Chick-fil-A
Transportation Impact Assessment
1984 Baseline Road, City of Ottawa

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Chick-fil-A – College Square
Transportation Impact Assessment

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INTRODUCTION

EXP Service has been retained by Chick-fil-A Canada ULC to prepare a Transportation Impact Assessment (TIA) in support of Site Plan Approval applications for the development of the lands known as 1984 Baseline Road, henceforth referred to as the "Subject Site".

As shown in *Figure 1*, the subject site is currently occupied by a commercial establishment (The Beer Store), which will be replaced by the proposed development.

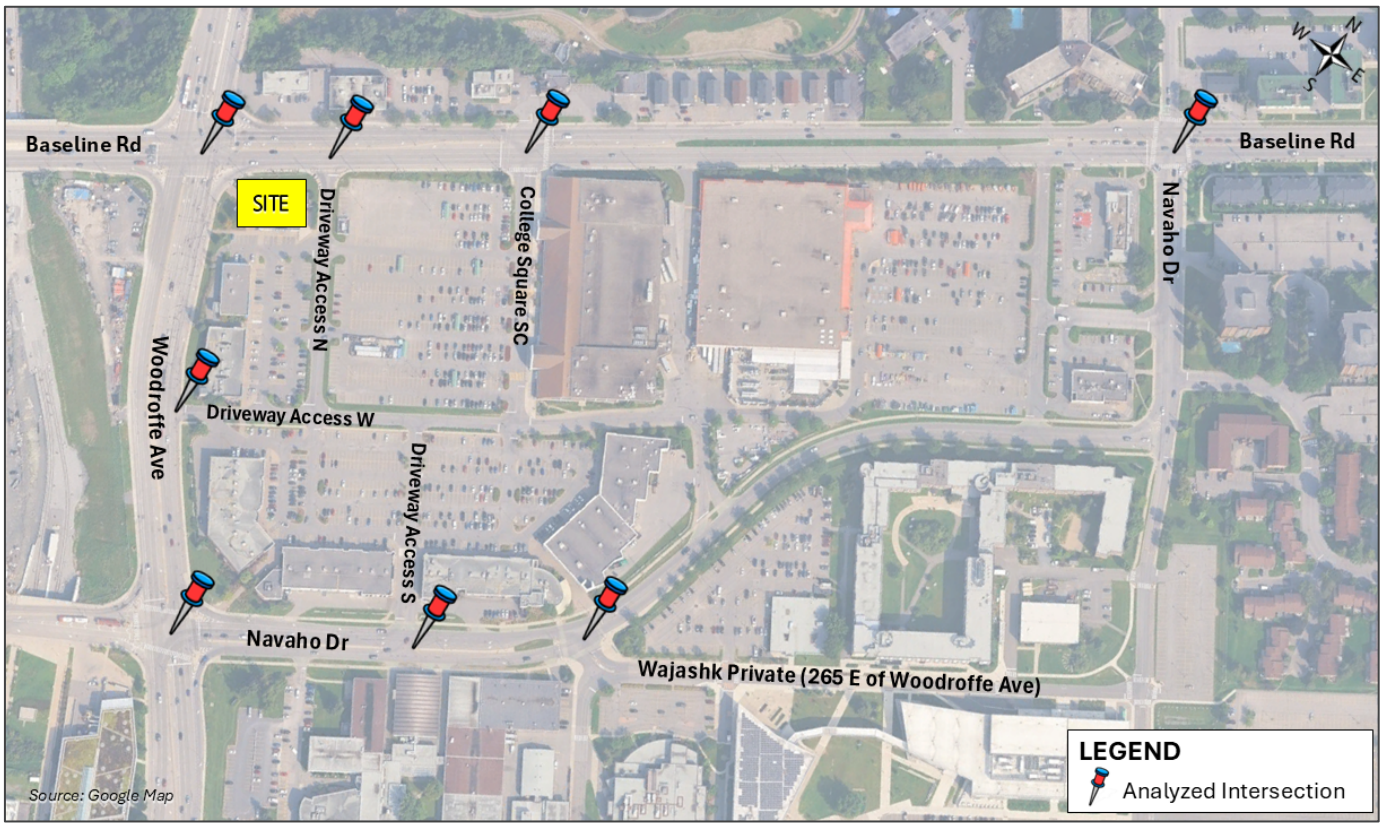


Figure 1: Site Location

Notably, the existing site was recently involved in a reported collision, highlighting that safety concerns can arise at high-demand locations. To mitigate any potential risks, an operational safety plan will be developed for the proposed Chick-fil-A drive-through operation, providing additional on-site traffic control and guidance when it is needed.

Detailed site plan is provided in **Appendix A** for reference.

1. SCREENING

A Transportation Impact Assessment (TIA) screening form was completed for the proposed development to determine the requirements for the assessment. The findings are summarized as follows:

Trip Generation Trigger	The trip generation estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition, this development meets the City's TIA Trip Generation Trigger (≥ 60 peak-hour auto trips). Therefore, the trip generation-based trigger is satisfied.
Location Trigger	According to the City's *Official Plan Schedule C7-A*, the development is located within a designated priority area. Therefore, the location-based trigger is satisfied.
Safety Trigger	The proposed development includes a drive-through facility, which satisfies the safety-based trigger

Based on the City's screening assessment, EXP has confirmed the need to conduct a full TIA for the proposed development. A copy of the completed screening form is included in **Appendix B** for reference.

2. SCOPING

2.1. Proposed Development

The proposed development is located at 1984 Baseline Road in City of Ottawa, within the northwest corner of College Square Mall. The site is currently zoned Mixed Use – Commercial Zone II (MC F(1.5) H(34)) under the City of Ottawa Zoning By-law 2008-250. This zoning permits a range of commercial uses, including drive-through facilities, subject to site plan control and applicable design guidelines.

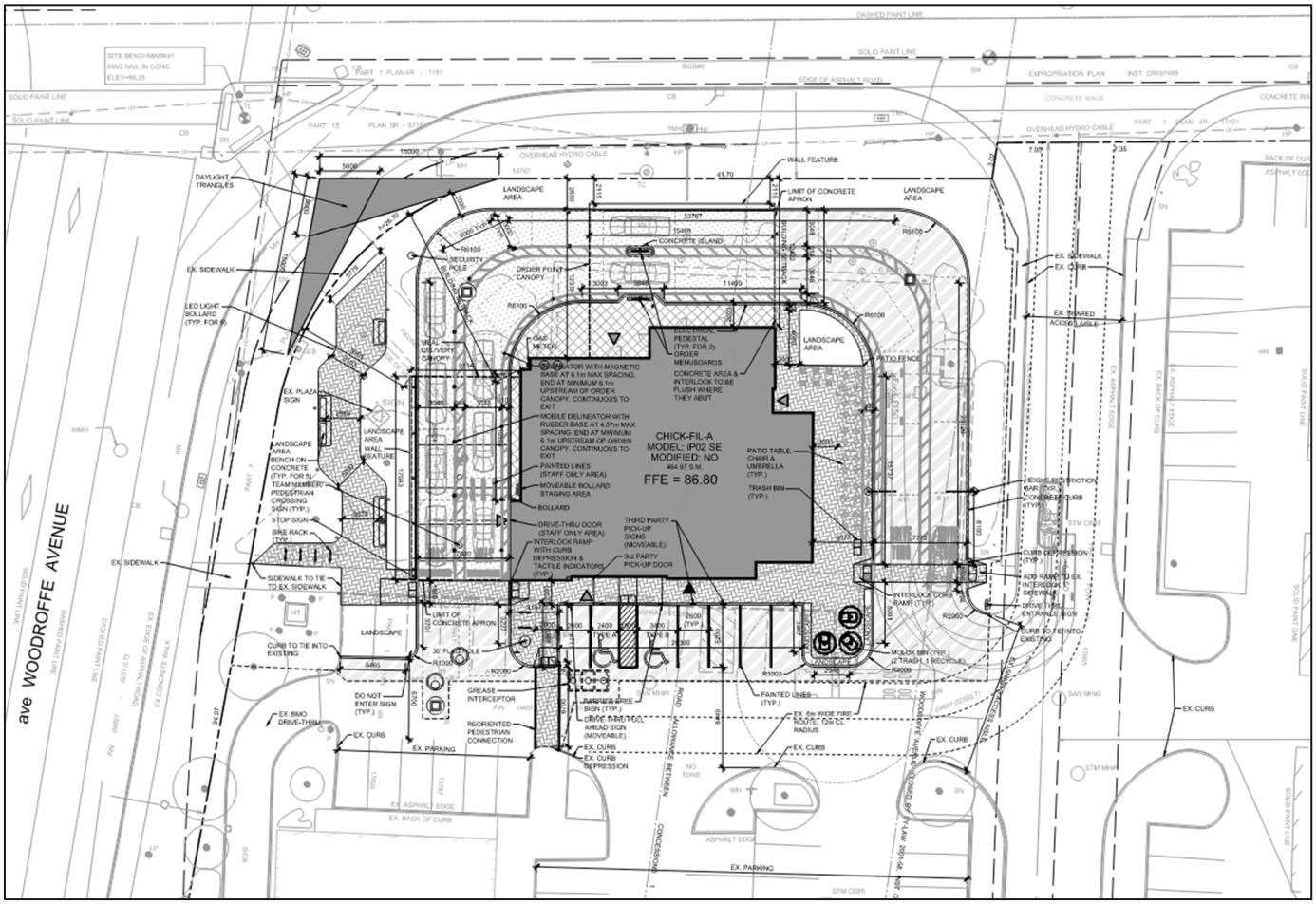


Figure 2: Site Plan

The development includes approximately 424 m^2 of gross floor area, two drive-through lanes, and nine parking spaces, including two accessible spaces. The site is currently served by multiple access points to the surrounding shopping mall, located along Baseline Road, Woodroffe Avenue, and Navaho Drive.

Construction is expected to proceed in a single phase, with occupancy targeted for 2027.

2.2. Existing Conditions

Roadways

The following outlines the existing site characteristics of the roads and intersections in the vicinity of the subject site are described below.

- **Baseline Road** is a four-lane east-west arterial corridor extending from Richmond Road to Prince of Wales Drive. Within the study area, it features auxiliary turn lanes at major intersections, sidewalks on both sides, and a posted speed limit of 60 km/h. The corridor is designated as a truck route under the City of Ottawa's transportation network, and its infrastructure is designed to accommodate heavy vehicle traffic. According to Schedule C16 of the City's Official Plan, Baseline Road has a protected right-of-way of 40 metres, with unequal widening: approximately 14 metres on the north side and 26 metres on the south side. While most of the study area conforms to the protected ROW, localized constraints exist near the proposed Chick-fil-A site. To achieve full ROW width, an estimated 3 to 4 metres of property dedication from the north ROW line along the site frontage will be required.
- **Woodroffe Avenue** is a four-lane, undivided north–south arterial road with sidewalks on both sides and a posted speed limit of 60 km/h. The corridor includes dedicated bus lanes in both northbound and southbound directions and is designated as a truck route, supporting heavy vehicle traffic. Its multi-lane configuration and direct connections to major routes such as Highway 417, Carling Avenue, and Hunt Club Road facilitate efficient regional movement. According to Schedule C16 of the City of Ottawa's Official Plan, Woodroffe Avenue has a protected right-of-way (ROW) of 37 metres between Adirondack Drive and Baseline Road, and 45 metres between Baseline Road and Knoxdale Road.
- **Navaho Drive** is a four-lane east-west collector road with sidewalks on both sides and a posted speed limit of 50 km/h.
- **College Square Shopping Center** is a one-lane per direction north-south access road with sidewalks on the east side. The posted speed limit for this section is 5 km/h, intended for the College Square Loblaws parking lots.
- **Driveway Site Access N** is a one-lane per direction north-south access road with sidewalks on the west side and operating as a right-in and right-out.
- **Wajashk Private** is a named street on the Algonquin College Ottawa campus, as part of the college's Indigenization Strategy. The road runs through the southwest part of the campus. It is well-connected to OC Transpo routes 88, offering convenient transit access for students and staff.

The existing lane configuration and traffic controls for the study area are presented in *Figure 3.*

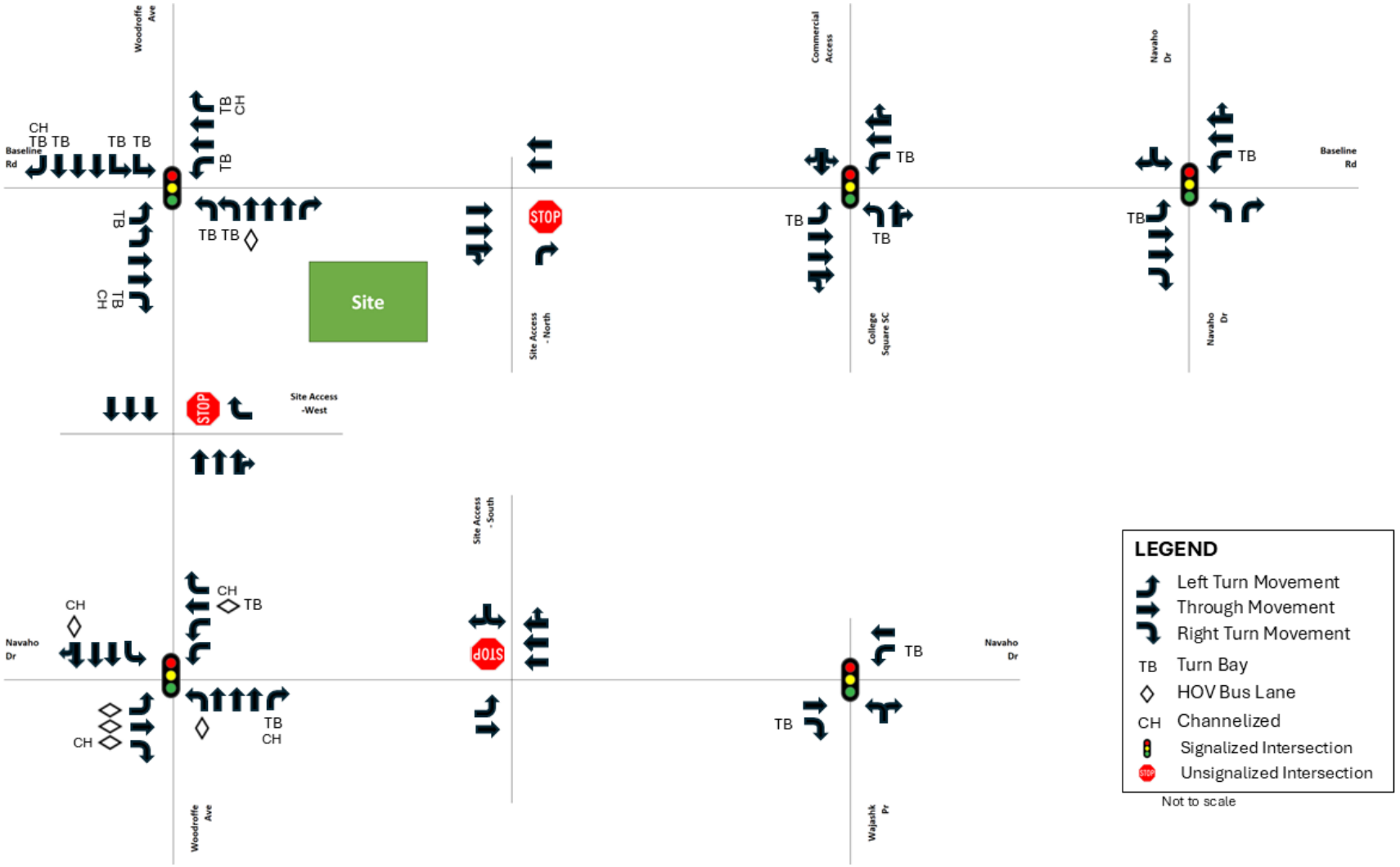
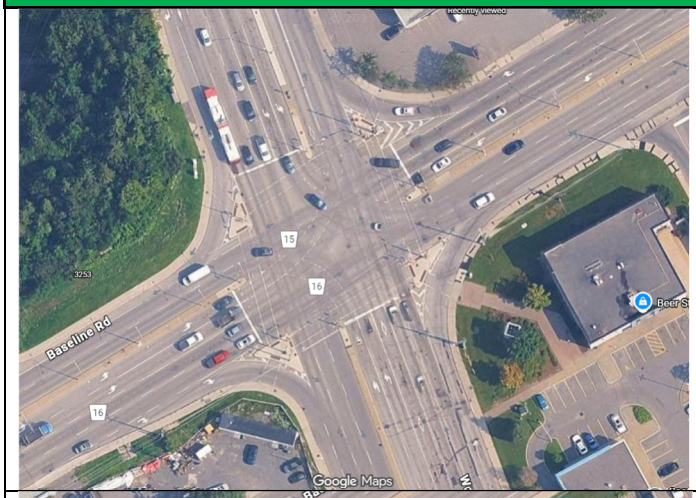
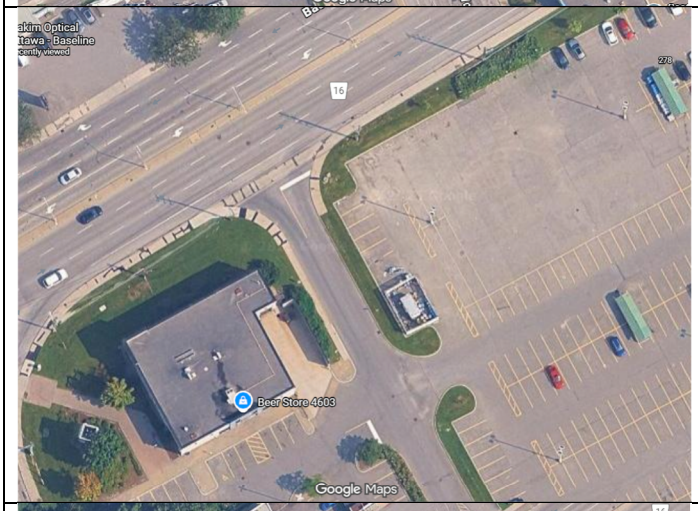
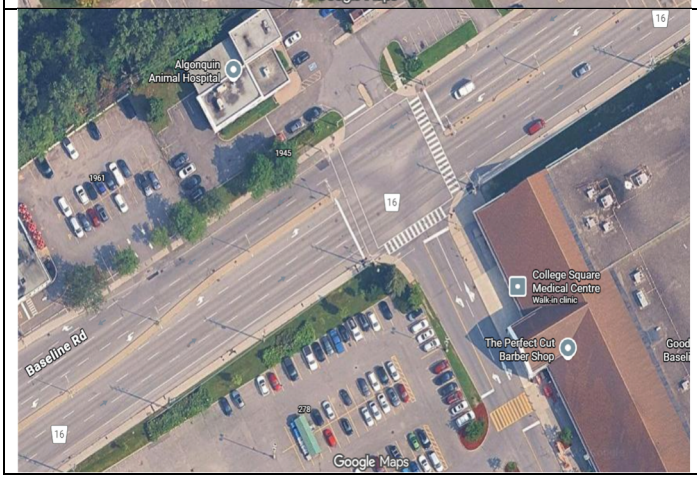
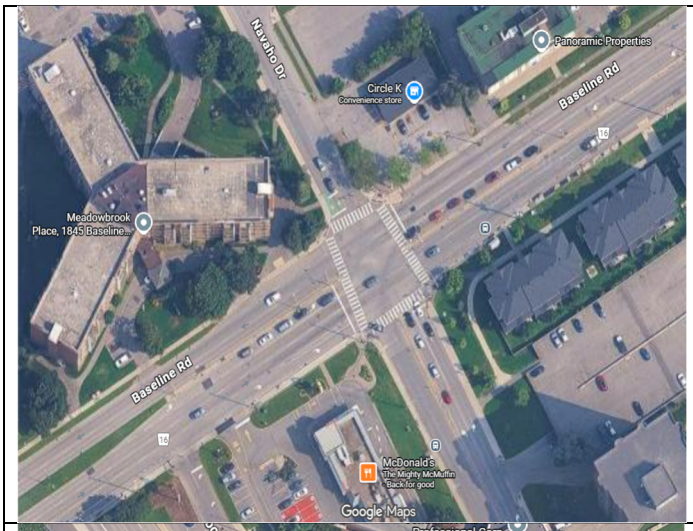


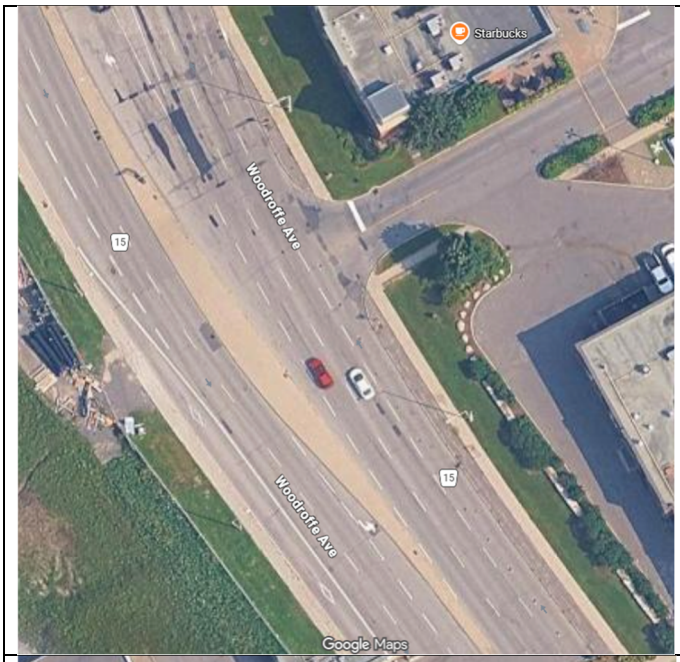
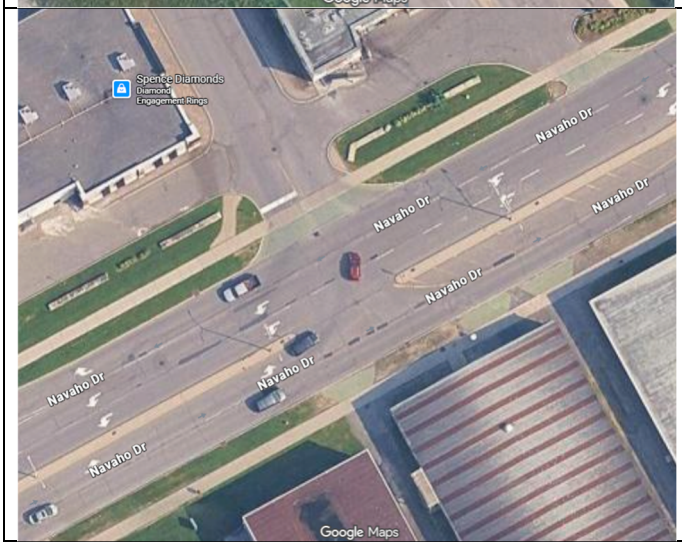
Figure 3: Existing Lane Configuration and Traffic Controls

Intersections

The key intersections within proximity of the site have been summarized below:

Intersection Overview	Description
	**Baseline Road and Woodroffe Avenue** ○ It is a signalized intersection with a single left-turn lane on the east approach and dual left-turn lanes on all other approaches. The intersection has a channelized right-turn lane and a median on all intersection approaches. ○ The intersection has two through movement lanes and a dedicated bus lane for the south approach. The intersection has three through movement lanes on all other approaches. ○ Sidewalks are present on all intersection approaches.
	**Baseline Road and Site Access North** ○ It is an unsignalized intersection with one eastbound through/right turn lane entering College Square Mall and a restricted right-turn exit, operating as a right-in/right-out access. ○ Sidewalks are present on both sides of Baseline Road. ○ A median runs along Baseline, dividing eastbound and westbound traffic.
	**Baseline Road and College Square Shopping Center** ○ It is a signalized access with one lane receiving eastbound through-right movements and a westbound left movement into the mall. The access includes a northbound left and a northbound through-right lane for vehicles exiting the mall. ○ Sidewalks are present on both sides of Baseline Road. ○ A median runs along Baseline, dividing eastbound and westbound traffic.

	**Baseline Road and Navaho Drive** ○ It is a signalized intersection with a dedicated left-turn lane for both eastbound and westbound traffic. ○ The intersection has a median on all intersection approaches, except the southbound approach. ○ Northbound and southbound traffic faces a "Do Not Drive Straight" restriction- limiting movements to left and right turns only (with buses and bicycles exempted). ○ Sidewalks are present on all intersection approaches.
	**Woodroffe Avenue and Navaho Drive** ○ It is a signalized intersection with a dedicated southbound left-turn lane and two westbound left-turn lanes. ○ The intersection has a channelized right turn lane and a median on all intersection approaches. ○ Westbound includes two fully protected left-turn lanes and one right-turn lane. ○ Sidewalks are present on all intersection approaches.
	**Navaho Drive and Wajashk Private** ○ It is a signalized intersection with a dedicated turn lanes on Navaho Drive. ○ A median runs along Navaho Drive, west leg of the intersection, dividing eastbound and westbound traffic. ○ Sidewalks are present on all intersection approaches.

	**Baseline Road and Site Access West** ○ It is an unsignalized intersection with one northbound through/right-turn lane entering College Square Mall and a restricted right-turn exit, operating as a right-in/right-out access. ○ Sidewalks are present on both sides of Woodroffe Avenue. ○ A median runs along Woodroffe Avenue, dividing northbound and southbound traffic.
	**Baseline Road and Site Access South** ○ It is an unsignalized intersection with full turning movements and left- and right- turn exits. ○ Sidewalks are present on both sides of Navaho Drive. ○ A median runs along Navaho Drive, west leg of the intersection, dividing eastbound and westbound traffic.

Driveways

Figure 4 illustrates the existing driveways within 200 metres of the proposed site access. A review of the local area identified three commercial driveways and two driveways used for OC Transpo construction access.



Figure 4: Existing Driveways within 200 meters

Currently, Baseline Road and Woodroffe Avenue have medians, which physically prevent left turns across traffic. This results in the existing driveways near the site operating as right-in/right-out (RIRO) only.

Pedestrian Facilities

Figure 5 illustrates the active transportation conditions near the proposed site, focusing on pedestrian infrastructure. Existing concrete sidewalks are well established throughout the surrounding area, providing good connectivity for pedestrians.

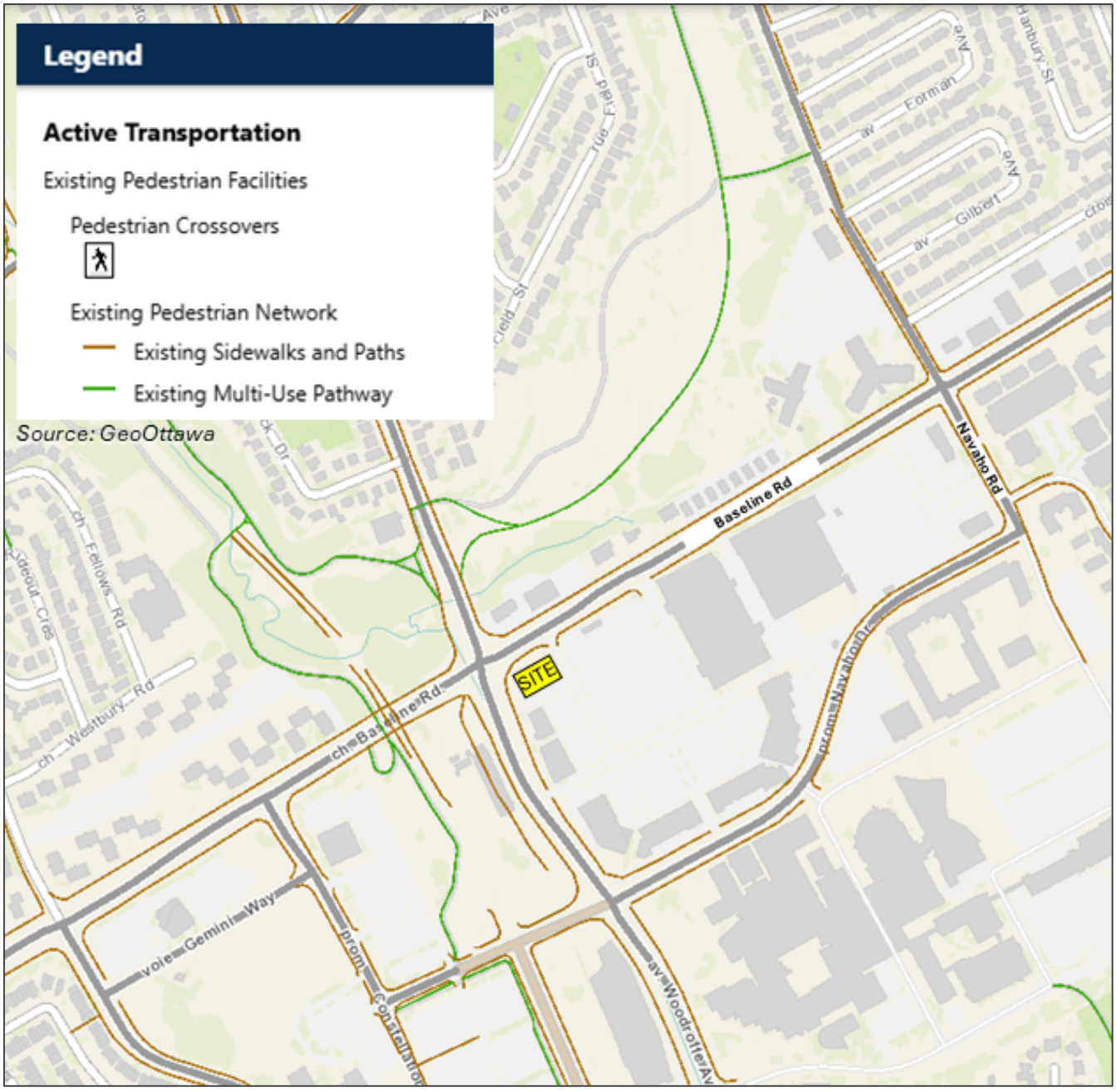


Figure 5: GeoOttawa Active Transportation Map

The area is well served by a network of existing sidewalks, multi-use pathways, and pedestrian connections, providing good walkability and overall connectivity. pedestrian crossovers are provided at all signalized intersections in the vicinity, the site remains well integrated into the surrounding active transportation network, supporting safe and convenient pedestrian movement.

Cycling Facilities

The cycling conditions near the proposed site, as shown in the Official Cycling Map for Ottawa-Gatineau, are well-developed and supportive of active transportation. The area features a mix of multi-use pathways (green lines), on-road bike lanes (orange lines), and suggested connector routes (yellow dashed lines), offering cyclists a variety of safe and accessible options. Key amenities, such as a bike repair station, are located within 1 km of the proposed site. Nearby Transitway stations further enhance convenience and multimodal connectivity for cyclists.



Figure 6: The Official Cycling Map (City of Ottawa-Gatineau)

It should be noted that the areas marked in yellow in the figure below indicate locations without bike lanes. Cyclists traveling along Baseline Road in these areas are advised to share the sidewalk with pedestrians.

Transit

OC Transpo bus stops #2953 and #4540 are located along Woodroffe Avenue, bus stop #2909 is located on Baseline Road, and bus stop #4511 is located on Navaho Drive. These bus stops are located within a walking distance of 600 m all units within the proposed development. Also note that the bus terminal is located approximately 400 meters away from the proposed development. The location of the bus stops is shown in *Figure 7*.

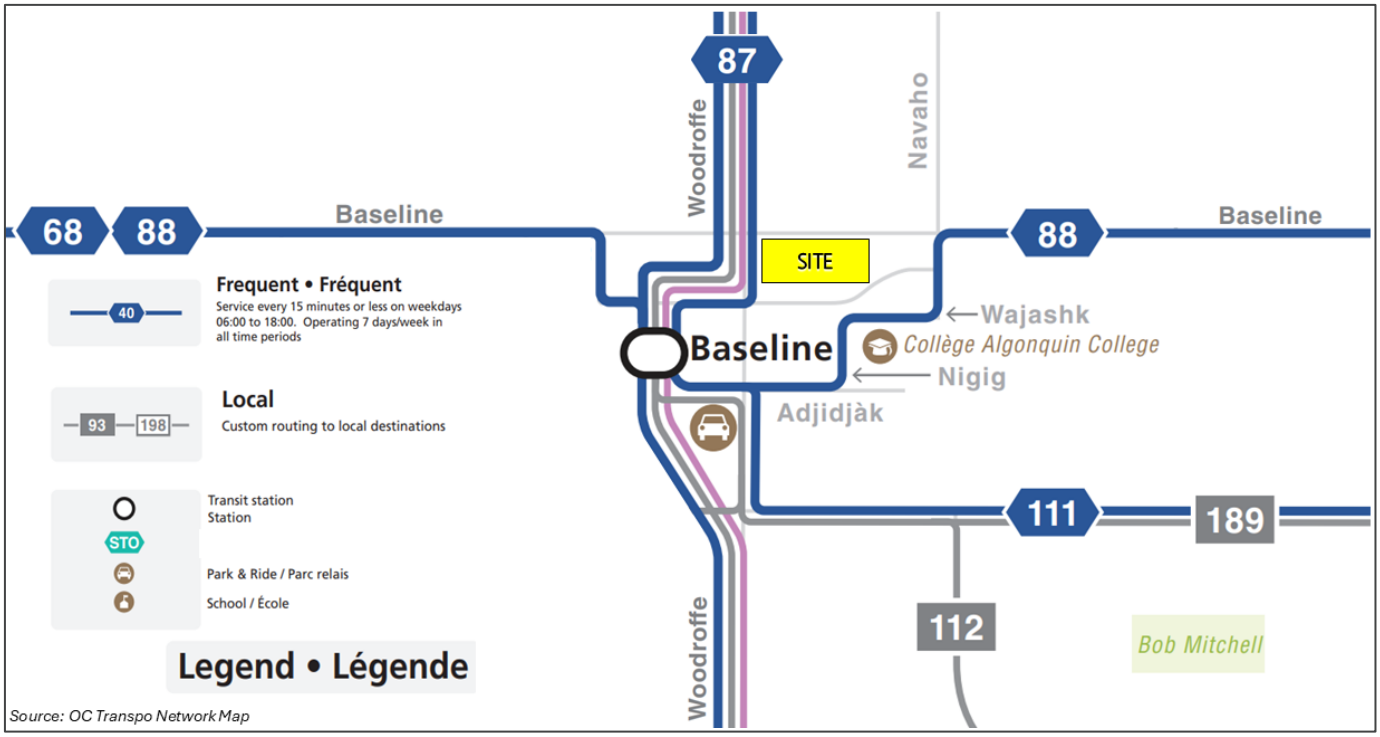


Figure 7: OC Transpo Network within the Study Area

The aforementioned bus stops serve OC Transpo routes 68, 87, and 88. Descriptions of the foregoing transit routes are provided in the following table. Route maps are included in **Appendix C**.

Table 1: OC Transpo Route Information

Transit Route	Descriptions
68	Exists and runs between Baseline Station and Terry Fox Station in Kanata. Service levels vary, but typical weekday midday frequency is around every 25 minutes, particularly on the Baseline–Kanata segment.
87	Connects Tunney's Pasture Station to Baseline Station, passing through Westboro, Carlingwood, and Woodroffe Ave. Official service schedules indicate that this route is among the frequent weekday routes, with a likely ~15-minute frequency during peak periods.
88	A frequent crosstown route linking Hurdman Station (east) to Bayshore Shopping Centre (west), passing key hubs such as Billings Bridge, Algonquin College, and Baseline Station. Service intervals are typically every 20–30 minutes during the day, consistent with its frequent service designation

Area Traffic Management Measures

No Area Traffic Management studies have been completed or are currently underway within the study area. Additionally, no traffic calming measures have been implemented along the roadways in the study area.

Existing Traffic Volumes

Existing traffic volumes at the study intersections were provided by the City of Ottawa's Transportation Data Department. The dates of the traffic counts collected are shown in *Table 2*.

Table 2: Available Turning Movement Counts

Intersections	Collected Date
Baseline Road & Woodroffe Avenue	Wednesday, 2023-11-29
	Saturday, 2025-12-06
Baseline Road & Driveway Access N	Thursday, 2025-12-04
	Saturday, 2025-12-06
Navaho Drive & Driveway Access S	Thursday, 2025-12-04
	Saturday, 2025-12-06
Woodroffe Avenue & Driveway Access W	Thursday, 2025-12-04
	Saturday, 2025-12-06
Baseline Road & College Square Shopping Center	Tuesday, 2024-10-22
	Saturday, 2025-12-06
Baseline Road & Navaho Drive	Wednesday, 2024-10-23
	Saturday, 2025-12-06
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station	Wednesday, 2022-02-16
	Saturday, 2025-12-06
Navaho Drive & 265 East of Woodroffe Avenue	Tuesday, 2024-09-24
	Saturday, 2025-12-06

Baseline Road primarily functions as a commuter corridor, suggesting that weekday traffic volumes are likely higher than weekend volumes. Additionally, the proposed development is located within a shopping mall and adjacent to a college, which indicates elevated weekend traffic activity. Consequently, both weekday and weekend peak hours were selected for analysis.

Both existing weekday and weekend afternoon peak hour traffic volumes at the study area intersections are shown in *Figure 8*.

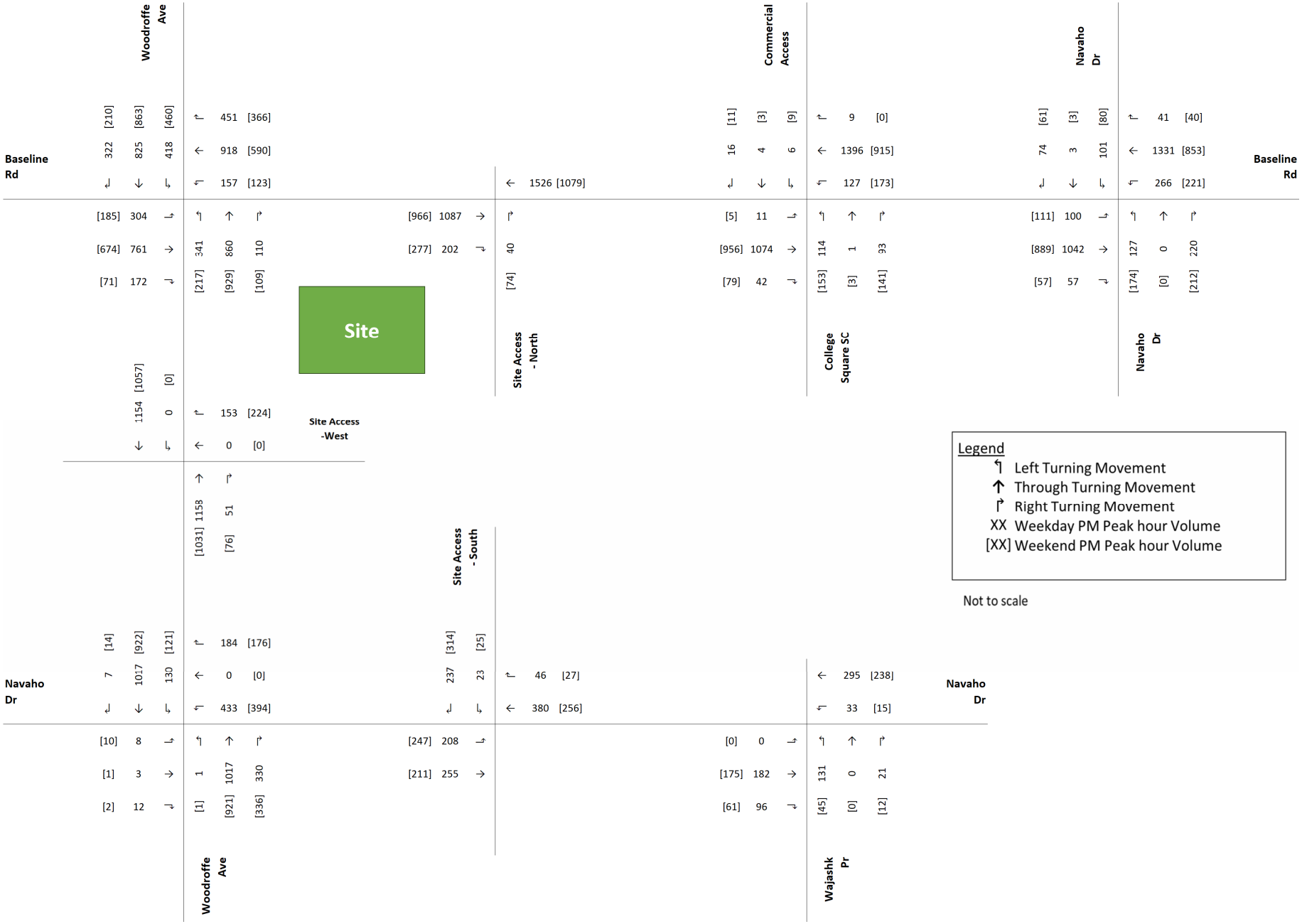


Figure 8: 2025 Existing Traffic Volumes

It is noted that the rate of growth of background traffic was established as 0.5 % by comparing the 2022 and 2046 TRANS Regional models within the study area (refer to section 3.2.2), which provided by the City of Ottawa is included in **Appendix D**.

Along Baseline Road, segment-based volume balancing was applied to account for the numerous mid-block access points that affect traffic continuity between major intersections. However, it should be noted that a McDonald's restaurant located west of the Navaho Drive intersection likely generates a substantial number of trips during peak hours. This localized traffic activity introduces significant mid-block inflow and outflow that could not be accurately quantified with available data. As a result, volume balancing between College Square Shopping Centre and Navaho Drive was left unbalanced, recognizing the limitations imposed by this high-activity access point. This exception was documented to maintain transparency in the corridor analysis and to reflect observed operational conditions. Detailed turning movement count data is included in **Appendix E**.

Existing Traffic Operations

For signalized intersections, the level of service (LOS) is evaluated based on the volume to capacity ratio for all individual lane movements. The overall intersection performance is classified using the corresponding LOS thresholds defined by HCM, providing a standardized assessment of operational conditions during peak periods.

Table 3 summarizes the existing intersection operations for both weekday midday and weekday afternoon peak hours.

Under existing conditions, the study area intersections generally operate well, with the exception of the Baseline Road & Woodroffe Avenue intersection, which experiences notable congestion during both the weekend and weekday afternoon peak hours. Critical movements were also identified at Baseline Road & College Square SC (NB-L), and Baseline Road & Navaho Drive (EB-L, WB-L, NB-L, SB-L).

The symbol "#" indicates that the 95th percentile volume exceeds capacity, suggesting oversaturation and potential queue spillback. At the intersection of Baseline Road and Woodroffe Avenue, majority of left turn and through movements are flagged with "#", indicating that demand exceeds capacity during both analyzed peak periods. This highlights the need for further operational review. Measures such as signal retiming or phasing adjustments should be considered to mitigate observed congestion before evaluating the need for geometric modifications.

Baseline Road at Driveway Access N operates as a right-in/right-out configuration. The analysis results indicate no operational issues at this location.

The intersection of Baseline Road & College Square SC currently operates at an overall LOS A with low delays and balanced volumes, indicating excellent performance.

The intersection of Baseline Road and Navaho Drive currently operates at an overall Level of Service (LOS) D with a maximum volume-to-capacity (v/c) ratio of 0.87 and an intersection delay of 35.5 seconds per vehicle, indicating moderate congestion but acceptable performance. During the PM peak hour, eastbound through and westbound left-turn movements are the most critical, with the conditions showing v/c ratios increasing to 0.80 and 0.87, respectively, and delays rising to approximately 40 seconds, which will push the intersection to LOS D overall. Northbound movements remain efficient with low delays and v/c ratios even in future scenarios. Overall, the intersection is functioning adequately today but is expected to experience noticeable congestion in the future, primarily on the eastbound and westbound approaches.

The Navaho Drive & Woodroffe Avenue (Transitway/Baseline Station) intersection currently operates at an overall LOS A with low delays and balanced volumes, indicating excellent performance. The eastbound approach is exclusively designated for buses at all times, with other vehicles restricted or discouraged, which helps maintain efficient transit operations. Most movements experience minimal delays, although the southbound left-turn movement is somewhat constrained by the upstream intersection during both peak hours; however, this impact is considered negligible as it is expected to have minimal operational effect.

Detailed Synchro worksheets are provided in **Appendix F**.

Table 3: Existing Traffic Operations

Intersection		Lane	Weekday PM Peak Hour				Weekend PM Peak Hour			
			LOS	Delay (s)	V/C Ratio	95th % Queue (m)	LOS	Delay (s)	V/C Ratio	95th % Queue (m)
Baseline Road & Woodroffe Avenue		**Overall**	F	101.2	---	---	F	85.2	---	---
		EB-L	E	63.0	0.78	59.2	E	66.0	0.74	#41.3
		EB-T	E	64.9	0.94	#156.9	D	50.0	0.81	114.2
		EB-R	D	37.9	0.21	28.6	C	33.7	0.05	0.0
		WB-L	E	73.1	0.79	#75.6	F	108.1	0.93	#73.7
		WB-T	F	129.3	1.14	#204.5	D	45.6	0.70	85.4
		WB-R	E	79.0	0.87	#104.2	E	60.9	0.57	63.9
		NB-L	F	140.7	1.08	#89.2	D	39.5	0.68	43.6
		NB-T	F	83.5	1.04	#171.5	F	80.9	0.99	#182.9
		NB-R	F	141.3	0.08	26.3	F	222.4	0.08	28.2
		SB-L	F	269.8	1.43	#116.0	F	291.3	1.49	#123.2
		SB-T	F	83.0	1.02	#171.5	E	56.7	0.93	#165.5
		SB-R	D	42.2	0.57	76.8	C	32.9	0.28	36.8
Baseline Road & Driveway Access North (Right-in/Right-out)		**Overall**	A	0.1	---	---	A	0.3	---	---
		EB-TR	A	0.0	0.27	0.0	A	0.0	0.31	0.0
		WB-T	A	0.0	0.50	0.0	A	0.0	0.35	0.0
		NB-R	A	9.5	0.05	1.3	A	9.5	0.09	2.3
Baseline Road & College Square SC		**Overall**	B	13.4	---	---	B	12.9	---	---
		EB-L	A	1.3	0.07	m0.0	A	1.6	0.02	m0.2
		EB-TR	A	1.2	0.40	m6.8	A	1.4	0.40	m7.2
		WB-L	B	13.4	0.43	m24.0	B	19.5	0.54	m49.0
		WB-TR	B	16.0	0.67	146.7	B	10.5	0.45	89.1
		NB-L	E	63.6	0.69	48.8	E	63.8	0.77	60.5
		NB-TR	D	48.5	0.08	14.9	D	43.9	0.12	17.6
		SB-LTR	D	48.4	0.06	10.5	D	43.3	0.06	9.8
Baseline Road & Navaho Drive		**Overall**	D	37.0	---	---	C	33.1	---	---
		EB-L	D	39.2	0.38	38.8	B	16.7	0.33	19.7
		EB-T	D	35.0	0.80	#204.6	B	17.1	0.56	55.2
		EB-R	D	44.1	0.04	4.7	F	385.2	0.05	11.1
		WB-L	C	33.4	0.74	#70.9	B	16.8	0.66	42.5
		WB-TR	C	32.6	0.88	#272.3	C	21.3	0.57	125.1
		NB-L	E	65.9	0.75	51.7	E	62.8	0.80	66.5
		NB-R	D	45.3	0.17	11.2	D	50.9	0.16	23.9
		SB-LTR	D	53.9	0.63	59.4	D	42.7	0.40	44.3
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station		**Overall**	C	34.7	---	---	C	26.8	---	---
		EB-L	D	50.5	0.08	8.0	D	49.7	0.11	8.6
		EB-T	D	54.8	0.04	3.2	D	52.2	0.01	1.7
		EB-R	D	54.6	0.02	0.0	D	52.1	0.00	0.0
		WB-L	E	58.0	0.78	65.4	D	49.8	0.73	50.7
		WB-R	E	55.6	0.14	3.8	D	53.2	0.13	0.0
		NB-L	E	70.7	0.12	2.3	E	68.2	0.12	2.2
		NB-T	C	34.4	0.62	112.3	C	28.1	0.52	97.5
		NB-R	C	30.0	0.31	37.0	C	24.8	0.26	24.0
		SB-L	D	54.8	0.44	m43.8	E	58.2	0.51	m25.4
		SB-T	B	20.0	0.60	m77.0	A	7.0	0.55	m152.2
		SB-R	B	12.3	0.01	m0.0	B	12.1	0.02	m0.0
Navaho Drive & Wajashk Private		**Overall**	C	21.4	---	---	B	11.2	---	---
		EB-T	C	21.5	0.43	34.5	B	10.8	0.24	23.3
		EB-R	C	32.7	0.07	8.6	A	9.3	0.05	5.3
		WB-L	B	18.2	0.12	8.1	A	9.2	0.03	3.8
		WB-T	C	25.3	0.68	50.4	B	11.6	0.33	31.6
		NB-L	A	7.4	0.16	19.8	B	13.1	0.09	9.5
		NB-R	A	6.5	0.02	3.3	B	12.4	0.01	2.8
Woodroffe Avenue & Site Access West (Right-in/right-out Access)		**Overall**	A	0.6	---	---	A	1.0	---	---
		WB-R	B	10.1	0.20	5.5	B	10.5	0.27	8.5
		NB-T	A	0.0	0.30	0.0	A	0.0	0.27	0.0
		SB-T	A	0.0	0.25	0.0	A	0.0	0.23	0.0
Navaho Drive & Site Access South		Overall	A	6.2	---	---	A	7.9	---	---
		EB-L	A	9.2	0.21	6.2	A	8.7	0.22	6.5
		EB-T	A	0.0	0.17	0.0	A	0.0	0.14	0.0
		WB-TR	A	0.0	0.11	0.0	A	0.0	0.07	0.0
		SB-LR	C	19.8	0.55	24.9	C	18.8	0.60	30.1

Notes: Saturation flow rate of 1800 veh/h/lane, Peak Hour Factor = 0.90, m = metered queue, # = volume for the 95th percentile cycle exceeds capacity

Collision History

Collision data for the period from 2019 to 2024 on Baseline Road, Woodroffe Avenue and Navaho Drive was provided by the City of Ottawa. The data was reviewed to identify any collision patterns.

Table 4: Intersection Collision Data Summary

		Baseline Rd & Woodroffe Ave	Baseline Rd & College Square Sc	Baseline Rd & Navaho Dr	Navaho Dr & Woodroffe Ave/Transitway/ Baseline Station
Accident Year	2019	32	4	10	20
	2020	24	1	12	3
	2021	23	3	11	7
	2022	26	3	12	6
	2024	22	-	10	10
Classification	Non-Fatal Injury	14	4	17	10
	Property Damage Only	113	7	38	36
	Non-Reportable	-	-	-	-
Collision Type	Rear End	78	5	25	17
	Sideswipe	29	3	10	6
	Turning Movement	10	1	9	18
	Angle	4	2	1	1
	SMV Other	6	-	10	4
Environment	Clear	110	10	42	33
	Rain	9	-	7	6
	Freezing Rain	1	-	-	1
	Snow	6	1	6	5
	Strong Wind	1	-	-	-
	Other	-	-	-	1
Light	Dawn	1	1	-	2
	Daylight	100	7	37	31
	Dusk	5	-	5	3
	Dark	21	3	13	10

The collision history for the study area shows that the Baseline Road & Woodroffe Avenue intersection is the most significant safety concern, with 127 collisions recorded between 2019 and 2024, including 14 non-fatal injuries. The predominant collision type here is rear-end crashes (78 incidents), which suggests congestion and frequent stop-and-go conditions, possibly influenced by high traffic volumes and transit activity. Environmental factors indicate most collisions occurred in clear weather (110) and daylight (100), pointing to operational issues rather than adverse conditions.

The Baseline Road & Navaho Drive intersection recorded 55 collisions, with 17 non-fatal injuries, and a notable share of turning movement collisions (9) and rear-end crashes (25). This pattern may reflect conflicts between traffic and turning vehicles, especially given the intersection's proximity to Algonquin College and local access points.

At Navaho Drive & Woodroffe Avenue (Transitway/Baseline Station), there were 53 collisions, mostly property damage only, with rear-end (17) and turning movement (18) crashes being dominant. The bus-only eastbound approach and constrained southbound left-turn movement likely contribute to complex traffic interactions, though the overall severity remains low.

Overall, the data suggests that Baseline & Woodroffe is the critical hotspot requiring attention, primarily due to high rear-end collision frequency and injury rates. The other intersections show moderate collision levels, with patterns indicating turning conflicts and localized operational issues rather than systemic safety deficiencies.

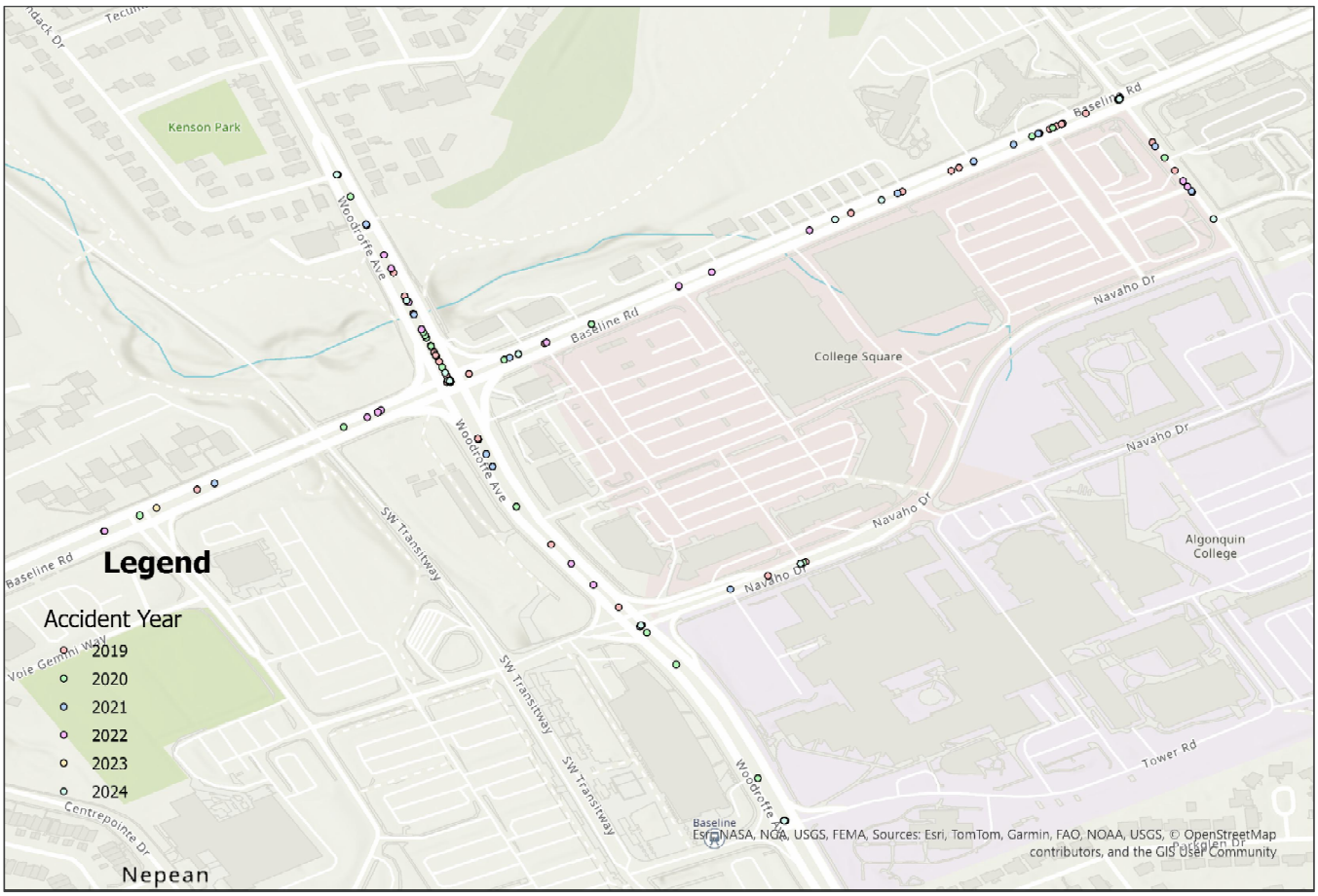


Figure 9: Collision Location Map

Figure 9 indicates the exact location of these collisions at the study area intersection. The dense stack of points on the north leg of the Woodroffe Avenue and Baseline Road intersection indicates that, across the years, a disproportionately high number of crashes were coded to that approach most likely near the stop line and within the typical "intersection-related" buffer. At a signalized approach usually reflects recurring rear-end and turning collisions rather than a single precise spot, and can be influenced by heavy volumes, complex lane use/turning demands, and frequent bus operations and pedestrian activity associated with College Square and Algonquin College. At this location, plausible contributing factors include: queues forming and spillback from adjacent signals and nearby mall accesses, short storage or late lane changes into through/turn lanes, and transit stops or coach layovers causing unexpected decelerations in the curb lane, each of which tends to elevate rear-end and sideswipe frequencies.

