Hazelia Living

Transportation Impact Study

Lake Oswego, Oregon

Date:
June 4, 2025

Prepared for:
Heitman Allen Real Estate and Construction

Prepared by:
Myla Cross
Todd Mobley, PE

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Executive Summary

1. The proposed Hazelia Living includes the development of a mix of cottage, triplex, and quadplex units. The site is located at 17979 SW Stafford Road in Lake Oswego, Oregon. The project will include the construction of 29 cottage units, and 24 triplex/quadplex units. Access to the site will be provided via a new public street connection to SW Stafford Road.
2. The trip generation calculations show that the proposed development is projected to generate 32 morning peak hour, 41 evening peak hour, and 446 weekday trips.
3. 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. Accordingly, no safety mitigation is recommended per the crash data analysis.
4. Sight distance standards at met at the proposed site access location.
5. Left-turn lane warrants are not projected to be met at any of the applicable study intersections under buildout conditions. Accordingly, no left-turn lanes are necessary or recommended as part of the proposed development application.
6. Traffic signal warrants are not projected to be met at any of the applicable study intersections under buildout conditions. Accordingly, no signals are necessary or recommended as part of the proposed development application.
7. Based on the results of the operational analysis, all study intersections are projected to operate well with minimal delays under all analysis scenarios with the exception of the Atherton Drive/Rosemont Road & SW Stafford Road intersection. With its current configuration, the intersection operates over capacity under all evening peak hour scenarios. However, the impacts of the proposed development is small and the project will not degrade the volume-to-capacity (v/c) ratio at the intersection, which is the applicable performance metric. Therefore, no mitigation is recommended as part of the proposed development application.
8. Based on the intersection queuing analysis, all applicable turning movements at the study intersection have adequate storage space to accommodate projected 95th percentile queues. Accordingly, no intersection queuing related mitigation is necessary or recommended as part of the proposed development.

Project Description

Introduction

The proposed Hazelia Living includes the development of a mix of cottage, triplex, and quadplex units. The site is located at 17979 SW Stafford Road in Lake Oswego, Oregon. The project will take access to SW Stafford Road via a new public street.

The purposes of this study are to determine whether the transportation system within the vicinity of the site is capable of 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 Lake Oswego and Clackamas County, the report includes capacity analyses at three intersections:

1. Overlook Drive & SW Stafford Road
2. Site Access & SW Stafford Road
3. Atherton Drive/Rosemont Road & SW Stafford Road

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

Location Description

The project site is located at 17979 SW Stafford Road (Tax Lot 21E16D 01000) and encompasses approximately 6.01 acres. The lot is currently occupied by a church with an operating daycare facility. The proposed development will include the construction of 29 cottage units, and 24 triplex/quadplex units. Access to the site will be provided via a new public street connection to SW Stafford Road, near the southern corner of the project site. Additionally, emergency access will be provided via a connection to the lot to the north. The project site is shown outlined in yellow in Figure 1.

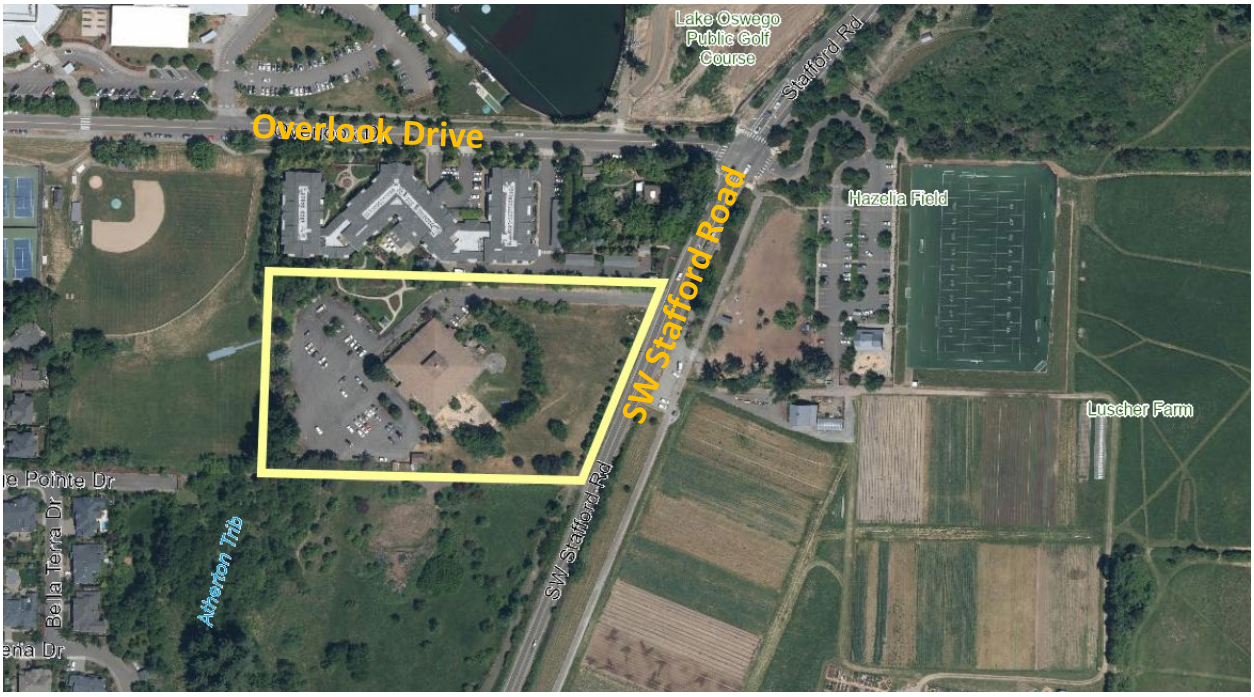


Figure 1: Project Location (image from Lake Oswego Maps)

Vicinity Streets

The proposed development is expected to impact four roadways near the site. Table 1 provides a description of each of the vicinity roadways.

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Functional Classification[1]	Posted Speed	Curbs & Sidewalks	On-Street Parking	Bicycle Facilities
Overlook Drive	Lake Oswego	Local	25 mph	Partial Both Sides	None	None
Atherton Drive	Lake Oswego	Local	25 mph	Partial Both Sides	Partial Both Sides	None
Rosemont Road	Clackamas County	Minor Arterial	40 mph	Partial Both Sides	None	Partial Both Sides
SW Stafford Road	Lake Oswego /Clackamas County	Minor Arterial	35/45 mph	Partial Both Sides	None	None

Study Intersections

Based on coordination with City of Lake Oswego and Clackamas County staff, three intersections were identified for analysis. A summarized description of the study intersections is provided in Table 2.

Table 2: Study Intersection Descriptions

Intersection		Geometry	Traffic Control	Phasing/Stopped Approaches
1	Overlook Drive & SW Stafford Road	Four-Legged	Signalized	Protected/Permitted NB/SB Left Permitted EB/WB Left
2	Site Access/SW Stafford Road	Three-Legged	Stop-Controlled	WB Stop-Controlled
3	Atherton Drive/Rosemont Road & SW Stafford Road	Four-Legged	Roundabout	All Yield Control

Bicycle and Pedestrian Facilities

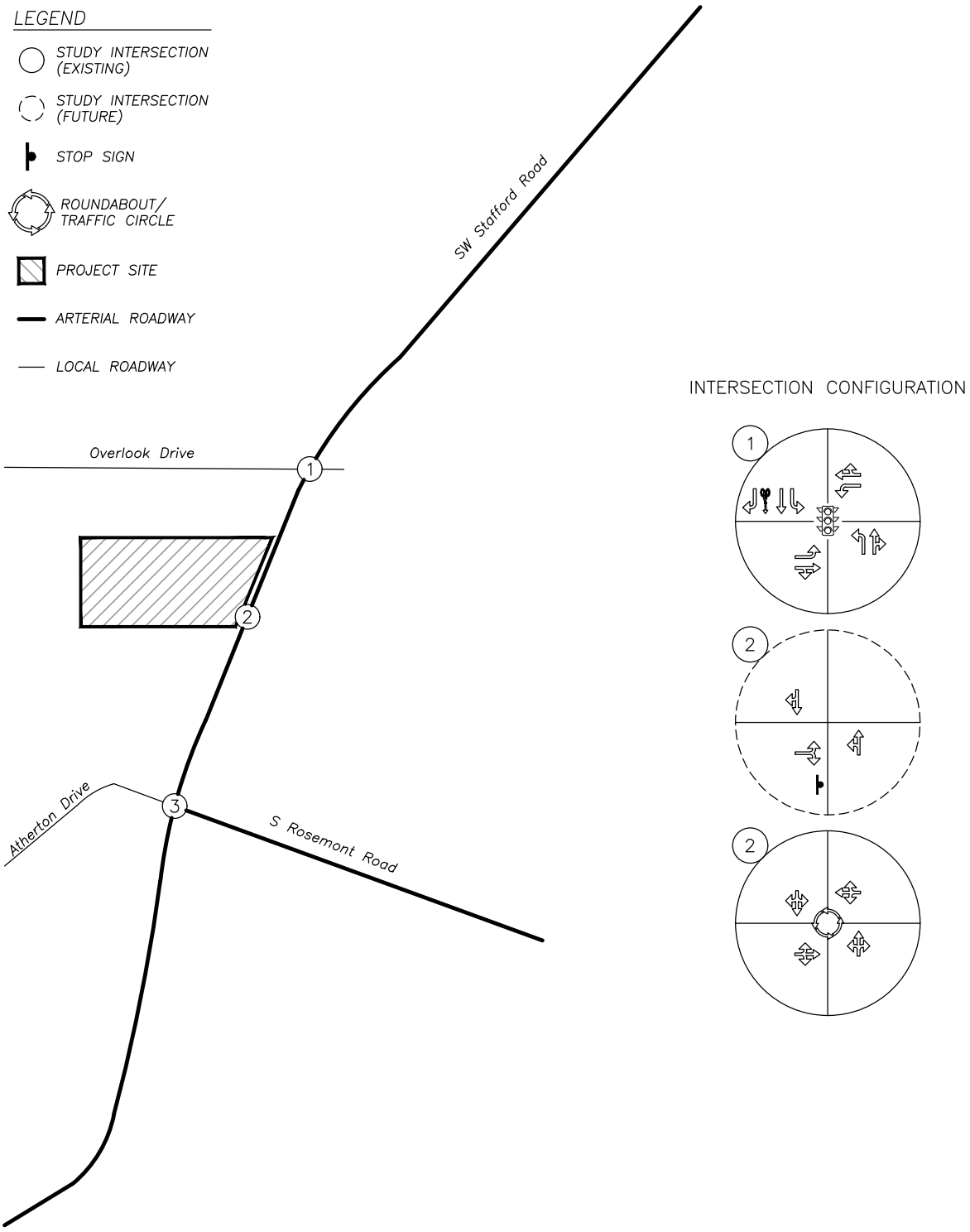
There are bicycle lanes available along SW Stafford Road north of Overlook Drive, bicyclists must share the roadway or utilize the Stafford-Rosemont trail located on the east side of SW Stafford Road south of Overlook Drive. Sidewalks are provided intermittently along SW Stafford Road throughout the study area, pedestrians can also utilize the Stafford-Rosemont Trail.

Transit

The project site is located near one TriMet bus line, that has a stop located just over 1/3 mile from the project site at the SW Stafford Road & Bergis Road intersection.

Bus Line #153 - *Stafford/Salamo* provides weekday service between Lake Oswego, West Linn and Willamette, along State, McVey, Stafford, Rosemont, Santa Anita, Salamo, Blankenship, Ostman and Willamette Falls Drive. Weekday service is scheduled from approximately 5:50 AM to 6:05 PM and has headways of approximately 60 minutes. No weekend service is currently available.

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



INTERSECTION CONFIGURATION

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VICINITY MAP

Lane Configuration & Traffic Control

Figure 2

Hazelia Living TIS

5/30/2025

Site Trips

Trip Generation

To estimate the number of trips that could be generated by the proposed development, trip rates from the *Trip Generation Manual* [1] were used. Data from the land use code 210, *Single-Family Detached Housing,* and land use code 215, *Single-Family Attached Housing,* are used to estimate the proposed development's trip generation based on the number of dwelling units. The resulting trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included in Appendix A.

Table 3: Trip Generation Summary

Land Use	ITE Code	Intensity	Morning Peak Hour			Evening Peak Hour			Weekday Total
			In	Out	Total	In	Out	Total	
Single-Family Detached Housing	210	29 DU	5	15	20	17	10	27	274
Single-Family Attached Housing	215	24 DU	4	8	12	8	6	14	172
Total:			**9**	**23**	**32**	**25**	**16**	**41**	**446**

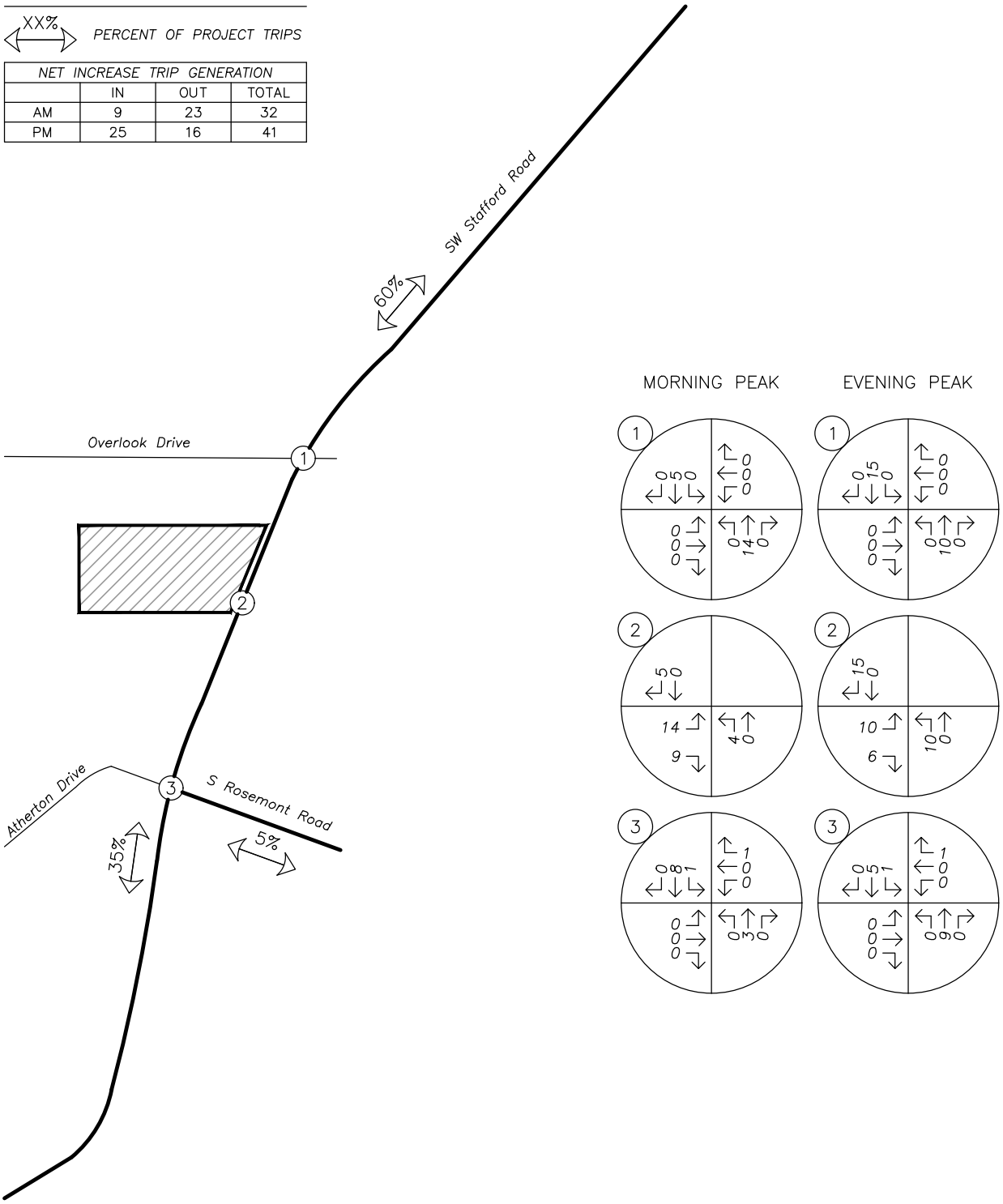
Trip Distribution

The directional distribution of site trips to and from the proposed site was estimated based on the locations of likely trip origins and destinations, locations of major transportation facilities in the site vicinity, and existing travel patterns at the study intersections. The following trip distribution was estimated and used for analysis:

- Approximately 60 percent of site trips will travel to/from the north along SW Stafford Road;
- Approximately 35 percent of site trips will travel to/from the south along SW Stafford Road; and
- Approximately 5 percent of site trips will travel to/from the east along S Rosemont Road.

