6	0	4	163	
5:30 PM	0	3	72	1	0	0	77	2	0	0	0	0	0	8	0	13	176	
5:35 PM	0	2	78	1	0	0	81	1	0	0	0	0	0	6	0	6	175	
5:40 PM	0	4	84	0	0	1	75	3	0	0	0	1	0	3	0	10	181	
5:45 PM	0	4	78	0	0	1	102	2	0	0	0	0	0	2	0	8	197	
5:50 PM	0	3	72	0	0	0	78	1	0	0	0	1	0	4	0	6	165	
5:55 PM	0	0	69	0	0	0	74	4	0	0	0	0	0	2	0	10	159	
Count Total	0	113	1,705	2	0	8	1,811	92	0	1	2	11	0	207	1	310	4,263	
Peak Hour	0	62	870	0	0	3	893	55	0	1	0	4	0	110	1	176	2,175	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	1	6	2	10	4:00 PM	3	0	1	0	4	4:00 PM	0	1	0	0	1
4:05 PM	3	0	4	4	11	4:05 PM	1	0	0	0	1	4:05 PM	0	0	0	0	0
4:10 PM	3	0	3	1	7	4:10 PM	0	0	1	0	1	4:10 PM	0	0	0	0	0
4:15 PM	4	0	2	3	9	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	2	0	6	1	9	4:20 PM	1	0	0	0	1	4:20 PM	0	0	0	0	0
4:25 PM	6	0	3	0	9	4:25 PM	0	0	1	0	1	4:25 PM	0	0	0	0	0
4:30 PM	5	0	6	2	13	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	4	0	4	0	8	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	1	0	3	1	5	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	3	1	1	1	6	4:45 PM	0	0	0	0	0	4:45 PM	0	1	0	0	1
4:50 PM	2	0	3	1	6	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	2	0	4	0	6	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	2	0	4	1	7	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	2	0	1	0	3	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	3	0	3	0	6	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	2	0	1	0	3	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	1	1	3	0	5	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	2	0	0	1	3	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	4	0	2	0	6	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	2	0	2	0	4	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	2	1	3	1	7	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	0	1	0	2	5:45 PM	1	0	0	0	1	5:45 PM	0	1	0	0	1
5:50 PM	2	0	2	2	6	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	1	0	2	1	4	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	60	4	69	22	155	Count Total	6	0	3	0	9	Count Total	0	3	0	0	3
Peak Hour	36	1	40	10	87	Peak Hour	1	0	1	0	2	Peak Hour	0	1	0	0	1

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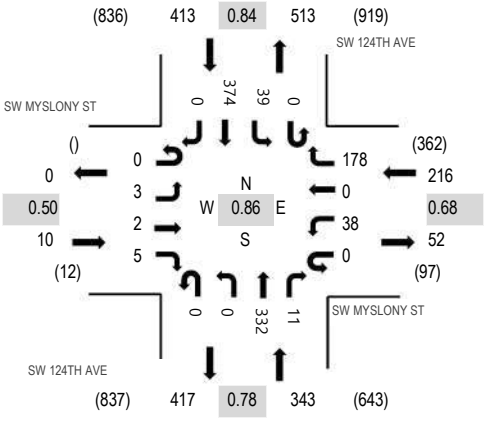
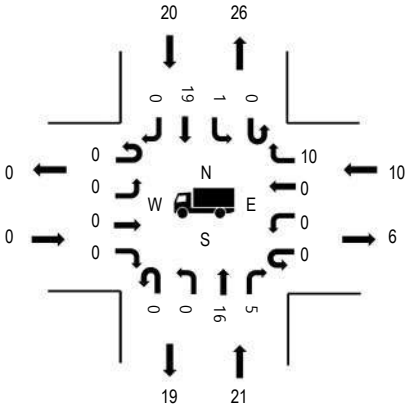
Location: 3 SW 124TH AVE & SW MYSLONY ST PM
Date: Tuesday, May 24, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

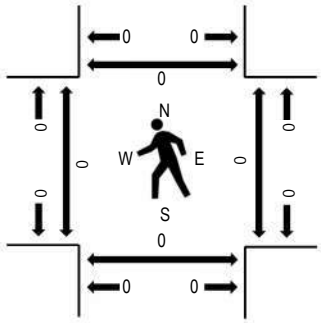
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	4.6%	0.68
NB	6.1%	0.78
SB	4.8%	0.84
All	5.2%	0.86

Traffic Counts - Motorized Vehicles

Interval Start Time	SW MYSLONY ST Eastbound				SW MYSLONY ST Westbound				SW 124TH AVE Northbound				SW 124TH 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	2	0	4	0	24	0	0	41	0	0	2	27	0	100	982
4:05 PM	0	0	0	0	0	5	0	22	0	0	35	2	0	0	30	0	94	949
4:10 PM	0	1	0	0	0	4	0	20	0	0	31	1	0	6	29	0	92	962
4:15 PM	0	0	0	1	0	2	0	17	0	0	29	1	0	2	26	0	78	956
4:20 PM	0	0	0	0	0	1	0	7	0	0	19	0	0	4	33	0	64	966
4:25 PM	0	0	0	0	0	4	0	6	0	0	25	0	0	2	26	0	63	975
4:30 PM	0	1	0	0	0	4	0	6	0	0	31	2	0	5	37	0	86	981
4:35 PM	0	0	2	0	0	1	0	23	0	0	23	3	0	1	30	0	83	965
4:40 PM	0	0	0	1	0	3	0	16	0	0	32	0	0	3	38	0	93	961
4:45 PM	0	1	0	1	0	2	0	10	0	0	26	1	0	4	23	0	68	926
4:50 PM	0	0	0	0	0	6	0	13	0	0	16	1	0	4	33	0	73	912
4:55 PM	0	0	0	0	0	2	0	14	0	0	24	0	0	6	42	0	88	904
5:00 PM	0	0	0	0	0	2	0	16	0	0	21	0	0	3	25	0	67	871
5:05 PM	0	0	0	0	0	12	0	20	0	0	33	1	0	1	40	0	107	
5:10 PM	0	0	0	0	0	6	0	11	0	0	21	0	0	7	41	0	86	
5:15 PM	0	0	0	0	0	4	0	9	0	0	25	2	0	8	40	0	88	
5:20 PM	0	0	0	0	0	0	0	6	0	0	30	0	0	6	31	0	73	
5:25 PM	0	2	0	0	0	2	0	9	0	0	26	0	0	1	29	0	69	
5:30 PM	0	0	0	0	0	3	0	4	0	0	26	1	0	1	35	0	70	
5:35 PM	0	0	0	0	0	1	0	10	0	0	26	0	0	1	41	0	79	
5:40 PM	0	0	0	0	0	3	0	2	0	0	25	0	0	3	25	0	58	
5:45 PM	0	0	0	0	0	2	0	5	0	0	13	0	0	1	33	0	54	
5:50 PM	0	0	0	0	0	1	0	7	0	0	35	0	0	5	17	0	65	
5:55 PM	0	0	0	0	0	1	0	10	0	0	14	1	0	3	26	0	55	
Count Total	0	5	2	5	0	75	0	287	0	0	627	16	0	79	757	0	1,853	
Peak Hour	0	3	2	5	0	38	0	178	0	0	332	11	0	39	374	0	982	

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	3	0	1	4	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	3	5	2	10	4:05 PM	0	2	0	0	2	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	3	3	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	2	0	2	4	4:15 PM	0	1	0	0	1	4:15 PM	0	0	0	0	0
4:20 PM	0	2	0	3	5	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	1	1	3	5	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	4	2	2	8	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	3	1	0	4	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	1	0	1	2	4:40 PM	0	0	0	30	30	4:40 PM	0	0	0	0	0
4:45 PM	0	1	1	2	4	4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	0	0
4:50 PM	0	1	0	1	2	4:50 PM	0	0	1	0	1	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	1	0	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	2	4	6	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	1	0	1	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	1	0	3	4	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	0	1	2	5:25 PM	0	0	0	0	0	5:25 PM	0	0	1	0	1
5:30 PM	0	2	1	0	3	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	2	2	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	2	0	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	1	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	1	0	1
Count Total	0	30	14	32	76	Count Total	0	3	1	31	35	Count Total	0	0	2	0	2
Peak Hour	0	21	10	20	51	Peak Hour	0	3	1	31	35	Peak Hour	0	0	0	0	0

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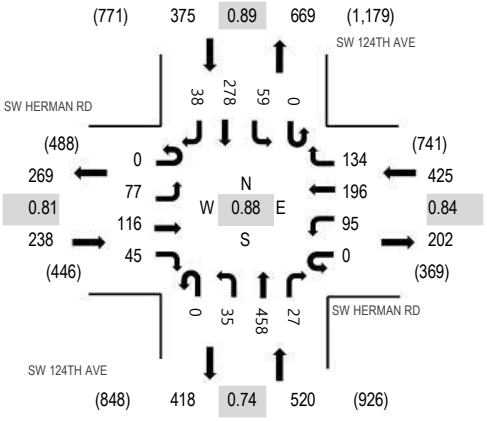
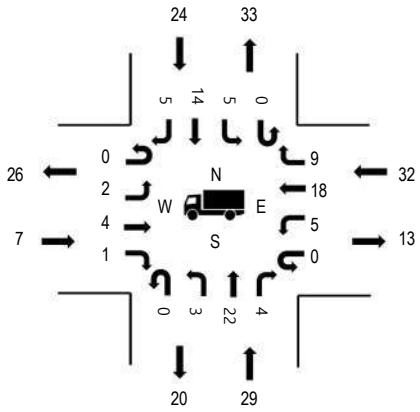
Location: 4 SW 124TH AVE & SW HERMAN RD PM
Date: Tuesday, May 24, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

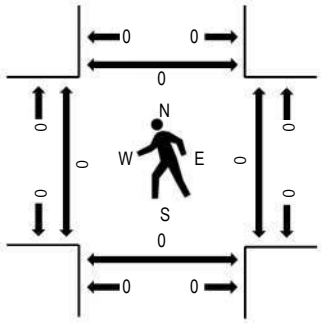
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.9%	0.81
WB	7.5%	0.84
NB	5.6%	0.74
SB	6.4%	0.89
All	5.9%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	SW HERMAN RD Eastbound				SW HERMAN RD Westbound				SW 124TH AVE Northbound				SW 124TH 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	11	4	0	3	19	15	0	5	65	2	0	7	21	2	162	1,558
4:05 PM	0	5	15	3	0	8	14	15	0	3	46	3	0	6	21	5	144	1,521
4:10 PM	0	9	7	6	0	12	17	9	0	3	45	3	0	7	17	4	139	1,514
4:15 PM	0	9	9	4	0	7	16	10	0	2	30	4	0	6	19	6	122	1,510
4:20 PM	0	5	9	6	0	6	15	4	0	3	35	3	0	7	29	2	124	1,524
4:25 PM	0	0	5	4	0	7	14	4	0	3	28	1	0	3	16	0	85	1,523
4:30 PM	0	14	11	5	0	11	20	19	0	1	28	2	0	5	26	0	142	1,546
4:35 PM	0	4	13	3	0	8	9	17	0	4	47	3	0	4	18	4	134	1,512
4:40 PM	0	4	9	1	0	12	13	18	0	3	41	0	0	3	28	4	136	1,476
4:45 PM	0	5	12	2	0	6	25	9	0	2	35	3	0	2	17	2	120	1,436
4:50 PM	0	5	8	3	0	9	18	10	0	4	21	1	0	4	29	6	118	1,407
4:55 PM	0	9	7	4	0	6	16	4	0	2	37	2	0	5	37	3	132	1,367
5:00 PM	0	11	17	5	0	5	18	8	0	4	27	4	0	3	18	5	125	1,326
5:05 PM	0	11	8	5	0	6	16	10	0	5	40	3	0	3	28	2	137	
5:10 PM	0	10	6	2	0	9	18	11	0	3	33	2	0	2	37	2	135	
5:15 PM	0	6	5	6	0	9	23	7	0	1	31	2	0	4	37	5	136	
5:20 PM	0	7	9	3	0	10	13	9	0	1	36	3	0	5	26	1	123	
5:25 PM	0	5	11	1	0	7	15	4	0	1	32	3	0	4	22	3	108	
5:30 PM	0	7	6	3	0	4	9	6	0	3	26	2	0	2	34	6	108	
5:35 PM	0	2	8	0	0	13	10	4	0	3	27	3	0	3	24	1	98	
5:40 PM	0	7	8	1	0	3	6	6	0	0	29	1	0	8	25	2	96	
5:45 PM	0	5	5	2	0	8	15	6	0	2	16	1	0	7	22	2	91	
5:50 PM	0	8	6	1	0	1	4	3	0	2	27	2	0	3	21	0	78	
5:55 PM	0	4	4	3	0	4	14	2	0	2	27	2	0	2	25	2	91	
Count Total	0	160	209	77	0	174	357	210	0	62	809	55	0	105	597	69	2,884	
Peak Hour	0	77	116	45	0	95	196	134	0	35	458	27	0	59	278	38	1,558	

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

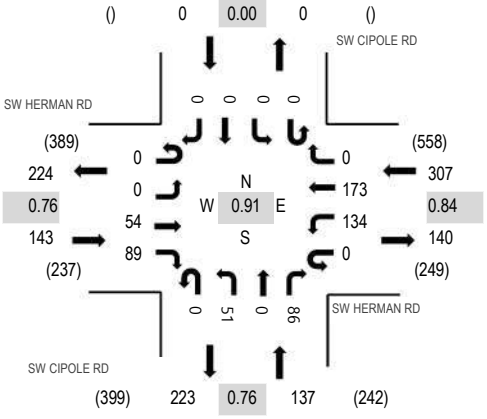
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	2	5	1	9	4:00 PM	1	0	0	0	1	4:00 PM	0	0	0	0	0
4:05 PM	0	8	4	3	15	4:05 PM	1	2	0	0	3	4:05 PM	0	0	0	0	0
4:10 PM	0	1	4	4	9	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	2	1	3	6	4:15 PM	0	1	0	0	1	4:15 PM	0	0	0	0	0
4:20 PM	1	4	3	3	11	4:20 PM	1	0	0	1	2	4:20 PM	0	0	0	0	0
4:25 PM	1	2	5	1	9	4:25 PM	0	0	1	0	1	4:25 PM	0	0	0	0	0
4:30 PM	0	5	2	2	9	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	1	2	1	1	5	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	1	1	3	1	6	4:40 PM	0	0	1	30	31	4:40 PM	0	0	0	0	0
4:45 PM	1	1	1	2	5	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	1	2	2	5	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	1	0	1	1	3	4:55 PM	1	1	0	0	2	4:55 PM	0	0	0	0	0
5:00 PM	2	0	3	1	6	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	1	0	1	2	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	2	1	3	3	9	5:10 PM	0	1	0	0	1	5:10 PM	0	0	0	0	0
5:15 PM	0	0	2	1	3	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	1	1	2	4	8	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	2	3	6	5:25 PM	0	0	0	0	0	5:25 PM	0	0	1	0	1
5:30 PM	2	2	0	2	6	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	3	1	4	5:35 PM	1	0	0	0	1	5:35 PM	0	0	0	0	0
5:40 PM	2	0	0	0	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	1	1	2	4	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	1	2	1	0	4	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	1	2	2	5	5:55 PM	0	0	0	0	0	5:55 PM	0	0	1	0	1
Count Total	17	39	51	44	151	Count Total	5	5	2	31	43	Count Total	0	0	2	0	2
Peak Hour	7	29	32	24	92	Peak Hour	4	4	2	31	41	Peak Hour	0	0	0	0	0

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

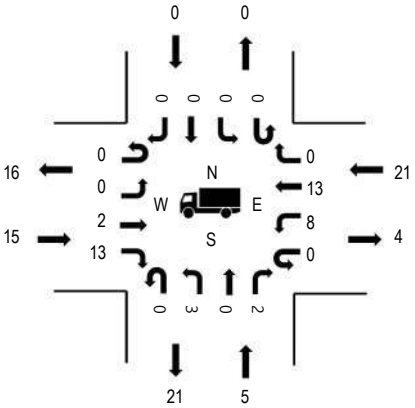
Location: 5 SW CIPOLE RD & SW HERMAN RD PM
Date: Tuesday, May 24, 2022
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour

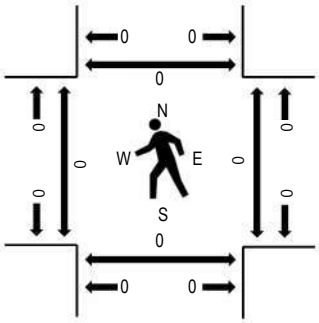
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	10.5%	0.76
WB	6.8%	0.84
NB	3.6%	0.76
SB	0.0%	0.00
All	7.0%	0.91

Traffic Counts - Motorized Vehicles

Interval Start Time	SW HERMAN RD Eastbound				SW HERMAN RD Westbound				SW CIPOLE RD Northbound				SW CIPOLE RD 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	5	7	0	13	17	0	0	4	0	11	0	0	0	0	57	587
4:05 PM	0	0	4	4	0	9	22	0	0	9	0	7	0	0	0	0	55	583
4:10 PM	0	0	6	9	0	9	12	0	0	6	0	8	0	0	0	0	50	586
4:15 PM	0	0	6	6	0	15	10	0	0	2	0	6	0	0	0	0	45	574
4:20 PM	0	0	6	15	0	11	8	0	0	9	0	8	0	0	0	0	57	577
4:25 PM	0	0	5	6	0	10	13	0	0	0	0	2	0	0	0	0	36	565
4:30 PM	0	0	2	8	0	11	14	0	0	7	0	8	0	0	0	0	50	567
4:35 PM	0	0	4	5	0	8	16	0	0	2	0	12	0	0	0	0	47	556
4:40 PM	0	0	4	6	0	7	9	0	0	4	0	5	0	0	0	0	35	540
4:45 PM	0	0	4	8	0	17	25	0	0	3	0	7	0	0	0	0	64	530
4:50 PM	0	0	4	13	0	14	7	0	0	4	0	6	0	0	0	0	48	500
4:55 PM	0	0	4	2	0	10	20	0	0	1	0	6	0	0	0	0	43	471
5:00 PM	0	0	5	9	0	15	11	0	0	7	0	6	0	0	0	0	53	450
5:05 PM	0	0	2	7	0	18	21	0	0	2	0	8	0	0	0	0	58	
5:10 PM	0	0	1	8	0	10	13	0	0	3	0	3	0	0	0	0	38	
5:15 PM	0	0	7	3	0	19	9	0	0	2	0	8	0	0	0	0	48	
5:20 PM	0	0	4	6	0	11	13	0	0	4	0	7	0	0	0	0	45	
5:25 PM	0	0	4	2	0	11	7	0	0	7	0	7	0	0	0	0	38	
5:30 PM	0	0	5	7	0	4	14	0	0	3	0	6	0	0	0	0	39	
5:35 PM	0	0	4	3	0	7	12	0	0	5	0	0	0	0	0	0	31	
5:40 PM	0	0	5	1	0	3	5	0	0	4	0	7	0	0	0	0	25	
5:45 PM	0	0	3	3	0	12	10	0	0	0	0	6	0	0	0	0	34	
5:50 PM	0	0	3	0	0	2	7	0	0	1	0	6	0	0	0	0	19	
5:55 PM	0	0	1	1	0	14	3	0	0	2	0	1	0	0	0	0	22	
Count Total	0	0	98	139	0	260	298	0	0	91	0	151	0	0	0	0	1,037	
Peak Hour	0	0	54	89	0	134	173	0	0	51	0	86	0	0	0	0	587	

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	2	5	0	9	4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	0	0
4:05 PM	0	0	4	0	4	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	3	0	3	0	6	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	2	0	1	0	3	4:15 PM	1	0	0	0	1	4:15 PM	0	0	0	0	0
4:20 PM	1	0	1	0	2	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	2	0	2	4:25 PM	0	0	1	0	1	4:25 PM	0	0	0	0	0
4:30 PM	1	1	1	0	3	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	1	1	1	0	3	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	3	0	0	0	3	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	1	1	1	0	3	4:50 PM	1	0	0	0	1	4:50 PM	0	0	0	0	0
4:55 PM	1	0	1	0	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	1	1	2	0	4	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	2	0	2	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	1	0	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	1	1	3	0	5	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	1	2	0	3	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	1	1	0	0	2	5:30 PM	1	0	0	0	1	5:30 PM	0	0	0	0	0
5:35 PM	0	0	2	0	2	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	1	0	0	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	0	1	0	2	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	1	0	0	1	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	2	0	2	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	20	12	36	0	68	Count Total	3	1	1	0	5	Count Total	0	0	0	0	0
Peak Hour	15	5	21	0	41	Peak Hour	2	1	1	0	4	Peak Hour	0	0	0	0	0

All Traffic Data Services, LLC
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Date Start: 15-Jul-21
Date End: 16-Jul-21
SW 124th Ave S-O SW Myslony St
Site Code: 1

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
07/15/21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	1	**2**	1	**7**	15	30	53	76	33	12	3	0	0	0	233	51	56
15:00	1	0	**4**	4	**20**	**35**	**96**	102	53	8	1	1	**1**	0	326	51	54
16:00	**5**	0	2	2	6	12	71	**144**	**93**	16	4	1	0	0	**356**	53	56
17:00	3	0	2	1	5	15	73	116	75	**21**	**9**	**2**	0	0	322	53	58
18:00	0	0	0	0	1	15	45	64	40	17	4	1	0	0	187	54	58
19:00	0	0	1	1	3	4	25	37	20	7	1	0	0	0	99	53	57
20:00	2	0	0	0	3	1	35	39	33	11	0	0	0	**1**	125	53	57
21:00	1	0	0	1	0	13	26	30	12	6	1	0	0	0	90	52	57
22:00	1	1	0	0	1	4	12	25	8	2	1	0	0	0	55	51	55
23:00	0	0	0	3	2	3	11	9	4	3	4	0	0	0	39	56	62
Total	14	3	10	19	56	132	447	642	371	103	28	5	1	1	1832		
Percent	0.8%	0.2%	0.5%	1.0%	3.1%	7.2%	24.4%	35.0%	20.3%	5.6%	1.5%	0.3%	0.1%	0.1%			
AM Peak																	
Vol.																	
PM Peak	16:00	14:00	15:00	14:00	15:00	15:00	15:00	16:00	16:00	17:00	17:00	17:00	15:00	20:00	16:00		
Vol.	5	2	4	7	20	35	96	144	93	21	9	2	1	1	356		

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SW 124th Ave S-O SW Myslony St
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Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
07/16/21	0	0	0	1	0	3	4	11	2	0	0	0	0	0	21	49	52
01:00	0	0	0	0	0	2	8	9	3	1	0	0	0	0	23	50	54
02:00	1	0	0	0	0	1	7	2	3	0	0	1	0	0	15	52	66
03:00	0	**1**	0	2	10	10	4	8	7	1	1	0	0	0	44	51	54
04:00	1	0	1	**12**	**33**	21	15	20	9	1	0	0	0	0	113	48	52
05:00	1	0	1	5	12	21	20	45	27	**15**	**3**	**3**	0	0	153	54	59
06:00	**4**	1	0	3	15	31	31	53	31	14	3	1	0	0	187	53	58
07:00	3	0	**3**	7	15	29	32	61	**40**	15	0	2	0	0	**207**	53	57
08:00	2	0	1	5	9	14	49	**70**	30	9	1	0	0	0	190	51	55
09:00	3	0	2	4	3	29	**65**	52	22	12	3	0	0	0	195	51	57
10:00	0	0	1	7	10	32	53	69	18	3	1	0	0	0	194	49	53
11:00	4	0	2	3	10	**36**	49	56	27	5	3	0	0	0	195	51	54
12 PM	**4**	0	**2**	**7**	**10**	**30**	**64**	71	**35**	**3**	**2**	0	0	0	**228**	50	54
13:00	3	0	0	6	10	27	56	**98**	22	3	1	0	0	0	226	49	53
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	26	2	13	62	137	286	457	625	276	82	18	7	0	0	1991		
Percent	1.3%	0.1%	0.7%	3.1%	6.9%	14.4%	23.0%	31.4%	13.9%	4.1%	0.9%	0.4%	0.0%	0.0%			
AM Peak	06:00	03:00	07:00	04:00	04:00	11:00	09:00	08:00	07:00	05:00	05:00	05:00			07:00		
Vol.	4	1	3	12	33	36	65	70	40	15	3	3			207		
PM Peak	12:00		12:00	12:00	12:00	12:00	12:00	13:00	12:00	12:00	12:00				12:00		
Vol.	4		2	7	10	30	64	98	35	3	2				228		
Grand Total	40	5	23	81	193	418	904	1267	647	185	46	12	1	1	3823		
Percent	1.0%	0.1%	0.6%	2.1%	5.0%	10.9%	23.6%	33.1%	16.9%	4.8%	1.2%	0.3%	0.0%	0.0%			

15th Percentile :	37 MPH
50th Percentile :	45 MPH
85th Percentile :	52 MPH
95th Percentile :	56 MPH

Statistics

10 MPH Pace Speed :	41-50 MPH
Number in Pace :	2171
Percent in Pace :	56.8%
Number of Vehicles > 55 MPH :	245
Percent of Vehicles > 55 MPH :	6.4%
Mean Speed(Average) :	46 MPH

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Date Start: 19-Jul-21
Date End: 20-Jul-21
SW 124th Ave S-O SW Myslony St
Site Code: 1

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
07/19/21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	**3**	0	1	**13**	**31**	**67**	**166**	**115**	**46**	4	**2**	0	0	0	**448**	49	53
17:00	1	1	**2**	13	18	67	130	89	27	**5**	1	0	0	0	354	48	52
18:00	0	0	2	7	13	33	70	54	18	2	0	**1**	0	0	200	49	53
19:00	1	0	1	3	3	9	34	45	10	3	0	0	0	**1**	110	49	53
20:00	0	1	1	0	10	16	30	39	9	1	1	0	0	0	108	49	53
21:00	0	**2**	2	5	5	10	26	17	8	1	1	0	0	0	77	49	53
22:00	0	0	0	1	2	5	16	18	5	1	0	0	0	0	48	49	53
23:00	0	0	0	0	1	5	8	9	3	0	1	0	0	0	27	49	54
Total	5	4	9	42	83	212	480	386	126	17	6	1	0	1	1372		
Percent	0.4%	0.3%	0.7%	3.1%	6.0%	15.5%	35.0%	28.1%	9.2%	1.2%	0.4%	0.1%	0.0%	0.1%			
AM Peak Vol.																	
PM Peak Vol.	16:00 3	21:00 2	17:00 2	16:00 13	16:00 31	16:00 67	16:00 166	16:00 115	16:00 46	17:00 5	16:00 2	18:00 1		19:00 1	16:00 448		

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Date Start: 19-Jul-21
Date End: 20-Jul-21
SW 124th Ave S-O SW Myslony St
Site Code: 1

NB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
07/20/21	0	0	0	1	1	6	6	3	4	0	0	0	0	0	21	51	53
01:00	0	0	1	4	0	1	7	7	1	0	0	0	0	0	21	48	49
02:00	0	0	3	11	8	7	8	3	0	0	0	0	0	0	40	43	46
03:00	0	0	0	0	1	3	12	5	2	1	0	0	0	0	24	49	54
04:00	0	0	0	1	2	12	16	27	10	0	0	1	0	0	69	50	53
05:00	0	0	0	1	4	14	23	49	24	6	**1**	0	0	0	122	52	55
06:00	2	0	4	3	2	20	41	48	26	**9**	0	0	**1**	0	156	52	56
07:00	2	0	3	9	14	31	84	**100**	**28**	7	0	0	0	0	**278**	49	53
08:00	**3**	**5**	3	9	15	47	78	56	8	1	0	0	0	0	225	47	49
09:00	0	0	1	**13**	13	46	77	42	10	2	0	0	0	0	204	47	50
10:00	2	3	**7**	10	18	47	71	52	15	2	1	**2**	0	0	230	48	52
11:00	0	3	4	11	**29**	**51**	**92**	52	13	0	0	1	0	0	256	47	50
12 PM	**4**	**4**	6	11	23	52	98	56	12	2	**1**	0	**1**	0	270	47	51
13:00	1	0	5	4	25	27	86	82	18	**7**	0	0	0	0	255	49	53
14:00	2	2	2	19	36	68	137	65	19	4	1	0	0	0	355	47	51
15:00	2	2	**11**	**35**	**56**	**78**	**147**	**97**	**21**	2	1	0	0	0	**452**	47	50
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	18	19	50	142	247	510	983	744	211	43	5	4	2	0	2978		
Percent	0.6%	0.6%	1.7%	4.8%	8.3%	17.1%	33.0%	25.0%	7.1%	1.4%	0.2%	0.1%	0.1%	0.0%			
AM Peak	08:00	08:00	10:00	09:00	11:00	11:00	11:00	07:00	07:00	06:00	05:00	10:00	06:00		07:00		
Vol.	3	5	7	13	29	51	92	100	28	9	1	2	1		278		
PM Peak	12:00	12:00	15:00	15:00	15:00	15:00	15:00	15:00	15:00	13:00	12:00		12:00		15:00		
Vol.	4	4	11	35	56	78	147	97	21	7	1		1		452		
Grand Total	23	23	59	184	330	722	1463	1130	337	60	11	5	2	1	4350		
Percent	0.5%	0.5%	1.4%	4.2%	7.6%	16.6%	33.6%	26.0%	7.7%	1.4%	0.3%	0.1%	0.0%	0.0%			

15th Percentile :	35 MPH
50th Percentile :	42 MPH
85th Percentile :	48 MPH
95th Percentile :	52 MPH