Copies of the collision summary report are included in **Appendix G**

Table 5: Segment Collision Data Summary

		BASELINE RD Between COLLEGE SQUARE SC & WOODROFFE AVE	BASELINE RD Between NAVAHO DR & COLLEGE SQUARE SC	NAVAHO DR Between WOODROFFE AVE & 265 E OF WOODROFFE AVE	WOODROFFE AVE Between BASELINE RD & NAVAHO DR/ TRANSITWAY	WOODROFFE AVE Between TRANSITWAY - BASELINE/ ALGONQUIN COLL & NAVAHO DR
Accident Year	2019	2	9	2	5	0
	2020	2	2	1	1	3
		1	5	1	2	0
	2021	1	1	0	2	0
	2022	0	0	0	0	0
	2024	1	2	1	0	0
Classification	Non-Fatal Injury	1	2	2	0	2
	Property Damage Only	6	17	3	10	1
Collision Type	Angle	2	6	5	0	1
	Rear end	1	6	0	0	3
	Sideswipe	3	5	0	0	6
	Turning movement	0	1	2	0	0
	SMV other	1	1	1	1	0
Environment	Clear	5	14	5	10	1
	Rain	1	3	0	0	1
	Snow	1	2	0	0	1
	Other	7	19	5	10	3
Light	Daylight	5	13	6	1	9
	Dusk	0	0	0	0	0
	Dark	0	2	0	0	0

Based on the segment collision table, the highest collision density occurs on Baseline Road between Navaho Drive and College Square Shopping Centre, with most crashes classified as property-damage-only and occurring under clear, daylight conditions, typical of access-related conflicts (multiple driveways, lane changes into turn bays, and short storage). The Woodroffe Avenue segment between Baseline Road and Navaho Drive/Transitway shows the next-highest totals, with a mix dominated by rear-end and angle collisions, consistent with queueing near the signal, stop-and-go operations, and turn conflicts. The Navaho Drive segment east of Woodroffe presents a moderate number of angle/turning-movement crashes, again pointing to unsignalized access and driveway activity. The Baseline segment immediately west of Woodroffe has fewer but notable collisions, skewing to sideswipes and angles, which also suggests late lane changes and driveway interactions near mall entries. By contrast, Woodroffe Avenue south of the Transitway to Navaho has very few collisions overall.

Across segments, the pattern is clear: PDO > injury, daylight > dusk/dark, and clear weather > rain/snow, implying operational and access-management issues rather than visibility or adverse-weather problems. Year-to-year, counts appear highest pre-pandemic (2019) and post-recovery (2024), with 2022 notably low, which is consistent with traffic volume fluctuations. In short, the data supports what the location map suggests: the approaches serving College Square especially the Baseline corridor and the north leg of Woodroffe at Baseline are safety hotspots driven mainly by driveway density, lane changes into turn bays, and signal-related queuing.

2.3. Planned Conditions

Changes to the Study Area Transportation Network

The 2025 Transportation Master Plan sets out Ottawa's vision for meeting mobility needs to 2046. Infrastructure projects were selected to fulfil core mobility needs such as road capacity deficiencies or to provide transportation access to new developments. A transit-first approach is applied for road developments to satisfy the initial network demand. It prioritizes O-Train extensions, new Transitway corridors, and continuous bus lanes, alongside other forms of sustainable transportation. Benefits include faster transit travel times, reduced congestion, improved job access, and better public health outcomes, with an estimated $4.5 billion cost for transit infrastructure, plus $8.3 billion for the Stage 3 O-Train extensions, and $2.8 billion for road capacity projects.

Merivale Centre Community Design Plan (CDP)

The Merivale Road (North) Community Design Plan identifies several transportation network improvements within the study area. Baseline Road and Woodroffe Avenue are both identified in the City of Ottawa's Transportation Master Plan as major transit corridors with planned upgrades focused on improving sustainable transportation. Baseline Road is designated for Bus Rapid Transit (BRT) in the median, which will include dedicated transit lanes, enhanced pedestrian facilities, and cycling infrastructure as part of a complete street approach. Similarly, Woodroffe Avenue is planned for transit priority measures and future BRT improvements to strengthen north-south connectivity. These upgrades aim to support high-capacity transit service, improve multimodal access, and accommodate anticipated growth along these key arterial routes.

Transportation Master Plan (2025)

Figure 10 illustrates the Ultimate Network map proposed in the City's 2025 Transportation Master Plan (TMP) for the area surrounding the site. The site is located near a north-south corridor that serves as a key connector between Baseline Road and Meadowlands Drive. The surrounding road network does not indicate any planned improvements within the immediate vicinity of the site.

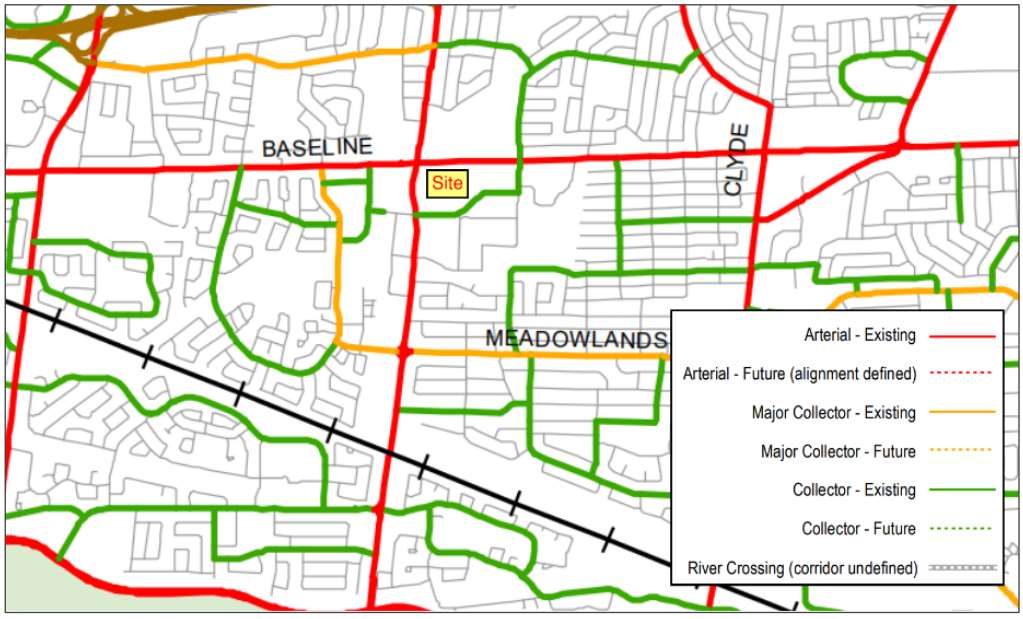


Figure 10: Annex D - Ultimate Network Maps - Map D4:Road Network – Urban

The City has identified[1] several planned infrastructure improvements within the study area, including road resurfacing and Transitway renewal along Woodroffe Avenue south of Baseline Road, both scheduled for implementation in 2025. Additionally, road resurfacing along Baseline Road west of Woodroffe Avenue is anticipated to occur in 2028.

[1] 1984 BASELINE ROAD, OTTAWA | COMMENTS & RESPONSE MATRIX (Dated August 22, 2025)

Ottawa Cycling Plan (2025)

According to the City of Ottawa's Ultimate Cycling Network, both Baseline Road and Woodroffe Avenue are designated as Cross-town Bikeway routes. Cross-town Bikeway routes typically include enhanced cycling infrastructure such as separated bike lanes, multi-use pathways, or paved shoulders, and are prioritized for upgrades and ongoing maintenance.

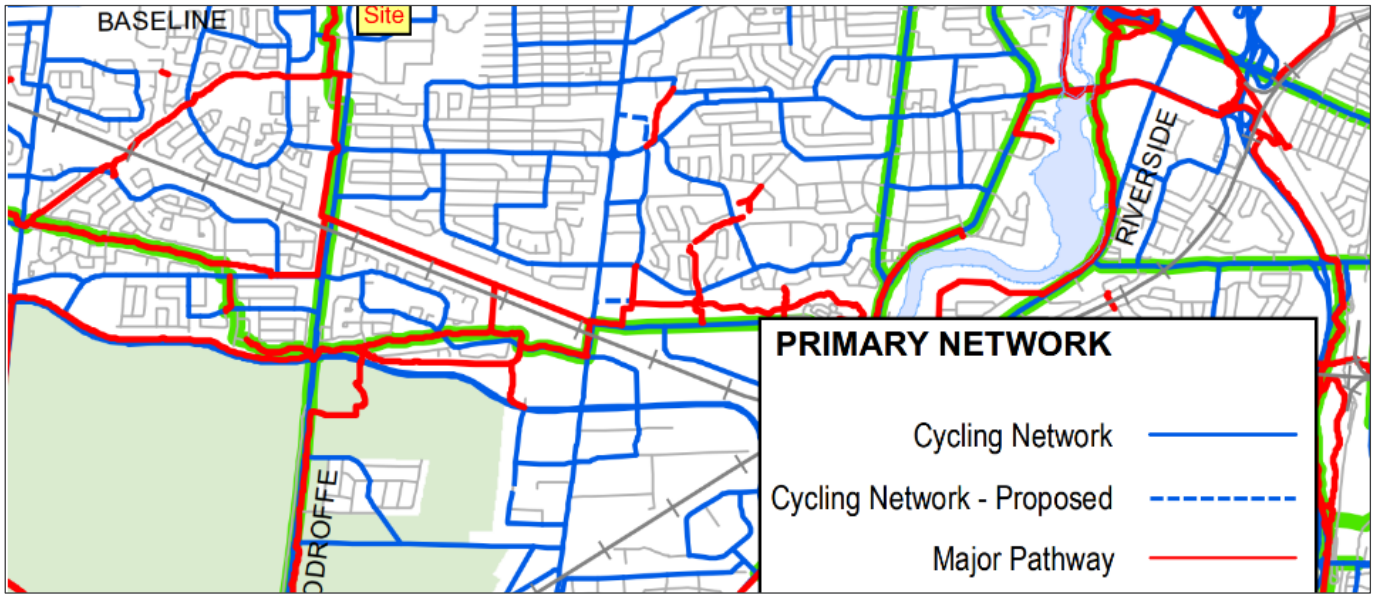


Figure 11: City of Ottawa's 2025 Transportation Master Plan, Map D1: Cycling Network

The site is located immediately south of Baseline Road and is directly adjacent to a designated Cross-town Bikeway, which provides a continuous east-west cycling corridor across Ottawa. In addition to this major bikeway, the site benefits from proximity to two Spine Routes running north-south, one intersecting Baseline Road just west of the site and another further east, offering strong regional connectivity. Several Major Pathways are also present to the south and east, creating off-road cycling options that link residential neighbourhoods to the primary network.

Overall, the site is well integrated into Ottawa's cycling infrastructure, with excellent access to both commuter and recreational routes.

Traffic Calming Measures

The City of Ottawa implements traffic calming primarily through its Neighbourhood Traffic Calming Program and Temporary Traffic Calming Measures Program, which focus on local and collector streets rather than major arterials. Baseline Road, being a key arterial corridor and a planned transit priority route under the Transportation Master Plan, is not targeted for traditional traffic calming measures such as speed humps or curb extensions. Instead, improvements along Baseline Road are centred on transit enhancements, intersection upgrades, and safety initiatives outlined in the Road Safety Action Plan, including measures like automated speed enforcement and pedestrian signal improvements where warranted.

Other Area Developments

A TIA, prepared by Morrison Hershfield in October 2019, was submitted to the City of Ottawa in support of a Site Plan Control application for 1385 Woodroffe Avenue. The development consists of a two-storey educational and institutional building and is anticipated to be constructed in 2021.

A TIA, prepared by CGH Transportation in January 2021, was submitted to the City of Ottawa in support of a Zoning By-law Amendment application for 19 Centerpointe Drive. The development consists of a two-storey 585-unit apartment building and is anticipated to be constructed in 2023.

2.4. Study Area and Time Periods

Study Area

The proposed study area for this proposed development includes the following intersections:

- Baseline Road & Woodroffe Avenue
- Baseline Road & Driveway Access North
- Baseline Road & College Square SC
- Baseline Road & Navaho Drive
- Navaho Drive & Woodroffe Avenue
- Navaho Drive & Wajashk Private
- Navaho Drive & Driveway Access South
- Woodroffe Avenue & Driveway Access West

Time Periods

Chick-fil-A restaurants across Ontario open at 10:30 AM. As a result, the weekday morning peak hour is not included in the traffic analysis. In areas with retail, institutional, or mixed-use developments, traffic volumes often surge around lunchtime. The proposed development is part of a large-scale commercial retail centre that includes big-box stores, restaurants, and service-oriented businesses such as The Beer Store and McDonald's. Major anchors like Loblaws and Home Depot further contribute to the site's high traffic generation. Although the shopping centre is adjacent to institutional uses (Algonquin College), the land use at this location is predominantly commercial retail. Given this context, the traffic analysis focuses on both weekday and weekend afternoon peak hours, which represent the "worst-case" traffic conditions. This is particularly relevant for a quick-service restaurant with a drive-through, which is expected to generate its highest traffic volumes during these periods.

Horizon Years

A full buildout of the proposed development is envisioned by 2027. The scope of the transportation assessment includes the following horizon years:

- 2025 Existing Conditions
- 2027 Future Background Conditions
- 2027 Future Total Conditions (full build-out year)
- 2032 Future Background Conditions
- 2032 Future Total Conditions (5 years after the build-out year)

2.5. Exemption Review

The Exemptions Review table from the City of Ottawa Transportation Impact Assessment Guidelines is summarized in *Table 6*.

Table 6: Exemptions Review

Module	Element	Exemption Considerations	Exempt ? (Yes/No)
4.1 Development Design	4.1.1 Design for Sustainable Modes	All	No
	4.1.2 Circulation and Access	All site plan and zoning by-law applications	No
	4.1.3 New Street Networks	Only required for plans for subdivision	Yes
4.2 Parking	4.2.1 Parking Supply	All site plan and zoning by-law applications	No
	4.2.2 Spillover Parking	Section removed from TIA	Yes
4.3 Boundary Street Design	N/A	All	No
4.5 Transportation Demand Management	4.5.1 Context for TDM	All	No
	4.5.2 Need and Opportunity	All	No
	4.5.3 TDM Program	All	No
4.6 Neighbourhood Traffic Calming	N/A	If the development meets all of the following criteria along the route(s) site generated traffic is expected to utilize between an arterial road and the site's access: 1. Access to Collector or Local; 2. "Significant sensitive land use presence" exists, where there is at least two of the following adjacent to the subject street segment: o School (within 250m walking distance); o Park; o Retirement / Older Adult Facility (i.e. long-term care and retirement homes); o Licenced Child Care Centre; o Community Centre; or o 50%, or greater, of adjacent property along the route(s) is occupied by residential lands and a minimum of 10 occupied residential units are present on the route; 3. Application is for Zoning By-Law Amendment or Draft Plan of Subdivision; 4. At least 75 site-generated auto trips; 5. Site Trip Infiltration is expected. Site traffic will increase peak hour vehicle volumes along the route by 50% or more.	Yes
4.7 Transit	4.7.1 Transit Route Capacity	> 75 site transit trips	Yes
	4.7.2 Transit Priority Requirements	> 75 site auto trips	Yes
4.8 Network Concept	N/A	When proposed development generates > 200 person-trips during the peak hour in excess of the equivalent volume permitted by established zoning.	Yes
4.9 Intersection Design	4.9.1 Intersection Controls (including site accesses)	> 75 site auto trips	No
	4.9.2 Intersection Design	> 75 site auto trips	No

3. FORECASTING

3.1. Development-generated Travel Demand

Trip Generation and Mode Shares

As noted earlier, the existing site currently operates as a retail outlet (The Beer Store) that selling beer beverages, with an associated surface parking lot. Based on Google Maps data, the Beer Store occupies approximately 624 m² (6,717 ft²). Trip generation estimates for the Beer Store were derived using the ITE Trip Generation Manual, 12th Edition, under Land Use Code (LUC) 899 – Liquor Store. It is important to note that the Beer Store does not operate during the morning peak period, and the proposed Chick-fil-A development is also not expected to generate trips during this time. Therefore, no trip generation estimates have been provided for the AM peak hour. A comparison of trip generation between the existing and proposed land uses is provided in *Table 7* to illustrate the change in auto trips.

Table 7: Summary of Vehicle Trip Generation Comparison (Auto Trip)

ITE Land Use	Size	Independent Variable	Weekday PM Peak Hour			Weekend PM Peak Hour		
			In	Out	Total	In	Out	Total
Liquor Store (LUC 899)	6,717 ft² GFA	1,000 ft² GFA	56 (50%)	56 (50%)	112 (100%)	55 (51%)	53 (49%)	108 (100%)
Fast-food restaurant with Drive-Through Window (LUC 934)	4,560 ft² GFA	1,000 ft² GFA	75 (52%)	69 (48%)	144 (100%)	118 (51%)	113 (49%)	231 (100%)
Difference			+19	+13	+32	+63	+60	+123

As shown, the proposed development is expected to generate 32 and 123 additional auto trips during the weekday PM and weekend PM peak hours compared to the existing Beer Store. For this assessment, existing auto trips generated by the shopping centre will be included in the background traffic to avoid double-counting trips associated with the proposed development.

3.1.1.1. Proxy Site – 2331 Appleby Line, Burlington

A proxy site survey was conducted at the Chick-fil-A restaurant located at 2331 Appleby Line, Burlington on Saturday January 31st, 2026, and Tuesday February3rd, 2026. Both survey were conducted between 11:00 AM and 7:00 PM. The Burlington Chick-Fil-A shares similar characteristics with the proposed Chick-Fil-A development. It has a slightly larger GFA approximately 452m2 and is within a large commercial area near an intersection with two arterial roads. The results of the site visit found that the peak hours were 12:15-1:15 during the weekday, and 1:00-2:00 during the weekend. Trip generation characteristics survey from the Chick-Fil-A are provide in **Table 8** and detailed survey sheets are provided in appendix. **Table 9** summarizes the differences in trip generation between the survey and the ITE rates.

The survey results indicate that proxy trip generation is slightly lower than the ITE trip estimates during the weekend peak hours. In contrast, the weekday PM peak hour survey data shows a noticeable increase in trip generation. Accordingly, an additional scenario will be analyzed for the future 2032 condition using the proxy weekday PM peak hour trip generation to assess the potential traffic impacts of the development using a more conservative scenario.

Table 8: Burlington CFA Trip Generation and Drive Through

	Weekday Peak Hour Tuesday (Feb 3rd) 12:15-1:15 PM		Weekend Peak Hour Saturday (Jan 31st) 1:00 – 2:00 PM	
	In	Out	In	Out
Trip Generation	170		229	
	75	95	114	115
Drive Through	120		103	
	60	60	55	58
% Drive Through Trips	71%		45%	
	80%	63%	48%	50%

Table 9: Burlington CFA Trip Generation VS ITE Trip Generation

	Weekday Peak Hour Tuesday (Feb 3rd) 12:15-1:15 PM		Weekend Peak Hour Saturday (Jan 31st) 1:00 – 2:00 PM	
	In	Out	In	Out
Proxy CFA Trip Generation	170		229	
	75	95	114	115
ITE Trips	144		231	
	75	69	118	113
Difference	26		-2	
	0	26	-4	2

Person-Trips and Mode Shares

The ITE Trip Generation Manual recommends using a vehicle occupancy factor of 1.28 person-trips per vehicle trip to convert auto trips to person-trips. Based on this factor, the proposed development is expected to generate approximately 41 additional person-trips during the weekday PM peak hour, including 24 inbound and 17 outbound trips, and an additional 157 person-trips during the weekend PM peak hour, including 81 inbound and 76 outbound trips.

Mode share estimates were derived from the 2020 TRANS Trip Generation Manual Summary Report for the Merivale district, based on data from the National Capital Region Origin-Destination (OD) Survey. Although the proposed development is a fast-food restaurant, mode shares for employment generators were used due to the regular nature of staff and service provider trips, which are typically tied to shift schedules.

While the TRANS report provides mode shares for trips to employment generators, these shares are generally applicable to outbound trips as well, given the tendency of employees to use the same mode for both directions. Therefore, AM peak mode shares were used to approximate PM peak travel behaviour. The typical mode share distribution for land uses in Merivale is presented in *Table 8*.

Table 10: 2020 TRANS Mode Shares - Merivale

Travel Mode	Employment Generator
Auto-Driver	70%
Auto-Passenger	7%
Transit	16%
Cycling	3%
Walking	4%
Total	100 %

Table 11: Proposed Development Mode Shares

Travel Mode	Employment Generator
Auto-Driver	65%
Auto-Passenger	5%
Transit	20%
Cycling	5%
Walking	5%
Total	100 %

Given the site's proximity (approximately 650 m to 1 km) to Baseline Station, a major OC Transpo transit hub, a modest increase in transit and walking mode shares is considered achievable. Applying these mode share targets to the estimated person-trips during both peak hours, the projected person-trips by mode are summarized in Table 12.

Table 12: Trip Generation by Mode

Travel Mode	Modal Share		Weekday Peak Hour			Weekend Peak Hour		
			In	Out	Total	In	Out	Total
Fast-food restaurant with Drive-Through Window	**Auto Driver**	**65%**	**16**	**11**	**27**	**53**	**49**	**102**
	Auto Passenger	5%	1	1	2	4	4	8
	Transit	20%	5	3	8	16	15	31
	Cycling	5%	1	1	2	4	4	8
	Walking	5%	1	1	2	4	4	8
Total Person Trips			24	17	41	81	76	157

As shown, the proposed development is expected to generate 27 two-way auto trips during the weekday PM peak hour and 102 two-way auto trips during the weekend PM peak hour.

3.2. Trip Distribution

To understand the travel patterns associated with the proposed development, the Origin-Destination (OD) Survey for the Merivale district was reviewed. The survey provides insights into existing travel behaviour in the area, which were used to inform the directional distribution of site-generated trips.

Table 13: OD Survey Existing Trip Distribution - Merivale

To/From	% of Trips
North	20 %
South	15 %
East	50 %
West	15 %
Total	100 %

The proposed development at 1984 Baseline Road is located near the western portion of Baseline Road, a principal east-west arterial that connects residential neighborhoods, commercial areas, and employment zones. This corridor experiences significant traffic volumes in both directions.

Site-generated trips were distributed to and from the surrounding road network based on observed traffic patterns and the configuration of adjacent streets. The assumed trip orientation and distribution percentages are considered reasonable given the site's location and the surrounding land use and transportation context.

Trip Assignment

Based on the trip distribution outlined in Section 3.1.1.3, along with turning movement splits and the configuration of adjacent transportation infrastructure, site-generated trips have been assigned to the surrounding road network. The proposed development is located within College Square Mall, which features multiple access points. These access points allow vehicles to enter and exit from various directions, helping to distribute site-generated traffic across the local road network and reduce potential congestion at any single location.

Figure 12 illustrates the directional assignment of site-generated trips by percentage, while *Figure 13* presents the corresponding assigned vehicle volumes during the peak hours.

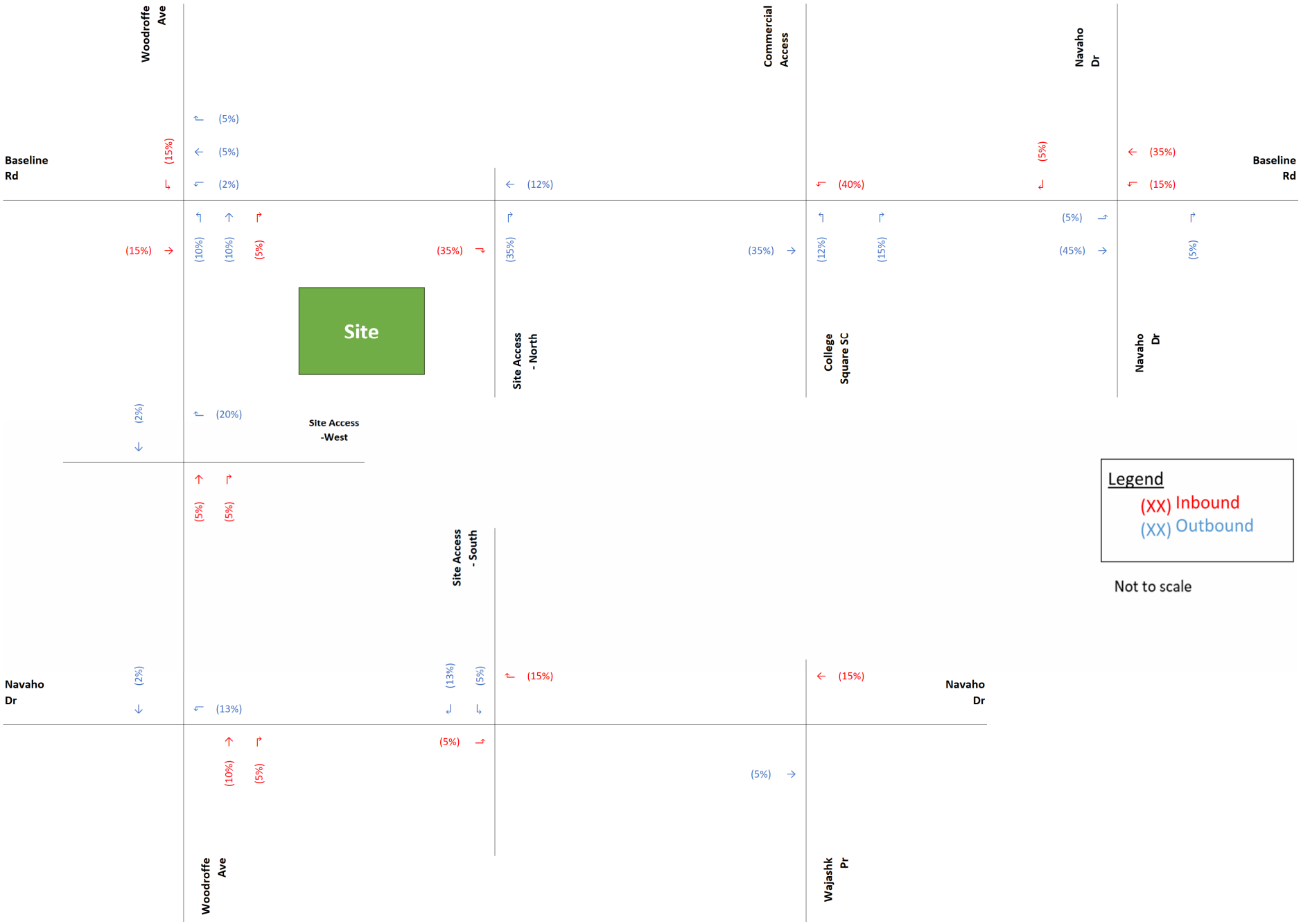


Figure 12: Proposed Development-Generated Trips Assignment (%)

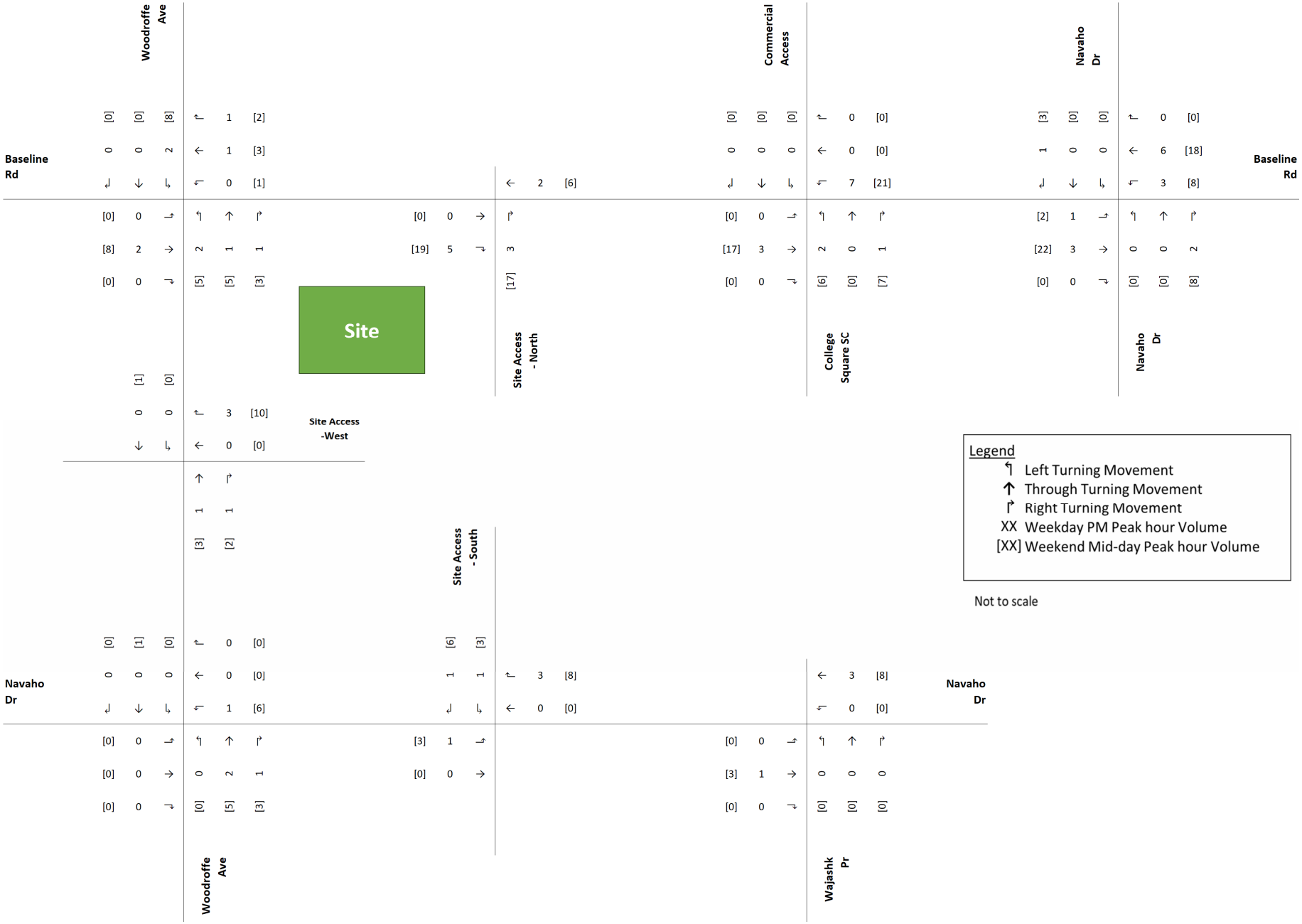


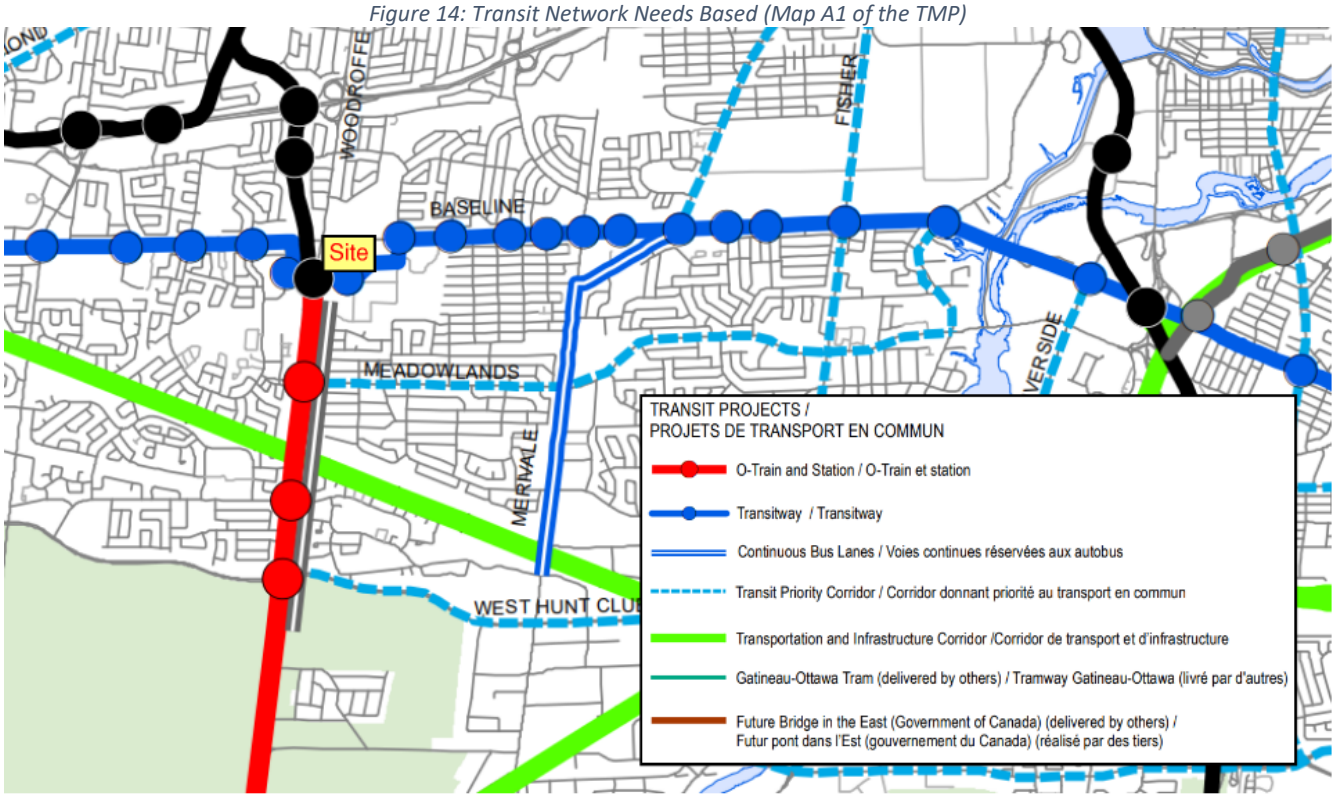
Figure 13: New Site Generated Trip Volumes

3.3. Background Network Travel Demands

Transportation Network Plans

The 2025 TMP Update indicates planned infrastructure projects within the study area. The Needs-Based Transit Network of the TMP as shown in Figure 14 illustrates the City of Ottawa's mobility needs for 2046 based on the Official Plans population and employment growth projections. The needs-based Transit network indicates a transit way project is proposed along Baseline Road & Navaho Drive within the study area. In addition, an O-Train and station project will extend the existing rapid transit connectivity south along Woodroffe Avenue. These projects are anticipated to increase the transit ridership within the study area.

Figure 14: Transit Network Needs Based (Map A1 of the TMP)



Background Growth

A review of the TRANS Regional Model projections for the 2022 and 2046 horizons was conducted to determine background growth rates for key study area roadways. The directional growth rates are summarized in *Table 11*, and supporting model plots are provided in ***Appendix D***.

Table 14: Growth Rates - TRANS Regional Model Projections

Street Name	TRANS Rate			
	Eastbound	Westbound	Northbound	Southbound
Baseline Road	+0.28%	+0.38%	-	-
Woodroffe Avenue	-	-	+0.22%	+0.11%

Between 2022 and 2046, total trips within the study area are projected to increase, reflecting a compounded annual growth rate (CAGR) of 0.50%, which will be applied to estimate future traffic demands and assess long-term impacts of the proposed development.

Other Adjacent Developments

As noted in Section 2.3.1.5, nearby developments at 1385 Woodroffe Avenue and 19 Centrepointe Drive will be incorporated into the 2027 and 2032 future background scenarios using projected traffic volumes. The background volumes for these developments are provided in **Appendix H**.

Future Background Traffic Volumes

An annual growth rate of 0.50 % has been applied to background traffic volumes to account for anticipated growth along the corridor and in surrounding suburban areas. *Figure 15* illustrates the projected background traffic volumes for the 2027 horizon, while *Figure 16* presents volumes for the 2032 horizon.

3.3.1. Future Total Traffic Volumes

The total traffic volumes for the 2027 and 2032 future horizons, which include both background and site-generated traffic, are illustrated in *Figure 17* and *Figure 18*, respectively.

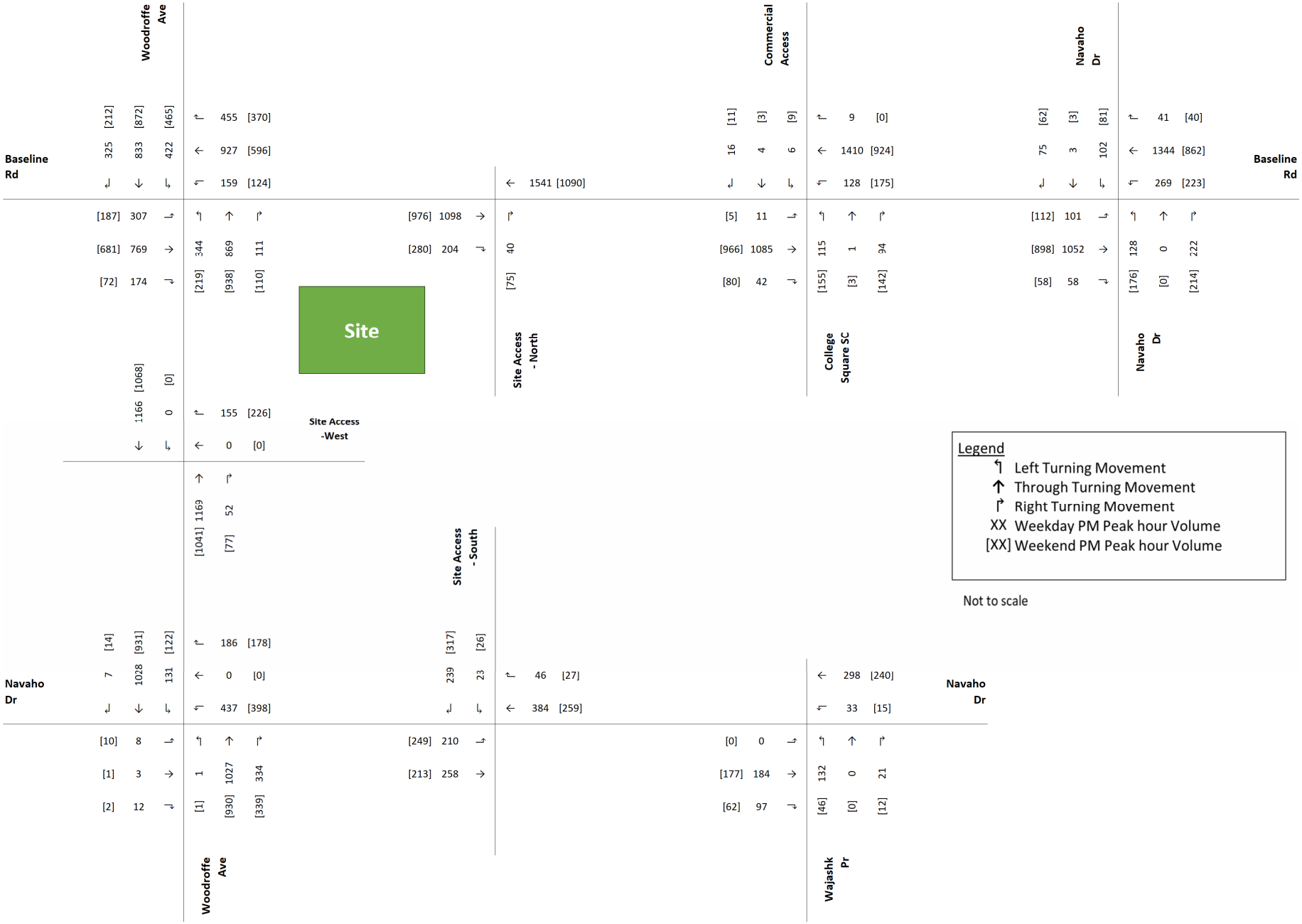


Figure 15: 2027 Background Traffic Volumes

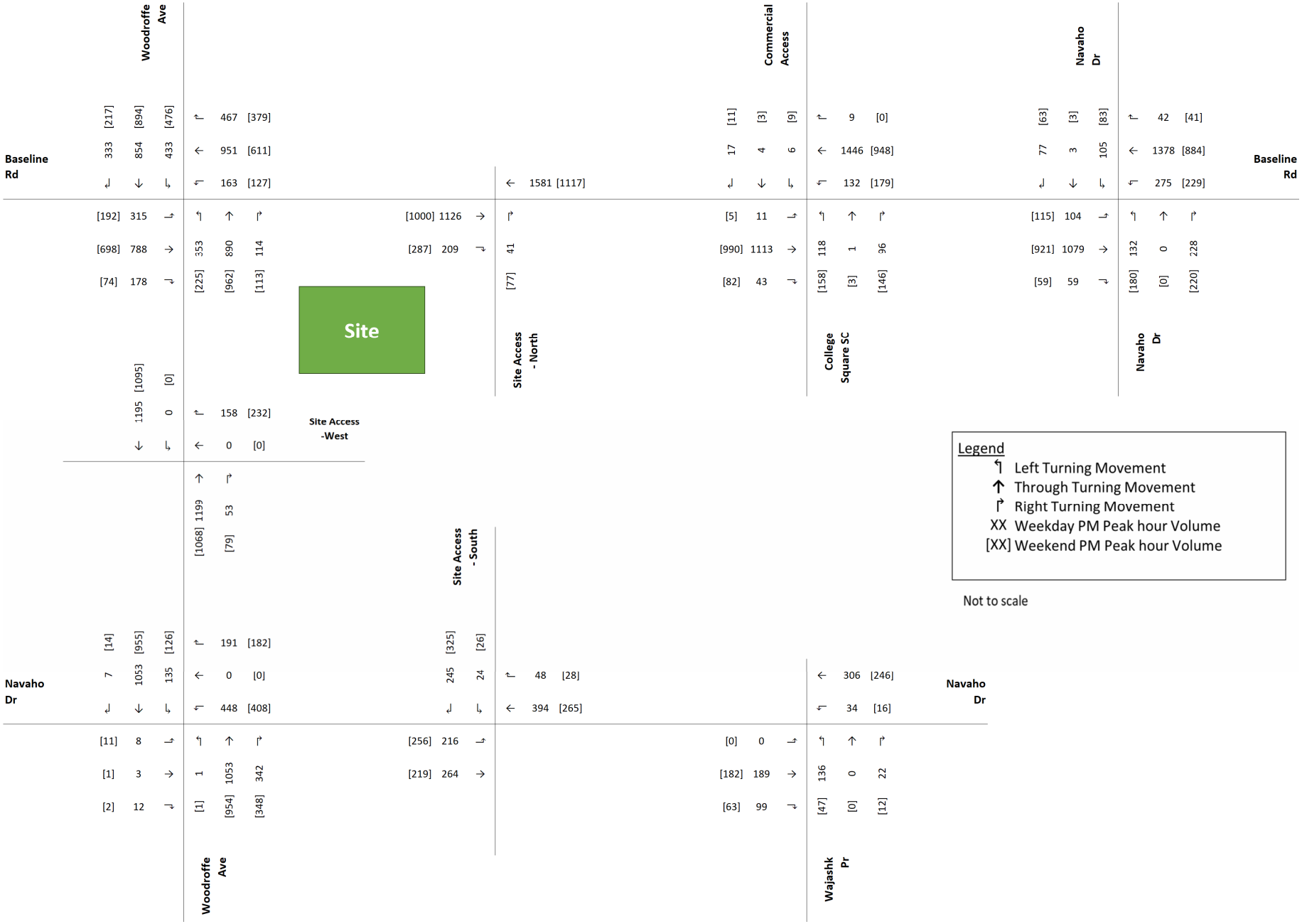


Figure 16: 2032 Background Traffic Volumes

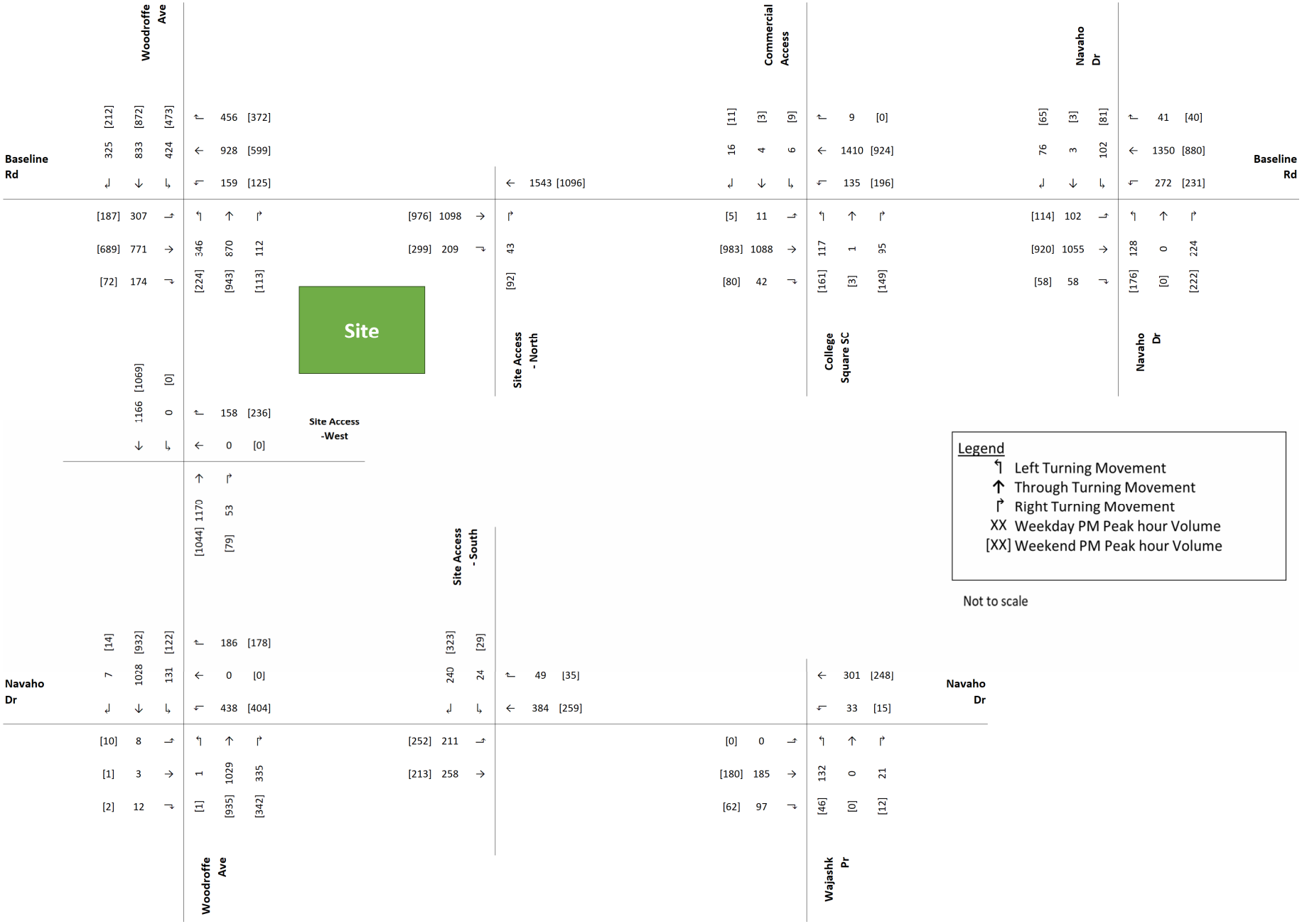


Figure 17: 2027 Total Traffic Volumes

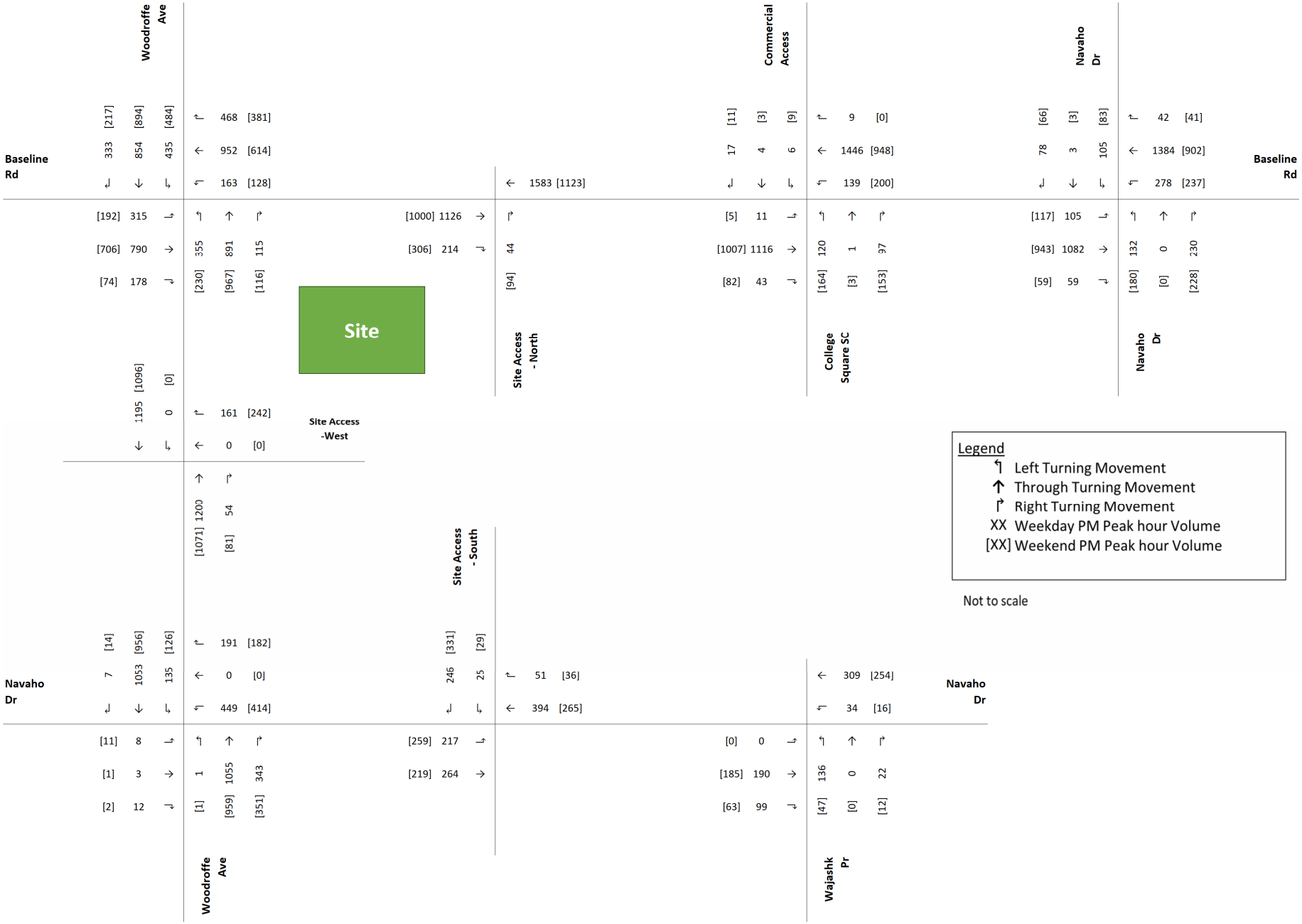


Figure 18: 2032 Total Traffic Volumes

3.4. Demand Rationalization

The existing traffic analysis for 2025, combined with future background traffic projections for 2027 and 2032, indicates persistent capacity constraints for east-west movements at signalized intersections along Baseline Road and Woodroffe Avenue. These constraints are expected to continue into future horizon years, even without the proposed development.

Baseline Road serves as a major arterial corridor connecting residential, commercial, and institutional land uses, resulting in high traffic volumes during weekday peak hours, particularly in the east-west direction.

To address these challenges, rationalizing travel demand through operational improvements, infrastructure upgrades, and travel demand management strategies is essential. Potential measures include:

- Encouraging carpooling through incentives to reduce single-occupancy vehicle trips.
- Expanding transit services by improving frequency, reliability, and affordability to increase ridership.
- Promoting active transportation via investment in safe, connected cycling and pedestrian infrastructure.
- Coordinating with local institutions to stagger start times and reduce peak-hour congestion.
- Supporting flexible work arrangements such as remote work policies to lower peak-period travel demand.

4. ANALYSIS

4.1. Development Design

Design for Sustainable Modes

Pedestrian Facilities

The site plan incorporates several modifications to support active transportation and enhance accessibility for pedestrians. The existing pedestrian pathway west of the site has been relocated further west developing a buffer between the pedestrian pathway and the drive-through. The crosswalk directly south of the main entrance has been realigned to reduce the walking distance on the road. Bike Racks are included along the relocated pedestrian pathway and south of the main entrance.