The trip distribution and assignment for the total site trips generated during the morning and evening peak hours is shown in Figure 3.

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



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SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours

Figure 3

Hazelia Living TIS

5/30/2025

Traffic Volumes

Year 2024 Existing Conditions

Traffic counts were conducted at the study intersections on Wednesday, May 15th, 2024, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. School was still in session when the counts were collected. Each intersection's respective morning and evening peak hours were used for analysis.

Figure 4 shows the existing traffic volumes at the study intersections during the morning and evening peak hours.

Year 2028 Background Conditions

To analyze the impact of the proposed development on the nearby transportation facilities, an estimate of future traffic volumes is required. A buildout year of 2028 is assumed for the proposed development. A general growth rate of 1.0 percent per year was applied to all study intersections to address background growth.

In addition to the general growth, the following nearby developments are approved but were not yet constructed at the time of the traffic counts will be included as in-process traffic:

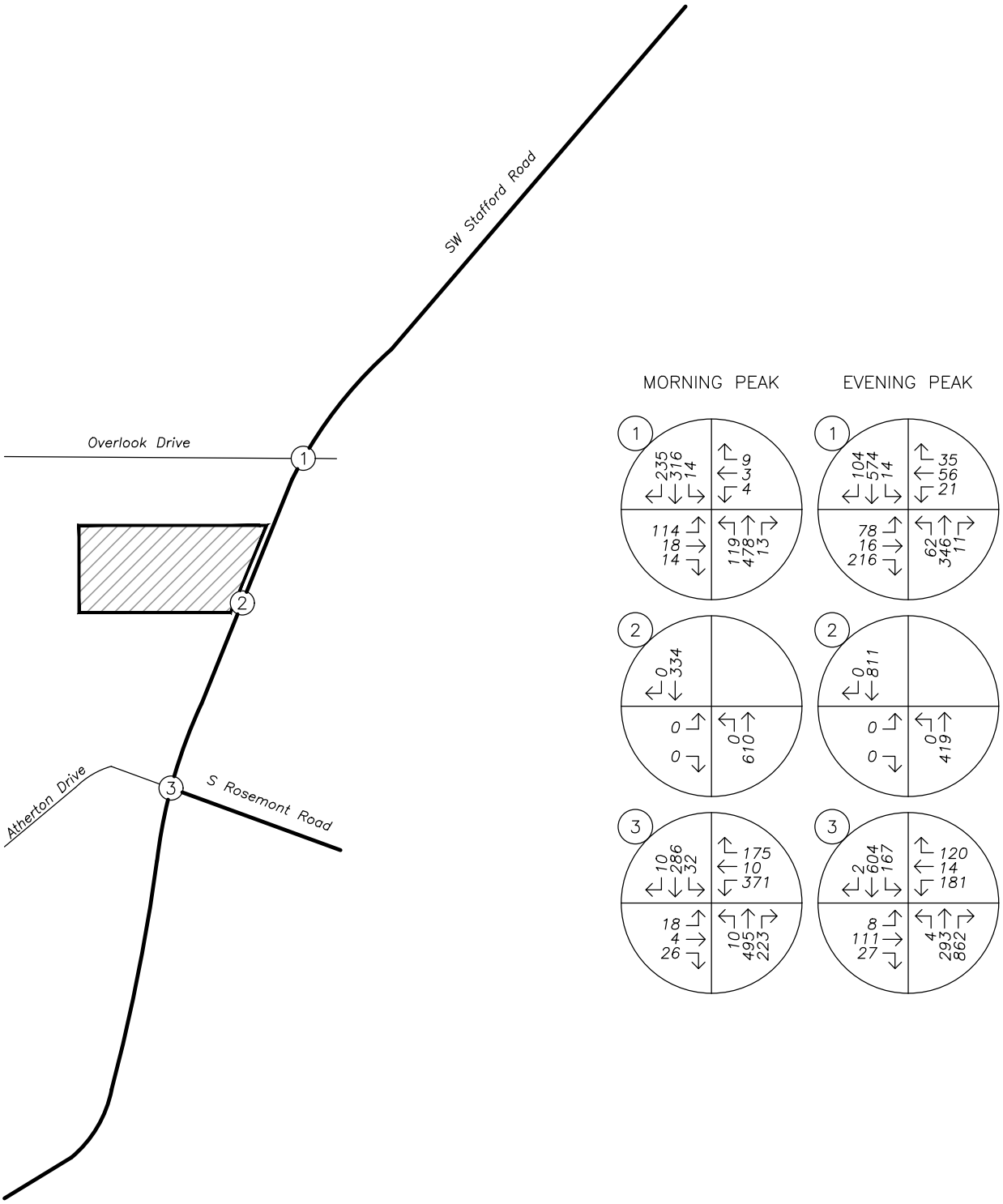
- Lake Oswego Aquatic Center
- Rassekh Park

Figure 5 shows the projected year 2028 background traffic volumes at the study intersections during the morning and evening peak hours.

Year 2028 Buildout Conditions

The trips to be generated by the proposed development (see *Site Trips* section) were added to the year 2028 background traffic volumes to estimate the year 2028 traffic volumes with the full buildout and occupancy of the proposed development.

Figure 6 shows year 2028 buildout traffic volumes at the study intersections during the morning and evening peak hours



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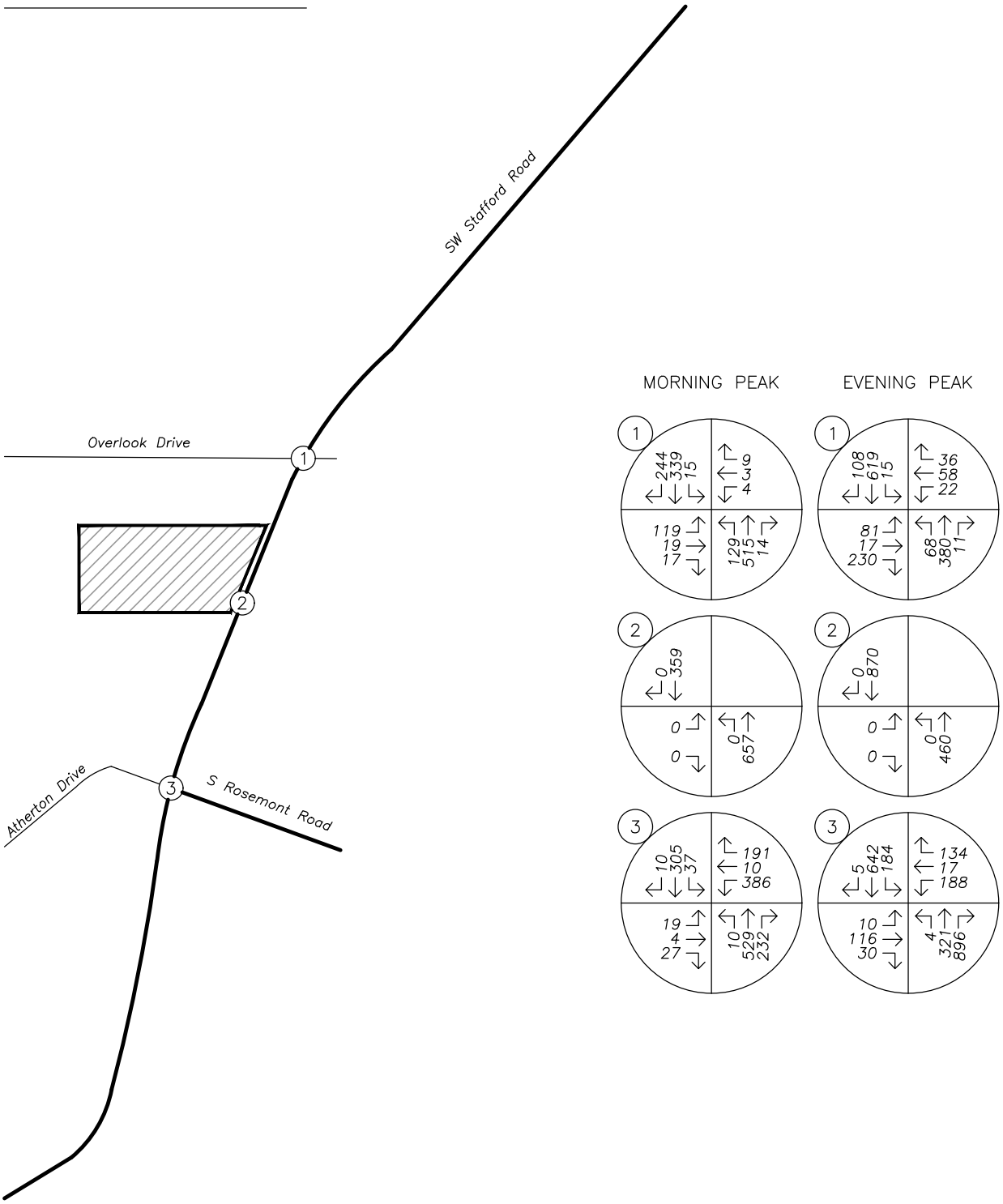
TRAFFIC VOLUMES
Year 2024 Existing Conditions
AM & PM Peak Hours

Figure 4
Hazelia Living TIS
5/30/2025



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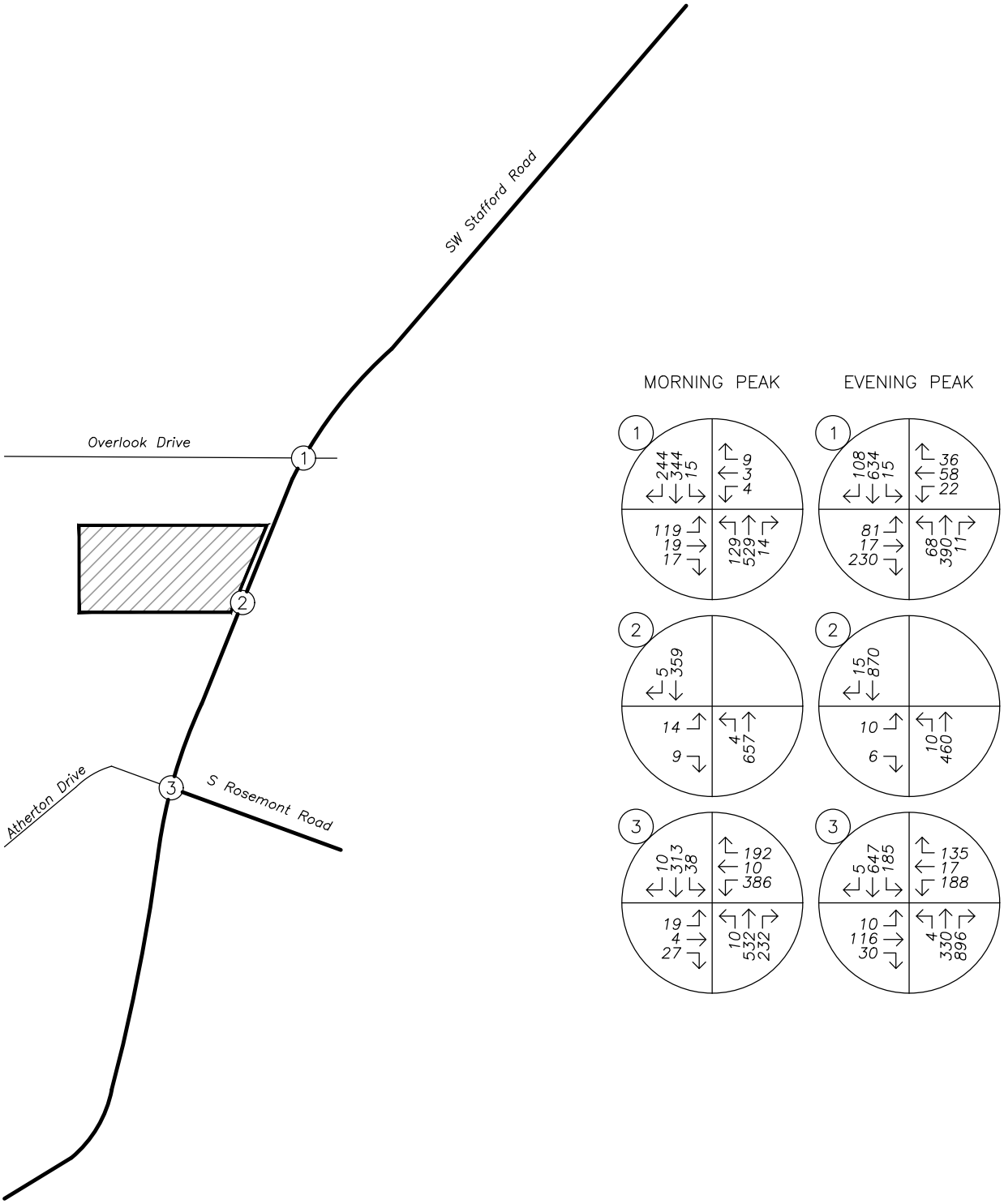
TRAFFIC VOLUMES
Year 2028 Background Conditions
AM & PM Peak Hours

Figure 5
Hazelia Living TIS
6/4/2025



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TRAFFIC VOLUMES
Year 2028 Buildout Conditions
AM & PM Peak Hours

Figure 6
Hazelia Living TIS
6/4/2025

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 2019 through December 2023) 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)
- Suspected Serious Injury (Injury A)
- Suspected Minor Injury (Injury B)
- Possible Injury (Injury C)
- 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 hour represents approximately 10 percent of the annual average daily traffic (AADT) at the intersection. Crash rates in excess of 1.00 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

Table 4 provides a summary of crash types while Table 5 summarizes crash severities and rates for each of the study intersections. Detailed crash data is provided in the appendix to this report.

Table 4: Crash Type Summary

Intersection		Crash Type					Total Crashes
		Turn	Rear End	Angle	Fixed Object	Ped/ Bike	
1	Overlook Drive & SW Stafford Road	1	1	0	0	0	2
3	Atherton Drive/Rosemont Road & SW Stafford Road	1	2	1	3	0	7

Table 5: Crash Severity and Rate Summary

Intersection		Severity					Total Crashes	Peak Hour Volume	Crash Rate
		PDO	C	B	A	Fatality			
1	Overlook Drive & SW Stafford Road	1	0	1	0	0	2	1,533	0.07
3	Atherton Drive/Rosemont Road & SW Stafford Road	4	2	1	0	0	7	2,393	0.16

Based on the review of the available crash data, no significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns. Accordingly, no safety mitigation is recommended per the crash data analysis.

Sight Distance Evaluation

A sight distance analysis was conducted at the proposed site access. To evaluate the sight distance available at the proposed site access location, intersection sight distance was measured and recommended in accordance with the current AASHTO manual[2]. According to AASHTO, 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 vehicle driver's eye-height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement.

Per the AASHTO manual, intersection sight distance is an operation measure intended to provide sufficient line of sight along the major-street so that a driver could turn from the minor-street approach without impeding traffic flow. Conversely, stopping sight distance is considered the minimum requirement to ensure safe operation of an intersection. This is the distance that allows an oncoming driver to see a hazard on the roadway, react, and come to a complete stop, if necessary, to avoid a collision. SW Stafford Road has a posted speed limit of 35 mph in both directions and has a two-lane cross-section; thus the minimum recommended intersection sight distance is 390 feet, and the required stopping sight distance is 250 feet in both directions.

The available sight distance was measured to exceed 390 feet in both directions of the proposed site access location; therefore, sight distance standards are met.

Warrant Analysis

Left-Turn Lane Warrants

A left-turn refuge lane is primarily a safety consideration for the major-street, removing left-turning vehicles from the through traffic stream. The left-turn lane warrants used were developed from the *National Cooperative Highway Research Project's* (NCHRP) *Report 457*.[3] Turn lane warrants were evaluated based on the number of advancing and opposing vehicles as well as the number of turning vehicles, the travel speed, and the number of through lanes.