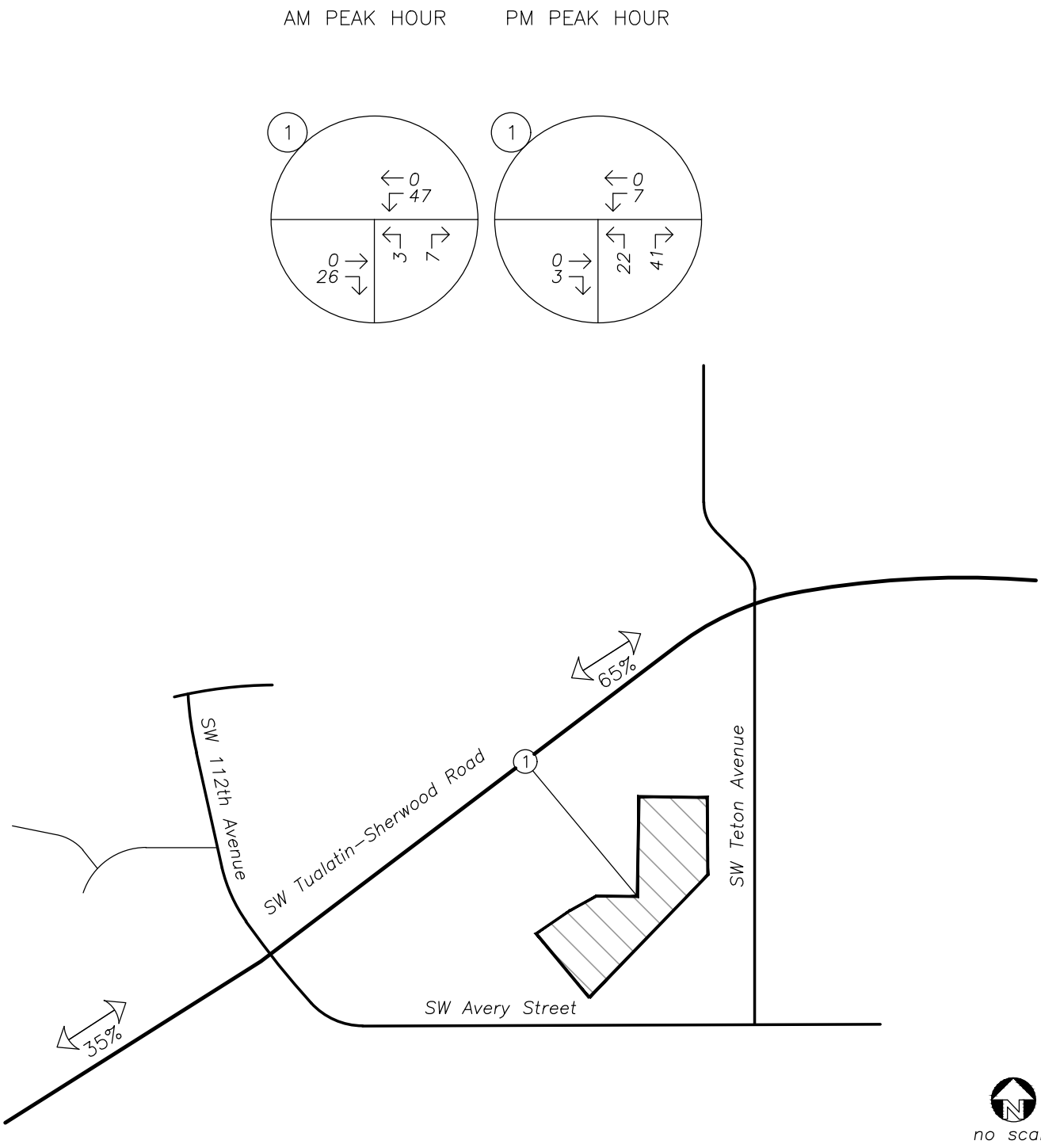
Statistics

10 MPH Pace Speed :	41-50 MPH
Number in Pace :	2593
Percent in Pace :	59.6%
Number of Vehicles > 55 MPH :	79
Percent of Vehicles > 55 MPH :	1.8%
Mean Speed(Average) :	43 MPH

LEGEND

XX% PERCENT OF PROJECT TRIPS

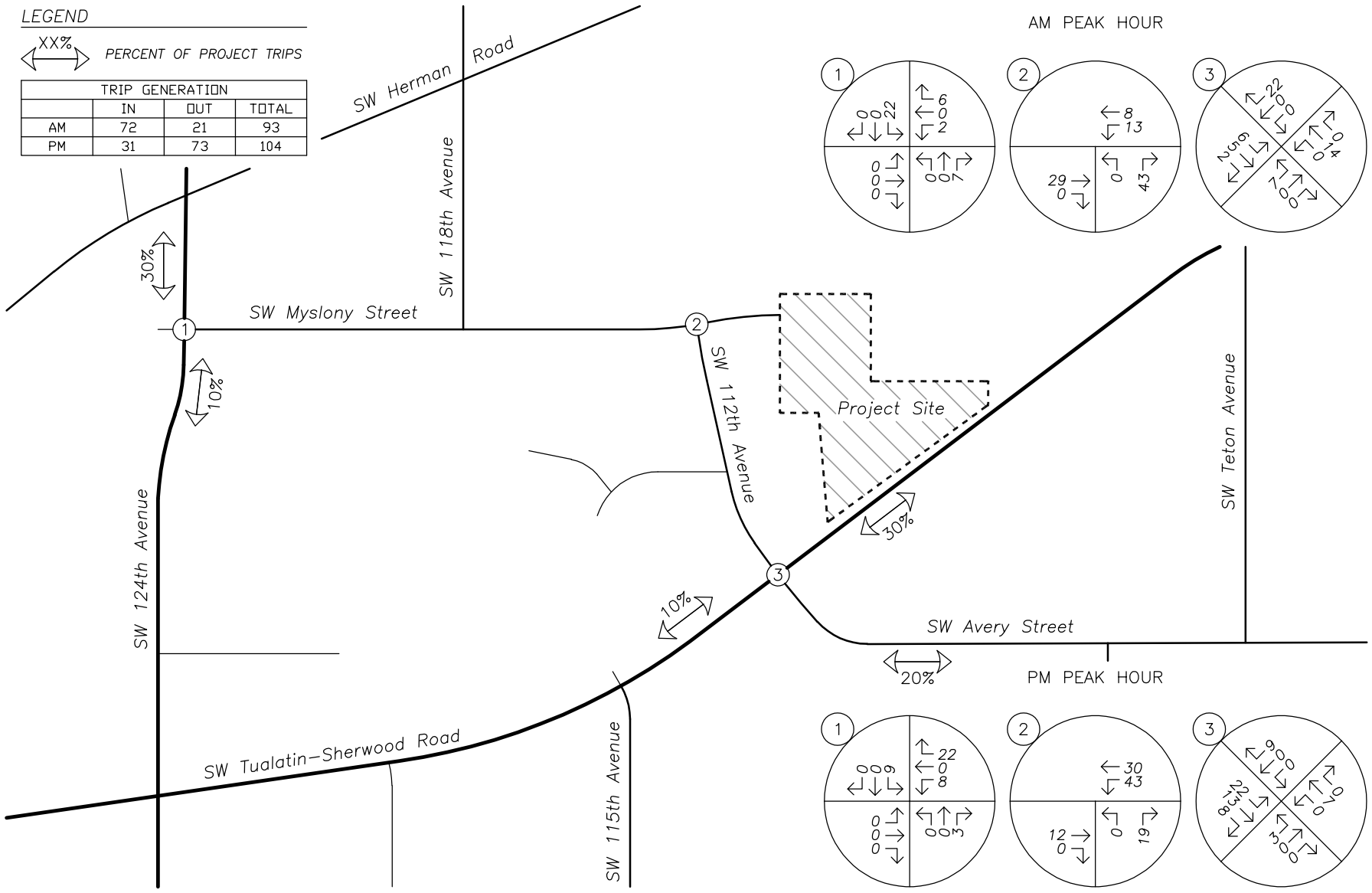
TRIP GENERATION			
	IN	OUT	TOTAL
AM	73	10	83
PM	10	63	73



SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips
AM & PM Peak Hours

Figure 3
Avery I & II
2/8/2022

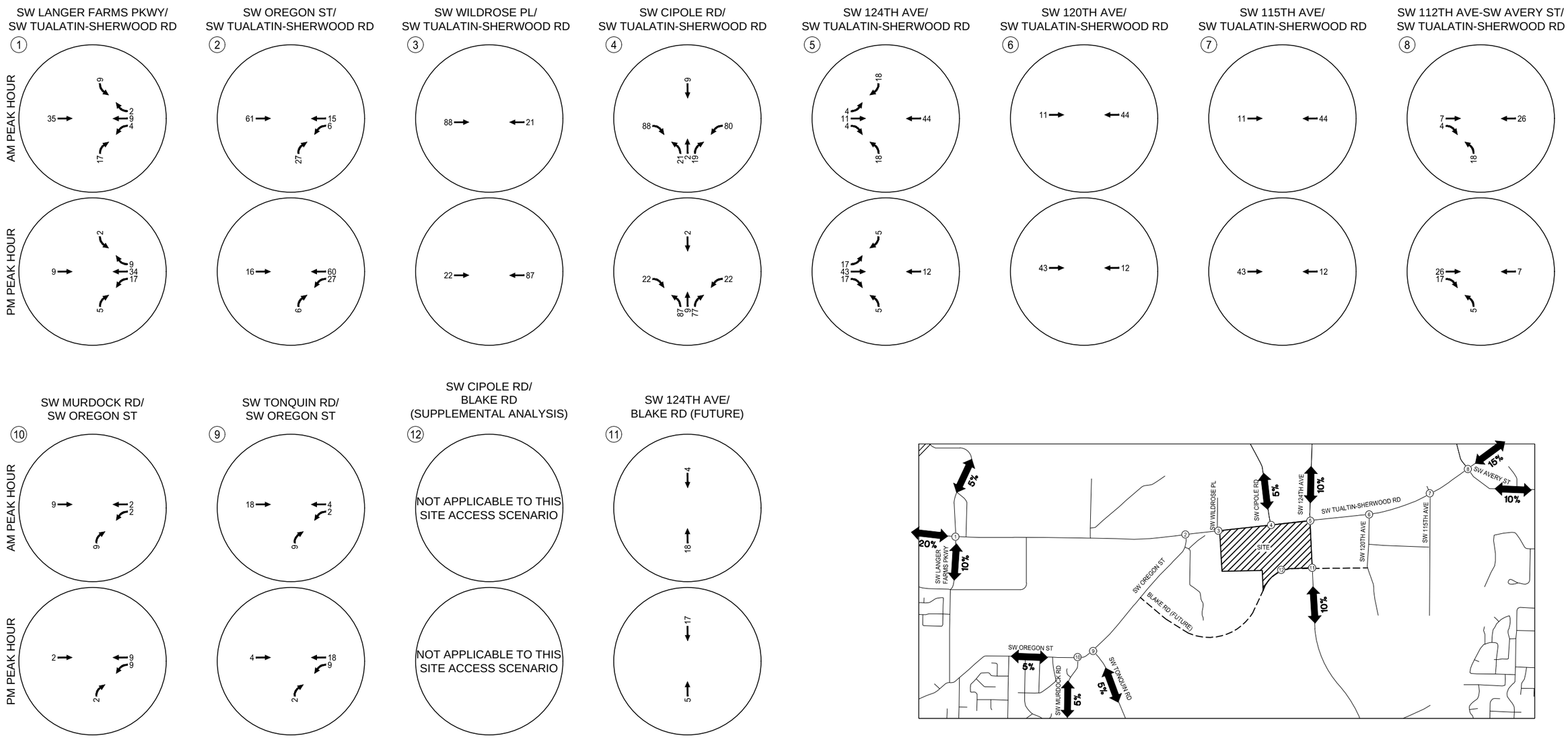


SITE TRIP DISTRIBUTION & ASSIGNMENT
Proposed Development Plan – Site Trips
AM & PM Peak Hours

no scale

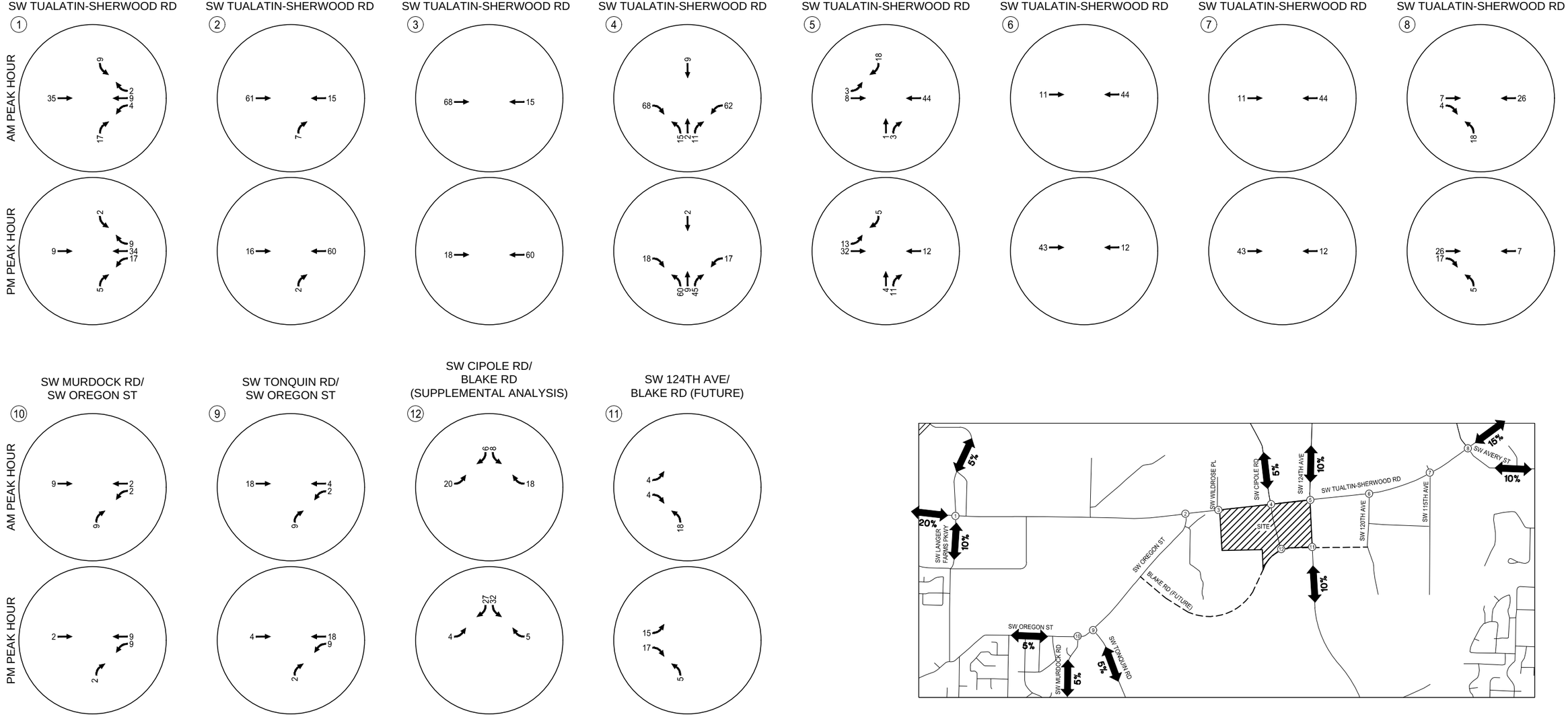
FIGURE 2

PAGE 11



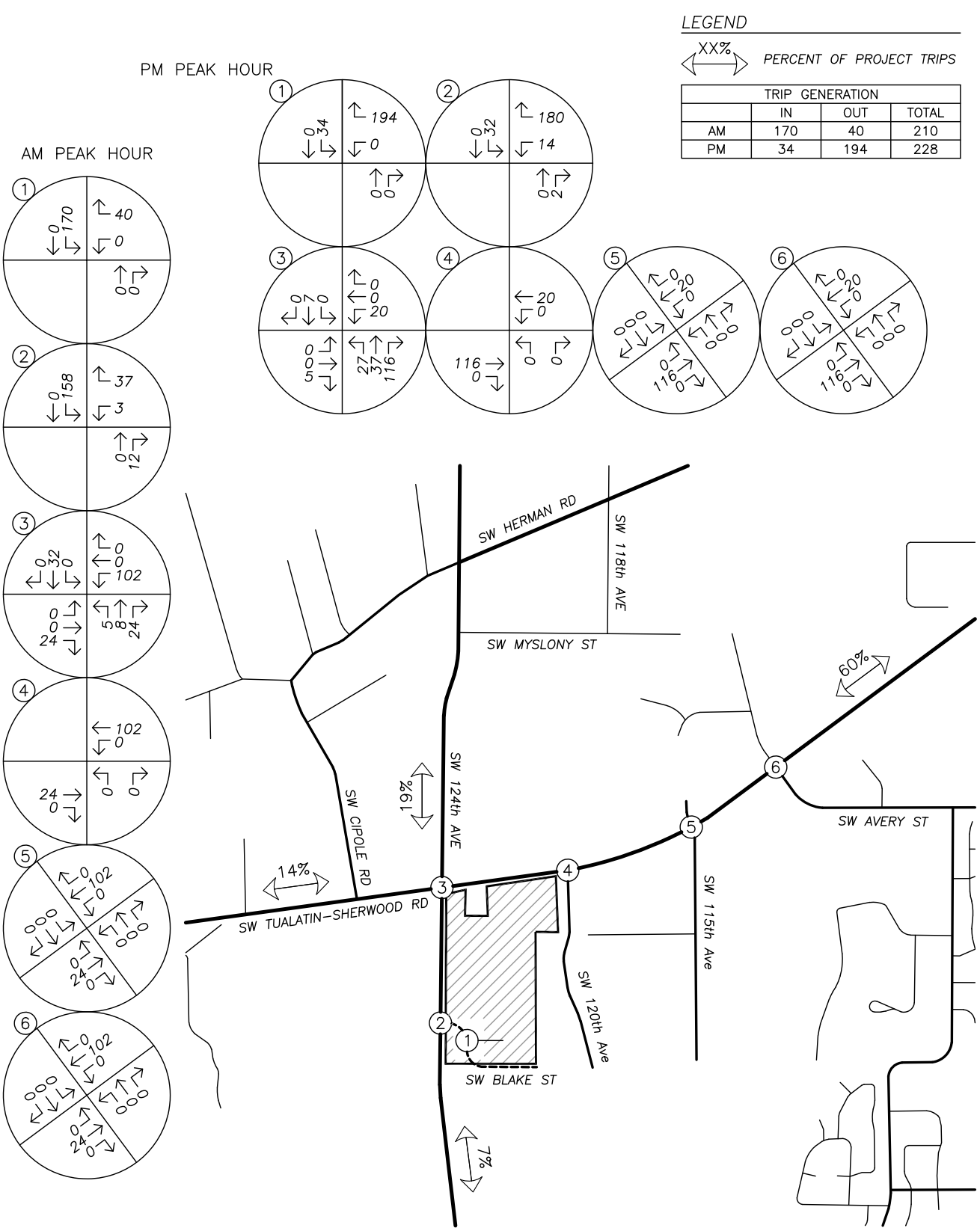
Site Trip Distribution
Weekday AM and PM Peak Hours
Sherwood, Oregon

Figure
6



Site Trip Distribution - Alternative Access Scenario
Weekday AM and PM Peak Hours
Sherwood, Oregon

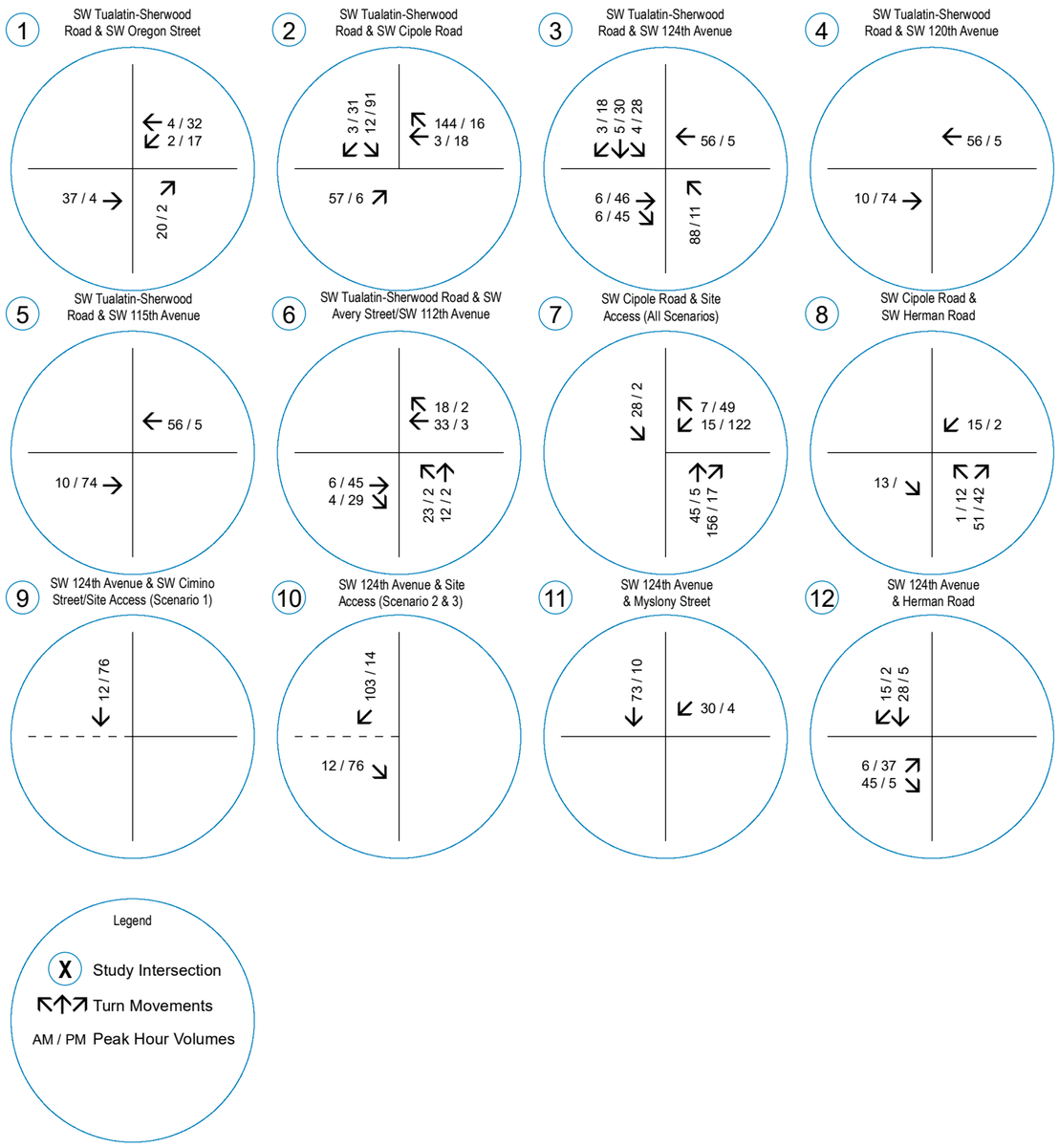
Figure
11

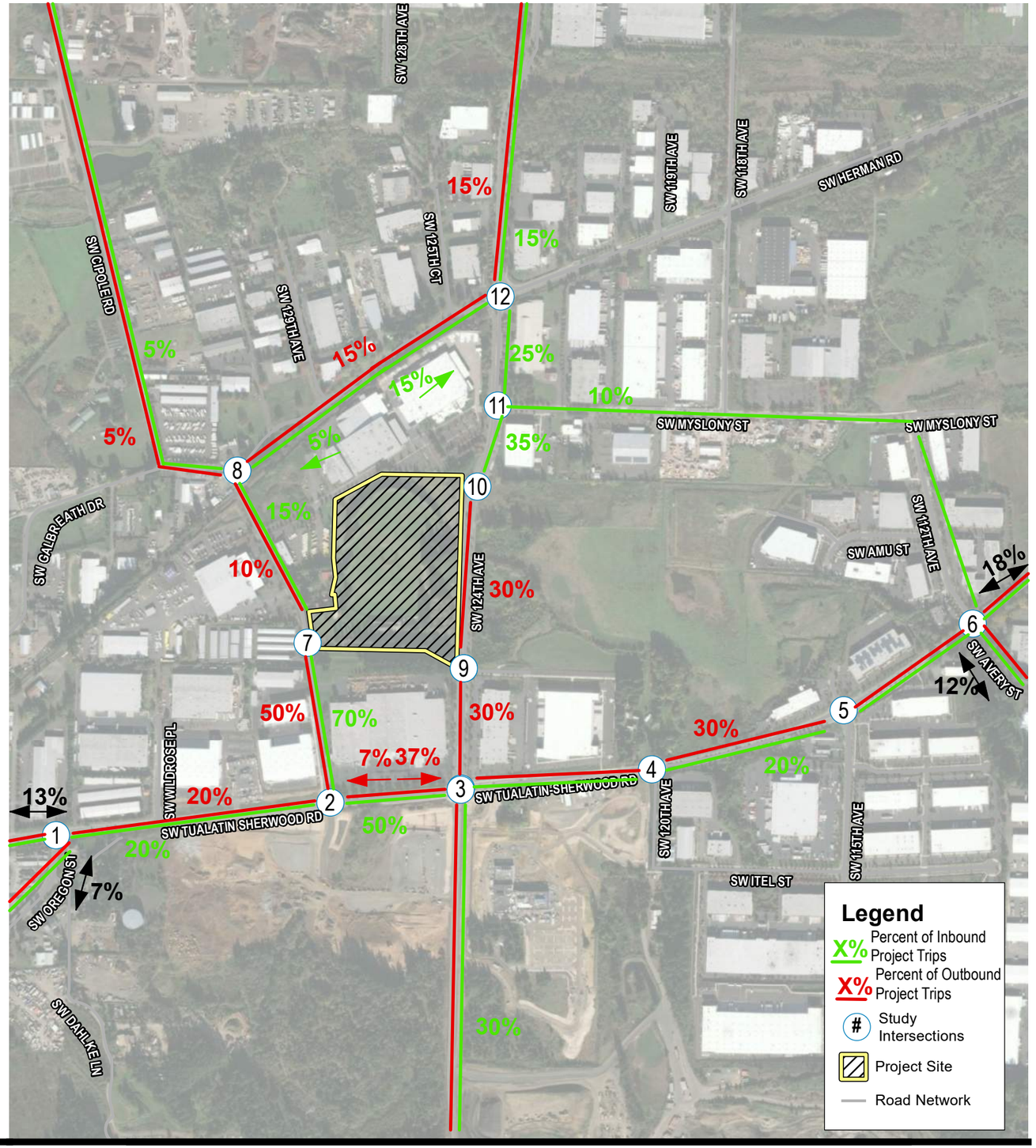


TRIP DISTRIBUTION & ASSIGNMENT
Proposed Development Plan – Site Trips
AM & PM Peak Hours

no scale

FIGURE 4



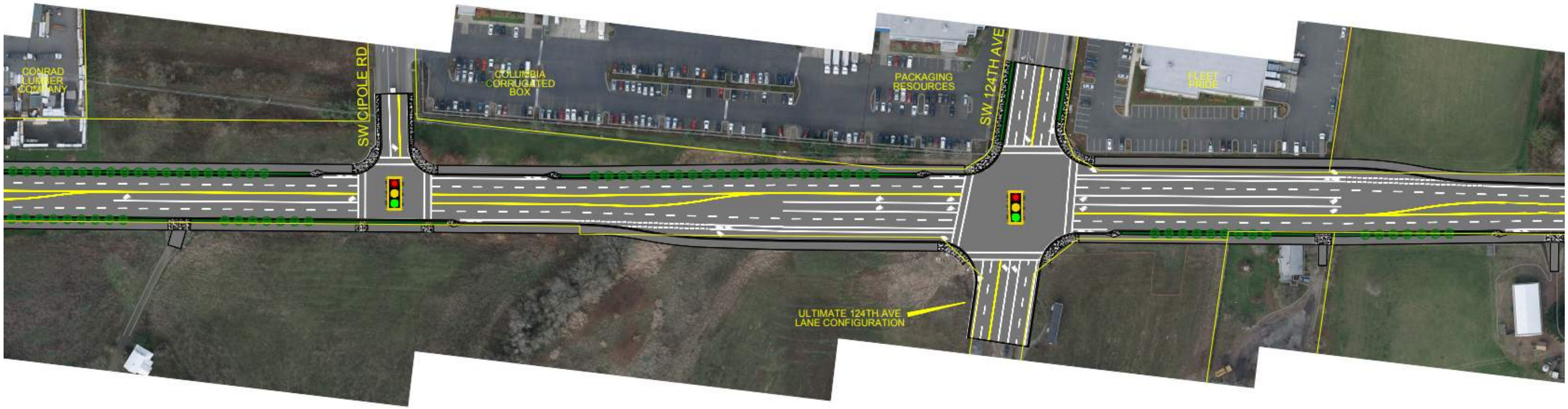


lancaster mobley

TRAFFIC VOLUMES
Trip Distribution & Assignment: Scenario 2
AM & PM Peak Hour

NOT TO SCALE

Figure 3
Tualatin Logistics Park TIA
12/6/2021



TUALATIN-SHERWOOD ROAD
LANGER FARMS PKWY TO TETON AVE

PIRELIMINARY - SUBJECT TO CHANGE

WASHINGTON COUNTY OREGON

DAVID EVANS AND ASSOCIATES INC.
2100 SW River Parkway
Portland Oregon 97201
Phone: 503.223.6663

N

Appendix C – Safety

Crash Reports

CITY OF TUALATIN, WASHINGTON COUNTY

CIPOLE RD and HERMAN RD, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

1 - 1 of 1 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
03200	N	N	N		N	N	09/01/2020	17	SW HERMAN RD	STRGHT		N	N	CLR	O-STRGHT	01	NONE 0	STRGHT										05
COUNTY							TU	315	SW CIPOLE RD	NE	(NONE)	UNKNOWN	N	DRY	HEAD		PRVTE	SW-NE									000	00
Y							7A			08			N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	49	M	OR-Y		039	000	05
N							45 22 33.25	-122 48 39.34			(02)													OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	NE-SW									000	00
																	PSNGR CAR		01	DRVR	INJB	27	F	OR-Y		000	000	00
																								OR<25				

CITY OF TUALATIN, WASHINGTON COUNTY

TUALATIN-SHERWOOD and CIPOLE RD, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