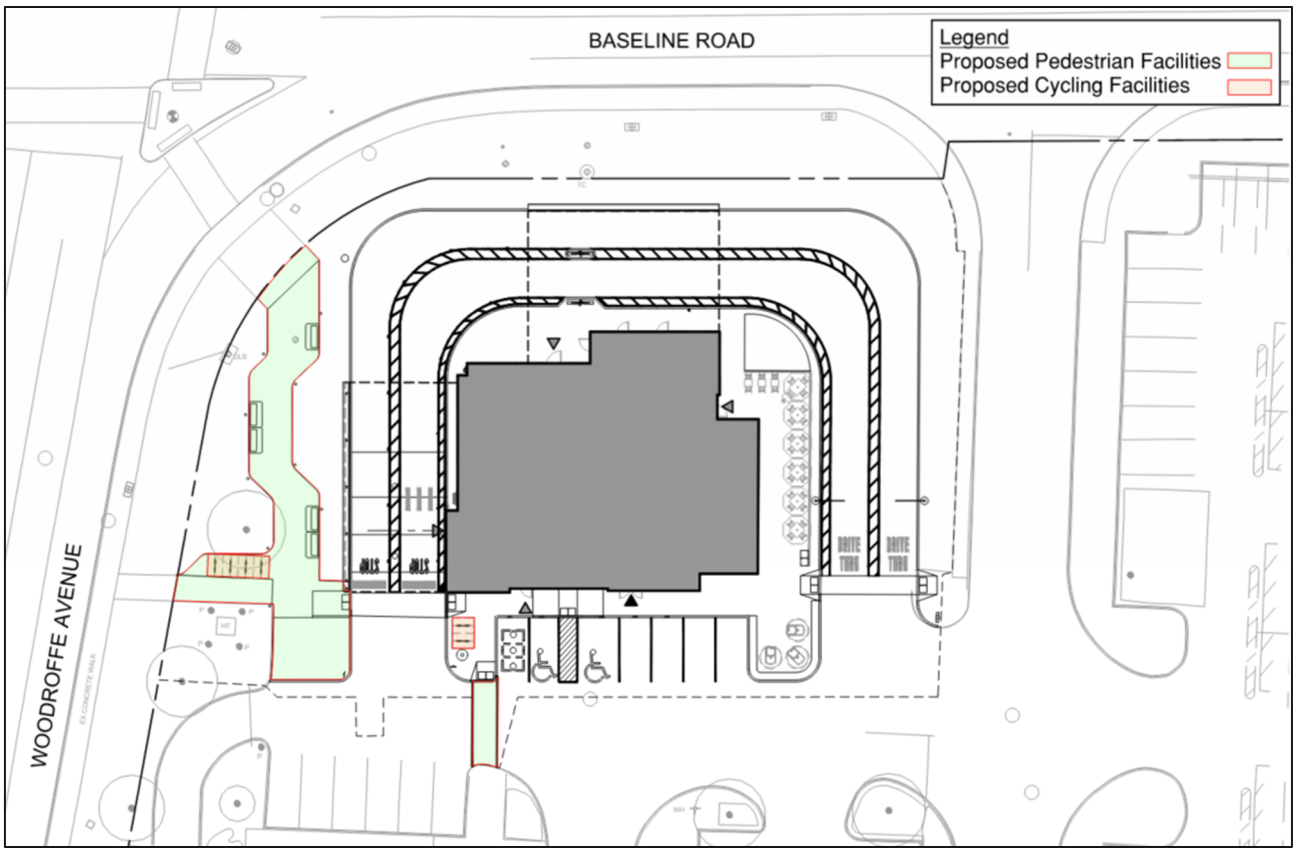


Figure 19: Proposed Pedestrian and Cycling Facilities

Bicycle Parking

12 bicycle parking spaces are provided, supporting active transportation options. This combination of dedicated, shared, and bicycle parking accommodates anticipated demand while promoting multimodal access.

Parking Areas

Parking spaces are located adjacent to the building's south side, with direct pedestrian connections to the main entrance. The By-Law stipulates a maximum parking rate of 4 spaces per 100 m² of gross floor area (GFA), which equates to 19 spaces for the proposed 424.9 m² building. The site plan provides 6 dedicated parking spaces for Chick-fil-A, supplemented by 56 existing shared parking spaces within the commercial plaza, ensuring adequate supply for customer and staff needs. Two barrier-free spaces are included one Type 'A' (3.45 m × 5.2 m) and one Type 'B' (2.45 m × 5.2 m) to meet accessibility standards.

Location of Transit Facilities

The site is well-served by existing public transit, with OC Transpo bus stops #2953 and #4540 located along Woodroffe Avenue, bus stop #2909 on Baseline Road, and bus stop #4511 on Navaho Drive. These stops serve routes 68, 87, and 88 and are all within approximately 600 meters walking distance of the proposed development. In addition, a major bus terminal is located about 400 meters from the site, adjacent to Algonquin Station (currently Baseline Station), which will become the terminus for the O-Train Line 1 West Extension. The location of bus routes and stops serving the area is illustrated in Section 2.2.6.

Circulation and Access

Figure 20 illustrates the site demonstrating the internal driveway circulation designed to optimize vehicle flow and minimize conflicts between vehicles, pedestrians, and cyclists. The proposed vehicle movements for passenger, delivery, and garbage vehicles are shown in Figure 21 and Figure 22. The proposed site layout provides a clear and efficient circulation pattern for both customer vehicles and drive-through traffic. Vehicles enter the site from the internal plaza drive aisles, with multiple access points directing traffic toward the parking area and the drive-through lane. The drive-through is designed as a one-way loop wrapping around the building, allowing vehicles to queue along the north and east sides before reaching the order and pickup windows on the south façade. A minimum of eight queuing spaces is provided within the drive-through lane, ensuring adequate storage without interfering with internal circulation. The circulation plan minimizes conflict points by separating drive-through traffic from general parking movements and maintaining sufficient aisle width for two-way flow. Overall, the design supports safe and efficient operations for vehicles, pedestrians, and service access.

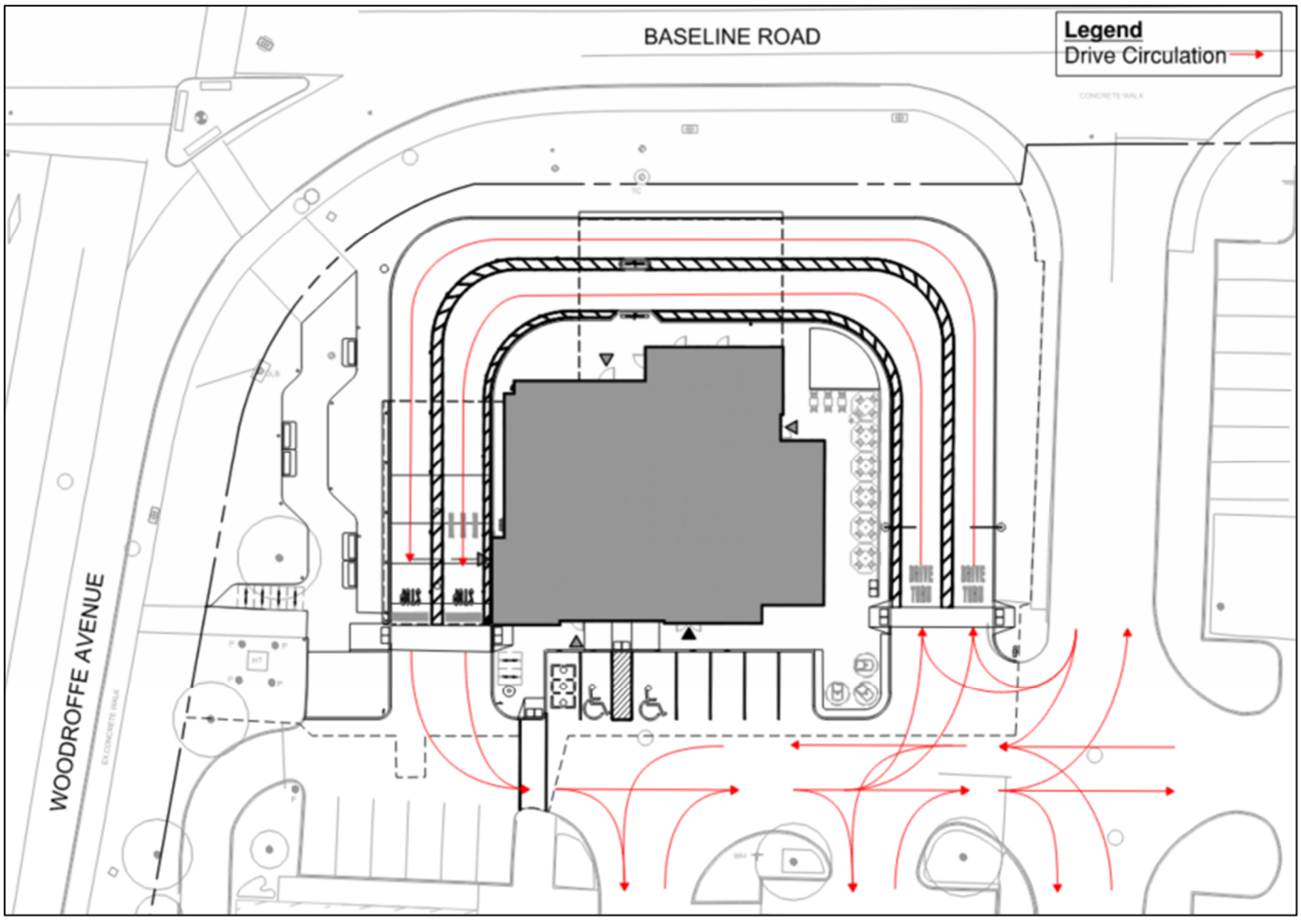


Figure 20: Internal Driveway Circulation

Figure 21: Passenger Vehicle Movements

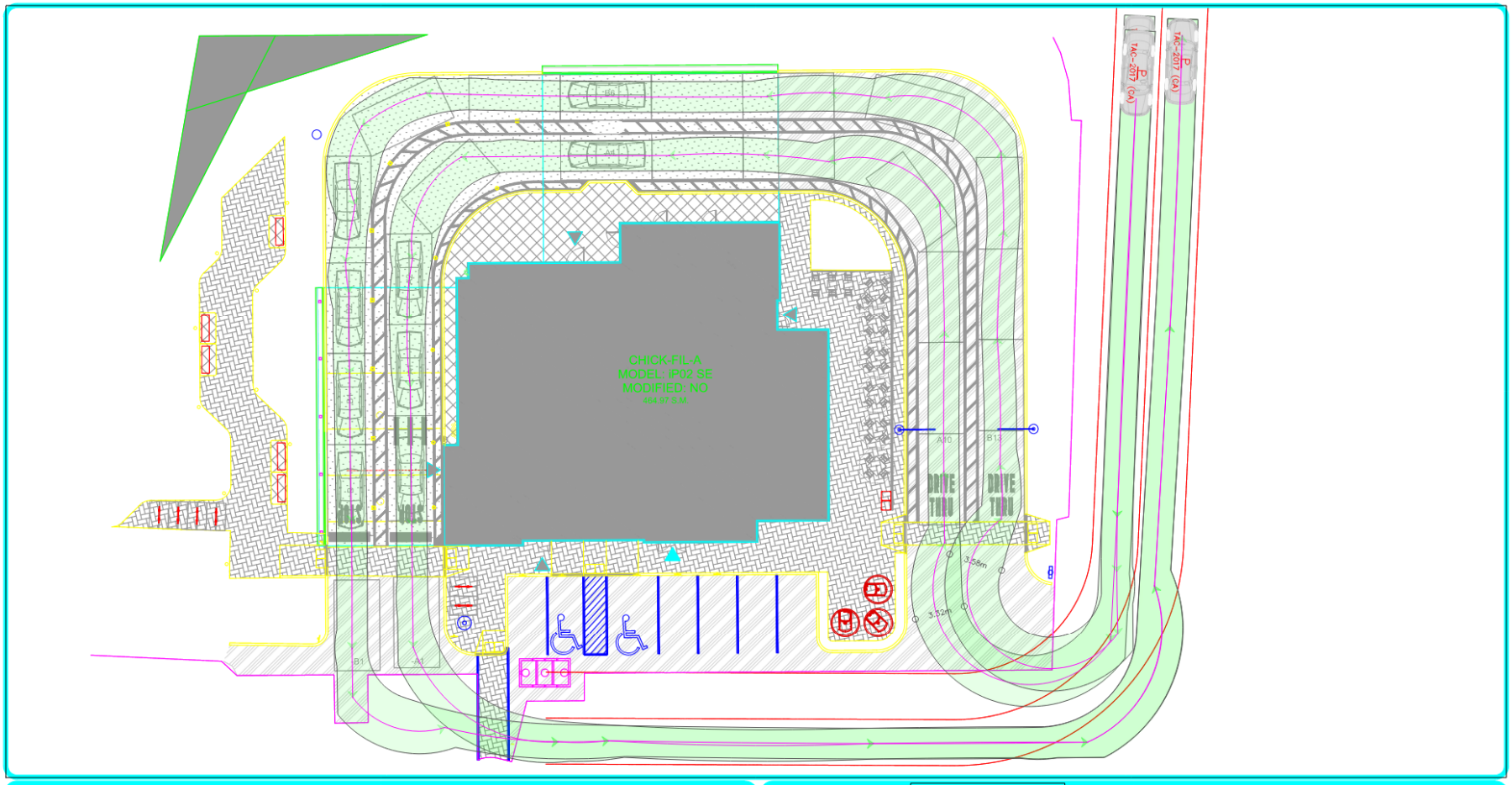
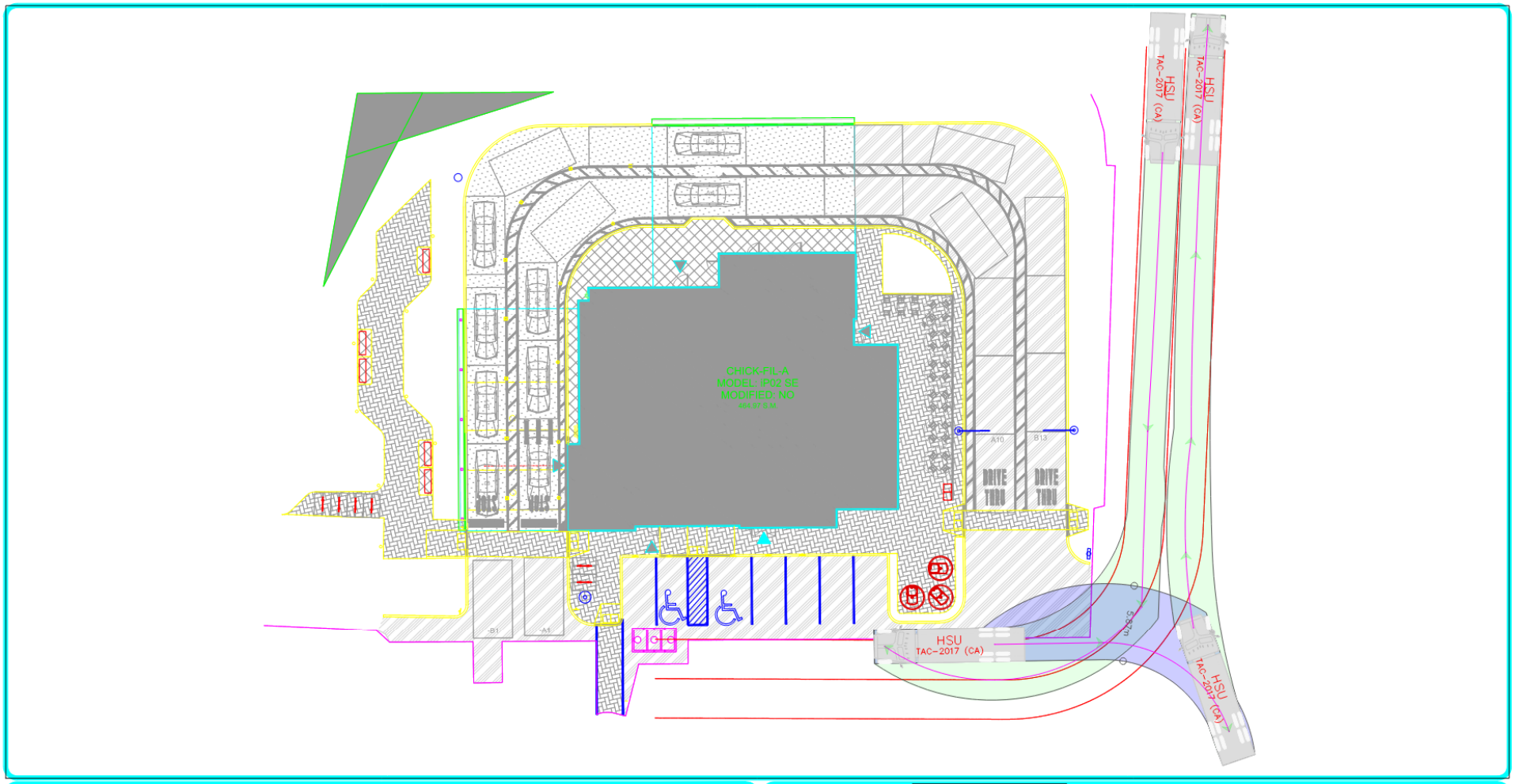
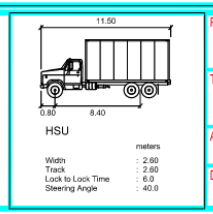


Figure 22: Delivery Vehicle & Garbage Vehicle Movements



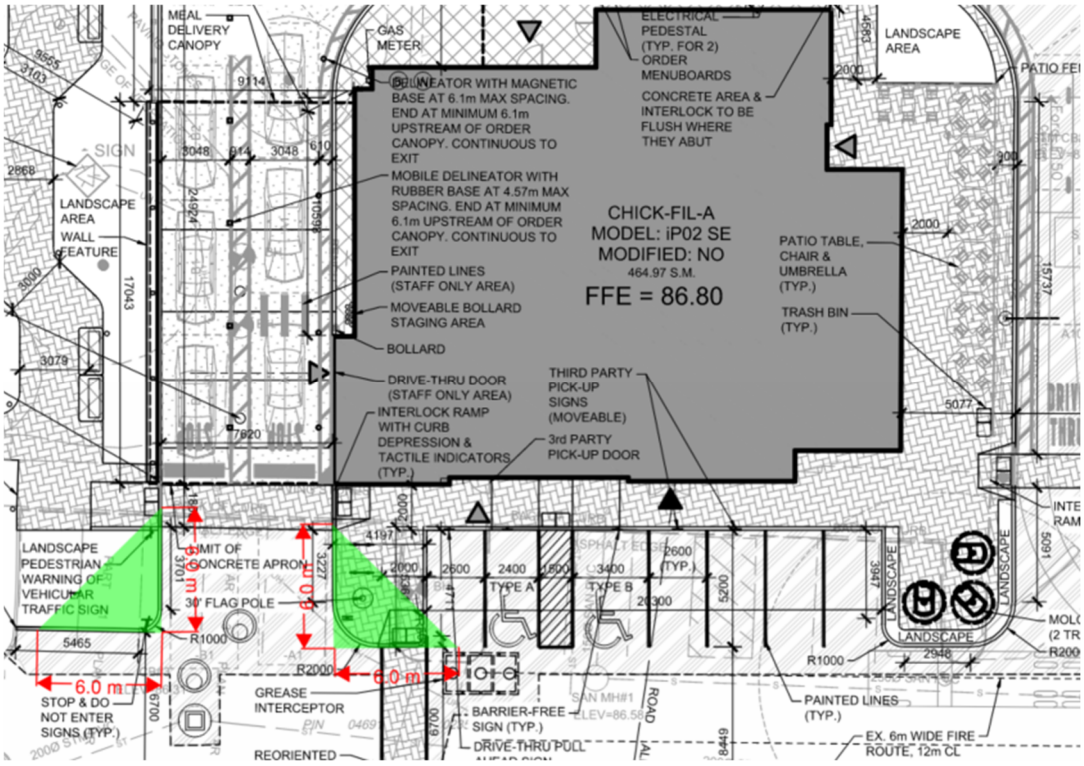


Project: CHICK-FIL-A 1984 BASELINE ROAD		
Title: HSU VEHICLE MOVEMENTS		
Approved by: RZ	Date: 2026-02-04	Project No.: BRM-23002042-W0
Drawn by: TH	Scale:	Figure no.: 2

Corner Sight Triangles

The site plan proposes a detached building located on a corner lot. Section 57 of the City of Ottawa Zoning By-law 2008-250, outlines that no obstructions to the vision of motor vehicle operators higher than 0.75 meters above grade is permitted within the corner sight triangle. Figure 23 below demonstrates that the site plan adheres to the corner sight triangles sightlines within the site plan.

Figure 23: Corner Sight Triangles within the site plan



4.2. Queuing

Drive-Through Overview

Chick-fil-A has a unique service model for outdoor guest service. Guests and third-party order Aggregators (e.g., DoorDash, Uber Eats, etc.), who choose to pick up food using outdoor guest service options, enter a double-lane drive-through located at the southwest corner of the development. Orders will be placed at a dual-order point canopy. During peak hours, staff are equipped with electronic handheld devices to assist guests with their orders at the "order point canopy". During non-peak hours, the drive-through lanes are equipped with stationary order points at the canopy, allowing team members inside the restaurant to assist orders via an intercom system.

After orders are taken, vehicles proceed counterclockwise around the south side of the building while meals are prepared. As vehicles approach the northeast corner of the building, they will enter a double-lane Meal Delivery Area where team members can deliver meals to vehicles.

The drive through provides a total storage queue of 27 vehicles distributed between the two lanes.

The inner lane provides storage queue of 12 vehicles (6 between the order point canopy and meal delivery area, 7 between the order point canopy and entrance to the drive-through), and the outer lane provides storage queue of 15 vehicles (6 between the order point canopy and meal delivery area, 9 between the order point canopy and entrance to the drive-through).

Operational Analysis

A queueing assessment was undertaken to evaluate the potential for queues to extend beyond the drive-through entrance.

The following assumptions were used:

- Queuing was estimated based on an M/M/N model (Poisson arrival, Poisson service, dual server)
- The cycle time per order is referenced from information provided to EXP by Chick-fil-A.
- The number of vehicles serviced is derived from the proxy site drive-through survey. The highest inbound drive through trips were used to project worst observed conditions; **66** inbound drive-through trips were observed between 1:30 – 2:30 PM on Saturday.

Three queues were estimated: Single Order (the queue for the order window with a single queue lane), Dual Order (the queue for the order window with a dual order lane), and Service Area (the order window to service window queue). The probability of the queue exceeding the available drive-through storage was calculated, with supportingp calculations and assumptions provided in **Appendix I**.

The results indicate that the probability of the queue length exceeding one vehicle during the anticipated peak hour is approximately 13.0%. Our analysis indicates that there is a low probability of the queue exceeding the available storage space. It is expected that vehicles queuing for the drive-through will seldomly impact the internal laneway or disrupt traffic circulation within the Chick Fil A.

4.3. Parking

Parking Supply

The subject site is located in Area B on Schedule 1 and Area Z on Schedule 1A of the City of Ottawa Zoning By-law. In accordance with Section 103, sites within 600 meters of a rapid transit station identified on Schedule 2B such as Algonquin Station (currently Baseline Station) are subject to maximum parking requirements rather than minimums. For this development, the applicable maximum vehicular parking and minimum bicycle parking rates are summarized in *Table 15.*

Table 15: Vehicle and Bicycle Parking Requirements Per Zoning By-Law

Land Use	Rate	Units/GFA	Requirement
Vehicle Parking			
Retail Store; Retail Food store	3.6 per 100m^2 of gross floor area	424 m^2	15 Parking Space
		Total Maximum Vehicle Parking	**15 Parking Spaces**
Bicycle Parking			
Restaurant	1 per 250 m2 of gross floor area	424 m^2	2 Bicycle Spaces
		Total Minimum Bicycle Parking Required	**2 Bicycle Spaces**

The proposed development will provide six on-site parking spaces, including two accessible spaces, in compliance with the parking requirements outlined in Zoning By-law 2008-250. In addition, a total of 12 bicycle parking spaces is proposed, meeting the minimum requirements for Site Plan approval under the same by-law.

4.4. Boundary Street Design

Existing and Future Conditions

The City of Ottawa has adopted a Complete Streets approach to transportation planning, prioritizing safety, comfort, and mobility for all users regardless of age, ability, or travel mode. This section reviews the boundary streets using Complete Streets principles. The 2025 iteration of the Multi-Modal Level of Service (MMLOS) guidelines builds upon the 2022 Official Plan, the 2023 Transportation Master Plan, and the 2015 MMLOS guidelines developed by IBI Group. These guidelines were applied to evaluate the level of service for each mode along the boundary roadways. Schedule B3 of the Official Plan identifies the entire study area road network as part of Mainstreet corridors within the Outer Urban Area. Table 14 summarizes the MMLOS analysis for the adjacent road segments, with detailed results provided in **Appendix J**.

Table 16: Multi-Modal Level of Service – Boundary Street Segment

Road Segment	Pedestrian		Bicycle		Transit		Public Realm	
	P-LOS	Target	B-LOS	Target	T-LOS	Target	PR-LOS	Target
Baseline Road (Woodroffe Ave to Navaho Dr)	C	A	D	A	N/A[1]	N/A[1]	C	C
Woodroffe Avenue (Baseline Rd to Navaho Dr)	C	A	D	A	E	E	C	C

1 Not applicable as there is no transit for the segment

Pedestrian Level of Service (P-LOS) Under existing conditions, both Baseline Rd and Woodroffe Ave do not meet P-LOS targets. To achieve the target, the following improvements are recommended:

a. Provide a sidewalk at least 1.5 m wide with a 0.5 m boulevard
b. Reduce the maximum distance between pedestrian crossings to less than 200 m.

Bicycle Level of Service (B-LOS) Under existing conditions, both Baseline Rd and Woodroffe Ave do not meet B-LOS Targets. To achieve the target, it is recommended to provide a 1.5 m wide cycling facility with a paved shoulder and buffer.

Transit Level of Service (T-LOS) Under existing conditions all road segments meet T-LOS requirements.

Public Realm Level of Service (PR-LOS) Under existing conditions, all road segments meet PR-LOS requirements.

4.5. Transportation Demand Management

Context for TDM

The proposed development is expected to generate primarily customer trips, with peak activity during the weekday PM peak hour. The site is located within a Transit-Oriented Development (TOD) zone as identified in the City's Official Plan and currently operates as a Beer Store with hours from 10:00 AM to 9:00 PM, Monday to Saturday. Given its location within a major shopping center and proximity to Algonquin College, a significant portion of trips during peak periods will interact with surrounding land uses, creating opportunities for integrated travel behavior.

Need and Opportunity

In alignment with the City's mode share targets outlined in the 2013 Transportation Master Plan, strategies that promote sustainable transportation are encouraged. These measures include improving access for active modes such as walking and cycling, providing secure bicycle parking, and designing pedestrian-friendly pathways. Implementing these strategies will help reduce reliance on single-occupant vehicles and support the City's Complete Streets and TOD objectives.

TDM Program

The following measures have been selected from the City of Ottawa's Transportation Demand Management (TDM) Measures Checklist, Version 1.0 (June 30, 2017) to support sustainable travel options for the proposed development:

- 1.1.1 Designate an internal coordinator or contract with an external coordinator.
- 1.2.1 Conduct periodic surveys to identify travel-related behaviors, attitudes, challenges, and solutions, and track progress.
- 3.1.1 Display relevant transit schedules and route maps at entrances.
- 3.1.2 Provide online links to OC Transpo and STO information.
- 4.1.1 Provide a dedicated ride-matching portal at OttawaRideMatch.com.
- 7.1.1 Provide a multimodal travel option information package to new or relocating employees and students.
- 8.3.1 Provide local business travel options that minimize the need for employees to bring a personal car to work.

The TDM infrastructure checklist and detailed measures are reviewed and included in **Appendix K**.

4.6. Neighbourhood Traffic Calming

The proposed development will not require any additional Neighbourhood Traffic Calming measures, as site access is provided via internal plaza driveways and does not rely on local or collector streets.

4.7. Transit

Transit Route Capacity & Transit Priority

Transit Route Capacity requirements are exempt because the development is expected to generate fewer than 75 transit trips. Similarly, Transit Priority measures are exempt as the site is anticipated to generate fewer than 75 auto trips during the peak hour.

4.8. Review of Network Concept

The subject site is zoned Mixed Use – Commercial Zone II (MC F(1.5) H(34)) under the City of Ottawa Zoning By-law 2008-250. In accordance with Section 3.1.1, developments generating fewer than 200 peak-hour vehicle trips are exempt from the network adequacy review component of the Transportation Impact Assessment (TIA). Therefore, this requirement does not apply to the proposed development.

It is noted that the City of Ottawa is currently reviewing and approving a new Transportation Master Plan and Capital Infrastructure Plan, which may introduce changes or new concepts to the future transportation network.

4.9. Intersection Design

This section reviews the study area intersections using Complete Streets principles. The Multi-Modal Level of Service (MMLOS) worksheets provided by the City of Ottawa in May 2025 were used to evaluate the LOS for all intersections across each transportation mode. According to Schedule B3 of the Official Plan, the entire study area road network is designated as part of the Mainstreet corridors within the Outer Urban Area.

The following sub-sections provide total traffic analysis (including a combination of background traffic and development-generated traffic), including the multi-modal level of service analysis and vehicle level of service analysis considered.

Intersection Control

The five signalized study area intersections, Baseline Road & Woodroffe Avenue, Woodroffe Avenue & Navaho Drive, Baseline Road & Navaho Drive, Baseline Road & College Square, and Navaho Drive & Wajashk Private will remain to operate as signalized intersections. The stop-controlled site access on Baseline Rd & College Square will continue to ensure safe site access and maintain free-flow traffic on Baseline Road.

Intersection Design

Existing Intersection MMLOS Analysis

All study area intersections are located within 600 m of a rapid transit Station. *Table 17* summarizes the findings of the intersection MMLOS analysis.

Table 17: Multi-Modal Level of Service - Intersection

Intersection		LEVEL OF SERVICE BY MODES							
		Pedestrian		Bicycle		Transit		Auto Vehicle	
		PLOS	Target	BLOS	Target	TLOS	Target	AutoLOS	Target
Baseline Road & Woodroffe Avenue	North Leg	E	A	F	A	F	E (D for frequent transit routes)	F	E
	South Leg	E		F		E			
	East Leg	E		E		F			
	West Leg	E		F		E			
	Overall	**E**		**F**		**E**			
Woodroffe Avenue & Navaho Drive	North Leg	E	A	F	B	B	E (D for frequent transit routes)	C	E
	South Leg	E		E		C			
	East Leg	D		F		A			
	West Leg	C		F		A			
	Overall	**D**		**F**		**B**			
Baseline Road & Navaho Drive	North Leg	B	A	E	B	D	N/A[1]	D	E
	South Leg	B		E		D			
	East Leg	D		E		D			
	West Leg	D		D		D			
	Overall	**C**		**D**		**D**			
Baseline Road & College Square	North Leg	B	A	B	B	C	N/A[1]	B	E
	South Leg	B		B		B			
	East Leg	D		F		B			
	West Leg	D		C		A			
	Overall	**C**		**C**		**B**			
Navaho Drive & Wajashk Private	North Leg	-	A	-	B	-	N/A[1]	B	E
	South Leg	B		A		A			
	East Leg	B		D		B			
	West Leg	B		C		C			
	Overall	**B**		**C**		**B**			

1 Not applicable as there is no existing or proposed transit

Detailed intersection MMLOS calculations can be found in ***Appendix K***.

Pedestrian Level of Service (PLOS): PLOS targets are not met at any of the study area intersections due to factors such as the large number of travel lanes to cross, high right-turning vehicle volumes, and low effective walk times. Potential modifications tested within the MMLOS worksheets to improve PLOS include:

- Adjusting right-turn movements (e.g., RTOR restrictions, protected right turns)
- Implementing Leading Pedestrian Intervals (LPI)
- Applying alternative crosswalk treatments (e.g., textured or colored pavement, high-visibility zebra markings, raised crosswalks)
- Increasing effective walk time

Bicycle Level of Service (BLOS): BLOS targets are not met at any of the study area intersections, primarily due to the lack of dedicated cycling facilities and high vehicle turning volumes. Potential modifications tested within the MMLOS worksheets to improve BLOS include:

- Enhancing cycle facility at intersection legs (i.e. bike lanes, crossride)
- Improving cyclist left-turn treatment at intersections (i.e protected corner, bike boxes, bike queues, physical separation)

Truck Level of Service (TkLOS): The TkLOS was met for all intersections in the study area.

Auto Level of Service (AutoLOS): The AutoLOS was met for all intersections in the study area, except the intersection of Baseline Road and Woodroffe Avenue.

Future Background Traffic Operation Analysis

Intersection capacity analysis has been completed for the 2027 & 2032 background traffic conditions. The intersection parameters used in the analysis are consistent with the TIA guidelines (Saturation Flow rate: 1800 vphpl, peak hour factors were calculated from turning movement count data). The signal timing splits have been optimized in Synchro, minimizing delays and maximizing traffic flow efficiency based on the given parameters and constraints for all intersections within the study area. In this analysis, a maximum cycle length for signalized intersections was established at 130 seconds to optimize traffic flow and accommodate the operational characteristics of the study area.

Table 18 and *Table 19* summarizes the results of the Synchro analysis for the 2027 & 2032 background traffic conditions. Detailed synchro reports are included in **Appendix F**.

Table 18: 2027 Background Intersection Operations

Intersection		Lane	Weekday PM Peak Hour				Weekend PM Peak Hour			
			LOS	Delay (s)	V/C Ratio	95th % Queue (m)	LOS	Delay (s)	V/C Ratio	95th % Queue (m)
Baseline Road & Woodroffe Avenue		**Overall**	**E**	**66.8**	-	-	**E**	**56.2**	-	-
		EB-L	F	105.7	0.99	#68.8	E	73.6	0.79	#41.8
		EB-T	D	49.2	0.81	116.6	D	47.2	0.75	102.4
		EB-R	C	34.3	0.15	20.4	C	33.9	0.05	0.0
		WB-L	F	105.8	0.94	#80.8	F	114.6	0.93	#68.0
		WB-T	E	63.8	0.96	#159.0	D	42.9	0.64	87.3
		WB-R	D	45.2	0.62	82.7	D	42.1	0.50	63.1
		NB-L	E	79.2	0.91	#70.4	E	66.1	0.75	#43.5
		NB-T	F	80.8	1.02	#158.2	E	73.0	1.00	#165.7
		NB-R	C	34.5	0.08	5.4	C	32.8	0.08	5.1
		SB-L	F	103.7	1.02	#88.5	F	87.6	0.97	#92.5
		SB-T	E	60.0	0.93	#143.1	D	40.2	0.77	125.5
		SB-R	D	38.5	0.48	60.6	C	29.6	0.22	28.7
Baseline Road & Driveway Access North (Right-in/right-out Access)		**Overall**	**A**	**0.1**	-	-	**A**	**0.3**	-	-
		EB-TR	A	0.0	0.26	0.0	A	0.0	0.23	0.0
		WB-T	A	0.0	0.45	0.0	A	0.0	0.32	0.0
		NB-R	A	9.3	0.05	1.1	A	9.3	0.08	2.1
Baseline Road & College Square SC		**Overall**	**B**	**14.5**	-	-	**B**	**15.7**	-	-
		EB-L	B	10.0	0.07	3.1	B	11.7	0.02	2.0
		EB-TR	B	13.0	0.44	72.7	B	16.5	0.51	61.3
		WB-L	A	6.4	0.37	18.5	A	8.4	0.49	#36.3
		WB-TR	B	13.3	0.69	176.0	B	12.5	0.52	#97.2
		NB-L	D	36.6	0.53	28.6	C	29.2	0.57	29.1
		NB-TR	C	31.7	0.07	10.3	C	24.0	0.11	10.5
		SB-LTR	C	31.6	0.05	6.8	C	23.7	0.05	5.3
Baseline Road & Navaho Drive		**Overall**	**C**	**31.4**	-	-	**C**	**26.5**	-	-
		EB-L	C	22.8	0.43	31.0	B	10.8	0.25	20.4
		EB-T	D	37.9	0.79	#185.8	C	28.6	0.73	#116.2
		EB-R	D	43.3	0.04	0.0	A	27.1	0.04	0.0
		WB-L	B	18.5	0.58	44.5	B	12.6	0.50	#58.7
		WB-TR	C	22.3	0.74	192.4	C	29.1	0.74	#118.8
		NB-L	E	60.5	0.70	44.5	D	36.7	0.65	37.7
		NB-R	D	40.2	0.15	10.1	A	29.6	0.14	19.6
		SB-LTR	D	51.0	0.59	50.2	B	29.2	0.30	22.7
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station		**Overall**	**C**	**27.3**	-	-	**C**	-	-	-
		EB-L	D	38.5	0.09	6.1	D	39.6	0.12	7.1
		EB-T	D	37.4	0.03	2.3	D	37.3	0.01	1.2
		EB-R	D	37.3	0.02	0.0	D	37.2	0.00	0.0
		WB-L	D	36.6	0.68	34.2	D	33.8	0.65	31.1
		WB-R	D	38.0	0.13	4.7	D	37.8	0.12	3.8
		NB-L	D	53.5	0.12	1.8	D	46.6	0.12	1.8
		NB-T	C	27.0	0.61	#90.5	C	23.2	0.53	75.1
		NB-R	C	22.8	0.23	21.4	C	20.4	0.23	21.6
		SB-L	D	42.9	0.59	#58.8	D	39.5	0.60	#54.0
		SB-T	C	21.0	0.65	#156.2	B	17.6	0.58	#136.6
		SB-R	B	13.2	0.01	0.0	B	12.7	0.02	0.0
Navaho Drive & Wajashk Private		**Overall**	**B**	**16.2**	-	-	**B**	**17.4**	-	-
		WB-L	B	17.2	0.40	24.6	B	18.3	0.42	23.9
		WB-R	B	15.3	0.07	7.1	B	16.1	0.04	5.8
		NE-T	B	15.5	0.11	6.5	B	16.2	0.05	3.9
		NE-R	C	20.7	0.64	39.4	C	20.1	0.56	31.7
		SW-L	A	7.0	0.15	16.5	A	5.8	0.06	7.1
		SW-T	A	6.1	0.01	3.0	A	5.5	0.01	2.2
Woodroffe Avenue & Site Access West (Right-in/right-out Access)		**Overall**	**A**	**0.6**	-	-	**A**	**1.0**	-	-
		WB-R	A	9.9	0.17	4.8	B	10.2	0.25	7.3
		NB-T	A	0.0	0.28	0.0	A	0.0	0.24	0.0
		SB-T	A	0.0	0.23	0.0	A	0.0	0.21	0.0
Navaho Drive & Site Access South		**Overall**	**A**	**5.4**	-	-	**B**	**6.9**	-	-
		EB-L	A	9.0	0.19	5.2	A	8.5	0.20	5.6
		EB-T	A	0.0	0.15	0.0	A	0.0	0.13	0.0
		WB-TR	A	0.0	0.15	0.0	A	0.0	0.10	0.0
		SB-LR	C	16.3	0.45	17.9	C	15.9	0.51	22.4

Table 19: 2032 Background Intersection Operations

Intersection	Lane	Weekday PM Peak Hour				Weekend PM Peak Hour			
		LOS	Delay (s)	V/C Ratio	95th % Queue (m)	LOS	Delay (s)	V/C Ratio	95th % Queue (m)
Baseline Road & Woodroffe Avenue	**Overall**	**E**	**71.0**	---	---	**E**	**58.8**	---	---
	EB-L	F	112.8	1.02	#71.2	E	76.1	0.81	#43.4
	EB-T	D	50.4	0.83	120.0	D	48.0	0.76	105.5
	EB-R	C	34.5	0.16	21.5	C	34.0	0.05	0.0
	WB-L	F	112.1	0.96	#83.3	F	121.0	0.95	#69.5
	WB-T	E	68.8	0.98	#165.7	D	43.3	0.65	89.6
	WB-R	D	46.5	0.65	88.2	D	42.8	0.52	66.7
	NB-L	F	84.1	0.93	#73.0	E	67.1	0.77	#45.1
	NB-T	F	87.8	1.04	#164.1	E	79.9	1.02	#172.4
	NB-R	C	34.5	0.08	5.9	C	32.8	0.08	5.6
	SB-L	F	111.2	1.05	#91.6	F	93.7	1.00	#95.6
	SB-T	E	64.3	0.96	#149.0	D	41.2	0.79	129.4
	SB-R	D	38.8	0.50	63.5	C	29.8	0.23	29.8
Baseline Road & Driveway Access North (Right-in/right-out Access)	**Overall**	**A**	**0.1**	---	---	**A**	**0.3**	---	---
	EB-TR	A	0.0	0.26	0.0	A	0.0	0.29	0.0
	WB-T	A	0.0	0.47	0.0	A	0.0	0.33	0.0
	NB-R	A	9.3	0.05	1.1	A	9.4	0.09	2.1
Baseline Road & College Square SC	**Overall**	**B**	**14.9**	---	---	**B**	**16.0**	---	---
	EB-L	B	10.4	0.07	3.1	B	11.8	0.02	2.0
	EB-TR	B	13.3	0.45	75.0	B	16.9	0.52	63.2
	WB-L	A	6.6	0.39	19.1	A	8.7	0.51	#39.0
	WB-TR	B	13.8	0.71	#183.2	B	12.8	0.53	#101.3
	NB-L	D	36.7	0.54	29.3	C	29.4	0.57	29.7
	NB-TR	C	31.6	0.07	10.4	C	24.0	0.11	10.6
	SB-LTR	C	31.4	0.05	6.9	C	23.6	0.05	5.3
Baseline Road & Navaho Drive	**Overall**	**C**	**33.1**	---	---	**C**	**28.8**	---	---
	EB-L	C	23.5	0.43	31.7	B	11.2	0.26	20.9
	EB-T	D	40.5	0.83	#193.4	C	30.7	0.77	#120.8
	EB-R	D	43.0	0.04	0.0	C	26.8	0.04	0.0
	WB-L	C	22.5	0.60	45.4	B	13.3	0.52	#64.9
	WB-TR	C	23.9	0.77	#204.6	C	31.5	0.79	#123.5
	NB-L	E	60.9	0.71	45.9	D	36.9	0.66	38.6
	NB-R	D	39.8	0.16	10.1	C	29.1	0.15	20.1
	SB-LTR	D	51.0	0.59	51.9	C	29.0	0.30	23.1
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station	**Overall**	**C**	**27.9**	---	---	**C**	**26.1**	---	---
	EB-L	D	38.2	0.09	6.1	D	39.5	0.13	7.7
	EB-T	D	37.4	0.03	2.3	D	37.3	0.01	1.2
	EB-R	D	37.3	0.02	0.0	D	37.2	0.00	0.0
	WB-L	D	36.1	0.69	35.1	D	36.3	0.66	32.0
	WB-R	D	38.1	0.13	5.5	D	38.1	0.12	4.7
	NB-L	D	53.5	0.12	1.8	D	53.5	0.12	1.8
	NB-T	C	28.1	0.64	#94.9	C	25.1	0.55	#79.4
	NB-R	C	23.4	0.24	21.7	C	21.9	0.24	21.8
	SB-L	D	42.1	0.59	#61.1	D	43.7	0.60	#56.0
	SB-T	C	21.7	0.67	#161.6	B	19.6	0.60	#141.7
	SB-R	B	13.3	0.01	0.0	B	12.9	0.02	0.0
Navaho Drive & Wajashk Private	**Overall**	**B**	**16.2**	---	---	**B**	**17.5**	---	---
	WB-L	B	17.1	0.40	24.9	B	18.3	0.43	24.5
	WB-R	B	15.1	0.07	7.1	B	16.0	0.04	5.8
	NE-T	B	15.4	0.11	6.7	B	16.1	0.06	4.0
	NE-R	C	20.8	0.64	40.2	C	20.2	0.57	32.6
	SW-L	A	7.1	0.16	17.1	A	5.8	0.06	7.3
	SW-T	A	6.2	0.02	3.1	A	5.5	0.01	2.2
Woodroffe Avenue & Site Access West (Right-in/right-out Access)	**Overall**	**A**	**0.6**	---	---	**A**	**1.0**	---	---
	WB-R	A	10.0	0.18	4.9	B	10.3	0.25	7.7
	NB-T	A	0.0	0.28	0.0	A	0.0	0.25	0.0
	SB-T	A	0.0	0.23	0.0	A	0.0	0.21	0.0
Navaho Drive & Site Access South	Overall	**A**	**5.5**	---	---	**A**	**7.1**	---	---
	EB-L	A	9.0	0.19	5.5	A	8.6	0.20	5.8
	EB-T	A	0.0	0.16	0.0	A	0.0	0.13	0.0
	WB-TR	A	0.0	0.15	0.0	A	0.0	0.10	0.0
	SB-LR	C	17.1	0.48	19.6	C	16.4	0.53	23.9

Future Total Intersection Operations

Intersection capacity analysis has been completed for the 2027 & 2032 total traffic conditions. The intersection parameters used in the analysis are consistent with the TIA guidelines (Saturation Flow rate: 1800 vphpl, peak hour factors were calculated from turning movement count data). The signal timing splits have been optimized in Synchro, minimizing delays and maximizing traffic flow efficiency based on the given parameters and constraints for all intersections within the study area. In this analysis, a maximum cycle length for signalized intersections was established at 130 seconds to optimize traffic flow and accommodate the operational characteristics of the study area. *Table 18* and *Table 19* summarize the results of the Synchro analysis for the 2027 & 2032 total traffic conditions.

Detailed synchro reports are included in **Appendix F**.

Table 20: 2027 Total Intersection Operations

Intersection	Lane	Weekday PM Peak Hour				Weekend PM Peak Hour			
		LOS	Delay (s)	V/C Ratio	95th % Queue (m)	LOS	Delay (s)	V/C Ratio	95th % Queue (m)
Baseline Road & Woodroffe Avenue	**Overall**	E	66.6	---	---	E	57.6	---	---
	EB-L	F	97.8	0.97	#67.8	E	67.9	0.75	#39.4
	EB-T	D	51.1	0.83	117.9	D	46.8	0.74	103.4
	EB-R	C	34.9	0.15	20.5	C	33.7	0.05	0.0
	WB-L	F	102.5	0.92	#80.1	F	116.3	0.94	#69.0
	WB-T	E	69.8	0.98	#162.5	D	43.2	0.64	88.1
	WB-R	D	46.8	0.64	86.1	D	42.6	0.51	64.2
	NB-L	F	84.9	0.93	#72.0	E	66.9	0.76	#44.8
	NB-T	F	81.1	1.02	#158.5	E	77.0	1.01	#168.4
	NB-R	C	34.5	0.08	5.6	C	33.1	0.08	5.6
	SB-L	F	94.0	0.99	#87.0	F	93.4	1.00	#95.2
	SB-T	E	55.7	0.91	#139.9	D	40.9	0.78	126.2
	SB-R	D	37.7	0.46	59.4	C	29.9	0.22	28.9
Baseline Road & Driveway Access North (Right-in/right-out Access)	**Overall**	A	0.1	---	---	A	0.4	---	---
	EB-TR	A	0.0	0.26	0.0	A	0.0	0.29	0.0
	WB-T	A	0.0	0.45	0.0	A	0.0	0.32	0.0
	NB-R	A	9.3	0.05	1.2	A	9.4	0.10	2.6
Baseline Road & College Square SC	**Overall**	B	14.6	---	---	B	16.3	---	---
	EB-L	B	10.1	0.07	3.1	B	12.3	0.02	2.0
	EB-TR	B	13.1	0.44	72.7	B	17.5	0.53	62.8
	WB-L	A	6.5	0.39	19.4	A	9.3	0.54	#46.4
	WB-TR	B	13.4	0.69	#176.0	B	12.6	0.52	#97.2
	NB-L	D	36.8	0.54	29.1	C	29.6	0.58	30.2
	NB-TR	C	31.6	0.07	10.4	C	23.9	0.11	10.8
	SB-LTR	C	31.5	0.05	6.8	C	23.5	0.05	5.3
Baseline Road & Navaho Drive	**Overall**	C	31.5	---	---	C	28.7	---	---
	EB-L	C	23.1	0.44	31.2	B	11.1	0.25	20.7
	EB-T	D	38.3	0.80	#188.0	C	30.7	0.77	#120.6
	EB-R	D	43.3	0.04	0.0	C	27.0	0.04	0.0
	WB-L	B	19.3	0.59	44.9	B	13.2	0.52	#65.8
	WB-TR	C	22.3	0.74	193.5	C	31.3	0.78	#122.5
	NB-L	E	60.7	0.71	44.6	D	36.9	0.65	37.7
	NB-R	D	40.0	0.15	9.9	C	29.0	0.15	20.1
	SB-LTR	D	51.2	0.59	50.7	C	29.1	0.30	22.8
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station	**Overall**	C	27.5	---	---	C	25.8	---	---
	EB-L	D	38.4	0.09	6.1	D	39.5	0.12	7.1
	EB-T	D	37.4	0.03	2.3	D	37.3	0.01	1.2
	EB-R	D	37.3	0.02	0.0	D	37.2	0.00	0.0
	WB-L	D	36.1	0.68	34.3	D	36.3	0.66	31.6
	WB-R	D	38.0	0.13	5.2	D	38.1	0.12	4.0
	NB-L	D	53.5	0.12	1.8	D	53.5	0.12	1.8
	NB-T	C	27.9	0.62	#89.3	C	24.7	0.53	75.4
	NB-R	C	23.4	0.23	21.1	C	21.6	0.23	21.4
	SB-L	D	41.1	0.56	#60.8	D	43.6	0.59	#54.7
	SB-T	C	21.1	0.65	#156.4	B	19.2	0.59	#136.8
	SB-R	B	13.2	0.01	0.0	B	12.9	0.02	0.0
Navaho Drive & Wajashk Private	**Overall**	B	16.2	---	---	B	17.5	---	---
	WB-L	B	17.1	0.40	24.5	B	18.2	0.42	24.2
	WB-R	B	15.2	0.07	7.1	B	16.0	0.04	5.8
	NE-T	B	15.4	0.11	6.5	B	16.0	0.05	3.9
	NE-R	C	20.7	0.64	39.7	C	20.1	0.57	32.8
	SW-L	A	7.0	0.16	16.6	A	5.9	0.06	7.1
	SW-T	A	6.2	0.01	3.0	A	5.6	0.01	2.2
Woodroffe Avenue & Site Access West (Right-in/right-out Access)	**Overall**	A	0.6	---	---	A	1.0	---	---
	WB-R	A	9.9	0.18	4.9	B	10.3	0.26	7.8
	NB-T	A	0.0	0.28	0.0	A	0.0	0.25	0.0
	SB-T	A	0.0	0.23	0.0	A	0.0	0.21	0.0
Navaho Drive & Site Access South	Overall	A	5.4	---	---	A	7.3	---	---
	EB-L	A	9.0	0.19	5.3	A	8.6	0.20	5.7
	EB-T	A	0.0	0.15	0.0	A	0.0	0.13	0.0
	WB-TR	A	0.0	0.15	0.0	A	0.0	0.10	0.0
	SB-LR	C	16.6	0.46	18.5	C	16.8	0.54	24.7

Table 21: 2032 Total Intersection Operations

Intersection	Lane	Weekday PM Peak Hour				Weekend PM Peak Hour			
		LOS	Delay (s)	V/C Ratio	95th % Queue (m)	LOS	Delay (s)	V/C Ratio	95th % Queue (m)
Baseline Road & Woodroffe Avenue	**Overall**	E	71.1	---	---	E	59.0	---	---
	EB-L	F	112.8	1.02	#71.2	E	67.2	0.74	#40.0
	EB-T	D	52.0	0.85	#121.5	D	49.3	0.78	107.6
	EB-R	C	34.9	0.16	21.7	C	34.3	0.05	0.0
	WB-L	F	103.8	0.93	#81.9	F	118.2	0.95	#70.2
	WB-T	E	70.4	0.99	#166.7	D	45.1	0.68	91.7
	WB-R	D	46.9	0.66	89.1	D	44.5	0.54	68.5
	NB-L	F	87.0	0.94	#73.9	E	66.8	0.77	#46.2
	NB-T	F	88.2	1.04	#164.6	F	80.3	1.02	#173.7
	NB-R	C	34.5	0.08	6.3	C	32.8	0.08	6.3
	SB-L	F	108.6	1.04	#91.4	F	93.3	1.00	#96.7
	SB-T	E	62.5	0.95	#147.9	D	40.8	0.79	129.2
	SB-R	D	38.5	0.49	63.0	C	29.6	0.23	29.8
Baseline Road & Driveway Access North (Right-in/right-out Access)	**Overall**	A	0.1	---	---	A	0.4	---	---
	EB-TR	A	0.0	0.26	0.0	A	0.0	0.30	0.0
	WB-T	A	0.0	0.47	0.0	A	0.0	0.33	0.0
	NB-R	A	9.3	0.05	1.2	A	9.5	0.11	2.7
Baseline Road & College Square SC	**Overall**	B	15.1	---	---	B	16.7	---	---
	EB-L	B	10.5	0.08	3.1	B	12.6	0.02	2.0
	EB-TR	B	13.5	0.46	75.3	B	18.2	0.56	64.3
	WB-L	A	6.8	0.41	19.9	A	9.9	0.55	#50.5
	WB-TR	B	13.9	0.71	#183.2	B	13.0	0.54	#101.3
	NB-L	D	36.9	0.54	29.8	C	29.5	0.59	30.8
	NB-TR	C	31.5	0.07	10.6	C	23.8	0.11	10.8
	SB-LTR	C	31.4	0.05	6.9	C	23.3	0.05	5.3
Baseline Road & Navaho Drive	**Overall**	C	33.7	---	---	C	30.5	---	---
	EB-L	C	23.6	0.42	31.9	B	11.5	0.26	21.8
	EB-T	D	41.5	0.84	#194.2	C	33.2	0.81	#125.2
	EB-R	D	43.0	0.04	0.0	C	26.8	0.04	0.0
	WB-L	C	23.3	0.60	46.0	B	14.0	0.53	#71.9
	WB-TR	C	24.6	0.78	#207.0	C	34.0	0.83	#127.2
	NB-L	E	61.2	0.72	45.9	D	37.3	0.66	38.7
	NB-R	D	39.4	0.16	10.2	C	28.5	0.15	20.5
	SB-LTR	D	51.1	0.60	51.9	C	29.0	0.30	23.4
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station	**Overall**	C	28.1	---	---	C	26.2	---	---
	EB-L	D	38.2	0.09	6.1	D	39.4	0.13	7.7
	EB-T	D	37.4	0.03	2.3	D	37.3	0.01	1.2
	EB-R	D	37.3	0.02	0.0	D	37.2	0.00	0.0
	WB-L	D	36.3	0.69	35.3	D	36.3	0.67	32.4
	WB-R	D	38.1	0.13	6.1	D	38.1	0.12	4.7
	NB-L	D	53.5	0.12	1.8	D	53.5	0.12	1.8
	NB-T	C	28.9	0.65	#93.0	C	25.2	0.55	#82.7
	NB-R	C	23.9	0.24	21.7	C	22.0	0.24	22.0
	SB-L	D	40.6	0.56	#63.1	D	43.7	0.60	#56.0
	SB-T	C	21.7	0.67	#161.6	B	19.7	0.60	#141.8
	SB-R	B	13.3	0.01	0.0	B	13.0	0.02	0.0
Navaho Drive & Wajashk Private	**Overall**	B	16.2	---	---	B	17.5	---	---
	WB-L	B	17.0	0.40	25.0	B	18.2	0.43	24.8
	WB-R	B	15.0	0.07	7.1	B	15.9	0.04	5.8
	NE-T	B	15.3	0.11	6.6	B	16.0	0.06	4.0
	NE-R	C	20.8	0.65	40.5	C	20.3	0.58	33.6
	SW-L	A	7.2	0.16	17.1	A	5.9	0.06	7.3
	SW-T	A	6.3	0.02	3.1	A	5.6	0.01	2.2
Woodroffe Avenue & Site Access West (Right-in/right-out Access)	**Overall**	A	0.6	---	---	A	1.0	---	---
	WB-R	B	10.0	0.18	5.1	B	10.4	0.27	8.1
	NB-T	A	0.0	0.28	0.0	A	0.0	0.25	0.0
	SB-T	A	0.0	0.23	0.0	A	0.0	0.21	0.0
Navaho Drive & Site Access South	Overall	A	5.6	---	---	A	7.5	---	---
	EB-L	A	9.0	0.20	5.5	A	8.6	0.21	5.9
	EB-T	A	0.0	0.16	0.0	A	0.0	0.13	0.0
	WB-TR	A	0.0	0.15	0.0	A	0.0	0.10	0.0
	SB-LR	C	17.5	0.49	20.2	C	17.5	0.56	26.4

Table 22:2032 Total Intersection Operations (Proxy Trip Generation)

Intersection		Lane	Weekday PM Peak Hour			
			LOS	Delay (s)	V/C Ratio	95th % Queue (m)
Baseline Road & Woodroffe Avenue		**Overall**	E	71.4	---	---
		EB-L	F	112.8	1.02	#71.2
		EB-T	D	52.1	0.85	#121.9
		EB-R	C	34.9	0.16	21.7
		WB-L	F	103.8	0.93	#81.9
		WB-T	E	70.7	0.99	#167.0
		WB-R	D	47.1	0.66	89.9
		NB-L	F	87.5	0.95	#74.4
		NB-T	F	89.3	1.05	#165.2
		NB-R	C	34.5	0.08	6.3
		SB-L	F	109.2	1.04	#91.7
		SB-T	E	62.5	0.95	#147.9
		SB-R	D	38.5	0.49	63.0
Baseline Road & Driveway Access North (Right-in/right-out Access)		**Overall**	A	0.2	---	---
		EB-TR	A	0.0	0.26	0.0
		WB-T	A	0.0	0.47	0.0
		NB-R	A	9.4	0.06	1.5
Baseline Road & College Square SC		**Overall**	B	15.2	---	---
		EB-L	B	10.5	0.08	3.1
		EB-TR	B	13.6	0.46	76.1
		WB-L	A	6.9	0.41	20.0
		WB-TR	B	14.0	0.71	#183.2
		NB-L	D	36.8	0.55	30.1
		NB-TR	C	31.4	0.07	10.7
		SB-LTR	C	31.3	0.05	6.9
Baseline Road & Navaho Drive		**Overall**	C	34.1	---	---
		EB-L	C	23.6	0.42	32.1
		EB-T	D	42.2	0.85	#197.9
		EB-R	D	43.0	0.04	0.0
		WB-L	C	24.4	0.61	46.0
		WB-TR	C	24.6	0.78	#207.6
		NB-L	E	61.2	0.72	45.9
		NB-R	D	39.4	0.16	10.2
		SB-LTR	D	51.1	0.60	51.9
Navaho Drive & Woodroffe Avenue-Transitway/Baseline Station		**Overall**	C	28.2	---	---
		EB-L	D	38.1	0.08	6.1
		EB-T	D	37.4	0.03	2.3
		EB-R	D	37.3	0.02	0.0
		WB-L	D	36.2	0.69	35.5
		WB-R	D	38.1	0.13	6.1
		NB-L	D	53.5	0.12	1.8
		NB-T	C	29.0	0.66	#93.0
		NB-R	C	24.0	0.24	21.7
		SB-L	D	40.6	0.56	#63.1
		SB-T	C	21.8	0.67	#161.6
		SB-R	B	13.4	0.01	0.0
Navaho Drive & Wajashk Private		**Overall**	B	16.2	---	---
		WB-L	B	17.0	0.40	25.0
		WB-R	B	15.0	0.07	7.1
		NE-T	B	15.3	0.11	6.6
		NE-R	C	20.8	0.65	40.5
		SW-L	A	7.2	0.16	17.1
		SW-T	A	6.3	0.02	3.1
Woodroffe Avenue & Site Access West (Right-in/right-out Access)		**Overall**	A	0.7	---	---
		WB-R	B	10.1	0.19	5.4
		NB-T	A	0.0	0.28	0.0
		SB-T	A	0.0	0.23	0.0
Navaho Drive & Site Access South		Overall	A	5.7	---	---
		EB-L	A	9.0	0.20	5.5
		EB-T	A	0.0	0.16	0.0
		WB-TR	A	0.0	0.15	0.0
		SB-LR	C	17.6	0.49	20.6

5. SUMMARY AND CONCLUSIONS

The Transportation Impact Assessment (TIA) for the proposed Chick-fil-A development at 1984 Baseline Road evaluated existing conditions, future traffic forecasts, multimodal performance, and safety within the study area. The analysis covered existing weekday PM peak hour, weekend PM peak hour, and future horizon years (2027 and 2032). Key findings and implications are summarized below:

Trip Generation & Mode Share:

- The proposed Chick-fil-A (424 m² GFA) is expected to generate:
  - Weekday PM Peak Hour: 144 auto trips (75 inbound, 69 outbound), resulting in 32 net new trips compared to the existing Beer Store.
  - Weekend PM Peak Hour: 231 auto trips (118 inbound, 113 outbound), resulting in 123 net new trips.
- Person-trip estimates: 41 weekday PM peak person trips and 157 weekend PM peak person trips.
- Mode share assumptions reflect TOD context:
  - Auto-driver: 65%, Transit: 20%, Cycling: 5%, Walking: 5%.
- Proximity to Baseline Station (400 m) and multiple OC Transpo routes supports increased transit and active mode use.