Left-turn lane warrants were examined at the site access during the morning and evening peak hours under buildout conditions. The analysis shows that left turn warrants are not met at the site access under buildout conditions during the morning or evening peak hour.

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

[3] National Cooperative Highway Research Program, NCHRP Report 457 Engineering Study Guide for Evaluating Intersection Improvements, 2001.

Preliminary Traffic Signal Warrants

Preliminary traffic signal warrants were examined at the site access to determine whether the installation of a new traffic signal will be warranted at the intersection by the 2028 site buildout year. Methodologies were based on the *Manual on Uniform Traffic Control Devices*[4] (MUTCD). Warrant 1, Eight-Hour Vehicular Volumes, was evaluated based on the common assumption that traffic counted during the evening peak hour represents 10 percent of the average daily traffic (ADT) and that the 8th highest hour is 5.65 percent of the daily volume.

Preliminary traffic signal warrants are not projected to be met at the site access upon full buildout of the project.

[4] Federal Highway Administration, Manual on Uniform Traffic Control Devices, 11th Edition, 2023

Operational Analysis

Intersection Capacity Analysis

A capacity and delay analysis were conducted for each of the study intersections per the signalized and unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)[5]. 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.

Performance Standards

The operating standards adopted by the City of Lake Oswego and Clackamas County are summarized below.

City of Lake Oswego

The City of Lake Oswego Municipal Code Section 50.07.003.1.a.iii.(3)(f) states that study intersections should operate at LOS E or better during the peak hour, after the future impacts generated by the development are considered.

Clackamas County

According to Table 5-2b in the *Clackamas County Comprehensive Plan, Chapter 5 Transportation System Plan*, the following operational standard applies to intersections located under Clackamas County jurisdiction:

- Unsignalized Intersections – Minimum LOS E for the weekday AM and PM peak hours.
- Roundabout Intersections - Maximum v/c ratio of 0.90 for the weekday AM and PM peak hours.

Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 6 for the morning and evening peak hours.

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

Table 6: Capacity Analysis Summary

Intersection	Performance Standard	Morning Peak Hour			Evening Peak Hour		
		LOS	Delay (s)	V/C	LOS	Delay (s)	V/C
1. Overlook Drive & SW Stafford Road							
Year 2024 Existing Conditions	LOS E	B	14	0.54	B	18	0.71
Year 2028 Background Conditions		B	15	0.55	C	20	0.76
Year 2028 Buildout Conditions		B	15	0.55	C	21	0.77
2. Site Access & SW Stafford Road							
Year 2028 Buildout Conditions	LOS E	C	18	0.09	D	27	0.10
3. Atherton Drive/Rosemont Road & SW Stafford Road							
Year 2024 Existing Conditions	0.90	A	7	0.64	B	44	**1.0**
Year 2028 Background Conditions		A	8	0.70	C	65	**1.1**
Year 2028 Buildout Conditions		A	8	0.71	C	68	**1.1**

*Table Notes: Locations that do not meet standards are **BOLDED.***

As shown, changes in operations at all intersections will be the same or minimally worse with the trips added by the proposed development. All intersections will continue to meet agency standards through the buildout year except for the intersection of Atherton Drive/Rosemont Road & SW Stafford Road. The intersection operates above the 0.90 v/c standard under all analysis scenarios during the evening peak hour. While the proposed development will add minimal trips to this intersection, 16 trips in total for the evening peak hour, the additional trips do not worsen the v/c ratio compared to the background conditions. Accordingly, no operational mitigation at the intersection of Atherton Drive/Rosemont Road & SW Stafford Road is necessary or recommended.

Queuing Analysis

An analysis of projected queuing was conducted for the study intersections. The 95th percentile queue lengths were estimated based on the same Synchro/SimTraffic simulations used for the delay calculations. 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 theoretically never be met or observed in the field.

The 95th percentile queue lengths reported in the simulation are presented in Table 7 for the morning and evening peak hours. Reported queue lengths were rounded up to the nearest 25 feet, equivalent to an average vehicle length. If no turn-lanes are present, the available storage is measured to the nearest intersection. Detailed queuing analysis reports are included in the appendix.

Table 7: 95th Percentile Queueing Analysis Summary

Intersection/Movement	Available Storage (ft)	2028 Background Queue (ft)		2028 Buildout Queue (ft)	
		Morning	Evening	Morning	Evening
1. Overlook Drive & SW Stafford Road					
NB Left-Turn Lane	225	125	75	125	75
EB Left-Turn Lane	150	100	100	100	125
SB Left-Turn Lane	150	25	50	25	75
SB Right-Turn Lane	225	75	50	100	175
WB Left-Turn Lane	75	25	50	25	75
2. Site Access & SW Stafford Road					
NB Approach	775	-	-	25	50
EB Approach	100	-	-	50	75
3. Atherton Drive/Rosemont Road & SW Stafford Road					
NB Approach	1,750	250	650	175	650
EB Approach	1,350	50	100	50	100
SB Approach	1,300	125	1,050	150	1,050
WB Approach	>2,000	650	75	600	75

*Table Notes: 95th percentile queues that exceed the available storage are **BOLDED.***

Based on the intersection queuing analysis, all applicable turning movements at the study intersection have adequate storage space to accommodate projected 95th percentile queues. Accordingly, no intersection queuing related mitigation is necessary or recommended as part of the proposed development.

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. Accordingly, no safety mitigation is recommended per the crash data analysis.
- Sight distance standards at met at the proposed site access location.
- Left-turn lane warrants are not projected to be met at any of the applicable study intersections under buildout conditions. Accordingly, no left-turn lanes are necessary or recommended as part of the proposed development application.
- Traffic signal warrants are not projected to be met at any of the applicable study intersections under buildout conditions. Accordingly, no signals are necessary or recommended as part of the proposed development application.
- Based on the results of the operational analysis, all study intersections are projected to operate well with minimal delays under all analysis scenarios with the exception of the Atherton Drive/Rosemont Road & SW Stafford Road intersection. With its current configuration, the intersection operates over capacity under all evening peak hour scenarios. However, the impacts of the proposed development and resulting potential increase in trips is small and the development will not degrade the volume-to-capacity (v/c) ratio at the intersection, which is the applicable performance metric. Therefore, no mitigation is recommended as part of the proposed development application
- Based on the intersection queuing analysis, all applicable turning movements at the study intersection have adequate storage space to accommodate projected 95th percentile queues. Accordingly, no intersection queuing related mitigation is necessary or recommended as part of the proposed development.

Appendix A – Site Information

Site Plan

Trip Generation Calculations

CONCEPT SITE PLAN
HORIZ SCALE: 1" = 30'

DEVELOPMENT SUMMARY

	TRIPLEX / QUADPLEX	24
	COTTAGE TYPE 1	9
	COTTAGE TYPE 2	14
	COTTAGE TYPE 3	2
	COTTAGE TYPE 4	4
	TOTAL UNITS	53
	COMMUNITY BUILDING	
	DETACHED GARAGE	6

SCALE
30 0 15 30
1 INCH = 30 FEET

PACIFIC COMMUNITY DESIGN
12564 SW Main Street Tigard, OR
97223
[T] 503-941-9484

SHAPIRO DIDWAY

MILBRANDT
ARCHITECTS

1ST SUBMITTAL: 06/03/2025

REVISIONS

NO.	DATE	DESCRIPTION

HAZELIA
LIVING

CONCEPTUAL
SITE PLAN

PROJECT NO.: 156001
TYPE: PLANNING
REVIEWED BY: JMH

3.0

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

Land Use:	Single-Family Detached Housing
Land Use Code:	210
Land Use Subcategory:	All Sites
Setting/Location	General Urban/Suburban
Variable:	Dwelling Units
Trip Type:	Vehicle
Variable Quantity:	29

AM PEAK HOUR

Trip Rate: 0.7

	Enter	Exit	Total
Directional Split	26%	74%	
Trip Ends	5	15	20

PM PEAK HOUR

Trip Rate: 0.94

	Enter	Exit	Total
Directional Split	63%	37%	
Trip Ends	17	10	27

WEEKDAY

Trip Rate: 9.43

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	137	137	274

SATURDAY

Trip Rate: 9.48

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	137	137	274

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

Land Use:	Single-Family Attached Housing
Land Use Code:	215
Land Use Subcategory:	All Sites
Setting/Location	General Urban/Suburban
Variable:	Dwelling Units
Trip Type:	Vehicle
Variable Quantity:	24

AM PEAK HOUR

Trip Rate: 0.48

	Enter	Exit	Total
Directional Split	31%	69%	
Trip Ends	4	8	12

PM PEAK HOUR

Trip Rate: 0.57

	Enter	Exit	Total
Directional Split	57%	43%	
Trip Ends	8	6	14

WEEKDAY

Trip Rate: 7.2

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	86	86	172

SATURDAY

Trip Rate: 8.76

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	105	105	210

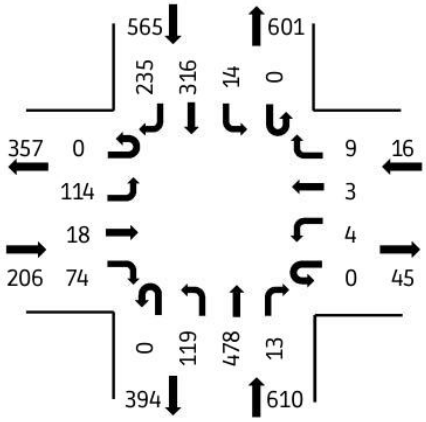
Appendix B – Volumes

Traffic Counts

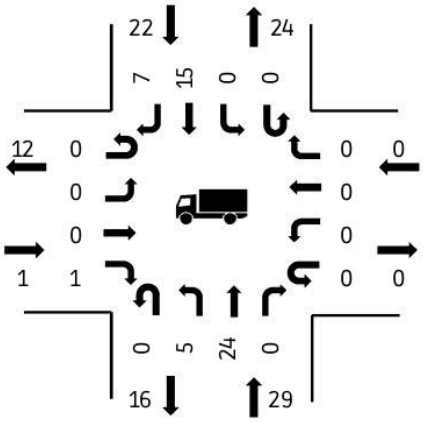
RallyTraffic

Location: Stafford Rd & Overlook Dr
Date: 2024-05-15
Peak Hour Start: 07:45 AM
Peak 15 Minute Start: 08:10 AM
Peak Hour Factor: 0.81

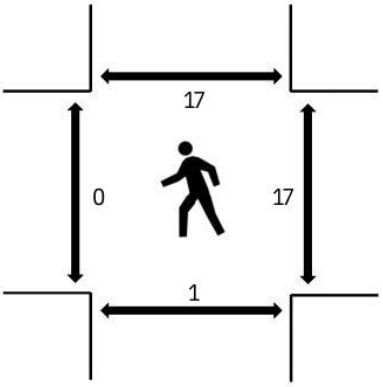
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	3	14	0	0	0	0	4	1	0	0	3	0	0	0	0	0	0	0	0	0		
07:05:00 AM	2	22	1	0	0	0	10	1	0	0	3	2	3	0	0	0	1	0	0	0		
07:10:00 AM	6	28	1	0	0	0	17	3	0	0	1	0	4	0	0	0	0	1	0	0	131	
07:15:00 AM	3	24	0	0	0	0	32	2	0	0	0	0	6	0	0	2	0	1	0	0	176	
07:20:00 AM	5	32	0	0	0	1	27	0	0	0	3	0	3	0	0	0	0	1	0	0	203	
07:25:00 AM	5	38	0	0	0	0	19	8	0	0	3	0	9	0	0	0	0	0	0	0	224	
07:30:00 AM	3	27	3	0	0	0	25	0	0	0	3	0	4	0	0	1	2	1	0	0	223	
07:35:00 AM	4	35	4	0	0	0	16	6	0	0	4	0	5	0	0	0	0	2	0	0	227	
07:40:00 AM	13	42	1	0	0	0	14	5	0	0	2	1	2	0	0	0	0	1	0	0	226	
07:45:00 AM	3	53	0	0	0	0	25	10	0	0	7	0	5	0	0	0	0	0	0	0	260	
07:50:00 AM	12	44	1	0	0	1	20	12	0	0	3	1	2	0	0	0	1	2	0	0	283	
07:55:00 AM	12	53	1	0	0	0	26	28	0	0	5	1	8	0	0	0	0	0	0	0	336	917
08:00:00 AM	11	33	0	0	0	3	27	14	0	0	7	2	9	0	0	1	0	0	0	0	340	999
08:05:00 AM	10	32	1	0	0	1	26	20	0	0	16	3	6	0	0	1	0	0	0	0	357	1070
08:10:00 AM	16	37	3	0	0	0	30	33	0	0	4	0	5	0	0	0	0	0	0	0	351	1137
08:15:00 AM	19	38	2	0	0	2	29	45	0	0	16	3	10	0	0	0	0	1	0	0	409	1232
08:20:00 AM	11	32	0	0	0	1	34	37	0	0	12	3	7	0	0	0	0	1	0	0	431	1298
08:25:00 AM	1	29	0	0	0	1	18	15	0	0	24	3	11	0	0	0	0	1	0	0	406	1319
08:30:00 AM	10	56	1	0	0	1	24	9	0	0	6	1	3	0	0	1	0	0	0	0	353	1362
08:35:00 AM	7	38	1	0	0	2	21	3	0	0	12	0	6	0	0	0	2	1	0	0	308	1379
08:40:00 AM	7	33	3	0	0	2	36	9	0	0	2	1	2	0	0	1	0	3	0	0	304	1397
08:45:00 AM	8	38	1	0	0	1	22	3	0	0	4	0	7	0	0	0	1	0	0	0	277	1379
08:50:00 AM	1	24	0	0	0	1	32	7	0	0	10	1	6	0	0	1	0	1	0	0	268	1364
08:55:00 AM	6	52	2	0	0	0	30	5	0	0	7	3	9	0	0	0	0	1	0	0	284	1345

Car Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	3	13	0	0	0	0	3	1	0	0	3	0	0	0	0	0	0	0	0	0		
07:05:00 AM	2	21	1	0	0	0	10	0	0	0	3	2	3	0	0	0	1	0	0	0		
07:10:00 AM	6	28	1	0	0	0	16	3	0	0	1	0	4	0	0	0	0	1	0	0	126	
07:15:00 AM	3	23	0	0	0	0	31	2	0	0	0	0	6	0	0	2	0	1	0	0	171	
07:20:00 AM	5	30	0	0	0	1	27	0	0	0	3	0	3	0	0	0	0	1	0	0	198	
07:25:00 AM	5	36	0	0	0	0	16	8	0	0	3	0	9	0	0	0	0	0	0	0	215	
07:30:00 AM	3	26	0	0	0	0	23	0	0	0	3	0	4	0	0	1	2	1	0	0	210	
07:35:00 AM	4	32	4	0	0	0	16	6	0	0	3	0	5	0	0	0	0	2	0	0	212	
07:40:00 AM	13	40	1	0	0	0	14	5	0	0	2	1	2	0	0	0	0	1	0	0	214	
07:45:00 AM	3	51	0	0	0	0	23	10	0	0	7	0	5	0	0	0	0	0	0	0	250	
07:50:00 AM	12	42	1	0	0	1	20	11	0	0	3	1	2	0	0	0	1	2	0	0	274	
07:55:00 AM	12	50	1	0	0	0	26	26	0	0	5	1	8	0	0	0	0	0	0	0	324	879
08:00:00 AM	11	31	0	0	0	3	27	14	0	0	7	2	8	0	0	1	0	0	0	0	329	960
08:05:00 AM	10	32	1	0	0	1	26	20	0	0	16	3	6	0	0	1	0	0	0	0	349	1033
08:10:00 AM	16	36	3	0	0	0	27	33	0	0	4	0	5	0	0	0	0	0	0	0	344	1097
08:15:00 AM	19	36	2	0	0	2	29	45	0	0	16	3	10	0	0	0	0	1	0	0	403	1192
08:20:00 AM	11	30	0	0	0	1	33	36	0	0	12	3	7	0	0	0	0	1	0	0	421	1256
08:25:00 AM	1	28	0	0	0	1	18	14	0	0	24	3	11	0	0	0	0	1	0	0	398	1280
08:30:00 AM	10	52	1	0	0	1	20	9	0	0	6	1	3	0	0	1	0	0	0	0	339	1321
08:35:00 AM	7	33	1	0	0	2	18	3	0	0	12	0	6	0	0	0	2	1	0	0	290	1334
08:40:00 AM	7	33	3	0	0	2	34	7	0	0	2	1	2	0	0	1	0	3	0	0	284	1350
08:45:00 AM	8	37	1	0	0	1	21	3	0	0	4	0	7	0	0	0	1	0	0	0	263	1334
08:50:00 AM	1	24	0	0	0	1	30	7	0	0	10	1	6	0	0	1	0	1	0	0	260	1320
08:55:00 AM	6	50	2	0	0	0	30	4	0	0	7	3	9	0	0	0	0	1	0	0	277	1303