1 - 4 of 21 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J S W U I C O G N H R K V L	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
00228	N	N	N	01/13/2019	14	SW CIPOLE RD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										27,29
NONE				SU	0	SW TUALATIN-SHERWOOD	E		TRF SIGNAL	N	DRY	REAR		N/A	E -W									000	00
N				4P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N				45 22 8.5	-122 48 32.72																UNK				
													02	NONE 9	STOP										
														N/A	E -W									011	00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																					UNK				
01094	N	N	N N	03/04/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT										27,07
CITY				MO	40	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E									000	00
N				6P			05			N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	25	M	OR-Y		016,043	038	27,07
N				45 22 8.59	-122 48 31.74			(02)													OR<25				
													02	NONE 0	STRGHT										
														PRVTE	W -E									000	00
														PSNGR CAR		01	DRVR	INJC	48	F	OR-Y		000	000	00
																					OR<25				
04026	N	N	N	06/19/2016	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
NONE				SU	100	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000	00
N				2P			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	M	OR-Y		026	000	29
N				45 22 8.69	-122 48 30.79			(02)													OR<25				
													02	NONE 0	STOP										
														PRVTE	E -W									011	00
														PSNGR CAR		01	DRVR	INJC	23	F	OR-Y		000	000	00
																					OR<25				
04920	N	N	N N	07/26/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										07
CITY				TU	100	SW CIPOLE RD	E	(NONE)	NONE	N	DRY	REAR		PRVTE	W -E									000	00
N				12P			07			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	21	M	OR-Y		043	000	07
N				45 22 8.68	-122 48 30.85			(02)													OR<25				
													01	NONE 0	STRGHT										
														PRVTE	W -E									000	00
														PSNGR CAR		02	PSNG	INJC	19	M			000	000	00
													02	NONE 0	STOP										
														PRVTE	W -E									011	00
														PSNGR CAR		01	DRVR	INJC	53	M	OR-Y		000	000	00
																					OR<25				
03523	N	N	N N	06/14/2017	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLD	S-1STOP	01	NONE 0	STRGHT										29,32
CITY				WE	100	SW CIPOLE RD	E	(NONE)	NONE	N	DRY	REAR		PRVTE	W -E									000	00
N				10A			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	41	F	OR-Y		026,052	000	29,32
N				45 22 8.68	-122 48 30.89			(02)													OR<25				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A	D M R U G	J I N	S C H	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0	STOP											
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		01	DRVR	INJC	69	M	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STOP											
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		02	PSNG	NO<5	04	M			000	000		00
																03	NONE 0	STOP											
																	PRVTE	W -E									022		00
																	PSNGR CAR		01	DRVR	NONE	67	M	OR-Y		000	000		00
																								OR<25					
03610	N	N	N	N	N		07/13/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	22,29
CITY							FR	100	SW CIPOLE RD	E	(NONE)	NONE	N	DRY	REAR		PRVTE	W -E									000		22
N							11A			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	32	M	OR-Y		026	000		29
N							45 22 8.68	-122 48 30.92			(02)													OR<25					
																02	NONE 0	STOP											
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		01	DRVR	INJC	53	F	OR-Y		000	000		00
																								OR>25					
																03	NONE 0	STOP											
																	PRVTE	W -E									022		00
																	PSNGR CAR		01	DRVR	NONE	26	M	OR-Y		000	000		00
																								OR<25					
01251	N	N	N				03/04/2020	14	SW CIPOLE RD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							WE	100	SW TUALATIN-SHERWOOD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N							11A			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	39	M	OR-Y		026	000		29
N							45 22 8.68	-122 48 30.91			(02)													OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011		00
																	PSNGR CAR		01	DRVR	INJC	38	M	OR-Y		000	000		00
																								OR<25					
04565	N	N	N	N	N		08/31/2018	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
CITY							FR	110	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A	E -W									000		00
N							5P			08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 8.69	-122 48 30.78			(02)													UNK					
																02	NONE 9	STOP											
																	N/A	E -W									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	I H L	S C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02191	N	N	N					04/04/2016	14	SW CIPOLE RD	STRGHT		Y	N	CLR	S-STRGHT	01	NONE 0	STRGHT										29
NONE								MO	150	SW TUALATIN-SHERWOOD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N								1P			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	19	M	OTH-Y		026	000		29
N								45 22 8.76	-122 48 30.1			(02)													N-RES					
																	02	NONE 0	STRGHT											
																		PRVTE	E -W									000		00
																		PSNGR CAR		01	DRVR	INJB	58	M	OR-Y		000	000		00
																									OR<25					
04294	N	N	N		N	N		06/30/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	27,29,32
CITY								TH	150	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E									000		00
N								3P			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	F	OR-Y		016,026,052	038		27,29,32
N								45 22 8.75	-122 48 30.13			(02)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W -E									011	013	00
																		PSNGR CAR		01	DRVR	INJB	45	F	OR-Y		000	000		00
																									OR<25					
																	03	NONE 0	STOP											
																		PRVTE	W -E									022	013	00
																		PSNGR CAR		01	DRVR	INJC	55	M	OR-Y		000	000		00
																									OR<25					
																	04	NONE 0	STOP											
																		PRVTE	W -E									022	013	00
																		PSNGR CAR		01	DRVR	NONE	28	F	OR-Y		000	000		00
																									OR<25					
																	04	NONE 0	STOP											
																		PRVTE	W -E									022	013	00
																		PSNGR CAR		02	PSNG	INJC	55	F			000	000		00
																	05	NONE 0	STOP											
																		UNKN	W -E									022		00
																		PSNGR CAR		01	DRVR	NONE	35	F	OR-Y		000	000		00
																									OR<25					
06795	N	N	N		N	N		10/07/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										093	27,29
CITY								FR	150	SW CIPOLE RD	E	(NONE)	NONE	N	WET	REAR		PRVTE	W -E									000		00
N								12P			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	65	F	OR-Y		016,026	038	093	27,29
N								45 22 8.75	-122 48 30.22			(02)													OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W -E									011		00
																		PSNGR CAR		01	DRVR	INJC	52	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 I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
08043	N	N	N		N	N	12/15/2017	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLD	S-1STOP	01	NONE 0	STRGHT											07
CITY			FR					150	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	WET	REAR		PRVTE	W -E									000	00
N			7P							07			N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	16	F	OR-Y		043	000	07
N			45 22 8.75					-122 48 30.21			(02)							OR<25										
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	INJC	33	F	OR-Y		000	000	00
																								OR<25				
06640	N	N	N		N	N	10/01/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLD	S-STRGHT	01	NONE 0	STRGHT											07
CITY			SA					200	SW CIPOLE RD	E	(NONE)	NONE	N	WET	REAR		PRVTE	W -E									000	00
N			11A							07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	37	M	OR-Y		043	000	07
N			45 22 8.82					-122 48 29.52			(02)							OR<25										
																01	NONE 0	STRGHT										
																	PRVTE	W -E									000	00
																	PSNGR CAR		02	PSNG	NO<5	03	F			000	000	00
																02	NONE 0	STRGHT										
																	PRVTE	W -E									006 013	00
																	PSNGR CAR		01	DRVR	INJC	34	F	OR-Y		000	000	00
																								OR<25				
																03	NONE 0	STOP										
																	PRVTE	W -E									022 013	00
																	PSNGR CAR		01	DRVR	NONE	34	M	OR-Y		000	000	00
																								OR<25				
																04	NONE 0	STOP										
																	PRVTE	W -E									022	00
																	PSNGR CAR		01	DRVR	NONE	54	M	OR-Y		000	000	00
																								OR<25				
08017	N	N	N				11/02/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE			WE					200	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E									000	00
N			5P							07			N	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N			45 22 8.82					-122 48 29.51			(02)							UNK										
																02	NONE 9	STOP										
																	N/A	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
05771	N	N	N		N	N	11/04/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	27,07
CITY			MO					200	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000	00
N			5P							08			N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	31	M	OR-Y		016,043	038	27,07
N			45 22 8.81					-122 48 29.54			(02)							OR<25										

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0	STOP										
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		01	DRVR	INJC	38	M	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP										
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	NONE	31	M	OR-Y		000	000		00
																								OR<25					
00669	N	N	N	N	N		02/07/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	FOG	S-1STOP	01	NONE 9	STRGHT											29
STATE							WE	245	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E									000		00
N							6A			07			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 8.88	-122 48 28.92			(02)													UNK					
																02	NONE 9	STOP										
																	N/A	W -E									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
00715	N	N	N	N	N		02/05/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLD	S-1STOP	01	NONE 9	STRGHT											07
CITY							WE	263	SW CIPOLE RD	E	(NONE)	NONE	N	WET	REAR		N/A	E -W									000		00
N							10A			08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 8.9	-122 48 28.69			(02)													UNK					
																02	NONE 9	STOP										
																	N/A	E -W									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
05213	N	N	N	N	N		10/11/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	27,07
CITY							FR	285	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E									000		00
N							7A			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	39	M	OR-Y		016,043	038		27,07
N							45 22 8.94	-122 48 28.34			(02)													OR<25					
																02	NONE 0	STOP										
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		01	DRVR	INJC	35	F	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP										
																	PRVTE	W -E									022		00
																	PSNGR CAR		01	DRVR	NONE	67	M	OR-Y		000	000		00
																								OR<25					
04862	N	N	N	N	N		07/24/2016	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-STRGHT	01	NONE 0	STRGHT											07
CITY							SU	289	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N							11A			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	21	F	OR-Y		043	000		07
N							45 22 8.95	-122 48 28.2			(02)													OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R G S	J U N V	S I H L	W C O K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W										000 000	00 00
																02	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	41	M	OR-Y OR<25		000	006 000	00 00
04887	N	N	N				08/03/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							MO	300	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000	00
N N							9A 45 22 8.95	-122 48 28.16		08	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	47	M	OR-Y OR<25		026	000	29
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	67	F	OR-Y OR<25		000	011 000	00 00
00576	N	N	N				02/01/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01	NONE 9	STRGHT											29
CITY							TH	325	SW CIPOLE RD	E	(NONE)	UNKNOWN	N	WET	REAR		N/A	W -E									000	00
N N							6P 45 22 8.99	-122 48 27.84		07	(02)		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000	00
																02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000	00 00

URBAN NON-SYSTEM CRASH LISTING

CITY OF TUALATIN, WASHINGTON COUNTY

HERMAN RD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

1 - 4 of 13 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
01033	N N N N N	02/28/2019	16	SW HERMAN RD	INTER	CROSS	N	N	CLD	ANGL-OTH	01	NONE 9	TURN-R										27,02
CITY		TH	0	SW 124TH AVE	N		TRF SIGNAL	N	WET	TURN		N/A	E -N									000	00
N		1P			00	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 42.84	-122 48																UNK				
			17.93																				
											02	NONE 9	STRGHT										
												N/A	S -N									000	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				
04634	N N N N N	12/16/2020	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										07
CITY		WE	0	SW 124TH AVE	N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S									000	00
N		5P			09	2		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	46	F	OR-Y		043,026	000	07
N		45 22 42.84	-122 48																OR<25				
			17.93																				
											02	NONE 0	STOP										
												PRVTE	N -S									011	00
												PSNGR CAR		01	DRVR	INJC	20	F	OR-Y		000	000	00
																			OR<25				
03529	N N N	06/14/2017	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	TURN-R										29
NONE		WE	0	SW 124TH AVE	NE		TRF SIGNAL	N	DRY	REAR		N/A	E -N									000	00
N		5P			09	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 42.84	-122 48																UNK				
			17.93																				
											02	NONE 9	STOP										
												N/A	E -N									011	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				
02723	N N N N N	07/29/2020	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	TURN-R										07
CITY		WE	0	SW 124TH AVE	SW		YIELD	N	DRY	REAR		PRVTE	W -S									000	00
N		10A			09	2		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	56	F	OR-Y		043	000	07
N		45 22 42.84	-122 48																OR<25				
			17.93																				
											01	NONE 0	TURN-R										
												PRVTE	W -S									000	00
												PSNGR CAR		02	PSNG	INJC	06	M			000	000	00
											02	NONE 0	STOP										
												PRVTE	W -S									011	00
												PSNGR CAR		01	DRVR	NONE	48	M	OR-Y		000	000	00
																			OR>25				
01769	N N N	04/10/2018	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	O-1STOP	01	NONE 9	BACK										10
NONE		TU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	BACK		N/A	E -W									000	00
N		3P			09	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 42.84	-122 48																UNK				
			17.93																				

CITY OF TUALATIN, WASHINGTON COUNTY

HERMAN RD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

5 - 9 of 13 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J U G S	S	W I N V	C H L	O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																	02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
05366	N	N	N	N	N			08/12/2016	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
CITY			FR						0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	E -W									000		00
N N			9A 45 22 42.84					-122 48 17.93			02	2		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	30	F	OR-Y OR<25		000	000		00
																	01 02	NONE 0 PRVTE PSNGR CAR NONE 0 PRVTE PSNGR CAR	STRGHT E -W STRGHT S -N	02 01	PSNG DRVR	INJB INJA	08 56	F F	 OR-Y OR<25		000 020	000 000		00 00 00 04
02422	N	N	N	N	N			04/13/2016	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 9	STRGHT											02
CITY			WE						0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		N/A	S -N									000		00
N N			3P 45 22 42.84					-122 48 17.93			04	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																	02	NONE 9 N/A PSNGR CAR	TURN-L N -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000		00 00
01933	N	N	N	N	N			04/07/2017	16	SW HERMAN RD	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE 0	STRGHT											02
CITY			FR						0	SW 124TH AVE	CN		TRF SIGNAL	N	WET	TURN		PRVTE	S -N									000		00
N N			1P 45 22 42.84					-122 48 17.93			04	2		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	29	M	OR-Y OR<25		000	000		00
																	02	NONE 0 PRVTE PSNGR CAR	TURN-L N -E	01	DRVR	NONE	45	M	OR-Y OR<25		004,028	000 000		00 02
05408	N	N	N	N	N			10/11/2018	16	SW HERMAN RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 9	TURN-L											04
CITY			TH						0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		N/A	N -E									000		00
N N			1P 45 22 42.84					-122 48 17.93			04	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																	02	NONE 9 N/A PSNGR CAR	STRGHT S -N	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000		00 00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R G S	J N 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 / OWNER / TYPE	QTY	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
06891	N	N	N					12/24/2019	16	SW HERMAN RD	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE	0	STRGHT											02
CITY								TU	0	SW 124TH AVE	CN		L-GRN-SIG	N	DRY	TURN		PRVTE		S -N									000		00
N								5P			04	2		N	DUSK	INJ		PSNGR CAR			01	DRVR	INJC	30	M	OR-Y		000	000		00
N								45 22 42.84	-122 48 17.93																	OR<25					
																	02	NONE	0	TURN-L											
																		PRVTE		N -E									000		00
																		PSNGR CAR			01	DRVR	NONE	57	M	OR-Y		028,004	000		02
																										OR<25					
02817	N	N	N		N	N		08/06/2020	16	SW HERMAN RD	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE	9	TURN-L											02
CITY								TH	0	SW 124TH AVE	CN		TRF SIGNAL	N	WET	TURN		N/A		S -W									000		00
N								9A			01	2		N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
N								45 22 42.84	-122 48 17.93																	UNK					
																	02	NONE	9	STRGHT											
																		N/A		N -S									000		00
																		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
																										UNK					
02786	N	N	N		N	N		06/01/2018	17	SW HERMAN RD	STRGHT		Y	N	CLR	S-1STOP	01	NONE	9	STRGHT											07
CITY								FR	100	SW 124TH AVE	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A		E -W									000		00
N								5P			08			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
N								45 22 43.42	-122 48 15.94			(02)														UNK					
																	02	NONE	9	STOP											
																		N/A		E -W									011		00
																		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
																										UNK					
03519	N	N	N		N	N		07/10/2019	17	SW HERMAN RD	STRGHT		N	N	CLD	S-1STOP	01	NONE	9	STRGHT											27,29
CITY								WE	200	SW 124TH AVE	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A		E -W									000		00
N								4P			08			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
N								45 22 43.8	-122 48 14.66			(02)														UNK					
																	02	NONE	9	STOP											
																		N/A		E -W									011		00
																		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
																										UNK					

CITY OF TUALATIN, WASHINGTON COUNTY

MYSLONY ST and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

1 - 5 of 5 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
01826	N	N	N		N	N	03/18/2016	16	SW MYSLONY ST	INTER	3-LEG	N	N	CLR	O-1STOP	01	NONE 0	STRGHT											05
CITY			FR				0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	SS-M		PRVTE	N -S									000	00
N			4A						04	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	47	M	NONE		044	000	05
N			45 22 35.33	-122 48 17.98																			OR<25				
																02	NONE 0	STOP									
																	PRVTE	S -N								012	00
																	MTRCYCLE		01	DRVR	INJB	36	M	OR-Y		000	000	00
																								OR>25				
09144	N	N	N		N	N	10/10/2016	17	SW MYSLONY ST	ALLEY		N	N	CLR	ANGL-OTH	01	NONE 0	TURN-L										02
CITY			MO				450	SW 124TH AVE	E	(NONE)	NONE	N	DRY	TURN		UNKN	N -E									018	00
N			3P						08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	27	M	OTH-Y		028	000	02
N			45 22 35.39	-122 48 11.29						(02)														N-RES				
																02	NONE 0	STRGHT									
																	PRVTE	E -W								000	00
																	PSNGR CAR		01	DRVR	INJC	46	F	OR-Y		000	000	00
																								OR<25				
96859	N	N	N				10/10/2016	17	SW MYSLONY ST	ALLEY		N	N	CLR	ANGL-OTH	01	NONE 0	TURN-L										02
CITY			MO				630	SW 124TH AVE	E	(NONE)	NONE	N	DRY	TURN		UNKN	S -W									000	00
N			3P						07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	27	M	OTH-Y		028	000	02
N			45 22 35.37	-122 48 8.79						(02)														N-RES				
																02	NONE 0	STRGHT									
																	UNKN	W -E								000	00
																	PSNGR CAR		01	DRVR	INJC	46	F	OR-Y		000	000	00
																								OR<25				
03137	N	Y	N		N	N	06/19/2018	16	SW 124TH AVE	CURVE		N	Y	CLR	FIX OBJ	01	NONE 9	STRGHT									053	10
CITY			TU				300	SW MYSLONY ST	S	(RSDMD)	UNKNOWN	N	DRY	FIX		N/A	N -S									000	00
Y			8P						07			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N			45 22 32.02	-122 48 18.52						(04)														UNK				
06893	N	N	N		N	N	11/01/2017	16	SW 124TH AVE	CURVE		N	Y	CLD	FIX OBJ	01	NONE 9	STRGHT									044,062	10
CITY			WE				325	SW MYSLONY ST	S	(RSDMD)	NONE	N	DRY	FIX		N/A	N -S									000	00
Y			1P						07			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N			45 22 31.98	-122 48 18.54						(04)														UNK				

CITY OF TUALATIN, WASHINGTON COUNTY

TUALATIN-SHERWOOD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

1 - 5 of 100 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J S W U I C O G N H R K V L	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
02547	N	N	N	05/21/2018	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 1	STRGHT											27,29
CITY				MO	0	SW 124TH AVE	N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S										000	00
N				8A			06	0		N	DAY	INJ		SEMI TOW		01	DRVR	NONE	49	M	OTH-Y		016,026	038		27,29
N				45 22 9.72	-122 48 20.29																N-RES					
													02	NONE 0	STOP											
														PRVTE	N -S									012		00
														PSNGR CAR		01	DRVR	INJC	65	F	OR-Y		000	000		00
																					OR<25					
00625	N	N	N	02/06/2019	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 1	TURN-L											27,29
CITY				WE	0	SW 124TH AVE	N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -E										000	00
N				11A			06	0		N	DAY	INJ		SEMI TOW		01	DRVR	NONE	31	M	OTH-Y		016,026	038		27,29
N				45 22 9.72	-122 48 20.29																N-RES					
													02	NONE 0	STOP											
														PRVTE	N -S									011		00
														PSNGR CAR		01	DRVR	INJC	17	M	OR-Y		000	000		00
																					OR<25					
02851	N	N	N	08/06/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										013	07,29
CITY				TH	0	SW 124TH AVE	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S										000	00
N				5P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N				45 22 9.72	-122 48 20.29																UNK					
													02	NONE 9	STOP											
														N/A	N -S									011		00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																					UNK					
03895	N	Y	N	10/25/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
CITY				SU	0	SW 124TH AVE	N		TRF SIGNAL	N	DRY	REAR		N/A	N -S										000	00
N				12P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N				45 22 9.73	-122 48 20.32																UNK					
													02	NONE 9	STOP											
														N/A	N -S									011		00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																					UNK					
02692	N	N	N	04/23/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE				SA	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		N/A	E -W										000	00
N				12P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N				45 22 9.72	-122 48 20.29																UNK					
													02	NONE 9	STOP											
														N/A	E -W									011		00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																					UNK					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03949	N	N	N		N	N	06/16/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	Y	CLD	FIX OBJ	01	NONE 9	TURN-L										040	
CITY							TH	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	FIX		N/A	N -E									000		00
N							6P			05	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 9.72	-122 48 20.29																UNK					
04777	N	N	N		N	N	08/04/2017	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT												07
CITY							FR	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W									000		00
N							3P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		043	000		07
N							45 22 9.72	-122 48 20.29																OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011		00
																	PSNGR CAR		01	DRVR	INJC	37	F	OR-Y		000	000		00
																								OR<25					
07573	N	N	N		N	N	11/28/2017	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT												27,07
CITY							TU	0	SW 124TH AVE	E		TRF SIGNAL	N	WET	REAR		PRVTE	E -W									000		00
N							5P			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	48	F	OR-Y		016,043	038		27,07
N							45 22 9.72	-122 48 20.29																OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011		00
																	PSNGR CAR		01	DRVR	NONE	29	M	OR-Y		000	000		00
																								OR<25					
03012	N	N	N		N	N	05/23/2017	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT												07
CITY							TU	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		N/A	E -W									000		00
N							6P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 9.72	-122 48 20.29																UNK					
																02	NONE 9	STOP											
																	N/A	E -W									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
00173	N	N	N		N	N	01/10/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 0	STRGHT											013	07
CITY							TH	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W									000		00
N							6P			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	48	F	OR-Y		043	000		07
N							45 22 9.72	-122 48 20.29																OR>25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		01	DRVR	INJC	67	F	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP											
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	INJC	51	F	OR-Y		000	000		00
																								OR<25					

CITY OF TUALATIN, WASHINGTON COUNTY

TUALATIN-SHERWOOD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

10 - 14 of 100 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D / D M 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
											03	NONE 0	STOP										
												PRVTE	E -W									022	00
												PSNGR CAR		02	PSNG	INJC	08	M			000	000	00
											04	NONE 0	STOP										
												PRVTE	E -W									022	00
												PSNGR CAR		01	DRVR	NONE	17	M	OR-Y		000	000	00
																			OR<25				
02816	N N N N N	06/05/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										27,29
CITY		WE	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W									000	00
N		2A			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	23	M	OTH-Y		016,026	038	27,29
N		45 22 9.72	-122 48																OR<25				
			20.29																				
											02	NONE 0	STOP										
												PRVTE	E -W									011	00
												PSNGR CAR		01	DRVR	INJC	56	M	OR-Y		000	000	00
																			OR<25				
00333	N N N	01/18/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	RAIN	S-STRGHT	01	NONE 9	STRGHT										29
NONE		FR	0	SW 124TH AVE	E		TRF SIGNAL	N	WET	REAR		N/A	E -W									000	00
N		6P			06	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 9.72	-122 48																UNK				
			20.29																				
											02	NONE 9	STRGHT										
												N/A	E -W									006	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				
00653	N Y N N N	02/09/2019	16	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 9	STRGHT										29
CITY		SA	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		N/A	E -W									000	00
N		1P			09	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 42.84	-122 48																UNK				
			17.93																				
											02	NONE 9	STOP										
												N/A	E -W									011	00
												MTRCYCLE		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				
01258	N N N N N	03/12/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 9	STRGHT										27,29
CITY		TU	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		N/A	E -W									000	00
N		4P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 9.72	-122 48																UNK				
			20.29																				
											02	NONE 9	STOP										
												N/A	E -W									011	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																			UNK				

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
04350	N	N	N				11/24/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-STRGHT	01	NONE 0	STRGHT										29
NONE							TU	0	SW 124TH AVE	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W									000	00
N							10A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	36	F	OR-Y		042	000	29
N							45 22 9.72	-122 48 20.29																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	E -W									006	00
																	PSNGR CAR		01	DRVR	NONE	65	M	OR-Y		000	000	00
																								OR<25				
04362	N	N	N		N	N	06/19/2019	16	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 9	STRGHT										07
CITY							WE	0	SW 124TH AVE	S		TRF SIGNAL	N	DRY	REAR		N/A	S -N									000	00
N							6P			06	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 42.84	-122 48 17.93																UNK				
																02	NONE 9	STOP										
																	N/A	S -N									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
03535	N	N	N		N	N	05/31/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										07
CITY							TU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N							2P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	41	M	OR-Y		043	000	07
N							45 22 9.72	-122 48 20.29																OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	32	F	OR-Y		000	000	00
																								OR<25				
04658	N	N	N		N	N	07/15/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										07
CITY							FR	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N							3P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	50	F	OTH-Y		043	000	07
N							45 22 9.72	-122 48 20.29																OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	40	F	OR-Y		000	000	00
																								OR<25				
01864	N	N	N		N	N	03/20/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLD	S-1STOP	01	NONE 9	STRGHT										27,29
CITY							SU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		N/A	W -E									000	00
N							4P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 9.72	-122 48 20.29																UNK				
																02	NONE 9	STOP										
																	N/A	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				

URBAN NON-SYSTEM CRASH LISTING

CITY OF TUALATIN, WASHINGTON COUNTY

TUALATIN-SHERWOOD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

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
05361	N	N	N				08/11/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NONE							TH	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		N/A	W -E									000	00
N							6P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 9.72	-122 48 20.29																UNK				
																02	NONE 9	STOP										
																	N/A	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
07665	N	N	N				11/08/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										27,29
NO RPT							TU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		N/A	E -W									000	00
N							3P			05	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 9.72	-122 48 20.29																UNK				
																02	NONE 9	STOP										
																	N/A	E -W									011	00
																	SEMI TOW		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
00025	N	N	N		N	N	01/02/2017	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
CITY							MO	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N							5P			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	79	M	OR-Y		026	000	29
N							45 22 9.72	-122 48 20.29																OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	INJC	30	F	OR-Y		000	000	00
																								OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		02	PSNG	INJC	05	F			000	000	00
02204	N	N	N		N	N	04/18/2017	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										07
CITY							TU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N							6P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	18	F	OTH-Y		043	000	07
N							45 22 9.72	-122 48 20.29																OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	INJC	18	F	OR-Y		000	000	00
																								OR<25				
05685	N	N	N				09/15/2017	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 1	STRGHT										29
NONE							FR	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N							5P			06	0		N	DAY	INJ		SEMI TOW		01	DRVR	NONE	38	M	OR-Y		026	000	29
N							45 22 9.72	-122 48 20.29																OR<25				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	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	STOP W -E						OR-Y OR<25		000	012 000		00 00
06563	N	N	N	N	N		10/19/2017 TH 6P 45 22 9.72	14 0 -122 48 20.29	SW TUALATIN-SHERWOOD SW 124TH AVE	INTER W 06	3-LEG 0	N TRF SIGNAL	N N	RAIN WET DLIT	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	NONE	17	M	OR-Y OR<25		043	000 000		07 00
CITY N N																												
																02	NONE 0 PRVTE PSNGR CAR	STOP W -E	01	DRVR	INJC	50	M	OR-Y OR<25		000	011 000		00 00
																02	NONE 0 PRVTE PSNGR CAR	STOP W -E	02	PSNG	INJC	50	F			000	011 000		00 00
07889	N	N	N				12/09/2017 SA 1P 45 22 9.72	14 0 -122 48 20.29	SW TUALATIN-SHERWOOD SW 124TH AVE 06	INTER W 06	3-LEG 0	N TRF SIGNAL N	N N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000		29 00 00
NONE N N																												
																02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
03819	N	N	N	N	N		07/29/2019 MO 9A 45 22 9.72	14 0 -122 48 20.29	SW TUALATIN-SHERWOOD SW 124TH AVE 05	INTER W 05	CROSS 0	N UNKNOWN N	N N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	81	M	OR-Y OR<25		016,026	038	013	27,29 00 27,29
CITY N N																												
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	64	M	OR-Y OR<25		000	011 000	013	00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	NONE	37	F	OR-Y OR<25		000	022 000		00 00
04114	N	N	N				08/13/2019 TU 2A 45 22 9.72	14 0 -122 48 20.29	SW TUALATIN-SHERWOOD SW 124TH AVE 06	INTER W 06	CROSS 0	N TRF SIGNAL N	N N N	CLR DRY DLIT	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	NONE	35	M	OR-Y OR<25		026	000 000		29 00 29
NONE N N																												

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S	S I H V	W C O R 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
																02	NONE 0 PRVTE PSNGR CAR	STOP W -E									011		00
																			01	DRVR	INJC	59	M	OR-Y OR<25		000	000		00
82093	N	N	N				06/23/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							SU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000		00
N N							11A 45 22 9.71	-122 48 20.29		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	62	F	OR-Y OR<25		026	000		29
																02	NONE 0 PRVTE PSNGR CAR	STOP W -E									011		00
																			01	DRVR	INJC	70	F	OR-Y OR<25		000	000		00
00771	N	N	N				02/12/2019	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	RAIN	S-1STOP	01	NONE 9	STRGHT											29
NONE							TU	0	SW 124TH AVE	W		TRF SIGNAL	N	WET	REAR		N/A	W -E									000		00
N N							8A 45 22 9.72	-122 48 20.29		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
83688	N	N	N				10/21/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	ANIMAL	01	NONE 9	STRGHT										035		12
NONE							MO	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	OTH		N/A	E -W									000		00
N N							5A 45 22 9.72	-122 48 20.27		05	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
04439	N	N	N				12/01/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE							TU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000		00
N N							10A 45 22 9.72	-122 48 20.29		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	54	M	OR-Y OR<25		026	000		07
																02	NONE 0 PRVTE PSNGR CAR	STOP W -E									011		00
																			01	DRVR	INJC	42	M	OR-Y OR<25		000	000		00
83080	N	N	N				11/03/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							TU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000		00
N N							1P 45 22 9.75	-122 48 20.31		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	66	F	OR-Y OR<25		026	000		29
																02	NONE 0 PRVTE PSNGR CAR	STOP W -E									011		00
																			01	DRVR	INJC	27	F	OR-Y OR<25		000	000		00

TUALATIN-SHERWOOD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

SER# INVEST RD DPT UNLOC?	S P E E D	A L C	D R U G S	M J I N V	S C H L	W O R K	DATE DAY TIME LAT	CLASS DIST FROM LONG	CITY STREET FIRST STREET SECOND STREET LRS	RD CHAR DIRECT LOCTN	INT-TYPE (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH COLL SVRTY	V#	SPCL USE TRLR QTY OWNER TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04555	N	N	N		N	N	12/10/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 9	STRGHT											07
CITY							TH	0	SW 124TH AVE	W		TRF SIGNAL	N	WET	REAR		N/A	W -E									000		00
N							9P			06	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 9.72	-122 48 20.29																	UNK					
																02	NONE 9	STOP											
																	N/A	W -E									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
03889	N	Y	N		N	N	10/25/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	29
CITY							SU	0	SW 124TH AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000		00
N							12P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	53	M	OR-Y		026	000		29
N							45 22 9.72	-122 48 20.29																	OR<25					
																02	NONE 0	STOP											
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		01	DRVR	INJC	68	M	OR-Y		000	000		00
																								OR>25					
																02	NONE 0	STOP											
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		02	PSNG	INJC	60	F			000	000		00
																03	NONE 0	STOP											
																	PRVTE	W -E									022		00
																	PSNGR CAR		01	DRVR	INJC	55	F	OR-Y		000	000		00
																								OR>25					
06385	N	N	N		N	N	09/21/2016	14	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	CLD	O-1 L-TURN	01	NONE 0	STRGHT											04
CITY							WE	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	E -W									000		00
N							8A			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	57	F	OR-Y		000	000		00
N							45 22 9.72	-122 48 20.29																	OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	W -N									000		00
																	PSNGR CAR		01	DRVR	NONE	23	F	OR-Y		020,004	000		04
																								OR<25					
00335	N	N	N				01/18/2017	16	SW TUALATIN-SHERWOOD	INTER	3-LEG	N	N	RAIN	O-1 L-TURN	01	NONE 0	STRGHT											04
NO RPT							WE	0	SW 124TH AVE	CN		TRF SIGNAL	N	WET	TURN		PRVTE	S -N									000		00
N							1P			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	23	M	OR-Y		000	000		00
N							45 23 16.36	-122 48 15.23																	OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	N -E									000		00
																	PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		020	000		04
																								OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04434	N	N	N		N	N	07/21/2017	16	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											04
CITY							FR	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	N -S									000		00
N							3P			01	2		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	35	M	OR-Y		020	000		04
N							45 22 42.84	-122 48 17.93																OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	S -W									000		00
																	PSNGR CAR		01	DRVR	NONE	55	M	OR-Y		000	000		00
																								OR<25					
01124	N	N	N		N	N	03/05/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											080	02
CITY							TU	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	S -N									000		00
N							7A			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	49	M	OR-Y		000	000		00
N							45 22 9.72	-122 48 20.29																OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	N -E									000		00
																	PSNGR CAR		01	DRVR	NONE	30	M	OR-Y		028,004	000		02
																								OR<25					
																03	NONE 0	STOP											
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	NONE	40	M	OR-Y		000	000		00
																								OR<25					
02524	N	N	N		N	N	05/18/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE 0	TURN-L												04
CITY							SA	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W -N									000		00
N							3P			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	77	F	OR-Y		020	000		04
N							45 22 9.72	-122 48 20.29																OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	E -W									000		00
																	PSNGR CAR		01	DRVR	INJC	23	M	OR-Y		000	000		00
																								OR<25					
06869	N	N	N		N	N	12/23/2019	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE 0	STRGHT												04
CITY							MO	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	E -W									000		00
N							1P			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	22	F	OR-Y		000	000		00
N							45 22 9.72	-122 48 20.29																OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	W -N									000		00
																	PSNGR CAR		01	DRVR	NONE	61	M	OR-Y		020	000		04
																								OR<25					
00382	N	N	N				01/17/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE 0	TURN-L											087	02
CITY							FR	0	SW 124TH AVE	CN		TRF SIGNAL	N	WET	TURN		PRVTE	W -N									000	087	00
N							4A			02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	25	F	OR-Y		028,004	000		02
N							45 22 9.72	-122 48 20.29																OR<25					