Traffic Operations:

Baseline Road & Woodroffe Avenue:

- Existing LOS F during weekday PM peak (101.2 s delay) and LOS **E** during weekend PM peak (85.2 s delay).
- Future conditions remain constrained (LOS E/F) even after signal optimization, with critical movements (WB-T, SB-L) exceeding capacity.

Baseline & Navaho Drive:

Existing LOS D (37.0 s delay), future LOS C/D with moderate congestion on EB/WB approaches.

Baseline & College Square:

- Operate at LOS A–C under all scenarios.

Navaho Drive & Woodroffe:

- Operate at LOS A–C under all scenarios.

Navaho Drive & Wajashk Private:

- Operate at LOS A–C under all scenarios.

Site accesses (RIRO on Baseline Road and Woodroffe Avenue, full movement on Navaho Drive):

- No operational issues identified.

Safety Review:

Baseline & Woodroffe Avenue is the primary collision hotspot.

- 127 collisions (2019–2024), 14 injuries, dominated by rear-end crashes (78 incidents).
- The operational issues at the intersection are primarily due to high traffic volumes, short storage lengths, and frequent bus stop activity.

Baseline & Navaho Drive intersection has experienced 55 collisions, turning conflicts and rear-end crashes.

- Segment review shows highest collision density along Baseline between Navaho and College Square, typical of access-related conflicts.
- Most collisions occurred in clear, daylight conditions, indicating operational issues rather than environmental factors.

Multimodal Level of Service (MMLOS)

- Pedestrian and Bicycle LOS targets are not met along Baseline Road and Woodroffe Avenue due to wide crossings, high turning volumes, and lack of cycling facilities.
- Transit and Public Realm LOS targets are met, supported by proximity to Algonquin Station and multiple OC Transpo routes.

Parking and Site Design:

- Maximum parking requirement: 15 spaces; proposed: 6 spaces (2 accessible) plus 56 shared plaza spaces.
- Bicycle parking: 12 spaces provided, exceeding minimum requirement (2 spaces).
- Internal circulation accommodates 8 queuing spaces for drive-through without impacting plaza operations.
- Pedestrian pathways are designed for safety; bike racks and crosswalk improvements included.
- The site provides 6 on-site parking spaces (including 2 accessible) and 12 bicycle spaces, meeting zoning requirements. Internal circulation accommodates drive-through queuing without impacting plaza operations.

Transportation Demand Management (TDM):

Measures include:

- Transit information displays and online links.
- Ride-matching portal (OttawaRideMatch.com).
- Secure bicycle parking and multimodal travel packages for employees.
- Supports City's mode share targets and TOD objectives.

Network Concept & Exemptions:

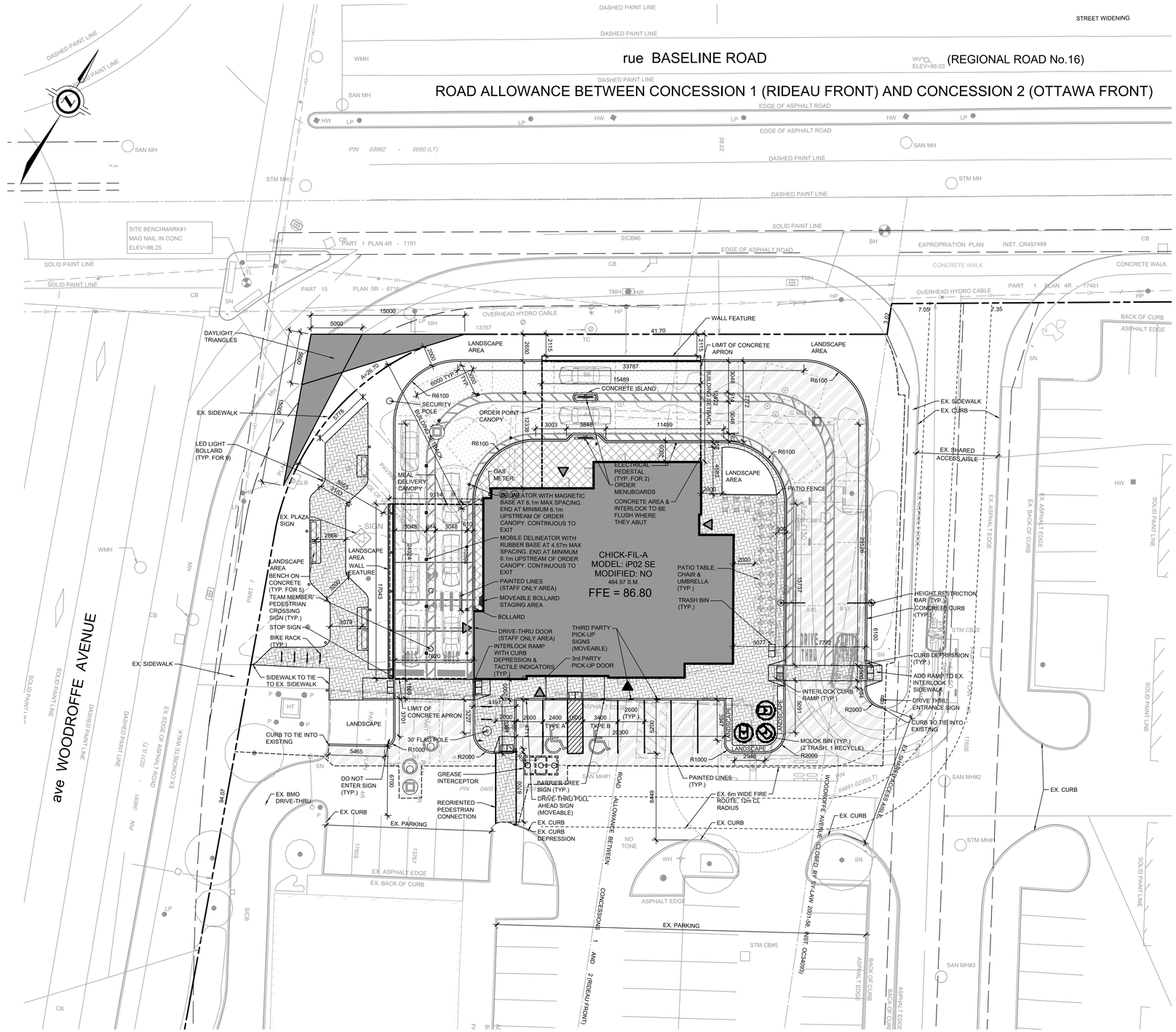
- Development exempt from network adequacy review and transit priority requirements under City guidelines (trip generation < 200 peak-hour vehicles).
- No major infrastructure improvements required; corridor-level congestion at Baseline/Woodroffe is a systemic issue, not development-driven.

The proposed Chick-fil-A development can be accommodated within the existing and planned transportation network without significant infrastructure upgrades, provided operational strategies and TDM measures are implemented. While Baseline & Woodroffe Avenue remains a critical congestion point, this is a corridor-level issue unrelated to the incremental impact of the development. Recommended actions include:

- Signal optimization at Baseline/Woodroffe and Navaho intersections.
- Pedestrian and cycling enhancements consistent with Complete Streets principles.
- Continued implementation of TDM strategies to support sustainable travel.

Appendix A

Site Plan


rue BASELINE ROAD
(REGIONAL ROAD No.16)
ROAD ALLOWANCE BETWEEN CONCESSION 1 (RIDEAU FRONT) AND CONCESSION 2 (OTTAWA FRONT)
STREET WIDENING
DASHED PAINT LINE
SOLID PAINT LINE
EDGE OF ASPHALT ROAD
PIN 03992 - 0090 (LT)
SITE BENCHMARK#1
MAG NAIL IN CONC
ELEV=86.25
PART 1 PLAN 4R - 1191
PART 15 PLAN 5R - 6716
EXPROPRIATION PLAN INST. CR497489
PART 1 PLAN 4R - 17401
OVERHEAD HYDRO CABLE
CONCRETE WALK
BACK OF CURB
ASPHALT EDGE
SAN MH
STM MH
SICB#6
WMH
CB
SN
HW
BH
TMH
HP
LP
TC
MH
DAYLIGHT TRIANGLES
WALL FEATURE
LIMIT OF CONCRETE APRON
LANDSCAPE AREA
CONCRETE ISLAND
R6100
SECURITY POLE
BUILDING SETBACK
ORDER POINT CANOPY
MEAL DELIVERY CANOPY
GAS METER
ELECTRICAL PEDESTAL (TYP. FOR 2)
ORDER MENUBOARDS
CONCRETE AREA & INTERLOCK TO BE FLUSH WHERE THEY ABUT
PATIO FENCE
DELINEATOR WITH MAGNETIC BASE AT 6.1m MAX SPACING. END AT MINIMUM 6.1m UPSTREAM OF ORDER CANOPY. CONTINUOUS TO EXIT
MOBILE DELINEATOR WITH RUBBER BASE AT 4.57m MAX SPACING. END AT MINIMUM 6.1m UPSTREAM OF ORDER CANOPY. CONTINUOUS TO EXIT
PAINTED LINES (STAFF ONLY AREA)
MOVEABLE BOLLARD STAGING AREA
BOLLARD
DRIVE-THRU DOOR (STAFF ONLY AREA)
INTERLOCK RAMP WITH CURB DEPRESSION & TACTILE INDICATORS (TYP.)
THIRD PARTY PICK-UP SIGNS (MOVEABLE)
3rd PARTY PICK-UP DOOR
CHICK-FIL-A
MODEL: iP02 SE
MODIFIED: NO
464.97 S.M.
FFE = 86.80
PATIO TABLE, CHAIR & UMBRELLA (TYP.)
TRASH BIN (TYP.)
HEIGHT RESTRICTION BAR (TYP.)
CONCRETE CURB (TYP.)
CURB DEPRESSION (TYP.)
ADD RAMP TO EX. INTERLOCK SIDEWALK
INTERLOCK CURB RAMP (TYP.)
DRIVE THRU ENTRANCE SIGN
CURB TO TIE INTO EXISTING
MOLOK BIN (TYP.) (2 TRASH, 1 RECYCLE)
PAINTED LINES (TYP.)
EX. 6m WIDE FIRE ROUTE, 12m CL RADIUS
EX. 6m WIDE FIRE ROUTE, 12m CL RADIUS (CLOSED BY BY-LAW 2001-96 INST. OC3460(9))
EX. SIDEWALK
EX. CURB
EX. SHARED ACCESS AISLE
EX. ASPHALT EDGE
EX. BACK OF CURB
EX. PARKING
EX. PLAZA SIGN
LED LIGHT BOLLARD (TYP. FOR 8)
LANDSCAPE AREA
BENCH ON CONCRETE (TYP. FOR 5)
TEAM MEMBER/ PEDESTRIAN CROSSING SIGN (TYP.)
STOP SIGN
BIKE RACK (TYP.)
SIDEWALK TO TIE TO EX. SIDEWALK
CURB TO TIE INTO EXISTING
30' FLAG POLE
R1000
R2000
GREASE INTERCEPTOR
DO NOT ENTER SIGN (TYP.)
EX. BMO DRIVE-THRU
REORIENTED PEDESTRIAN CONNECTION
DRIVE-THRU PULL AHEAD SIGN (MOVEABLE)
EX. CURB DEPRESSION
ave WOODROFFE AVENUE
ALLOWANCE BETWEEN CONCESSION 1 AND 2 (RIDEAU FRONT)
NO TONE
ASPHALT EDGE
BACK OF CURB
SOLID PAINT LINE
DASHED PAINT LINE
EX EDGE OF ASPHALT ROAD
EXISTED CONCRETE CURB
PIN 0469
PIN 0468
PIN 0469(LT)
PIN 0235(LT)
PIN 1220
PIN 1469
PART 7
PART 8
PART 9
PART 10
PART 11
PART 12
PART 13
PART 14
PART 16
PART 17
PART 18
PART 19
PART 20
PART 21
PART 22
PART 23
PART 24
PART 25
PART 26
PART 27
PART 28
PART 29
PART 30
PART 31
PART 32
PART 33
PART 34
PART 35
PART

Appendix B

Screening Form

Certification Form for TIA Study PM

TIA Plan Reports

On April 14, 2022, the Province's Bill 109 received Royal Assent providing legislative direction to implement the More Homes for Everyone Act, 2022 aiming to increase the supply of a range of housing options to make housing more affordable. Revisions have been made to the TIA guidelines to comply with Bill 109 and streamline the process for applicants and staff.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that they meet the four criteria listed below.

CERTIFICATION

- ☑ I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines; (Update effective July 2023)
- ☑ I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
- ☑ I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and
- ☑ I am either a licensed or registered[1] professional in good standing, whose field of expertise
  - ☑ is either transportation engineering
  - ☐ or transportation planning.

[1] License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.

City Of Ottawa
Planning, Real Estate and Economic Development
110 Laurier Avenue West, 4th fl.
Ottawa, ON
K1P 1J1
Tel. : 613-580-2424
Fax: 613-560-6006

Revision Date: June 2023

Dated at Ottawa (City) this 14 day of July , 20 25 .

Name : Rick Zarzosa

Professional title: Senior Traffic and Transit Engineer



Signature of individual certifier that s/he/they meet the above criteria

Office Contact Information (Please Print)
Address: 2650 Queensview Dr Suite 100
City / Postal Code: K2B 8H6
Telephone / Extension: 343-804-4894
Email Address: Rick.Zarzosa@exp.com

Stamp



Revision Date: June 2023

City of Ottawa 2017 TIA Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	1984 Baseline Road, Ottawa, ON
Description of Location	SW corner of Baseline Rd. & Woodroffe Ave. Intersection
Land Use Classification	Commercial - Fast-food restaurant
Development Size (units)	1
Development Size (m^2)	464.97
Number of Accesses and Locations	(1) Right-in & Right-out access driveway on Baseline Rd.
Phase of Development	Precon
Buildout Year	2026-2027

If available, please attach a sketch of the development or site plan to this form.

2. Trip Generation Trigger

Considering the Development's Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Table notes:

1.Table 2, Table 3 & Table 4 TRANS Trip Generation Manual
2.Institute of Transportation Engineers (ITE) Trip Generation Manual 11.1 Ed.

Land Use Type	Minimum Development Size
Single-family homes	60 units
Multi-Use Family (Low-Rise)[1]	90 units
Multi-Use Family (High-Rise)[1]	150 units
Office[2]	1,400 m^2
Industrial[2]	7,000 m^2
Fast-food restaurant or coffee shop[2]	110 m^2 **< 464.97**
Destination retail[2]	1,800 m^2
Gas station or convenience market[2]	90 m^2

If the proposed development size is greater than the sizes identified above, the Trip Generation Trigger is satisfied. **Trip generation trigger is satisfied.**

-Number of trip generation during weekday AM peak: 223

-Number of trip generated during weekday PM peak: 165

3. Location Triggers

	Yes	No
Does the development propose a new driveway to a boundary street that is designated as part of the City's Transit Priority Network, Rapid Transit network or Cross-Town Bikeways?		X
Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)?[2]	X	

If any of the above questions were answered with 'Yes,' the Location Trigger is satisfied.

4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street 80 km/hr or greater?		X
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		X
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?		X
Is the proposed driveway within auxiliary lanes of an intersection?		X
Does the proposed driveway make use of an existing median break that serves an existing site?		X
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?		X
Does the development include a drive-thru facility?	X	

If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.

5. Summary

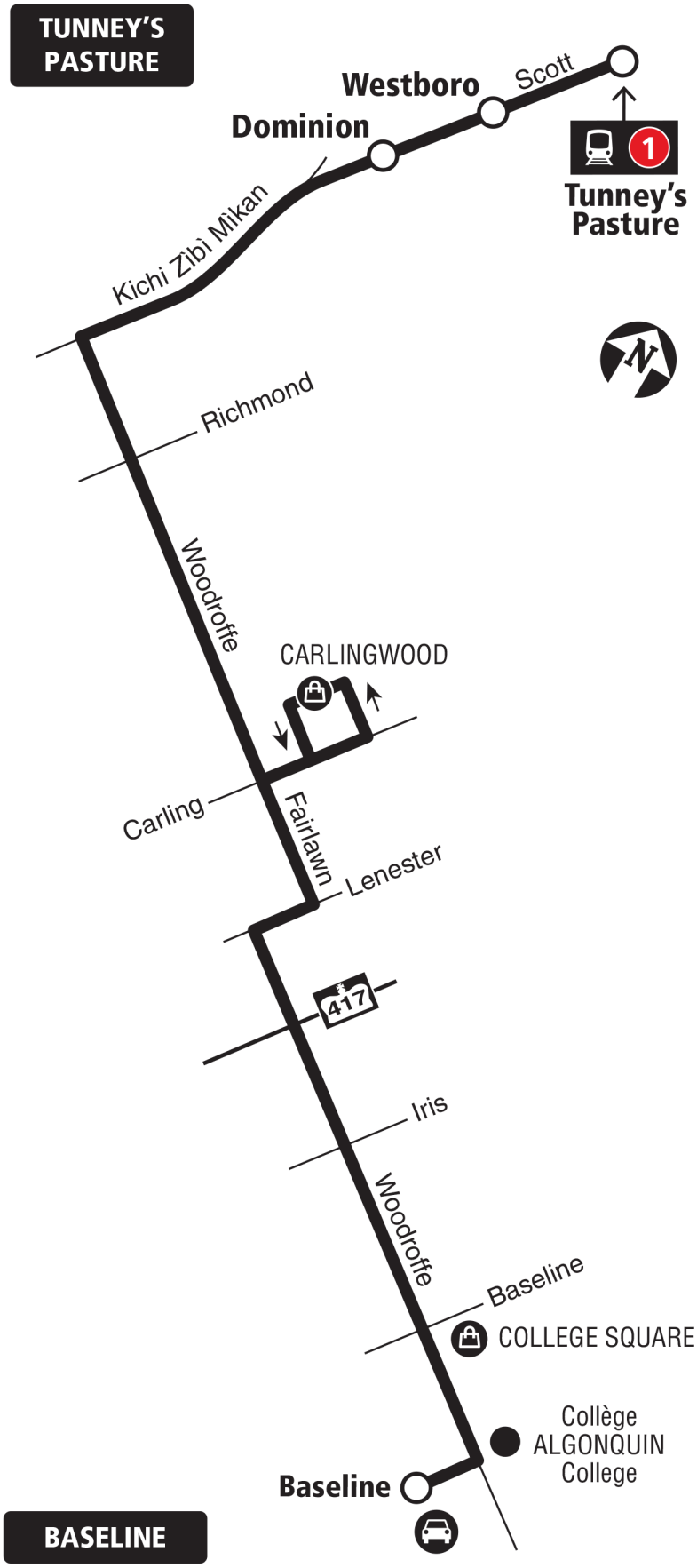
	Yes	No
Does the development satisfy the results of screening?	X	
Does the development satisfy the Location Trigger?	X	
Does the development satisfy the Safety Trigger?	X	

[2] Hubs are identified in Schedules B1 to B8 of the City of Ottawa Official Plan. PMTSAs are identified in ScheduleC1 of the Official Plan. DPAs are identified in Schedule C7A and C7B of the Official. See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA.

If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).

Appendix C

Transit Route Map

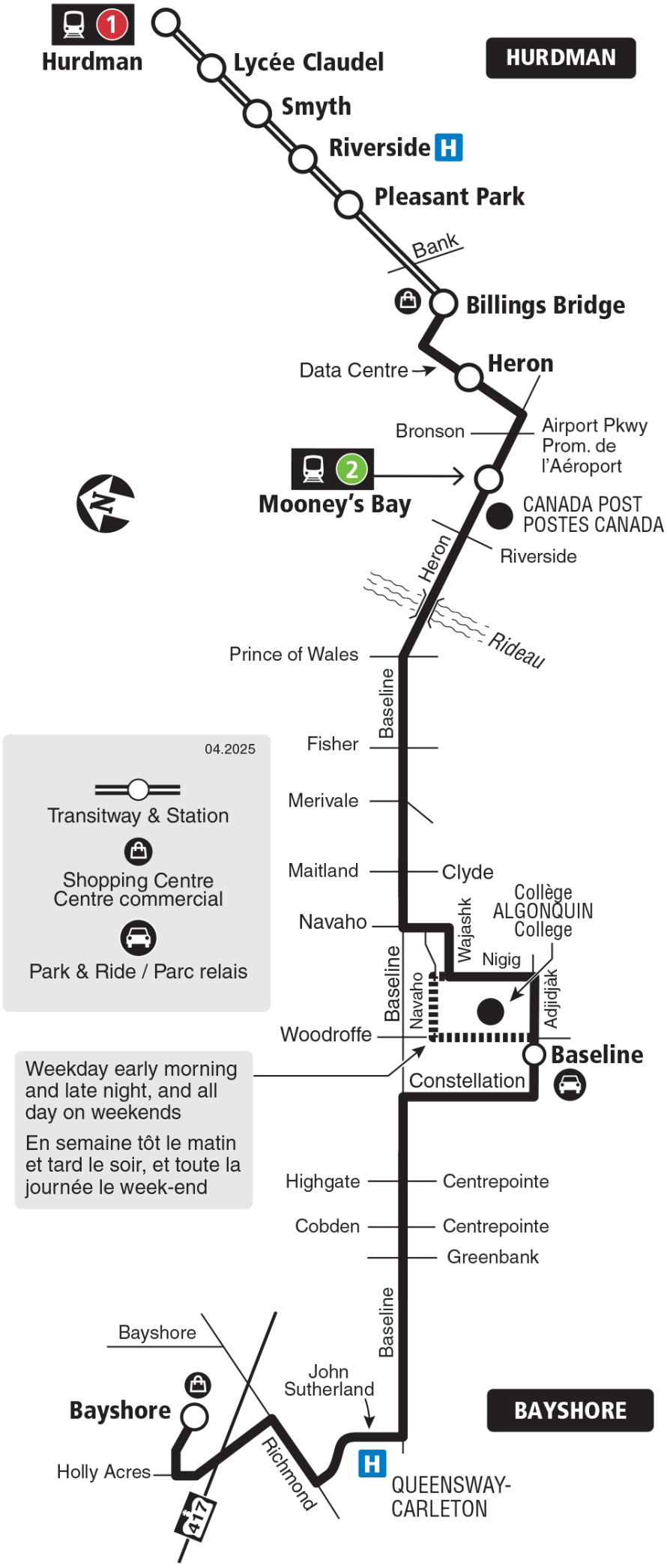


04.2025

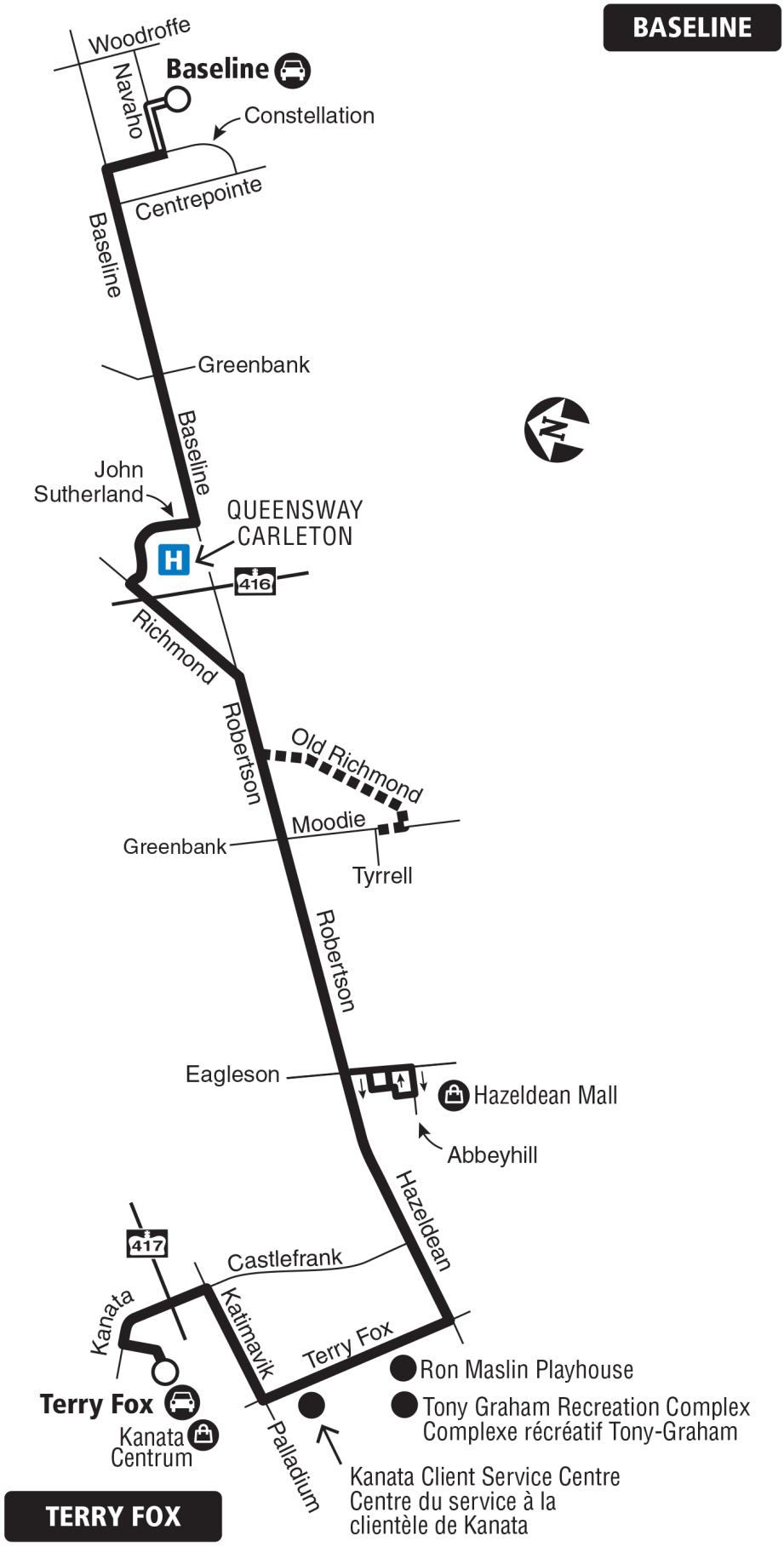
Transitway & Station

Park & Ride / Parc relais

Shopping Centre / Centre commercial


Hurdman
Lycée Claudel
HURDMAN
Smyth
Riverside H
Pleasant Park
Bank
Billings Bridge
Data Centre
Heron
Bronson
Airport Pkwy
Prom. de
l'Aéroport
Mooney's Bay
CANADA POST
POSTES CANADA
Riverside
Heron
Rideau
Prince of Wales
Baseline
Fisher
Merivale
04.2025
Transitway & Station
Shopping Centre
Centre commercial
Park & Ride / Parc relais
Maitland
Clyde
Collège
ALGONQUIN
College
Navaho
Wajashk
Nigig
Adjidjak
Baseline
Navaho
Woodroffe
Baseline
Constellation
Weekday early morning and late night, and all day on weekends
En semaine tôt le matin et tard le soir, et toute la journée le week-end
Highgate
Centrepointe
Cobden
Centrepointe
Greenbank
Baseline
Bayshore
John
Sutherland
Bayshore
BAYSHORE
Holly Acres
Richmond
417
QUEENSWAY-
CARLETON

2025.04


BASELINE
Woodroffe
Navaho
Baseline
Constellation
Centrepointe
Baseline
Greenbank
Baseline
John Sutherland
QUEENSWAY CARLETON
416
Richmond
Robertson
Old Richmond
Moodie
Greenbank
Tyrrell
Robertson
Eagleson
Hazeldean Mall
Abbeyhill
Hazeldean
417
Castlefrank
Kanata
Katimavik
Terry Fox
Ron Maslin Playhouse
Tony Graham Recreation Complex
Complexe récréatif Tony-Graham
Terry Fox
Kanata Centrum
Palladium
Kanata Client Service Centre
Centre du service à la clientèle de Kanata
TERRY FOX
04.2025
Transitway & Station
Some trips / Quelques trajets
Park & Ride / Parc relais
Shopping Centre / Centre commercial

2025.04

Appendix D

TRANS Regional Model 2022 & 2046

TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Baseline

2022 Model - Basecase

N/A

User Initials: TIMW
Plot Prepared: Sept, 2025
EMME Scenario: 22002

Legend

AM Peak Hour Total Traffic Volume

1000 2000 3000 4000 5000

N

Distance (m)

50 100 150 200

Kenson Park

Field Street

Westbury Road

Baseline Road

Woodroffe Avenue

Algonquin

The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

Made with OpenPaths™ ©

TRANS Regional Model

Version 1.01 - Assigned December, 2024

AM Peak Hour Total Traffic Volume

Baseline

2046 Model - Basecase

N/A

User Initials: TIMW
Plot Prepared: Sept, 2025
EMME Scenario: 46001

Legend

AM Peak Hour Total Traffic Volume

1000 2000 3000 4000 5000

N

Distance (m)

50 100 150 200

Kenson Park

Field Street

Westbury Road

Baseline Road

Woodroffe Avenue

Algonquin

The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

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Made with OpenPaths™ ©

Appendix E

Detailed Turning Movement Data

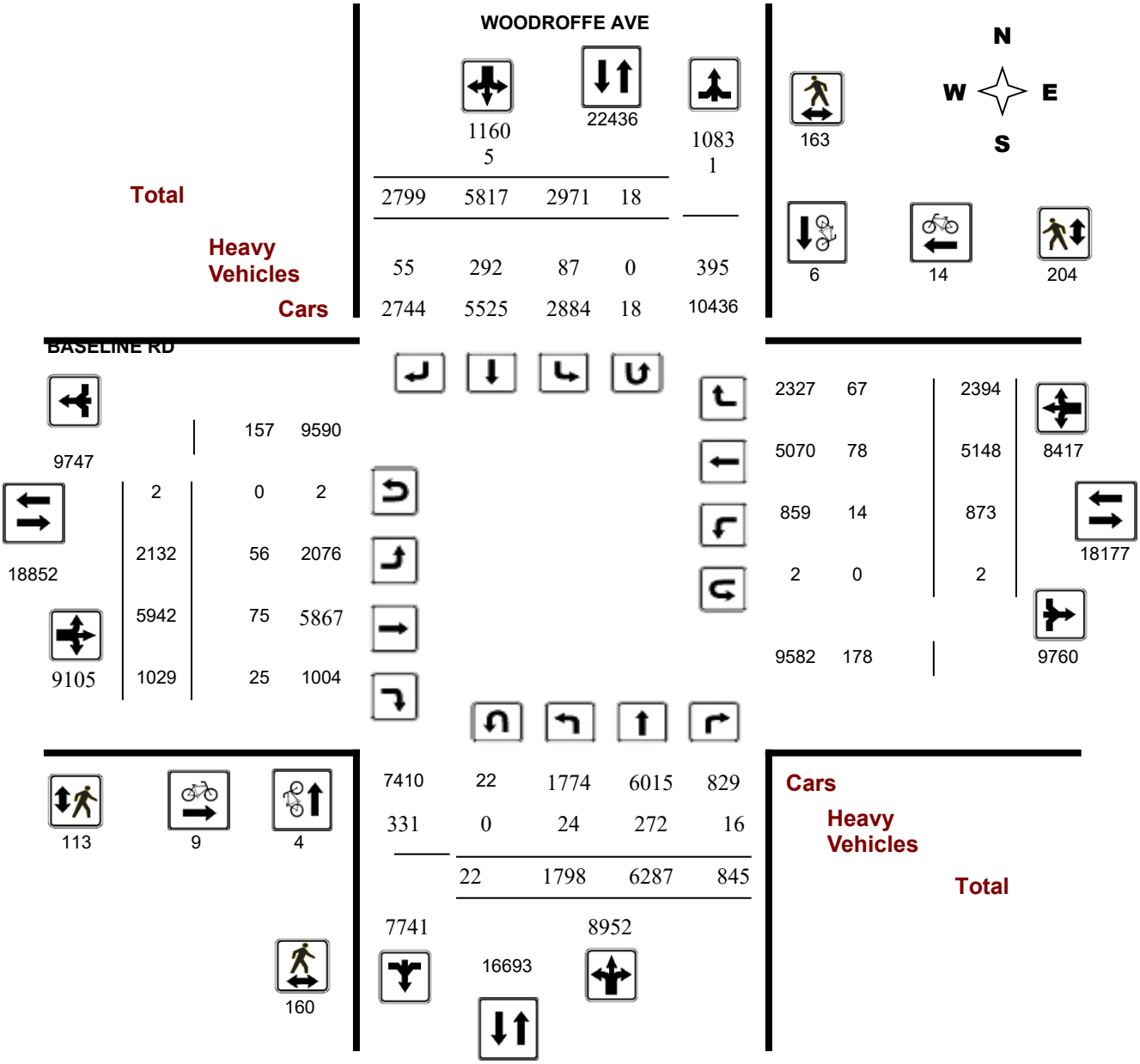
Transportation Services - Traffic Services

Turning Movement Count - Study Results

BASELINE RD @ WOODROFFE AVE

Survey Date: Wednesday, November 29, 2023
Start Time: 07:00
WO No: 41346
Device: Miovision

Full Study Diagram



Transportation Services - Traffic Services

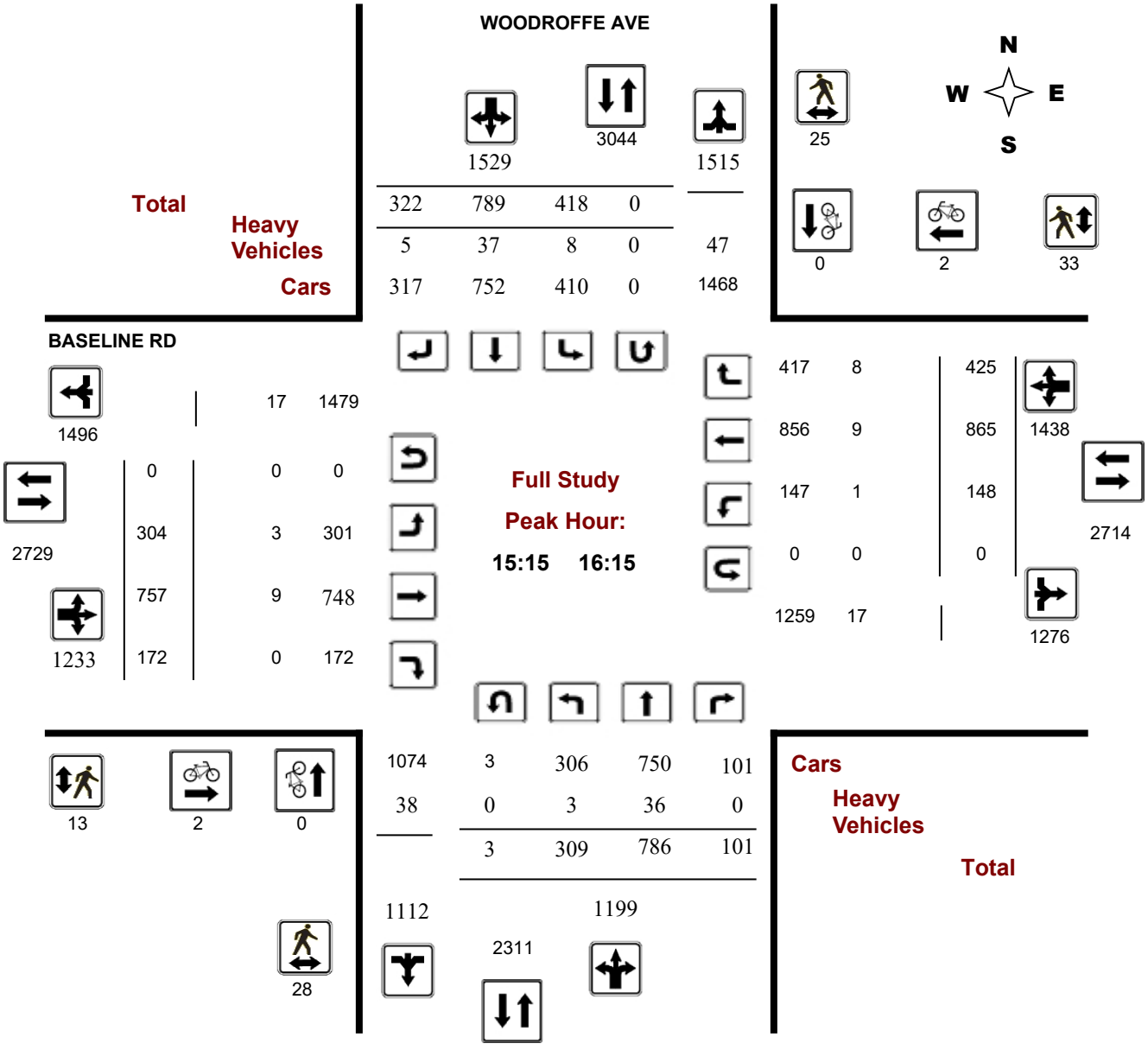
Turning Movement Count - Study Results

BASELINE RD @ WOODROFFE AVE

Survey Date: Wednesday, November 29, 2023 **WO No:** 41346

Start Time: 07:00 **Device:** Miovision

Full Study Peak Hour Diagram



Transportation Services - Traffic Services

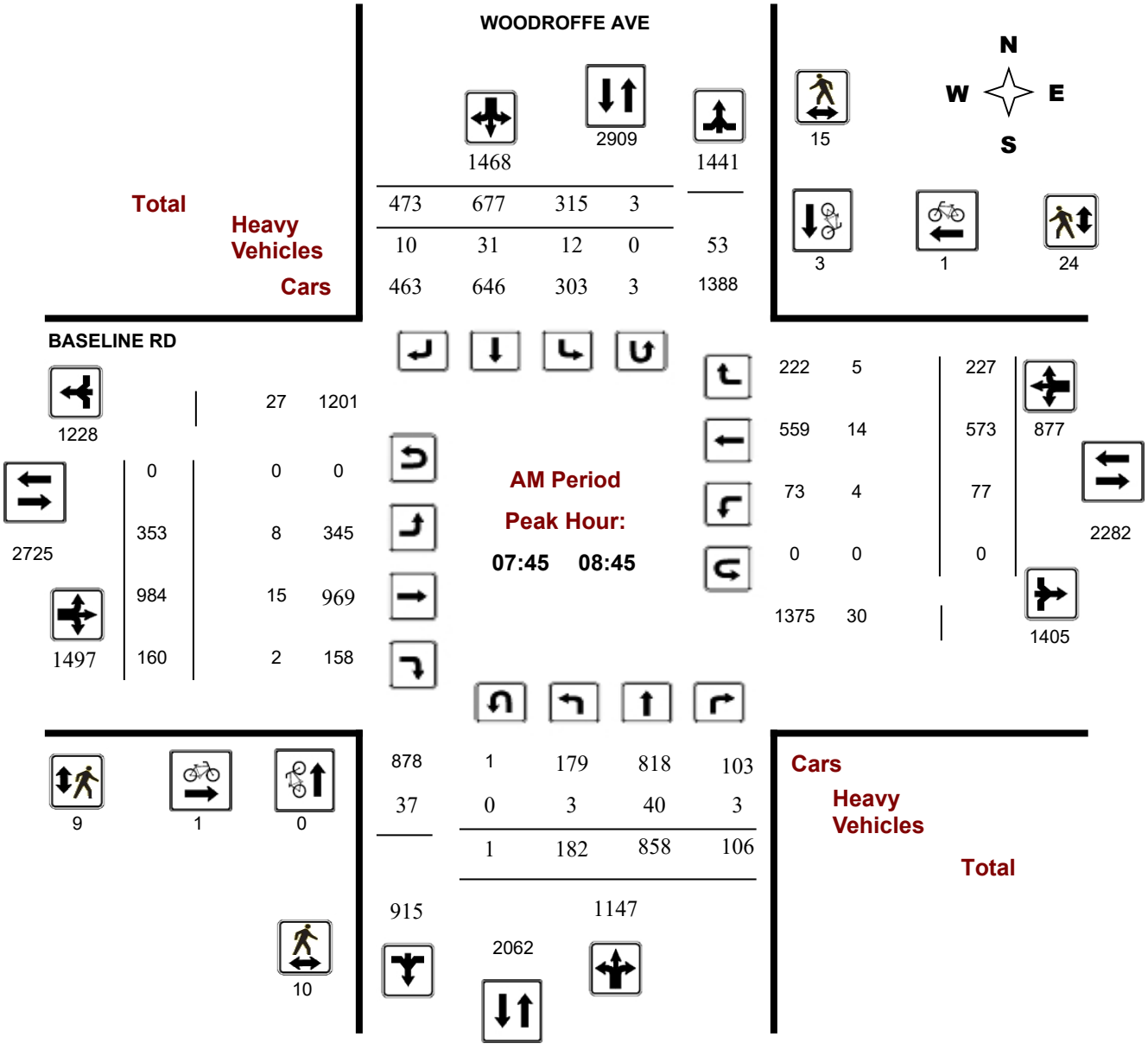
Turning Movement Count - Study Results

BASELINE RD @ WOODROFFE AVE

Survey Date: Wednesday, November 29, 2023 **WO No:** 41346

Start Time: 07:00 **Device:** Miovision

AM Period Peak Hour Diagram



Transportation Services - Traffic Services

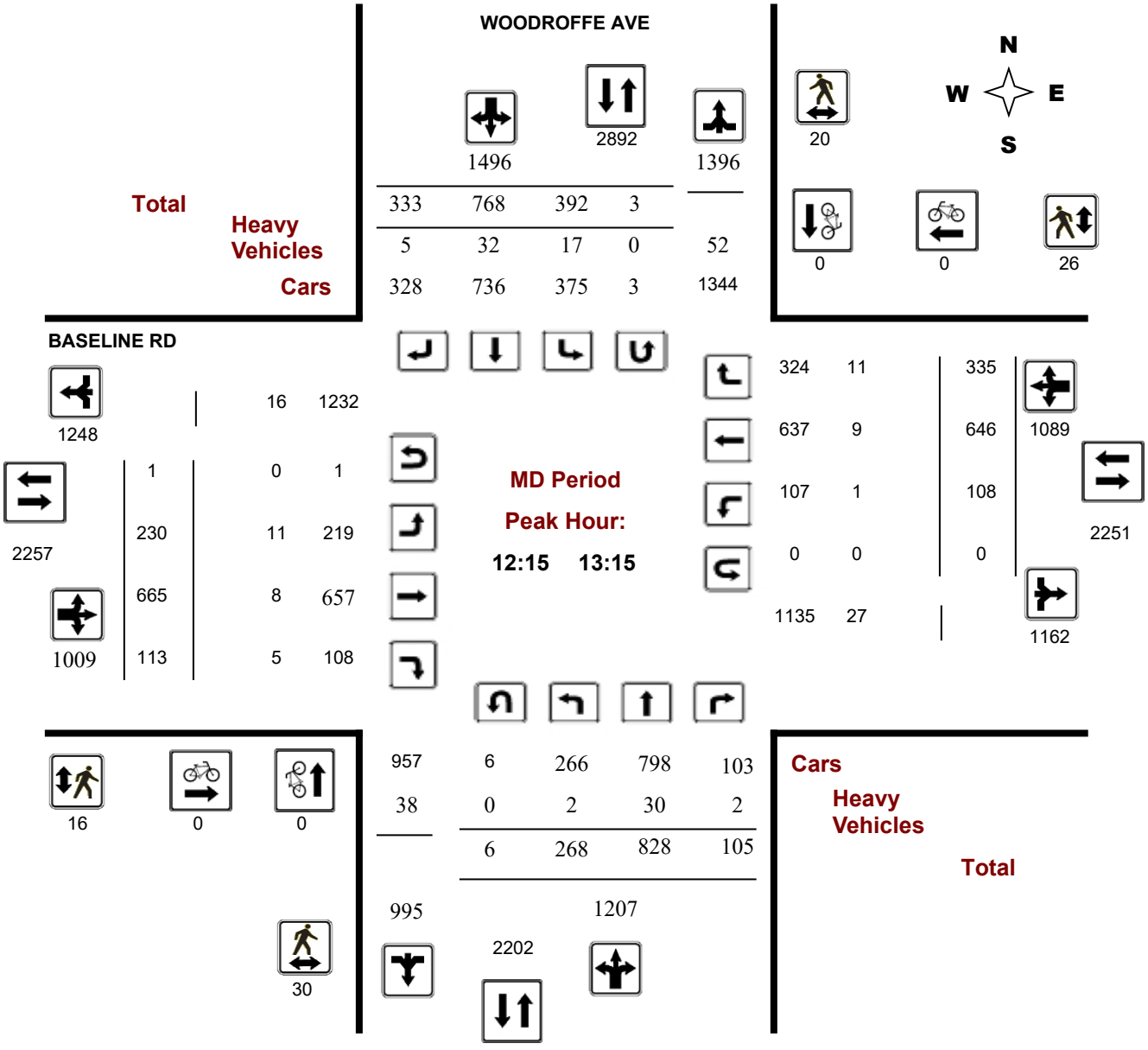
Turning Movement Count - Study Results

BASELINE RD @ WOODROFFE AVE

Survey Date: Wednesday, November 29, 2023 **WO No:** 41346

Start Time: 07:00 **Device:** Miovision

MD Period Peak Hour Diagram



Transportation Services - Traffic Services

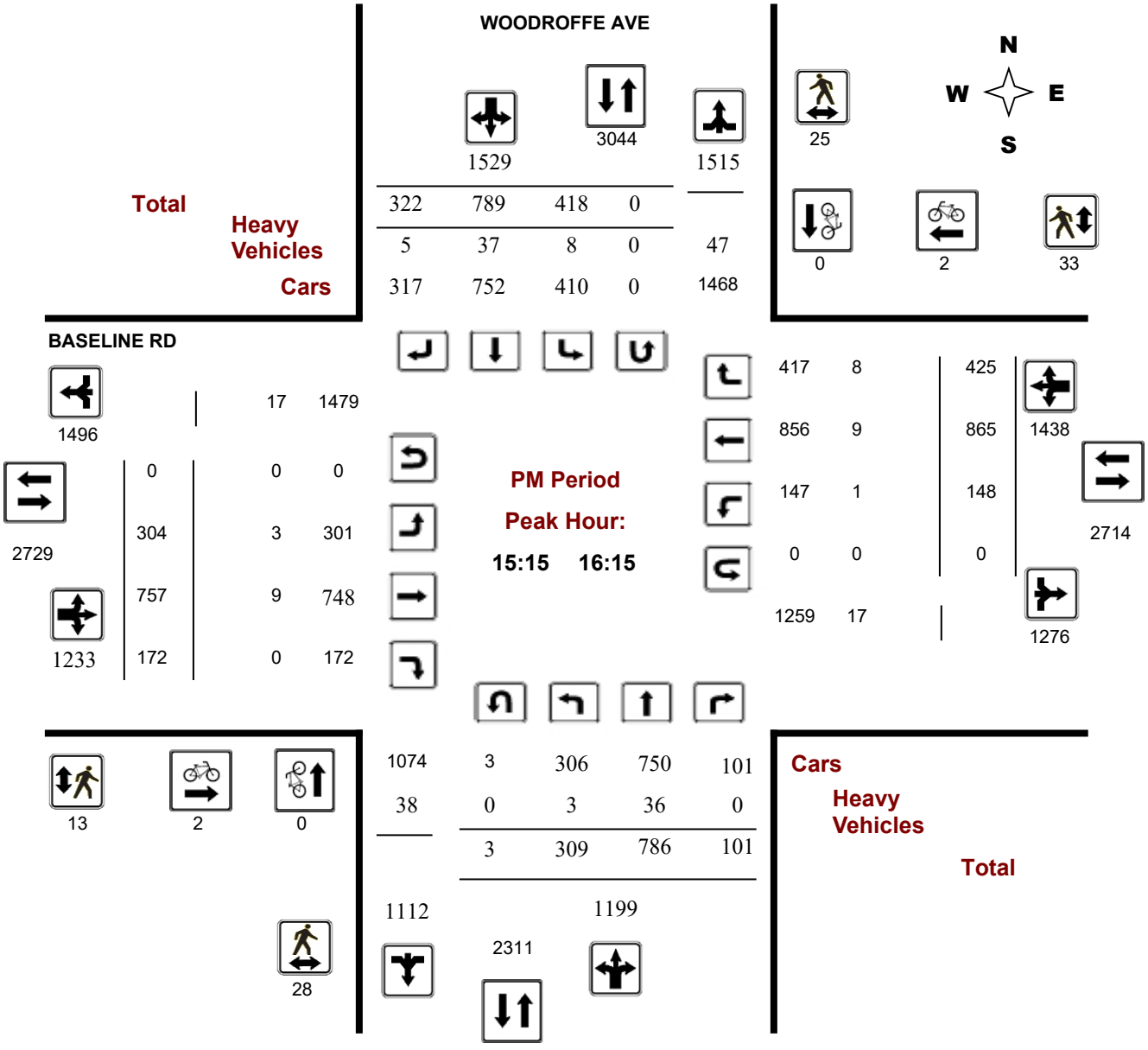
Turning Movement Count - Study Results

BASELINE RD @ WOODROFFE AVE

Survey Date: Wednesday, November 29, 2023 **WO No:** 41346

Start Time: 07:00 **Device:** Miovision

PM Period Peak Hour Diagram



Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Ottawa
Site #: 2519300008
Intersection: Baseline Rd & Shopping Mall Acce
TFR File #: 1
Count date: 4-Dec-25

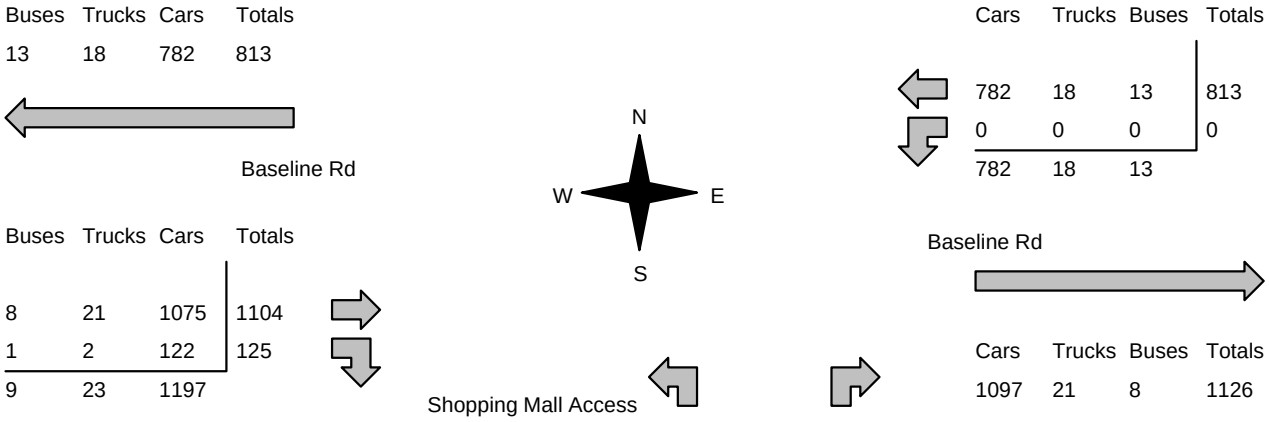
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Baseline Rd runs W/E