Truck Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
07:15:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
07:20:00 AM	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
07:25:00 AM	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
07:30:00 AM	0	1	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
07:35:00 AM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	15	
07:40:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:45:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
07:50:00 AM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9	
07:55:00 AM	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	12	40
08:00:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12	42
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	40
08:10:00 AM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8	43
08:15:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	44
08:20:00 AM	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	11	44
08:25:00 AM	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	10	42
08:30:00 AM	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	15	44
08:35:00 AM	2	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	21	50
08:40:00 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	22	52
08:45:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	50
08:50:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	49
08:55:00 AM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	47

Bike Volumes

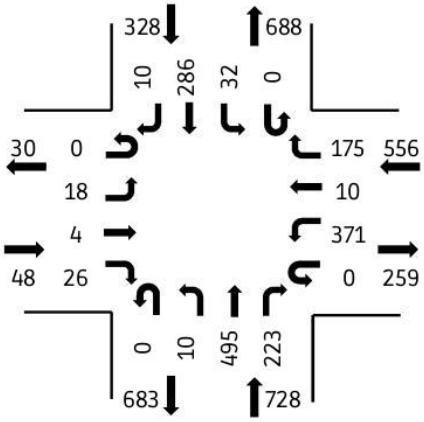
Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Volumes

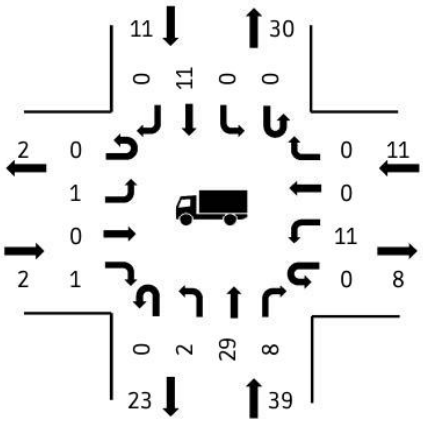
Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	1	1	1		
07:05:00 AM	0	0	0	0		
07:10:00 AM	0	1	0	1	5	
07:15:00 AM	0	2	0	1	5	
07:20:00 AM	0	0	0	0	5	
07:25:00 AM	0	0	0	0	3	
07:30:00 AM	0	0	0	4	4	
07:35:00 AM	0	0	0	0	4	
07:40:00 AM	0	1	0	1	6	
07:45:00 AM	0	0	0	1	3	
07:50:00 AM	0	0	0	1	4	
07:55:00 AM	0	0	0	0	2	16
08:00:00 AM	0	0	0	5	6	18
08:05:00 AM	1	4	0	2	12	25
08:10:00 AM	0	8	0	2	22	33
08:15:00 AM	0	2	0	4	23	36
08:20:00 AM	0	2	0	2	20	40
08:25:00 AM	0	0	0	0	10	40
08:30:00 AM	0	0	0	0	4	36
08:35:00 AM	0	0	0	0	0	36
08:40:00 AM	0	1	0	0	1	35
08:45:00 AM	0	0	0	0	1	34
08:50:00 AM	0	0	0	0	1	33
08:55:00 AM	0	0	0	0	0	33

Location: Stafford Rd & Rosemont Rd
Date: 2024-05-15
Peak Hour Start: 07:40 AM
Peak 15 Minute Start: 07:45 AM
Peak Hour Factor: 0.9

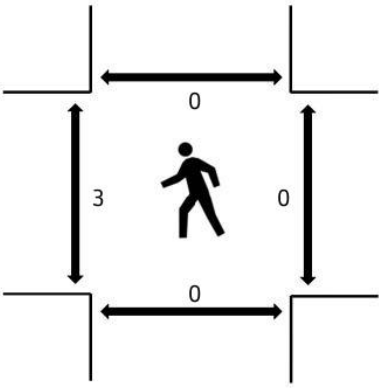
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	9	10	0	0	2	6	0	0	0	0	0	4	0	0	10	0	7	0	0		
07:05:00 AM	0	19	19	0	0	4	8	0	0	0	0	0	2	0	0	15	0	8	0	0		
07:10:00 AM	0	29	5	0	0	1	19	0	0	0	0	0	2	0	0	23	0	9	0	0	211	
07:15:00 AM	0	22	16	0	0	4	26	1	0	0	0	0	1	0	0	19	0	9	0	0	261	
07:20:00 AM	0	29	11	0	0	2	25	0	0	0	1	0	0	1	0	28	0	9	0	0	292	
07:25:00 AM	0	32	15	0	0	2	26	0	0	0	3	1	1	0	0	20	0	13	0	0	317	
07:30:00 AM	0	24	21	0	0	1	21	0	0	0	0	0	1	0	0	21	0	12	0	0	320	
07:35:00 AM	1	30	16	0	0	3	21	1	0	0	0	0	1	0	0	27	0	14	0	0	328	
07:40:00 AM	1	38	16	0	0	2	14	0	0	0	1	0	0	0	0	40	0	18	0	0	345	
07:45:00 AM	1	34	19	0	0	2	22	0	0	0	2	1	0	0	0	45	2	20	0	0	392	
07:50:00 AM	0	44	30	0	0	4	24	0	0	0	2	1	3	0	0	27	0	15	0	0	428	
07:55:00 AM	0	53	21	0	0	2	16	1	0	0	1	1	0	0	0	45	1	20	0	0	459	1332
08:00:00 AM	0	40	19	0	0	7	21	2	0	0	1	0	3	0	0	30	1	12	0	0	447	1420
08:05:00 AM	1	38	14	0	0	3	21	2	0	0	0	0	2	0	0	28	0	8	0	0	414	1462
08:10:00 AM	1	43	16	0	0	3	28	1	0	0	3	1	4	0	0	30	0	19	0	0	402	1523
08:15:00 AM	0	52	14	0	0	2	29	1	0	0	2	0	4	0	0	18	0	16	0	0	404	1563
08:20:00 AM	3	32	18	0	0	3	23	1	0	0	0	0	2	0	0	21	3	12	0	0	405	1575
08:25:00 AM	1	36	15	0	0	1	32	2	0	0	6	0	5	0	0	33	0	11	0	0	398	1604
08:30:00 AM	2	43	20	0	0	1	24	0	0	0	0	0	2	0	0	24	1	10	0	0	387	1630
08:35:00 AM	0	42	21	0	0	2	32	0	0	0	0	0	1	0	0	30	2	14	0	0	413	1660
08:40:00 AM	2	33	11	0	0	4	23	0	0	0	1	0	1	0	0	25	0	15	0	0	386	1645
08:45:00 AM	0	38	23	0	0	3	23	1	0	0	3	0	3	0	0	27	0	7	0	0	387	1625
08:50:00 AM	0	24	18	0	0	6	27	0	0	0	0	0	2	0	0	33	1	14	0	0	368	1600
08:55:00 AM	1	39	20	0	0	3	31	1	0	0	1	0	0	0	0	20	0	17	0	0	386	1572

Car Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	8	8	0	0	2	5	0	0	0	0	0	4	0	0	10	0	7	0	0		
07:05:00 AM	0	19	17	0	0	4	8	0	0	0	0	0	2	0	0	15	0	8	0	0		
07:10:00 AM	0	29	4	0	0	1	18	0	0	0	0	0	2	0	0	23	0	9	0	0	203	
07:15:00 AM	0	22	15	0	0	4	26	1	0	0	0	0	1	0	0	19	0	9	0	0	256	
07:20:00 AM	0	26	10	0	0	2	24	0	0	0	1	0	0	1	0	26	0	9	0	0	282	
07:25:00 AM	0	29	14	0	0	2	25	0	0	0	2	1	1	0	0	19	0	13	0	0	302	
07:30:00 AM	0	21	19	0	0	1	21	0	0	0	0	0	0	0	0	21	0	12	0	0	300	
07:35:00 AM	1	27	15	0	0	3	19	1	0	0	0	0	1	0	0	27	0	14	0	0	309	
07:40:00 AM	1	35	16	0	0	2	14	0	0	0	1	0	0	0	0	40	0	18	0	0	330	
07:45:00 AM	1	33	19	0	0	2	20	0	0	0	2	1	0	0	0	45	2	20	0	0	380	
07:50:00 AM	0	42	28	0	0	4	24	0	0	0	2	1	3	0	0	26	0	15	0	0	417	
07:55:00 AM	0	51	21	0	0	2	16	1	0	0	1	1	0	0	0	44	1	20	0	0	448	1283
08:00:00 AM	0	37	19	0	0	7	20	2	0	0	1	0	2	0	0	29	1	12	0	0	433	1369
08:05:00 AM	1	38	14	0	0	3	21	2	0	0	0	0	2	0	0	25	0	8	0	0	402	1410
08:10:00 AM	1	42	15	0	0	3	25	1	0	0	3	1	4	0	0	30	0	19	0	0	388	1468
08:15:00 AM	0	49	14	0	0	2	29	1	0	0	2	0	4	0	0	17	0	16	0	0	392	1505
08:20:00 AM	3	30	18	0	0	3	23	1	0	0	0	0	2	0	0	20	3	12	0	0	393	1521
08:25:00 AM	1	33	14	0	0	1	32	2	0	0	5	0	5	0	0	32	0	11	0	0	385	1551
08:30:00 AM	2	39	18	0	0	1	22	0	0	0	0	0	2	0	0	23	1	10	0	0	369	1574
08:35:00 AM	0	37	19	0	0	2	29	0	0	0	0	0	1	0	0	29	2	14	0	0	387	1599
08:40:00 AM	2	32	11	0	0	4	21	0	0	0	1	0	1	0	0	25	0	15	0	0	363	1584
08:45:00 AM	0	36	23	0	0	3	21	1	0	0	3	0	3	0	0	27	0	7	0	0	369	1563
08:50:00 AM	0	24	18	0	0	6	27	0	0	0	0	0	2	0	0	33	1	14	0	0	361	1543
08:55:00 AM	1	38	19	0	0	3	29	1	0	0	1	0	0	0	0	19	0	17	0	0	377	1513

Truck Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
07:15:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
07:20:00 AM	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	11	
07:25:00 AM	0	3	1	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	16	
07:30:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	20	
07:35:00 AM	0	3	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
07:40:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
07:45:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:50:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	11	
07:55:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	11	50
08:00:00 AM	2	3	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	16	54
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	14	55
08:10:00 AM	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16	58
08:15:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	12	60
08:20:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	12	56
08:25:00 AM	0	3	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	13	55
08:30:00 AM	0	4	2	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	18	58
08:35:00 AM	0	5	2	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	26	63
08:40:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	63
08:45:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18	64
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	59
08:55:00 AM	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	9	61

Bike Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

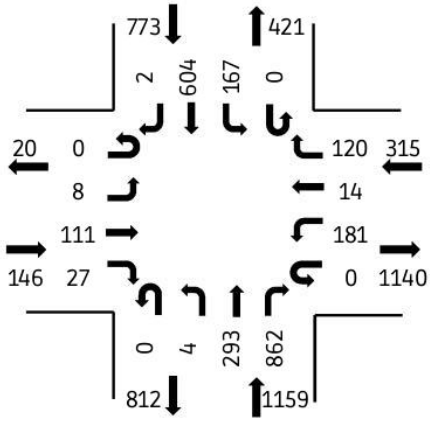
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	0	2	0		
07:05:00 AM	0	0	2	0		
07:10:00 AM	0	0	0	0	4	
07:15:00 AM	0	0	0	0	2	
07:20:00 AM	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	4
08:00:00 AM	0	0	2	0	2	4
08:05:00 AM	0	0	0	0	2	2
08:10:00 AM	0	0	0	0	2	2
08:15:00 AM	0	0	0	0	0	2
08:20:00 AM	0	0	1	0	1	3
08:25:00 AM	0	0	0	0	1	3
08:30:00 AM	0	0	0	0	1	3
08:35:00 AM	0	0	0	0	0	3
08:40:00 AM	0	0	0	0	0	3
08:45:00 AM	0	0	0	0	0	3
08:50:00 AM	0	0	1	0	1	4
08:55:00 AM	0	0	0	0	1	4

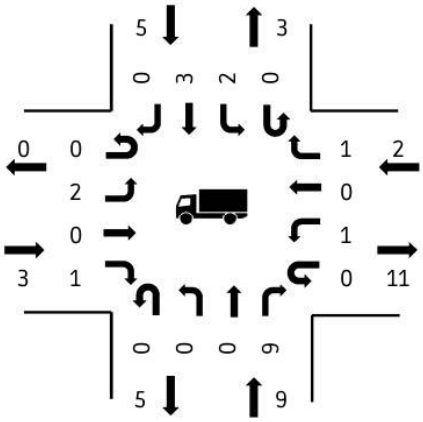
RallyTraffic

Location: Stafford Rd & Rosemont Rd
Date: 2024-05-15
Peak Hour Start: 04:30 PM
Peak 15 Minute Start: 04:55 PM
Peak Hour Factor: 0.94

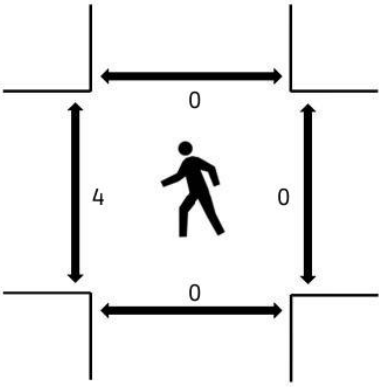
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	3	27	65	0	0	13	51	1	0	0	1	2	6	0	0	22	1	7	0	0		
04:05:00 PM	2	31	59	0	0	12	48	1	0	0	2	0	3	0	0	19	0	9	0	0		
04:10:00 PM	0	18	64	0	0	12	54	0	0	0	1	0	8	0	0	24	1	13	0	0	580	
04:15:00 PM	1	26	65	0	0	10	46	0	0	0	2	0	3	0	0	16	2	11	0	0	563	
04:20:00 PM	0	22	48	0	0	6	16	0	0	0	1	5	2	0	0	19	0	16	0	0	512	
04:25:00 PM	1	23	40	0	0	5	30	0	0	0	3	3	1	0	0	12	1	8	0	0	444	
04:30:00 PM	2	34	59	0	0	10	59	0	0	0	2	8	2	0	0	7	0	11	0	0	456	
04:35:00 PM	0	25	69	0	0	9	43	1	0	0	2	6	1	0	0	12	2	9	0	0	500	
04:40:00 PM	0	29	71	0	0	16	51	0	0	0	1	9	4	0	0	14	0	9	0	0	577	
04:45:00 PM	0	19	79	0	0	20	54	0	0	0	0	15	1	0	0	15	1	12	0	0	599	
04:50:00 PM	0	17	79	0	0	16	48	0	0	0	1	12	2	0	0	27	2	8	0	0	632	
04:55:00 PM	0	25	78	0	0	15	50	0	0	0	1	17	2	0	0	14	1	6	0	0	637	2238
05:00:00 PM	0	24	76	0	0	17	53	0	0	0	0	8	6	0	0	16	1	13	0	0	635	2253
05:05:00 PM	0	29	68	0	0	15	60	1	0	0	0	8	3	0	0	17	2	12	0	0	638	2282
05:10:00 PM	1	28	69	0	0	16	50	0	0	0	0	2	1	0	0	19	1	11	0	0	627	2285
05:15:00 PM	0	27	74	0	0	12	42	0	0	0	0	9	0	0	0	10	2	14	0	0	603	2293
05:20:00 PM	0	20	63	0	0	6	40	0	0	0	0	7	4	0	0	14	0	10	0	0	552	2322
05:25:00 PM	1	16	77	0	0	15	54	0	0	0	1	10	1	0	0	16	2	5	0	0	552	2393
05:30:00 PM	0	19	79	0	0	17	47	0	0	0	0	4	5	0	0	12	1	8	0	0	554	2391
05:35:00 PM	1	23	58	0	0	15	30	0	0	0	0	9	2	0	0	15	0	9	0	0	552	2374
05:40:00 PM	0	18	68	0	0	11	37	0	0	0	1	2	1	0	0	21	1	9	0	0	523	2339
05:45:00 PM	2	12	66	0	0	17	45	1	0	0	0	8	1	0	0	13	0	9	0	0	505	2297
05:50:00 PM	1	22	45	0	0	7	35	0	0	0	0	3	0	0	0	19	0	16	0	0	491	2233
05:55:00 PM	2	18	54	0	0	10	28	1	0	0	1	2	0	0	0	17	0	8	0	0	463	2165