CITY OF TUALATIN, WASHINGTON COUNTY

TUALATIN-SHERWOOD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

42 - 46 of 100 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E E D / D M R J S W / A U I C O / L G N H R / 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	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACT EVENT	CAUSE
											02 NONE 0	STRGHT									
											PRVTE	E -W								000 087	00
											PSNGR CAR		01 DRVR	INJA	58	F	OR-Y		000	000	00
																	OR<25				
02936	N N N N N	08/14/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01 NONE 0	TURN-L								087	02
CITY		FR	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	S -W								000 087	00
N		4P			01	0		N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	51	F	OR-Y		028,004	000	02
N		45 22 9.72	-122 48 20.29														OR<25				
											02 NONE 0	STRGHT									
											PRVTE	N -S								000 087	00
											PSNGR CAR		01 DRVR	INJC	18	M	OR-Y		000	000	00
																	OR<25				
03941	N N N Y	10/28/2020	14	SW TUALATIN-SHERWOOD	INTER	CROSS	N	N	FOG	O-1 L-TURN	01 NONE 0	TURN-L									02
CITY		WE	0	SW 124TH AVE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	S -W								000	00
N		6A			01	0		N	DLIT	INJ	PSNGR CAR		01 DRVR	INJC	60	M	OR-Y		028,004	000	02
N		45 22 9.72	-122 48 20.29														OR<25				
											02 NONE 0	STRGHT									
											PRVTE	N -S								000	00
											PSNGR CAR		01 DRVR	INJC	31	F	OR-Y		000	000	00
																	OR<25				
05093	N N N N N	08/01/2016	16	SW 124TH AVE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 9	STRGHT									07
CITY		MO	50	SW TUALATIN-SHERWOOD	N	(NONE)	UNKNOWN	N	DRY	REAR	N/A	N -S								000	00
N		9A			06			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 10.65	-122 48 20.29			(03)											UNK				
											02 NONE 9	STOP									
											N/A	N -S								012	00
											SEMI TOW		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
02414	N N N N N	07/07/2020	16	SW 124TH AVE	STRGHT		N	N	CLD	S-1STOP	01 NONE 0	STRGHT									07
CITY		TU	100	SW TUALATIN-SHERWOOD	N	(NONE)	NONE	N	DRY	REAR	PRVTE	N -S								000	00
N		10A			08			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	22	M	OR-Y		043	000	07
N		45 22 11.16	-122 48 20.29			(02)											OR<25				
											02 NONE 0	STOP									
											PRVTE	N -S								011	00
											PSNGR CAR		01 DRVR	INJC	49	F	NONE		000	000	00
																	OR<25				
00173	N N N N N	01/09/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01 NONE 9	STRGHT									29
CITY		TH	40	SW 124TH AVE	E	(NONE)	UNKNOWN	N	WET	REAR	N/A	E -W								000	00
N		8P			06			N	DLIT	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 9.87	-122 48 18.84			(02)											UNK				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	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	STOP E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
04205	N	N	N	N	N		08/14/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	SMOK	S-STRGHT	01	NONE 0	STRGHT										087	07
CITY			TU					50	SW 124TH AVE	E	(NONE)	NONE	N	DRY	REAR		PRVTE	W -E									000	087	00
N N			1P 45 22 9.88					-122 48 18.7		05	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	F	OR-Y OR<25		043	000		07
																02	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	INJC	32	M	OR-Y OR<25		000	006 000	087	00 00
																02	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	02	PSNG	INJC	31	F			000	006 000	087	00 00
																02	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	03	PSNG	INJB	01	F			000	006 000	087	00 00
02275	N	N	N	N	N		05/07/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
CITY			TU					80	SW 124TH AVE	E	(NONE)	UNKNOWN	N	DRY	REAR		UNKN	E -W									000		00
N N			1P 45 22 9.93					-122 48 18.3		08	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	M	UNK UNK		026	000		29
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	35	F	OR-Y OR<25		000	011 000		00 00
02767	N	N	N				06/01/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE			SA					100	SW 124TH AVE	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A	E -W									000		00
N N			2P 45 22 9.95					-122 48 18.02		08	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																02	NONE 9 N/A PSNGR CAR	STOP E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
03667	N	N	N				07/19/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE			FR					100	SW 124TH AVE	E	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E									000		00
N N			7P 45 22 9.95					-122 48 18.04		07	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S I H L	W C O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES / LICNS	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
06003	N	N	N	N	N		11/15/2019 FR 6P 45 22 9.94	14 100 -122 48 18	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT E 08	(NONE) (02)	N TRF SIGNAL	N	CLR DRY DUSK	S-1STOP REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	07 000 000		07 00 00
																02	NONE 9 N/A PSNGR CAR	STOP E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
06147	N	N	N				11/13/2018 TU 5P 45 22 10.04	14 156 -122 48 17.22	SW TUALATIN-SHERWOOD SW 124TH AVE 08	STRGHT E 08	(NONE) (02)	Y UNKNOWN	N	RAIN WET DUSK	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	46	M	OR-Y OR<25		016,026	013 000 038		27,29 00 27,29
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	37	M	OR-Y OR<25		000	011 022	013	00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	45	M	OR-Y OR<25		000	011 000		00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	02	PSNG	INJC	45	F			000	011 000		00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	03	PSNG	INJC	18	F			000	011 000		00 00
06091	N	N	N	Y			11/10/2018 SA 1P 45 22 10.1	14 200 -122 48 16.64	SW TUALATIN-SHERWOOD SW 124TH AVE 07	STRGHT E 07	(NONE) (02)	N UNKNOWN N	N	CLR DRY DAY	S-STRGHT REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	NONE	22	F	OR-Y OR>25		043	013 000 000		07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	INJC	61	F	OR-Y OR<25		000	000 000	013	00 00
																02	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	02	PSNG	INJC	66	F			000	000 000	013	00 00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S	S I H V	W C O L	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
																03	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	NONE	71	M	OR-Y OR<25		000	022 000		00 00
00223	N	N	N	N	N		01/13/2019 CITY SU 5P 45 22 10.1	14 200 -122 48 16.62	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT E 08	(NONE)	N NONE	N N	CLR DRY DUSK	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	62	M	OR-Y OR<25		043	000 000		07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	66	M	OR-Y OR<25		000	011 000		00 00
03702	N	N	N	N	N		07/22/2019 CITY MO 9A 45 22 10.16	14 250 -122 48 15.97	SW TUALATIN-SHERWOOD SW 124TH AVE 07	STRGHT E 07	(NONE) (02)	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000		27,07 00 00
																02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
00331	N	N	N	N	N		01/16/2020 CITY TH 6A 45 22 10.17	14 250 -122 48 15.94	SW TUALATIN-SHERWOOD SW 124TH AVE 08	STRGHT E 08	(NONE) (02)	N UNKNOWN	N N	RAIN WET DARK	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	22	M	OR-Y OR<25		043	000 000	013	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	59	F	OR-Y OR<25		000	011 000	013	00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	24	M	OR-Y OR<25		000	022 000		00 00
03925	N	N	N	N	N		10/27/2020 CITY TU 7A 45 22 10.17	14 250 -122 48 15.93	SW TUALATIN-SHERWOOD SW 124TH AVE 08	STRGHT E 08	(NONE) (02)	N UNKNOWN	N N	CLD DRY DLIT	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	48	M	OR-Y OR<25		016,043	038 000	013	27,07 00 27,07
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	61	F	OR-Y OR<25		000	011 000	013	00 00

SER# / INVEST / RD DPT / UNLOC?	S P E D / D M 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
											03 NONE 0	STOP									
											PRVTE	E -W								022	00
											PSNGR CAR		01 DRVR	NONE	29	M	OR-Y		000	000	00
																	OR<25				
84730	N N N	11/10/2017	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	UNK	S-1STOP	01 NONE 9	STRGHT									29
NO RPT		FR	500	SW 124TH AVE	E	(NONE)	UNKNOWN	N	WET	REAR	N/A	E -W								000	00
N		6P			08			N	DUSK	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 10.52	-122 48			(02)											UNK				
			12.48																		
											02 NONE 9	STOP									
											N/A	E -W								011	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
02064	N N N N N	04/25/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT									27,07
CITY		TH	500	SW 124TH AVE	E	(NONE)	NONE	N	DRY	REAR	PRVTE	E -W								000	00
N		5P			08			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	17	F	OR-Y		016,043	038	27,07
N		45 22 10.52	-122 48			(02)											OR<25				
			12.51																		
											02 NONE 0	STOP									
											PRVTE	E -W								011	00
											PSNGR CAR		01 DRVR	INJC	54	F	OR-Y		000	000	00
																	OR<25				
00134	N N N N N	01/08/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01 NONE 9	STRGHT									07
CITY		TU	500	SW 124TH AVE	E	(NONE)	NONE	N	WET	REAR	N/A	E -W								000	00
N		11A			08			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 10.52	-122 48			(02)											UNK				
			12.49																		
											02 NONE 9	STOP									
											N/A	E -W								011	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
06592	Y N N N N	12/01/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLD	S-STRGHT	01 NONE 9	STRGHT									01
CITY		SA	600	SW 124TH AVE	E	(NONE)	NONE	N	WET	REAR	N/A	E -W								000	00
N		11A			08			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 22 10.66	-122 48			(02)											UNK				
			11.14																		
											02 NONE 9	STRGHT									
											N/A	E -W								000	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																	UNK				
04556	N N N N N	12/10/2020	19	SW 124TH AVE	STRGHT		N	Y	FOG	FIX OBJ	01 NONE 9	STRGHT								035,079	12
COUNTY		TH	1800	SW TUALATIN-SHERWOOD	S	(NONE)	UNKNOWN	N	WET	FIX	N/A	S -N								088	00
Y		1A			08			N	DARK	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		45 21 51.32	-122 48			(02)											UNK				
			20.39																		

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R J U G S	I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT EVENT	CAUSE
02004	N	N	N				05/31/2020	19	SW 124TH AVE	STRGHT		N	Y	CLR	BIKE	01	NONE 0	STRGHT									32
COUNTY							SU	3745	SW TUALATIN-SHERWOOD	S	(NONE)	UNKNOWN	N	DRY	SS-O		PRVTE	N -S								000	00
Y							5P			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	21	M	OR-Y		080,052	000	32
N							45 21 51.04	-122 48 20.38			(02)													OR<25				
																		- STRGHT	01	BIKE	INJB	43	M		SHLDR	000	046	00
																		N S									
02027	N	N	N				04/23/2019	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 9	STRGHT									29
NONE							TU	30	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E								000	00
N							1P			06			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 9.61	-122 48 21.36			(02)													UNK				
																02	NONE 9	STOP										
																	N/A	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
06475	N	N	N				11/26/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-STRGHT	01	NONE 9	STRGHT									29
NONE							TU	30	SW 124TH AVE	W	(NONE)	UNKNOWN	N	WET	REAR		N/A	E -W								000	00
N							1P			05			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 9.61	-122 48 21.35			(02)													UNK				
																02	NONE 9	STRGHT										
																	N/A	E -W									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
06771	N	N	N	N	N		10/07/2016	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT									07
CITY							FR	50	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E								000	00
N							3P			06			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	44	F	OR-Y		043	000	07
N							45 22 9.59	-122 48 21.64			(02)													OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	INJC	51	F	OTH-Y		000	000	00
																								N-RES				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		02	PSNG	INJC	25	F			000	000	00
05356	N	N	N				08/11/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT									06,29
NONE							TH	50	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E								000	00
N							6A			06			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 22 9.59	-122 48 21.64			(03)													UNK				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S	S I H V	W C O L	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 / INJ / SVRTY	A G E	S E X	LICNS / RES / LOC	PED ERROR	ACT	EVENT	CAUSE
																02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR NONE 	00	Unk	UNK UNK	000	011 000		00 00
06572	N	N	N	N	N		09/29/2016 TH 5P 45 22 9.59	14 50 -122 48 21.64	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 05	(NONE) (02)	N NONE	N	CLR DRY DAY	S-STRGHT REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR NONE 	00	Unk	UNK UNK	000	07 000 000		00 00
																02	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR NONE 	00	Unk	UNK UNK	000	006 000		00 00
01112	N	N	N	N	N		02/27/2017 MO 3P 45 22 9.59	14 50 -122 48 21.65	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 05	(NONE) (02)	N NONE	N	CLD WET DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR NONE 	34	F	OR-Y OR<25	043	07 000	013	07 00
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR INJC 	16	M	OR-Y OR<25	000	011 000	013	00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR INJB 	43	M	OR-Y OR<25	000	022 000		00 00
05186	N	N	N	N	N		10/09/2019 WE 2P 45 22 9.58	14 50 -122 48 21.65	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 05	(NONE) (02)	N NONE	N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR NONE 	00	Unk	UNK UNK	000	27,29 000 000		00 00
																02	NONE 9 N/A PSNGR CAR	STOP E -W	01	DRVR NONE 	00	Unk	UNK UNK	000	011 000		00 00
00542	N	N	N	N	N		01/26/2020 SU 3P 45 22 9.58	14 50 -122 48 21.64	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 05	(NONE) (02)	N NONE	N	CLD WET DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR NONE 	84	F	OR-Y OR<25	043	07 000	013	07 00
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR INJC 	64	F	OR-Y OR<25	000	011 000	013	00 00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	I H L	C O R K	W DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED / LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0	STOP										
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		02	PSNG	INJC	51	F			000	000		00
																03	NONE 0	STOP										
																	PRVTE	E -W									022	013	00
																	PSNGR CAR		01	DRVR	INJC	22	F	OR-Y OR<25		000	000		00
																03	NONE 0	STOP										
																	PRVTE	E -W									022	013	00
																	PSNGR CAR		02	PSNG	INJC	03	M			000	000		00
																04	NONE 0	STOP										
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	NONE	17	F	OR-Y OR<25		000	000		00
03771	N N N		N N				06/09/2016	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 9	STRGHT											27,07
CITY				TH		75	SW 124TH AVE	W	(NONE)	TRF SIGNAL	N	DRY	REAR		N/A	W -E									000		00
N N				5P 45 22 9.55		-122 48 22		08	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
																02	NONE 9	STOP										
																	N/A	W -E									011		00
																	UNKNOWN		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
04225	Y N N		N N				06/27/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	01,29
CITY				MO		100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N N				11A 45 22 9.51		-122 48 22.42		07	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	37	M	OTH-Y N-RES	047,026	000			01,29
																02	NONE 0	STOP										
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		01	DRVR	NONE	65	F	OR-Y OR<25		000	000		00
																03	NONE 0	STOP										
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	NONE	65	M	OR-Y OR<25		000	000		00
02841	N N N		N N				05/01/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											29
CITY				SU		100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N N				3P 45 22 9.52		-122 48 22.31		07	(02)		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	75	M	OR-Y OR<25	042	000			29
																01	NONE 0	STRGHT										
																	PRVTE	E -W									000		00
																	PSNGR CAR		02	PSNG	INJC	75	F			000	000		00

CITY OF TUALATIN, WASHINGTON COUNTY

TUALATIN-SHERWOOD and 124TH AVE, City of Tualatin, Washington County, 01/01/2016 to 12/31/2020

75 - 79 of 100 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	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 0	STRGHT									
											PRVTE	E -W								000	00
											PSNGR CAR		01 DRVR	NONE	53	M	OR-Y		000	000	00
																	OR<25				
											03 NONE 0	STRGHT									
											PRVTE	E -W								022	00
											PSNGR CAR		01 DRVR	NONE	37	M	OTH-Y		000	000	00
																	N-RES				
03700	N N N	07/17/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-STRGHT	01 NONE 0	STRGHT									29
CITY		TU	100	SW 124TH AVE	W	(NONE)	NONE	N	DRY	REAR	PRVTE	W -E								000	00
N		7A			08			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	19	F	OR-Y		042	000	29
N		45 22 9.52	-122 48			(02)											OR<25				
			22.31																		
											02 NONE 0	STRGHT									
											PRVTE	W -E								006	00
											PSNGR CAR		01 DRVR	INJC	41	F	OR-Y		000	000	00
																	OR<25				
04450	N N N	08/25/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT									29
NONE		SA	100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W								000	00
N		10A			07			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	73	F	OR-Y		026	000	29
N		45 22 9.52	-122 48			(02)											OR<25				
			22.34																		
											02 NONE 0	STOP									
											PRVTE	E -W								011	00
											PSNGR CAR		01 DRVR	INJC	59	F	OR-Y		000	000	00
																	OR<25				
04024	N N N	08/08/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01 NONE 0	STRGHT									07
NO RPT		TH	100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	WET	REAR	PRVTE	W -E								000	00
N		12P			08			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	18	M	OR-Y		043	000	07
N		45 22 9.48	-122 48			(02)											OR<25				
			22.29																		
											02 NONE 0	STOP									
											PRVTE	W -E								011	00
											PSNGR CAR		01 DRVR	INJC	56	M	OR-Y		000	000	00
																	OR<25				
02746	N N N N N	05/31/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT									27,07
CITY		FR	100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E								000	00
N		3P			08			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	28	F	SUSP		016,043	038	27,07
N		45 22 9.51	-122 48			(02)											OR<25				
			22.33																		
											02 NONE 0	STOP									
											PRVTE	W -E								011	00
											PSNGR CAR		01 DRVR	INJC	30	M	NONE		000	000	00
																	OR<25				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J S W U I C O G N H R 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	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
03686	N	N	N	07/21/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										29
NONE				SU	100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E								000	00
N				2P			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	32	F	OR-Y		026	000	29
N				45 22 9.52	-122 48 22.34			(02)							OR<25									
													02	NONE 0	STOP									
														PRVTE	W -E								011	00
														PSNGR CAR		01	DRVR	INJC	62	F	OR-Y		000	000	00
																					OR<25				
02237	N	N	N	N N 06/18/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										07
CITY				TH	100	SW 124TH AVE	W	(NONE)	NONE	N	DRY	REAR		PRVTE	W -E								000	00
N				3P			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	M	OR-Y		043	000	07
N				45 22 9.53	-122 48 22.34			(02)							OR<25									
													02	NONE 0	STOP									
														PRVTE	W -E								011	00
														PSNGR CAR		01	DRVR	INJC	29	F	OR-Y		000	000	00
																					OR<25				
00669	N	N	N	N N 02/02/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLD	S-STRGHT	01	NONE 9	STRGHT										27,29
CITY				SU	100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E								000	00
N				12P			08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N				45 22 9.52	-122 48 22.34			(02)							UNK									
													02	NONE 9	STRGHT									
														N/A	W -E								006	00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																					UNK				
04153	N	N	N	N N 11/13/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01	NONE 9	STRGHT									013	07,27,29
CITY				FR	100	SW 124TH AVE	W	(NONE)	UNKNOWN	N	WET	REAR		N/A	E -W								000	00
N				10A			07			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N				45 22 9.54	-122 48 22.13			(02)							UNK									
													02	NONE 9	STOP									
														N/A	E -W								011	00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																					UNK				
07776	N	N	N	N N 11/12/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT										07
CITY				SA	150	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E								000	00
N				1P			08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N				45 22 9.45	-122 48 23.01			(02)							UNK									
													02	NONE 9	STRGHT									
														N/A	W -E								006	00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																					UNK				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J U G N V	S I H L	W C 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
00766	N	N	N			02/13/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01	NONE 9	STRGHT											27,29
NONE						WE	150	SW 124TH AVE	W	(NONE)	UNKNOWN	N	WET	REAR		N/A	W -E									000		00
N						8A			08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N						45 22 9.44	-122 48 23.05			(02)													UNK					
															02	NONE 9	STOP											
																N/A	W -E									011		00
																PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																							UNK					
03213	N	N	N			06/22/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NO RPT						SA	150	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E									000		00
N						10A			08			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N						45 22 9.45	-122 48 23.03			(02)													UNK					
															02	NONE 9	STOP											
																N/A	W -E									011		00
																PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																							UNK					
05653	N	N	N		N	08/23/2016	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	29
CITY						TU	200	SW 124TH AVE	W	(NONE)	NONE	N	DRY	REAR		PRVTE	E -W									000		00
N						6P			07			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	19	F	OR-Y	026	000			29
N						45 22 9.38	-122 48 23.72			(02)													OR<25					
															02	NONE 0	STOP											
																PRVTE	E -W									011	013	00
																PSNGR CAR		01	DRVR	INJC	23	F	OR-Y	000	000			00
																							OR>25					
															03	NONE 0	STOP											
																PRVTE	E -W									022		00
																PSNGR CAR		01	DRVR	NONE	42	M	OR-Y	000	000			00
																							OR<25					
07214	N	N	N		N	10/22/2016	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	29
CITY						SA	200	SW 124TH AVE	W	(NONE)	NONE	N	DRY	REAR		PRVTE	W -E									000		00
N						11A			08			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	19	F	OR-Y	026	000			29
N						45 22 9.38	-122 48 23.69			(02)													OR<25					
															02	NONE 0	STOP											
																PRVTE	W -E									011	013	00
																PSNGR CAR		01	DRVR	INJC	21	F	OTH-Y	000	000			00
																							N-RES					
															03	NONE 0	STOP											
																UNKN	W -E									022		00
																PSNGR CAR		01	DRVR	NONE	48	F	OR-Y	000	000			00
																							OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R G S	J N V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04986	N	N	N				08/15/2017	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE							TU	200	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	E -W									000		00
N							3P			07			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 9.38	-122 48 23.72			(02)													UNK					
																02	NONE 9	STOP											
																	N/A	E -W									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
03319	N	N	N				06/28/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	29
NONE							TH	200	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N							12P			07			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	44	M	OTH-Y		026	000		29
N							45 22 9.38	-122 48 23.73			(02)													N-RES					
																02	NONE 0	STOP											
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		01	DRVR	INJC	66	M	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP											
																	PRVTE	E -W									022		00
																	PSNGR CAR		01	DRVR	INJC	18	M	OR-Y		000	000		00
																								OR<25					
07019	N	N	N				12/05/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	29
NONE							WE	200	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N							5P			07			N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	54	M	OR-Y		026	000		29
N							45 22 9.41	-122 48 23.54			(02)													OR<25					
																02	NONE 0	STOP											
																	PRVTE	E -W									011	013	00
																	PSNGR CAR		01	DRVR	INJC	59	F	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP											
																	PRVTE	E -W									011		00
																	PSNGR CAR		01	DRVR	NONE	17	M	OR-Y		000	000		00
																								OR<25					
00566	N	N	N	N	N		02/03/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										013	27,07
CITY							SU	200	SW 124TH AVE	W	(NONE)	UNKNOWN	N	WET	REAR		PRVTE	W -E									000		00
N							7P			08			N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	31	F	OR-Y		016,043	038		27,07
N							45 22 9.38	-122 48 23.73			(02)													OR<25					
																02	NONE 0	STOP											
																	PRVTE	W -E									011	013	00
																	PSNGR CAR		01	DRVR	INJC	32	F	OTH-Y		000	000		00
																								OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S	S I H V	W C O L	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
																03	NONE 0 PRVTE PSNGR CAR	STOP W -E	01	DRVR	INJC	34	F	OR-Y OR<25		000	022 000	00 00
03622	N	N	N	N	N		10/05/2020 MO 6P 45 22 9.38	14 200 -122 48 23.71	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 07	(NONE) (02)	N UNKNOWN	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	32	F	OR-Y OR<25		016,026	038	27,29 00 27,29
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	INJC	22	F	OR-Y OR<25		000	011 000	00 00
04450	N	N	N				07/21/2017 FR 9P 45 22 9.25	14 300 -122 48 25.11	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 08	(NONE) (02)	N UNKNOWN	N N	CLR DRY DLIT	S-STRGHT REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000	29 00 00
																02	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	006 000	00 00
06980	N	N	N				12/17/2018 MO 6P 45 22 9.25	14 300 -122 48 25.08	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 07	(NONE) (02)	N UNKNOWN	N N	RAIN WET DLIT	S-STRGHT REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000	29 00 00
																02	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000	00 00
05082	N	N	N	N	N		10/04/2019 FR 12P 45 22 9.25	14 300 -122 48 25.1	SW TUALATIN-SHERWOOD SW 124TH AVE	STRGHT W 07	(NONE) (02)	N NONE	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	01	DRVR	NONE	22	M	OR-Y OR<25		043	013 000	07 00 07
																02	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	NONE	46	M	OR-Y OR<25		000	011 000	013 00 00
																03	NONE 0 PRVTE PSNGR CAR	STOP E -W	01	DRVR	NONE	78	M	OR-Y OR<25		000	022 000	00 00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S	I H V	C O R L	W DAY TIME LAT	DATE / CLASS / DIST FROM / SECOND STREET / LRS	CITY STREET / FIRST STREET / 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 / TYPE / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
															03	NONE 0 PRVTE PSNGR CAR	STOP E -W	02	PSNG	INJC	75	F			000	022 000		00 00
01227	N	N	N				03/03/2020	14	SW TUALATIN-SHERWOOD	STRGHT		Y	N	CLR	S-1STOP	01	NONE 9	STRGHT									002	27
COUNTY							TU	360	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E								000		00
N N							1P 45 22 9.18	-122 48 25.78		08	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
															02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
03767	N	N	N		N	N	10/16/2020	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT									087	27,29
CITY							FR	500	SW 124TH AVE	W	(NONE)	TRF SIGNAL	N	DRY	REAR		PRVTE	W -E								000	087	00
N N							7P 45 22 8.98	-122 48 27.89		08	(02)		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	37	F	OR-Y OR<25		016,026	038		27,29
															02	NONE 0 PRVTE PSNGR CAR	STOP W -E	01 02	DRVR PSNG	NONE INJC	41 58	M F	OR-Y OR<25		000	011 000	087	00 00
03669	N	N	N		N	N	07/19/2019	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-1STOP	01	NONE 9	STRGHT										07
CITY							FR	505	SW 124TH AVE	W	(NONE)	UNKNOWN	N	DRY	REAR		N/A	W -E								000		00
N N							6P 45 22 8.97	-122 48 27.95		08	(02)		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
															02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00
06669	N	N	N		N	N	12/05/2018	14	SW TUALATIN-SHERWOOD	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT										27,29
CITY							WE	580	SW 124TH AVE	W	(NONE)	NONE	N	DRY	REAR		N/A	W -E								000		00
N N							6A 45 22 8.87	-122 48 29.02		08	(02)		N	DAWN	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000		00
															02	NONE 9 N/A PSNGR CAR	STOP W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000		00 00

Appendix D – Operations Analysis

Synchro Reports

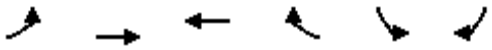
SimTraffic Queuing Reports

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	169	89	134	173	1	55	1	86	2	0	0
Future Vol, veh/h	2	169	89	134	173	1	55	1	86	2	0	0
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	20	20	20	9	9	9	14	14	14	0	0	0
Mvmt Flow	3	228	120	181	234	1	74	1	116	3	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.5	15.9	11.4	9.6
HCM LOS	B	C	B	A

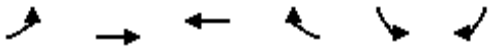
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	1%	44%	100%
Vol Thru, %	1%	65%	56%	0%
Vol Right, %	61%	34%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	260	308	2
LT Vol	55	2	134	2
Through Vol	1	169	173	0
RT Vol	86	89	1	0
Lane Flow Rate	192	351	416	3
Geometry Grp	1	1	1	1
Degree of Util (X)	0.309	0.509	0.604	0.005
Departure Headway (Hd)	5.792	5.212	5.223	6.518
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	620	692	691	548
Service Time	3.829	3.239	3.249	4.572
HCM Lane V/C Ratio	0.31	0.507	0.602	0.005
HCM Control Delay	11.4	13.5	15.9	9.6
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	1.3	2.9	4.1	0



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	85	856	1079	89	63	124
Future Volume (vph)	85	856	1079	89	63	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1671	1759	1667	1388	1399	1252
Flt Permitted	0.12	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	213	1759	1667	1388	1399	1252
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	89	892	1124	93	66	129
RTOR Reduction (vph)	0	0	0	11	0	115
Lane Group Flow (vph)	89	892	1124	82	66	14
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	8%	8%	14%	14%	29%	29%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Actuated Green, G (s)	97.9	97.9	88.1	88.1	11.6	11.6
Effective Green, g (s)	97.9	99.4	89.6	89.6	12.6	12.6
Actuated g/C Ratio	0.82	0.83	0.75	0.75	0.10	0.10
Clearance Time (s)	4.0	5.5	5.5	5.5	5.0	5.0
Vehicle Extension (s)	1.5	3.5	3.5	3.5	2.0	2.0
Lane Grp Cap (vph)	244	1457	1244	1036	146	131
v/s Ratio Prot	0.02	c0.51	c0.67		c0.05	
v/s Ratio Perm	0.28			0.06		0.01
v/c Ratio	0.36	0.61	0.90	0.08	0.45	0.10
Uniform Delay, d1	15.3	3.6	11.8	4.1	50.5	48.6
Progression Factor	1.00	1.00	0.76	0.41	1.00	1.00
Incremental Delay, d2	0.3	1.9	10.0	0.1	0.8	0.1
Delay (s)	15.6	5.5	19.0	1.8	51.3	48.7
Level of Service	B	A	B	A	D	D
Approach Delay (s)		6.4	17.7		49.6	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