East Leg Total: 1939
East Entering: 813
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 1229
West Leg Total: 2042

Cars 122
Trucks 2
Buses 1
Totals 125

Cars 0 22 22
Trucks 0 0 0
Buses 0 0 0
Totals 0 22

Peds Cross: ⋈
South Peds: 2
South Entering: 22
South Leg Total: 147

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

Municipality: Ottawa
Site #: 2519300008
Intersection: Baseline Rd & Shopping Mall Acce
TFR File #: 1
Count date: 4-Dec-25

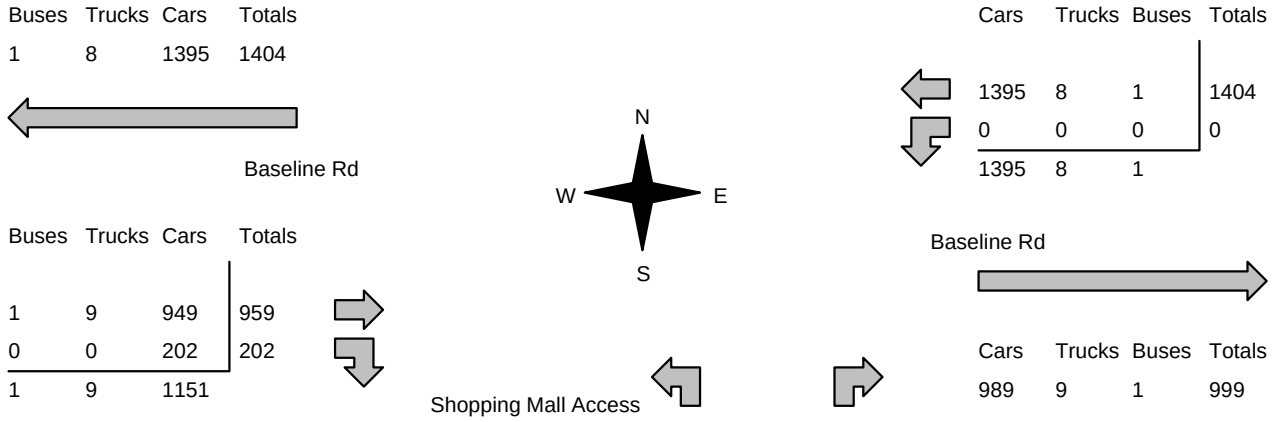
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Baseline Rd runs W/E

East Leg Total: 2403
East Entering: 1404
East Peds: 3
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 1161
West Leg Total: 2565

Cars 202
Trucks 0
Buses 0
Totals 202

Cars 0 40 40
Trucks 0 0 0
Buses 0 0 0
Totals 0 40

Peds Cross: ⋈
South Peds: 6
South Entering: 40
South Leg Total: 242

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Ottawa
Site #: 2519300008
Intersection: Baseline Rd & Shopping Mall Acce
TFR File #: 1
Count date: 4-Dec-25

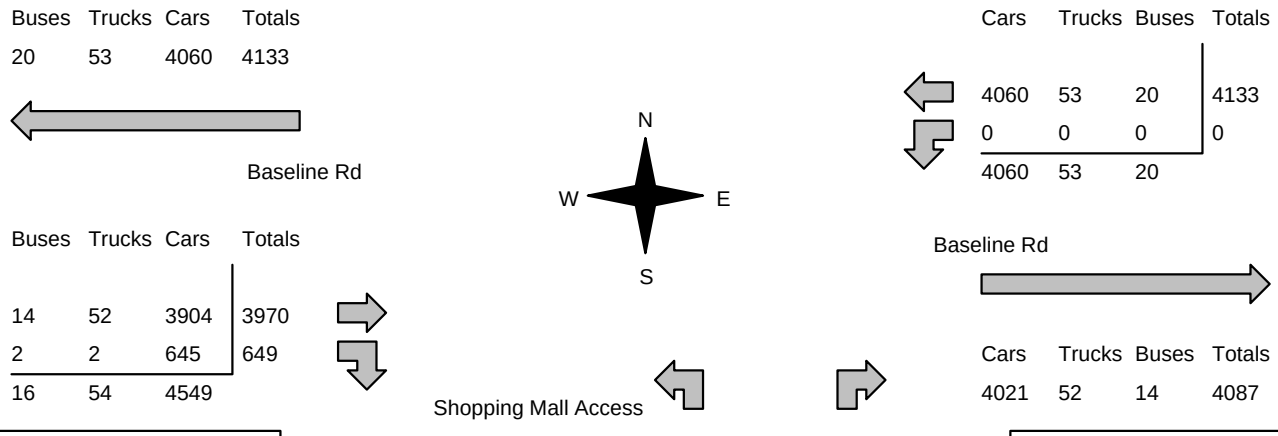
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Baseline Rd runs W/E

East Leg Total: 8220
East Entering: 4133
East Peds: 6
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 4619
West Leg Total: 8752

Cars 645
Trucks 2
Buses 2
Totals 649

Cars 0 117 117
Trucks 0 0 0
Buses 0 0 0
Totals 0 117

Peds Cross: ⋈
South Peds: 17
South Entering: 117
South Leg Total: 766

Comments

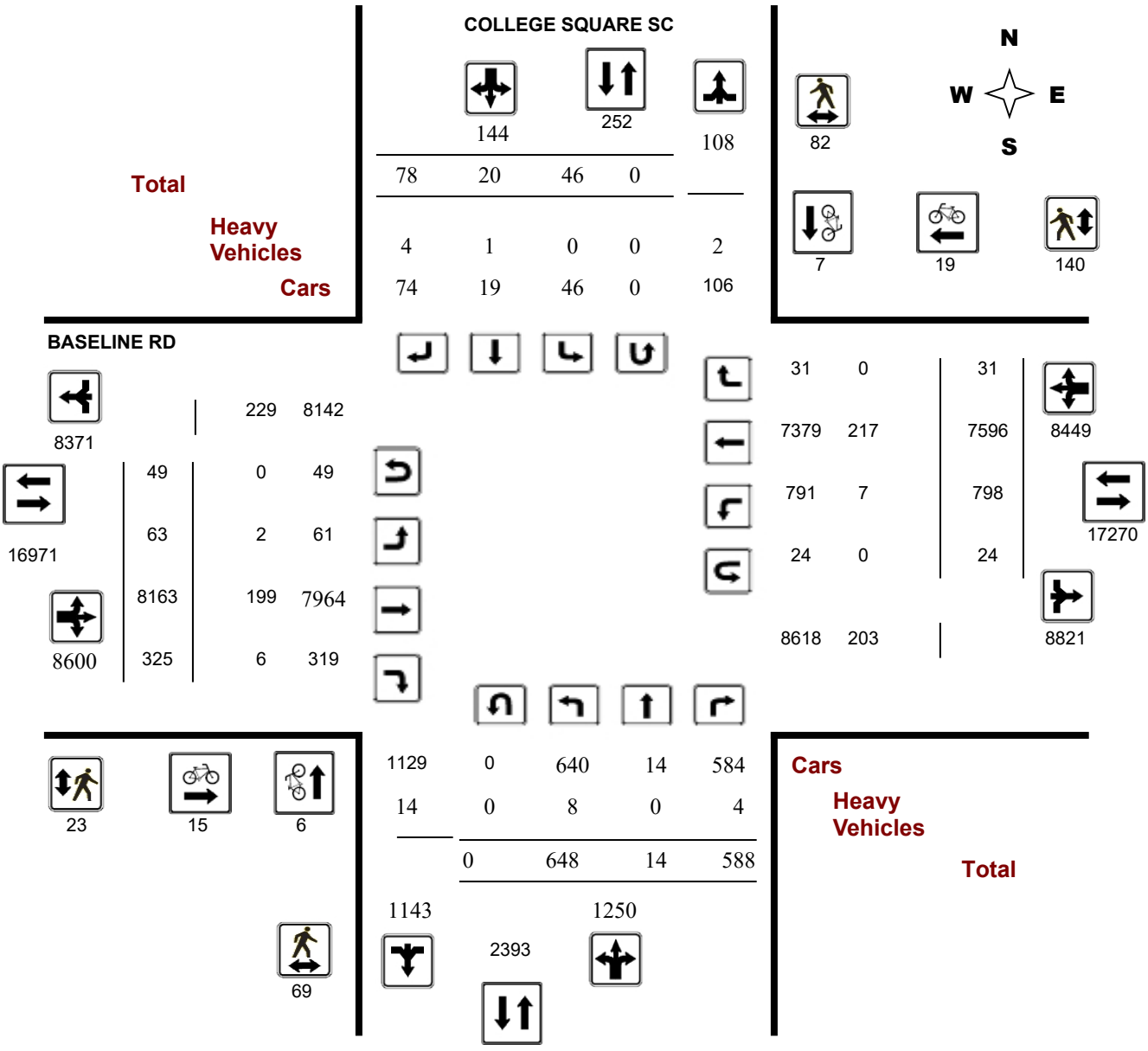
Transportation Services - Traffic Services

Turning Movement Count - Study Results

BASELINE RD @ COLLEGE SQUARE SC

Survey Date: Tuesday, October 22, 2024
Start Time: 07:00
WO No: 42306
Device: Miovision

Full Study Diagram



Transportation Services - Traffic Services

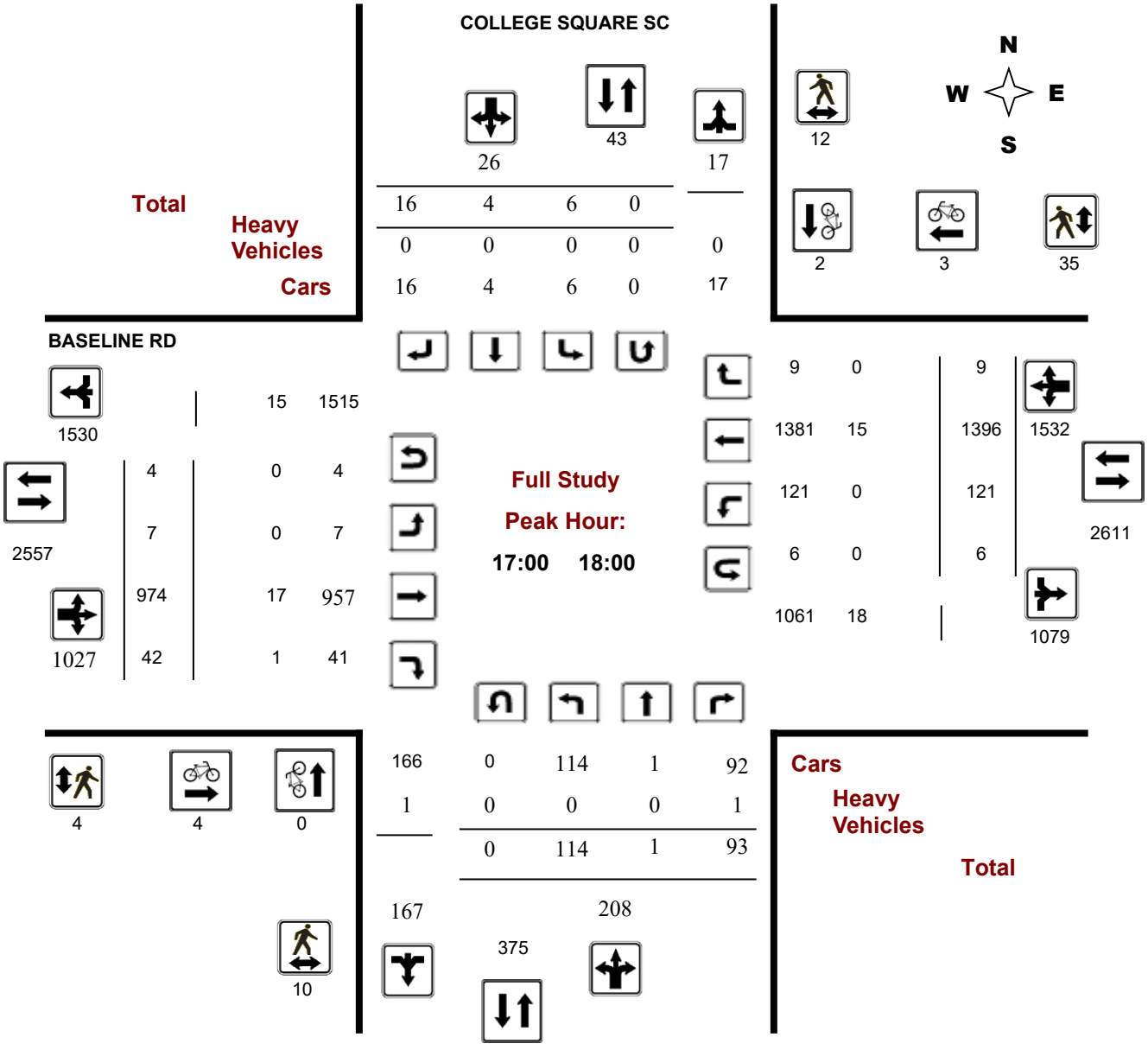
Turning Movement Count - Study Results

BASELINE RD @ COLLEGE SQUARE SC

Survey Date: Tuesday, October 22, 2024 **WO No:** 42306

Start Time: 07:00 **Device:** Miovision

Full Study Peak Hour Diagram



Transportation Services - Traffic Services

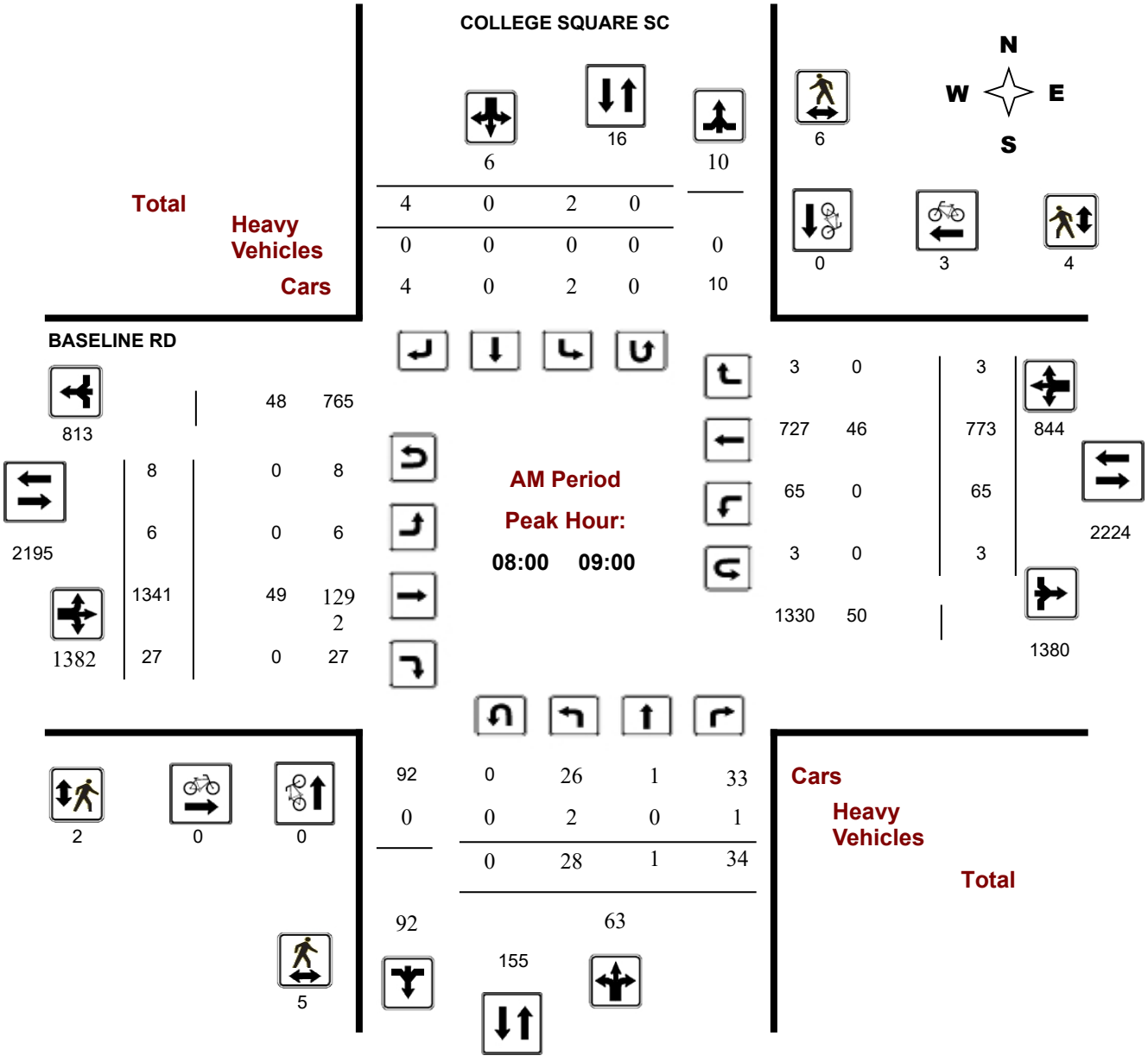
Turning Movement Count - Study Results

BASELINE RD @ COLLEGE SQUARE SC

Survey Date: Tuesday, October 22, 2024 **WO No:** 42306

Start Time: 07:00 **Device:** Miovision

AM Period Peak Hour Diagram



Transportation Services - Traffic Services

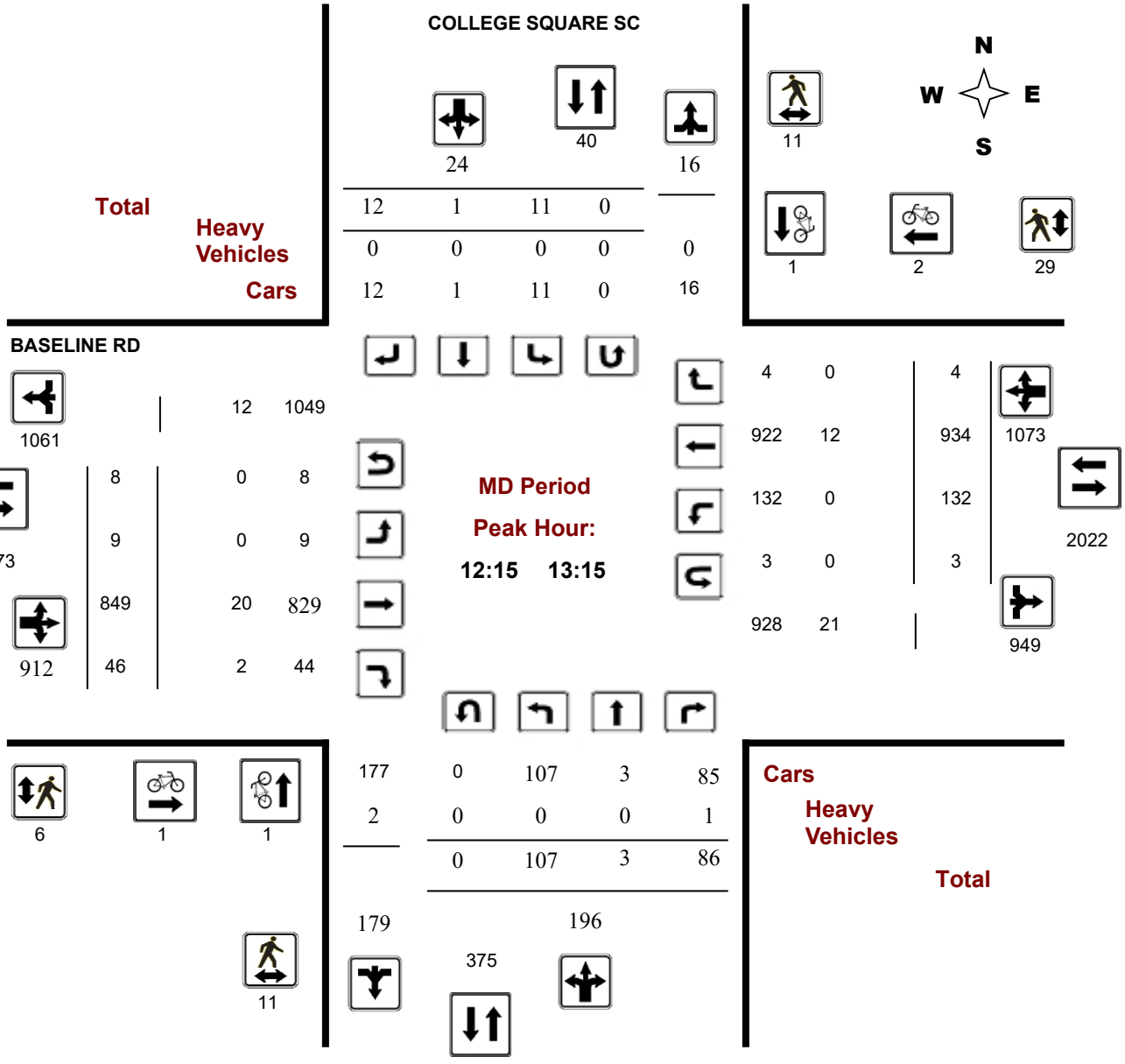
Turning Movement Count - Study Results

BASELINE RD @ COLLEGE SQUARE SC

Survey Date: Tuesday, October 22, 2024 **WO No:** 42306

Start Time: 07:00 **Device:** Miovision

MD Period Peak Hour Diagram



Transportation Services - Traffic Services

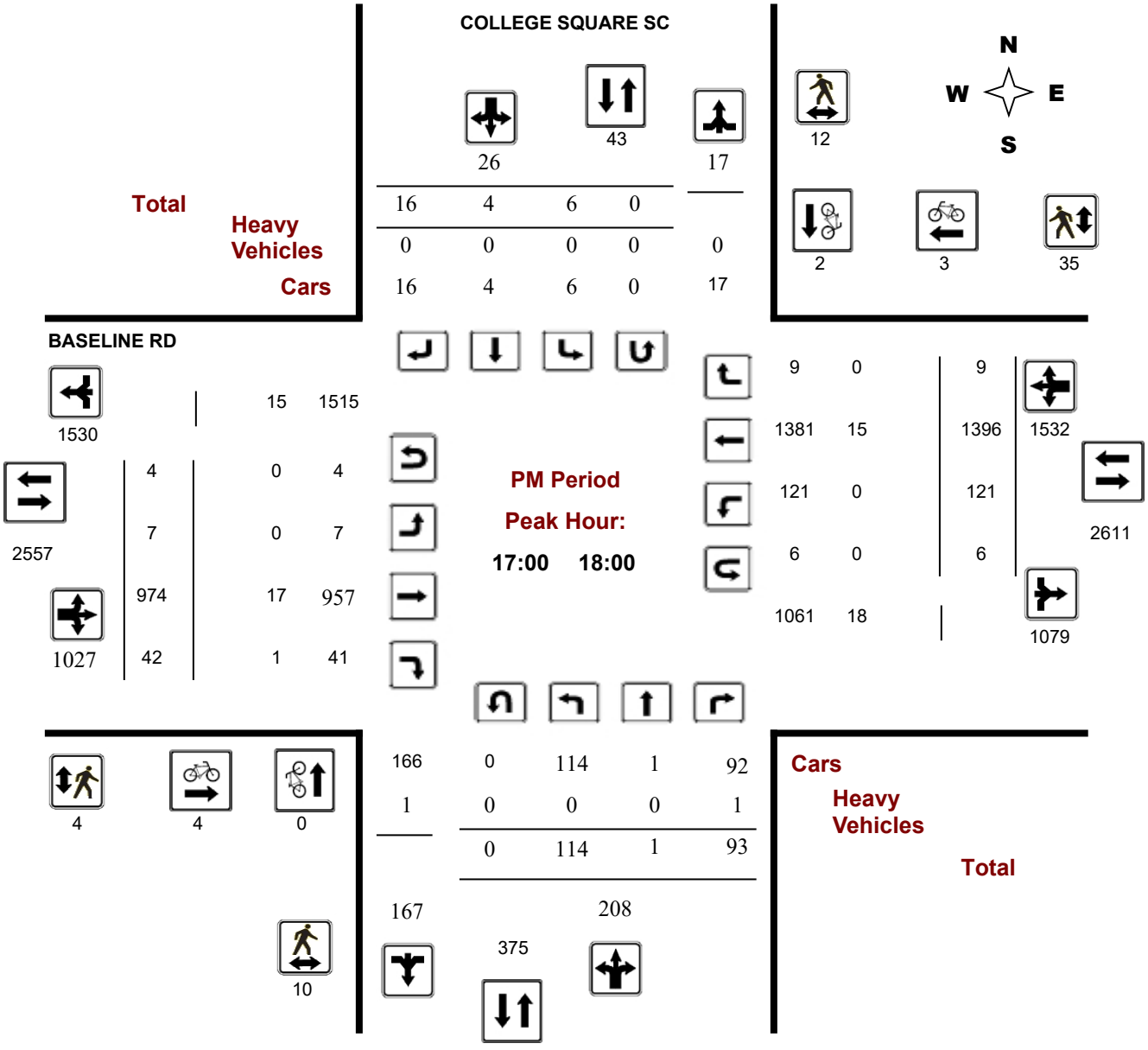
Turning Movement Count - Study Results

BASELINE RD @ COLLEGE SQUARE SC

Survey Date: Tuesday, October 22, 2024 **WO No:** 42306

Start Time: 07:00 **Device:** Miovision

PM Period Peak Hour Diagram



Transportation Services - Traffic Services

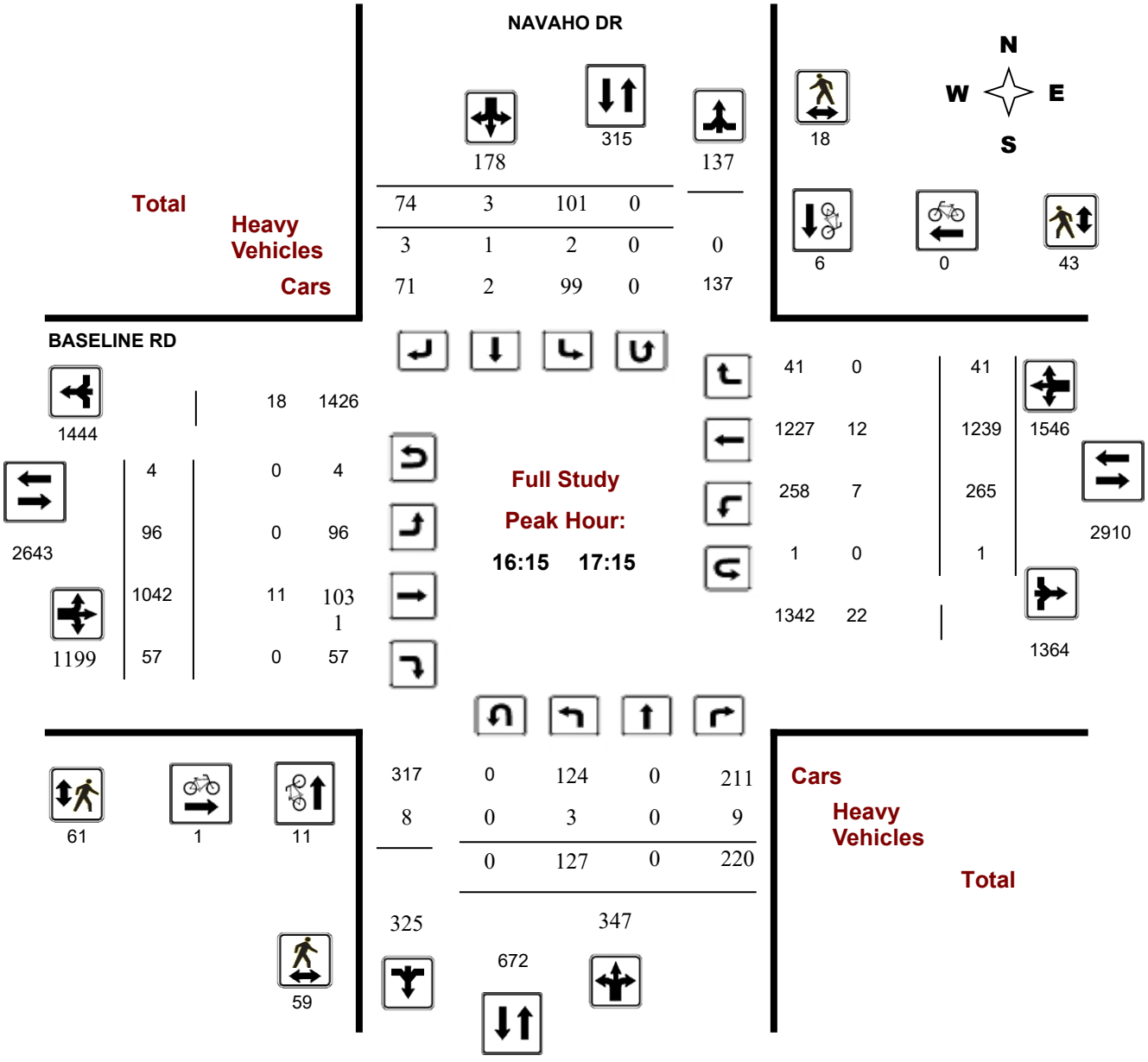
Turning Movement Count - Study Results

BASELINE RD @ NAVAHO DR

Survey Date: Wednesday, October 23, 2024 **WO No:** 42346

Start Time: 07:00 **Device:** Miovision

Full Study Peak Hour Diagram



Transportation Services - Traffic Services

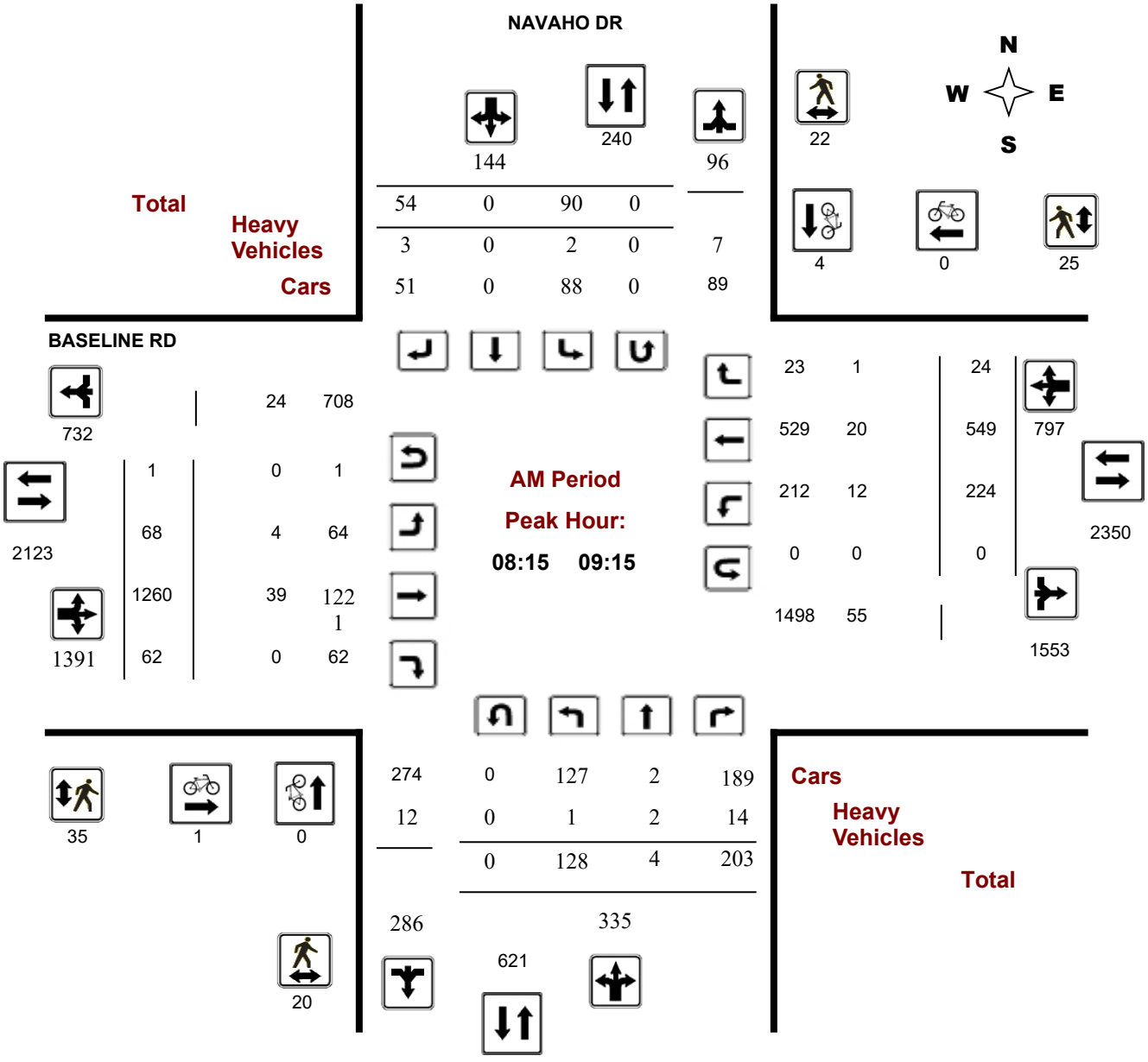
Turning Movement Count - Study Results

BASELINE RD @ NAVAHO DR

Survey Date: Wednesday, October 23, 2024 **WO No:** 42346

Start Time: 07:00 **Device:** Miovision

AM Period Peak Hour Diagram



Transportation Services - Traffic Services

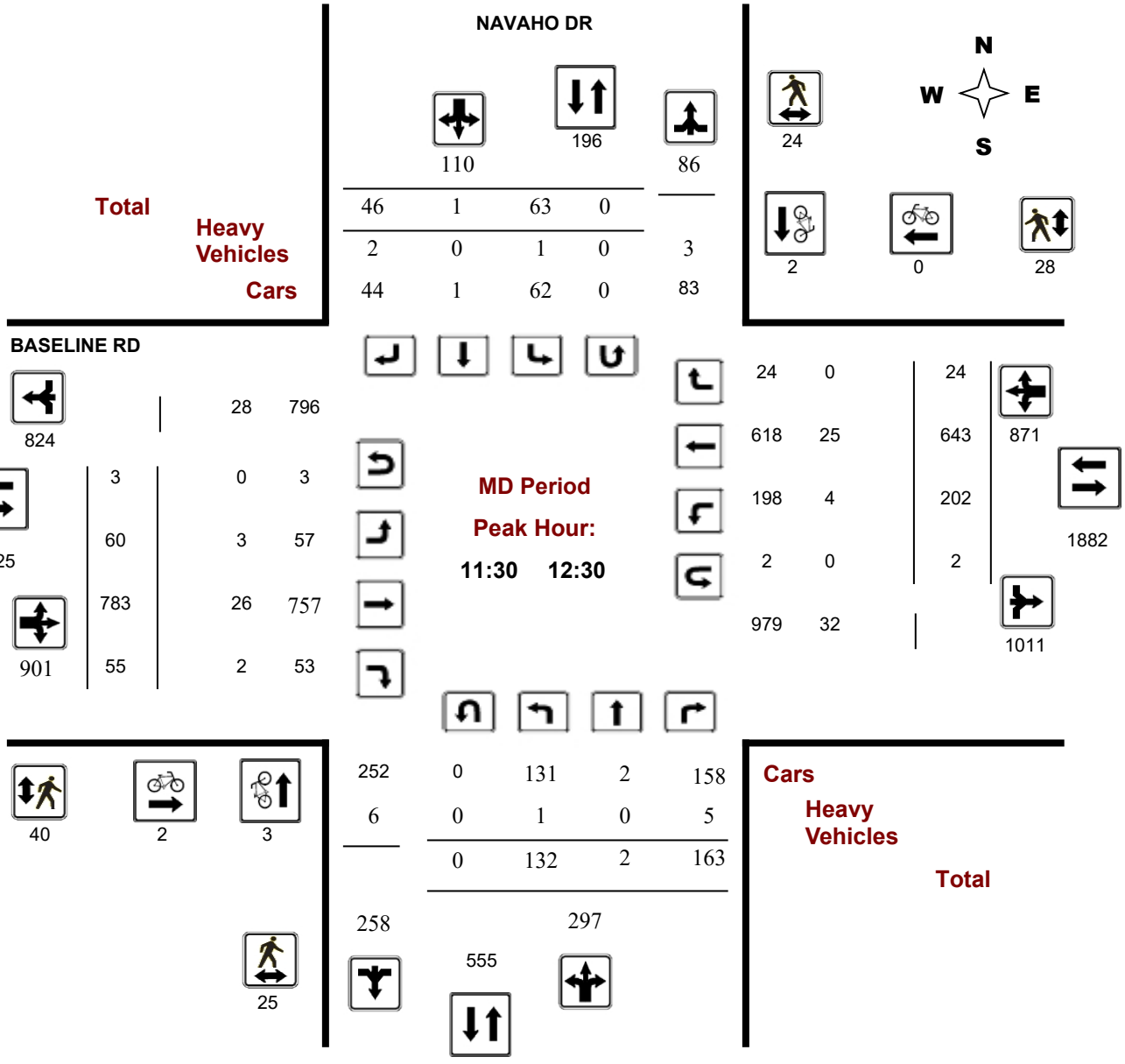
Turning Movement Count - Study Results

BASELINE RD @ NAVAHO DR

Survey Date: Wednesday, October 23, 2024 **WO No:** 42346

Start Time: 07:00 **Device:** Miovision

MD Period Peak Hour Diagram



Transportation Services - Traffic Services

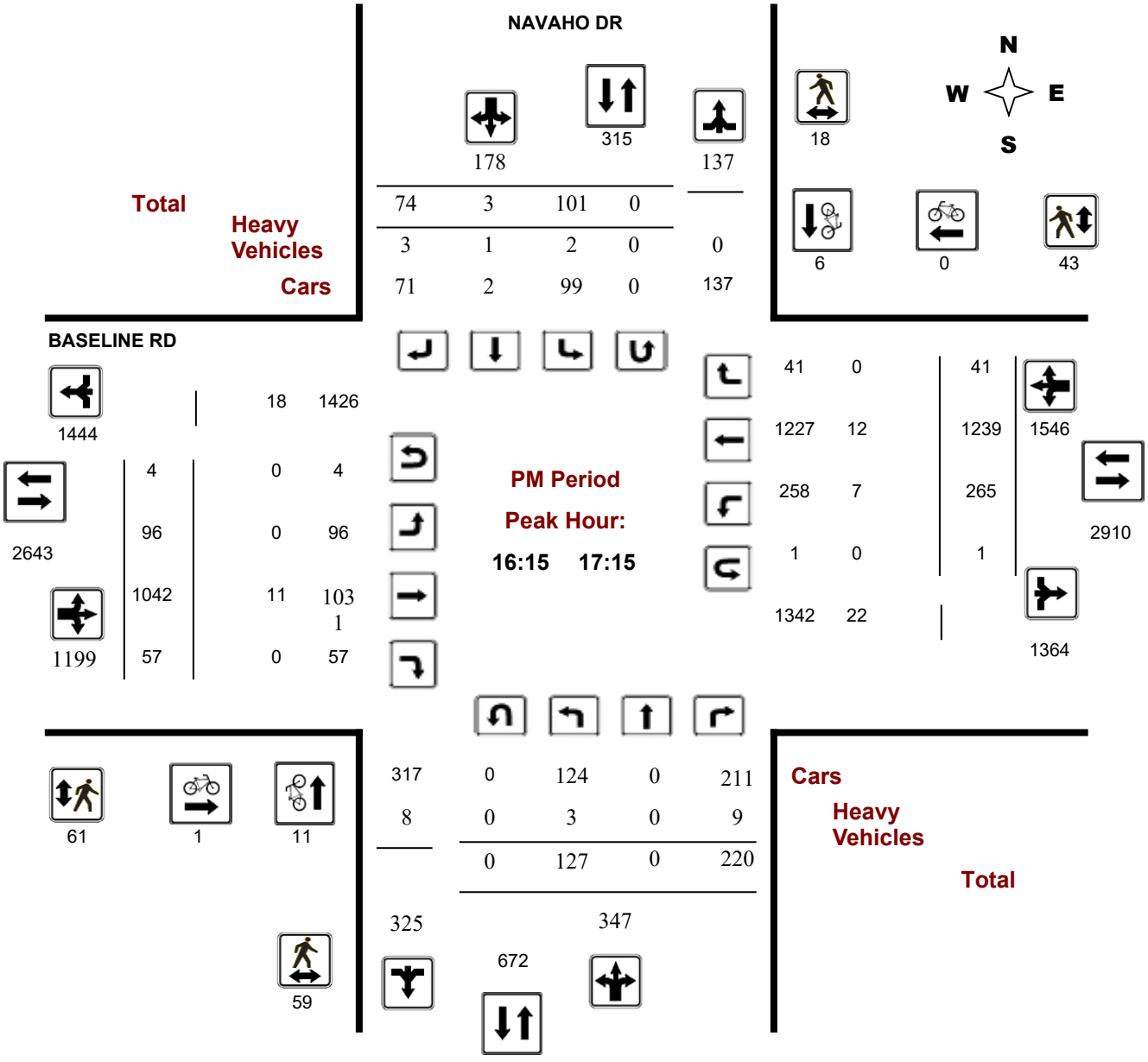
Turning Movement Count - Study Results

BASELINE RD @ NAVAHO DR

Survey Date: Wednesday, October 23, 2024 **WO No:** 42346

Start Time: 07:00 **Device:** Miovision

PM Period Peak Hour Diagram



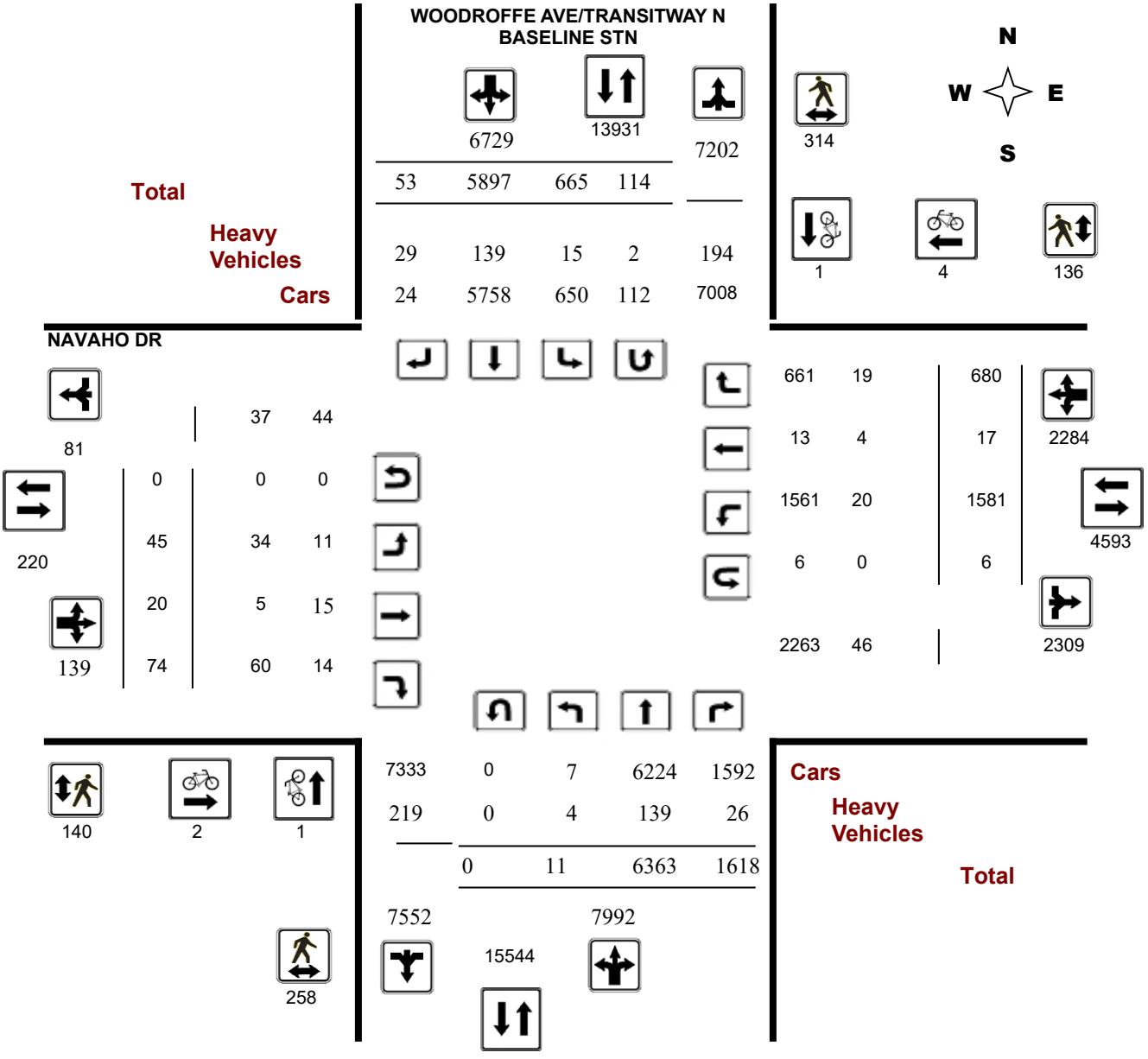
Transportation Services - Traffic Services

Turning Movement Count - Study Results

NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Survey Date: Wednesday, February 16, 2022
Start Time: 07:00
WO No: 40139
Device: Miovision

Full Study Diagram



Transportation Services - Traffic Services

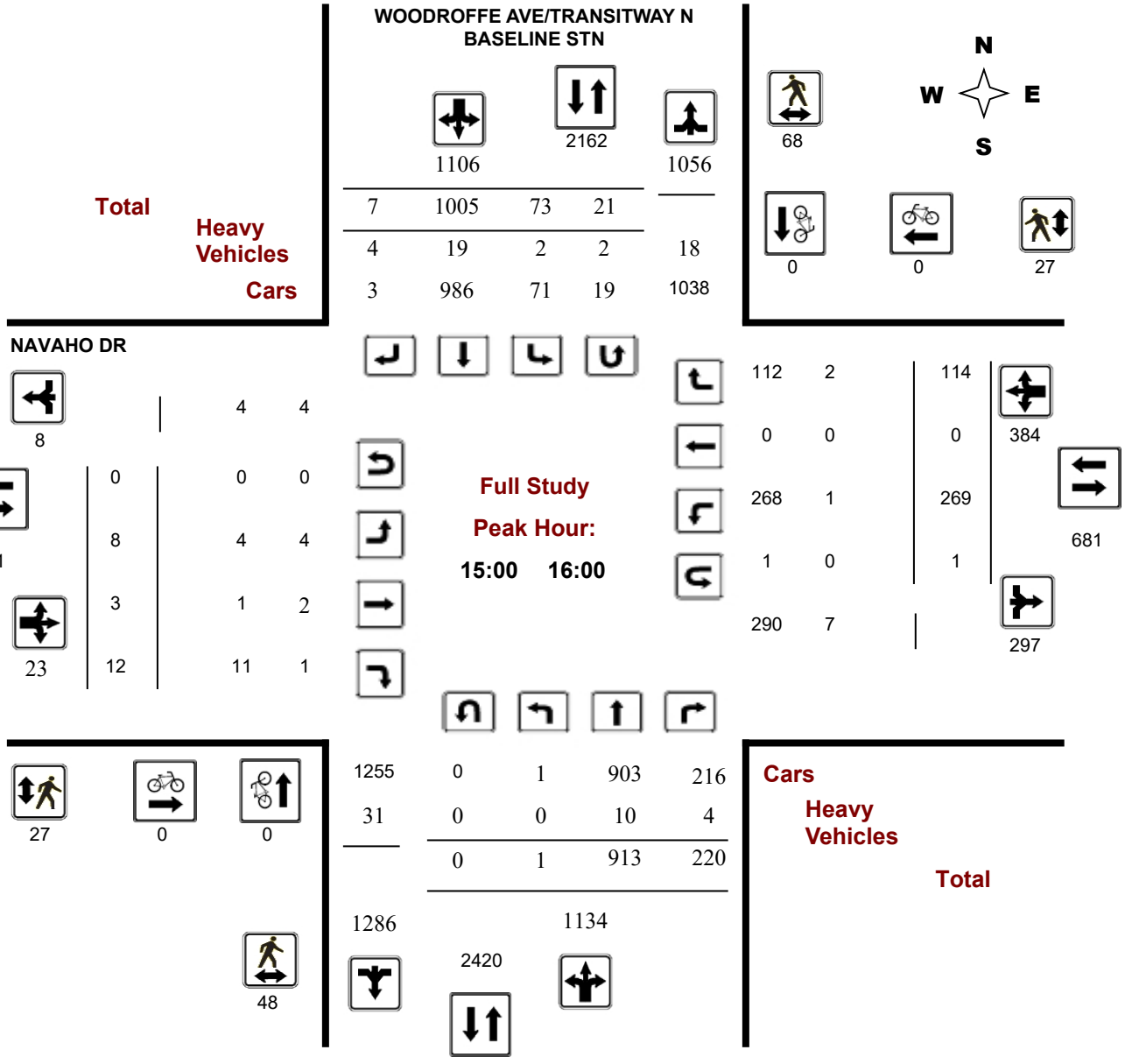
Turning Movement Count - Study Results

NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Survey Date: Wednesday, February 16, 2022 **WO No:** 40139

Start Time: 07:00 **Device:** Miovision

Full Study Peak Hour Diagram



Transportation Services - Traffic Services

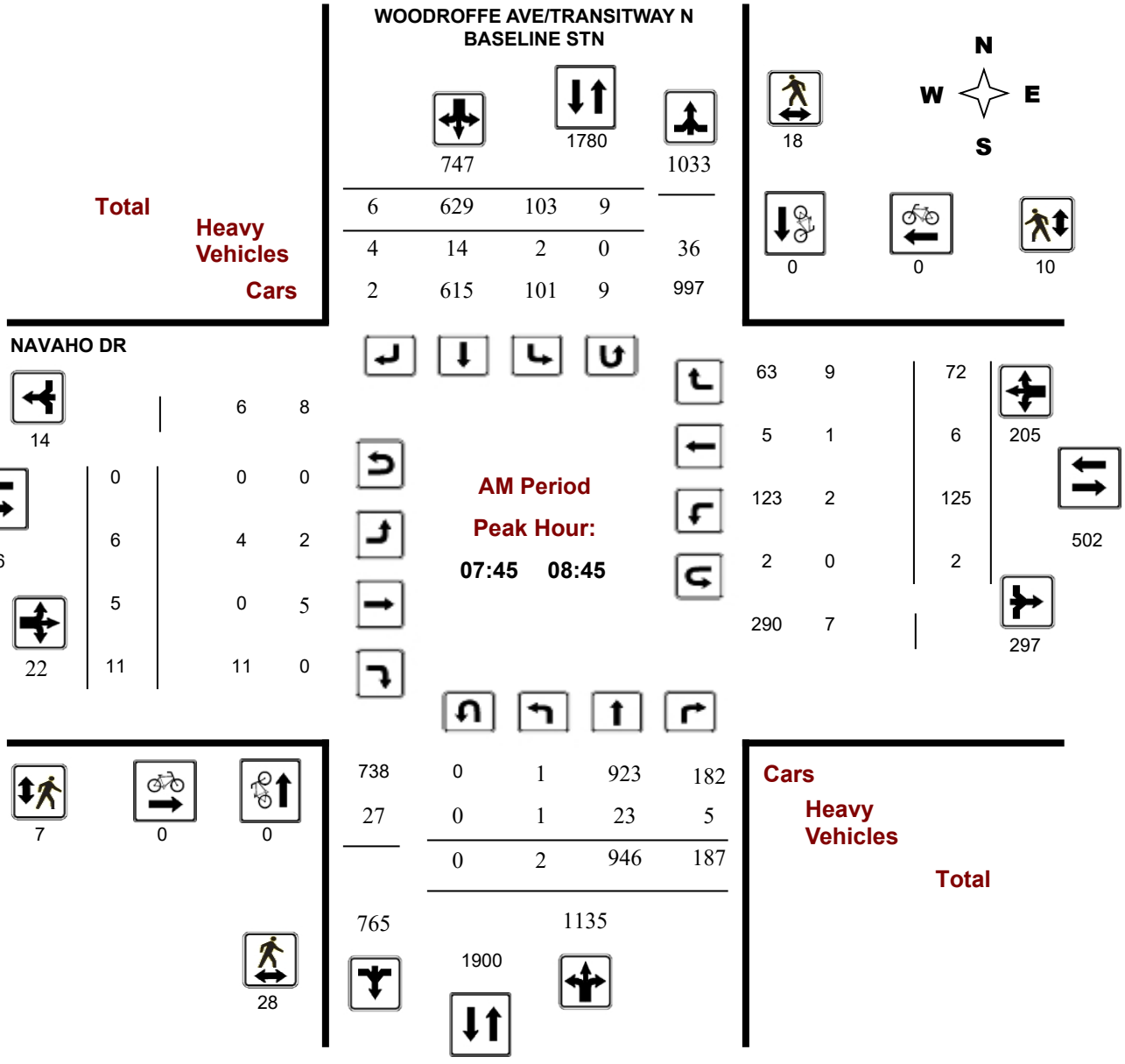
Turning Movement Count - Study Results

NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Survey Date: Wednesday, February 16, 2022 **WO No:** 40139