Car Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	3	27	65	0	0	13	50	1	0	0	1	2	6	0	0	20	1	7	0	0		
04:05:00 PM	2	31	59	0	0	12	47	1	0	0	2	0	3	0	0	18	0	9	0	0		
04:10:00 PM	0	18	64	0	0	12	54	0	0	0	1	0	8	0	0	24	1	13	0	0	575	
04:15:00 PM	1	26	65	0	0	10	44	0	0	0	2	0	3	0	0	14	2	11	0	0	557	
04:20:00 PM	0	22	47	0	0	6	16	0	0	0	1	5	2	0	0	18	0	15	0	0	505	
04:25:00 PM	1	23	39	0	0	5	30	0	0	0	3	3	1	0	0	10	1	8	0	0	434	
04:30:00 PM	2	34	58	0	0	10	56	0	0	0	1	8	2	0	0	7	0	11	0	0	445	
04:35:00 PM	0	25	68	0	0	9	43	1	0	0	2	6	1	0	0	12	2	8	0	0	490	
04:40:00 PM	0	29	70	0	0	15	51	0	0	0	1	9	4	0	0	14	0	9	0	0	568	
04:45:00 PM	0	19	78	0	0	20	54	0	0	0	0	15	1	0	0	15	1	12	0	0	594	
04:50:00 PM	0	17	79	0	0	16	48	0	0	0	1	12	2	0	0	27	2	8	0	0	629	
04:55:00 PM	0	25	77	0	0	15	50	0	0	0	0	17	2	0	0	14	1	6	0	0	634	2211
05:00:00 PM	0	24	76	0	0	17	53	0	0	0	0	8	5	0	0	16	1	13	0	0	632	2228
05:05:00 PM	0	29	67	0	0	14	60	1	0	0	0	8	3	0	0	17	2	12	0	0	633	2257
05:10:00 PM	1	28	69	0	0	16	50	0	0	0	0	2	1	0	0	18	1	11	0	0	623	2259
05:15:00 PM	0	27	73	0	0	12	42	0	0	0	0	9	0	0	0	10	2	14	0	0	599	2270
05:20:00 PM	0	20	61	0	0	6	40	0	0	0	0	7	4	0	0	14	0	10	0	0	548	2300
05:25:00 PM	1	16	77	0	0	15	54	0	0	0	1	10	1	0	0	16	2	5	0	0	549	2374
05:30:00 PM	0	19	79	0	0	17	47	0	0	0	0	4	5	0	0	11	1	8	0	0	551	2376
05:35:00 PM	1	23	57	0	0	15	30	0	0	0	0	9	2	0	0	15	0	9	0	0	550	2360
05:40:00 PM	0	18	68	0	0	11	37	0	0	0	1	2	1	0	0	19	1	9	0	0	519	2325
05:45:00 PM	2	12	66	0	0	17	45	1	0	0	0	8	1	0	0	13	0	9	0	0	502	2284
05:50:00 PM	1	22	45	0	0	7	35	0	0	0	0	3	0	0	0	19	0	16	0	0	489	2220
05:55:00 PM	2	18	54	0	0	10	28	1	0	0	1	2	0	0	0	17	0	8	0	0	463	2154

Truck Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:15:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	6	
04:20:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	7	
04:25:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	10	
04:30:00 PM	0	0	1	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	11	
04:35:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	10	
04:40:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
04:45:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
04:55:00 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	27
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	25
05:05:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	25
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	26
05:15:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	23
05:20:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	22
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	19
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	15
05:35:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	14
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	14
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	13
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11

Bike Volumes

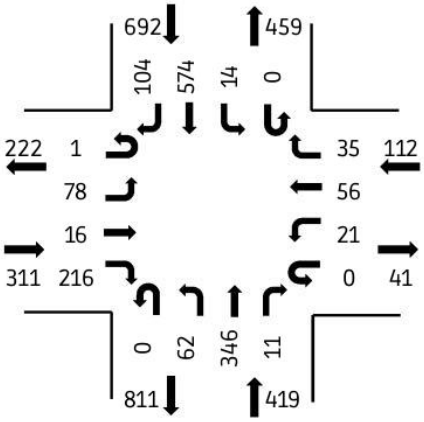
Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Rosemont Rd)					WB (Rosemont Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Volumes

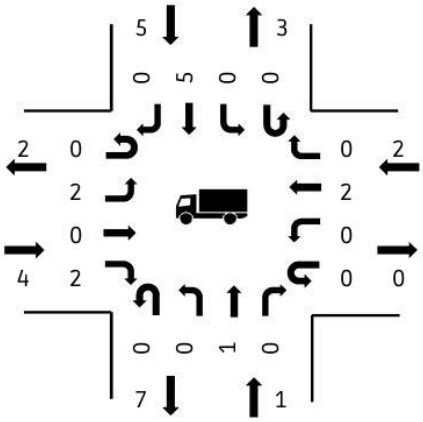
Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	0	1	0	1	
04:35:00 PM	0	0	0	0	1	
04:40:00 PM	0	0	0	0	1	
04:45:00 PM	0	0	2	0	2	
04:50:00 PM	0	0	0	0	2	
04:55:00 PM	0	0	0	0	2	3
05:00:00 PM	0	0	0	0	0	3
05:05:00 PM	0	0	0	0	0	3
05:10:00 PM	0	0	1	0	1	4
05:15:00 PM	0	0	0	0	1	4
05:20:00 PM	0	0	0	0	1	4
05:25:00 PM	0	0	0	0	0	4
05:30:00 PM	0	0	0	0	0	3
05:35:00 PM	0	0	0	0	0	3
05:40:00 PM	0	0	0	0	0	3
05:45:00 PM	0	0	0	0	0	1
05:50:00 PM	0	0	0	0	0	1
05:55:00 PM	0	0	0	0	0	1

Location: Stafford Rd & Overlook Dr
Date: 2024-05-15
Peak Hour Start: 04:30 PM
Peak 15 Minute Start: 05:00 PM
Peak Hour Factor: 0.84

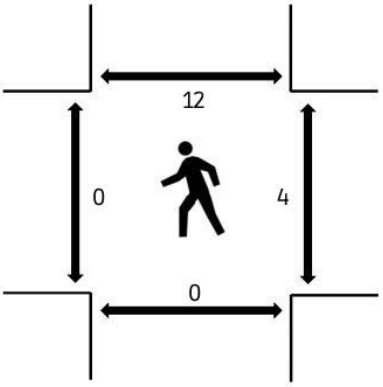
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	2	24	1	0	0	9	54	9	0	0	8	3	13	0	0	2	4	7	0	0		
04:05:00 PM	8	32	0	0	0	2	52	11	0	0	13	9	6	0	0	0	1	3	0	0		
04:10:00 PM	5	25	1	0	0	3	53	7	0	0	12	1	14	0	0	2	0	1	0	0	397	
04:15:00 PM	4	28	0	0	0	3	39	1	0	0	20	3	14	0	0	0	1	4	0	0	378	
04:20:00 PM	11	28	0	0	0	0	31	9	0	0	6	2	9	0	0	0	0	0	0	0	337	
04:25:00 PM	9	21	0	0	0	2	19	6	0	0	7	0	14	0	0	1	3	2	0	0	297	
04:30:00 PM	8	37	1	0	0	2	49	13	0	0	11	1	16	0	0	0	1	0	0	0	319	
04:35:00 PM	3	30	2	0	0	1	30	9	0	0	4	0	15	1	0	2	1	0	0	0	321	
04:40:00 PM	6	29	0	0	0	0	58	8	0	0	5	1	13	0	0	0	2	0	0	0	359	
04:45:00 PM	7	25	1	0	0	1	58	6	0	0	6	5	18	0	0	0	0	1	0	0	348	
04:50:00 PM	6	19	1	0	0	2	45	6	0	0	8	2	16	0	0	0	1	1	0	0	357	
04:55:00 PM	5	28	0	0	0	1	46	5	0	0	9	2	24	0	0	0	1	2	0	0	358	1411
05:00:00 PM	1	33	1	0	0	2	61	10	0	0	4	1	19	0	0	4	9	5	0	0	380	1425
05:05:00 PM	4	35	1	0	0	0	43	11	0	0	4	2	12	0	0	10	23	15	0	0	433	1448
05:10:00 PM	8	30	1	0	0	1	50	9	0	0	10	1	22	0	0	3	7	5	0	0	457	1471
05:15:00 PM	7	31	1	0	0	1	48	3	0	0	6	0	16	0	0	1	6	2	0	0	429	1476
05:20:00 PM	5	27	2	0	0	3	43	12	0	0	6	0	21	0	0	0	4	3	0	0	395	1506
05:25:00 PM	2	22	0	0	0	0	43	12	0	0	5	1	24	0	0	1	1	1	0	0	360	1534
05:30:00 PM	5	21	0	0	0	1	36	5	0	0	9	1	16	0	0	0	0	0	0	0	332	1489
05:35:00 PM	10	37	1	0	0	1	49	13	0	0	5	0	7	0	0	0	1	1	0	0	331	1516
05:40:00 PM	4	26	0	0	0	2	41	8	0	0	6	0	11	0	0	1	0	2	0	0	320	1495
05:45:00 PM	8	22	2	0	0	1	39	6	0	0	9	1	21	0	0	3	0	0	0	0	338	1479
05:50:00 PM	6	30	5	0	0	1	35	2	0	0	7	1	11	0	0	1	0	1	0	0	313	1472
05:55:00 PM	6	20	1	0	0	0	28	4	0	0	14	1	5	0	0	2	0	3	0	0	296	1433

Car Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	2	23	1	0	0	9	52	9	0	0	8	3	13	0	0	2	4	7	0	0		
04:05:00 PM	8	32	0	0	0	2	51	10	0	0	13	9	6	0	0	0	1	3	0	0		
04:10:00 PM	5	25	1	0	0	3	53	7	0	0	12	1	14	0	0	2	0	1	0	0	392	
04:15:00 PM	4	28	0	0	0	3	37	1	0	0	19	3	14	0	0	0	1	4	0	0	373	
04:20:00 PM	11	28	0	0	0	0	31	8	0	0	6	2	9	0	0	0	0	0	0	0	333	
04:25:00 PM	9	21	0	0	0	2	17	6	0	0	7	0	14	0	0	1	3	2	0	0	291	
04:30:00 PM	8	37	1	0	0	2	48	13	0	0	11	1	16	0	0	0	1	0	0	0	315	
04:35:00 PM	3	29	2	0	0	1	30	9	0	0	4	0	15	1	0	2	1	0	0	0	317	
04:40:00 PM	6	29	0	0	0	0	58	8	0	0	4	1	12	0	0	0	2	0	0	0	355	
04:45:00 PM	7	25	1	0	0	1	58	6	0	0	6	5	18	0	0	0	0	1	0	0	345	
04:50:00 PM	6	19	1	0	0	2	45	6	0	0	8	2	15	0	0	0	1	1	0	0	354	
04:55:00 PM	5	28	0	0	0	1	46	5	0	0	9	2	24	0	0	0	1	2	0	0	357	1395
05:00:00 PM	1	33	1	0	0	2	61	10	0	0	4	1	19	0	0	4	7	5	0	0	377	1410
05:05:00 PM	4	35	1	0	0	0	41	11	0	0	4	2	12	0	0	10	23	15	0	0	429	1433
05:10:00 PM	8	30	1	0	0	1	49	9	0	0	9	1	22	0	0	3	7	5	0	0	451	1454
05:15:00 PM	7	31	1	0	0	1	48	3	0	0	6	0	16	0	0	1	6	2	0	0	425	1462
05:20:00 PM	5	27	2	0	0	3	43	12	0	0	6	0	21	0	0	0	4	3	0	0	393	1493
05:25:00 PM	2	22	0	0	0	0	42	12	0	0	5	1	24	0	0	1	1	1	0	0	359	1522
05:30:00 PM	5	20	0	0	0	1	36	5	0	0	9	1	15	0	0	0	0	0	0	0	329	1476
05:35:00 PM	10	37	1	0	0	1	49	13	0	0	5	0	7	0	0	0	1	1	0	0	328	1504
05:40:00 PM	4	26	0	0	0	2	41	8	0	0	6	0	10	0	0	1	0	2	0	0	317	1484
05:45:00 PM	8	22	2	0	0	1	39	6	0	0	9	1	21	0	0	3	0	0	0	0	337	1468
05:50:00 PM	6	30	5	0	0	1	34	1	0	0	6	1	11	0	0	1	0	1	0	0	309	1459
05:55:00 PM	6	20	1	0	0	0	28	4	0	0	14	1	5	0	0	2	0	3	0	0	293	1420

Truck Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:15:00 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	5	
04:20:00 PM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:25:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
04:30:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:35:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	4	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	17
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	16
05:05:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	16
05:10:00 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	6	18
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	15
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13
05:25:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
05:30:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	13
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	11
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
05:50:00 PM	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	5	14
05:55:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15

Bike Volumes

Time	NB (Stafford Rd)					SB (Stafford Rd)					EB (Overlook Dr)					WB (Overlook Dr)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3
05:40:00 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	6	8
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	8
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8

Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	1	0	0	1	
04:35:00 PM	0	0	0	0	1	
04:40:00 PM	0	0	0	0	1	
04:45:00 PM	0	1	0	0	1	
04:50:00 PM	0	0	0	0	1	
04:55:00 PM	0	3	0	3	7	8
05:00:00 PM	0	3	0	0	9	11
05:05:00 PM	0	0	0	0	9	11
05:10:00 PM	0	1	0	1	5	13
05:15:00 PM	0	1	0	0	3	14
05:20:00 PM	0	0	0	0	3	14
05:25:00 PM	0	2	0	0	3	16
05:30:00 PM	0	3	0	2	7	20
05:35:00 PM	0	0	0	2	9	22
05:40:00 PM	0	0	0	0	7	22
05:45:00 PM	0	0	0	0	2	21
05:50:00 PM	0	0	0	0	0	21
05:55:00 PM	0	0	0	0	0	15

Appendix C - Safety

Crash History Data

Left-Turn Lane Warrant Analysis

Preliminary Signal Warrant Analysis

CITY OF LAKE OSWEGO, CLACKAMAS COUNTY

STAFFORD RD at OVERLOOK DR, City of Lake Oswego, Clackamas County, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

1 - 2 of 2 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N S	S H V	W O R 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
00784	N	N	N	N			03/29/2021	16	OVERLOOK DR	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT									29
NONE							MO		STAFFORD RD	UN		TRF SIGNAL	N	DRY	REAR		N/A	SW-NE								000	00
N							UNK			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 23 48.62	-122 41 17.34																UNK				
																02	NONE 9	STOP									
																	N/A	SW-NE								011	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																								UNK				
02799	N	N	N	N	N	N	09/09/2022	16	OVERLOOK DR	INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE 0	TURN-L									02,27
CITY							FR	0	STAFFORD RD	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W -NE								000	00
N							9P			02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	16	M	OR-Y		028,016	038	02,27
N							45 23 48.62	-122 41 17.34																OR<25				
																02	NONE 0	STRGHT									
																	PRVTE	E -W								000	00
																	PSNGR CAR		01	DRVR	INJB	17	F	OR-Y		000	000	00
																								OR<25				
																02	NONE 0	STRGHT									
																	PRVTE	E -W								000	00
																	PSNGR CAR		02	PSNG	INJB	18	F			000	000	00
																02	NONE 0	STRGHT									
																	PRVTE	E -W								000	00
																	PSNGR CAR		03	PSNG	INJB	17	F			000	000	00

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
COUNTY ROAD CRASH LISTING

CLACKAMAS COUNTY

SW STAFFORD RD- 30013, MP 6.3 to 6.32, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

1 - 5 of 5 Crash records shown.