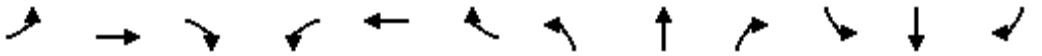
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	85	856	1079	89	63	124
Future Volume (veh/h)	85	856	1079	89	63	124
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	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	1781	1781	1693	1693	1470	1470
Adj Flow Rate, veh/h	89	892	1124	77	66	129
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	14	14	29	29
Cap, veh/h	379	1434	1239	1028	180	160
Arrive On Green	0.04	0.80	0.97	0.97	0.13	0.13
Sat Flow, veh/h	1697	1781	1693	1405	1400	1246
Grp Volume(v), veh/h	89	892	1124	77	66	129
Grp Sat Flow(s),veh/h/ln	1697	1781	1693	1405	1400	1246
Q Serve(g_s), s	1.5	23.5	18.1	0.2	5.2	12.1
Cycle Q Clear(g_c), s	1.5	23.5	18.1	0.2	5.2	12.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	379	1434	1239	1028	180	160
V/C Ratio(X)	0.23	0.62	0.91	0.07	0.37	0.81
Avail Cap(c_a), veh/h	394	1434	1239	1028	268	239
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	1.00	1.00
Uniform Delay (d), s/veh	5.3	4.6	0.7	0.4	47.8	50.8
Incr Delay (d2), s/veh	0.1	2.0	8.3	0.1	0.5	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.1	3.5	0.1	1.8	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.4	6.6	9.0	0.5	48.3	57.5
LnGrp LOS	A	A	A	A	D	E
Approach Vol, veh/h		981	1201		195	
Approach Delay, s/veh		6.5	8.4		54.4	
Approach LOS		A	A		D	

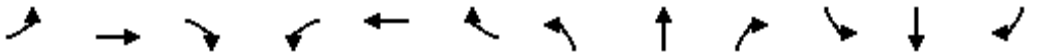
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.6		19.4	8.7	91.8
Change Period (Y+Rc), s		5.5		5.0	4.0	5.5
Max Green Setting (Gmax), s		87.5		22.0	5.8	77.7
Max Q Clear Time (g_c+I1), s		25.5		14.1	3.5	20.1
Green Ext Time (p_c), s		44.2		0.4	0.0	52.0

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	207	32	26	143	36	41	225	40	163	425	70
Future Volume (vph)	28	207	32	26	143	36	41	225	40	163	425	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1597	1648		1597	1627		1504	2930		1702	3323	
Flt Permitted	0.56	1.00		0.45	1.00		0.44	1.00		0.47	1.00	
Satd. Flow (perm)	939	1648		756	1627		692	2930		850	3323	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	31	233	36	29	161	40	46	253	45	183	478	79
RTOR Reduction (vph)	0	7	0	0	11	0	0	16	0	0	13	0
Lane Group Flow (vph)	31	262	0	29	190	0	46	282	0	183	544	0
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%	20%	20%	20%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.7	15.8		17.5	15.7		21.5	18.1		28.7	21.7	
Effective Green, g (s)	19.7	17.3		19.5	17.2		23.5	19.6		30.7	23.2	
Actuated g/C Ratio	0.31	0.27		0.31	0.27		0.37	0.31		0.48	0.36	
Clearance Time (s)	5.0	5.5		5.0	5.5		5.0	5.5		5.0	5.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	320	447		268	439		311	901		516	1210	
v/s Ratio Prot	0.00	c0.16		c0.00	0.12		0.01	0.10		c0.04	c0.16	
v/s Ratio Perm	0.03			0.03			0.04			0.13		
v/c Ratio	0.10	0.59		0.11	0.43		0.15	0.31		0.35	0.45	
Uniform Delay, d1	15.5	20.1		15.8	19.2		13.1	16.9		9.7	15.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	2.0		0.1	0.7		0.1	0.2		0.2	0.3	
Delay (s)	15.6	22.1		15.8	19.9		13.2	17.1		9.9	15.7	
Level of Service	B	C		B	B		B	B		A	B	
Approach Delay (s)		21.4			19.4			16.6			14.2	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	63.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	207	32	26	143	36	41	225	40	163	425	70
Future Volume (veh/h)	28	207	32	26	143	36	41	225	40	163	425	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1604	1604	1604	1811	1811	1811
Adj Flow Rate, veh/h	31	233	0	29	161	0	46	253	39	183	478	68
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	13	13	13	13	13	13	20	20	20	6	6	6
Cap, veh/h	413	418		358	415		369	637	97	525	904	128
Arrive On Green	0.06	0.24	0.00	0.05	0.24	0.00	0.07	0.24	0.21	0.13	0.30	0.27
Sat Flow, veh/h	1626	1707	0	1626	1707	0	1527	2642	401	1725	3016	427
Grp Volume(v), veh/h	31	233	0	29	161	0	46	144	148	183	272	274
Grp Sat Flow(s),veh/h/ln	1626	1707	0	1626	1707	0	1527	1523	1520	1725	1721	1722
Q Serve(g_s), s	0.7	5.7	0.0	0.6	3.8	0.0	1.0	3.8	4.0	3.6	6.3	6.4
Cycle Q Clear(g_c), s	0.7	5.7	0.0	0.6	3.8	0.0	1.0	3.8	4.0	3.6	6.3	6.4
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.26	1.00		0.25
Lane Grp Cap(c), veh/h	413	418		358	415		369	367	366	525	516	516
V/C Ratio(X)	0.08	0.56		0.08	0.39		0.12	0.39	0.40	0.35	0.53	0.53
Avail Cap(c_a), veh/h	643	1047		591	1047		519	887	885	593	1001	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	15.9	0.0	12.8	15.2	0.0	12.3	15.3	15.5	10.8	14.0	14.2
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.6	0.0	0.1	0.7	0.7	0.1	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	0.0	0.2	1.4	0.0	0.3	1.1	1.2	1.0	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.6	17.0	0.0	12.8	15.8	0.0	12.4	16.0	16.2	10.9	14.8	15.1
LnGrp LOS	B	B		B	B		B	B	B	B	B	B
Approach Vol, veh/h		264			190			338			729	
Approach Delay, s/veh		16.5			15.4			15.6			13.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	15.6	6.6	15.8	7.3	18.4	6.7	15.7
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	7.0	26.5	8.5	28.0	7.0	26.5	8.5	28.0
Max Q Clear Time (g_c+I1), s	5.6	6.0	2.6	7.7	3.0	8.4	2.7	5.8
Green Ext Time (p_c), s	0.0	1.4	0.0	1.3	0.0	2.8	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Notes

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

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

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1	3	25	1	29	16	268	36	88	391	23
Future Vol, veh/h	4	1	3	25	1	29	16	268	36	88	391	23
Conflicting Peds, #/hr	3	0	1	1	0	3	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	13	13	13	41	41	41	18	18	18	17	17	17
Mvmt Flow	5	1	4	30	1	35	19	319	43	105	465	27

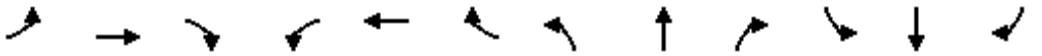
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	891	1090	248	823	1082	184	493	0	0	362	0	0
Stage 1	690	690	-	379	379	-	-	-	-	-	-	-
Stage 2	201	400	-	444	703	-	-	-	-	-	-	-
Critical Hdwy	7.76	6.76	7.16	8.32	7.32	7.72	4.46	-	-	4.44	-	-
Critical Hdwy Stg 1	6.76	5.76	-	7.32	6.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.76	-	7.32	6.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.63	4.13	3.43	3.91	4.41	3.71	2.38	-	-	2.37	-	-
Pot Cap-1 Maneuver	220	197	720	208	163	718	962	-	-	1092	-	-
Stage 1	377	418	-	520	525	-	-	-	-	-	-	-
Stage 2	751	573	-	471	354	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	189	174	719	188	144	716	961	-	-	1092	-	-
Mov Cap-2 Maneuver	189	174	-	188	144	-	-	-	-	-	-	-
Stage 1	369	377	-	510	515	-	-	-	-	-	-	-
Stage 2	697	562	-	422	320	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.5	20	0.4	1.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	961	-	-	257	305	1092	-	-
HCM Lane V/C Ratio	0.02	-	-	0.037	0.215	0.096	-	-
HCM Control Delay (s)	8.8	-	-	19.5	20	8.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.8	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	854	97	26	564	95	162	200	58	131	226	58
Future Volume (vph)	76	854	97	26	564	95	162	200	58	131	226	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1612	1696	1408	1583	1667	1401	1626	1712	1455	1583	1667	1392
Flt Permitted	0.27	1.00	1.00	0.10	1.00	1.00	0.29	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	462	1696	1408	167	1667	1401	496	1712	1455	599	1667	1392
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)	82	918	104	28	606	102	174	215	62	141	243	62
RTOR Reduction (vph)	0	0	38	0	0	40	0	0	51	0	0	48
Lane Group Flow (vph)	82	918	66	28	606	62	174	215	11	141	243	14
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	12%	12%	12%	14%	14%	14%	11%	11%	11%	14%	14%	14%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	74.4	68.4	76.4	68.8	65.6	73.5	29.5	21.5	21.5	29.3	21.4	27.4
Effective Green, g (s)	74.4	69.9	76.4	68.8	67.1	73.5	29.5	23.0	21.5	29.3	22.9	27.4
Actuated g/C Ratio	0.62	0.58	0.64	0.57	0.56	0.61	0.25	0.19	0.18	0.24	0.19	0.23
Clearance Time (s)	4.0	5.5	4.0	4.0	5.5	4.0	4.0	5.5	5.5	4.0	5.5	4.0
Vehicle Extension (s)	1.5	4.5	1.5	1.5	4.5	1.5	1.5	2.0	2.0	1.5	2.0	1.5
Lane Grp Cap (vph)	343	987	896	133	932	858	197	328	260	211	318	317
v/s Ratio Prot	c0.01	c0.54	0.00	0.01	0.36	0.00	c0.06	0.13		0.04	0.15	0.00
v/s Ratio Perm	0.14		0.04	0.11		0.04	c0.16		0.01	0.12		0.01
v/c Ratio	0.24	0.93	0.07	0.21	0.65	0.07	0.88	0.66	0.04	0.67	0.76	0.04
Uniform Delay, d1	12.2	22.8	8.3	20.2	18.3	9.4	41.7	44.8	40.7	38.9	46.0	36.1
Progression Factor	1.00	0.89	0.73	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	14.5	0.0	0.3	3.5	0.0	33.2	3.6	0.0	6.1	9.4	0.0
Delay (s)	12.4	34.8	6.1	20.4	21.8	9.4	74.9	48.4	40.8	45.0	55.4	36.1
Level of Service	B	C	A	C	C	A	E	D	D	D	E	D
Approach Delay (s)		30.5			20.1			57.6			49.4	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	854	97	26	564	95	162	200	58	131	226	58
Future Volume (veh/h)	76	854	97	26	564	95	162	200	58	131	226	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1722	1722	1693	1693	1693	1737	1737	1737	1693	1693	1693
Adj Flow Rate, veh/h	82	918	88	28	606	27	174	215	40	141	243	40
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	14	14	14	11	11	11	14	14	14
Cap, veh/h	366	1019	922	158	979	896	204	318	250	223	309	299
Arrive On Green	0.04	0.59	0.58	0.03	0.58	0.57	0.07	0.18	0.17	0.07	0.18	0.17
Sat Flow, veh/h	1640	1722	1423	1612	1693	1415	1654	1737	1468	1612	1693	1430
Grp Volume(v), veh/h	82	918	88	28	606	27	174	215	40	141	243	40
Grp Sat Flow(s),veh/h/ln	1640	1722	1423	1612	1693	1415	1654	1737	1468	1612	1693	1430
Q Serve(g_s), s	2.5	55.9	2.8	0.9	28.2	0.9	8.0	13.9	2.8	8.0	16.4	2.7
Cycle Q Clear(g_c), s	2.5	55.9	2.8	0.9	28.2	0.9	8.0	13.9	2.8	8.0	16.4	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	366	1019	922	158	979	896	204	318	250	223	309	299
V/C Ratio(X)	0.22	0.90	0.10	0.18	0.62	0.03	0.85	0.68	0.16	0.63	0.79	0.13
Avail Cap(c_a), veh/h	384	1019	922	198	979	896	204	420	336	223	409	384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	21.4	8.0	23.2	16.6	8.3	44.1	45.7	42.5	40.3	46.8	38.6
Incr Delay (d2), s/veh	0.1	10.1	0.2	0.2	2.9	0.1	26.5	1.2	0.1	4.3	5.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	22.6	0.8	0.4	10.7	0.3	3.0	5.9	1.0	3.6	7.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	31.5	8.2	23.4	19.6	8.3	70.6	46.9	42.6	44.7	51.9	38.7
LnGrp LOS	B	C	A	C	B	A	E	D	D	D	D	D
Approach Vol, veh/h		1088			661			429			424	
Approach Delay, s/veh		28.2			19.3			56.1			48.2	
Approach LOS		C			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	75.0	12.0	25.9	8.7	73.4	12.0	25.9
Change Period (Y+Rc), s	4.0	5.5	4.0	5.5	4.0	5.5	4.0	5.5
Max Green Setting (Gmax), s	6.0	59.5	8.0	27.5	6.0	59.5	8.0	27.5
Max Q Clear Time (g_c+I1), s	2.9	57.9	10.0	18.4	4.5	30.2	10.0	15.9
Green Ext Time (p_c), s	0.0	1.5	0.0	1.8	0.1	15.7	0.0	1.8

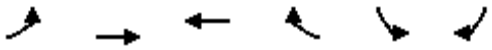
Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	130	72	100	240	1	51	0	98	1	0	0
Future Vol, veh/h	0	130	72	100	240	1	51	0	98	1	0	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	7	7	7	7	7	7	5	5	5	0	0	0
Mvmt Flow	0	155	86	119	286	1	61	0	117	1	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

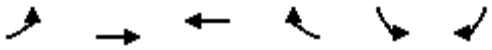
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10	13.5	10	9
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	34%	0%	29%	100%
Vol Thru, %	0%	64%	70%	0%
Vol Right, %	66%	36%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	149	202	341	1
LT Vol	51	0	100	1
Through Vol	0	130	240	0
RT Vol	98	72	1	0
Lane Flow Rate	177	240	406	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.254	0.317	0.543	0.002
Departure Headway (Hd)	5.148	4.748	4.815	6.019
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	692	750	743	598
Service Time	3.225	2.819	2.878	4.019
HCM Lane V/C Ratio	0.256	0.32	0.546	0.002
HCM Control Delay	10	10	13.5	9
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1	1.4	3.3	0



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	62	870	1079	55	110	176
Future Volume (vph)	62	870	1079	55	110	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	1827	1845	1530	1736	1553
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	176	1827	1845	1530	1736	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	946	1173	60	120	191
RTOR Reduction (vph)	0	0	0	7	0	151
Lane Group Flow (vph)	67	946	1173	53	120	40
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				4		
Heavy Vehicles (%)	4%	4%	3%	3%	4%	4%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Actuated Green, G (s)	96.1	96.1	87.9	87.9	13.4	13.4
Effective Green, g (s)	96.1	97.6	89.4	89.4	14.4	14.4
Actuated g/C Ratio	0.80	0.81	0.75	0.75	0.12	0.12
Clearance Time (s)	4.0	5.5	5.5	5.5	5.0	5.0
Vehicle Extension (s)	1.5	3.5	3.5	3.5	2.0	2.0
Lane Grp Cap (vph)	195	1485	1374	1139	208	186
v/s Ratio Prot	0.01	c0.52	c0.64		c0.07	
v/s Ratio Perm	0.26			0.03		0.03
v/c Ratio	0.34	0.64	0.85	0.05	0.58	0.21
Uniform Delay, d1	18.4	4.3	10.7	4.0	49.9	47.7
Progression Factor	1.00	1.00	0.68	0.16	1.00	1.00
Incremental Delay, d2	0.4	2.1	5.5	0.1	2.4	0.2
Delay (s)	18.8	6.4	12.8	0.7	52.3	47.9
Level of Service	B	A	B	A	D	D
Approach Delay (s)		7.3	12.2		49.6	
Approach LOS		A	B		D	

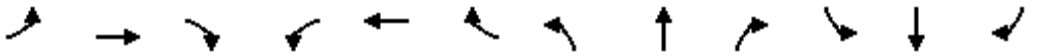
Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	62	870	1079	55	110	176
Future Volume (veh/h)	62	870	1079	55	110	176
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	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	1841	1841	1856	1856	1841	1841
Adj Flow Rate, veh/h	67	946	1173	44	120	191
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	3	3	4	4
Cap, veh/h	353	1445	1326	1098	260	231
Arrive On Green	0.04	0.79	0.95	0.95	0.15	0.15
Sat Flow, veh/h	1753	1841	1856	1537	1753	1560
Grp Volume(v), veh/h	67	946	1173	44	120	191
Grp Sat Flow(s),veh/h/ln	1753	1841	1856	1537	1753	1560
Q Serve(g_s), s	1.2	27.3	23.7	0.2	7.5	14.3
Cycle Q Clear(g_c), s	1.2	27.3	23.7	0.2	7.5	14.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	353	1445	1326	1098	260	231
V/C Ratio(X)	0.19	0.65	0.88	0.04	0.46	0.83
Avail Cap(c_a), veh/h	373	1445	1326	1098	336	299
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.64	0.64	1.00	1.00
Uniform Delay (d), s/veh	6.9	5.7	1.4	0.9	46.7	49.6
Incr Delay (d2), s/veh	0.1	2.3	6.0	0.0	0.5	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	7.9	3.6	0.1	3.3	12.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.0	8.0	7.4	0.9	47.2	60.5
LnGrp LOS	A	A	A	A	D	E
Approach Vol, veh/h		1013	1217		311	
Approach Delay, s/veh		8.0	7.2		55.4	
Approach LOS		A	A		E	

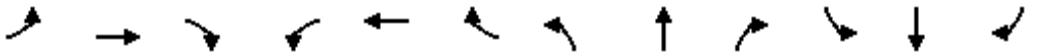
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.2		21.8	8.5	89.7
Change Period (Y+Rc), s		5.5		5.0	4.0	5.5
Max Green Setting (Gmax), s		87.5		22.0	5.8	77.7
Max Q Clear Time (g_c+I1), s		29.3		16.3	3.2	25.7
Green Ext Time (p_c), s		45.0		0.5	0.0	48.4

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	168	45	100	304	163	35	458	45	88	278	38
Future Volume (vph)	77	168	45	100	304	163	35	458	45	88	278	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.95		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1597	1628		1597	1586		1504	2962		1703	3334	
Flt Permitted	0.20	1.00		0.53	1.00		0.52	1.00		0.27	1.00	
Satd. Flow (perm)	332	1628		891	1586		816	2962		478	3334	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	87	189	51	112	342	183	39	515	51	99	312	43
RTOR Reduction (vph)	0	10	0	0	20	0	0	9	0	0	12	0
Lane Group Flow (vph)	87	230	0	112	505	0	39	557	0	99	343	0
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%	20%	20%	20%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	33.8	28.2		33.8	28.2		24.1	20.7		27.3	22.3	
Effective Green, g (s)	35.8	29.7		35.8	29.7		26.1	22.2		29.3	23.8	
Actuated g/C Ratio	0.44	0.37		0.44	0.37		0.32	0.28		0.36	0.30	
Clearance Time (s)	5.0	5.5		5.0	5.5		5.0	5.5		5.0	5.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	251	600		454	585		302	816		265	985	
v/s Ratio Prot	c0.03	0.14		0.02	c0.32		0.01	c0.19		c0.03	0.10	
v/s Ratio Perm	0.13			0.09			0.03			0.11		
v/c Ratio	0.35	0.38		0.25	0.86		0.13	0.68		0.37	0.35	
Uniform Delay, d1	15.1	18.7		13.4	23.5		18.9	26.0		17.9	22.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.4		0.1	12.6		0.1	2.4		0.3	0.2	
Delay (s)	15.4	19.1		13.6	36.1		18.9	28.4		18.2	22.5	
Level of Service	B	B		B	D		B	C		B	C	
Approach Delay (s)		18.1			32.1			27.8			21.5	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	168	45	100	304	163	35	458	45	88	278	38
Future Volume (veh/h)	77	168	45	100	304	163	35	458	45	88	278	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1604	1604	1604	1811	1811	1811
Adj Flow Rate, veh/h	87	189	0	112	342	0	39	515	45	99	312	32
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	13	13	13	13	13	13	20	20	20	6	6	6
Cap, veh/h	345	462		459	474		405	772	67	359	947	96
Arrive On Green	0.08	0.27	0.00	0.09	0.28	0.00	0.06	0.27	0.25	0.09	0.30	0.27
Sat Flow, veh/h	1626	1707	0	1626	1707	0	1527	2835	247	1725	3144	320
Grp Volume(v), veh/h	87	189	0	112	342	0	39	276	284	99	170	174
Grp Sat Flow(s),veh/h/ln	1626	1707	0	1626	1707	0	1527	1523	1559	1725	1721	1743
Q Serve(g_s), s	2.1	5.2	0.0	2.7	10.3	0.0	1.0	9.2	9.3	2.3	4.4	4.5
Cycle Q Clear(g_c), s	2.1	5.2	0.0	2.7	10.3	0.0	1.0	9.2	9.3	2.3	4.4	4.5
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.16	1.00		0.18
Lane Grp Cap(c), veh/h	345	462		459	474		405	415	424	359	518	525
V/C Ratio(X)	0.25	0.41		0.24	0.72		0.10	0.67	0.67	0.28	0.33	0.33
Avail Cap(c_a), veh/h	480	882		583	882		530	747	764	451	844	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	17.1	0.0	13.1	18.6	0.0	13.6	18.5	18.6	13.6	15.5	15.6
Incr Delay (d2), s/veh	0.1	0.6	0.0	0.1	2.1	0.0	0.0	1.8	1.8	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.9	0.0	0.9	3.9	0.0	0.3	2.9	3.0	0.7	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	17.7	0.0	13.2	20.7	0.0	13.6	20.3	20.4	13.8	15.8	16.0
LnGrp LOS	B	B		B	C		B	C	C	B	B	B
Approach Vol, veh/h		276			454			599			443	
Approach Delay, s/veh		16.5			18.9			19.9			15.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	19.5	9.2	19.4	7.3	21.2	8.7	19.9
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	7.0	26.5	8.5	28.0	7.0	26.5	8.5	28.0
Max Q Clear Time (g_c+I1), s	4.3	11.3	4.7	7.2	3.0	6.5	4.1	12.3
Green Ext Time (p_c), s	0.0	2.7	0.0	1.0	0.0	1.7	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

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

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

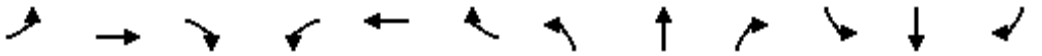
Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	2	18	50	0	178	0	332	11	39	400	1
Future Vol, veh/h	16	2	18	50	0	178	0	332	11	39	400	1
Conflicting Peds, #/hr	3	0	1	1	0	3	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	13	13	13	41	41	41	18	18	18	17	17	17
Mvmt Flow	19	2	21	60	0	212	0	395	13	46	476	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	771	978	241	734	972	207	478	0	0	408	0	0
Stage 1	570	570	-	402	402	-	-	-	-	-	-	-
Stage 2	201	408	-	332	570	-	-	-	-	-	-	-
Critical Hdwy	7.76	6.76	7.16	8.32	7.32	7.72	4.46	-	-	4.44	-	-
Critical Hdwy Stg 1	6.76	5.76	-	7.32	6.32	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.76	5.76	-	7.32	6.32	-	-	-	-	-	-	-
Follow-up Hdwy	3.63	4.13	3.43	3.91	4.41	3.71	2.38	-	-	2.37	-	-
Pot Cap-1 Maneuver	271	231	727	245	194	691	976	-	-	1047	-	-
Stage 1	447	477	-	502	510	-	-	-	-	-	-	-
Stage 2	751	568	-	558	417	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	181	221	726	228	185	689	975	-	-	1047	-	-
Mov Cap-2 Maneuver	181	221	-	228	185	-	-	-	-	-	-	-
Stage 1	447	456	-	502	510	-	-	-	-	-	-	-
Stage 2	519	568	-	515	398	-	-	-	-	-	-	-

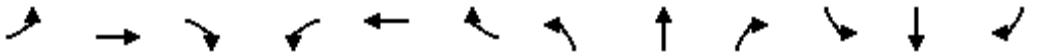
Approach	EB	WB	NB	SB
HCM Control Delay, s	19.3	22	0	0.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	975	-	-	295	477	1047	-	-
HCM Lane V/C Ratio	-	-	-	0.145	0.569	0.044	-	-
HCM Control Delay (s)	0	-	-	19.3	22	8.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	3.5	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	746	193	31	808	79	123	208	37	165	228	130
Future Volume (vph)	65	746	193	31	808	79	123	208	37	165	228	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1736	1827	1519	1769	1863	1564	1718	1810	1500	1769	1863	1552
Flt Permitted	0.13	1.00	1.00	0.20	1.00	1.00	0.30	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	243	1827	1519	381	1863	1564	545	1810	1500	564	1863	1552
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	769	199	32	833	81	127	214	38	170	235	134
RTOR Reduction (vph)	0	0	70	0	0	30	0	0	32	0	0	105
Lane Group Flow (vph)	67	769	129	32	833	51	127	214	6	170	235	29
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Confl. Bikes (#/hr)			1			2			1			2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	74.9	69.2	77.6	69.9	66.7	76.1	27.6	19.2	19.2	29.6	20.2	25.9
Effective Green, g (s)	74.9	70.7	77.6	69.9	68.2	76.1	27.6	20.7	19.2	29.6	21.7	25.9
Actuated g/C Ratio	0.62	0.59	0.65	0.58	0.57	0.63	0.23	0.17	0.16	0.25	0.18	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.5	4.0	4.0	5.5	5.5	4.0	5.5	4.0
Vehicle Extension (s)	1.5	4.5	1.5	1.5	4.5	1.5	1.5	2.0	2.0	1.5	2.0	1.5
Lane Grp Cap (vph)	222	1076	982	258	1058	991	207	312	240	233	336	334
v/s Ratio Prot	c0.01	0.42	0.01	0.00	c0.45	0.00	0.04	0.12		c0.06	c0.13	0.00
v/s Ratio Perm	0.17		0.08	0.07		0.03	0.10		0.00	0.12		0.01
v/c Ratio	0.30	0.71	0.13	0.12	0.79	0.05	0.61	0.69	0.03	0.73	0.70	0.09
Uniform Delay, d1	17.5	17.5	8.2	14.7	20.2	8.3	38.9	46.6	42.5	38.4	46.1	37.6
Progression Factor	0.98	0.84	0.49	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	3.3	0.0	0.1	5.9	0.0	3.8	4.9	0.0	9.3	5.1	0.0
Delay (s)	17.3	17.9	4.1	14.7	26.2	8.3	42.6	51.5	42.5	47.7	51.2	37.6
Level of Service	B	B	A	B	C	A	D	D	D	D	D	D
Approach Delay (s)		15.2			24.2			47.6			46.7	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.5%	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)	65	746	193	31	808	79	123	208	37	165	228	130
Future Volume (veh/h)	65	746	193	31	808	79	123	208	37	165	228	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	67	769	184	32	833	9	127	214	17	170	235	113
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	2	2	2	5	5	5	2	2	2
Cap, veh/h	288	1110	1004	346	1109	1013	214	310	237	233	318	302
Arrive On Green	0.05	0.80	0.79	0.03	0.59	0.58	0.07	0.17	0.16	0.07	0.17	0.16
Sat Flow, veh/h	1753	1841	1525	1781	1870	1563	1739	1826	1508	1781	1870	1541
Grp Volume(v), veh/h	67	769	184	32	833	9	127	214	17	170	235	113
Grp Sat Flow(s),veh/h/ln	1753	1841	1525	1781	1870	1563	1739	1826	1508	1781	1870	1541
Q Serve(g_s), s	1.8	22.4	3.1	0.9	39.2	0.2	7.3	13.2	1.2	8.0	14.3	7.6
Cycle Q Clear(g_c), s	1.8	22.4	3.1	0.9	39.2	0.2	7.3	13.2	1.2	8.0	14.3	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	1110	1004	346	1109	1013	214	310	237	233	318	302
V/C Ratio(X)	0.23	0.69	0.18	0.09	0.75	0.01	0.59	0.69	0.07	0.73	0.74	0.37
Avail Cap(c_a), veh/h	311	1110	1004	387	1109	1013	214	441	346	233	452	412
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	6.9	4.0	11.4	17.9	7.5	39.9	46.8	43.1	43.1	47.3	42.0
Incr Delay (d2), s/veh	0.1	2.7	0.3	0.0	4.7	0.0	3.0	1.0	0.0	9.7	1.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.5	0.9	0.3	16.5	0.1	3.2	5.9	0.4	1.6	6.6	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	9.6	4.3	11.4	22.6	7.5	43.0	47.9	43.1	52.8	49.1	42.3
LnGrp LOS	B	A	A	B	C	A	D	D	D	D	D	D
Approach Vol, veh/h		1020			874			358			518	
Approach Delay, s/veh		9.1			22.1			45.9			48.9	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	76.3	12.0	24.4	8.5	75.1	12.0	24.4
Change Period (Y+Rc), s	4.0	5.5	4.0	5.5	4.0	5.5	4.0	5.5
Max Green Setting (Gmax), s	6.0	59.5	8.0	27.5	6.0	59.5	8.0	27.5
Max Q Clear Time (g_c+I1), s	2.9	24.4	9.3	16.3	3.8	41.2	10.0	15.2
Green Ext Time (p_c), s	0.0	24.6	0.0	2.3	0.1	14.4	0.0	1.8

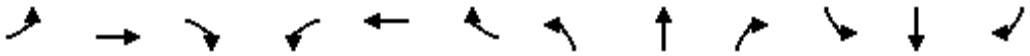
Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	19
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	185	114	157	185	1	61	1	142	2	0	0
Future Vol, veh/h	2	185	114	157	185	1	61	1	142	2	0	0
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	20	20	20	9	9	9	14	14	14	0	0	0
Mvmt Flow	3	250	154	212	250	1	82	1	192	3	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.2	22.6	14.4	10.4
HCM LOS	C	C	B	B