Start Time: 07:00 **Device:** Miovision

AM Period Peak Hour Diagram



Transportation Services - Traffic Services

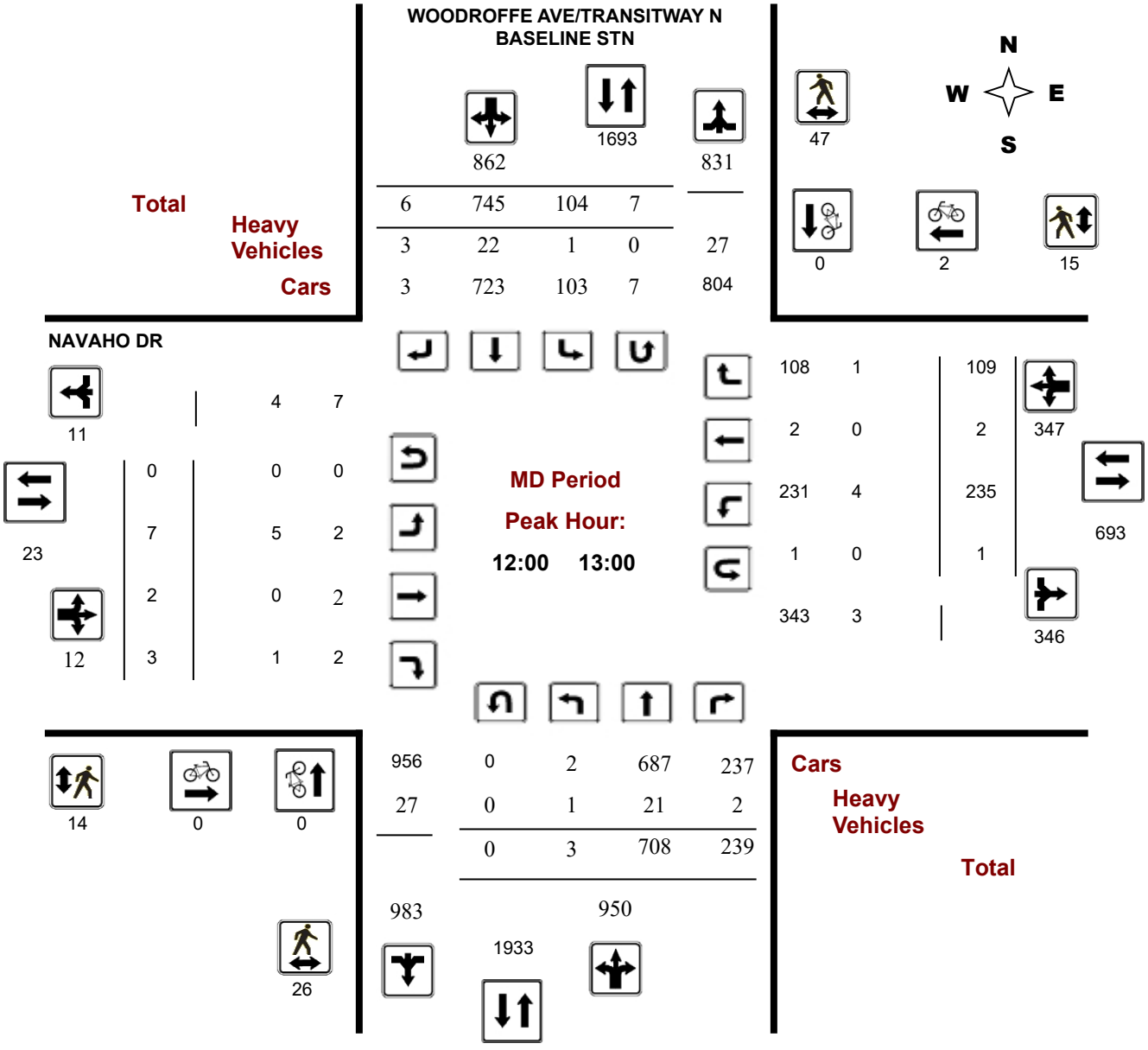
Turning Movement Count - Study Results

NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Survey Date: Wednesday, February 16, 2022 **WO No:** 40139

Start Time: 07:00 **Device:** Miovision

MD Period Peak Hour Diagram



Transportation Services - Traffic Services

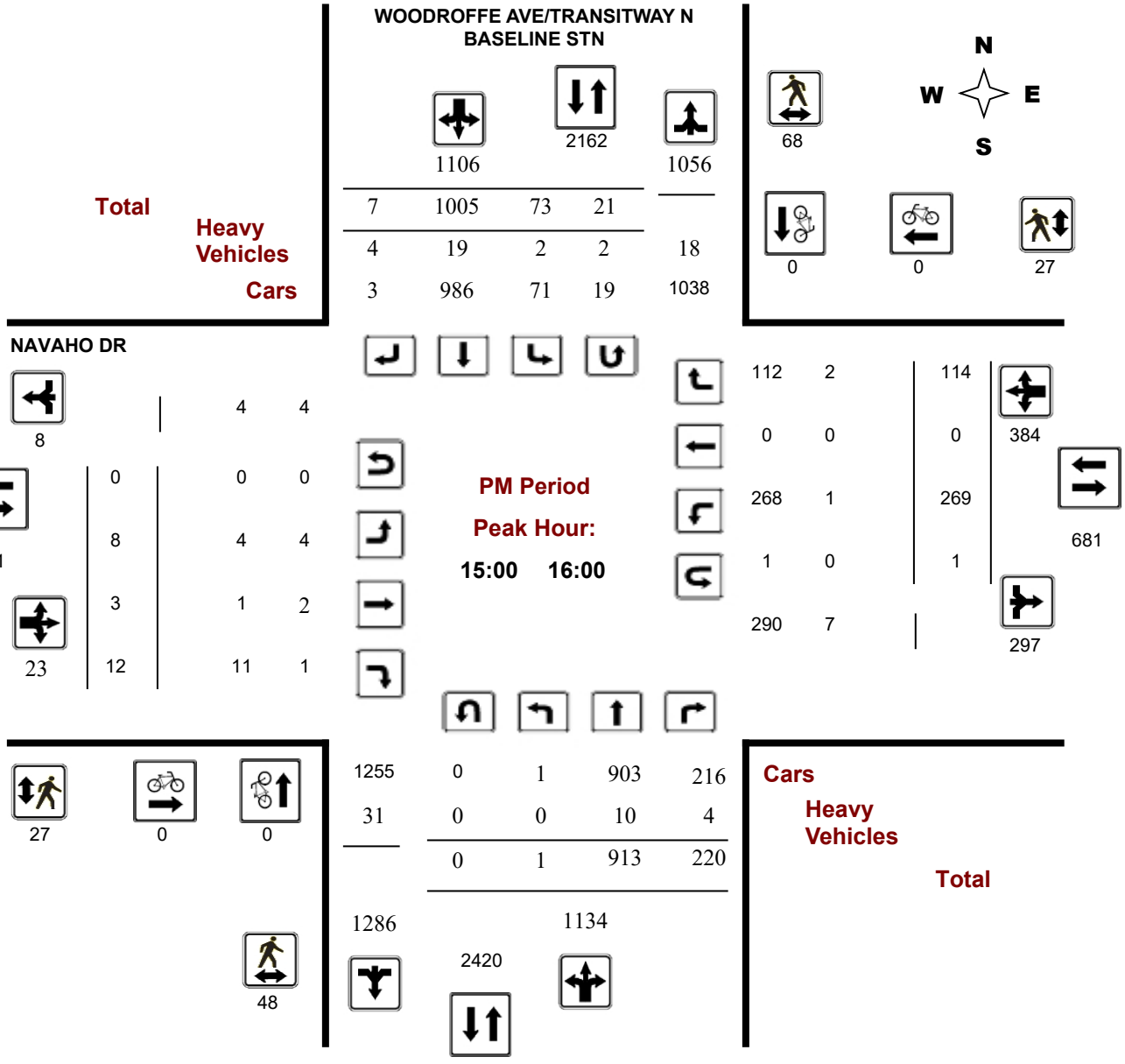
Turning Movement Count - Study Results

NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Survey Date: Wednesday, February 16, 2022 **WO No:** 40139

Start Time: 07:00 **Device:** Miovision

PM Period Peak Hour Diagram



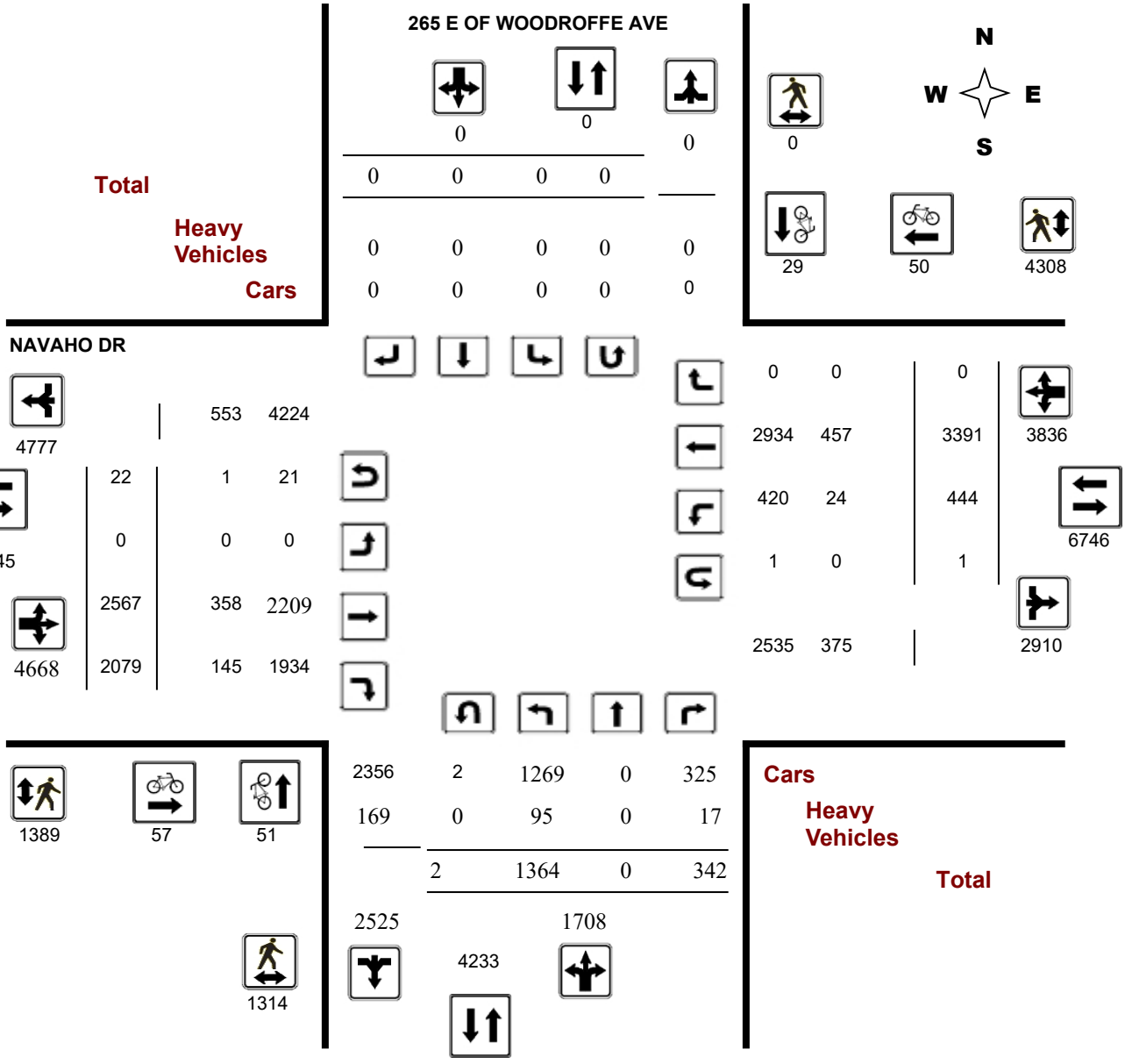
Transportation Services - Traffic Services

Turning Movement Count - Study Results

NAVAHO DR @ 265 E OF WOODROFFE AVE

Survey Date: Tuesday, September 24, 2024
Start Time: 00:00
WO No: 42076
Device: Miovision

Full Study Diagram



Transportation Services - Traffic Services

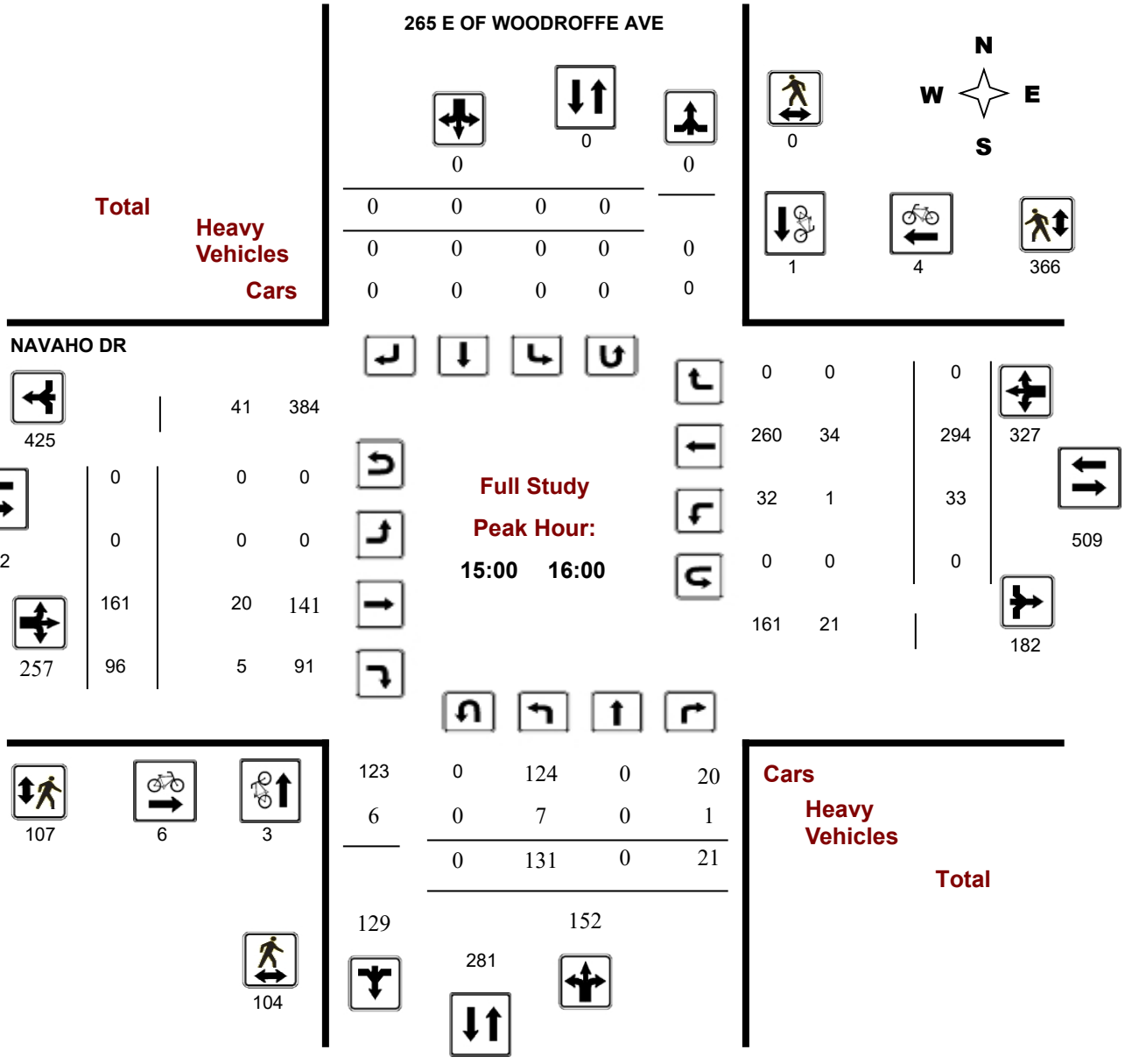
Turning Movement Count - Study Results

NAVAHO DR @ 265 E OF WOODROFFE AVE

Survey Date: Tuesday, September 24, 2024 **WO No:** 42076

Start Time: 00:00 **Device:** Miovision

Full Study Peak Hour Diagram



Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Ottawa
Site #: 2519300006
Intersection: Woodroffe Ave & Shopping Mall Ac
TFR File #: 1
Count date: 4-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S

North Leg Total: 2374
North Entering: 1015
North Peds: 0
Peds Cross: ⋈

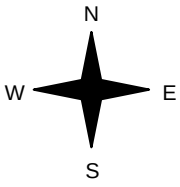
Buses	18	0	18
Trucks	12	0	12
Cars	985	0	985
Totals	1015	0	

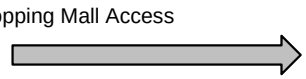
Buses	29
Trucks	18
Cars	1312
Totals	1359

East Leg Total: 107
East Entering: 66
East Peds: 5
Peds Cross: ⋈



Cars	65	1	0	66
	0	0	0	0
	65	1	0	





Cars	Trucks	Buses	Totals
41	0	0	41



Cars	985	Cars	1247	41	1288
Trucks	12	Trucks	17	0	17
Buses	18	Buses	29	0	29
Totals	1015	Totals	1293	41	

Peds Cross: ⋈
South Peds: 0
South Entering: 1334
South Leg Total: 2349

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:00:00
To: 17:00:00

Municipality: Ottawa
Site #: 2519300006
Intersection: Woodroffe Ave & Shopping Mall Ac
TFR File #: 1
Count date: 4-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

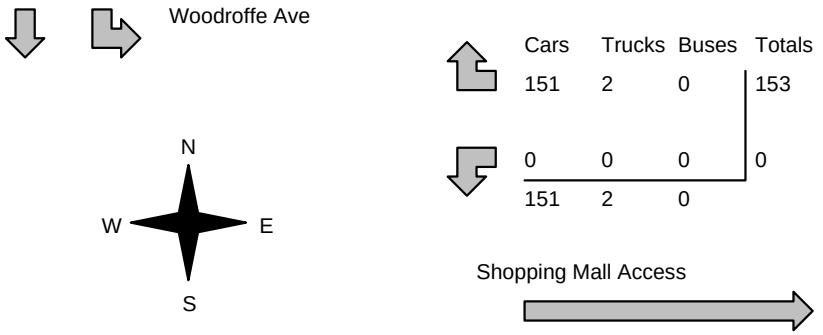
Major Road: Woodroffe Ave runs N/S

North Leg Total: 2371
North Entering: 1063
North Peds: 0
Peds Cross: ⋈

Buses	29	0	29
Trucks	3	0	3
Cars	1031	0	1031
Totals	1063	0	

Buses	19
Trucks	9
Cars	1280
Totals	1308

East Leg Total: 204
East Entering: 153
East Peds: 5
Peds Cross: ⋈



Cars	1031		
Trucks	3		
Buses	29		
Totals	1063		

Cars	1129	51	1180
Trucks	7	0	7
Buses	19	0	19
Totals	1155	51	

Peds Cross: ⋈
South Peds: 0
South Entering: 1206
South Leg Total: 2269

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Ottawa
Site #: 2519300006
Intersection: Woodroffe Ave & Shopping Mall Ac
TFR File #: 1
Count date: 4-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S

North Leg Total: 8919
North Entering: 3843
North Peds: 0
Peds Cross: ⋈

Buses	83	0	83
Trucks	41	0	41
Cars	3719	0	3719
Totals	3843	0	

Buses	92
Trucks	58
Cars	4926
Totals	5076

East Leg Total: 625
East Entering: 458
East Peds: 18
Peds Cross: ⋈

Woodroffe Ave

Cars	Trucks	Buses	Totals
453	3	2	458
0	0	0	0
453	3	2	

N
W E
S

Shopping Mall Access

Cars	Trucks	Buses	Totals
166	1	0	167

Woodroffe Ave

Cars	3719	4473	166	4639
Trucks	41	55	1	56
Buses	83	90	0	90
Totals	3843	4618	167	

Peds Cross: ⋈
South Peds: 1
South Entering: 4785
South Leg Total: 8628

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Ottawa
Site #: 2519300007
Intersection: Navaho Dr & Shopping Mall Access
TFR File #: 1
Count date: 4-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Navaho Dr runs W/E

North Leg Total: 171
North Entering: 87
North Peds: 4
Peds Cross: ⋈

Buses	0	0	0
Trucks	0	0	0
Cars	76	11	87
Totals	76	11	

Buses	1
Trucks	0
Cars	83
Totals	84

East Leg Total: 533
East Entering: 142
East Peds: 7
Peds Cross: ⧖

Shopping Mall Access

Buses	Trucks	Cars	Totals
2	5	195	202

Navaho Dr

Buses	Trucks	Cars	Totals
1	0	67	68
4	3	373	380
5	3	440	

Cars	Trucks	Buses	Totals
16	0	0	16
119	5	2	126
135	5	2	

N
W E
S

Navaho Dr

Cars	Trucks	Buses	Totals
384	3	4	391

Peds Cross: ⧖
West Peds: 3
West Entering: 448
West Leg Total: 650

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Ottawa
Site #: 2519300007
Intersection: Navaho Dr & Shopping Mall Access
TFR File #: 1
Count date: 4-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Navaho Dr runs W/E

North Leg Total: 514
North Entering: 260
North Peds: 4
Peds Cross: ⋈

Buses	1	0	1
Trucks	0	0	0
Cars	236	23	259
Totals	237	23	

Buses	0
Trucks	1
Cars	253
Totals	254

East Leg Total: 523
East Entering: 313
East Peds: 12
Peds Cross: ⧖



Buses	Trucks	Cars	Totals
2	1	501	504

Buses	Trucks	Cars	Totals
0	1	207	208
0	1	186	187
0	2	393	

Cars	Trucks	Buses	Totals
46	0	0	46
265	1	1	267
311	1	1	

Cars	Trucks	Buses	Totals
209	1	0	210

Peds Cross: ⧖
West Peds: 4
West Entering: 395
West Leg Total: 899

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

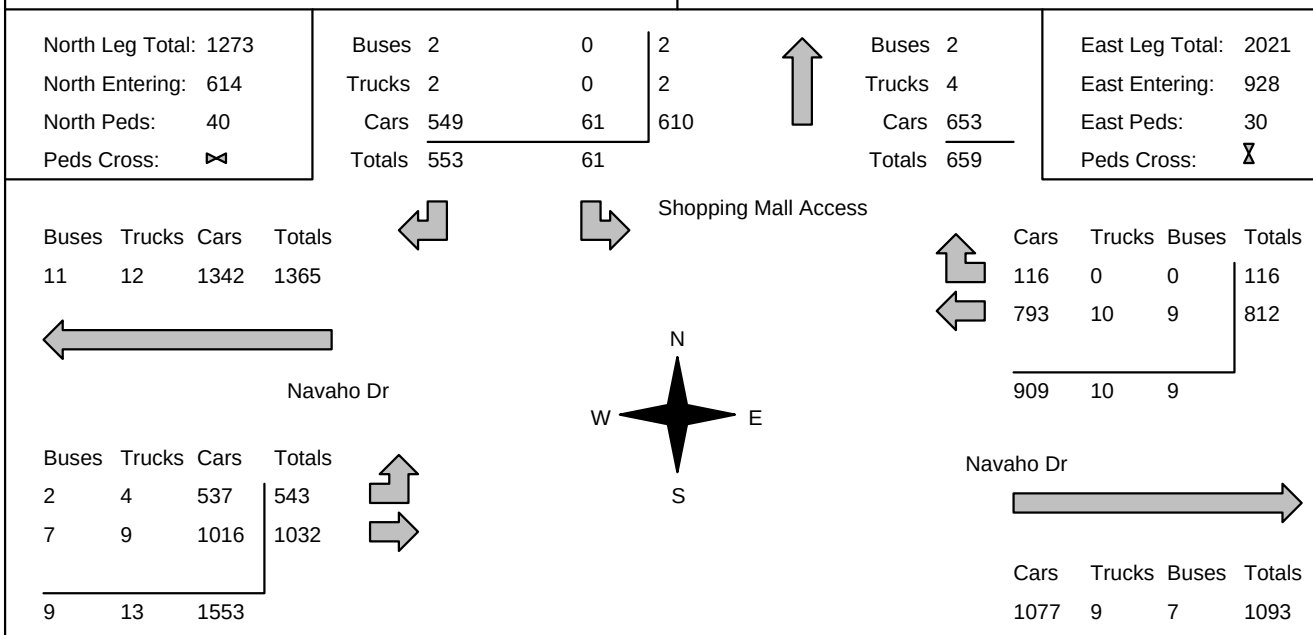
Municipality: Ottawa
Site #: 2519300007
Intersection: Navaho Dr & Shopping Mall Access
TFR File #: 1
Count date: 4-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Navaho Dr runs W/E



Peds Cross:
West Peds: 18
West Entering: 1575
West Leg Total: 2940

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

Municipality: Ottawa
Site #: 2519300001
Intersection: Woodroffe Ave & Baseline Rd
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S

North Leg Total: 2894
North Entering: 1526
North Peds: 15
Peds Cross: ⋈

Buses	0	13	0	13
Trucks	2	7	0	9
Cars	208	836	460	1504
Totals	210	856	460	

Buses	12
Trucks	6
Cars	1350
Totals	1368

East Leg Total: 2209
East Entering: 966
East Peds: 14
Peds Cross: ⧖

Buses	Trucks	Cars	Totals
0	5	950	955

Woodroffe Ave

Baseline Rd

Cars	Trucks	Buses	Totals
325	2	1	328
526	2	0	528
110	0	0	110
961	4	1	

N
W E
S

Buses	Trucks	Cars	Totals
0	0	185	185
1	2	671	674
0	0	71	71
1	2	927	

Baseline Rd

Cars	Trucks	Buses	Totals
1239	2	2	1243

Woodroffe Ave

Peds Cross: ⧖
West Peds: 6
West Entering: 930
West Leg Total: 1885

Cars	1017
Trucks	7
Buses	13
Totals	1037

Cars	216	840	108	1164
Trucks	1	4	0	5
Buses	0	11	1	12
Totals	217	855	109	

Peds Cross: ⋈
South Peds: 15
South Entering: 1181
South Leg Total: 2218

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

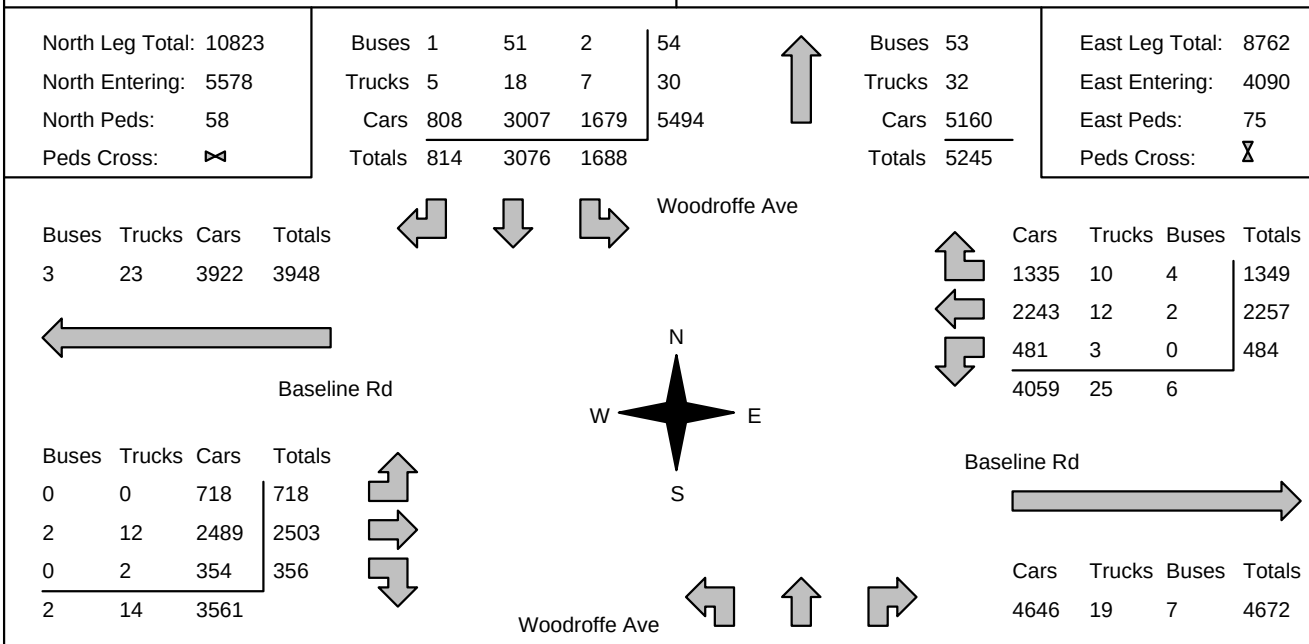
Municipality: Ottawa
Site #: 2519300001
Intersection: Woodroffe Ave & Baseline Rd
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Ottawa
Site #: 2519300002
Intersection: Baseline Rd & College Square
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Baseline Rd runs W/E

North Leg Total:	31			
North Entering:	23			
North Peds:	11			
Peds Cross:	⋈			

Buses	0	0	0	0
Trucks	0	0	0	0
Cars	11	3	9	23
Totals	11	3	9	

Buses	0
Trucks	0
Cars	8
Totals	8

East Leg Total:	2100
East Entering:	1067
East Peds:	18
Peds Cross:	⧖

Driveway

Buses	Trucks	Cars	Totals
0	8	1050	1058

Cars	Trucks	Buses	Totals
0	0	0	0
887	7	0	894
173	0	0	173
1060	7	0	

Baseline Rd

N
W E
S

Buses	Trucks	Cars	Totals
0	0	5	5
1	6	876	883
0	0	79	79
1	6	960	

Baseline Rd

Cars	Trucks	Buses	Totals
1026	6	1	1033

College Square

Peds Cross:	⧖			
West Peds:	7			
West Entering:	967			
West Leg Total:	2025			

Cars	255			
Trucks	0			
Buses	0			
Totals	255			

Cars	152	3	141	296
Trucks	1	0	0	1
Buses	0	0	0	0
Totals	153	3	141	

Peds Cross:	⋈
South Peds:	6
South Entering:	297
South Leg Total:	552

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

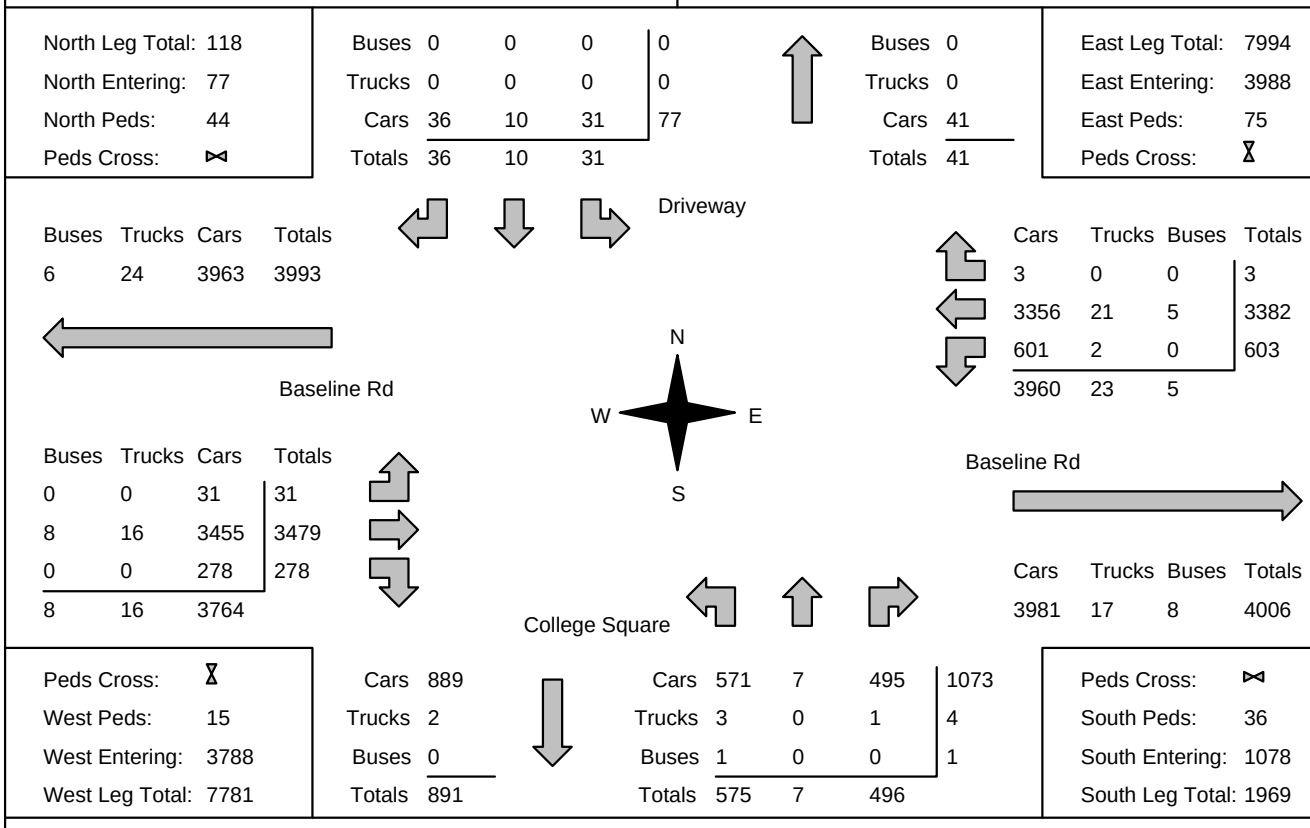
Municipality: Ottawa
Site #: 2519300002
Intersection: Baseline Rd & College Square
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Baseline Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Ottawa
Site #: 2519300003
Intersection: Baseline Rd & Navaho Dr
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Baseline Rd runs W/E

North Leg Total: 295
North Entering: 144
North Peds: 16
Peds Cross: ⋈

Buses	0	0	0	0
Trucks	1	0	0	1
Cars	60	3	80	143
Totals	61	3	80	

Buses	0
Trucks	4
Cars	147
Totals	151

East Leg Total: 2222
East Entering: 1114
East Peds: 36
Peds Cross: ⧖

Navaho Dr

Buses	Trucks	Cars	Totals
1	7	1080	1088

Cars	Trucks	Buses	Totals
38	2	0	40
847	6	0	853
215	1	5	221
1100	9	5	

Baseline Rd

N
W E
S

Buses	Trucks	Cars	Totals
0	2	109	111
1	2	813	816
0	1	56	57
1	5	978	

Baseline Rd

Cars	Trucks	Buses	Totals
1100	4	4	1108

Navaho Dr

Peds Cross: ⧖
West Peds: 47
West Entering: 984
West Leg Total: 2072

Cars	274			
Trucks	2			
Buses	5			
Totals	281			

Cars	173	0	207	380
Trucks	0	0	2	2
Buses	1	0	3	4
Totals	174	0	212	

Peds Cross: ⋈
South Peds: 53
South Entering: 386
South Leg Total: 667

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

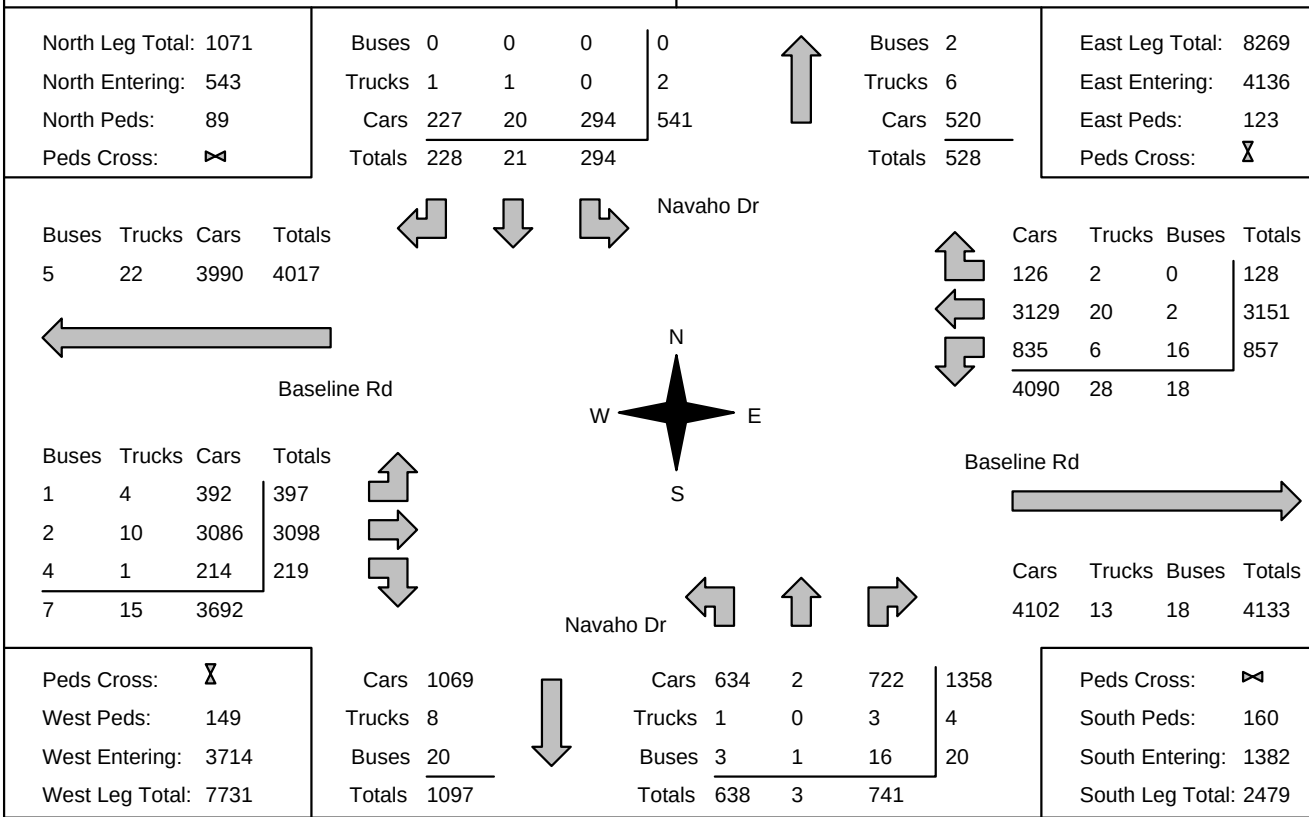
Municipality: Ottawa
Site #: 2519300003
Intersection: Baseline Rd & Navaho Dr
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Baseline Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:45:00
To: 13:45:00

Municipality: Ottawa
Site #: 2519300004
Intersection: Woodroffe Ave & Navaho Dr
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

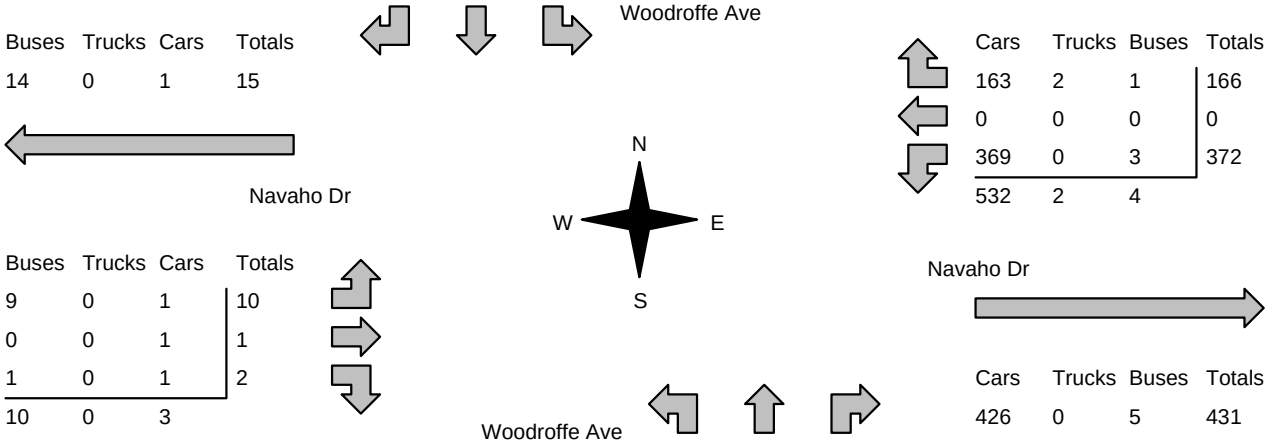
Major Road: Woodroffe Ave runs N/S

North Leg Total: 2086
North Entering: 989
North Peds: 74
Peds Cross: ⋈

Buses	14	4	1	19
Trucks	0	4	0	4
Cars	0	853	113	966
Totals	14	861	114	

Buses	14
Trucks	13
Cars	1070
Totals	1097

East Leg Total: 969
East Entering: 538
East Peds: 24
Peds Cross: ⧖



Buses	Trucks	Cars	Totals
14	0	1	15

Cars	Trucks	Buses	Totals
163	2	1	166
0	0	0	0
369	0	3	372
532	2	4	

Buses	Trucks	Cars	Totals
9	0	1	10
0	0	1	1
1	0	1	2
10	0	3	

Cars	Trucks	Buses	Totals
426	0	5	431

Peds Cross: ⧖
West Peds: 26
West Entering: 13
West Leg Total: 28

Cars	1223			
Trucks	4			
Buses	8			
Totals	1235			

Cars	1	906	312	1219
Trucks	0	11	0	11
Buses	0	4	4	8
Totals	1	921	316	

Peds Cross: ⋈
South Peds: 40
South Entering: 1238
South Leg Total: 2473

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

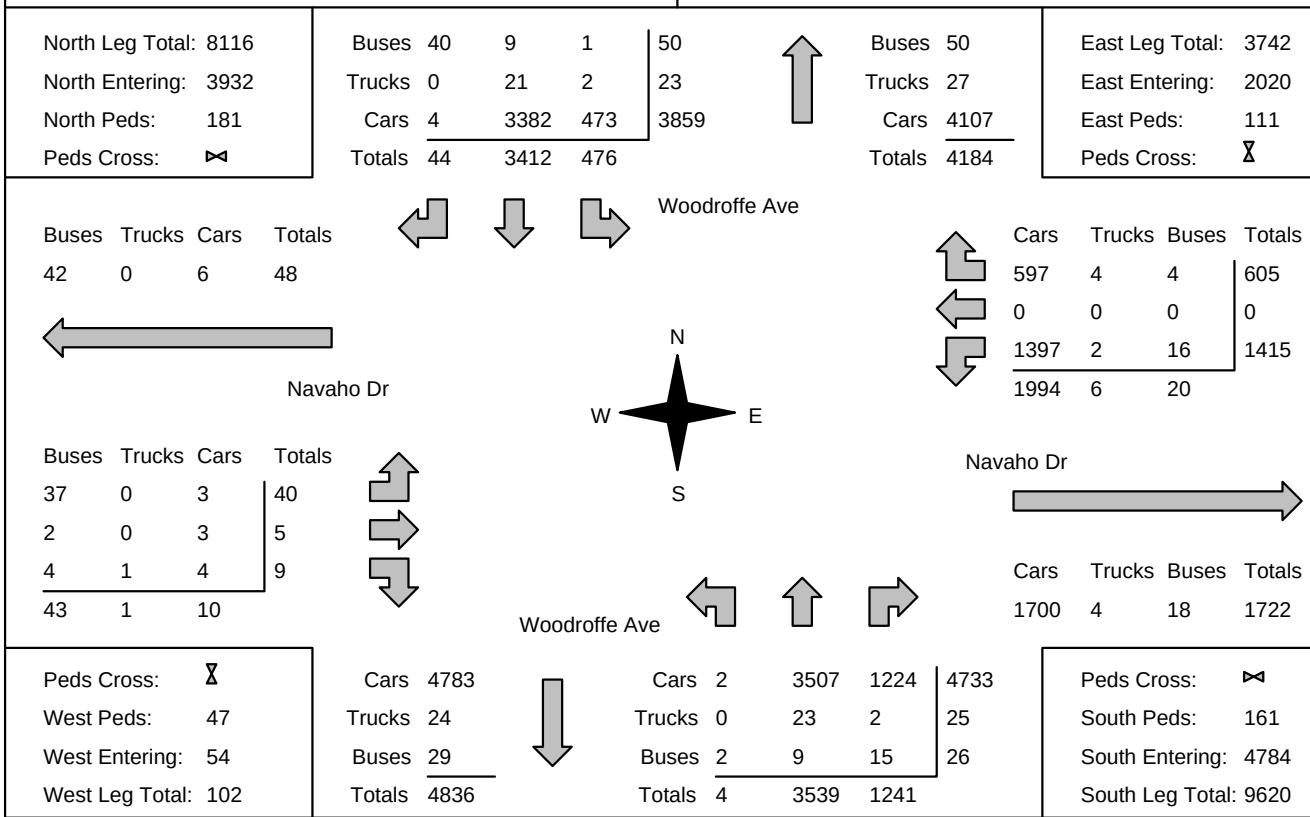
Municipality: Ottawa
Site #: 2519300004
Intersection: Woodroffe Ave & Navaho Dr
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:30:00
To: 13:30:00

Municipality: Ottawa
Site #: 2519300005
Intersection: Navaho Dr & Wajashk Private
TFR File #: 1
Count date: 6-Dec-25

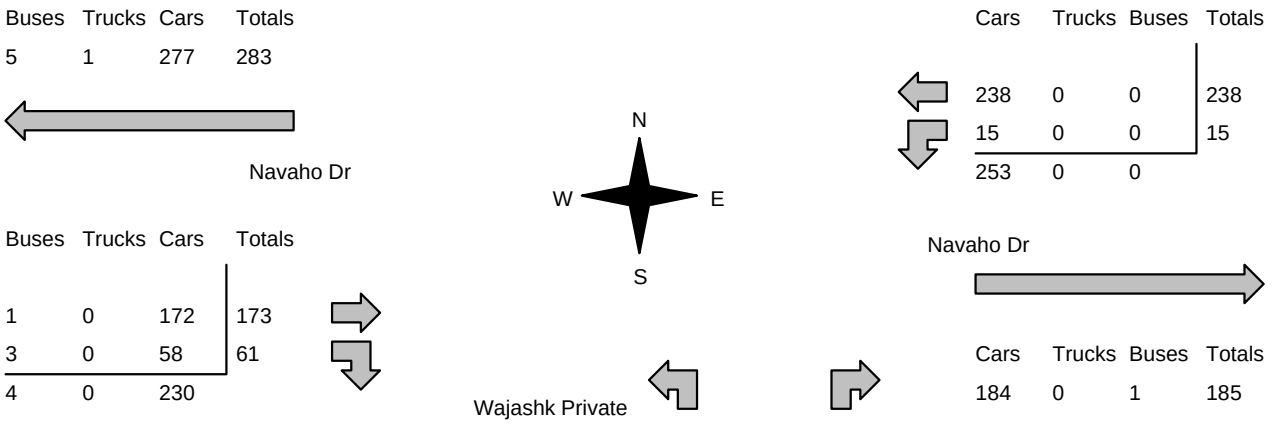
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Navaho Dr runs W/E

East Leg Total: 438
East Entering: 253
East Peds: 95
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 49
West Entering: 234
West Leg Total: 517

Cars 73
Trucks 0
Buses 3
Totals 76

Cars 39 12 51
Trucks 1 0 1
Buses 5 0 5
Totals 45 12

Peds Cross: ⋈
South Peds: 17
South Entering: 57
South Leg Total: 133

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Ottawa
Site #: 2519300005
Intersection: Navaho Dr & Wajashk Private
TFR File #: 1
Count date: 6-Dec-25

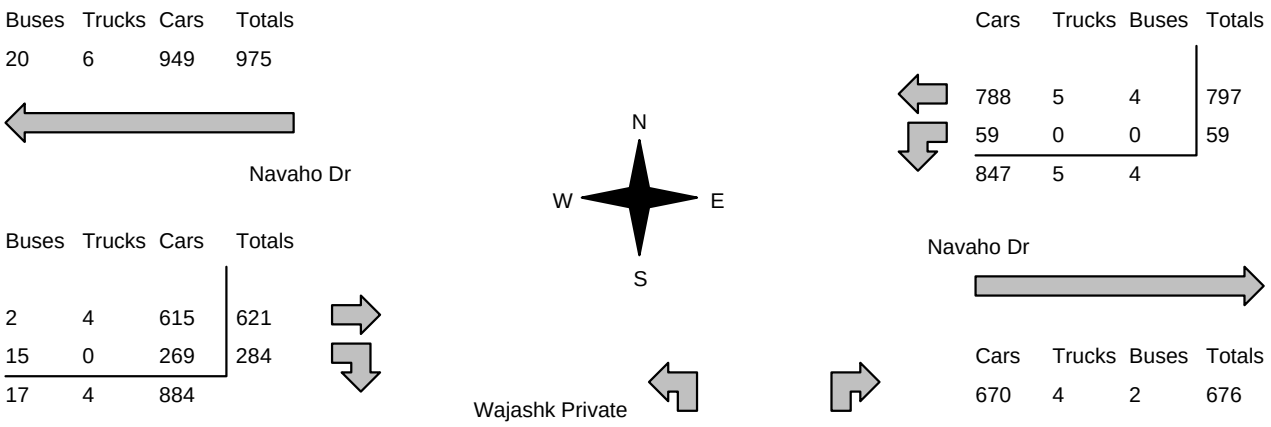
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Navaho Dr runs W/E

East Leg Total: 1532
East Entering: 856
East Peds: 418
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 146
West Entering: 905
West Leg Total: 1880

Cars 328
Trucks 0
Buses 15
Totals 343

Cars 161 55 216
Trucks 1 0 1
Buses 16 0 16
Totals 178 55

Peds Cross: ⋈
South Peds: 65
South Entering: 233
South Leg Total: 576

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:30:00
To: 13:30:00

Municipality: Ottawa
Site #: 2519300006
Intersection: Woodroffe Ave & Shopping Mall Ac
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S

North Leg Total: 2249
North Entering: 1017
North Peds: 0
Peds Cross: ⋈

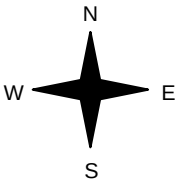
Buses	17	0	17
Trucks	5	0	5
Cars	995	0	995
Totals	1017	0	

Buses	12
Trucks	9
Cars	1211
Totals	1232

East Leg Total: 300
East Entering: 224
East Peds: 3
Peds Cross: ⋈

Woodroffe Ave

Cars	Trucks	Buses	Totals
224	0	0	224
0	0	0	0
224	0	0	



Shopping Mall Access

Cars	Trucks	Buses	Totals
76	0	0	76

Woodroffe Ave

Cars	995	987	76	1063
Trucks	5	9	0	9
Buses	17	12	0	12
Totals	1017	1008	76	

Peds Cross: ⋈
South Peds: 1
South Entering: 1084
South Leg Total: 2101

Comments

Accu-Traffic Inc.