SW Stafford Road & Atherton Drive/Rosemont Road

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R J U G S	I N V	S H L	W O R K	DATE / DAY / TIME / LAT	MILEPNT / DIST FROM / INTERSECT / LONG	COUNTY ROADS / 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 / TYPE / OWNER	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
01546	N	N	N	N			06/08/2021	6.30	SW STAFFORD RD- 30013	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT											02
NONE							TU			CN		YIELD	Y	DRY	ANGL		N/A	E -W									000		00
N							10A			02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 22 29.06	-122 42 8.61																	UNK					
																02	NONE 9	STRGHT											
																	N/A	S -N									000		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																									UNK				
01062	N	N	N	N			04/02/2019	6.31	SW STAFFORD RD- 30013	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							TU			UN	(RSDMD)	OFCR/FLAG	N	DRY	REAR		PRVTE	N -S									000		00
N							2P			03			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	31	F	OR-Y		026	000		29
N							45 23 33.7	-122 41 25.24			(02)														OR<25					
																02	NONE 0	STOP											
																	PRVTE	N -S									011		00
																	PSNGR CAR		01	DRVR	INJC	62	M	OR-Y		000	000		00
																									OR<25				
02162	N	Y	N	N	N	N	06/29/2019	6.32	SW STAFFORD RD- 30013	STRGHT		N	Y	CLR	FIX OBJ	01	NONE 9	STRGHT										053	10
CITY							SA			UN	(RSDMD)	NONE	N	DRY	FIX		N/A	S -N									000		00
Y							9P			01			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 23 36.76	-122 41 23.91			(02)														UNK					
02173	N	N	N	N			07/20/2022	6.32	SW STAFFORD RD- 30013	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							WE			UN		YIELD	Y	DRY	REAR		PRVTE	N -S									000		00
N							4P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	69	F	OR-Y		026	000		29
N							45 23 34.85	-122 41 24.9																	OR<25					
																02	NONE 0	STOP											
																	PRVTE	N -S									011		00
																	PSNGR CAR		01	DRVR	INJC	66	M	OR-Y		000	000		00
																									OR<25				
02042	N	N	N	N	N	N	07/18/2021	6.32	SW STAFFORD RD- 30013	INTER	CROSS	N	Y	CLR	FIX OBJ	01	NONE 0	STRGHT										040,062	33,10
CITY							SU			S		YIELD	Y	DRY	FIX		PRVTE	N -S									000	040,062	00
N							12A			05	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	27	M	OTH-Y		051,081	000		33,10
N							45 23 34.85	-122 41 24.9																	UNK					
																01	NONE 0	STRGHT											
																	PRVTE	N -S									000	040,062	00
																	PSNGR CAR		02	PSNG	INJC	29	F			000	000		00

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
COUNTY ROAD CRASH LISTING

CLACKAMAS COUNTY

S ROSEMONT RD, MP 0 to 0.2, ALL Crashes Severity, ALL Crashes Circumstance, 01/01/2019 to 12/31/2023

1 - 2 of 2 Crash records shown.

SW Stafford Road & Atherton Drive/Rosemont Road

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 S O R K	W DATE / DAY / TIME / LAT	MILEPNT / DIST FROM / INTERSECT / LONG	COUNTY ROADS / 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 / TYPE / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03000	N	N	N	N	N	N	11/06/2020	0.00	S ROSEMONT RD	INTER	CROSS	N	N	FOG	OTH OBJ	01	NONE 9	STRGHT									035,050	10
CITY			FR							CN		YIELD	Y	DRY	FIX		N/A	E -W								007		00
N			10P							02	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 23 34.85					-122 41 24.9																UNK				
01419	N	N	N	N	N	N	05/13/2022	0.00	S ROSEMONT RD	INTER	4-LEG	N	N	RAIN	O-OTHER	01	NONE 9	TURN-R											02
NONE			FR							CN		YIELD	Y	WET	TURN		N/A	S -E								000		00
N			6P							04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 23 34.85					-122 41 24.9																UNK				
																02	NONE 9	TURN-L										
																	N/A	N -E								000		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK				

Left-Turn Lane Warrant Analysis

Project: Hazelia Living TIS
Intersection: SW Stafford Road & Site Access
Date: 6/4/2025
Scenario: Year 2028 AM Buildout Conditions - Northbound

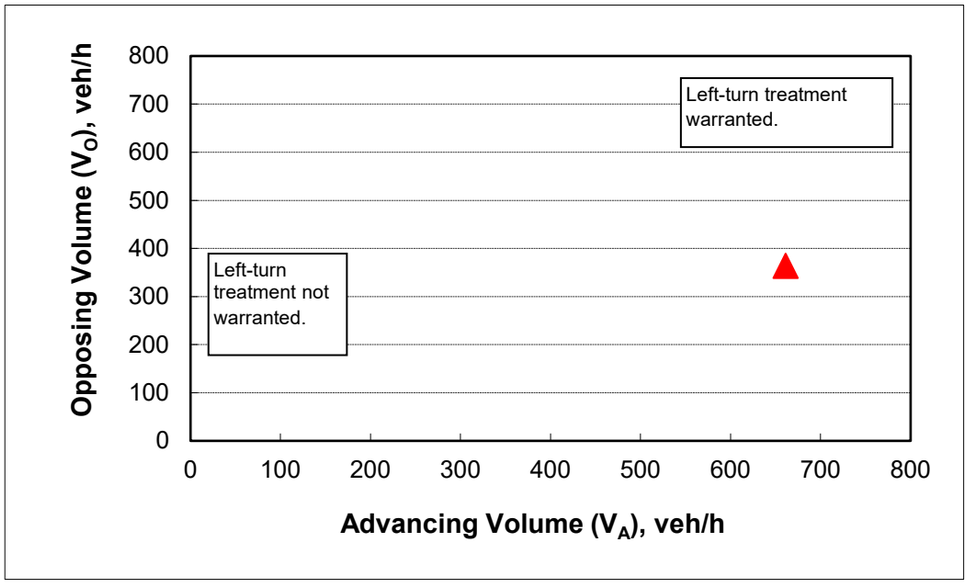
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	1%
Left turns in advancing volume (V_A), veh/h:	4
Advancing volume (V_A), veh/h:	661
Opposing volume (V_O), veh/h:	364

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1568
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Hazelia Living TIS
Intersection: SW Stafford Road & Site Access
Date: 6/4/2025
Scenario: Year 2028 PM Buildout Conditions - Northbound

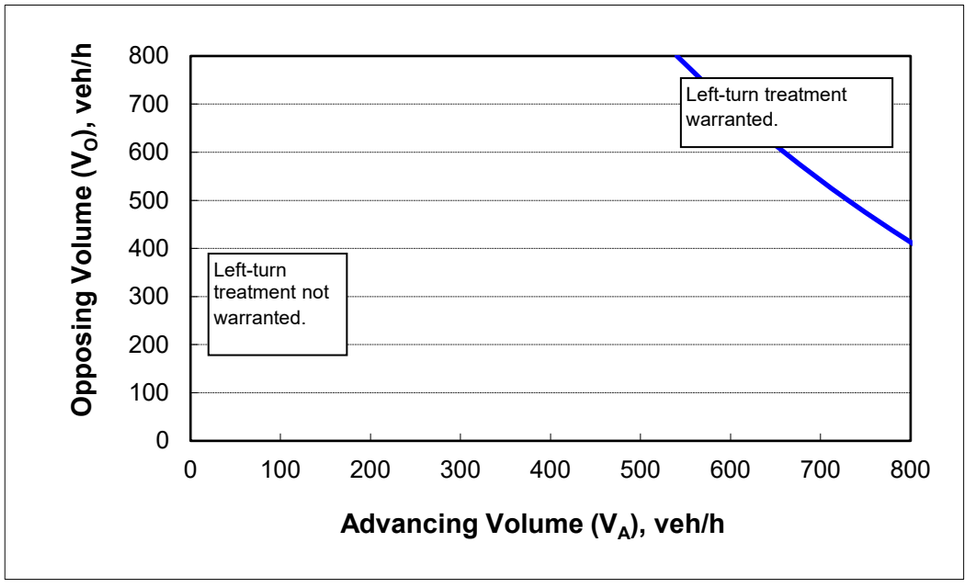
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	2%
Left turns in advancing volume (V_A), veh/h:	10
Advancing volume (V_A), veh/h:	470
Opposing volume (V_O), veh/h:	885

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	497
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Preliminary Traffic Signal Warrant Analysis

Project:	Hazelia Living TIS
Date:	6/4/2025
Scenario:	Year 2028 Buildout Conditions

Major Street:	SW Stafford Road		Minor Street:	Site Access	
Number of Lanes:	1		Number of Lanes:	1	
PM Peak Hour Volumes:	1355		PM Peak Hour Volumes:	16	Total
				6	Rights
				50%	RT Discount

Warrant Used:

X	100 percent of standard warrants used
	70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

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

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

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	13,550	8,850	
Minor Street*	130	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	13,550	13,300	
Minor Street*	130	1,350	**No**
Combination Warrant			
Major Street	13,550	10,640	
Minor Street*	130	2,120	**No**

* Minor street right-turning traffic volumes reduced by 50%.

Appendix D - Operations

Definitions

Synchro Reports

Queuing Reports

LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

HCM 7th Signalized Intersection Summary
1: SW Stafford Road & Overlook Drive

05/22/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	18	14	4	3	9	119	478	13	14	316	235
Future Volume (veh/h)	114	18	14	4	3	9	119	478	13	14	316	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.97		0.96	0.97		0.96	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	141	22	17	5	4	11	147	590	16	17	390	290
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	1	1	1	0	0	0	5	5	5	4	4	4
Cap, veh/h	452	235	182	434	106	291	257	864	23	405	722	599
Arrive On Green	0.24	0.24	0.23	0.24	0.24	0.23	0.15	0.49	0.47	0.05	0.39	0.39
Sat Flow, veh/h	1362	968	748	1346	435	1195	1739	1768	48	1753	1841	1526
Grp Volume(v), veh/h	141	0	39	5	0	15	147	0	606	17	390	290
Grp Sat Flow(s),veh/h/ln	1362	0	1716	1346	0	1630	1739	0	1816	1753	1841	1526
Q Serve(g_s), s	4.9	0.0	1.0	0.2	0.0	0.4	4.4	0.0	14.2	0.3	9.0	7.9
Cycle Q Clear(g_c), s	5.3	0.0	1.0	1.1	0.0	0.4	4.4	0.0	14.2	0.3	9.0	7.9
Prop In Lane	1.00		0.44	1.00		0.73	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	452	0	417	434	0	396	257	0	887	405	722	599
V/C Ratio(X)	0.31	0.00	0.09	0.01	0.00	0.04	0.57	0.00	0.68	0.04	0.54	0.48
Avail Cap(c_a), veh/h	687	0	713	666	0	678	472	0	1510	600	1331	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	16.4	16.7	0.0	16.3	22.0	0.0	10.9	9.4	13.0	12.6
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.0	0.0	0.0	2.0	0.0	0.9	0.0	0.6	0.6
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	1.5	0.0	0.4	0.0	0.0	0.1	1.7	0.0	4.5	0.1	3.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	0.0	16.5	16.7	0.0	16.3	24.0	0.0	11.8	9.4	13.6	13.2
LnGrp LOS	B		B	B		B	C		B	A	B	B
Approach Vol, veh/h		180			20			753			697	
Approach Delay, s/veh		18.0			16.4			14.2			13.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	31.0		17.5	12.2	25.7		17.5				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	45.0		22.0	14.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	2.3	16.2		7.3	6.4	11.0		3.1				
Green Ext Time (p_c), s	0.0	8.9		0.5	0.2	5.9		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.3
HCM 7th LOS	B

Notes

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

MOVEMENT SUMMARY

Site: 101 [2024 Existing - AM (Site Folder: General)]

2024 Existing - AM
Site Category: Atherton Drive/Rosemont Road @ SW Stafford Road
Roundabout

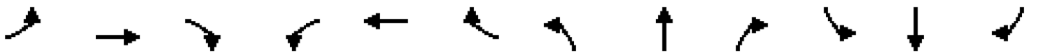
Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: SW Stafford Road														
3u	U	1	5.0	1	5.0	0.592	13.1	LOS B	5.3	137.4	0.34	0.40	0.34	38.8
3	L2	10	5.0	11	5.0	0.592	10.5	LOS B	5.3	137.4	0.34	0.40	0.34	31.5
8	T1	495	5.0	550	5.0	0.592	3.8	LOS A	5.3	137.4	0.34	0.40	0.34	35.7
18	R2	223	5.0	248	5.0	0.592	4.2	LOS A	5.3	137.4	0.34	0.40	0.34	36.1
Approach		729	5.0	810	5.0	0.592	4.0	LOS A	5.3	137.4	0.34	0.40	0.34	35.8
East: Rosemont Road														
1u	U	1	2.0	1	2.0	0.636	18.7	LOS B	6.5	164.4	0.84	0.97	1.06	34.0
1	L2	371	2.0	412	2.0	0.636	16.2	LOS B	6.5	164.4	0.84	0.97	1.06	33.2
6	T1	10	2.0	11	2.0	0.636	10.1	LOS B	6.5	164.4	0.84	0.97	1.06	26.2
16	R2	175	2.0	194	2.0	0.636	9.8	LOS A	6.5	164.4	0.84	0.97	1.06	30.6
Approach		557	2.0	619	2.0	0.636	14.1	LOS B	6.5	164.4	0.84	0.97	1.06	32.2
North: SW Stafford Road														
7u	U	1	3.0	1	3.0	0.357	13.2	LOS B	2.5	63.0	0.67	0.54	0.67	34.2
7	L2	32	3.0	36	3.0	0.357	10.8	LOS B	2.5	63.0	0.67	0.54	0.67	34.5
4	T1	286	3.0	318	3.0	0.357	4.3	LOS A	2.5	63.0	0.67	0.54	0.67	34.3
14	R2	10	3.0	11	3.0	0.357	4.9	LOS A	2.5	63.0	0.67	0.54	0.67	27.5
Approach		329	3.0	366	3.0	0.357	5.0	LOS A	2.5	63.0	0.67	0.54	0.67	34.1
West: Atherton Drive														
5u	U	1	4.0	1	4.0	0.069	10.4	LOS B	0.4	10.8	0.72	0.64	0.72	25.9
5	L2	18	4.0	20	4.0	0.069	8.9	LOS A	0.4	10.8	0.72	0.64	0.72	27.9
2	T1	4	4.0	4	4.0	0.069	3.8	LOS A	0.4	10.8	0.72	0.64	0.72	28.6
12	R2	26	4.0	29	4.0	0.069	4.5	LOS A	0.4	10.8	0.72	0.64	0.72	27.9
Approach		49	4.0	54	4.0	0.069	6.2	LOS A	0.4	10.8	0.72	0.64	0.72	27.9
All Vehicles		1664	3.6	1849	3.6	0.636	7.6	LOS A	6.5	164.4	0.58	0.63	0.66	33.9

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 7th Signalized Intersection Summary
1: SW Stafford Road & Overlook Drive