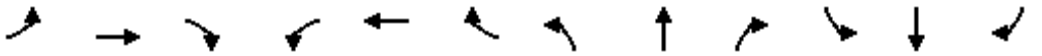
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	1%	46%	100%
Vol Thru, %	0%	61%	54%	0%
Vol Right, %	70%	38%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	301	343	2
LT Vol	61	2	157	2
Through Vol	1	185	185	0
RT Vol	142	114	1	0
Lane Flow Rate	276	407	464	3
Geometry Grp	1	1	1	1
Degree of Util (X)	0.466	0.637	0.73	0.006
Departure Headway (Hd)	6.079	5.637	5.673	7.338
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	590	639	635	491
Service Time	4.147	3.7	3.733	5.338
HCM Lane V/C Ratio	0.468	0.637	0.731	0.006
HCM Control Delay	14.4	18.2	22.6	10.4
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	2.5	4.5	6.3	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	971	54	61	1161	238	12	3	15	79	7	134
Future Volume (vph)	147	971	54	61	1161	238	12	3	15	79	7	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	5.5		4.5	4.5		4.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.87		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	3312		1583	3075		1805	1660		1399	1262	
Flt Permitted	0.08	1.00		0.24	1.00		0.66	1.00		0.54	1.00	
Satd. Flow (perm)	147	3312		393	3075		1260	1660		797	1262	
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)	153	1011	56	64	1209	248	12	3	16	82	7	140
RTOR Reduction (vph)	0	2	0	0	10	0	0	15	0	0	118	0
Lane Group Flow (vph)	153	1065	0	64	1447	0	13	4	0	82	29	0
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	8%	8%	8%	14%	14%	14%	0%	0%	0%	29%	29%	29%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	84.8	75.3		71.5	66.5		12.1	10.1		25.7	19.2	
Effective Green, g (s)	84.8	75.3		71.5	66.5		12.1	10.1		26.7	19.2	
Actuated g/C Ratio	0.71	0.63		0.60	0.55		0.10	0.08		0.22	0.16	
Clearance Time (s)	4.5	4.5		4.5	5.5		4.5	4.5		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.5		3.0	3.0		2.0	2.0	
Lane Grp Cap (vph)	266	2078		283	1704		136	139		238	201	
v/s Ratio Prot	c0.06	0.32		0.01	c0.47		0.00	0.00		c0.03	0.02	
v/s Ratio Perm	0.34			0.12			0.01			c0.04		
v/c Ratio	0.58	0.51		0.23	0.85		0.10	0.03		0.34	0.15	
Uniform Delay, d1	18.5	12.3		10.5	22.5		48.9	50.5		38.6	43.4	
Progression Factor	1.00	1.00		1.04	0.96		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.0	0.9		0.4	5.2		0.3	0.1		0.3	0.1	
Delay (s)	21.5	13.2		11.3	26.9		49.2	50.5		38.9	43.5	
Level of Service	C	B		B	C		D	D		D	D	
Approach Delay (s)		14.2			26.3			50.0			41.8	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



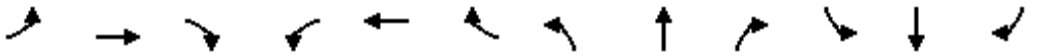
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	971	54	61	1161	238	12	3	15	79	7	134
Future Volume (veh/h)	147	971	54	61	1161	238	12	3	15	79	7	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1693	1693	1693	1900	1900	1900	1470	1470	1470
Adj Flow Rate, veh/h	153	1011	56	64	1209	232	12	3	16	82	7	140
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	14	14	14	0	0	0	29	29	29
Cap, veh/h	364	2118	117	355	1722	328	112	20	107	250	8	163
Arrive On Green	0.05	0.65	0.65	0.07	1.00	1.00	0.01	0.08	0.08	0.08	0.14	0.14
Sat Flow, veh/h	1697	3256	180	1612	2685	511	1810	261	1389	1400	60	1195
Grp Volume(v), veh/h	153	525	542	64	720	721	12	0	19	82	0	147
Grp Sat Flow(s),veh/h/ln	1697	1692	1744	1612	1608	1588	1810	0	1650	1400	0	1255
Q Serve(g_s), s	3.7	18.9	18.9	1.6	0.0	0.0	0.7	0.0	1.3	6.1	0.0	13.7
Cycle Q Clear(g_c), s	3.7	18.9	18.9	1.6	0.0	0.0	0.7	0.0	1.3	6.1	0.0	13.7
Prop In Lane	1.00		0.10	1.00		0.32	1.00		0.84	1.00		0.95
Lane Grp Cap(c), veh/h	364	1101	1135	355	1031	1019	112	0	127	250	0	171
V/C Ratio(X)	0.42	0.48	0.48	0.18	0.70	0.71	0.11	0.00	0.15	0.33	0.00	0.86
Avail Cap(c_a), veh/h	364	1101	1135	365	1031	1019	163	0	385	410	0	471
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.4	10.6	10.6	7.7	0.0	0.0	50.1	0.0	51.7	43.0	0.0	50.7
Incr Delay (d2), s/veh	0.8	1.5	1.4	0.2	3.2	3.4	0.4	0.0	0.5	0.3	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.1	7.3	0.5	0.9	1.0	0.3	0.0	0.6	2.1	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.2	12.1	12.1	7.9	3.2	3.4	50.5	0.0	52.2	43.3	0.0	55.4
LnGrp LOS	A	B	B	A	A	A	D	A	D	D	A	E
Approach Vol, veh/h		1220			1505			31			229	
Approach Delay, s/veh		11.5			3.5			51.6			51.1	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	83.6	6.1	21.4	10.0	82.5	13.3	14.2
Change Period (Y+Rc), s	4.5	* 5.5	4.5	5.0	4.5	5.5	5.0	* 5
Max Green Setting (Gmax), s	5.1	* 46	5.0	45.0	5.5	45.0	22.0	* 28
Max Q Clear Time (g_c+I1), s	3.6	20.9	2.7	15.7	5.7	2.0	8.1	3.3
Green Ext Time (p_c), s	0.0	8.0	0.0	0.6	0.0	16.5	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

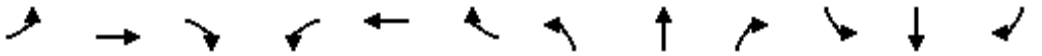
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	219	86	48	152	38	46	249	48	173	522	89
Future Volume (vph)	36	219	86	48	152	38	46	249	48	173	522	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1597	1610		1597	1627		1504	2924		1702	3321	
Flt Permitted	0.56	1.00		0.33	1.00		0.38	1.00		0.42	1.00	
Satd. Flow (perm)	939	1610		563	1627		604	2924		746	3321	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	40	246	97	54	171	43	52	280	54	194	587	100
RTOR Reduction (vph)	0	13	0	0	8	0	0	13	0	0	12	0
Lane Group Flow (vph)	40	330	0	54	206	0	52	321	0	194	675	0
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%	20%	20%	20%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.0	21.5		25.4	22.2		22.9	19.5		35.4	27.0	
Effective Green, g (s)	26.0	23.0		27.4	23.7		24.9	21.0		36.4	28.5	
Actuated g/C Ratio	0.34	0.30		0.36	0.31		0.33	0.28		0.48	0.37	
Clearance Time (s)	5.0	5.5		5.0	5.5		5.0	5.5		5.0	5.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	351	486		259	506		249	806		506	1243	
v/s Ratio Prot	0.01	c0.21		c0.01	0.13		0.01	0.11		c0.06	c0.20	
v/s Ratio Perm	0.03			0.06			0.06			0.12		
v/c Ratio	0.11	0.68		0.21	0.41		0.21	0.40		0.38	0.54	
Uniform Delay, d1	17.0	23.3		16.7	20.7		17.8	22.4		12.0	18.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	3.8		0.1	0.5		0.2	0.3		0.2	0.5	
Delay (s)	17.0	27.1		16.9	21.2		18.0	22.7		12.2	19.2	
Level of Service	B	C		B	C		B	C		B	B	
Approach Delay (s)		26.0			20.3			22.1			17.6	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	76.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	219	86	48	152	38	46	249	48	173	522	89
Future Volume (veh/h)	36	219	86	48	152	38	46	249	48	173	522	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1604	1604	1604	1811	1811	1811
Adj Flow Rate, veh/h	40	246	0	54	171	0	52	280	54	194	587	100
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	13	13	13	13	13	13	20	20	20	6	6	6
Cap, veh/h	401	394		349	411		335	661	125	521	938	159
Arrive On Green	0.06	0.23	0.00	0.07	0.24	0.00	0.07	0.26	0.23	0.13	0.32	0.29
Sat Flow, veh/h	1626	1707	0	1626	1707	0	1527	2544	483	1725	2930	498
Grp Volume(v), veh/h	40	246	0	54	171	0	52	166	168	194	344	343
Grp Sat Flow(s),veh/h/ln	1626	1707	0	1626	1707	0	1527	1523	1503	1725	1721	1708
Q Serve(g_s), s	0.9	6.7	0.0	1.3	4.4	0.0	1.2	4.7	4.9	3.9	8.8	8.9
Cycle Q Clear(g_c), s	0.9	6.7	0.0	1.3	4.4	0.0	1.2	4.7	4.9	3.9	8.8	8.9
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.32	1.00		0.29
Lane Grp Cap(c), veh/h	401	394		349	411		335	396	390	521	551	547
V/C Ratio(X)	0.10	0.62		0.15	0.42		0.16	0.42	0.43	0.37	0.62	0.63
Avail Cap(c_a), veh/h	488	1379		484	1445		463	938	925	1026	1522	1511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	18.0	0.0	13.9	16.7	0.0	12.8	16.0	16.3	10.9	15.0	15.2
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.1	0.7	0.0	0.1	0.7	0.8	0.2	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.5	0.0	0.4	1.6	0.0	0.3	1.4	1.4	1.1	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	19.6	0.0	14.0	17.3	0.0	12.9	16.7	17.0	11.1	16.2	16.4
LnGrp LOS	B	B		B	B		B	B	B	B	B	B
Approach Vol, veh/h		286			225			386			881	
Approach Delay, s/veh		18.8			16.5			16.3			15.2	
Approach LOS		B			B			B			B	

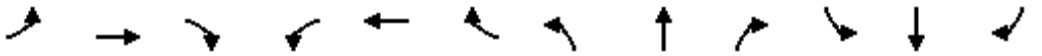
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	17.5	7.7	16.0	7.6	20.6	7.2	16.5
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	21.0	30.5	7.0	40.5	7.0	44.5	5.0	42.5
Max Q Clear Time (g_c+I1), s	5.9	6.9	3.3	8.7	3.2	10.9	2.9	6.4
Green Ext Time (p_c), s	0.2	1.7	0.0	1.5	0.0	4.2	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

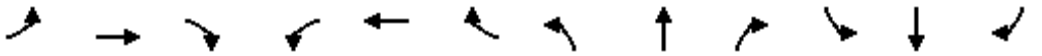
User approved pedestrian interval to be less than phase max green.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1	3	74	1	45	17	289	88	140	510	24
Future Volume (vph)	4	1	3	74	1	45	17	289	88	140	510	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.95		1.00	0.96		1.00	0.99	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1542			1233		1530	2938		1543	3061	
Flt Permitted		0.86			0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1353			1025		1530	2938		1543	3061	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	5	1	4	88	1	54	20	344	105	167	607	29
RTOR Reduction (vph)	0	3	0	0	28	0	0	28	0	0	3	0
Lane Group Flow (vph)	0	7	0	0	115	0	20	421	0	167	633	0
Confl. Peds. (#/hr)	3		1	1		3	1					1
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	13%	13%	13%	41%	41%	41%	18%	18%	18%	17%	17%	17%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		9.6			9.6		1.0	21.6		9.3	29.9	
Effective Green, g (s)		9.6			9.6		1.0	21.6		9.3	29.9	
Actuated g/C Ratio		0.18			0.18		0.02	0.40		0.17	0.55	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		240			182		28	1175		265	1694	
v/s Ratio Prot							0.01	0.14		c0.11	c0.21	
v/s Ratio Perm		0.00			c0.11							
v/c Ratio		0.03			0.63		0.71	0.36		0.63	0.37	
Uniform Delay, d1		18.3			20.6		26.4	11.3		20.8	6.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			7.0		60.5	0.2		4.8	0.1	
Delay (s)		18.4			27.5		86.9	11.5		25.6	6.9	
Level of Service		B			C		F	B		C	A	
Approach Delay (s)		18.4			27.5			14.7			10.8	
Approach LOS		B			C			B			B	

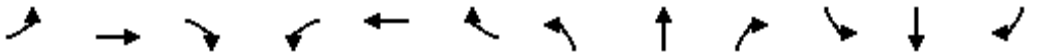
Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	3	74	1	45	17	289	88	140	510	24
Future Volume (veh/h)	4	1	3	74	1	45	17	289	88	140	510	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1292	1292	1292	1633	1633	1633	1648	1648	1648
Adj Flow Rate, veh/h	5	1	4	88	1	54	20	344	105	167	607	29
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	13	13	13	41	41	41	18	18	18	17	17	17
Cap, veh/h	261	69	108	277	16	68	40	629	189	215	1157	55
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.27	0.27	0.14	0.38	0.38
Sat Flow, veh/h	537	402	626	551	94	391	1555	2338	701	1570	3039	145
Grp Volume(v), veh/h	10	0	0	143	0	0	20	226	223	167	312	324
Grp Sat Flow(s),veh/h/ln	1564	0	0	1036	0	0	1555	1552	1487	1570	1566	1618
Q Serve(g_s), s	0.0	0.0	0.0	3.6	0.0	0.0	0.4	4.0	4.1	3.3	4.9	5.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	4.2	0.0	0.0	0.4	4.0	4.1	3.3	4.9	5.0
Prop In Lane	0.50		0.40	0.62		0.38	1.00		0.47	1.00		0.09
Lane Grp Cap(c), veh/h	438	0	0	360	0	0	40	418	400	215	596	616
V/C Ratio(X)	0.02	0.00	0.00	0.40	0.00	0.00	0.51	0.54	0.56	0.78	0.52	0.53
Avail Cap(c_a), veh/h	1318	0	0	1024	0	0	364	1332	1277	1102	2077	2146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	12.7	0.0	0.0	15.4	10.0	10.1	13.4	7.7	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	9.6	1.1	1.2	5.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.2	0.9	0.9	1.1	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.1	0.0	0.0	13.4	0.0	0.0	25.0	11.1	11.3	19.3	8.4	8.4
LnGrp LOS	B	A	A	B	A	A	C	B	B	B	A	A
Approach Vol, veh/h		10			143			469			803	
Approach Delay, s/veh		11.1			13.4			11.8			10.7	
Approach LOS		B			B			B			B	

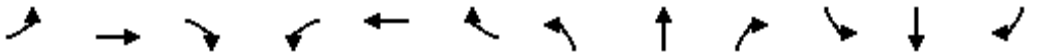
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	13.1		10.0	5.3	16.7		10.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	22.5	27.5		26.5	7.5	42.5		26.5				
Max Q Clear Time (g_c+I1), s	5.3	6.1		2.2	2.4	7.0		6.2				
Green Ext Time (p_c), s	0.4	2.4		0.0	0.0	3.8		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		11.3	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	963	115	55	696	101	261	246	69	143	265	84
Future Volume (vph)	95	963	115	55	696	101	261	246	69	143	265	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3127	3223	1423	3072	3167	1402	3155	3146		3072	1667	1402
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3127	3223	1423	3072	3167	1402	3155	3146		3072	1667	1402
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)	102	1035	124	59	748	109	281	265	74	154	285	90
RTOR Reduction (vph)	0	0	50	0	0	50	0	23	0	0	0	66
Lane Group Flow (vph)	102	1035	74	59	748	59	281	316	0	154	285	24
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	12%	12%	12%	14%	14%	14%	11%	11%	11%	14%	14%	14%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	7.3	57.8	71.8	4.8	55.3	64.8	14.0	28.9		9.5	24.4	31.7
Effective Green, g (s)	7.3	59.3	71.8	4.8	56.8	64.8	14.0	30.4		9.5	25.9	31.7
Actuated g/C Ratio	0.06	0.49	0.60	0.04	0.47	0.54	0.12	0.25		0.08	0.22	0.26
Clearance Time (s)	4.0	5.5	4.0	4.0	5.5	4.0	4.0	5.5		4.0	5.5	4.0
Vehicle Extension (s)	1.5	4.5	1.5	1.5	4.5	1.5	1.5	2.0		1.5	2.0	1.5
Lane Grp Cap (vph)	190	1592	851	122	1499	757	368	796		243	359	370
v/s Ratio Prot	c0.03	c0.32	0.01	0.02	0.24	0.01	c0.09	0.10		0.05	c0.17	0.00
v/s Ratio Perm			0.04			0.04						0.01
v/c Ratio	0.54	0.65	0.09	0.48	0.50	0.08	0.76	0.40		0.63	0.79	0.06
Uniform Delay, d1	54.7	22.6	10.2	56.4	21.8	13.3	51.4	37.2		53.6	44.5	33.0
Progression Factor	1.12	0.65	0.85	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	1.9	0.0	1.1	1.2	0.0	8.2	0.1		3.9	10.7	0.0
Delay (s)	62.8	16.5	8.7	57.5	23.0	13.3	59.6	37.3		57.5	55.3	33.1
Level of Service	E	B	A	E	C	B	E	D		E	E	C
Approach Delay (s)		19.5			24.0			47.4			52.1	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.8%	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)	95	963	115	55	696	101	261	246	69	143	265	84
Future Volume (veh/h)	95	963	115	55	696	101	261	246	69	143	265	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1722	1722	1693	1693	1693	1737	1737	1737	1693	1693	1693
Adj Flow Rate, veh/h	102	1035	108	59	748	34	281	265	52	154	285	68
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	14	14	14	11	11	11	14	14	14
Cap, veh/h	151	1677	878	112	1611	788	351	692	134	211	354	350
Arrive On Green	0.09	1.00	1.00	0.04	0.50	0.49	0.11	0.25	0.24	0.07	0.21	0.20
Sat Flow, veh/h	3182	3272	1437	3127	3216	1415	3209	2757	533	3127	1693	1432
Grp Volume(v), veh/h	102	1035	108	59	748	34	281	157	160	154	285	68
Grp Sat Flow(s),veh/h/ln	1591	1636	1437	1564	1608	1415	1605	1650	1640	1564	1693	1432
Q Serve(g_s), s	3.7	0.0	0.0	2.2	18.2	1.3	10.3	9.4	9.8	5.8	19.2	4.5
Cycle Q Clear(g_c), s	3.7	0.0	0.0	2.2	18.2	1.3	10.3	9.4	9.8	5.8	19.2	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	151	1677	878	112	1611	788	351	414	411	211	354	350
V/C Ratio(X)	0.68	0.62	0.12	0.53	0.46	0.04	0.80	0.38	0.39	0.73	0.81	0.19
Avail Cap(c_a), veh/h	217	1677	878	143	1611	788	428	506	503	292	451	432
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	0.0	0.0	56.8	19.5	12.1	52.2	37.2	37.5	54.9	45.1	36.0
Incr Delay (d2), s/veh	1.7	1.5	0.3	1.4	1.0	0.1	7.1	0.2	0.2	2.9	6.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.3	0.1	0.9	6.6	0.4	4.4	3.7	3.8	2.3	8.4	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	1.5	0.3	58.3	20.4	12.2	59.2	37.4	37.8	57.8	51.4	36.1
LnGrp LOS	E	A	A	E	C	B	E	D	D	E	D	D
Approach Vol, veh/h		1245			841			598			507	
Approach Delay, s/veh		5.8			22.8			47.8			51.3	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	65.5	17.1	29.1	9.7	64.1	12.1	34.1
Change Period (Y+Rc), s	4.0	5.5	4.0	5.5	4.0	5.5	4.0	5.5
Max Green Setting (Gmax), s	5.5	49.0	16.0	30.5	8.2	46.3	11.2	35.3
Max Q Clear Time (g_c+I1), s	4.2	2.0	12.3	21.2	5.7	20.2	7.8	11.8
Green Ext Time (p_c), s	0.0	34.6	0.9	2.3	0.2	16.6	0.4	3.8

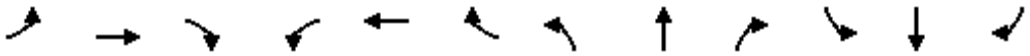
Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	142	78	108	256	1	73	0	146	1	0	0
Future Vol, veh/h	0	142	78	108	256	1	73	0	146	1	0	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	7	7	7	7	7	7	5	5	5	0	0	0
Mvmt Flow	0	169	93	129	305	1	87	0	174	1	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

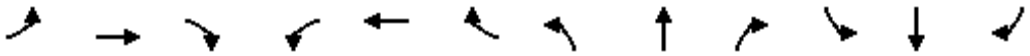
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.3	16.6	11.9	9.5
HCM LOS	B	C	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	0%	30%	100%
Vol Thru, %	0%	65%	70%	0%
Vol Right, %	67%	35%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	220	365	1
LT Vol	73	0	108	1
Through Vol	0	142	256	0
RT Vol	146	78	1	0
Lane Flow Rate	261	262	435	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.393	0.377	0.628	0.002
Departure Headway (Hd)	5.421	5.177	5.203	6.443
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	665	694	695	554
Service Time	3.457	3.21	3.231	4.5
HCM Lane V/C Ratio	0.392	0.378	0.626	0.002
HCM Control Delay	11.9	11.3	16.6	9.5
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	1.9	1.8	4.4	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	954	14	16	1203	74	47	7	38	208	3	218
Future Volume (vph)	72	954	14	16	1203	74	47	7	38	208	3	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	5.5		4.5	4.5		4.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.87		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3462		1752	3470		1805	1662		1736	1556	
Flt Permitted	0.10	1.00		0.22	1.00		0.61	1.00		0.52	1.00	
Satd. Flow (perm)	186	3462		398	3470		1158	1662		943	1556	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	1037	15	17	1308	80	51	8	41	226	3	237
RTOR Reduction (vph)	0	0	0	0	3	0	0	38	0	0	143	0
Lane Group Flow (vph)	78	1052	0	17	1385	0	51	11	0	226	97	0
Confl. Peds. (#/hr)	1		2	2		1						
Confl. Bikes (#/hr)			6			4						
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	0%	0%	0%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	76.8	71.3		69.4	67.1		13.5	9.4		32.4	23.8	
Effective Green, g (s)	76.8	71.3		69.4	67.1		13.5	9.4		33.4	23.8	
Actuated g/C Ratio	0.64	0.59		0.58	0.56		0.11	0.08		0.28	0.20	
Clearance Time (s)	4.5	4.5		4.5	5.5		4.5	4.5		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.5		3.0	3.0		2.0	2.0	
Lane Grp Cap (vph)	190	2057		256	1940		152	130		391	308	
v/s Ratio Prot	c0.02	0.30		0.00	c0.40		0.01	0.01		c0.09	0.06	
v/s Ratio Perm	0.24			0.04			0.03			c0.07		
v/c Ratio	0.41	0.51		0.07	0.71		0.34	0.09		0.58	0.31	
Uniform Delay, d1	14.3	14.2		11.6	19.4		48.6	51.3		36.0	41.1	
Progression Factor	1.00	1.00		0.55	0.48		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	0.9		0.1	2.1		1.3	0.3		1.3	0.2	
Delay (s)	15.7	15.1		6.5	11.4		49.9	51.6		37.3	41.3	
Level of Service	B	B		A	B		D	D		D	D	
Approach Delay (s)		15.1			11.3			50.8			39.4	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



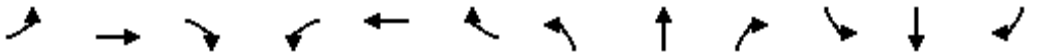
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	954	14	16	1203	74	47	7	38	208	3	218
Future Volume (veh/h)	72	954	14	16	1203	74	47	7	38	208	3	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1900	1900	1900	1841	1841	1841
Adj Flow Rate, veh/h	78	1037	15	17	1308	64	51	8	41	226	3	237
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	0	0	0	4	4	4
Cap, veh/h	357	2151	31	330	2013	98	152	20	101	378	3	270
Arrive On Green	0.04	0.61	0.61	0.04	1.00	1.00	0.03	0.07	0.07	0.14	0.17	0.17
Sat Flow, veh/h	1753	3528	51	1767	3417	167	1810	270	1382	1753	20	1543
Grp Volume(v), veh/h	78	514	538	17	674	698	51	0	49	226	0	240
Grp Sat Flow(s),veh/h/ln	1753	1749	1830	1767	1763	1821	1810	0	1651	1753	0	1563
Q Serve(g_s), s	2.1	19.5	19.5	0.5	0.0	0.0	3.1	0.0	3.4	13.5	0.0	18.0
Cycle Q Clear(g_c), s	2.1	19.5	19.5	0.5	0.0	0.0	3.1	0.0	3.4	13.5	0.0	18.0
Prop In Lane	1.00		0.03	1.00		0.09	1.00		0.84	1.00		0.99
Lane Grp Cap(c), veh/h	357	1066	1116	330	1039	1073	152	0	121	378	0	273
V/C Ratio(X)	0.22	0.48	0.48	0.05	0.65	0.65	0.34	0.00	0.41	0.60	0.00	0.88
Avail Cap(c_a), veh/h	367	1066	1116	373	1039	1073	166	0	385	467	0	585
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.7	12.9	12.9	10.4	0.0	0.0	49.3	0.0	53.1	40.0	0.0	48.2
Incr Delay (d2), s/veh	0.3	1.6	1.5	0.1	2.7	2.6	1.3	0.0	2.2	0.6	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.8	8.2	0.2	0.8	0.8	1.5	0.0	1.5	5.9	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	14.5	14.4	10.5	2.7	2.6	50.5	0.0	55.3	40.6	0.0	51.8
LnGrp LOS	A	B	B	B	A	A	D	A	E	D	A	D
Approach Vol, veh/h		1130			1389			100			466	
Approach Delay, s/veh		14.1			2.8			52.9			46.4	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	78.7	8.7	26.0	9.1	76.2	20.9	13.8
Change Period (Y+Rc), s	4.5	* 5.5	4.5	5.0	4.5	5.5	5.0	* 5
Max Green Setting (Gmax), s	5.1	* 46	5.1	44.9	5.3	45.2	22.0	* 28
Max Q Clear Time (g_c+I1), s	2.5	21.5	5.1	20.0	4.1	2.0	15.5	5.4
Green Ext Time (p_c), s	0.0	7.7	0.0	1.0	0.0	14.7	0.4	0.2

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

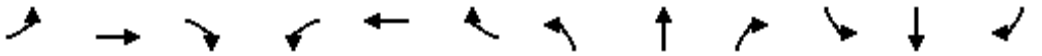
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	178	57	115	322	173	44	528	68	93	313	42
Future Volume (vph)	119	178	57	115	322	173	44	528	68	93	313	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.95		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1597	1620		1597	1586		1504	2949		1703	3336	
Flt Permitted	0.20	1.00		0.47	1.00		0.49	1.00		0.19	1.00	
Satd. Flow (perm)	332	1620		789	1586		772	2949		343	3336	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	134	200	64	129	362	194	49	593	76	104	352	47
RTOR Reduction (vph)	0	9	0	0	15	0	0	8	0	0	9	0
Lane Group Flow (vph)	134	255	0	129	541	0	49	661	0	104	390	0
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%	20%	20%	20%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	42.3	37.2		45.7	38.9		33.2	28.2		40.0	31.6	
Effective Green, g (s)	44.3	38.7		47.7	40.4		35.2	29.7		42.0	33.1	
Actuated g/C Ratio	0.44	0.38		0.47	0.40		0.35	0.29		0.41	0.33	
Clearance Time (s)	5.0	5.5		5.0	5.5		5.0	5.5		5.0	5.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	220	617		432	630		310	862		267	1086	
v/s Ratio Prot	c0.04	0.16		c0.02	c0.34		0.01	c0.22		c0.04	0.12	
v/s Ratio Perm	0.23			0.12			0.05			0.12		
v/c Ratio	0.61	0.41		0.30	0.86		0.16	0.77		0.39	0.36	
Uniform Delay, d1	20.4	23.1		16.0	28.0		22.4	32.8		20.3	26.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.3	0.5		0.1	11.2		0.1	4.1		0.3	0.2	
Delay (s)	23.7	23.6		16.1	39.2		22.5	36.9		20.6	26.4	
Level of Service	C	C		B	D		C	D		C	C	
Approach Delay (s)		23.6			34.9			35.9			25.2	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	101.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.4%	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)	119	178	57	115	322	173	44	528	68	93	313	42
Future Volume (veh/h)	119	178	57	115	322	173	44	528	68	93	313	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1604	1604	1604	1811	1811	1811
Adj Flow Rate, veh/h	134	200	0	129	362	0	49	593	76	104	352	47
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	13	13	13	13	13	13	20	20	20	6	6	6
Cap, veh/h	336	484		454	485		390	818	105	320	976	129
Arrive On Green	0.09	0.28	0.00	0.09	0.28	0.00	0.06	0.30	0.28	0.08	0.32	0.30
Sat Flow, veh/h	1626	1707	0	1626	1707	0	1527	2716	347	1725	3044	403
Grp Volume(v), veh/h	134	200	0	129	362	0	49	332	337	104	198	201
Grp Sat Flow(s),veh/h/ln	1626	1707	0	1626	1707	0	1527	1523	1540	1725	1721	1726
Q Serve(g_s), s	3.7	6.3	0.0	3.6	12.7	0.0	1.4	12.8	12.9	2.6	5.8	5.9
Cycle Q Clear(g_c), s	3.7	6.3	0.0	3.6	12.7	0.0	1.4	12.8	12.9	2.6	5.8	5.9
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.23	1.00		0.23
Lane Grp Cap(c), veh/h	336	484		454	485		390	459	464	320	552	553
V/C Ratio(X)	0.40	0.41		0.28	0.75		0.13	0.72	0.73	0.33	0.36	0.36
Avail Cap(c_a), veh/h	336	1091		502	1143		484	742	750	759	1204	1208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	19.1	0.0	14.6	21.4	0.0	14.4	20.5	20.7	15.2	17.1	17.3
Incr Delay (d2), s/veh	0.3	0.6	0.0	0.1	2.3	0.0	0.1	2.2	2.2	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.4	0.0	1.2	5.0	0.0	0.4	4.2	4.3	0.9	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	19.7	0.0	14.7	23.7	0.0	14.4	22.7	22.9	15.4	17.5	17.7
LnGrp LOS	B	B		B	C		B	C	C	B	B	B
Approach Vol, veh/h		334			491			718			503	
Approach Delay, s/veh		18.2			21.3			22.2			17.2	
Approach LOS		B			C			C			B	

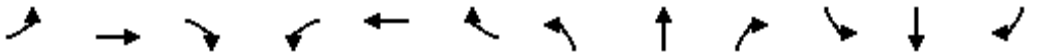
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	23.8	10.1	22.6	8.0	25.1	10.0	22.7
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	21.0	30.5	7.0	40.5	7.0	44.5	5.0	42.5
Max Q Clear Time (g_c+I1), s	4.6	14.9	5.6	8.3	3.4	7.9	5.7	14.7
Green Ext Time (p_c), s	0.1	3.4	0.0	1.2	0.0	2.2	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