Total Count Diagram

Municipality: Ottawa
Site #: 2519300006
Intersection: Woodroffe Ave & Shopping Mall Ac
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Woodroffe Ave runs N/S

North Leg Total: 8619
North Entering: 3974
North Peds: 0
Peds Cross: ⋈

Buses	51	0	51
Trucks	24	0	24
Cars	3899	0	3899
Totals	3974	0	

Buses	51
Trucks	28
Cars	4566
Totals	4645

East Leg Total: 1085
East Entering: 750
East Peds: 11
Peds Cross: ⧖

Woodroffe Ave

	Cars	Trucks	Buses	Totals
	748	2	0	750
	0	0	0	0
	748	2	0	

N
W E
S

Shopping Mall Access

	Cars	Trucks	Buses	Totals
	333	2	0	335

Woodroffe Ave

Cars	3899			
Trucks	24			
Buses	51			
Totals	3974			

Cars	3818	333	4151
Trucks	26	2	28
Buses	51	0	51
Totals	3895	335	

Peds Cross: ⋈
South Peds: 2
South Entering: 4230
South Leg Total: 8204

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:15:00
To: 14:15:00

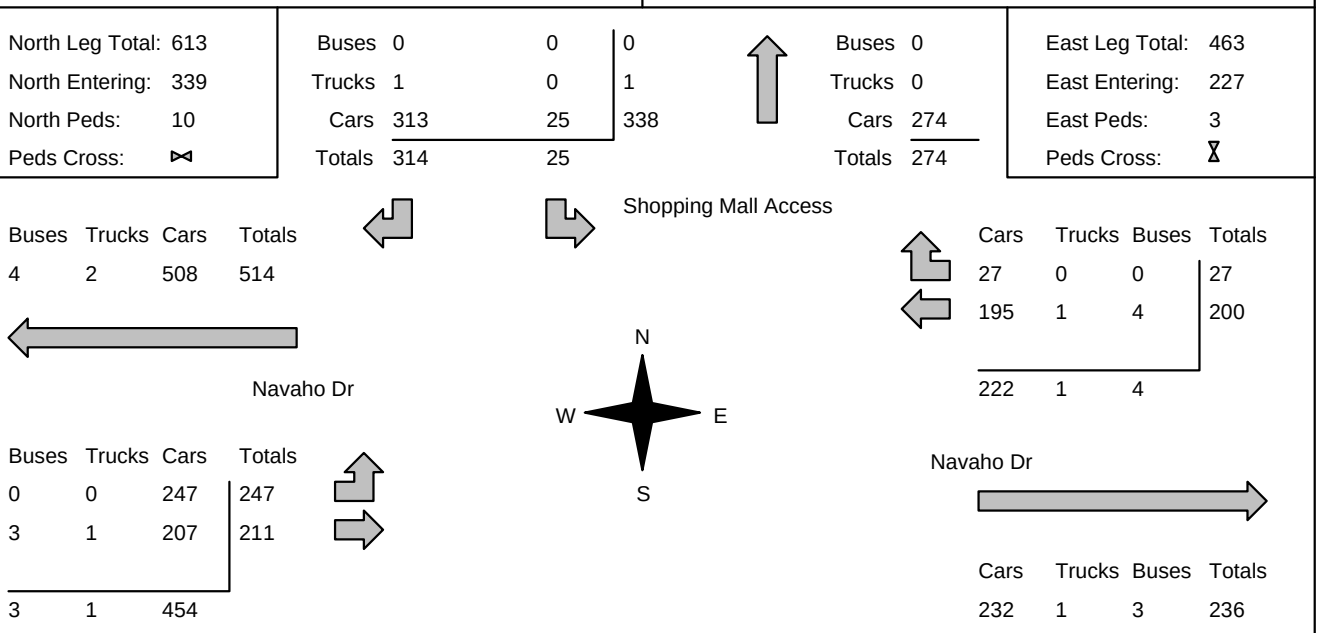
Municipality: Ottawa
Site #: 2519300007
Intersection: Navaho Dr & Shopping Mall Access
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Navaho Dr runs W/E



Peds Cross:
West Peds: 3
West Entering: 458
West Leg Total: 972

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

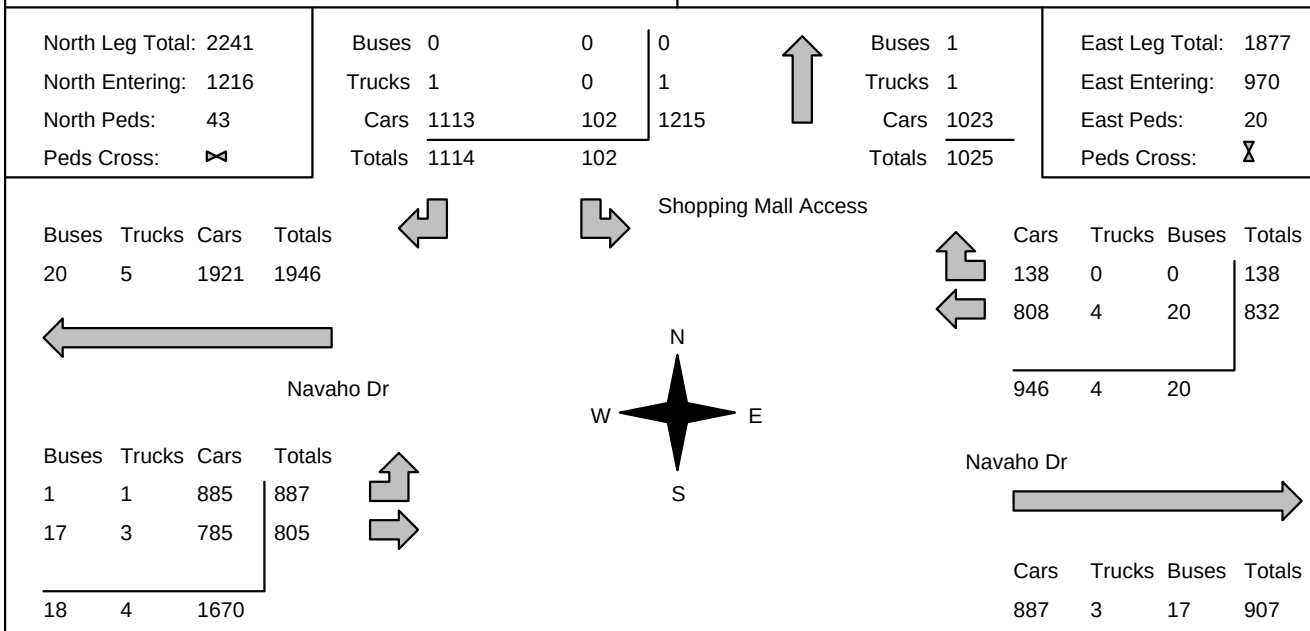
Municipality: Ottawa
Site #: 2519300007
Intersection: Navaho Dr & Shopping Mall Access
TFR File #: 1
Count date: 6-Dec-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Navaho Dr runs W/E



Peds Cross:
West Peds: 21
West Entering: 1692
West Leg Total: 3638

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:30:00
To: 14:30:00

Municipality: Ottawa
Site #: 2519300008
Intersection: Baseline Rd & Shopping Mall Acce
TFR File #: 1
Count date: 6-Dec-25

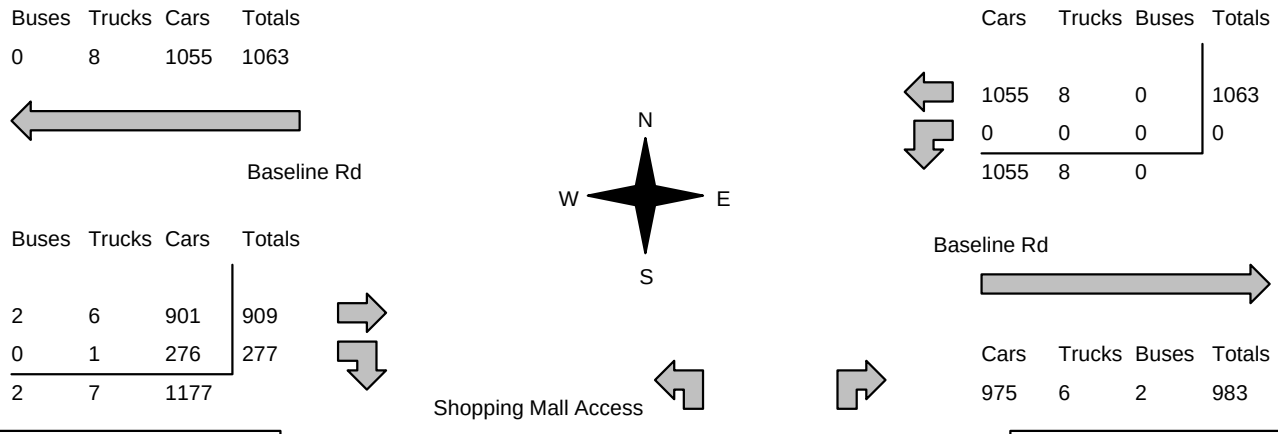
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Baseline Rd runs W/E

East Leg Total: 2046
East Entering: 1063
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 1186
West Leg Total: 2249

Cars 276
Trucks 1
Buses 0
Totals 277

Cars 0 74 74
Trucks 0 0 0
Buses 0 0 0
Totals 0 74

Peds Cross: ⋈
South Peds: 12
South Entering: 74
South Leg Total: 351

Comments

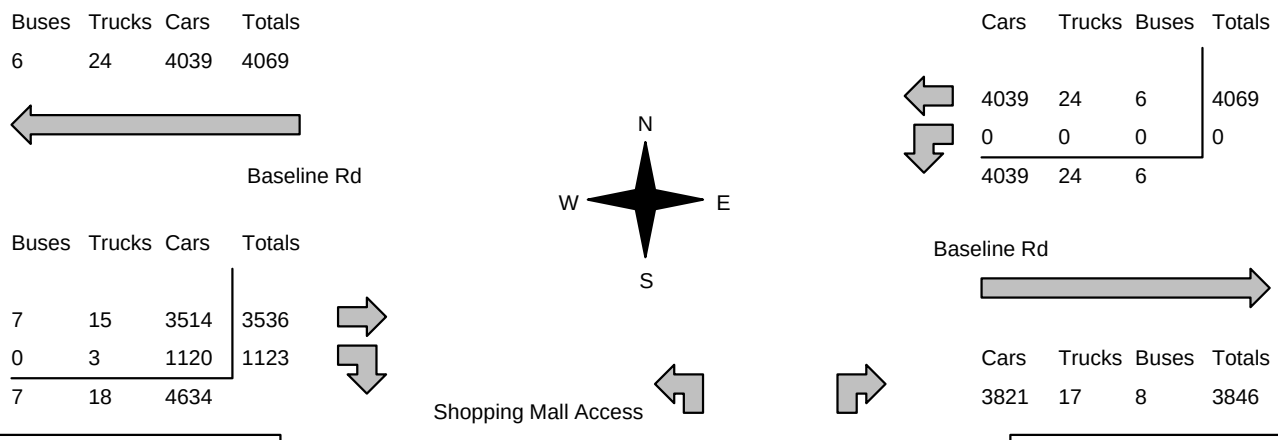
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Ottawa	**Weather conditions:**
Site #: 2519300008	
Intersection: Baseline Rd & Shopping Mall Acce	**Person counted:**
TFR File #: 1	**Person prepared:**
Count date: 6-Dec-25	**Person checked:**
**** Non-Signalized Intersection ****	**Major Road:** Baseline Rd runs W/E

East Leg Total: 7915
East Entering: 4069
East Peds: 0
Peds Cross: ⧖



Peds Cross:	⧖	Cars	1120	Cars	0	307	307	Peds Cross:	⋈
West Peds:	0	Trucks	3	Trucks	0	2	2	South Peds:	41
West Entering:	4659	Buses	0	Buses	0	1	1	South Entering:	310
West Leg Total:	8728	Totals	1123	Totals	0	310		South Leg Total:	1433

Comments

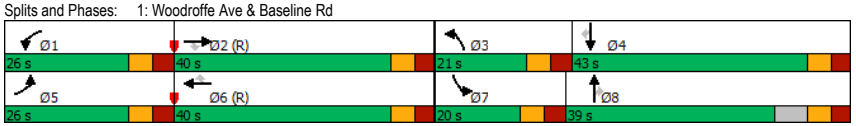
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	761	172	157	918	451	341	860	110	418	825	322
Future Volume (vph)	304	761	172	157	918	451	341	860	110	418	825	322
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	1.00		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3248	3349	1513	1674	3349	1483	3248	3221	1513	3216	3221	1483
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3233	3349	1477	1668	3349	1448	3228	3221	1476	3205	3221	1447
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			226			149			178
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Adj. Flow (vph)	338	846	191	174	1020	501	379	956	122	464	917	358
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	846	191	174	1020	501	379	956	122	464	917	358
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	26.0	40.0	40.0	26.0	40.0	40.0	21.0	39.0	39.0	20.0	43.0	43.0
Total Split (%)	20.0%	30.8%	30.8%	20.0%	30.8%	30.8%	16.2%	30.0%	30.0%	15.4%	33.1%	33.1%
Maximum Green (s)	18.9	33.2	33.2	18.9	33.2	33.2	14.1	32.2	32.2	13.1	36.2	36.2
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	17.4	35.0	35.0	17.1	34.7	34.7	14.1	37.2	37.2	13.1	36.2	36.2
Actuated g/C Ratio	0.13	0.27	0.27	0.13	0.27	0.27	0.11	0.29	0.29	0.10	0.28	0.28
v/c Ratio	0.78	0.94	0.38	0.79	1.14	0.91	1.08	1.04	0.23	1.43	1.02	0.67
Control Delay	67.3	65.0	12.8	79.2	122.6	50.9	133.2	82.3	13.1	252.5	82.2	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.3	65.0	12.8	79.2	122.6	50.9	133.2	82.3	13.1	252.5	82.2	27.4
LOS	E	E	B	E	F	D	F	F	B	F	F	C
Approach Delay		58.3			96.9			89.8			116.4	
Approach LOS		E			F			F			F	
Queue Length 50th (m)	43.2	114.2	8.3	42.1	~170.5	97.3	~56.9	~71.7	0.0	~82.8	~131.2	41.4
Queue Length 95th (m)	59.2	#156.9	28.6	#75.6	#204.5	#104.2	#89.2	#171.5	26.3	#116.0	#171.5	76.8
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	472	902	507	243	893	552	352	921	528	324	896	531
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.94	0.38	0.72	1.14	0.91	1.08	1.04	0.23	1.43	1.02	0.67

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 21 (16%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 92.2	Intersection LOS: F

Intersection Capacity Utilization 97.4% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	761	172	157	918	451	341	860	110	418	825	322
Future Volume (vph)	304	761	172	157	918	451	341	860	110	418	825	322
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3248	3349	1477	1674	3349	1448	3248	3221	1476	3216	3221	1447
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3248	3349	1477	1674	3349	1448	3248	3221	1476	3216	3221	1447
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	338	846	191	174	1020	501	379	956	122	464	917	358
RTOR Reduction (vph)	0	0	109	0	0	166	0	0	87	0	0	128
Lane Group Flow (vph)	338	846	82	174	1020	335	379	956	35	464	917	230
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	17.4	35.0	35.0	17.1	34.7	34.7	14.1	37.2	37.2	13.1	36.2	36.2
Effective Green, g (s)	17.4	35.0	35.0	17.1	34.7	34.7	14.1	37.2	37.2	13.1	36.2	36.2
Actuated g/C Ratio	0.13	0.27	0.27	0.13	0.27	0.27	0.11	0.29	0.29	0.10	0.28	0.28
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	434	901	397	220	893	386	352	921	422	324	896	402
v/s Ratio Prot	c0.10	0.25		0.10	c0.30		0.12	c0.30		c0.14	0.28	
v/s Ratio Perm			0.06			0.23			0.02			0.16
v/c Ratio	0.78	0.94	0.21	0.79	1.14	0.87	1.08	1.04	0.08	1.43	1.02	0.57
Uniform Delay, d1	54.4	46.5	36.8	54.7	47.6	45.5	58.0	46.4	33.9	58.5	46.9	40.2
Progression Factor	1.00	1.00	1.00	1.08	1.14	1.33	1.27	0.98	4.16	1.00	1.00	1.00
Incremental Delay, d2	8.6	18.4	1.2	14.0	74.8	18.4	67.0	38.1	0.1	211.4	36.1	2.0
Delay (s)	63.0	64.9	37.9	73.1	129.3	79.0	140.7	83.5	141.3	269.8	83.0	42.2
Level of Service	E	E	D	E	F	E	F	F	F	F	F	D
Approach Delay (s)		60.7			108.6			103.2			124.5	
Approach LOS		E			F			F			F	

Intersection Summary				
HCM 2000 Control Delay	101.2	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.08			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	97.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1087	202	0	1526	0	40
Future Volume (vph)	1087	202	0	1526	0	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.977					0.865
Flt Protected						
Satd. Flow (prot)	4708	0	0	3382	0	1540
Flt Permitted						
Satd. Flow (perm)	4708	0	0	3382	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1208	224	0	1696	0	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1432	0	0	1696	0	44
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1087	202	0	1526	0	40
Future Volume (Veh/h)	1087	202	0	1526	0	40
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1208	224	0	1696	0	44
Pedestrians	10			10		
Lane Width (m)	3.5			3.5		
Walking Speed (m/s)	1.0			1.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.78		0.84	0.78
vC, conflicting volume			1432		2178	525
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			578		453	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			781		447	845

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	483	483	466	848	848	44
Volume Left	0	0	0	0	0	0
Volume Right	0	0	224	0	0	44
cSH	1700	1700	1700	1700	1700	845
Volume to Capacity	0.28	0.28	0.27	0.50	0.50	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	1.3
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.5
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.5
Approach LOS						A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	47.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Intersection Capacity Utilization 76.7% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1074	42	127	1396	9	114	1	93	6	4	16
Future Volume (vph)	11	1074	42	127	1396	9	114	1	93	6	4	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1691	4728		1690	3344		1668	1463			1581	
Flt Permitted	0.12	1.00		0.18	1.00		0.74	1.00			0.93	
Satd. Flow (perm)	218	4728		315	3344		1297	1463			1482	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	1193	47	141	1551	10	127	1	103	7	4	18
RTOR Reduction (vph)	0	2	0	0	0	0	0	88	0	0	15	0
Lane Group Flow (vph)	12	1238	0	141	1561	0	127	16	0	0	14	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	87.0	84.6		99.2	90.7		18.5	18.5			18.5	
Effective Green, g (s)	87.0	84.6		99.2	90.7		18.5	18.5			18.5	
Actuated g/C Ratio	0.67	0.65		0.76	0.70		0.14	0.14			0.14	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	173	3076		330	2333		184	208			210	
v/s Ratio Prot	0.00	0.26		c0.03	c0.47			0.01				
v/s Ratio Perm	0.05			0.30			c0.10				0.01	
v/c Ratio	0.07	0.40		0.43	0.67		0.69	0.08			0.06	
Uniform Delay, d1	8.9	10.7		5.4	11.1		53.0	48.3			48.3	
Progression Factor	0.15	0.11		2.37	1.37		1.00	1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.5	0.8		10.6	0.2			0.1	
Delay (s)	1.3	1.2		13.4	16.0		63.6	48.5			48.4	
Level of Service	A	A		B	B		E	D			D	
Approach Delay (s)		1.2			15.8			56.8			48.4	
Approach LOS		A			B			E			D	

Intersection Summary					
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.68				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	76.7%	ICU Level of Service		D	
Analysis Period (min)	15				

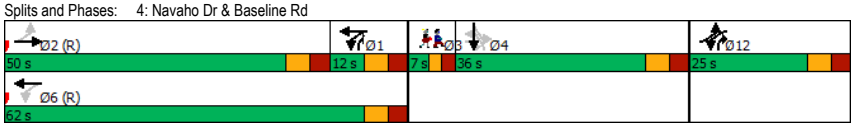
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1042	57	266	1331	41	127	0	220	101	3	74
Future Volume (vph)	100	1042	57	266	1331	41	127	0	220	101	3	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		1.00		0.99				0.98	
Frt			0.850		0.995				0.850		0.944	
Flt Protected	0.950			0.950			0.950				0.972	
Satd. Flow (prot)	1691	3349	1513	1642	3330	0	1658	0	1455	0	1566	0
Flt Permitted	0.072			0.123			0.606				0.972	
Satd. Flow (perm)	128	3349	1456	213	3330	0	1050	0	1455	0	1556	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180		3				244		25	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Adj. Flow (vph)	111	1158	63	296	1479	46	141	0	244	112	3	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	1158	63	296	1525	0	141	0	244	0	197	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø1	Ø3	Ø6
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (m)			
Storage Lanes			
Taper Length (m)			
Lane Util. Factor			
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (k/h)			
Link Distance (m)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(m)			
Link Offset(m)			
Crosswalk Width(m)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (k/h)			
Number of Detectors			
Detector Template			
Leading Detector (m)			
Trailing Detector (m)			
Detector 1 Position(m)			
Detector 1 Size(m)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(m)			
Detector 2 Size(m)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			

Intersection Capacity Utilization 84.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1042	57	266	1331	41	127	0	220	101	3	74
Future Volume (vph)	100	1042	57	266	1331	41	127	0	220	101	3	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		6.8		6.8		6.8	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1691	3349	1456	1642	3331		1646		1455		1557	
Flt Permitted	0.07	1.00	1.00	0.12	1.00		0.61		1.00		0.97	
Satd. Flow (perm)	127	3349	1456	213	3331		1049		1455		1557	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	111	1158	63	296	1479	46	141	0	244	112	3	82
RTOR Reduction (vph)	0	0	52	0	1	0	0	0	200	0	21	0
Lane Group Flow (vph)	111	1158	11	296	1524	0	141	0	44	0	177	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Actuated Green, G (s)	74.2	55.9	23.4	86.2	67.9		23.4		23.5		23.4	
Effective Green, g (s)	74.2	55.9	23.4	86.2	67.9		23.4		23.5		23.4	
Actuated g/C Ratio	0.57	0.43	0.18	0.66	0.52		0.18		0.18		0.18	
Clearance Time (s)	6.8	6.8	6.8				6.8				6.8	
Vehicle Extension (s)	3.0	3.0	3.0				3.0				3.0	
Lane Grp Cap (vph)	292	1440	262	399	1739		188		263		280	
v/s Ratio Prot	0.05	0.35		c0.13	c0.46				0.03			
v/s Ratio Perm	0.16		0.01	0.36			c0.13				0.11	
v/c Ratio	0.38	0.80	0.04	0.74	0.88		0.75		0.17		0.63	
Uniform Delay, d1	21.8	32.3	44.0	26.1	27.3		50.5		45.0		49.3	
Progression Factor	1.77	0.94	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	0.8	4.6	0.1	7.3	5.3		15.4		0.3		4.6	
Delay (s)	39.2	35.0	44.1	33.4	32.6		65.9		45.3		53.9	
Level of Service	D	D	D	C	C		E		D		D	
Approach Delay (s)		35.8			32.8			52.9			53.9	
Approach LOS		D			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.92			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	31.2	
Intersection Capacity Utilization	84.5%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	433	0	184	1	1014	330	130	1017	7
Future Volume (vph)	8	3	12	433	0	184	1	1014	330	130	1017	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.97	1.00		0.95
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1483	846	4811	1483	1642	3316	756
Flt Permitted	0.950			0.756			0.950			0.950		
Satd. Flow (perm)	835	890	738	2528	890	1448	840	4811	1440	1636	3316	719
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139			399			318			150
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Adj. Flow (vph)	9	3	13	481	0	204	1	1127	367	144	1130	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	3	13	481	0	204	1	1127	367	144	1130	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

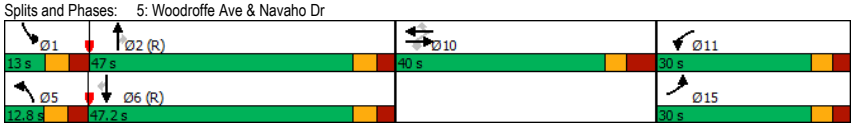
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	30.0	40.0	40.0	30.0	40.0	40.0	12.8	47.0	47.0	13.0	47.2	47.2
Total Split (%)	23.1%	30.8%	30.8%	23.1%	30.8%	30.8%	9.8%	36.2%	36.2%	10.0%	36.3%	36.3%
Maximum Green (s)	23.8	32.1	32.1	23.8	32.1	32.1	6.0	40.4	40.4	6.2	40.6	40.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	7.1	11.1	11.1	29.2		11.1	5.9	49.2	49.2	25.8	79.1	79.1
Actuated g/C Ratio	0.05	0.09	0.09	0.22		0.09	0.05	0.38	0.38	0.20	0.61	0.61
v/c Ratio	0.20	0.04	0.07	0.74		0.42	0.03	0.62	0.49	0.44	0.56	0.02
Control Delay	67.4	47.7	0.7	55.6		4.0	60.0	35.0	7.9	59.7	19.3	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.4	47.7	0.7	55.6		4.0	60.0	35.0	7.9	59.7	19.3	0.0
LOS	E	D	A	E		A	E	D	A	E	B	A
Approach Delay		30.3			40.2			28.4			23.7	
Approach LOS		C			D			C			C	
Queue Length 50th (m)	2.3	0.8	0.0	61.6		1.7	0.3	79.5	7.5	38.8	68.0	0.0
Queue Length 95th (m)	8.0	3.2	0.0	65.4		3.8	2.3	112.3	37.0	m43.8	m77.0	m0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	154	219	286	837		658	40	1820	742	325	2017	496
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.01	0.05	0.57		0.31	0.03	0.62	0.49	0.44	0.56	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 90 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 29.0		Intersection LOS: C	

Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	433	0	184	1	1014	330	130	1017	7
Future Volume (vph)	8	3	12	433	0	184	1	1014	330	130	1017	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	738	3187		1448	846	4811	1440	1642	3316	719
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	738	2536		1448	846	4811	1440	1642	3316	719
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	9	3	13	481	0	204	1	1127	367	144	1130	8
RTOR Reduction (vph)	0	0	12	0	0	187	0	0	198	0	0	3
Lane Group Flow (vph)	9	3	1	481	0	17	1	1127	169	144	1130	5
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	16.4	11.1	11.1	27.5		11.1	1.3	49.2	49.2	25.8	73.7	73.7
Effective Green, g (s)	16.4	11.1	11.1	27.5		11.1	1.3	49.2	49.2	25.8	73.7	73.7
Actuated g/C Ratio	0.13	0.09	0.09	0.21		0.09	0.01	0.38	0.38	0.20	0.57	0.57
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	75	63	618		123	8	1820	544	325	1879	407
v/s Ratio Prot	0.01	0.00		c0.10			0.00	0.23		c0.09	c0.34	
v/s Ratio Perm			0.00	c0.07		0.01			0.12			0.01
v/c Ratio	0.08	0.04	0.02	0.78		0.14	0.12	0.62	0.31	0.44	0.60	0.01
Uniform Delay, d1	50.2	54.6	54.5	46.9		55.0	63.8	32.8	28.5	45.8	18.5	12.3
Progression Factor	1.00	1.00	1.00	1.11		1.00	1.00	1.00	1.00	1.19	1.05	1.00
Incremental Delay, d2	0.3	0.2	0.1	6.1		0.5	6.9	1.6	1.5	0.4	0.6	0.0
Delay (s)	50.5	54.8	54.6	58.0		55.6	70.7	34.4	30.0	54.8	20.0	12.3
Level of Service	D	D	D	E		E	E	C	C	D	B	B
Approach Delay (s)		53.1			57.3			33.3			23.8	
Approach LOS		D			E			C			C	

Intersection Summary					
HCM 2000 Control Delay	34.7	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.66				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	73.3%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

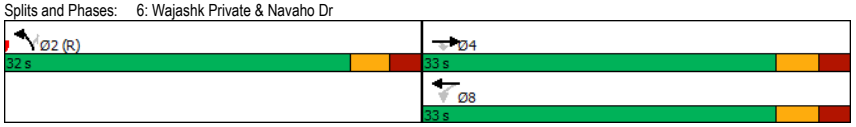
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	182	96	33	295	131	21
Future Volume (vph)	182	96	33	295	131	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.96
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1469	1691	1780	1610	1513
Flt Permitted			0.624		0.950	
Satd. Flow (perm)	1762	1437	1103	1780	1596	1460
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		107				23
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Adj. Flow (vph)	202	107	37	328	146	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	107	37	328	146	23
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	27.8	27.8
Total Split (s)	33.0	33.0	33.0	33.0	32.0	32.0
Total Split (%)	50.8%	50.8%	50.8%	50.8%	49.2%	49.2%
Maximum Green (s)	27.2	27.2	27.2	27.2	26.5	26.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	2	2	5	5
Act Effct Green (s)	17.5	17.5	17.5	17.5	36.2	36.2
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.56	0.56
v/c Ratio	0.43	0.23	0.12	0.69	0.16	0.03
Control Delay	22.6	5.9	16.7	28.2	9.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	5.9	16.7	28.2	9.1	4.4
LOS	C	A	B	C	A	A
Approach Delay	16.8			27.1	8.5	
Approach LOS	B			C	A	
Queue Length 50th (m)	31.3	3.8	3.4	35.4	7.7	0.0
Queue Length 95th (m)	34.5	8.6	8.1	50.4	19.8	3.3
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	737	663	461	744	897	823
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.16	0.08	0.44	0.16	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 1 (2%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 19.6		Intersection LOS: B	

Intersection Capacity Utilization 47.9% ICU Level of Service A
Analysis Period (min) 15

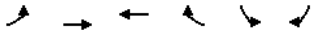
Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	182	96	33	295	131	21
Future Volume (vph)	182	96	33	295	131	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1437	1679	1780	1610	1460
Flt Permitted	1.00	1.00	0.62	1.00	0.95	1.00
Satd. Flow (perm)	1762	1437	1102	1780	1610	1460
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	202	107	37	328	146	23
RTOR Reduction (vph)	0	78	0	0	0	10
Lane Group Flow (vph)	202	29	37	328	146	13
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	17.5	17.5	17.5	17.5	36.2	36.2
Effective Green, g (s)	17.5	17.5	17.5	17.5	36.2	36.2
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.56	0.56
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	474	386	296	479	896	813
v/s Ratio Prot	0.11			c0.18	c0.09	
v/s Ratio Perm		0.02	0.03			0.01
v/c Ratio	0.43	0.07	0.12	0.68	0.16	0.02
Uniform Delay, d1	19.6	17.7	18.0	21.3	7.0	6.4
Progression Factor	1.07	1.84	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2	4.0	0.4	0.0
Delay (s)	21.5	32.7	18.2	25.3	7.4	6.5
Level of Service	C	C	B	C	A	A
Approach Delay (s)	25.4			24.6	7.3	
Approach LOS	C			C	A	

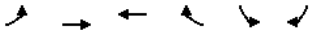
Intersection Summary				
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	47.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	208	255	380	46	23	237
Future Volume (vph)	208	255	380	46	23	237
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.984		0.877	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1762	3298	0	1555	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1762	3298	0	1555	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	231	283	422	51	26	263
Shared Lane Traffic (%)						
Lane Group Flow (vph)	231	283	473	0	289	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	208	255	380	46	23	237
Future Volume (Veh/h)	208	255	380	46	23	237
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	231	283	422	51	26	263
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	483				1212	256
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	483				1212	256
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	79				81	64
cM capacity (veh/h)	1080				137	734

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	231	283	281	192	289
Volume Left	231	0	0	0	26
Volume Right	0	0	0	51	263
cSH	1080	1700	1700	1700	527
Volume to Capacity	0.21	0.17	0.17	0.11	0.55
Queue Length 95th (m)	6.2	0.0	0.0	0.0	24.9
Control Delay (s)	9.2	0.0	0.0	0.0	19.8
Lane LOS	A				C
Approach Delay (s)	4.2		0.0		19.8
Approach LOS					C

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

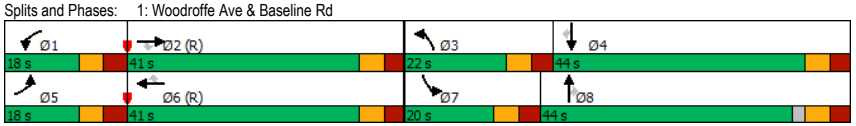
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	674	71	123	590	366	217	929	109	460	863	210
Future Volume (vph)	185	674	71	123	590	366	217	929	109	460	863	210
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3281	3382	1513	1691	3382	1498	3281	3316	1498	3281	3316	1498
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3256	3382	1478	1684	3382	1463	3262	3316	1462	3271	3316	1462
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			246			155			155
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Adj. Flow (vph)	206	749	79	137	656	407	241	1032	121	511	959	233
Shared Lane Traffic (%)												
Lane Group Flow (vph)	206	749	79	137	656	407	241	1032	121	511	959	233
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	18.0	41.0	41.0	18.0	41.0	41.0	22.0	44.0	44.0	20.0	44.0	44.0
Total Split (%)	14.4%	32.8%	32.8%	14.4%	32.8%	32.8%	17.6%	35.2%	35.2%	16.0%	35.2%	35.2%
Maximum Green (s)	10.9	34.2	34.2	10.9	34.2	34.2	15.1	37.2	37.2	13.1	37.2	37.2
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	10.6	34.2	34.2	10.9	34.5	34.5	13.6	39.2	39.2	13.1	38.7	38.7
Actuated g/C Ratio	0.08	0.27	0.27	0.09	0.28	0.28	0.11	0.31	0.31	0.10	0.31	0.31
v/c Ratio	0.74	0.81	0.15	0.93	0.70	0.70	0.68	0.99	0.21	1.49	0.93	0.42
Control Delay	72.1	50.4	0.6	112.1	46.1	29.2	44.1	80.3	16.3	273.8	58.5	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	50.4	0.6	112.1	46.1	29.2	44.1	80.3	16.3	273.8	58.5	14.5
LOS	E	D	A	F	D	C	D	F	B	F	E	B
Approach Delay		50.9			47.9			68.5			117.1	
Approach LOS		D			D			E			F	
Queue Length 50th (m)	25.8	90.6	0.0	34.7	87.0	41.0	30.0	140.8	9.0	~89.3	121.6	14.1
Queue Length 95th (m)	#41.3	114.2	0.0	#73.7	85.4	63.9	43.6	#182.9	28.2	#123.2	#165.5	36.8
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	286	925	516	147	932	581	396	1039	564	343	1027	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.81	0.15	0.93	0.70	0.70	0.61	0.99	0.21	1.49	0.93	0.42

Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 116 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.49	
Intersection Signal Delay: 76.0	Intersection LOS: E

Intersection Capacity Utilization 98.7% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	674	71	123	590	366	217	929	109	460	863	210
Future Volume (vph)	185	674	71	123	590	366	217	929	109	460	863	210
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	206	749	79	137	656	407	241	1032	121	511	959	233
RTOR Reduction (vph)	0	0	57	0	0	178	0	0	83	0	0	107
Lane Group Flow (vph)	206	749	22	137	656	229	241	1032	38	511	959	126
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	10.6	34.2	34.2	10.9	34.5	34.5	13.6	39.2	39.2	13.1	38.7	38.7
Effective Green, g (s)	10.6	34.2	34.2	10.9	34.5	34.5	13.6	39.2	39.2	13.1	38.7	38.7
Actuated g/C Ratio	0.08	0.27	0.27	0.09	0.28	0.28	0.11	0.31	0.31	0.10	0.31	0.31
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	925	404	147	933	403	356	1039	458	343	1026	452
v/s Ratio Prot	0.06	c0.22		c0.08	0.19		0.07	c0.31		c0.16	0.29	
v/s Ratio Perm			0.01			0.16			0.03			0.09
v/c Ratio	0.74	0.81	0.05	0.93	0.70	0.57	0.68	0.99	0.08	1.49	0.93	0.28
Uniform Delay, d1	55.9	42.4	33.5	56.7	40.6	38.9	53.6	42.8	30.2	56.0	41.9	32.6
Progression Factor	1.00	1.00	1.00	1.01	1.02	1.43	0.65	1.30	7.35	1.00	1.00	1.00
Incremental Delay, d2	10.2	7.6	0.3	51.0	4.0	5.2	4.7	25.2	0.1	235.4	14.8	0.3
Delay (s)	66.0	50.0	33.7	108.1	45.6	60.9	39.5	80.9	222.4	291.3	56.7	32.9
Level of Service	E	D	C	F	D	E	D	F	F	F	E	C
Approach Delay (s)		51.9			57.9			86.0			123.9	
Approach LOS		D			E			F			F	

Intersection Summary					
HCM 2000 Control Delay	85.2	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	0.99				
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6		
Intersection Capacity Utilization	98.7%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	966	277	0	1079	0	74
Future Volume (vph)	966	277	0	1079	0	74
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.967					0.865
Flt Protected						
Satd. Flow (prot)	4663	0	0	3349	0	1540
Flt Permitted						
Satd. Flow (perm)	4663	0	0	3349	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	1073	308	0	1199	0	82
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1381	0	0	1199	0	82
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	966	277	0	1079	0	74
Future Volume (Veh/h)	966	277	0	1079	0	74
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1073	308	0	1199	0	82
Pedestrians	10			10	10	
Lane Width (m)	3.5			3.5	3.5	
Walking Speed (m/s)	1.0			1.0	1.0	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.82		0.89	0.82
vC, conflicting volume			1391		1846	532
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			720		693	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			725		335	880

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	429	429	523	600	600	82
Volume Left	0	0	0	0	0	0
Volume Right	0	0	308	0	0	82
cSH	1700	1700	1700	1700	1700	880
Volume to Capacity	0.25	0.25	0.31	0.35	0.35	0.09
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	2.3
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.5
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.5
Approach LOS						A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	44.3%	ICU Level of Service		A
Analysis Period (min)	15			

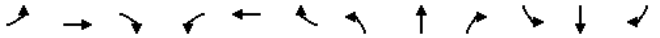
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	956	79	173	915	0	153	3	141	9	3	11
Future Volume (vph)	5	956	79	173	915	0	153	3	141	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00			0.99	0.98			0.98	
Frt		0.989						0.853			0.935	
Flt Protected	0.950			0.950			0.950				0.980	
Satd. Flow (prot)	1691	4745	0	1691	3349	0	1674	1481	0	0	1611	0
Flt Permitted	0.273			0.190			0.741				0.870	
Satd. Flow (perm)	484	4745	0	337	3349	0	1289	1481	0	0	1425	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15						157			12	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	6	1062	88	192	1017	0	170	3	157	10	3	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	1150	0	192	1017	0	170	160	0	0	25	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	22.0	67.0		22.0	67.0		36.0	36.0		36.0	36.0	
Total Split (%)	17.6%	53.6%		17.6%	53.6%		28.8%	28.8%		28.8%	28.8%	
Maximum Green (s)	15.9	61.0		15.9	61.0		29.7	29.7		29.7	29.7	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	80.3	74.8		91.0	88.7		21.6	21.6			21.6	
Actuated g/C Ratio	0.64	0.60		0.73	0.71		0.17	0.17			0.17	
v/c Ratio	0.02	0.40		0.54	0.43		0.77	0.42			0.10	
Control Delay	1.2	1.5		20.8	9.8		70.2	9.8			26.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	1.2	1.5		20.8	9.8		70.2	9.8			26.3	
LOS	A	A		C	A		E	A			C	
Approach Delay		1.5			11.5			40.9			26.3	
Approach LOS		A			B			D			C	
Queue Length 50th (m)	0.0	3.4		14.0	28.2		40.2	0.6			2.7	
Queue Length 95th (m)	m0.2	m7.2		m49.0	89.1		60.5	17.6			9.8	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	500	2843		417	2376		306	471			347	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.40		0.46	0.43		0.56	0.34			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 11.0		Intersection LOS: B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	889	57	221	853	40	174	0	212	80	3	61
Future Volume (vph)	111	889	57	221	853	40	174	0	212	80	3	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.96	1.00	1.00		0.99				0.98	
Frt			0.850		0.993				0.850		0.943	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1674	3382	1455	1642	3313	0	1674	0	1483	0	1604	0
Flt Permitted	0.208			0.210			0.636				0.973	
Satd. Flow (perm)	365	3382	1401	362	3313	0	1112	0	1483	0	1595	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111		5				236		28	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Adj. Flow (vph)	123	988	63	246	948	44	193	0	236	89	3	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	123	988	63	246	992	0	193	0	236	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (k/h)	
Number of Detectors	
Detector Template	
Leading Detector (m)	
Trailing Detector (m)	
Detector 1 Position(m)	
Detector 1 Size(m)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(m)	
Detector 2 Size(m)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Detector Phase	12	2	4	12	6		4		12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	10.9	30.8	42.6	10.9	30.8		42.6		10.9	42.6	42.6	
Total Split (s)	22.0	60.0	36.0	22.0	60.0		36.0		22.0	36.0	36.0	
Total Split (%)	17.6%	48.0%	28.8%	17.6%	48.0%		28.8%		17.6%	28.8%	28.8%	
Maximum Green (s)	16.1	54.2	29.4	16.1	54.2		29.4		16.1	29.4	29.4	
Yellow Time (s)	3.7	3.7	3.3	3.7	3.7		3.3		3.7	3.3	3.3	
All-Red Time (s)	2.2	2.1	3.3	2.2	2.1		3.3		2.2	3.3	3.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Lost Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lead/Lag			Lag				Lag			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	None	C-Max	None	None	C-Max		None		None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0		18.0		29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5		5		5			5	5	
Act Effct Green (s)	79.4	65.8	27.2	79.4	65.8		27.2		13.7		27.2	
Actuated g/C Ratio	0.64	0.53	0.22	0.64	0.53		0.22		0.11		0.22	
v/c Ratio	0.33	0.56	0.16	0.66	0.57		0.80		0.63		0.43	
Control Delay	14.9	18.8	7.8	19.5	23.4		68.8		14.4		36.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	14.9	18.8	7.8	19.5	23.4		68.8		14.4		36.7	
LOS	B	B	A	B	C		E		B		D	
Approach Delay		17.8			22.6			38.9			36.7	
Approach LOS		B			C			D			D	
Queue Length 50th (m)	9.2	42.4	1.4	20.8	85.0		45.2		0.0		28.0	
Queue Length 95th (m)	19.7	55.2	11.1	42.5	125.1		66.5		23.9		44.3	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	410	1780	434	405	1747		278		399		420	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.30	0.56	0.15	0.61	0.57		0.69		0.59		0.38	

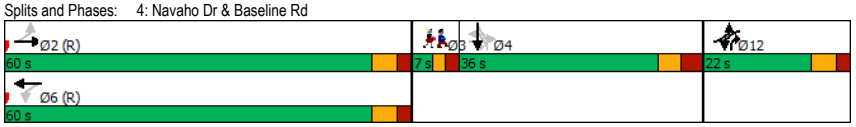
Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 20 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 23.8	Intersection LOS: C

Lane Group	Ø3
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	5.0
Total Split (s)	7.0
Total Split (%)	6%
Maximum Green (s)	3.0
Yellow Time (s)	2.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Capacity Utilization 74.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	889	57	221	853	40	174	0	212	80	3	61
Future Volume (vph)	111	889	57	221	853	40	174	0	212	80	3	61
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	0.99		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1673	3382	1401	1641	3314		1662		1483		1594	
Flt Permitted	0.21	1.00	1.00	0.21	1.00		0.64		1.00		0.97	
Satd. Flow (perm)	367	3382	1401	362	3314		1113		1483		1594	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	123	988	63	246	948	44	193	0	236	89	3	68
RTOR Reduction (vph)	0	0	49	0	2	0	0	0	210	0	22	0
Lane Group Flow (vph)	123	988	14	246	990	0	193	0	26	0	138	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Actuated Green, G (s)	79.5	65.8	27.2	79.5	65.8		27.2		13.7		27.2	
Effective Green, g (s)	79.5	65.8	27.2	79.5	65.8		27.2		13.7		27.2	
Actuated g/C Ratio	0.64	0.53	0.22	0.64	0.53		0.22		0.11		0.22	
Clearance Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)	376	1780	304	370	1744		242		162		346	
v/s Ratio Prot	0.04	0.29		c0.07	0.30				0.02			
v/s Ratio Perm	0.17		0.01	c0.35			c0.17				0.09	
v/c Ratio	0.33	0.56	0.05	0.66	0.57		0.80		0.16		0.40	
Uniform Delay, d1	10.7	19.8	38.6	12.4	20.0		46.3		50.4		41.9	
Progression Factor	1.51	0.80	9.97	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	0.5	1.2	0.1	4.5	1.3		16.5		0.5		0.8	
Delay (s)	16.7	17.1	385.2	16.8	21.3		62.8		50.9		42.7	
Level of Service	B	B	F	B	C		E		D		D	
Approach Delay (s)		36.8			20.4			56.3			42.7	
Approach LOS		D			C			E			D	

Intersection Summary				
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	22.3	
Intersection Capacity Utilization	74.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

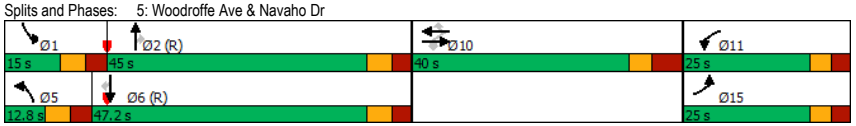
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	2	394	0	176	1	921	336	121	922	14
Future Volume (vph)	10	1	2	394	0	176	1	921	336	121	922	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.97	1.00		0.95
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1498	846	4718	1498	1674	3283	756
Flt Permitted	0.950			0.757			0.950			0.950		
Satd. Flow (perm)	836	890	739	2533	890	1463	840	4718	1455	1667	3283	720
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			360			368			156
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Adj. Flow (vph)	11	1	2	438	0	196	1	1023	373	134	1024	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1	2	438	0	196	1	1023	373	134	1024	16
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	25.0	40.0	40.0	25.0	40.0	40.0	12.8	45.0	45.0	15.0	47.2	47.2
Total Split (%)	20.0%	32.0%	32.0%	20.0%	32.0%	32.0%	10.2%	36.0%	36.0%	12.0%	37.8%	37.8%
Maximum Green (s)	18.8	32.1	32.1	18.8	32.1	32.1	6.0	38.4	38.4	8.2	40.6	40.6
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	7.4	10.9	10.9	27.4		10.9	5.8	52.2	52.2	19.6	75.9	75.9
Actuated g/C Ratio	0.06	0.09	0.09	0.22		0.09	0.05	0.42	0.42	0.16	0.61	0.61
v/c Ratio	0.22	0.01	0.01	0.69		0.43	0.03	0.52	0.45	0.51	0.51	0.03
Control Delay	65.4	44.0	0.0	47.5		2.9	58.0	29.4	5.1	62.4	6.8	0.1
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	44.0	0.0	47.5		2.9	58.0	29.4	5.1	62.4	6.8	0.1
LOS	E	D	A	D		A	E	C	A	E	A	A
Approach Delay		54.5			33.7			22.9			13.1	
Approach LOS		D			C			C			B	
Queue Length 50th (m)	2.6	0.3	0.0	48.6		0.0	0.3	64.3	0.7	27.3	2.9	0.0
Queue Length 95th (m)	8.6	1.7	0.0	50.7		0.0	2.2	97.5	24.0	m25.4	m152.2	m0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	127	228	297	742		643	41	1971	821	262	1994	498
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.00	0.01	0.59		0.30	0.02	0.52	0.45	0.51	0.51	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 109 (87%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 21.6		Intersection LOS: C	

Intersection Capacity Utilization 69.7% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	2	394	0	176	1	921	336	121	922	14
Future Volume (vph)	10	1	2	394	0	176	1	921	336	121	922	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.97	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	739	3188		1463	846	4718	1455	1674	3283	720
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	739	2541		1463	846	4718	1455	1674	3283	720
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	1	2	438	0	196	1	1023	373	134	1024	16
RTOR Reduction (vph)	0	0	2	0	0	179	0	0	214	0	0	7
Lane Group Flow (vph)	11	1	0	438	0	17	1	1023	159	134	1024	9
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	14.8	10.9	10.9	25.7		10.9	1.3	52.2	52.2	19.6	70.5	70.5
Effective Green, g (s)	14.8	10.9	10.9	25.7		10.9	1.3	52.2	52.2	19.6	70.5	70.5
Actuated g/C Ratio	0.12	0.09	0.09	0.21		0.09	0.01	0.42	0.42	0.16	0.56	0.56
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	100	77	64	599		127	8	1970	607	262	1851	406
v/s Ratio Prot	0.01	0.00		c0.09			0.00	0.22		c0.08	c0.31	
v/s Ratio Perm			0.00	c0.06		0.01			0.11			0.01
v/c Ratio	0.11	0.01	0.00	0.73		0.13	0.12	0.52	0.26	0.51	0.55	0.02
Uniform Delay, d1	49.2	52.1	52.1	45.2		52.7	61.3	27.1	23.8	48.3	17.3	12.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.19	0.37	1.00
Incremental Delay, d2	0.5	0.1	0.0	4.6		0.5	6.9	1.0	1.0	0.8	0.5	0.0
Delay (s)	49.7	52.2	52.1	49.8		53.2	68.2	28.1	24.8	58.2	7.0	12.1
Level of Service	D	D	D	D		D	E	C	C	E	A	B
Approach Delay (s)		50.2			50.8			27.2			12.9	
Approach LOS		D			D			C			B	

Intersection Summary						
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service		C		
HCM 2000 Volume to Capacity ratio	0.62					
Actuated Cycle Length (s)	125.0	Sum of lost time (s)		27.5		
Intersection Capacity Utilization	69.7%	ICU Level of Service		C		
Analysis Period (min)	15					

c Critical Lane Group

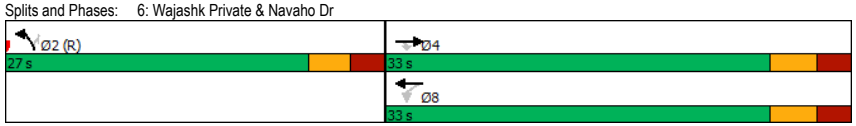
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	175	61	15	238	45	12
Future Volume (vph)	175	61	15	238	45	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1441	1691	1780	1496	1513
Flt Permitted			0.636		0.950	
Satd. Flow (perm)	1762	1411	1124	1780	1484	1462
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		68				13
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Adj. Flow (vph)	194	68	17	264	50	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	68	17	264	50	13
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	25.8	25.8	25.8	25.8	26.5	26.5
Total Split (s)	33.0	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	55.0%	45.0%	45.0%
Maximum Green (s)	27.2	27.2	27.2	27.2	21.5	21.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	0	0	5	5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Act Effct Green (s)	27.2	27.2	27.2	27.2	21.5	21.5
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.36	0.36
v/c Ratio	0.24	0.10	0.03	0.33	0.09	0.02
Control Delay	11.1	3.4	9.5	12.0	13.4	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.1	3.4	9.5	12.0	13.4	7.2
LOS	B	A	A	B	B	A
Approach Delay	9.1			11.8	12.2	
Approach LOS	A			B	B	
Queue Length 50th (m)	12.3	0.0	1.0	17.6	3.6	0.0
Queue Length 95th (m)	23.3	5.3	3.8	31.6	9.5	2.8
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	798	676	509	806	536	532
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.10	0.03	0.33	0.09	0.02

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 1 (2%), Referenced to phase 2:NBL and 6:, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.33
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 43.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	175	61	15	238	45	12
Future Volume (vph)	175	61	15	238	45	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1411	1679	1780	1496	1462
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1411	1124	1780	1496	1462
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	194	68	17	264	50	13
RTOR Reduction (vph)	0	37	0	0	0	8
Lane Group Flow (vph)	194	31	17	264	50	5
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	27.2	27.2	27.2	27.2	21.5	21.5
Effective Green, g (s)	27.2	27.2	27.2	27.2	21.5	21.5
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.36	0.36
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Grp Cap (vph)	798	639	509	806	536	523
v/s Ratio Prot	0.11			c0.15	c0.03	
v/s Ratio Perm		0.02	0.02			0.00
v/c Ratio	0.24	0.05	0.03	0.33	0.09	0.01
Uniform Delay, d1	10.1	9.2	9.1	10.5	12.8	12.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.1	1.1	0.3	0.0
Delay (s)	10.8	9.3	9.2	11.6	13.1	12.4
Level of Service	B	A	A	B	B	B
Approach Delay (s)	10.4			11.5	13.0	
Approach LOS	B			B	B	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	11.3
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	224	1031	76	0	1057
Future Volume (vph)	0	224	1031	76	0	1057
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.990			
Flt Protected						
Satd. Flow (prot)	0	1540	4723	0	0	4764
Flt Permitted						
Satd. Flow (perm)	0	1540	4723	0	0	4764
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	0	249	1146	84	0	1174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	249	1230	0	0	1174
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

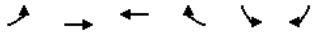
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	224	1031	76	0	1057
Future Volume (Veh/h)	0	224	1031	76	0	1057
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	249	1146	84	0	1174
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.86	0.85			0.85	
vC, conflicting volume	1599	444			1240	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			657	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	73			100	
cM capacity (veh/h)	867	908			790	

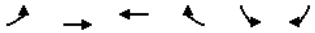
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	249	458	458	313	391	391	391
Volume Left	0	0	0	0	0	0	0
Volume Right	249	0	0	84	0	0	0
cSH	908	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.27	0.27	0.27	0.18	0.23	0.23	0.23
Queue Length 95th (m)	8.5	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.5	0.0			0.0		
Approach LOS	B						

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	247	211	256	27	25	314
Future Volume (vph)	247	211	256	27	25	314
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.986		0.875	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1745	3247	0	1551	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1745	3247	0	1551	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	274	234	284	30	28	349
Shared Lane Traffic (%)						
Lane Group Flow (vph)	274	234	314	0	377	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	247	211	256	27	25	314
Future Volume (Veh/h)	247	211	256	27	25	314
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	274	234	284	30	28	349
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	324				1101	177
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	324				1101	177
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	78				82	58
cM capacity (veh/h)	1235				160	826

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	274	234	189	125	377
Volume Left	274	0	0	0	28
Volume Right	0	0	0	30	349
cSH	1235	1700	1700	1700	630
Volume to Capacity	0.22	0.14	0.11	0.07	0.60
Queue Length 95th (m)	6.5	0.0	0.0	0.0	30.1
Control Delay (s)	8.7	0.0	0.0	0.0	18.8
Lane LOS	A				C
Approach Delay (s)	4.7		0.0		18.8
Approach LOS					C

Intersection Summary				
Average Delay		7.9		
Intersection Capacity Utilization		57.2%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	769	174	159	927	455	344	869	111	422	833	325
Future Volume (vph)	307	769	174	159	927	455	344	869	111	422	833	325
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3248	3349	1513	1674	3349	1483	3248	3221	1513	3216	3221	1483
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3231	3349	1478	1668	3349	1449	3227	3221	1476	3204	3221	1447
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			275			155			185
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Adj. Flow (vph)	307	769	174	159	927	455	344	869	111	422	833	325
Shared Lane Traffic (%)												
Lane Group Flow (vph)	307	769	174	159	927	455	344	869	111	422	833	325
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	19.0	42.2	42.2	19.8	43.0	43.0	21.5	40.0	40.0	23.0	41.5	41.5
Total Split (%)	15.2%	33.8%	33.8%	15.8%	34.4%	34.4%	17.2%	32.0%	32.0%	18.4%	33.2%	33.2%
Maximum Green (s)	11.9	35.4	35.4	12.7	36.2	36.2	14.6	33.2	33.2	16.1	34.7	34.7
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	11.9	35.4	35.4	12.7	36.2	36.2	14.6	33.2	33.2	16.1	34.7	34.7
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
v/c Ratio	0.99	0.81	0.33	0.94	0.96	0.74	0.91	1.02	0.22	1.02	0.93	0.61
Control Delay	106.0	49.6	9.0	109.7	64.0	23.6	82.6	80.4	2.7	102.7	61.8	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.0	49.6	9.0	109.7	64.0	23.6	82.6	80.4	2.7	102.7	61.8	21.7
LOS	F	D	A	F	E	C	F	F	A	F	E	C
Approach Delay		57.8			56.8			74.4			64.5	
Approach LOS		E			E			E			E	
Queue Length 50th (m)	39.5	92.7	3.4	39.4	117.8	40.8	43.7	~115.9	0.0	~56.5	105.2	29.1
Queue Length 95th (m)	#68.8	116.6	20.4	#80.8	#159.0	82.7	#70.4	#158.2	5.4	#88.5	#143.1	60.6
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	309	948	529	170	969	614	379	855	505	414	894	535
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.81	0.33	0.94	0.96	0.74	0.91	1.02	0.22	1.02	0.93	0.61

Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 63.3	Intersection LOS: E

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1098	204	0	1541	0	40
Future Volume (vph)	1098	204	0	1541	0	40
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.976					0.865
Flt Protected						
Satd. Flow (prot)	4703	0	0	3382	0	1540
Flt Permitted						
Satd. Flow (perm)	4703	0	0	3382	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1098	204	0	1541	0	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1302	0	0	1541	0	40
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1098	204	0	1541	0	40
Future Volume (Veh/h)	1098	204	0	1541	0	40
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1098	204	0	1541	0	40
Pedestrians	10			10		
Lane Width (m)	3.5			3.5		
Walking Speed (m/s)	1.0			1.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.82		0.80	0.82
vC, conflicting volume			1302		1980	478
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			585		362	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			811		490	882

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	439	439	424	770	770	40
Volume Left	0	0	0	0	0	0
Volume Right	0	0	204	0	0	40
cSH	1700	1700	1700	1700	1700	882
Volume to Capacity	0.26	0.26	0.25	0.45	0.45	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	1.1
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.3
Approach LOS						A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	48.3%	ICU Level of Service	A	
Analysis Period (min)	15			

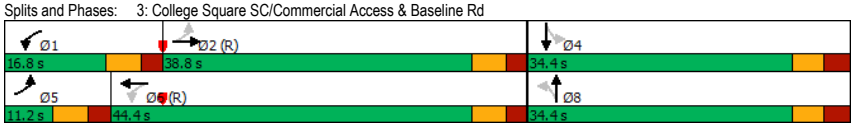
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1085	42	128	1410	9	115	1	94	6	4	16
Future Volume (vph)	11	1085	42	128	1410	9	115	1	94	6	4	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00		0.99	0.98			0.98	
Frt		0.994			0.999			0.852			0.917	
Flt Protected	0.950			0.950			0.950				0.989	
Satd. Flow (prot)	1691	4728	0	1691	3345	0	1691	1470	0	0	1593	0
Flt Permitted	0.144			0.186			0.740				0.930	
Satd. Flow (perm)	256	4728	0	330	3345	0	1305	1470	0	0	1495	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			1			94			16	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	11	1085	42	128	1410	9	115	1	94	6	4	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1127	0	128	1419	0	115	95	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.2	38.8		16.8	44.4		34.4	34.4		34.4	34.4	
Total Split (%)	12.4%	43.1%		18.7%	49.3%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	5.1	32.8		10.7	38.4		28.1	28.1		28.1	28.1	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	54.1	48.6		62.5	60.4		15.0	15.0			15.0	
Actuated g/C Ratio	0.60	0.54		0.69	0.67		0.17	0.17			0.17	
v/c Ratio	0.05	0.44		0.37	0.63		0.53	0.29			0.10	
Control Delay	7.9	14.8		9.2	13.5		41.1	8.4			16.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	7.9	14.8		9.2	13.5		41.1	8.4			16.6	
LOS	A	B		A	B		D	A			B	
Approach Delay		14.7			13.1			26.3			16.6	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.5	37.8		5.8	53.6		18.8	0.2			1.5	
Queue Length 95th (m)	3.1	72.7		18.5	#176.0		28.6	10.3			6.8	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	241	2558		391	2245		407	523			477	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.05	0.44		0.33	0.63		0.28	0.18			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 14.7		Intersection LOS: B	

Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



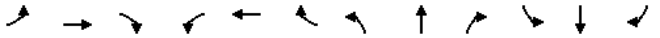
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1085	42	128	1410	9	115	1	94	6	4	16
Future Volume (vph)	11	1085	42	128	1410	9	115	1	94	6	4	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1691	4730		1690	3345		1675	1469			1589	
Flt Permitted	0.14	1.00		0.19	1.00		0.74	1.00			0.93	
Satd. Flow (perm)	256	4730		331	3345		1305	1469			1495	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1085	42	128	1410	9	115	1	94	6	4	16
RTOR Reduction (vph)	0	3	0	0	0	0	0	78	0	0	13	0
Lane Group Flow (vph)	11	1124	0	128	1419	0	115	17	0	0	13	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	49.7	48.7		62.7	55.6		15.0	15.0			15.0	
Effective Green, g (s)	49.7	48.7		62.7	55.6		15.0	15.0			15.0	
Actuated g/C Ratio	0.55	0.54		0.70	0.62		0.17	0.17			0.17	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	157	2559		349	2066		217	244			249	
v/s Ratio Prot	0.00	0.24		c0.03	c0.42			0.01				
v/s Ratio Perm	0.04			0.22			c0.09				0.01	
v/c Ratio	0.07	0.44		0.37	0.69		0.53	0.07			0.05	
Uniform Delay, d1	9.8	12.4		5.7	11.4		34.3	31.6			31.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.2	0.5		0.7	1.9		2.3	0.1			0.1	
Delay (s)	10.0	13.0		6.4	13.3		36.6	31.7			31.6	
Level of Service	B	B		A	B		D	C			C	
Approach Delay (s)		13.0			12.7			34.4			31.6	
Approach LOS		B			B			C			C	