05/22/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	16	216	21	56	35	62	346	11	14	574	104
Future Volume (veh/h)	78	16	216	21	56	35	62	346	11	14	574	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		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	1885	1885	1885	1870	1870	1870	1900	1900	1900	1885	1885	1885
Adj Flow Rate, veh/h	93	19	257	25	67	42	74	412	13	17	683	124
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, %	1	1	1	2	2	2	0	0	0	1	1	1
Cap, veh/h	366	27	366	206	271	170	187	954	30	560	876	739
Arrive On Green	0.26	0.26	0.24	0.26	0.26	0.24	0.10	0.52	0.51	0.05	0.46	0.46
Sat Flow, veh/h	1271	106	1436	1091	1064	667	1810	1832	58	1795	1885	1591
Grp Volume(v), veh/h	93	0	276	25	0	109	74	0	425	17	683	124
Grp Sat Flow(s),veh/h/ln	1271	0	1542	1091	0	1730	1810	0	1889	1795	1885	1591
Q Serve(g_s), s	4.3	0.0	11.1	1.4	0.0	3.4	2.6	0.0	9.4	0.3	20.6	3.1
Cycle Q Clear(g_c), s	7.7	0.0	11.1	12.5	0.0	3.4	2.6	0.0	9.4	0.3	20.6	3.1
Prop In Lane	1.00		0.93	1.00		0.39	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	366	0	393	206	0	441	187	0	984	560	876	739
V/C Ratio(X)	0.25	0.00	0.70	0.12	0.00	0.25	0.40	0.00	0.43	0.03	0.78	0.17
Avail Cap(c_a), veh/h	473	0	523	298	0	587	400	0	1281	714	1112	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	23.4	28.6	0.0	20.2	28.4	0.0	10.1	8.4	15.2	10.5
Incr Delay (d2), s/veh	0.4	0.0	2.7	0.3	0.0	0.3	1.4	0.0	0.3	0.0	2.8	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	1.3	0.0	4.2	0.4	0.0	1.4	1.1	0.0	3.3	0.1	8.2	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	0.0	26.1	28.9	0.0	20.5	29.8	0.0	10.4	8.4	18.1	10.7
LnGrp LOS	C		C	C		C	C		B	A	B	B
Approach Vol, veh/h		369			134			499			824	
Approach Delay, s/veh		25.4			22.1			13.2			16.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	39.3		21.3	11.0	35.5		21.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	45.0		22.0	14.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	2.3	11.4		13.1	4.6	22.6		14.5				
Green Ext Time (p_c), s	0.0	5.9		1.3	0.1	7.9		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh	17.9	
HCM 7th LOS	B	

Notes

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

MOVEMENT SUMMARY

Site: 101 [2024 Existing - PM (Site Folder: General)]

2024 Existing - PM
Site Category: Atherton Drive/Rosemont Road @ SW Stafford Road
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: SW Stafford Road														
3u	U	1	1.0	1	1.0	1.024	41.7	LOS F	43.5	1096.0	1.00	1.50	2.37	26.4
3	L2	4	1.0	4	1.0	1.024	39.1	LOS F	43.5	1096.0	1.00	1.50	2.37	22.7
8	T1	293	1.0	312	1.0	1.024	32.5	LOS F	43.5	1096.0	1.00	1.50	2.37	24.8
18	R2	862	1.0	917	1.0	1.024	32.8	LOS F	43.5	1096.0	1.00	1.50	2.37	25.1
Approach		1160	1.0	1234	1.0	1.024	32.7	LOS C	43.5	1096.0	1.00	1.50	2.37	25.0
East: Rosemont Road														
1u	U	1	1.0	1	1.0	0.295	13.9	LOS B	2.0	49.5	0.56	0.66	0.56	36.4
1	L2	181	1.0	193	1.0	0.295	11.3	LOS B	2.0	49.5	0.56	0.66	0.56	35.4
6	T1	14	1.0	15	1.0	0.295	5.2	LOS A	2.0	49.5	0.56	0.66	0.56	27.5
16	R2	120	1.0	128	1.0	0.295	5.0	LOS A	2.0	49.5	0.56	0.66	0.56	32.5
Approach		316	1.0	336	1.0	0.295	8.7	LOS A	2.0	49.5	0.56	0.66	0.56	33.8
North: SW Stafford Road														
7u	U	1	1.0	1	1.0	0.648	12.5	LOS B	5.9	148.1	0.63	0.49	0.63	34.2
7	L2	167	1.0	178	1.0	0.648	10.2	LOS B	5.9	148.1	0.63	0.49	0.63	34.5
4	T1	604	1.0	643	1.0	0.648	3.7	LOS A	5.9	148.1	0.63	0.49	0.63	34.2
14	R2	2	1.0	2	1.0	0.648	4.3	LOS A	5.9	148.1	0.63	0.49	0.63	27.5
Approach		774	1.0	823	1.0	0.648	5.1	LOS A	5.9	148.1	0.63	0.49	0.63	34.3
West: Atherton Drive														
5u	U	1	2.0	1	2.0	0.258	13.7	LOS B	1.9	47.9	0.91	0.84	0.91	25.6
5	L2	8	2.0	9	2.0	0.258	12.2	LOS B	1.9	47.9	0.91	0.84	0.91	27.5
2	T1	111	2.0	118	2.0	0.258	7.1	LOS A	1.9	47.9	0.91	0.84	0.91	28.2
12	R2	27	2.0	29	2.0	0.258	7.8	LOS A	1.9	47.9	0.91	0.84	0.91	27.5
Approach		147	2.0	156	2.0	0.258	7.5	LOS A	1.9	47.9	0.91	0.84	0.91	28.0
All Vehicles		2397	1.1	2550	1.1	1.024	19.1	LOS B	43.5	1096.0	0.82	1.02	1.48	28.7

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 7th Signalized Intersection Summary
1: SW Stafford Road & Overlook Drive

05/22/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	19	17	4	3	9	129	515	14	15	339	244
Future Volume (veh/h)	119	19	17	4	3	9	129	515	14	15	339	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.97		0.96	0.97		0.96	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	147	23	21	5	4	11	159	636	17	19	419	301
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	1	1	1	0	0	0	5	5	5	4	4	4
Cap, veh/h	439	211	193	416	103	284	254	883	24	386	750	622
Arrive On Green	0.24	0.24	0.22	0.24	0.24	0.22	0.15	0.50	0.48	0.05	0.41	0.41
Sat Flow, veh/h	1361	889	812	1339	434	1194	1739	1769	47	1753	1841	1527
Grp Volume(v), veh/h	147	0	44	5	0	15	159	0	653	19	419	301
Grp Sat Flow(s),veh/h/ln	1361	0	1701	1339	0	1628	1739	0	1816	1753	1841	1527
Q Serve(g_s), s	5.3	0.0	1.2	0.2	0.0	0.4	4.9	0.0	16.1	0.3	10.0	8.3
Cycle Q Clear(g_c), s	5.8	0.0	1.2	1.3	0.0	0.4	4.9	0.0	16.1	0.3	10.0	8.3
Prop In Lane	1.00		0.48	1.00		0.73	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	439	0	404	416	0	387	254	0	907	386	750	622
V/C Ratio(X)	0.33	0.00	0.11	0.01	0.00	0.04	0.63	0.00	0.72	0.05	0.56	0.48
Avail Cap(c_a), veh/h	661	0	682	635	0	653	455	0	1456	567	1283	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	17.3	17.6	0.0	17.1	23.0	0.0	11.2	9.5	13.0	12.5
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.0	0.0	0.0	2.5	0.0	1.1	0.1	0.7	0.6
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	1.6	0.0	0.4	0.1	0.0	0.2	2.0	0.0	5.2	0.1	3.6	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.5	0.0	17.4	17.7	0.0	17.2	25.6	0.0	12.3	9.5	13.7	13.1
LnGrp LOS	B		B	B		B	C		B	A	B	B
Approach Vol, veh/h		191			20			812			739	
Approach Delay, s/veh		19.0			17.3			14.9			13.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	32.6		17.6	12.4	27.4		17.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	45.0		22.0	14.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	2.3	18.1		7.8	6.9	12.0		3.3				
Green Ext Time (p_c), s	0.0	9.5		0.5	0.2	6.4		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B

Notes

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

MOVEMENT SUMMARY

Site: 101 [2028 Background - AM (Site Folder: General)]

2028 Background - AM
Site Category: Atherton Drive/Rosemont Road @ SW Stafford Road
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: SW Stafford Road														
3u	U	1	5.0	1	5.0	0.631	13.2	LOS B	6.1	158.3	0.39	0.42	0.39	38.6
3	L2	10	5.0	11	5.0	0.631	10.6	LOS B	6.1	158.3	0.39	0.42	0.39	31.4
8	T1	529	5.0	588	5.0	0.631	3.9	LOS A	6.1	158.3	0.39	0.42	0.39	35.5
18	R2	232	5.0	258	5.0	0.631	4.3	LOS A	6.1	158.3	0.39	0.42	0.39	36.0
Approach		772	5.0	858	5.0	0.631	4.1	LOS A	6.1	158.3	0.39	0.42	0.39	35.6
East: Rosemont Road														
1u	U	1	2.0	1	2.0	0.701	20.7	LOS C	8.3	210.5	0.91	1.05	1.25	33.1
1	L2	386	2.0	429	2.0	0.701	18.2	LOS B	8.3	210.5	0.91	1.05	1.25	32.3
6	T1	10	2.0	11	2.0	0.701	12.0	LOS B	8.3	210.5	0.91	1.05	1.25	25.7
16	R2	191	2.0	212	2.0	0.701	11.8	LOS B	8.3	210.5	0.91	1.05	1.25	29.9
Approach		588	2.0	653	2.0	0.701	16.0	LOS B	8.3	210.5	0.91	1.05	1.25	31.3
North: SW Stafford Road														
7u	U	1	3.0	1	3.0	0.394	13.3	LOS B	2.8	72.1	0.70	0.56	0.70	34.1
7	L2	37	3.0	41	3.0	0.394	11.0	LOS B	2.8	72.1	0.70	0.56	0.70	34.4
4	T1	305	3.0	339	3.0	0.394	4.5	LOS A	2.8	72.1	0.70	0.56	0.70	34.2
14	R2	10	3.0	11	3.0	0.394	5.1	LOS A	2.8	72.1	0.70	0.56	0.70	27.4
Approach		353	3.0	392	3.0	0.394	5.2	LOS A	2.8	72.1	0.70	0.56	0.70	34.0
West: Atherton Drive														
5u	U	1	4.0	1	4.0	0.076	10.9	LOS B	0.5	12.2	0.75	0.67	0.75	25.8
5	L2	19	4.0	21	4.0	0.076	9.4	LOS A	0.5	12.2	0.75	0.67	0.75	27.8
2	T1	4	4.0	4	4.0	0.076	4.2	LOS A	0.5	12.2	0.75	0.67	0.75	28.5
12	R2	27	4.0	30	4.0	0.076	5.0	LOS A	0.5	12.2	0.75	0.67	0.75	27.8
Approach		51	4.0	57	4.0	0.076	6.7	LOS A	0.5	12.2	0.75	0.67	0.75	27.8
All Vehicles		1764	3.6	1960	3.6	0.701	8.4	LOS A	8.3	210.5	0.64	0.66	0.75	33.5

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 7th Signalized Intersection Summary
1: SW Stafford Road & Overlook Drive

05/22/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	17	230	22	58	36	68	380	11	15	619	108
Future Volume (veh/h)	81	17	230	22	58	36	68	380	11	15	619	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		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	1885	1885	1885	1870	1870	1870	1900	1900	1900	1885	1885	1885
Adj Flow Rate, veh/h	96	20	274	26	69	43	81	452	13	18	737	129
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, %	1	1	1	2	2	2	0	0	0	1	1	1
Cap, veh/h	361	27	372	188	276	172	185	973	28	535	895	755
Arrive On Green	0.26	0.26	0.24	0.26	0.26	0.24	0.10	0.53	0.52	0.05	0.47	0.47
Sat Flow, veh/h	1268	105	1438	1074	1066	665	1810	1837	53	1795	1885	1591
Grp Volume(v), veh/h	96	0	294	26	0	112	81	0	465	18	737	129
Grp Sat Flow(s),veh/h/ln	1268	0	1543	1074	0	1731	1810	0	1890	1795	1885	1591
Q Serve(g_s), s	4.7	0.0	12.8	1.7	0.0	3.8	3.1	0.0	11.2	0.4	24.6	3.4
Cycle Q Clear(g_c), s	8.5	0.0	12.8	14.5	0.0	3.8	3.1	0.0	11.2	0.4	24.6	3.4
Prop In Lane	1.00		0.93	1.00		0.38	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	361	0	399	188	0	448	185	0	1001	535	895	755
V/C Ratio(X)	0.27	0.00	0.74	0.14	0.00	0.25	0.44	0.00	0.46	0.03	0.82	0.17
Avail Cap(c_a), veh/h	433	0	486	249	0	546	372	0	1192	671	1033	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	25.2	31.4	0.0	21.6	30.8	0.0	10.7	8.8	16.5	11.0
Incr Delay (d2), s/veh	0.4	0.0	4.6	0.3	0.0	0.3	1.6	0.0	0.3	0.0	4.9	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	0.0	5.1	0.4	0.0	1.5	1.4	0.0	4.1	0.1	10.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.2	0.0	29.8	31.8	0.0	21.9	32.4	0.0	11.1	8.8	21.4	11.1
LnGrp LOS	C		C	C		C	C		B	A	C	B
Approach Vol, veh/h		390			138			546			884	
Approach Delay, s/veh		28.7			23.7			14.2			19.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	42.7		22.9	11.5	38.6		22.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	45.0		22.0	14.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	2.4	13.2		14.8	5.1	26.6		16.5				
Green Ext Time (p_c), s	0.0	6.5		1.2	0.1	7.0		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Notes

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

MOVEMENT SUMMARY

Site: 101 [2028 Background - PM (Site Folder: General)]

2028 Background - PM
Site Category: Atherton Drive/Rosemont Road @ SW Stafford Road
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: SW Stafford Road														
3u	U	1	1.0	1	1.0	1.100	69.6	LOS F	65.3	1645.5	1.00	2.13	3.64	19.8
3	L2	4	1.0	4	1.0	1.100	67.0	LOS F	65.3	1645.5	1.00	2.13	3.64	17.7
8	T1	321	1.0	341	1.0	1.100	60.3	LOS F	65.3	1645.5	1.00	2.13	3.64	18.9
18	R2	896	1.0	953	1.0	1.100	60.7	LOS F	65.3	1645.5	1.00	2.13	3.64	19.1
Approach		1222	1.0	1300	1.0	1.100	60.6	LOS E	65.3	1645.5	1.00	2.13	3.64	19.0
East: Rosemont Road														
1u	U	1	1.0	1	1.0	0.320	14.0	LOS B	2.2	54.6	0.58	0.67	0.58	36.4
1	L2	188	1.0	200	1.0	0.320	11.4	LOS B	2.2	54.6	0.58	0.67	0.58	35.4
6	T1	17	1.0	18	1.0	0.320	5.3	LOS A	2.2	54.6	0.58	0.67	0.58	27.5
16	R2	134	1.0	143	1.0	0.320	5.1	LOS A	2.2	54.6	0.58	0.67	0.58	32.5
Approach		340	1.0	362	1.0	0.320	8.6	LOS A	2.2	54.6	0.58	0.67	0.58	33.7
North: SW Stafford Road														
7u	U	1	1.0	1	1.0	0.703	13.1	LOS B	7.4	187.7	0.70	0.57	0.72	33.9
7	L2	184	1.0	196	1.0	0.703	10.8	LOS B	7.4	187.7	0.70	0.57	0.72	34.2
4	T1	642	1.0	683	1.0	0.703	4.3	LOS A	7.4	187.7	0.70	0.57	0.72	34.0
14	R2	5	1.0	5	1.0	0.703	4.9	LOS A	7.4	187.7	0.70	0.57	0.72	27.3
Approach		832	1.0	885	1.0	0.703	5.8	LOS A	7.4	187.7	0.70	0.57	0.72	34.0
West: Atherton Drive														
5u	U	1	2.0	1	2.0	0.311	15.0	LOS B	2.4	60.2	0.96	0.91	0.96	25.2
5	L2	10	2.0	11	2.0	0.311	13.5	LOS B	2.4	60.2	0.96	0.91	0.96	27.1
2	T1	116	2.0	123	2.0	0.311	8.4	LOS A	2.4	60.2	0.96	0.91	0.96	27.7
12	R2	30	2.0	32	2.0	0.311	9.1	LOS A	2.4	60.2	0.96	0.91	0.96	27.1
Approach		157	2.0	167	2.0	0.311	8.9	LOS A	2.4	60.2	0.96	0.91	0.96	27.5
All Vehicles		2551	1.1	2714	1.1	1.100	32.6	LOS C	65.3	1645.5	0.84	1.35	2.12	24.5

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 7th Signalized Intersection Summary
1: SW Stafford Road & Overlook Drive