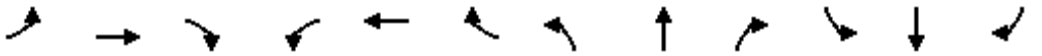
User approved pedestrian interval to be less than phase max green.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	2	19	109	0	236	0	375	34	61	440	1
Future Volume (vph)	17	2	19	109	0	236	0	375	34	61	440	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00			0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99			1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00			1.00		1.00	1.00	
Frt		0.93			0.91			0.99		1.00	1.00	
Flt Protected		0.98			0.98			1.00		0.95	1.00	
Satd. Flow (prot)		1520			1192			3022		1543	3084	
Flt Permitted		0.82			0.88			1.00		0.95	1.00	
Satd. Flow (perm)		1279			1071			3022		1543	3084	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	20	2	23	130	0	281	0	446	40	73	524	1
RTOR Reduction (vph)	0	14	0	0	94	0	0	8	0	0	0	0
Lane Group Flow (vph)	0	31	0	0	317	0	0	478	0	73	525	0
Confl. Peds. (#/hr)	3		1	1		3	1					1
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	13%	13%	13%	41%	41%	41%	18%	18%	18%	17%	17%	17%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		22.8			22.8			16.4		4.0	24.9	
Effective Green, g (s)		22.8			22.8			16.4		4.0	24.9	
Actuated g/C Ratio		0.40			0.40			0.29		0.07	0.44	
Clearance Time (s)		4.5			4.5			4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)		514			430			874		108	1354	
v/s Ratio Prot								c0.16		c0.05	0.17	
v/s Ratio Perm		0.02			c0.30							
v/c Ratio		0.06			0.74			0.55		0.68	0.39	
Uniform Delay, d1		10.4			14.4			17.0		25.7	10.7	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.0			6.5			0.7		15.5	0.2	
Delay (s)		10.4			20.9			17.7		41.2	10.9	
Level of Service		B			C			B		D	B	
Approach Delay (s)		10.4			20.9			17.7			14.6	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	56.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



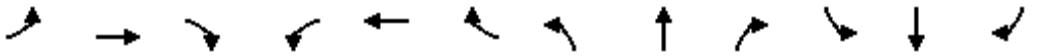
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	2	19	109	0	236	0	375	34	61	440	1
Future Volume (veh/h)	17	2	19	109	0	236	0	375	34	61	440	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1292	1292	1292	1633	1633	1633	1648	1648	1648
Adj Flow Rate, veh/h	20	2	23	130	0	281	0	446	40	73	524	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	13	13	13	41	41	41	18	18	18	17	17	17
Cap, veh/h	288	56	253	211	30	322	3	664	59	99	1223	2
Arrive On Green	0.44	0.44	0.44	0.44	0.00	0.44	0.00	0.23	0.23	0.06	0.38	0.38
Sat Flow, veh/h	421	126	572	268	68	728	1555	2880	257	1570	3206	6
Grp Volume(v), veh/h	45	0	0	411	0	0	0	239	247	73	256	269
Grp Sat Flow(s),veh/h/ln	1119	0	0	1065	0	0	1555	1552	1586	1570	1566	1647
Q Serve(g_s), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	7.2	7.2	2.3	6.2	6.2
Cycle Q Clear(g_c), s	0.8	0.0	0.0	17.8	0.0	0.0	0.0	7.2	7.2	2.3	6.2	6.2
Prop In Lane	0.44		0.51	0.32		0.68	1.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	597	0	0	564	0	0	3	358	366	99	597	628
V/C Ratio(X)	0.08	0.00	0.00	0.73	0.00	0.00	0.00	0.67	0.67	0.74	0.43	0.43
Avail Cap(c_a), veh/h	1020	0	0	929	0	0	152	834	853	261	949	998
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.2	0.0	0.0	12.8	0.0	0.0	0.0	17.9	17.9	23.6	11.7	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.8	0.0	0.0	0.0	2.2	2.2	10.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	3.6	0.0	0.0	0.0	2.3	2.4	1.0	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	0.0	0.0	14.6	0.0	0.0	0.0	20.1	20.1	33.7	12.2	12.2
LnGrp LOS	A	A	A	B	A	A	A	C	C	C	B	B
Approach Vol, veh/h		45			411			486			598	
Approach Delay, s/veh		8.2			14.6			20.1			14.8	
Approach LOS		A			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	16.3		27.1	0.0	24.0		27.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	27.5		40.5	5.0	31.0		40.5				
Max Q Clear Time (g_c+I1), s	4.3	9.2		2.8	0.0	8.2		19.8				
Green Ext Time (p_c), s	0.0	2.5		0.2	0.0	2.8		2.9				

Intersection Summary			
HCM 6th Ctrl Delay		16.2	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	877	251	38	895	84	148	264	78	203	288	169
Future Volume (vph)	94	877	251	38	895	84	148	264	78	203	288	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3367	3471	1533	3433	3539	1565	3335	3310		3433	1863	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3367	3471	1533	3433	3539	1565	3335	3310		3433	1863	1566
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	97	904	259	39	923	87	153	272	80	209	297	174
RTOR Reduction (vph)	0	0	101	0	0	36	0	25	0	0	0	80
Lane Group Flow (vph)	97	904	158	39	923	51	153	327	0	209	297	94
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Confl. Bikes (#/hr)			1			2			1			2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	8.3	63.3	73.0	4.4	59.4	70.2	9.7	22.5		10.8	23.6	31.9
Effective Green, g (s)	8.3	64.8	73.0	4.4	60.9	70.2	9.7	24.0		10.8	25.1	31.9
Actuated g/C Ratio	0.07	0.54	0.61	0.04	0.51	0.59	0.08	0.20		0.09	0.21	0.27
Clearance Time (s)	4.0	5.5	4.0	4.0	5.5	4.0	4.0	5.5		4.0	5.5	4.0
Vehicle Extension (s)	1.5	4.5	1.5	1.5	4.5	1.5	1.5	2.0		1.5	2.0	1.5
Lane Grp Cap (vph)	232	1874	932	125	1796	915	269	662		308	389	468
v/s Ratio Prot	0.03	c0.26	0.01	0.01	c0.26	0.01	0.05	c0.10		0.06	c0.16	0.01
v/s Ratio Perm			0.09			0.03						0.05
v/c Ratio	0.42	0.48	0.17	0.31	0.51	0.06	0.57	0.49		0.68	0.76	0.20
Uniform Delay, d1	53.5	17.2	10.3	56.3	19.7	10.7	53.1	42.6		52.9	44.7	34.2
Progression Factor	0.83	0.60	0.27	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.8	0.0	0.5	1.1	0.0	1.6	0.2		4.6	7.8	0.1
Delay (s)	44.7	11.0	2.8	56.8	20.7	10.7	54.8	42.8		57.5	52.5	34.2
Level of Service	D	B	A	E	C	B	D	D		E	D	C
Approach Delay (s)		11.9			21.3			46.4			49.4	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	877	251	38	895	84	148	264	78	203	288	169
Future Volume (veh/h)	94	877	251	38	895	84	148	264	78	203	288	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	97	904	244	39	923	15	153	272	59	209	297	153
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	2	2	2	5	5	5	2	2	2
Cap, veh/h	656	1935	933	105	1344	699	218	574	122	280	385	607
Arrive On Green	0.39	1.00	1.00	0.03	0.38	0.37	0.06	0.20	0.19	0.08	0.21	0.19
Sat Flow, veh/h	3401	3497	1539	3456	3554	1562	3374	2836	605	3456	1870	1560
Grp Volume(v), veh/h	97	904	244	39	923	15	153	164	167	209	297	153
Grp Sat Flow(s),veh/h/ln	1700	1749	1539	1728	1777	1562	1687	1735	1706	1728	1870	1560
Q Serve(g_s), s	2.2	0.0	0.0	1.3	26.2	0.3	5.3	10.0	10.4	7.1	18.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.0	1.3	26.2	0.3	5.3	10.0	10.4	7.1	18.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	656	1935	933	105	1344	699	218	351	345	280	385	607
V/C Ratio(X)	0.15	0.47	0.26	0.37	0.69	0.02	0.70	0.47	0.48	0.75	0.77	0.25
Avail Cap(c_a), veh/h	656	1935	933	173	1481	759	337	463	455	374	514	715
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	0.0	0.0	57.1	31.3	6.8	55.0	42.2	42.6	53.9	45.0	25.0
Incr Delay (d2), s/veh	0.0	0.7	0.6	0.8	2.9	0.1	1.5	0.4	0.4	3.5	3.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.2	0.2	0.6	11.2	0.1	2.3	4.2	4.3	3.1	8.4	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.7	0.6	57.9	34.2	6.9	56.5	42.5	43.0	57.4	48.4	25.1
LnGrp LOS	C	A	A	E	C	A	E	D	D	E	D	C
Approach Vol, veh/h		1245			977			484			659	
Approach Delay, s/veh		3.0			34.7			47.1			45.8	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	70.4	13.3	28.7	28.6	49.4	13.7	28.3
Change Period (Y+Rc), s	4.0	5.5	5.5	* 5.5	5.5	* 5.5	4.0	5.5
Max Green Setting (Gmax), s	6.0	51.5	12.0	* 32	9.0	* 49	13.0	30.5
Max Q Clear Time (g_c+I1), s	3.3	2.0	7.3	20.0	4.2	28.2	9.1	12.4
Green Ext Time (p_c), s	0.0	34.0	0.5	3.1	0.3	15.7	0.6	3.5

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

Notes

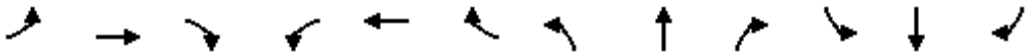
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	21.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	185	127	176	185	1	61	1	142	2	0	0
Future Vol, veh/h	2	185	127	176	185	1	61	1	142	2	0	0
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	20	20	20	9	9	9	14	14	14	0	0	0
Mvmt Flow	3	250	172	238	250	1	82	1	192	3	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19.6	26.1	14.8	10.6
HCM LOS	C	D	B	B

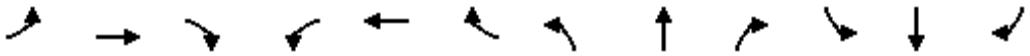
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	1%	49%	100%
Vol Thru, %	0%	59%	51%	0%
Vol Right, %	70%	40%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	314	362	2
LT Vol	61	2	176	2
Through Vol	1	185	185	0
RT Vol	142	127	1	0
Lane Flow Rate	276	424	489	3
Geometry Grp	1	1	1	1
Degree of Util (X)	0.474	0.67	0.778	0.006
Departure Headway (Hd)	6.192	5.686	5.728	7.515
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	579	632	631	479
Service Time	4.267	3.752	3.792	5.515
HCM Lane V/C Ratio	0.477	0.671	0.775	0.006
HCM Control Delay	14.8	19.6	26.1	10.6
HCM Lane LOS	B	C	D	B
HCM 95th-tile Q	2.5	5.1	7.4	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	997	54	61	1161	238	12	3	15	108	7	137
Future Volume (vph)	147	997	54	61	1161	238	12	3	15	108	7	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	5.5		4.5	4.5		4.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.87		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	3313		1583	3075		1805	1660		1399	1262	
Flt Permitted	0.08	1.00		0.22	1.00		0.66	1.00		0.52	1.00	
Satd. Flow (perm)	134	3313		369	3075		1257	1660		772	1262	
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)	153	1039	56	64	1209	248	12	3	16	112	7	143
RTOR Reduction (vph)	0	2	0	0	11	0	0	15	0	0	118	0
Lane Group Flow (vph)	153	1093	0	64	1446	0	13	4	0	113	32	0
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	8%	8%	8%	14%	14%	14%	0%	0%	0%	29%	29%	29%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	82.8	73.2		69.4	64.3		11.0	9.0		27.7	21.2	
Effective Green, g (s)	82.8	73.2		69.4	64.3		11.0	9.0		28.7	21.2	
Actuated g/C Ratio	0.69	0.61		0.58	0.54		0.09	0.08		0.24	0.18	
Clearance Time (s)	4.5	4.5		4.5	5.5		4.5	4.5		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.5		3.0	3.0		2.0	2.0	
Lane Grp Cap (vph)	258	2020		265	1647		124	124		264	222	
v/s Ratio Prot	c0.06	0.33		0.01	c0.47		0.00	0.00		c0.05	0.03	
v/s Ratio Perm	0.34			0.13			0.01			c0.05		
v/c Ratio	0.59	0.54		0.24	0.88		0.10	0.03		0.43	0.15	
Uniform Delay, d1	22.0	13.6		11.6	24.4		49.9	51.5		37.9	41.7	
Progression Factor	1.00	1.00		0.48	0.43		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.6	1.0		0.4	6.6		0.4	0.1		0.4	0.1	
Delay (s)	25.7	14.7		6.0	17.0		50.2	51.6		38.3	41.9	
Level of Service	C	B		A	B		D	D		D	D	
Approach Delay (s)		16.0			16.5			51.0			40.3	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



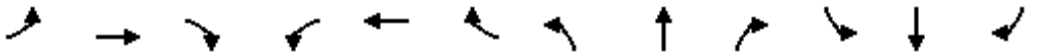
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	997	54	61	1161	238	12	3	15	108	7	137
Future Volume (veh/h)	147	997	54	61	1161	238	12	3	15	108	7	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1693	1693	1693	1900	1900	1900	1470	1470	1470
Adj Flow Rate, veh/h	153	1039	56	64	1209	232	12	3	16	112	7	143
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	8	8	14	14	14	0	0	0	29	29	29
Cap, veh/h	363	2114	114	345	1716	326	113	15	82	259	8	166
Arrive On Green	0.05	0.65	0.65	0.07	1.00	1.00	0.01	0.06	0.06	0.10	0.14	0.14
Sat Flow, veh/h	1697	3262	176	1612	2685	511	1810	261	1389	1400	59	1196
Grp Volume(v), veh/h	153	539	556	64	720	721	12	0	19	112	0	150
Grp Sat Flow(s),veh/h/ln	1697	1692	1745	1612	1608	1588	1810	0	1650	1400	0	1255
Q Serve(g_s), s	3.7	19.7	19.7	1.6	0.0	0.0	0.7	0.0	1.3	8.5	0.0	14.0
Cycle Q Clear(g_c), s	3.7	19.7	19.7	1.6	0.0	0.0	0.7	0.0	1.3	8.5	0.0	14.0
Prop In Lane	1.00		0.10	1.00		0.32	1.00		0.84	1.00		0.95
Lane Grp Cap(c), veh/h	363	1097	1131	345	1027	1015	113	0	97	259	0	174
V/C Ratio(X)	0.42	0.49	0.49	0.19	0.70	0.71	0.11	0.00	0.20	0.43	0.00	0.86
Avail Cap(c_a), veh/h	363	1097	1131	354	1027	1015	163	0	385	390	0	471
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.79	0.79	0.79	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.5	10.9	10.9	7.9	0.0	0.0	52.0	0.0	53.8	43.7	0.0	50.5
Incr Delay (d2), s/veh	0.8	1.6	1.5	0.2	3.2	3.4	0.4	0.0	1.0	0.4	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	7.5	7.7	0.5	0.9	0.9	0.4	0.0	0.6	3.0	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.3	12.5	12.4	8.1	3.2	3.4	52.4	0.0	54.7	44.1	0.0	55.3
LnGrp LOS	A	B	B	A	A	A	D	A	D	D	A	E
Approach Vol, veh/h		1248			1505			31			262	
Approach Delay, s/veh		11.8			3.5			53.8			50.5	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	83.3	6.1	21.7	10.0	82.2	15.7	12.1
Change Period (Y+Rc), s	4.5	* 5.5	4.5	5.0	4.5	5.5	5.0	* 5
Max Green Setting (Gmax), s	5.1	* 46	5.0	45.0	5.5	45.0	22.0	* 28
Max Q Clear Time (g_c+I1), s	3.6	21.7	2.7	16.0	5.7	2.0	10.5	3.3
Green Ext Time (p_c), s	0.0	8.2	0.0	0.6	0.0	16.5	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

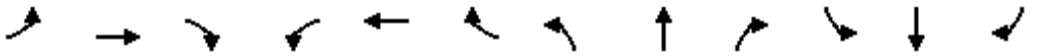
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	219	86	48	152	38	52	253	49	173	522	102
Future Volume (vph)	36	219	86	48	152	38	52	253	49	173	522	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1597	1610		1597	1627		1504	2924		1702	3311	
Flt Permitted	0.56	1.00		0.33	1.00		0.33	1.00		0.41	1.00	
Satd. Flow (perm)	944	1610		562	1627		525	2924		738	3311	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	40	246	97	54	171	43	58	284	55	194	587	115
RTOR Reduction (vph)	0	13	0	0	8	0	0	13	0	0	14	0
Lane Group Flow (vph)	40	330	0	54	206	0	58	326	0	194	688	0
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%	20%	20%	20%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.1	21.6		25.7	22.4		24.4	19.5		35.3	25.4	
Effective Green, g (s)	26.1	23.1		27.7	23.9		26.4	21.0		36.3	26.9	
Actuated g/C Ratio	0.34	0.30		0.36	0.31		0.35	0.28		0.48	0.35	
Clearance Time (s)	5.0	5.5		5.0	5.5		5.0	5.5		5.0	5.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	353	488		262	510		257	805		500	1168	
v/s Ratio Prot	0.01	c0.21		c0.01	0.13		0.02	0.11		c0.06	c0.21	
v/s Ratio Perm	0.03			0.06			0.06			0.12		
v/c Ratio	0.11	0.68		0.21	0.40		0.23	0.40		0.39	0.59	
Uniform Delay, d1	16.9	23.3		16.6	20.5		17.0	22.5		12.1	20.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	3.7		0.1	0.5		0.2	0.3		0.2	0.8	
Delay (s)	17.0	27.0		16.7	21.1		17.1	22.8		12.3	20.9	
Level of Service	B	C		B	C		B	C		B	C	
Approach Delay (s)		25.9			20.2			22.0			19.0	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	76.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.1%	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)	36	219	86	48	152	38	52	253	49	173	522	102
Future Volume (veh/h)	36	219	86	48	152	38	52	253	49	173	522	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1604	1604	1604	1811	1811	1811
Adj Flow Rate, veh/h	40	246	0	54	171	0	58	284	55	194	587	115
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	13	13	13	13	13	13	20	20	20	6	6	6
Cap, veh/h	396	392		344	408		336	682	130	524	927	181
Arrive On Green	0.06	0.23	0.00	0.07	0.24	0.00	0.07	0.27	0.24	0.13	0.32	0.30
Sat Flow, veh/h	1626	1707	0	1626	1707	0	1527	2542	484	1725	2858	558
Grp Volume(v), veh/h	40	246	0	54	171	0	58	168	171	194	353	349
Grp Sat Flow(s),veh/h/ln	1626	1707	0	1626	1707	0	1527	1523	1503	1725	1721	1695
Q Serve(g_s), s	1.0	6.9	0.0	1.3	4.5	0.0	1.4	4.8	5.0	4.0	9.2	9.3
Cycle Q Clear(g_c), s	1.0	6.9	0.0	1.3	4.5	0.0	1.4	4.8	5.0	4.0	9.2	9.3
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.32	1.00		0.33
Lane Grp Cap(c), veh/h	396	392		344	408		336	409	403	524	558	550
V/C Ratio(X)	0.10	0.63		0.16	0.42		0.17	0.41	0.42	0.37	0.63	0.64
Avail Cap(c_a), veh/h	481	1356		475	1420		455	922	909	1019	1496	1474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	18.3	0.0	14.2	17.0	0.0	12.7	15.9	16.2	10.9	15.2	15.4
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.7	0.0	0.1	0.7	0.7	0.2	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.6	0.0	0.4	1.7	0.0	0.4	1.4	1.5	1.1	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	20.0	0.0	14.3	17.7	0.0	12.8	16.6	16.9	11.1	16.4	16.7
LnGrp LOS	B	C		B	B		B	B	B	B	B	B
Approach Vol, veh/h		286			225			397			896	
Approach Delay, s/veh		19.2			16.9			16.2			15.3	
Approach LOS		B			B			B			B	

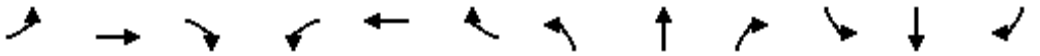
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	18.2	7.7	16.1	7.9	21.2	7.2	16.7
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	21.0	30.5	7.0	40.5	7.0	44.5	5.0	42.5
Max Q Clear Time (g_c+I1), s	6.0	7.0	3.3	8.9	3.4	11.3	3.0	6.5
Green Ext Time (p_c), s	0.2	1.8	0.0	1.5	0.0	4.3	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

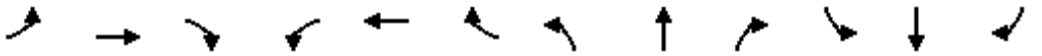
User approved pedestrian interval to be less than phase max green.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1	3	74	1	45	17	300	95	140	510	24
Future Volume (vph)	4	1	3	74	1	45	17	300	95	140	510	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.95		1.00	0.96		1.00	0.99	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1542			1233		1530	2934		1543	3061	
Flt Permitted		0.86			0.81		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1353			1025		1530	2934		1543	3061	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	5	1	4	88	1	54	20	357	113	167	607	29
RTOR Reduction (vph)	0	3	0	0	28	0	0	29	0	0	3	0
Lane Group Flow (vph)	0	7	0	0	115	0	20	441	0	167	633	0
Confl. Peds. (#/hr)	3		1	1		3	1					1
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	13%	13%	13%	41%	41%	41%	18%	18%	18%	17%	17%	17%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		9.6			9.6		1.0	22.1		9.3	30.4	
Effective Green, g (s)		9.6			9.6		1.0	22.1		9.3	30.4	
Actuated g/C Ratio		0.18			0.18		0.02	0.41		0.17	0.56	
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)		238			180		28	1189		263	1707	
v/s Ratio Prot							0.01	0.15		c0.11	c0.21	
v/s Ratio Perm		0.00			c0.11							
v/c Ratio		0.03			0.64		0.71	0.37		0.63	0.37	
Uniform Delay, d1		18.6			20.8		26.6	11.3		21.0	6.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			7.2		60.5	0.2		4.9	0.1	
Delay (s)		18.6			28.1		87.1	11.5		26.0	6.9	
Level of Service		B			C		F	B		C	A	
Approach Delay (s)		18.6			28.1			14.6			10.8	
Approach LOS		B			C			B			B	

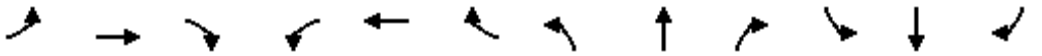
Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	54.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	3	74	1	45	17	300	95	140	510	24
Future Volume (veh/h)	4	1	3	74	1	45	17	300	95	140	510	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1292	1292	1292	1633	1633	1633	1648	1648	1648
Adj Flow Rate, veh/h	5	1	4	88	1	54	20	357	113	167	607	29
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	13	13	13	41	41	41	18	18	18	17	17	17
Cap, veh/h	258	69	108	273	16	67	40	641	200	215	1181	56
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.28	0.28	0.14	0.39	0.39
Sat Flow, veh/h	540	399	626	550	95	391	1555	2314	721	1570	3039	145
Grp Volume(v), veh/h	10	0	0	143	0	0	20	237	233	167	312	324
Grp Sat Flow(s),veh/h/ln	1565	0	0	1037	0	0	1555	1552	1483	1570	1566	1618
Q Serve(g_s), s	0.0	0.0	0.0	3.6	0.0	0.0	0.4	4.3	4.4	3.4	5.0	5.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	4.3	0.0	0.0	0.4	4.3	4.4	3.4	5.0	5.0
Prop In Lane	0.50		0.40	0.62		0.38	1.00		0.49	1.00		0.09
Lane Grp Cap(c), veh/h	435	0	0	357	0	0	40	430	411	215	609	629
V/C Ratio(X)	0.02	0.00	0.00	0.40	0.00	0.00	0.51	0.55	0.57	0.78	0.51	0.51
Avail Cap(c_a), veh/h	1254	0	0	974	0	0	358	1355	1296	1082	2087	2157
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	0.0	0.0	12.9	0.0	0.0	15.7	10.1	10.1	13.6	7.6	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	9.7	1.1	1.2	5.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.2	1.0	1.0	1.1	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.3	0.0	0.0	13.6	0.0	0.0	25.4	11.2	11.3	19.5	8.3	8.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	B	A	A
Approach Vol, veh/h		10			143			490			803	
Approach Delay, s/veh		11.3			13.6			11.8			10.6	
Approach LOS		B			B			B			B	

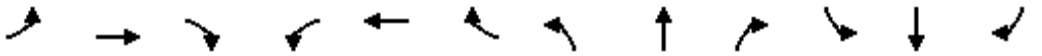
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	13.5		10.1	5.3	17.2		10.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	22.5	28.5		25.5	7.5	43.5		25.5				
Max Q Clear Time (g_c+I1), s	5.4	6.4		2.2	2.4	7.0		6.3				
Green Ext Time (p_c), s	0.4	2.6		0.0	0.0	3.8		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		11.3
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	963	118	58	696	140	261	285	69	143	265	84
Future Volume (vph)	146	963	118	58	696	140	261	285	69	143	265	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3127	3223	1423	3072	3167	1402	3155	3157		3072	1667	1405
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3127	3223	1423	3072	3167	1402	3155	3157		3072	1667	1405
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)	157	1035	127	62	748	151	281	306	74	154	285	90
RTOR Reduction (vph)	0	0	51	0	0	79	0	19	0	0	0	61
Lane Group Flow (vph)	157	1035	76	62	748	72	281	361	0	154	285	29
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			5			1						
Heavy Vehicles (%)	12%	12%	12%	14%	14%	14%	11%	11%	11%	14%	14%	14%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	14.6	57.6	71.9	4.8	47.8	57.3	14.3	29.1		9.5	24.3	38.9
Effective Green, g (s)	14.6	59.1	71.9	4.8	49.3	57.3	14.3	30.6		9.5	25.8	38.9
Actuated g/C Ratio	0.12	0.49	0.60	0.04	0.41	0.48	0.12	0.26		0.08	0.22	0.32
Clearance Time (s)	4.0	5.5	4.0	4.0	5.5	4.0	4.0	5.5		4.0	5.5	4.0
Vehicle Extension (s)	1.5	4.5	1.5	1.5	4.5	1.5	1.5	2.0		1.5	2.0	1.5
Lane Grp Cap (vph)	380	1587	852	122	1301	669	375	805		243	358	502
v/s Ratio Prot	0.05	c0.32	0.01	0.02	c0.24	0.01	c0.09	0.11		0.05	c0.17	0.01
v/s Ratio Perm			0.04			0.04						0.01
v/c Ratio	0.41	0.65	0.09	0.51	0.57	0.11	0.75	0.45		0.63	0.80	0.06
Uniform Delay, d1	48.7	22.8	10.2	56.4	27.3	17.3	51.1	37.6		53.6	44.6	27.9
Progression Factor	0.78	0.63	0.72	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.2	1.9	0.0	1.2	1.9	0.0	7.0	0.1		3.9	10.9	0.0
Delay (s)	38.4	16.3	7.3	57.7	29.1	17.3	58.1	37.8		57.5	55.5	27.9
Level of Service	D	B	A	E	C	B	E	D		E	E	C
Approach Delay (s)		18.0			29.1			46.4			51.4	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.8%	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)	146	963	118	58	696	140	261	285	69	143	265	84
Future Volume (veh/h)	146	963	118	58	696	140	261	285	69	143	265	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1722	1722	1722	1693	1693	1693	1737	1737	1737	1693	1693	1693
Adj Flow Rate, veh/h	157	1035	111	62	748	76	281	306	52	154	285	68
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	14	14	14	11	11	11	14	14	14
Cap, veh/h	604	1634	859	114	1072	551	351	744	125	212	354	554
Arrive On Green	0.38	1.00	0.97	0.04	0.33	0.32	0.11	0.26	0.25	0.07	0.21	0.20
Sat Flow, veh/h	3182	3272	1437	3127	3216	1414	3209	2826	475	3127	1693	1432
Grp Volume(v), veh/h	157	1035	111	62	748	76	281	177	181	154	285	68
Grp Sat Flow(s),veh/h/ln	1591	1636	1437	1564	1608	1414	1605	1650	1651	1564	1693	1432
Q Serve(g_s), s	4.1	0.1	0.0	2.3	24.2	2.0	10.3	10.6	10.9	5.8	19.2	0.0
Cycle Q Clear(g_c), s	4.1	0.1	0.0	2.3	24.2	2.0	10.3	10.6	10.9	5.8	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	604	1634	859	114	1072	551	351	434	434	212	354	554
V/C Ratio(X)	0.26	0.63	0.13	0.54	0.70	0.14	0.80	0.41	0.42	0.73	0.81	0.12
Avail Cap(c_a), veh/h	604	1634	859	143	1203	608	428	503	504	297	451	636
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	0.0	0.2	56.8	34.7	9.1	52.2	36.5	36.8	54.8	45.1	23.7
Incr Delay (d2), s/veh	0.1	1.6	0.3	1.5	3.8	0.5	7.1	0.2	0.2	2.5	6.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.4	0.1	0.9	9.7	0.8	4.4	4.2	4.3	2.3	8.4	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	1.6	0.5	58.3	38.5	9.6	59.2	36.7	37.0	57.4	51.4	23.7
LnGrp LOS	C	A	A	E	D	A	E	D	D	E	D	C
Approach Vol, veh/h		1303			886			639			507	
Approach Delay, s/veh		5.1			37.4			46.7			49.5	
Approach LOS		A			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	63.9	18.6	29.1	28.3	44.0	12.1	35.6
Change Period (Y+Rc), s	4.0	5.5	5.5	* 5.5	5.5	* 5.5	4.0	5.5
Max Green Setting (Gmax), s	5.5	49.0	16.0	* 31	11.1	* 43	11.4	35.1
Max Q Clear Time (g_c+I1), s	4.3	2.1	12.3	21.2	6.1	26.2	7.8	12.9
Green Ext Time (p_c), s	0.0	34.5	0.9	2.3	0.6	12.3	0.4	4.2

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	18	394	129	0	587
Future Vol, veh/h	0	18	394	129	0	587
Conflicting Peds, #/hr	1	3	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	13	13	18	18	17	17
Mvmt Flow	0	21	469	154	0	699

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	315	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.43	-	-	-	-
Pot Cap-1 Maneuver	0	649	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	647	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

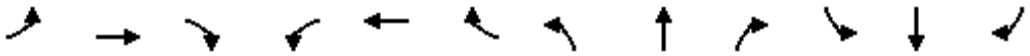
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	647	-
HCM Lane V/C Ratio	-	-	0.033	-
HCM Control Delay (s)	-	-	10.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	15.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	142	78	149	256	1	73	0	146	1	0	0
Future Vol, veh/h	0	142	78	149	256	1	73	0	146	1	0	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	7	7	7	7	7	7	5	5	5	0	0	0
Mvmt Flow	0	169	93	177	305	1	87	0	174	1	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