05/22/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	19	17	4	3	9	129	519	14	15	344	244
Future Volume (veh/h)	119	19	17	4	3	9	129	519	14	15	344	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.97		0.96	0.97		0.96	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1826	1826	1826	1841	1841	1841
Adj Flow Rate, veh/h	147	23	21	5	4	11	159	641	17	19	425	301
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	1	1	1	0	0	0	5	5	5	4	4	4
Cap, veh/h	437	210	192	414	103	283	253	887	24	385	755	626
Arrive On Green	0.24	0.24	0.22	0.24	0.24	0.22	0.15	0.50	0.48	0.05	0.41	0.41
Sat Flow, veh/h	1361	889	812	1339	434	1194	1739	1770	47	1753	1841	1528
Grp Volume(v), veh/h	147	0	44	5	0	15	159	0	658	19	425	301
Grp Sat Flow(s),veh/h/ln	1361	0	1700	1339	0	1628	1739	0	1816	1753	1841	1528
Q Serve(g_s), s	5.4	0.0	1.2	0.2	0.0	0.4	5.0	0.0	16.3	0.3	10.2	8.3
Cycle Q Clear(g_c), s	5.8	0.0	1.2	1.4	0.0	0.4	5.0	0.0	16.3	0.3	10.2	8.3
Prop In Lane	1.00		0.48	1.00		0.73	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	437	0	403	414	0	385	253	0	911	385	755	626
V/C Ratio(X)	0.34	0.00	0.11	0.01	0.00	0.04	0.63	0.00	0.72	0.05	0.56	0.48
Avail Cap(c_a), veh/h	658	0	678	632	0	649	452	0	1449	564	1277	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	17.4	17.8	0.0	17.2	23.2	0.0	11.3	9.5	13.1	12.5
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.0	0.0	0.0	2.6	0.0	1.1	0.1	0.7	0.6
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	1.7	0.0	0.5	0.1	0.0	0.2	2.0	0.0	5.3	0.1	3.6	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.6	0.0	17.6	17.8	0.0	17.3	25.8	0.0	12.4	9.5	13.7	13.1
LnGrp LOS	B		B	B		B	C		B	A	B	B
Approach Vol, veh/h		191			20			817			745	
Approach Delay, s/veh		19.2			17.4			15.0			13.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	32.9		17.7	12.4	27.6		17.7				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	45.0		22.0	14.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	2.3	18.3		7.8	7.0	12.2		3.4				
Green Ext Time (p_c), s	0.0	9.6		0.5	0.2	6.5		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.8
HCM 7th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	9	4	657	359	5
Future Vol, veh/h	14	9	4	657	359	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	5	5	3	3
Mvmt Flow	16	10	4	730	399	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	402	404	0	-	0
Stage 1	402	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	224	653	1138	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	223	653	1138	-	-	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	476	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	18.12	0.05	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	11	-	300	-	-
HCM Lane V/C Ratio	0.004	-	0.085	-	-
HCM Control Delay (s/veh)	8.2	0	18.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

MOVEMENT SUMMARY

Site: 101 [2028 Buildout- AM (Site Folder: General)]

2028 Buildout - AM
Site Category: Atherton Drive/Rosemont Road @ SW Stafford Road
Roundabout

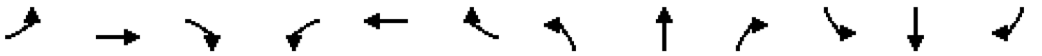
Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: SW Stafford Road														
3u	U	1	5.0	1	5.0	0.634	13.2	LOS B	6.2	160.2	0.39	0.42	0.39	38.6
3	L2	10	5.0	11	5.0	0.634	10.6	LOS B	6.2	160.2	0.39	0.42	0.39	31.4
8	T1	532	5.0	591	5.0	0.634	3.9	LOS A	6.2	160.2	0.39	0.42	0.39	35.5
18	R2	232	5.0	258	5.0	0.634	4.3	LOS A	6.2	160.2	0.39	0.42	0.39	35.9
Approach		775	5.0	861	5.0	0.634	4.1	LOS A	6.2	160.2	0.39	0.42	0.39	35.6
East: Rosemont Road														
1u	U	1	2.0	1	2.0	0.706	20.9	LOS C	8.4	213.8	0.91	1.06	1.27	33.0
1	L2	386	2.0	429	2.0	0.706	18.3	LOS B	8.4	213.8	0.91	1.06	1.27	32.2
6	T1	10	2.0	11	2.0	0.706	12.2	LOS B	8.4	213.8	0.91	1.06	1.27	25.6
16	R2	192	2.0	213	2.0	0.706	12.0	LOS B	8.4	213.8	0.91	1.06	1.27	29.8
Approach		589	2.0	654	2.0	0.706	16.2	LOS B	8.4	213.8	0.91	1.06	1.27	31.2
North: SW Stafford Road														
7u	U	1	3.0	1	3.0	0.404	13.3	LOS B	2.9	74.6	0.71	0.56	0.71	34.1
7	L2	38	3.0	42	3.0	0.404	11.0	LOS B	2.9	74.6	0.71	0.56	0.71	34.3
4	T1	313	3.0	348	3.0	0.404	4.5	LOS A	2.9	74.6	0.71	0.56	0.71	34.2
14	R2	10	3.0	11	3.0	0.404	5.1	LOS A	2.9	74.6	0.71	0.56	0.71	27.4
Approach		362	3.0	402	3.0	0.404	5.2	LOS A	2.9	74.6	0.71	0.56	0.71	34.0
West: Atherton Drive														
5u	U	1	4.0	1	4.0	0.077	11.0	LOS B	0.5	12.4	0.75	0.67	0.75	25.8
5	L2	19	4.0	21	4.0	0.077	9.5	LOS A	0.5	12.4	0.75	0.67	0.75	27.7
2	T1	4	4.0	4	4.0	0.077	4.3	LOS A	0.5	12.4	0.75	0.67	0.75	28.4
12	R2	27	4.0	30	4.0	0.077	5.1	LOS A	0.5	12.4	0.75	0.67	0.75	27.7
Approach		51	4.0	57	4.0	0.077	6.8	LOS A	0.5	12.4	0.75	0.67	0.75	27.7
All Vehicles		1777	3.6	1974	3.6	0.706	8.4	LOS A	8.4	213.8	0.64	0.67	0.76	33.4

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 7th Signalized Intersection Summary
1: SW Stafford Road & Overlook Drive

05/22/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	17	230	22	58	36	68	390	11	15	634	108
Future Volume (veh/h)	81	17	230	22	58	36	68	390	11	15	634	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		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	1885	1885	1885	1870	1870	1870	1900	1900	1900	1885	1885	1885
Adj Flow Rate, veh/h	96	20	274	26	69	43	81	464	13	18	755	129
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, %	1	1	1	2	2	2	0	0	0	1	1	1
Cap, veh/h	358	27	370	185	275	171	183	981	27	529	903	762
Arrive On Green	0.26	0.26	0.24	0.26	0.26	0.24	0.10	0.53	0.52	0.05	0.48	0.48
Sat Flow, veh/h	1268	105	1438	1074	1066	665	1810	1839	52	1795	1885	1591
Grp Volume(v), veh/h	96	0	294	26	0	112	81	0	477	18	755	129
Grp Sat Flow(s),veh/h/ln	1268	0	1543	1074	0	1731	1810	0	1890	1795	1885	1591
Q Serve(g_s), s	4.8	0.0	13.0	1.7	0.0	3.8	3.1	0.0	11.7	0.4	25.7	3.4
Cycle Q Clear(g_c), s	8.6	0.0	13.0	14.7	0.0	3.8	3.1	0.0	11.7	0.4	25.7	3.4
Prop In Lane	1.00		0.93	1.00		0.38	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	358	0	397	185	0	446	183	0	1008	529	903	762
V/C Ratio(X)	0.27	0.00	0.74	0.14	0.00	0.25	0.44	0.00	0.47	0.03	0.84	0.17
Avail Cap(c_a), veh/h	426	0	480	242	0	538	367	0	1175	663	1019	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	25.6	32.0	0.0	22.0	31.3	0.0	10.8	8.8	16.7	10.9
Incr Delay (d2), s/veh	0.4	0.0	4.9	0.3	0.0	0.3	1.7	0.0	0.3	0.0	5.6	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	1.5	0.0	5.2	0.4	0.0	1.6	1.4	0.0	4.2	0.1	11.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.6	0.0	30.5	32.3	0.0	22.3	33.0	0.0	11.1	8.8	22.3	11.0
LnGrp LOS	C		C	C		C	C		B	A	C	B
Approach Vol, veh/h		390			138			558			902	
Approach Delay, s/veh		29.3			24.2			14.3			20.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	43.5		23.1	11.5	39.5		23.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	45.0		22.0	14.0	39.0		22.0				
Max Q Clear Time (g_c+I1), s	2.4	13.7		15.0	5.1	27.7		16.7				
Green Ext Time (p_c), s	0.0	6.7		1.2	0.1	6.7		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	20.7	
HCM 7th LOS	C	

Notes

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	6	10	460	870	15
Future Vol, veh/h	10	6	10	460	870	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	11	6	11	489	926	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1444	934	941	0	-	0
Stage 1	934	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.11	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	147	325	732	-	-	-
Stage 1	386	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	144	325	732	-	-	-
Mov Cap-2 Maneuver	144	-	-	-	-	-
Stage 1	378	-	-	-	-	-
Stage 2	607	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	26.8	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	38	-	182	-	-
HCM Lane V/C Ratio	0.015	-	0.094	-	-
HCM Control Delay (s/veh)	10	0	26.8	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

MOVEMENT SUMMARY

Site: 101 [2028 Buildout - PM (Site Folder: General)]

2028 Buildout - PM
Site Category: Atherton Drive/Rosemont Road @ SW Stafford Road
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: SW Stafford Road														
3u	U	1	1.0	1	1.0	1.110	73.3	LOS F	68.3	1721.0	1.00	2.21	3.80	19.2
3	L2	4	1.0	4	1.0	1.110	70.8	LOS F	68.3	1721.0	1.00	2.21	3.80	17.2
8	T1	330	1.0	351	1.0	1.110	64.1	LOS F	68.3	1721.0	1.00	2.21	3.80	18.3
18	R2	896	1.0	953	1.0	1.110	64.4	LOS F	68.3	1721.0	1.00	2.21	3.80	18.5
Approach		1231	1.0	1310	1.0	1.110	64.4	LOS E	68.3	1721.0	1.00	2.21	3.80	18.4
East: Rosemont Road														
1u	U	1	1.0	1	1.0	0.323	14.0	LOS B	2.2	55.2	0.59	0.67	0.59	36.4
1	L2	188	1.0	200	1.0	0.323	11.4	LOS B	2.2	55.2	0.59	0.67	0.59	35.4
6	T1	17	1.0	18	1.0	0.323	5.3	LOS A	2.2	55.2	0.59	0.67	0.59	27.5
16	R2	135	1.0	144	1.0	0.323	5.1	LOS A	2.2	55.2	0.59	0.67	0.59	32.5
Approach		341	1.0	363	1.0	0.323	8.6	LOS A	2.2	55.2	0.59	0.67	0.59	33.7
North: SW Stafford Road														
7u	U	1	1.0	1	1.0	0.708	13.2	LOS B	7.6	192.2	0.70	0.58	0.73	33.9
7	L2	185	1.0	197	1.0	0.708	10.9	LOS B	7.6	192.2	0.70	0.58	0.73	34.2
4	T1	647	1.0	688	1.0	0.708	4.4	LOS A	7.6	192.2	0.70	0.58	0.73	34.0
14	R2	5	1.0	5	1.0	0.708	5.0	LOS A	7.6	192.2	0.70	0.58	0.73	27.3
Approach		838	1.0	891	1.0	0.708	5.8	LOS A	7.6	192.2	0.70	0.58	0.73	34.0
West: Atherton Drive														
5u	U	1	2.0	1	2.0	0.315	15.2	LOS B	2.4	61.2	0.96	0.92	0.96	25.1
5	L2	10	2.0	11	2.0	0.315	13.7	LOS B	2.4	61.2	0.96	0.92	0.96	27.0
2	T1	116	2.0	123	2.0	0.315	8.5	LOS A	2.4	61.2	0.96	0.92	0.96	27.7
12	R2	30	2.0	32	2.0	0.315	9.3	LOS A	2.4	61.2	0.96	0.92	0.96	27.0
Approach		157	2.0	167	2.0	0.315	9.0	LOS A	2.4	61.2	0.96	0.92	0.96	27.5
All Vehicles		2567	1.1	2731	1.1	1.110	34.5	LOS C	68.3	1721.0	0.85	1.39	2.20	24.0

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection: 1: SW Stafford Road & Overlook Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	118	84	14	29	171	269	44	196	115
Average Queue (ft)	55	22	2	7	69	104	5	64	19
95th Queue (ft)	101	57	9	26	134	213	27	142	70
Link Distance (ft)		1053		232		510		440	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100		50		150		125		125
Storage Blk Time (%)	2			0	1	2		1	0
Queuing Penalty (veh)	1			0	4	3		3	0

Intersection: 2: SW Stafford Road & Site Access

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: SW Stafford Road & Atherton Drive/Rosemont Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	66	604	317	169
Average Queue (ft)	18	296	85	62
95th Queue (ft)	49	668	242	127
Link Distance (ft)	346	751	603	838
Upstream Blk Time (%)		3		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 10

Intersection: 1: SW Stafford Road & Overlook Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	124	207	46	105	89	148	119	426	150
Average Queue (ft)	42	90	9	37	26	53	7	188	43
95th Queue (ft)	92	165	32	80	62	110	46	374	153
Link Distance (ft)		1053		232		510		440	
Upstream Blk Time (%)								3	
Queuing Penalty (veh)								0	
Storage Bay Dist (ft)	100		50		150		125		125
Storage Blk Time (%)	0	6	1	7		0		16	0
Queuing Penalty (veh)	1	5	1	2		0		20	0

Intersection: 2: SW Stafford Road & Site Access

Movement	SB
Directions Served	TR
Maximum Queue (ft)	378
Average Queue (ft)	152
95th Queue (ft)	465
Link Distance (ft)	510
Upstream Blk Time (%)	0
Queuing Penalty (veh)	3
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: SW Stafford Road & Atherton Drive/Rosemont Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	130	84	653	836
Average Queue (ft)	48	33	623	615
95th Queue (ft)	95	71	642	1017
Link Distance (ft)	346	751	603	838
Upstream Blk Time (%)			99	2
Queuing Penalty (veh)			0	16
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 47

Intersection: 1: SW Stafford Road & Overlook Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	118	97	17	34	159	229	52	261	150
Average Queue (ft)	59	23	2	8	62	89	5	72	25
95th Queue (ft)	105	64	11	27	122	173	28	167	92
Link Distance (ft)		1053		232		510		440	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100		50		150		125		125
Storage Blk Time (%)	2	0		0	0	1		2	0
Queuing Penalty (veh)	1	0		0	2	1		5	0

Intersection: 2: SW Stafford Road & Site Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	40	27
Average Queue (ft)	16	1
95th Queue (ft)	39	12
Link Distance (ft)	372	838
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: SW Stafford Road & Atherton Drive/Rosemont Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	66	625	258	166
Average Queue (ft)	17	276	65	63
95th Queue (ft)	48	582	175	133
Link Distance (ft)	346	751	603	838
Upstream Blk Time (%)		1		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 8

Intersection: 1: SW Stafford Road & Overlook Drive

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	T	R
Maximum Queue (ft)	125	218	55	108	70	153	149	474	150
Average Queue (ft)	51	99	12	38	29	53	13	262	54
95th Queue (ft)	109	179	39	80	60	115	78	517	169
Link Distance (ft)		1053		232		510		440	
Upstream Blk Time (%)								20	
Queuing Penalty (veh)								0	
Storage Bay Dist (ft)	100		50		150		125		125
Storage Blk Time (%)	1	9	0	8		0		29	0
Queuing Penalty (veh)	2	8	0	2		0		35	0

Intersection: 2: SW Stafford Road & Site Access

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	75	87	381
Average Queue (ft)	24	10	204
95th Queue (ft)	75	53	574
Link Distance (ft)	372	838	510
Upstream Blk Time (%)			1
Queuing Penalty (veh)			8
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: SW Stafford Road & Atherton Drive/Rosemont Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	122	96	648	839
Average Queue (ft)	43	36	624	655
95th Queue (ft)	90	77	642	1049
Link Distance (ft)	346	751	603	838
Upstream Blk Time (%)			98	2
Queuing Penalty (veh)			0	14
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 71