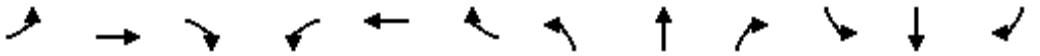
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.6	19.8	12.3	9.7
HCM LOS	B	C	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	0%	37%	100%
Vol Thru, %	0%	65%	63%	0%
Vol Right, %	67%	35%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	220	406	1
LT Vol	73	0	149	1
Through Vol	0	142	256	0
RT Vol	146	78	1	0
Lane Flow Rate	261	262	483	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.402	0.383	0.704	0.002
Departure Headway (Hd)	5.553	5.271	5.242	6.613
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	647	684	691	539
Service Time	3.595	3.307	3.271	4.678
HCM Lane V/C Ratio	0.403	0.383	0.699	0.002
HCM Control Delay	12.3	11.6	19.8	9.7
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	1.9	1.8	5.8	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	957	14	16	1203	74	47	7	38	227	3	240
Future Volume (vph)	72	957	14	16	1203	74	47	7	38	227	3	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	5.5		4.5	4.5		4.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.87		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	3462		1752	3470		1805	1662		1736	1556	
Flt Permitted	0.10	1.00		0.21	1.00		0.60	1.00		0.52	1.00	
Satd. Flow (perm)	182	3462		392	3470		1133	1662		943	1556	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	1040	15	17	1308	80	51	8	41	247	3	261
RTOR Reduction (vph)	0	0	0	0	3	0	0	38	0	0	142	0
Lane Group Flow (vph)	78	1055	0	17	1385	0	51	11	0	247	122	0
Confl. Peds. (#/hr)	1		2	2		1						
Confl. Bikes (#/hr)			6			4						
Heavy Vehicles (%)	4%	4%	4%	3%	3%	3%	0%	0%	0%	4%	4%	4%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	76.0	70.5		68.6	66.3		13.5	9.4		33.2	24.6	
Effective Green, g (s)	76.0	70.5		68.6	66.3		13.5	9.4		34.2	24.6	
Actuated g/C Ratio	0.63	0.59		0.57	0.55		0.11	0.08		0.29	0.21	
Clearance Time (s)	4.5	4.5		4.5	5.5		4.5	4.5		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.5		3.0	3.0		2.0	2.0	
Lane Grp Cap (vph)	186	2033		250	1917		150	130		402	318	
v/s Ratio Prot	c0.02	0.30		0.00	c0.40		0.01	0.01		c0.10	0.08	
v/s Ratio Perm	0.25			0.04			0.03			c0.07		
v/c Ratio	0.42	0.52		0.07	0.72		0.34	0.09		0.61	0.38	
Uniform Delay, d1	14.8	14.7		12.0	20.0		48.6	51.3		35.8	41.1	
Progression Factor	1.00	1.00		0.55	0.49		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	1.0		0.1	2.2		1.4	0.3		2.0	0.3	
Delay (s)	16.3	15.6		6.7	12.0		50.0	51.6		37.8	41.4	
Level of Service	B	B		A	B		D	D		D	D	
Approach Delay (s)		15.7			11.9			50.8			39.7	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



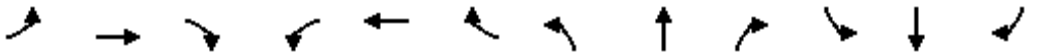
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	957	14	16	1203	74	47	7	38	227	3	240
Future Volume (veh/h)	72	957	14	16	1203	74	47	7	38	227	3	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1900	1900	1900	1841	1841	1841
Adj Flow Rate, veh/h	78	1040	15	17	1308	64	51	8	41	247	3	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	3	3	3	0	0	0	4	4	4
Cap, veh/h	351	2096	30	317	1960	96	152	21	110	403	3	295
Arrive On Green	0.04	0.59	0.59	0.04	1.00	1.00	0.03	0.08	0.08	0.15	0.19	0.19
Sat Flow, veh/h	1753	3528	51	1767	3416	167	1810	270	1382	1753	18	1545
Grp Volume(v), veh/h	78	516	539	17	674	698	51	0	49	247	0	264
Grp Sat Flow(s),veh/h/ln	1753	1749	1830	1767	1763	1821	1810	0	1651	1753	0	1563
Q Serve(g_s), s	2.2	20.4	20.4	0.5	0.0	0.0	3.1	0.0	3.4	14.7	0.0	19.7
Cycle Q Clear(g_c), s	2.2	20.4	20.4	0.5	0.0	0.0	3.1	0.0	3.4	14.7	0.0	19.7
Prop In Lane	1.00		0.03	1.00		0.09	1.00		0.84	1.00		0.99
Lane Grp Cap(c), veh/h	351	1039	1087	317	1011	1044	152	0	131	403	0	298
V/C Ratio(X)	0.22	0.50	0.50	0.05	0.67	0.67	0.33	0.00	0.37	0.61	0.00	0.89
Avail Cap(c_a), veh/h	361	1039	1087	360	1011	1044	167	0	385	475	0	585
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.4	14.0	14.0	11.3	0.0	0.0	48.7	0.0	52.4	39.0	0.0	47.3
Incr Delay (d2), s/veh	0.3	1.7	1.6	0.1	3.0	2.9	1.3	0.0	1.8	0.8	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	8.3	8.6	0.2	0.8	0.9	1.4	0.0	1.5	6.4	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.8	15.7	15.6	11.3	3.0	2.9	49.9	0.0	54.2	39.8	0.0	50.8
LnGrp LOS	A	B	B	B	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1133			1389			100			511	
Approach Delay, s/veh		15.3			3.1			52.0			45.5	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	76.8	8.7	27.9	9.1	74.3	22.0	14.5
Change Period (Y+Rc), s	4.5	* 5.5	4.5	5.0	4.5	5.5	5.0	* 5
Max Green Setting (Gmax), s	5.1	* 46	5.1	44.9	5.3	45.2	22.0	* 28
Max Q Clear Time (g_c+I1), s	2.5	22.4	5.1	21.7	4.2	2.0	16.7	5.4
Green Ext Time (p_c), s	0.0	7.7	0.0	1.1	0.0	14.7	0.4	0.2

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

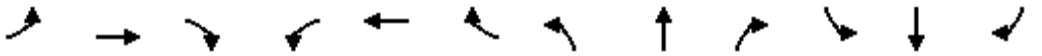
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	178	57	115	322	173	83	550	74	93	315	44
Future Volume (vph)	119	178	57	115	322	173	83	550	74	93	315	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.95		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1597	1620		1597	1586		1504	2947		1703	3334	
Flt Permitted	0.19	1.00		0.47	1.00		0.48	1.00		0.18	1.00	
Satd. Flow (perm)	326	1620		786	1586		758	2947		322	3334	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	134	200	64	129	362	194	93	618	83	104	354	49
RTOR Reduction (vph)	0	9	0	0	15	0	0	8	0	0	10	0
Lane Group Flow (vph)	134	255	0	129	541	0	93	693	0	104	393	0
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%	20%	20%	20%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	42.5	37.4		45.9	39.1		34.4	29.1		40.6	32.2	
Effective Green, g (s)	44.5	38.9		47.9	40.6		36.4	30.6		42.6	33.7	
Actuated g/C Ratio	0.43	0.38		0.47	0.40		0.35	0.30		0.41	0.33	
Clearance Time (s)	5.0	5.5		5.0	5.5		5.0	5.5		5.0	5.5	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	216	613		428	626		314	878		259	1094	
v/s Ratio Prot	c0.04	0.16		c0.02	c0.34		0.02	c0.24		c0.04	0.12	
v/s Ratio Perm	0.23			0.12			0.09			0.13		
v/c Ratio	0.62	0.42		0.30	0.86		0.30	0.79		0.40	0.36	
Uniform Delay, d1	20.9	23.5		16.3	28.5		22.8	33.1		20.5	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.9	0.5		0.1	11.9		0.2	4.8		0.4	0.2	
Delay (s)	24.8	24.0		16.5	40.4		23.0	37.8		20.9	26.5	
Level of Service	C	C		B	D		C	D		C	C	
Approach Delay (s)		24.3			35.9			36.1			25.3	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	102.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.2%	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)	119	178	57	115	322	173	83	550	74	93	315	44
Future Volume (veh/h)	119	178	57	115	322	173	83	550	74	93	315	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1604	1604	1604	1811	1811	1811
Adj Flow Rate, veh/h	134	200	0	129	362	0	93	618	83	104	354	49
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	13	13	13	13	13	13	20	20	20	6	6	6
Cap, veh/h	330	479		448	483		403	837	112	313	947	130
Arrive On Green	0.09	0.28	0.00	0.09	0.28	0.00	0.08	0.31	0.29	0.08	0.31	0.29
Sat Flow, veh/h	1626	1707	0	1626	1707	0	1527	2699	362	1725	3028	415
Grp Volume(v), veh/h	134	200	0	129	362	0	93	348	353	104	200	203
Grp Sat Flow(s),veh/h/ln	1626	1707	0	1626	1707	0	1527	1523	1538	1725	1721	1723
Q Serve(g_s), s	3.8	6.4	0.0	3.7	12.9	0.0	2.7	13.7	13.8	2.7	6.0	6.2
Cycle Q Clear(g_c), s	3.8	6.4	0.0	3.7	12.9	0.0	2.7	13.7	13.8	2.7	6.0	6.2
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.24	1.00		0.24
Lane Grp Cap(c), veh/h	330	479		448	483		403	472	477	313	538	539
V/C Ratio(X)	0.41	0.42		0.29	0.75		0.23	0.74	0.74	0.33	0.37	0.38
Avail Cap(c_a), veh/h	330	1070		493	1121		469	727	734	743	1181	1182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	19.7	0.0	15.0	21.9	0.0	14.1	20.7	20.9	15.3	17.9	18.1
Incr Delay (d2), s/veh	0.3	0.6	0.0	0.1	2.4	0.0	0.1	2.3	2.3	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.5	0.0	1.3	5.1	0.0	0.8	4.5	4.6	0.9	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	20.2	0.0	15.2	24.2	0.0	14.2	22.9	23.1	15.5	18.3	18.5
LnGrp LOS	B	C		B	C		B	C	C	B	B	B
Approach Vol, veh/h		334			491			794			507	
Approach Delay, s/veh		18.8			21.8			22.0			17.8	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	24.8	10.2	22.8	9.1	25.0	10.0	23.0
Change Period (Y+Rc), s	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5
Max Green Setting (Gmax), s	21.0	30.5	7.0	40.5	7.0	44.5	5.0	42.5
Max Q Clear Time (g_c+I1), s	4.7	15.8	5.7	8.4	4.7	8.2	5.8	14.9
Green Ext Time (p_c), s	0.1	3.5	0.0	1.2	0.0	2.3	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

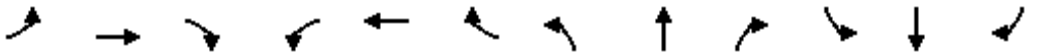
Notes

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

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	2	19	109	0	236	0	442	78	63	440	1
Future Volume (vph)	17	2	19	109	0	236	0	442	78	63	440	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00			0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99			1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00			1.00		1.00	1.00	
Frt		0.93			0.91			0.98		1.00	1.00	
Flt Protected		0.98			0.98			1.00		0.95	1.00	
Satd. Flow (prot)		1520			1191			2990		1543	3084	
Flt Permitted		0.82			0.88			1.00		0.95	1.00	
Satd. Flow (perm)		1278			1070			2990		1543	3084	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	20	2	23	130	0	281	0	526	93	75	524	1
RTOR Reduction (vph)	0	14	0	0	95	0	0	16	0	0	0	0
Lane Group Flow (vph)	0	31	0	0	316	0	0	603	0	75	525	0
Confl. Peds. (#/hr)	3		1	1		3	1					1
Confl. Bikes (#/hr)												4
Heavy Vehicles (%)	13%	13%	13%	41%	41%	41%	18%	18%	18%	17%	17%	17%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		24.0			24.0			19.3		4.0	27.8	
Effective Green, g (s)		24.0			24.0			19.3		4.0	27.8	
Actuated g/C Ratio		0.39			0.39			0.32		0.07	0.46	
Clearance Time (s)		4.5			4.5			4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)		504			422			949		101	1410	
v/s Ratio Prot								c0.20		c0.05	0.17	
v/s Ratio Perm		0.02			c0.30							
v/c Ratio		0.06			0.75			0.64		0.74	0.37	
Uniform Delay, d1		11.4			15.8			17.7		27.9	10.8	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.1			7.1			1.4		25.2	0.2	
Delay (s)		11.5			22.9			19.1		53.1	11.0	
Level of Service		B			C			B		D	B	
Approach Delay (s)		11.5			22.9			19.1			16.2	
Approach LOS		B			C			B			B	

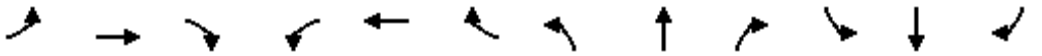
Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	2	19	109	0	236	0	442	78	63	440	1
Future Volume (veh/h)	17	2	19	109	0	236	0	442	78	63	440	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1292	1292	1292	1633	1633	1633	1648	1648	1648
Adj Flow Rate, veh/h	20	2	23	130	0	281	0	526	93	75	524	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	13	13	13	41	41	41	18	18	18	17	17	17
Cap, veh/h	269	51	240	201	27	317	3	713	126	95	1311	3
Arrive On Green	0.44	0.44	0.44	0.44	0.00	0.44	0.00	0.27	0.27	0.06	0.41	0.41
Sat Flow, veh/h	411	117	551	274	62	727	1555	2636	464	1570	3206	6
Grp Volume(v), veh/h	45	0	0	411	0	0	0	309	310	75	256	269
Grp Sat Flow(s),veh/h/ln	1079	0	0	1063	0	0	1555	1552	1549	1570	1566	1647
Q Serve(g_s), s	0.0	0.0	0.0	16.2	0.0	0.0	0.0	10.5	10.6	2.7	6.7	6.7
Cycle Q Clear(g_c), s	1.0	0.0	0.0	20.5	0.0	0.0	0.0	10.5	10.6	2.7	6.7	6.7
Prop In Lane	0.44		0.51	0.32		0.68	1.00		0.30	1.00		0.00
Lane Grp Cap(c), veh/h	560	0	0	545	0	0	3	420	419	95	640	673
V/C Ratio(X)	0.08	0.00	0.00	0.75	0.00	0.00	0.00	0.74	0.74	0.79	0.40	0.40
Avail Cap(c_a), veh/h	881	0	0	822	0	0	134	738	736	231	839	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.5	0.0	0.0	14.8	0.0	0.0	0.0	19.2	19.2	26.8	12.1	12.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.2	0.0	0.0	0.0	2.5	2.6	13.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	4.4	0.0	0.0	0.0	3.4	3.5	1.3	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.6	0.0	0.0	17.0	0.0	0.0	0.0	21.7	21.8	40.2	12.5	12.5
LnGrp LOS	A	A	A	B	A	A	A	C	C	D	B	B
Approach Vol, veh/h		45			411			619			600	
Approach Delay, s/veh		9.6			17.0			21.8			15.9	
Approach LOS		A			B			C			B	

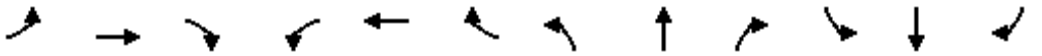
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	20.2		29.7	0.0	28.2		29.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	27.5		40.5	5.0	31.0		40.5				
Max Q Clear Time (g_c+I1), s	4.7	12.6		3.0	0.0	8.7		22.5				
Green Ext Time (p_c), s	0.0	3.0		0.2	0.0	2.8		2.8				

Intersection Summary			
HCM 6th Ctrl Delay		18.2	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	877	268	55	895	92	148	269	78	203	288	169
Future Volume (vph)	99	877	268	55	895	92	148	269	78	203	288	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3367	3471	1533	3433	3539	1565	3335	3312		3433	1863	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3367	3471	1533	3433	3539	1565	3335	3312		3433	1863	1566
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	102	904	276	57	923	95	153	277	80	209	297	174
RTOR Reduction (vph)	0	0	103	0	0	40	0	24	0	0	0	80
Lane Group Flow (vph)	102	904	173	57	923	55	153	333	0	209	297	94
Confl. Peds. (#/hr)	1		2	2		1	1		1	1		1
Confl. Bikes (#/hr)			1			2			1			2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	5%	5%	5%	2%	2%	2%
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	8.5	62.9	72.6	4.8	59.2	70.0	9.7	22.5		10.8	23.6	32.1
Effective Green, g (s)	8.5	64.4	72.6	4.8	60.7	70.0	9.7	24.0		10.8	25.1	32.1
Actuated g/C Ratio	0.07	0.54	0.60	0.04	0.51	0.58	0.08	0.20		0.09	0.21	0.27
Clearance Time (s)	4.0	5.5	4.0	4.0	5.5	4.0	4.0	5.5		4.0	5.5	4.0
Vehicle Extension (s)	1.5	4.5	1.5	1.5	4.5	1.5	1.5	2.0		1.5	2.0	1.5
Lane Grp Cap (vph)	238	1862	927	137	1790	912	269	662		308	389	471
v/s Ratio Prot	0.03	c0.26	0.02	0.02	c0.26	0.01	0.05	c0.10		0.06	c0.16	0.01
v/s Ratio Perm			0.10			0.03						0.05
v/c Ratio	0.43	0.49	0.19	0.42	0.52	0.06	0.57	0.50		0.68	0.76	0.20
Uniform Delay, d1	53.4	17.4	10.6	56.2	19.8	10.8	53.1	42.7		52.9	44.7	34.0
Progression Factor	0.84	0.61	0.30	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.8	0.0	0.7	1.1	0.0	1.6	0.2		4.6	7.8	0.1
Delay (s)	45.0	11.5	3.2	57.0	20.9	10.8	54.8	42.9		57.5	52.5	34.1
Level of Service	D	B	A	E	C	B	D	D		E	D	C
Approach Delay (s)		12.4			21.9			46.5			49.3	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	877	268	55	895	92	148	269	78	203	288	169
Future Volume (veh/h)	99	877	268	55	895	92	148	269	78	203	288	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	102	904	261	57	923	23	153	277	59	209	297	153
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	2	2	2	5	5	5	2	2	2
Cap, veh/h	655	1917	925	122	1345	700	218	576	121	280	385	607
Arrive On Green	0.39	1.00	1.00	0.04	0.38	0.37	0.06	0.20	0.19	0.08	0.21	0.19
Sat Flow, veh/h	3401	3497	1539	3456	3554	1562	3374	2847	596	3456	1870	1560
Grp Volume(v), veh/h	102	904	261	57	923	23	153	167	169	209	297	153
Grp Sat Flow(s),veh/h/ln	1700	1749	1539	1728	1777	1562	1687	1735	1708	1728	1870	1560
Q Serve(g_s), s	2.4	0.0	0.0	1.9	26.2	0.4	5.3	10.2	10.5	7.1	18.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	1.9	26.2	0.4	5.3	10.2	10.5	7.1	18.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	655	1917	925	122	1345	700	218	351	345	280	385	607
V/C Ratio(X)	0.16	0.47	0.28	0.47	0.69	0.03	0.70	0.48	0.49	0.75	0.77	0.25
Avail Cap(c_a), veh/h	655	1917	925	173	1481	759	337	463	455	374	514	715
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	56.8	31.3	6.8	55.0	42.3	42.6	53.9	45.0	25.0
Incr Delay (d2), s/veh	0.0	0.7	0.6	1.0	2.9	0.1	1.5	0.4	0.4	3.5	3.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.2	0.2	0.8	11.2	0.2	2.3	4.3	4.4	3.1	8.4	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	0.7	0.6	57.8	34.2	6.9	56.5	42.6	43.0	57.4	48.4	25.1
LnGrp LOS	C	A	A	E	C	A	E	D	D	E	D	C
Approach Vol, veh/h		1267			1003			489			659	
Approach Delay, s/veh		3.1			34.9			47.1			45.8	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	69.8	13.3	28.7	28.6	49.4	13.7	28.3
Change Period (Y+Rc), s	4.0	5.5	5.5	* 5.5	5.5	* 5.5	4.0	5.5
Max Green Setting (Gmax), s	6.0	51.5	12.0	* 32	9.0	* 49	13.0	30.5
Max Q Clear Time (g_c+I1), s	3.9	2.0	7.3	20.0	4.4	28.2	9.1	12.5
Green Ext Time (p_c), s	0.1	34.3	0.5	3.1	0.3	15.8	0.6	3.5

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	111	409	18	0	568
Future Vol, veh/h	0	111	409	18	0	568
Conflicting Peds, #/hr	1	3	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	13	13	18	18	17	17
Mvmt Flow	0	132	487	21	0	676

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	257	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.43	-	-	-	-
Pot Cap-1 Maneuver	0	710	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	708	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	708	-
HCM Lane V/C Ratio	-	-	0.187	-
HCM Control Delay (s)	-	-	11.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection: 1: SW Cipole Road & SW Herman Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	218	166	113	24
Average Queue (ft)	75	79	56	2
95th Queue (ft)	154	134	93	14
Link Distance (ft)	404	952	1232	158
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: SW Tualatin Sherwood Road & SW Cipole Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	186	296	324	364	547	542	41	36	202	184
Average Queue (ft)	86	116	140	63	277	291	12	11	70	71
95th Queue (ft)	151	237	272	213	521	534	36	33	146	139
Link Distance (ft)		2720	2720		784	784		553		1010
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	360			265			150		175	
Storage Blk Time (%)		0			12				1	1
Queuing Penalty (veh)		0			7				1	1

Intersection: 3: SW 124th Avenue & SW Herman Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	55	255	89	161	78	156	173	130	241	220
Average Queue (ft)	17	124	30	74	21	47	63	54	102	60
95th Queue (ft)	43	214	67	134	56	116	136	102	190	155
Link Distance (ft)		1028		978		682	682		559	559
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225		125		115			180		
Storage Blk Time (%)		1	0	1	0	1			1	
Queuing Penalty (veh)		0	0	1	0	0			2	

Intersection: 4: SW 124th Avenue & SW Myslony Street

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	57	140	57	99	128	169	172	161
Average Queue (ft)	8	69	14	36	55	72	58	45
95th Queue (ft)	33	122	41	82	109	132	132	117
Link Distance (ft)	232	1180		446	446		682	682
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			200			200		
Storage Blk Time (%)						0	0	
Queuing Penalty (veh)						0	0	

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	L
Maximum Queue (ft)	104	261	415	372	100	50	106	329	332	76	226	267
Average Queue (ft)	31	63	213	222	27	8	42	184	172	27	97	157
95th Queue (ft)	78	157	356	360	68	32	89	287	284	63	213	247
Link Distance (ft)			784	784				1707	1707			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250			350	385	385			385	465	465
Storage Blk Time (%)			4	1				0				
Queuing Penalty (veh)			3	1				0				

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	L	L	T	R
Maximum Queue (ft)	196	197	136	279	441	81
Average Queue (ft)	88	93	57	92	198	27
95th Queue (ft)	168	184	115	214	343	61
Link Distance (ft)	662	662			708	708
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			120	120		
Storage Blk Time (%)			0	1	28	
Queuing Penalty (veh)			1	3	40	

Zone Summary

Zone wide Queuing Penalty: 61

Intersection: 1: SW Cipole Road & SW Herman Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	95	170	113	6
Average Queue (ft)	41	90	49	0
95th Queue (ft)	77	145	83	6
Link Distance (ft)	404	952	1232	158
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: SW Tualatin Sherwood Road & SW Cipole Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	101	312	345	110	386	411	97	102	263	298
Average Queue (ft)	43	117	147	13	120	127	41	29	146	103
95th Queue (ft)	80	235	278	67	283	298	84	70	242	216
Link Distance (ft)		2734	2734		784	784		553		1010
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	360			265			150		175	
Storage Blk Time (%)		0			1			0	8	1
Queuing Penalty (veh)		0			0			0	17	2

Intersection: 3: SW 124th Avenue & SW Herman Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	212	309	225	661	124	238	266	90	176	121
Average Queue (ft)	66	105	98	280	24	120	128	38	70	30
95th Queue (ft)	141	217	226	578	75	209	229	74	137	85
Link Distance (ft)		1028		978		682	682		559	559
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225		125		115			180		
Storage Blk Time (%)	1	0	1	26		9			0	
Queuing Penalty (veh)	1	0	7	31		4			0	

Intersection: 4: SW 124th Avenue & SW Myslony Street

Movement	EB	WB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	T	TR	L	T	TR
Maximum Queue (ft)	61	282	162	165	122	169	146
Average Queue (ft)	21	128	67	63	43	73	56
95th Queue (ft)	51	230	134	138	92	143	121
Link Distance (ft)	232	1180	446	446		682	682
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					200		
Storage Blk Time (%)			0			0	
Queuing Penalty (veh)			0			0	

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	L
Maximum Queue (ft)	80	142	297	291	97	26	79	355	356	68	153	176
Average Queue (ft)	23	44	157	166	38	3	18	203	196	21	27	85
95th Queue (ft)	58	79	264	276	80	15	50	315	318	51	99	149
Link Distance (ft)			784	784				2371	2371			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250			350	385	385			385	465	465
Storage Blk Time (%)			1	0				0	0			
Queuing Penalty (veh)			1	0				0	0			

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	L	L	T	R
Maximum Queue (ft)	220	210	134	227	330	127
Average Queue (ft)	101	82	65	91	165	45
95th Queue (ft)	179	164	119	165	272	100
Link Distance (ft)	662	662			704	704
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			120	120		
Storage Blk Time (%)			1	4	24	
Queuing Penalty (veh)			3	11	49	

Zone Summary

Zone wide Queuing Penalty: 126

Intersection: 1: SW Cipole Road & SW Herman Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	207	188	105	30
Average Queue (ft)	76	87	53	3
95th Queue (ft)	140	148	88	18
Link Distance (ft)	404	952	1232	158
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: SW Tualatin Sherwood Road & SW Cipole Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	217	326	337	306	501	507	49	52	247	204
Average Queue (ft)	95	136	137	50	237	240	12	16	104	83
95th Queue (ft)	177	276	285	175	468	484	38	40	193	160
Link Distance (ft)		1620	1620		784	784		552		1011
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	360			265			150		175	
Storage Blk Time (%)		0			10				3	1
Queuing Penalty (veh)		0			6				4	1

Intersection: 3: SW 124th Avenue & SW Herman Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	66	214	81	175	77	145	148	116	231	148
Average Queue (ft)	20	111	28	74	23	41	57	52	100	52
95th Queue (ft)	49	195	62	140	60	104	118	100	183	121
Link Distance (ft)		1028		978		682	682		559	559
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225		125		115			180		
Storage Blk Time (%)		0		2		0			1	
Queuing Penalty (veh)		0		1		0			2	

Intersection: 4: SW 124th Avenue & SW Myslony Street

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	45	190	59	133	151	180	168	149
Average Queue (ft)	7	69	13	37	50	76	59	42
95th Queue (ft)	31	130	40	92	110	138	130	109
Link Distance (ft)	232	1180		446	446		682	682
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			200			200		
Storage Blk Time (%)						0	0	
Queuing Penalty (veh)						0	0	

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	L
Maximum Queue (ft)	158	205	428	395	89	80	128	370	368	90	253	288
Average Queue (ft)	42	68	199	211	25	10	45	222	208	42	88	149
95th Queue (ft)	105	151	356	365	66	43	99	345	331	80	207	244
Link Distance (ft)			784	784				1694	1694			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250			350	385	385			385	465	465
Storage Blk Time (%)	0	0	4	1				0	0			
Queuing Penalty (veh)	0	0	6	1				0	0			

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	L	L	T	R
Maximum Queue (ft)	212	252	162	280	434	98
Average Queue (ft)	90	115	60	100	193	29
95th Queue (ft)	170	206	126	221	347	72
Link Distance (ft)	662	662			708	708
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			120	120		
Storage Blk Time (%)			2	3	25	
Queuing Penalty (veh)			4	8	36	

Intersection: 6: SW 124th Avenue

Movement	WB	NB	NB	SB
Directions Served	R	T	TR	T
Maximum Queue (ft)	62	9	60	26
Average Queue (ft)	14	0	3	1
95th Queue (ft)	43	6	27	12
Link Distance (ft)	498	959	959	190
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 69

Intersection: 1: SW Cipole Road & SW Herman Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	92	186	102	12
Average Queue (ft)	42	92	46	1
95th Queue (ft)	75	149	76	9
Link Distance (ft)	404	952	1232	158
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: SW Tualatin Sherwood Road & SW Cipole Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	110	261	285	168	382	399	98	80	271	314
Average Queue (ft)	44	121	147	17	133	135	38	29	158	131
95th Queue (ft)	88	225	250	89	314	317	81	61	256	250
Link Distance (ft)		2081	2081		784	784		552		1011
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	360			265			150		175	
Storage Blk Time (%)					3			0	9	4
Queuing Penalty (veh)					1			0	21	8

Intersection: 3: SW 124th Avenue & SW Herman Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	150	217	225	592	184	259	269	106	164	122
Average Queue (ft)	65	103	104	270	48	126	128	38	78	32
95th Queue (ft)	126	190	237	516	117	227	230	81	142	92
Link Distance (ft)		1028		978		682	682		559	559
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225		125		115			180		
Storage Blk Time (%)	0	0	1	26	0	10			0	
Queuing Penalty (veh)	0	0	7	30	1	8			0	

Intersection: 4: SW 124th Avenue & SW Myslony Street

Movement	EB	WB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	T	TR	L	T	TR
Maximum Queue (ft)	73	299	204	198	117	156	132
Average Queue (ft)	18	133	74	85	48	64	48
95th Queue (ft)	54	252	158	169	99	129	108
Link Distance (ft)	232	1180	446	446		682	682
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)					200		
Storage Blk Time (%)			0			0	
Queuing Penalty (veh)			0			0	

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	L
Maximum Queue (ft)	83	161	307	324	110	63	133	393	379	58	141	195
Average Queue (ft)	27	49	169	179	43	10	30	205	203	25	34	93
95th Queue (ft)	64	108	281	293	84	37	96	317	321	53	109	168
Link Distance (ft)			784	784				2371	2371			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250	250			350	385	385			385	465	465
Storage Blk Time (%)			1	0				0	1			
Queuing Penalty (veh)			1	0				0	0			

Intersection: 5: SW 124th Avenue & SW Tualatin Sherwood Road

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	L	L	T	R
Maximum Queue (ft)	184	217	136	258	361	141
Average Queue (ft)	100	96	66	97	172	48
95th Queue (ft)	171	179	118	186	294	107
Link Distance (ft)	662	662			704	704
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			120	120		
Storage Blk Time (%)			0	2	23	
Queuing Penalty (veh)			1	6	47	

Intersection: 6: SW 124th Avenue

Movement	WB	NB	NB	SB	SB
Directions Served	R	T	TR	T	T
Maximum Queue (ft)	90	12	5	32	21
Average Queue (ft)	43	0	0	1	1
95th Queue (ft)	76	6	4	17	11
Link Distance (ft)	498	959	959	190	190
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 134