Intersection Summary					
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.67				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	77.2%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	1052	58	269	1344	41	128	0	222	102	3	75
Future Volume (vph)	101	1052	58	269	1344	41	128	0	222	102	3	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		1.00		0.99				0.98	
Frt			0.850		0.996				0.850		0.944	
Flt Protected	0.950			0.950			0.950				0.972	
Satd. Flow (prot)	1691	3349	1513	1642	3333	0	1658	0	1455	0	1566	0
Flt Permitted	0.080			0.144			0.614				0.972	
Satd. Flow (perm)	142	3349	1457	249	3333	0	1064	0	1455	0	1556	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			187		3				222		29	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Adj. Flow (vph)	101	1052	58	269	1344	41	128	0	222	102	3	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	1052	58	269	1385	0	128	0	222	0	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø1	Ø3	Ø6
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (m)			
Storage Lanes			
Taper Length (m)			
Lane Util. Factor			
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (k/h)			
Link Distance (m)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(m)			
Link Offset(m)			
Crosswalk Width(m)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (k/h)			
Number of Detectors			
Detector Template			
Leading Detector (m)			
Trailing Detector (m)			
Detector 1 Position(m)			
Detector 1 Size(m)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(m)			
Detector 2 Size(m)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Detector Phase	12	2	4	1 12	1 6		4		1 12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	
Minimum Split (s)	11.8	31.8	42.8				42.8			42.8	42.8	
Total Split (s)	11.8	45.1	42.8				42.8			42.8	42.8	
Total Split (%)	9.4%	36.1%	34.2%				34.2%			34.2%	34.2%	
Maximum Green (s)	5.0	38.3	36.0				36.0			36.0	36.0	
Yellow Time (s)	3.7	3.7	3.7				3.7			3.7	3.7	
All-Red Time (s)	3.1	3.1	3.1				3.1			3.1	3.1	
Lost Time Adjust (s)	0.0	0.0	0.0				0.0				0.0	
Total Lost Time (s)	6.8	6.8	6.8				6.8				6.8	
Lead/Lag		Lead	Lag				Lag			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0				3.0			3.0	3.0	
Recall Mode	None	C-Max	None				None			None	None	
Walk Time (s)		7.0	7.0				7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0				29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5				5			5	5	
Act Effct Green (s)	62.9	49.8	21.4	83.2	70.1		21.4		26.7		21.4	
Actuated g/C Ratio	0.50	0.40	0.17	0.67	0.56		0.17		0.21		0.17	
v/c Ratio	0.43	0.79	0.14	0.58	0.74		0.71		0.46		0.62	
Control Delay	26.0	39.7	0.7	19.0	25.4		67.4		5.9		47.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	26.0	39.7	0.7	19.0	25.4		67.4		5.9		47.8	
LOS	C	D	A	B	C		E		A		D	
Approach Delay		36.7			24.4			28.4			47.8	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	10.8	118.8	0.0	18.7	129.9		30.4		0.0		35.3	
Queue Length 95th (m)	31.0	#185.8	0.0	44.5	192.4		44.5		10.1		50.2	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	234	1333	552	462	1869		306		484		468	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.43	0.79	0.11	0.58	0.74		0.42		0.46		0.38	

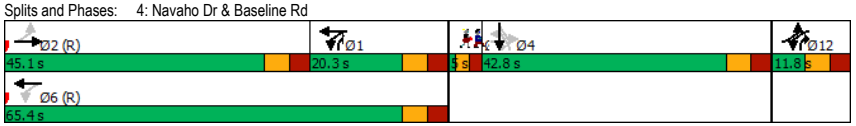
Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 30.4	Intersection LOS: C

Lane Group	Ø1	Ø3	Ø6
Turn Type			
Protected Phases	1	3	6
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	5.0
Minimum Split (s)	11.8	5.0	31.8
Total Split (s)	20.3	5.0	65.4
Total Split (%)	16%	4%	52%
Maximum Green (s)	13.5	1.0	58.6
Yellow Time (s)	3.7	2.0	3.7
All-Red Time (s)	3.1	2.0	3.1
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	C-Max
Walk Time (s)			7.0
Flash Dont Walk (s)			18.0
Pedestrian Calls (#/hr)			5
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (m)			
Queue Length 95th (m)			
Internal Link Dist (m)			
Turn Bay Length (m)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	1052	58	269	1344	41	128	0	222	102	3	75
Future Volume (vph)	101	1052	58	269	1344	41	128	0	222	102	3	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		6.8		6.8		6.8	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1691	3349	1457	1642	3332		1646		1455		1557	
Flt Permitted	0.08	1.00	1.00	0.14	1.00		0.61		1.00		0.97	
Satd. Flow (perm)	143	3349	1457	248	3332		1064		1455		1557	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	101	1052	58	269	1344	41	128	0	222	102	3	75
RTOR Reduction (vph)	0	0	48	0	1	0	0	0	175	0	24	0
Lane Group Flow (vph)	101	1052	10	269	1384	0	128	0	47	0	156	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Actuated Green, G (s)	62.9	49.7	21.4	83.2	70.0		21.4		26.7		21.4	
Effective Green, g (s)	62.9	49.7	21.4	83.2	70.0		21.4		26.7		21.4	
Actuated g/C Ratio	0.50	0.40	0.17	0.67	0.56		0.17		0.21		0.17	
Clearance Time (s)	6.8	6.8	6.8				6.8				6.8	
Vehicle Extension (s)	3.0	3.0	3.0				3.0				3.0	
Lane Grp Cap (vph)	235	1331	249	462	1865		182		310		266	
v/s Ratio Prot	0.05	0.31		c0.12	c0.42				0.03			
v/s Ratio Perm	0.17		0.01	0.26			c0.12				0.10	
v/c Ratio	0.43	0.79	0.04	0.58	0.74		0.70		0.15		0.59	
Uniform Delay, d1	21.6	33.1	43.2	16.6	20.7		48.8		40.0		47.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	1.3	4.8	0.1	1.9	1.6		11.6		0.2		3.3	
Delay (s)	22.8	37.9	43.3	18.5	22.3		60.5		40.2		51.0	
Level of Service	C	D	D	B	C		E		D		D	
Approach Delay (s)		36.9			21.7			47.6			51.0	
Approach LOS		D			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	31.2	
Intersection Capacity Utilization	85.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

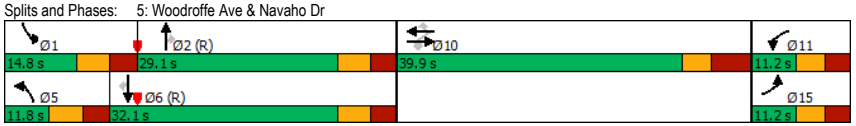
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
Future Volume (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1483	846	4811	1483	1642	3316	756
Flt Permitted	0.950			0.756			0.950			0.950		
Satd. Flow (perm)	838	890	741	2537	890	1453	841	4811	1447	1637	3316	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			254			334			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Adj. Flow (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.1	29.1	14.8	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	30.6%	30.6%	15.6%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	22.5	22.5	8.0	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	5.9	11.0	11.0	23.1		11.0	5.5	33.3	33.3	12.8	50.6	50.6
Actuated g/C Ratio	0.06	0.12	0.12	0.24		0.12	0.06	0.35	0.35	0.13	0.53	0.53
v/c Ratio	0.15	0.03	0.05	0.63		0.47	0.02	0.61	0.46	0.59	0.58	0.01
Control Delay	49.1	30.3	0.3	32.5		5.0	44.0	29.1	5.7	52.3	20.5	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	30.3	0.3	32.5		5.0	44.0	29.1	5.7	52.3	20.5	0.0
LOS	D	C	A	C		A	D	C	A	D	C	A
Approach Delay		21.2			24.3			23.4			23.9	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	1.4	0.5	0.0	34.2		0.0	0.2	55.8	0.0	22.3	55.6	0.0
Queue Length 95th (m)	6.1	2.3	0.0	34.2		4.7	1.8	#91.1	21.4	#58.8	#156.4	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	52	299	376	689		657	48	1688	724	221	1765	482
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01	0.03	0.63		0.28	0.02	0.61	0.46	0.59	0.58	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 23.8		Intersection LOS: C	

Intersection Capacity Utilization 73.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
Future Volume (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1453	846	4811	1447	1642	3316	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2542		1453	846	4811	1447	1642	3316	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	3	12	437	0	186	1	1027	334	131	1028	7
RTOR Reduction (vph)	0	0	11	0	0	164	0	0	217	0	0	4
Lane Group Flow (vph)	8	3	1	437	0	22	1	1027	117	131	1028	3
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	10.3	11.0	11.0	21.3		11.0	1.0	33.4	33.4	12.8	45.2	45.2
Effective Green, g (s)	10.3	11.0	11.0	21.3		11.0	1.0	33.4	33.4	12.8	45.2	45.2
Actuated g/C Ratio	0.11	0.12	0.12	0.22		0.12	0.01	0.35	0.35	0.13	0.48	0.48
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	91	103	85	640		168	8	1691	508	221	1577	344
v/s Ratio Prot	0.01	0.00		c0.07			0.00	0.21		c0.08	c0.31	
v/s Ratio Perm			0.00	c0.08		0.01			0.08			0.00
v/c Ratio	0.09	0.03	0.02	0.68		0.13	0.12	0.61	0.23	0.59	0.65	0.01
Uniform Delay, d1	38.1	37.3	37.2	33.3		37.7	46.6	25.4	21.7	38.6	18.9	13.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1	0.1	3.0		0.3	6.9	1.6	1.1	4.2	2.1	0.1
Delay (s)	38.5	37.4	37.3	36.3		38.0	53.5	27.0	22.8	42.9	21.0	13.2
Level of Service	D	D	D	D		D	D	C	C	D	C	B
Approach Delay (s)		37.7			36.8			26.0			23.4	
Approach LOS		D			D			C			C	

Intersection Summary						
HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C			
HCM 2000 Volume to Capacity ratio	0.70					
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	27.5			
Intersection Capacity Utilization	73.7%	ICU Level of Service	D			
Analysis Period (min)	15					

c Critical Lane Group

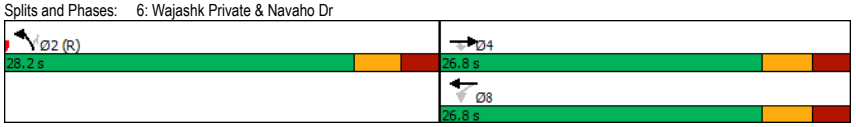
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	184	97	33	298	132	21
Future Volume (vph)	184	97	33	298	132	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1469	1691	1780	1610	1513
Flt Permitted			0.641		0.950	
Satd. Flow (perm)	1762	1439	1134	1780	1598	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		97				21
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Adj. Flow (vph)	184	97	33	298	132	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	184	97	33	298	132	21
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	27.8	27.8
Total Split (s)	26.8	26.8	26.8	26.8	28.2	28.2
Total Split (%)	48.7%	48.7%	48.7%	48.7%	51.3%	51.3%
Maximum Green (s)	21.0	21.0	21.0	21.0	22.7	22.7
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	2	2	5	5
Act Effct Green (s)	14.5	14.5	14.5	14.5	29.2	29.2
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.53	0.53
v/c Ratio	0.40	0.22	0.11	0.64	0.15	0.03
Control Delay	18.1	4.8	14.2	23.6	8.7	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.1	4.8	14.2	23.6	8.7	4.5
LOS	B	A	B	C	A	A
Approach Delay	13.5			22.7	8.1	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.0	0.0	2.5	26.1	6.0	0.0
Queue Length 95th (m)	24.6	7.1	6.5	39.4	16.5	3.0
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	672	609	432	679	855	787
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.16	0.08	0.44	0.15	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 16.4		Intersection LOS: B	

Intersection Capacity Utilization 48.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	184	97	33	298	132	21
Future Volume (vph)	184	97	33	298	132	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1439	1680	1780	1610	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1439	1135	1780	1610	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	184	97	33	298	132	21
RTOR Reduction (vph)	0	71	0	0	0	10
Lane Group Flow (vph)	184	26	33	298	132	11
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	14.5	14.5	14.5	14.5	29.2	29.2
Effective Green, g (s)	14.5	14.5	14.5	14.5	29.2	29.2
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.53	0.53
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	464	379	299	469	854	776
v/s Ratio Prot	0.10			c0.17	c0.08	
v/s Ratio Perm		0.02	0.03			0.01
v/c Ratio	0.40	0.07	0.11	0.64	0.15	0.01
Uniform Delay, d1	16.7	15.2	15.4	17.9	6.6	6.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2	2.8	0.4	0.0
Delay (s)	17.2	15.3	15.5	20.7	7.0	6.1
Level of Service	B	B	B	C	A	A
Approach Delay (s)	16.5			20.2	6.9	
Approach LOS	B			C	A	

Intersection Summary				
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.31			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	48.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	155	1169	52	0	1166
Future Volume (vph)	0	155	1169	52	0	1166
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.994			
Flt Protected						
Satd. Flow (prot)	0	1524	4739	0	0	4718
Flt Permitted						
Satd. Flow (perm)	0	1524	4739	0	0	4718
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	155	1169	52	0	1166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	155	1221	0	0	1166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

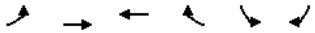
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	155	1169	52	0	1166
Future Volume (Veh/h)	0	155	1169	52	0	1166
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	155	1169	52	0	1166
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.91	0.83			0.83	
vC, conflicting volume	1604	436			1231	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	71	0			584	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	83			100	
cM capacity (veh/h)	826	890			827	

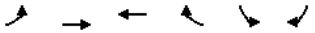
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	155	468	468	286	389	389	389
Volume Left	0	0	0	0	0	0	0
Volume Right	155	0	0	52	0	0	0
cSH	890	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.17	0.28	0.28	0.17	0.23	0.23	0.23
Queue Length 95th (m)	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.9	0.0			0.0		
Approach LOS	A						

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	43.6%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	258	384	46	23	239
Future Volume (vph)	210	258	384	46	23	239
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.984		0.877	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1762	3298	0	1555	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1762	3298	0	1555	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	210	258	384	46	23	239
Shared Lane Traffic (%)						
Lane Group Flow (vph)	210	258	430	0	262	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	258	384	46	23	239
Future Volume (Veh/h)	210	258	384	46	23	239
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	210	258	384	46	23	239
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	440				1105	235
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	440				1105	235
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	81				86	68
cM capacity (veh/h)	1120				166	758

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	210	258	256	174	262
Volume Left	210	0	0	0	23
Volume Right	0	0	0	46	239
cSH	1120	1700	1700	1700	577
Volume to Capacity	0.19	0.15	0.15	0.10	0.45
Queue Length 95th (m)	5.2	0.0	0.0	0.0	17.9
Control Delay (s)	9.0	0.0	0.0	0.0	16.3
Lane LOS	A				C
Approach Delay (s)	4.0		0.0		16.3
Approach LOS					C

Intersection Summary				
Average Delay		5.3		
Intersection Capacity Utilization		53.2%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	681	72	124	596	370	219	938	110	465	872	212
Future Volume (vph)	187	681	72	124	596	370	219	938	110	465	872	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3281	3382	1513	1691	3382	1498	3281	3316	1498	3281	3316	1498
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3253	3382	1478	1684	3382	1463	3260	3316	1462	3269	3316	1462
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			233			155			155
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Adj. Flow (vph)	187	681	72	124	596	370	219	938	110	465	872	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	681	72	124	596	370	219	938	110	465	872	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	16.1	40.6	40.6	17.0	41.5	41.5	18.3	42.3	42.3	25.1	49.1	49.1
Total Split (%)	12.9%	32.5%	32.5%	13.6%	33.2%	33.2%	14.6%	33.8%	33.8%	20.1%	39.3%	39.3%
Maximum Green (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.4	35.5	35.5	18.2	42.3	42.3
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.1	35.5	35.5	18.2	42.6	42.6
Actuated g/C Ratio	0.07	0.27	0.27	0.08	0.28	0.28	0.09	0.28	0.28	0.15	0.34	0.34
v/c Ratio	0.79	0.75	0.14	0.93	0.64	0.64	0.75	1.00	0.21	0.97	0.77	0.35
Control Delay	80.6	47.6	0.6	119.0	43.2	19.9	72.1	73.4	2.5	88.6	42.5	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.6	47.6	0.6	119.0	43.2	19.9	72.1	73.4	2.5	88.6	42.5	10.9
LOS	F	D	A	F	D	B	E	E	A	F	D	B
Approach Delay		50.5			43.9			67.0			52.0	
Approach LOS		D			D			E			D	
Queue Length 50th (m)	23.7	80.6	0.0	30.8	67.7	28.7	27.4	121.3	0.0	59.4	100.8	9.6
Queue Length 95th (m)	#41.8	102.4	0.0	#68.0	87.3	63.1	#43.5	#165.7	5.1	#92.5	125.5	28.7
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	236	914	512	133	938	574	299	941	526	477	1129	600
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.75	0.14	0.93	0.64	0.64	0.73	1.00	0.21	0.97	0.77	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 116 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 53.8		Intersection LOS: D	

Intersection Capacity Utilization 99.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	681	72	124	596	370	219	938	110	465	872	212
Future Volume (vph)	187	681	72	124	596	370	219	938	110	465	872	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	187	681	72	124	596	370	219	938	110	465	872	212
RTOR Reduction (vph)	0	0	53	0	0	168	0	0	79	0	0	102
Lane Group Flow (vph)	187	681	19	124	596	202	219	938	31	465	872	110
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.1	35.5	35.5	18.2	42.6	42.6
Effective Green, g (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.1	35.5	35.5	18.2	42.6	42.6
Actuated g/C Ratio	0.07	0.27	0.27	0.08	0.28	0.28	0.09	0.28	0.28	0.15	0.34	0.34
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	236	914	399	133	938	406	291	941	415	477	1130	498
v/s Ratio Prot	0.06	c0.20		c0.07	0.18		0.07	c0.28		c0.14	c0.26	
v/s Ratio Perm			0.01			0.14			0.02			0.08
v/c Ratio	0.79	0.75	0.05	0.93	0.64	0.50	0.75	1.00	0.08	0.97	0.77	0.22
Uniform Delay, d1	57.1	41.7	33.7	57.2	39.6	37.8	55.6	44.7	32.7	53.2	36.9	29.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.5	5.5	0.2	57.4	3.3	4.3	10.5	28.3	0.1	34.4	3.3	0.2
Delay (s)	73.6	47.2	33.9	114.6	42.9	42.1	66.1	73.0	32.8	87.6	40.2	29.6
Level of Service	E	D	C	F	D	D	E	E	C	F	D	C
Approach Delay (s)		51.4			50.8			68.3			53.0	
Approach LOS		D			D			E			D	

Intersection Summary				
HCM 2000 Control Delay	56.2	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.91			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	99.1%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	976	280	0	1090	0	75
Future Volume (vph)	976	280	0	1090	0	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.967					0.865
Flt Protected						
Satd. Flow (prot)	4663	0	0	3349	0	1540
Flt Permitted						
Satd. Flow (perm)	4663	0	0	3349	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	976	280	0	1090	0	75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1256	0	0	1090	0	75
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	976	280	0	1090	0	75
Future Volume (Veh/h)	976	280	0	1090	0	75
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	976	280	0	1090	0	75
Pedestrians	10			10	10	
Lane Width (m)	3.5			3.5	3.5	
Walking Speed (m/s)	1.0			1.0	1.0	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.85		0.90	0.85
vC, conflicting volume			1266		1681	485
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			674		508	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			776		441	904

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	390	390	475	545	545	75
Volume Left	0	0	0	0	0	0
Volume Right	0	0	280	0	0	75
cSH	1700	1700	1700	1700	1700	904
Volume to Capacity	0.23	0.23	0.28	0.32	0.32	0.08
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	2.1
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.3
Approach LOS						A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	44.6%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	966	80	175	924	0	155	3	142	9	3	11
Future Volume (vph)	5	966	80	175	924	0	155	3	142	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00			0.99	0.98			0.99	
Frt		0.989						0.853			0.935	
Flt Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1691	4749	0	1691	3349	0	1674	1489	0	0	1617	0
Flt Permitted	0.309			0.182			0.742				0.874	
Satd. Flow (perm)	548	4749	0	323	3349	0	1298	1489	0	0	1437	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						142			11	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	966	80	175	924	0	155	3	142	9	3	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1046	0	175	924	0	155	145	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

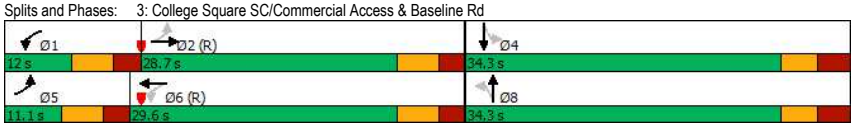
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.1	28.7		12.0	29.6		34.3	34.3		34.3	34.3	
Total Split (%)	14.8%	38.3%		16.0%	39.5%		45.7%	45.7%		45.7%	45.7%	
Maximum Green (s)	5.0	22.7		5.9	23.6		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	37.7	32.4		45.8	44.7		15.8	15.8			15.8	
Actuated g/C Ratio	0.50	0.43		0.61	0.60		0.21	0.21			0.21	
v/c Ratio	0.01	0.51		0.50	0.46		0.57	0.34			0.07	
Control Delay	9.4	17.8		16.3	13.0		33.1	6.2			13.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	9.4	17.8		16.3	13.0		33.1	6.2			13.8	
LOS	A	B		B	B		C	A			B	
Approach Delay		17.8			13.5			20.1			13.8	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.3	36.8		8.5	29.2		20.3	0.4			1.4	
Queue Length 95th (m)	2.0	61.3		#36.3	#97.2		29.1	10.5			5.3	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	358	2059		352	1997		484	644			543	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.51		0.50	0.46		0.32	0.23			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 16.1		Intersection LOS: B	

Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



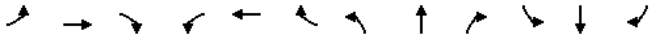
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	966	80	175	924	0	155	3	142	9	3	11
Future Volume (vph)	5	966	80	175	924	0	155	3	142	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1689	4746		1690	3349		1661	1489			1613	
Flt Permitted	0.31	1.00		0.18	1.00		0.74	1.00			0.87	
Satd. Flow (perm)	549	4746		324	3349		1298	1489			1438	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	966	80	175	924	0	155	3	142	9	3	11
RTOR Reduction (vph)	0	10	0	0	0	0	0	112	0	0	9	0
Lane Group Flow (vph)	5	1036	0	175	924	0	155	33	0	0	14	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	33.3	32.3		46.9	39.8		15.8	15.8			15.8	
Effective Green, g (s)	33.3	32.3		46.9	39.8		15.8	15.8			15.8	
Actuated g/C Ratio	0.44	0.43		0.63	0.53		0.21	0.21			0.21	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	258	2043		357	1777		273	313			302	
v/s Ratio Prot	0.00	0.22		c0.06	c0.28			0.02				
v/s Ratio Perm	0.01			0.25			c0.12				0.01	
v/c Ratio	0.02	0.51		0.49	0.52		0.57	0.11			0.05	
Uniform Delay, d1	11.6	15.6		7.3	11.4		26.5	23.9			23.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.0	0.9		1.1	1.1		2.7	0.1			0.1	
Delay (s)	11.7	16.5		8.4	12.5		29.2	24.0			23.7	
Level of Service	B	B		A	B		C	C			C	
Approach Delay (s)		16.4			11.8			26.7			23.7	
Approach LOS		B			B			C			C	

Intersection Summary					
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.56				
Actuated Cycle Length (s)	75.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	65.1%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	898	58	223	862	40	176	0	214	81	3	62
Future Volume (vph)	112	898	58	223	862	40	176	0	214	81	3	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99				0.99	
Frt			0.850		0.993				0.850		0.943	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1674	3382	1455	1642	3314	0	1674	0	1483	0	1606	0
Flt Permitted	0.174			0.176			0.676				0.973	
Satd. Flow (perm)	306	3382	1408	303	3314	0	1184	0	1483	0	1599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			154		5				214		49	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Adj. Flow (vph)	112	898	58	223	862	40	176	0	214	81	3	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	898	58	223	902	0	176	0	214	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (k/h)	
Number of Detectors	
Detector Template	
Leading Detector (m)	
Trailing Detector (m)	
Detector 1 Position(m)	
Detector 1 Size(m)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(m)	
Detector 2 Size(m)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Detector Phase	12	2	4	12	6		4		12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	10.9	30.8	42.6	10.9	30.8		42.6		10.9	42.6	42.6	
Total Split (s)	11.0	31.4	42.6	11.0	31.4		42.6		11.0	42.6	42.6	
Total Split (%)	12.2%	34.9%	47.3%	12.2%	34.9%		47.3%		12.2%	47.3%	47.3%	
Maximum Green (s)	5.1	25.6	36.0	5.1	25.6		36.0		5.1	36.0	36.0	
Yellow Time (s)	3.7	3.7	3.3	3.7	3.7		3.3		3.7	3.3	3.3	
All-Red Time (s)	2.2	2.1	3.3	2.2	2.1		3.3		2.2	3.3	3.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Lost Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lead/Lag			Lag				Lag			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	None	C-Max	None	None	C-Max		None		None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0		18.0		29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5		5		5			5	5	
Act Effct Green (s)	51.0	32.7	20.6	51.0	32.7		20.6		18.3		20.6	
Actuated g/C Ratio	0.57	0.36	0.23	0.57	0.36		0.23		0.20		0.23	
v/c Ratio	0.25	0.73	0.13	0.50	0.75		0.65		0.45		0.36	
Control Delay	10.8	30.4	0.6	17.8	30.9		40.9		8.9		19.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	10.8	30.4	0.6	17.8	30.9		40.9		8.9		19.1	
LOS	B	C	A	B	C		D		A		B	
Approach Delay		26.7			28.3			23.3			19.1	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	6.4	66.4	0.0	13.7	66.7		28.6		0.0		14.3	
Queue Length 95th (m)	20.4	#116.2	0.0	#58.7	#118.8		37.7		19.6		22.7	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	452	1230	655	444	1208		473		472		669	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.25	0.73	0.09	0.50	0.75		0.37		0.45		0.22	

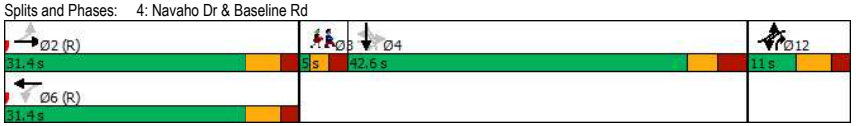
Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 26.5	Intersection LOS: C

Lane Group	Ø3
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	5.0
Total Split (s)	5.0
Total Split (%)	6%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Capacity Utilization 74.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	898	58	223	862	40	176	0	214	81	3	62
Future Volume (vph)	112	898	58	223	862	40	176	0	214	81	3	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1673	3382	1408	1641	3315		1664		1483		1599	
Flt Permitted	0.17	1.00	1.00	0.18	1.00		0.68		1.00		0.97	
Satd. Flow (perm)	307	3382	1408	304	3315		1185		1483		1599	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	112	898	58	223	862	40	176	0	214	81	3	62
RTOR Reduction (vph)	0	0	45	0	3	0	0	0	170	0	38	0
Lane Group Flow (vph)	112	898	13	223	899	0	176	0	44	0	108	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Actuated Green, G (s)	51.1	32.8	20.6	51.1	32.8		20.6		18.3		20.6	
Effective Green, g (s)	51.1	32.8	20.6	51.1	32.8		20.6		18.3		20.6	
Actuated g/C Ratio	0.57	0.36	0.23	0.57	0.36		0.23		0.20		0.23	
Clearance Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)	452	1232	322	444	1208		271		301		365	
v/s Ratio Prot	0.05	0.27		c0.10	c0.27				0.03			
v/s Ratio Perm	0.09		0.01	0.18			c0.15				0.07	
v/c Ratio	0.25	0.73	0.04	0.50	0.74		0.65		0.14		0.30	
Uniform Delay, d1	10.5	24.8	27.0	11.7	24.9		31.4		29.4		28.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	0.3	3.8	0.1	0.9	4.2		5.3		0.2		0.5	
Delay (s)	10.8	28.6	27.1	12.6	29.1		36.7		29.6		29.2	
Level of Service	B	C	C	B	C		D		C		C	
Approach Delay (s)		26.6			25.8			32.8			29.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.3	
Intersection Capacity Utilization	74.5%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

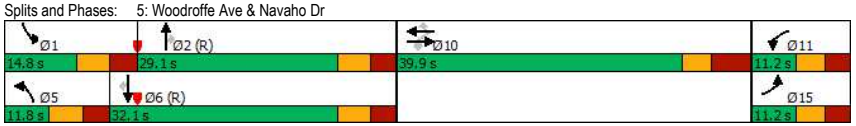
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	2	398	0	178	1	930	339	122	931	14
Future Volume (vph)	10	1	2	398	0	178	1	930	339	122	931	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1498	846	4718	1498	1674	3283	756
Flt Permitted	0.950			0.757			0.950			0.950		
Satd. Flow (perm)	838	890	741	2540	890	1467	840	4718	1461	1668	3283	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			251			339			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Adj. Flow (vph)	10	1	2	398	0	178	1	930	339	122	931	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1	2	398	0	178	1	930	339	122	931	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.1	29.1	14.8	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	30.6%	30.6%	15.6%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	22.5	22.5	8.0	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	6.0	10.9	10.9	22.1		10.9	5.5	35.5	35.5	11.6	51.6	51.6
Actuated g/C Ratio	0.06	0.11	0.11	0.23		0.11	0.06	0.37	0.37	0.12	0.54	0.54
v/c Ratio	0.19	0.01	0.01	0.61		0.46	0.02	0.53	0.45	0.60	0.52	0.03
Control Delay	50.8	29.0	0.0	32.3		4.6	44.0	26.5	5.4	53.7	19.1	0.1
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.8	29.0	0.0	32.3		4.6	44.0	26.5	5.4	53.7	19.1	0.1
LOS	D	C	A	C		A	D	C	A	D	B	A
Approach Delay		41.3			23.7			20.9			22.8	
Approach LOS		D			C			C			C	
Queue Length 50th (m)	1.8	0.2	0.0	31.4		0.0	0.2	47.3	0.0	20.9	46.5	0.0
Queue Length 95th (m)	7.1	1.2	0.0	31.1		3.8	1.8	75.1	21.6	#54.0	#136.6	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	53	299	376	657		660	48	1761	758	205	1781	487
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.00	0.01	0.61		0.27	0.02	0.53	0.45	0.60	0.52	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 22.2		Intersection LOS: C	

Intersection Capacity Utilization 70.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	2	398	0	178	1	930	339	122	931	14
Future Volume (vph)	10	1	2	398	0	178	1	930	339	122	931	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1467	846	4718	1461	1674	3283	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2547		1467	846	4718	1461	1674	3283	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	1	2	398	0	178	1	930	339	122	931	14
RTOR Reduction (vph)	0	0	2	0	0	158	0	0	212	0	0	7
Lane Group Flow (vph)	10	1	0	398	0	20	1	930	127	122	931	7
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	9.5	10.9	10.9	20.4		10.9	1.0	35.5	35.5	11.6	46.1	46.1
Effective Green, g (s)	9.5	10.9	10.9	20.4		10.9	1.0	35.5	35.5	11.6	46.1	46.1
Actuated g/C Ratio	0.10	0.11	0.11	0.21		0.11	0.01	0.37	0.37	0.12	0.49	0.49
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	84	102	85	611		168	8	1763	545	204	1593	351
v/s Ratio Prot	0.01	0.00		c0.07			0.00	0.20		c0.07	c0.28	
v/s Ratio Perm			0.00	c0.07		0.01			0.09			0.01
v/c Ratio	0.12	0.01	0.00	0.65		0.12	0.12	0.53	0.23	0.60	0.58	0.02
Uniform Delay, d1	38.9	37.3	37.2	33.8		37.8	46.6	23.2	20.4	39.5	17.6	12.7
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.0	0.0	2.5		0.3	6.9	1.1	1.0	4.7	1.6	0.1
Delay (s)	39.6	37.3	37.2	36.3		38.1	53.5	24.3	21.4	44.2	19.1	12.8
Level of Service	D	D	D	D		D	D	C	C	D	B	B
Approach Delay (s)		39.0			36.9			23.6			21.9	
Approach LOS		D			D			C			C	

Intersection Summary						
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C			
HCM 2000 Volume to Capacity ratio	0.64					
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	27.5			
Intersection Capacity Utilization	70.0%	ICU Level of Service	C			
Analysis Period (min)	15					

c Critical Lane Group

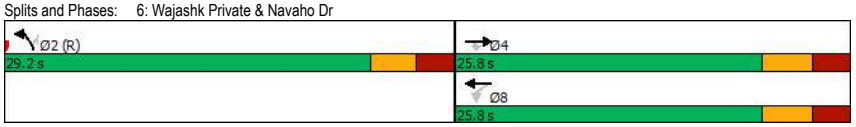
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	177	62	15	240	46	12
Future Volume (vph)	177	62	15	240	46	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1441	1691	1780	1496	1513
Flt Permitted			0.646		0.950	
Satd. Flow (perm)	1762	1412	1142	1780	1485	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		62				12
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Adj. Flow (vph)	177	62	15	240	46	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	177	62	15	240	46	12
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	25.8	25.8	25.8	25.8	26.5	26.5
Total Split (s)	25.8	25.8	25.8	25.8	29.2	29.2
Total Split (%)	46.9%	46.9%	46.9%	46.9%	53.1%	53.1%
Maximum Green (s)	20.0	20.0	20.0	20.0	23.7	23.7
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	0	0	5	5
Act Effct Green (s)	13.2	13.2	13.2	13.2	30.5	30.5
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.55	0.55
v/c Ratio	0.42	0.16	0.05	0.56	0.06	0.01
Control Delay	19.5	5.4	13.9	22.7	7.7	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	5.4	13.9	22.7	7.7	4.8
LOS	B	A	B	C	A	A
Approach Delay	15.9			22.2	7.1	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.1	0.0	1.2	21.3	1.8	0.0
Queue Length 95th (m)	23.9	5.8	3.9	31.7	7.1	2.2
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	640	552	415	647	830	817
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.11	0.04	0.37	0.06	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 17.9		Intersection LOS: B	

Intersection Capacity Utilization 40.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	177	62	15	240	46	12
Future Volume (vph)	177	62	15	240	46	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1412	1680	1780	1496	1463
Flt Permitted	1.00	1.00	0.65	1.00	0.95	1.00
Satd. Flow (perm)	1762	1412	1142	1780	1496	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	177	62	15	240	46	12
RTOR Reduction (vph)	0	47	0	0	0	5
Lane Group Flow (vph)	177	15	15	240	46	7
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	13.2	13.2	13.2	13.2	30.5	30.5
Effective Green, g (s)	13.2	13.2	13.2	13.2	30.5	30.5
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.55	0.55
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	422	338	274	427	829	811
v/s Ratio Prot	0.10			c0.13	c0.03	
v/s Ratio Perm		0.01	0.01			0.00
v/c Ratio	0.42	0.04	0.05	0.56	0.06	0.01
Uniform Delay, d1	17.7	16.1	16.1	18.4	5.6	5.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.1	1.7	0.1	0.0
Delay (s)	18.3	16.1	16.2	20.1	5.8	5.5
Level of Service	B	B	B	C	A	A
Approach Delay (s)	17.8			19.8	5.7	
Approach LOS	B			B	A	

Intersection Summary				
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.21			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	40.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

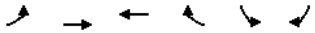
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	226	1041	77	0	1068
Future Volume (vph)	0	226	1041	77	0	1068
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.990			
Flt Protected						
Satd. Flow (prot)	0	1540	4723	0	0	4764
Flt Permitted						
Satd. Flow (perm)	0	1540	4723	0	0	4764
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	0	226	1041	77	0	1068
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	226	1118	0	0	1068
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	226	1041	77	0	1068
Future Volume (Veh/h)	0	226	1041	77	0	1068
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	226	1041	77	0	1068
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.90	0.86			0.86	
vC, conflicting volume	1456	406			1128	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	63	0			578	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	831	920			856	

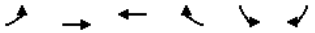
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	226	416	416	285	356	356	356
Volume Left	0	0	0	0	0	0	0
Volume Right	226	0	0	77	0	0	0
cSH	920	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.24	0.24	0.17	0.21	0.21	0.21
Queue Length 95th (m)	7.3	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	45.6%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	249	213	259	27	26	317
Future Volume (vph)	249	213	259	27	26	317
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.986		0.875	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1745	3246	0	1551	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1745	3246	0	1551	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	249	213	259	27	26	317
Shared Lane Traffic (%)						
Lane Group Flow (vph)	249	213	286	0	343	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	249	213	259	27	26	317
Future Volume (Veh/h)	249	213	259	27	26	317
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	249	213	259	27	26	317
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	296				1004	163
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	296				1004	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				86	62
cM capacity (veh/h)	1265				191	843

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	249	213	173	113	343
Volume Left	249	0	0	0	26
Volume Right	0	0	0	27	317
cSH	1265	1700	1700	1700	669
Volume to Capacity	0.20	0.13	0.10	0.07	0.51
Queue Length 95th (m)	5.6	0.0	0.0	0.0	22.4
Control Delay (s)	8.5	0.0	0.0	0.0	15.9
Lane LOS	A				C
Approach Delay (s)	4.6		0.0		15.9
Approach LOS					C

Intersection Summary				
Average Delay		6.9		
Intersection Capacity Utilization		57.6%	ICU Level of Service	B
Analysis Period (min)		15		

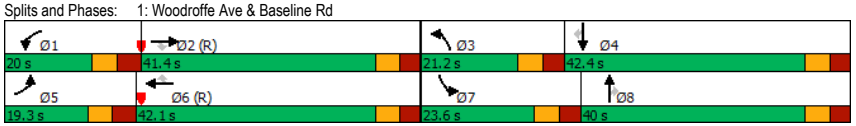
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	771	174	159	928	456	346	870	112	424	833	325
Future Volume (vph)	307	771	174	159	928	456	346	870	112	424	833	325
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3248	3349	1513	1674	3349	1483	3248	3221	1513	3216	3221	1483
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3231	3349	1478	1668	3349	1449	3227	3221	1476	3204	3221	1447
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			270			155			187
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Adj. Flow (vph)	307	771	174	159	928	456	346	870	112	424	833	325
Shared Lane Traffic (%)												
Lane Group Flow (vph)	307	771	174	159	928	456	346	870	112	424	833	325
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	19.3	41.4	41.4	20.0	42.1	42.1	21.2	40.0	40.0	23.6	42.4	42.4
Total Split (%)	15.4%	33.1%	33.1%	16.0%	33.7%	33.7%	17.0%	32.0%	32.0%	18.9%	33.9%	33.9%
Maximum Green (s)	12.2	34.6	34.6	12.9	35.3	35.3	14.3	33.2	33.2	16.7	35.6	35.6
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	12.2	34.6	34.6	12.9	35.3	35.3	14.3	33.2	33.2	16.7	35.6	35.6
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.28	0.28	0.11	0.27	0.27	0.13	0.28	0.28
v/c Ratio	0.97	0.83	0.33	0.92	0.98	0.76	0.93	1.02	0.22	0.99	0.91	0.60
Control Delay	99.4	51.5	9.1	106.9	69.9	25.3	87.4	80.6	2.9	94.7	57.9	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.4	51.5	9.1	106.9	69.9	25.3	87.4	80.6	2.9	94.7	57.9	20.8
LOS	F	D	A	F	E	C	F	F	A	F	E	C
Approach Delay		57.3			60.5			75.8			60.1	
Approach LOS		E			E			E			E	
Queue Length 50th (m)	39.3	93.9	3.4	39.4	119.3	43.1	44.1	~118.9	0.0	54.3	104.1	28.3
Queue Length 95th (m)	#67.8	117.9	20.5	#80.1	#162.5	86.1	#72.0	#158.5	5.6	#87.0	#139.9	59.4
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	317	927	521	172	945	602	371	855	505	429	917	545
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.83	0.33	0.92	0.98	0.76	0.93	1.02	0.22	0.99	0.91	0.60

Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 63.3	Intersection LOS: E

Intersection Capacity Utilization 98.0% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	307	771	174	159	928	456	346	870	112	424	833	325
Future Volume (vph)	307	771	174	159	928	456	346	870	112	424	833	325
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	307	771	174	159	928	456	346	870	112	424	833	325
RTOR Reduction (vph)	0	0	112	0	0	194	0	0	82	0	0	134
Lane Group Flow (vph)	307	771	62	159	928	262	346	870	30	424	833	191
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.2	34.6	34.6	12.9	35.3	35.3	14.3	33.2	33.2	16.7	35.6	35.6
Effective Green, g (s)	12.2	34.6	34.6	12.9	35.3	35.3	14.3	33.2	33.2	16.7	35.6	35.6
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.28	0.28	0.11	0.27	0.27	0.13	0.28	0.28
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	317	927	409	172	945	409	371	855	392	429	917	412
v/s Ratio Prot	0.09	0.23		c0.09	c0.28		0.11	c0.27		c0.13	0.26	
v/s Ratio Perm			0.04			0.18			0.02			0.13
v/c Ratio	0.97	0.83	0.15	0.92	0.98	0.64	0.93	1.02	0.08	0.99	0.91	0.46
Uniform Delay, d1	56.2	42.5	34.1	55.6	44.5	39.3	54.9	45.9	34.4	54.1	43.1	36.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	41.5	8.6	0.8	46.9	25.2	7.5	30.0	35.2	0.1	40.0	12.5	0.8
Delay (s)	97.8	51.1	34.9	102.5	69.8	46.8	84.9	81.1	34.5	94.0	55.7	37.7
Level of Service	F	D	C	F	E	D	F	F	C	F	E	D
Approach Delay (s)		60.3			66.4			78.2			62.2	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM 2000 Control Delay	66.6	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	98.0%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1098	209	0	1543	0	43
Future Volume (vph)	1098	209	0	1543	0	43
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.976					0.865
Flt Protected						
Satd. Flow (prot)	4703	0	0	3382	0	1540
Flt Permitted						
Satd. Flow (perm)	4703	0	0	3382	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1098	209	0	1543	0	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	0	1543	0	43
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1098	209	0	1543	0	43
Future Volume (Veh/h)	1098	209	0	1543	0	43
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1098	209	0	1543	0	43
Pedestrians	10			10		
Lane Width (m)	3.5			3.5		
Walking Speed (m/s)	1.0			1.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.81		0.80	0.81
vC, conflicting volume			1307		1984	480
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			578		348	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			813		500	880

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	439	439	429	772	772	43
Volume Left	0	0	0	0	0	0
Volume Right	0	0	209	0	0	43
cSH	1700	1700	1700	1700	1700	880
Volume to Capacity	0.26	0.26	0.25	0.45	0.45	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	1.2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.3
Approach LOS						A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A	
Analysis Period (min)	15			

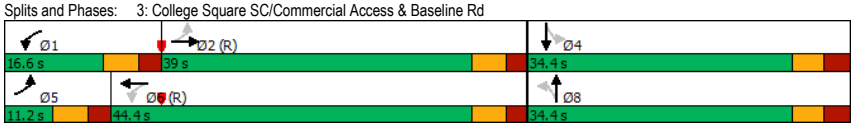
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1088	42	135	1410	9	117	1	95	6	4	16
Future Volume (vph)	11	1088	42	135	1410	9	117	1	95	6	4	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00		0.99	0.98			0.98	
Frt		0.994			0.999			0.852			0.917	
Flt Protected	0.950			0.950			0.950				0.989	
Satd. Flow (prot)	1691	4728	0	1691	3345	0	1691	1470	0	0	1593	0
Flt Permitted	0.144			0.185			0.740				0.930	
Satd. Flow (perm)	256	4728	0	328	3345	0	1305	1470	0	0	1495	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			1			95			16	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	11	1088	42	135	1410	9	117	1	95	6	4	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1130	0	135	1419	0	117	96	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.2	39.0		16.6	44.4		34.4	34.4		34.4	34.4	
Total Split (%)	12.4%	43.3%		18.4%	49.3%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	5.1	33.0		10.5	38.4		28.1	28.1		28.1	28.1	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	53.9	48.5		62.3	60.3		15.1	15.1			15.1	
Actuated g/C Ratio	0.60	0.54		0.69	0.67		0.17	0.17			0.17	
v/c Ratio	0.05	0.44		0.39	0.63		0.53	0.30			0.10	
Control Delay	8.0	14.9		9.5	13.5		41.1	8.4			16.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	8.0	14.9		9.5	13.5		41.1	8.4			16.6	
LOS	A	B		A	B		D	A			B	
Approach Delay		14.8			13.2			26.4			16.6	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.5	38.2		6.1	54.0		19.2	0.2			1.5	
Queue Length 95th (m)	3.1	72.7		19.4	#176.0		29.1	10.4			6.8	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	241	2550		386	2242		407	524			477	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.05	0.44		0.35	0.63		0.29	0.18			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 14.8		Intersection LOS: B	

Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



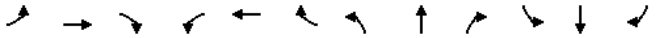
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1088	42	135	1410	9	117	1	95	6	4	16
Future Volume (vph)	11	1088	42	135	1410	9	117	1	95	6	4	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1691	4731		1690	3345		1675	1469			1589	
Flt Permitted	0.14	1.00		0.18	1.00		0.74	1.00			0.93	
Satd. Flow (perm)	256	4731		329	3345		1305	1469			1495	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1088	42	135	1410	9	117	1	95	6	4	16
RTOR Reduction (vph)	0	3	0	0	0	0	0	79	0	0	13	0
Lane Group Flow (vph)	11	1127	0	135	1419	0	117	17	0	0	13	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	49.5	48.5		62.6	55.5		15.1	15.1			15.1	
Effective Green, g (s)	49.5	48.5		62.6	55.5		15.1	15.1			15.1	
Actuated g/C Ratio	0.55	0.54		0.70	0.62		0.17	0.17			0.17	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	156	2549		349	2062		218	246			250	
v/s Ratio Prot	0.00	0.24		c0.03	c0.42			0.01				
v/s Ratio Perm	0.04			0.23			c0.09				0.01	
v/c Ratio	0.07	0.44		0.39	0.69		0.54	0.07			0.05	
Uniform Delay, d1	9.9	12.6		5.8	11.5		34.3	31.5			31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.2	0.6		0.7	1.9		2.5	0.1			0.1	
Delay (s)	10.1	13.1		6.5	13.4		36.8	31.6			31.5	
Level of Service	B	B		A	B		D	C			C	
Approach Delay (s)		13.1			12.8			34.5			31.5	
Approach LOS		B			B			C			C	

Intersection Summary					
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.67				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	77.2%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	1055	58	272	1350	41	128	0	224	102	3	76
Future Volume (vph)	102	1055	58	272	1350	41	128	0	224	102	3	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		1.00		0.99				0.98	
Frt			0.850		0.996				0.850		0.943	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1691	3349	1513	1642	3333	0	1658	0	1455	0	1565	0
Flt Permitted	0.081			0.142			0.612				0.973	
Satd. Flow (perm)	144	3349	1457	245	3333	0	1060	0	1455	0	1556	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			187		3				224		29	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Adj. Flow (vph)	102	1055	58	272	1350	41	128	0	224	102	3	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	1055	58	272	1391	0	128	0	224	0	181	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø1	Ø3	Ø6
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (m)			
Storage Lanes			
Taper Length (m)			
Lane Util. Factor			
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (k/h)			
Link Distance (m)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(m)			
Link Offset(m)			
Crosswalk Width(m)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (k/h)			
Number of Detectors			
Detector Template			
Leading Detector (m)			
Trailing Detector (m)			
Detector 1 Position(m)			
Detector 1 Size(m)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(m)			
Detector 2 Size(m)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Detector Phase	12	2	4	1 12	1 6		4		1 12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	
Minimum Split (s)	11.8	31.8	42.8				42.8			42.8	42.8	
Total Split (s)	11.8	44.8	42.8				42.8			42.8	42.8	
Total Split (%)	9.4%	35.8%	34.2%				34.2%			34.2%	34.2%	
Maximum Green (s)	5.0	38.0	36.0				36.0			36.0	36.0	
Yellow Time (s)	3.7	3.7	3.7				3.7			3.7	3.7	
All-Red Time (s)	3.1	3.1	3.1				3.1			3.1	3.1	
Lost Time Adjust (s)	0.0	0.0	0.0				0.0				0.0	
Total Lost Time (s)	6.8	6.8	6.8				6.8				6.8	
Lead/Lag		Lead	Lag				Lag			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0				3.0			3.0	3.0	
Recall Mode	None	C-Max	None				None			None	None	
Walk Time (s)		7.0	7.0				7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0				29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5				5			5	5	
Act Effct Green (s)	62.6	49.5	21.4	83.2	70.1		21.4		26.9		21.4	
Actuated g/C Ratio	0.50	0.40	0.17	0.67	0.56		0.17		0.22		0.17	
v/c Ratio	0.44	0.80	0.14	0.59	0.74		0.71		0.46		0.62	
Control Delay	26.1	40.2	0.7	19.4	25.6		67.5		5.9		48.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	26.1	40.2	0.7	19.4	25.6		67.5		5.9		48.0	
LOS	C	D	A	B	C		E		A		D	
Approach Delay		37.2			24.5			28.3			48.0	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	11.0	120.0	0.0	19.0	130.9		30.4		0.0		35.5	
Queue Length 95th (m)	31.2	#188.0	0.0	44.9	193.5		44.6		9.9		50.7	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	234	1325	552	464	1869		305		489		468	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.44	0.80	0.11	0.59	0.74		0.42		0.46		0.39	

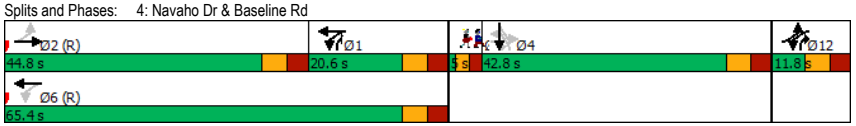
Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 30.7	Intersection LOS: C

Lane Group	Ø1	Ø3	Ø6
Turn Type			
Protected Phases	1	3	6
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	5.0
Minimum Split (s)	11.8	5.0	31.8
Total Split (s)	20.6	5.0	65.4
Total Split (%)	16%	4%	52%
Maximum Green (s)	13.8	1.0	58.6
Yellow Time (s)	3.7	2.0	3.7
All-Red Time (s)	3.1	2.0	3.1
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	C-Max
Walk Time (s)			7.0
Flash Dont Walk (s)			18.0
Pedestrian Calls (#/hr)			5
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (m)			
Queue Length 95th (m)			
Internal Link Dist (m)			
Turn Bay Length (m)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Capacity Utilization 85.3% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	1055	58	272	1350	41	128	0	224	102	3	76
Future Volume (vph)	102	1055	58	272	1350	41	128	0	224	102	3	76
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		6.8		6.8		6.8	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1691	3349	1457	1642	3332		1646		1455		1556	
Flt Permitted	0.08	1.00	1.00	0.14	1.00		0.61		1.00		0.97	
Satd. Flow (perm)	144	3349	1457	245	3332		1061		1455		1556	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	102	1055	58	272	1350	41	128	0	224	102	3	76
RTOR Reduction (vph)	0	0	48	0	1	0	0	0	176	0	24	0
Lane Group Flow (vph)	102	1055	10	272	1390	0	128	0	48	0	157	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Actuated Green, G (s)	62.6	49.5	21.4	83.2	70.1		21.4		26.9		21.4	
Effective Green, g (s)	62.6	49.5	21.4	83.2	70.1		21.4		26.9		21.4	
Actuated g/C Ratio	0.50	0.40	0.17	0.67	0.56		0.17		0.22		0.17	
Clearance Time (s)	6.8	6.8	6.8				6.8				6.8	
Vehicle Extension (s)	3.0	3.0	3.0				3.0				3.0	
Lane Grp Cap (vph)	234	1326	249	463	1868		181		313		266	
v/s Ratio Prot	0.05	0.32		c0.13	c0.42				0.03			
v/s Ratio Perm	0.17		0.01	0.26			c0.12				0.10	
v/c Ratio	0.44	0.80	0.04	0.59	0.74		0.71		0.15		0.59	
Uniform Delay, d1	21.8	33.3	43.2	17.3	20.7		48.8		39.8		47.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	1.3	5.0	0.1	1.9	1.6		11.9		0.2		3.5	
Delay (s)	23.1	38.3	43.3	19.3	22.3		60.7		40.0		51.2	
Level of Service	C	D	D	B	C		E		D		D	
Approach Delay (s)		37.3			21.8			47.6			51.2	
Approach LOS		D			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	31.2	
Intersection Capacity Utilization	85.3%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
Future Volume (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1483	846	4811	1483	1642	3316	756
Flt Permitted	0.950			0.756			0.950			0.950		
Satd. Flow (perm)	838	890	741	2537	890	1453	841	4811	1447	1637	3316	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			250			335			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Adj. Flow (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

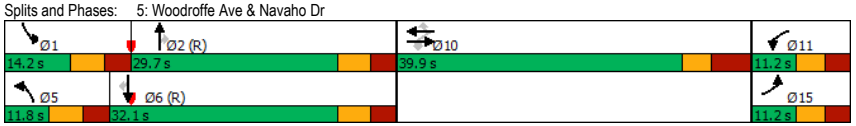
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.7	29.7	14.2	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	31.3%	31.3%	14.9%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	23.1	23.1	7.4	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	5.9	11.0	11.0	23.1		11.0	5.5	32.6	32.6	13.5	50.5	50.5
Actuated g/C Ratio	0.06	0.12	0.12	0.24		0.12	0.06	0.34	0.34	0.14	0.53	0.53
v/c Ratio	0.15	0.03	0.05	0.63		0.48	0.02	0.62	0.47	0.56	0.58	0.01
Control Delay	49.1	30.3	0.3	32.5		5.2	44.0	29.6	5.7	50.6	20.5	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	30.3	0.3	32.5		5.2	44.0	29.6	5.7	50.6	20.5	0.0
LOS	D	C	A	C		A	D	C	A	D	C	A
Approach Delay		21.2			24.3			23.7			23.7	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	1.4	0.5	0.0	34.3		0.0	0.2	56.3	0.0	22.2	55.6	0.0
Queue Length 95th (m)	6.1	2.3	0.0	34.3		5.2	1.8	#89.3	21.1	#60.8	#156.4	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	52	299	376	690		655	48	1651	716	233	1764	482
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01	0.03	0.63		0.28	0.02	0.62	0.47	0.56	0.58	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 23.8		Intersection LOS: C	

Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
Future Volume (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1453	846	4811	1447	1642	3316	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2542		1453	846	4811	1447	1642	3316	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	3	12	438	0	186	1	1029	335	131	1028	7
RTOR Reduction (vph)	0	0	11	0	0	164	0	0	220	0	0	4
Lane Group Flow (vph)	8	3	1	438	0	22	1	1029	115	131	1028	3
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	10.4	11.0	11.0	21.4		11.0	1.0	32.6	32.6	13.5	45.1	45.1
Effective Green, g (s)	10.4	11.0	11.0	21.4		11.0	1.0	32.6	32.6	13.5	45.1	45.1
Actuated g/C Ratio	0.11	0.12	0.12	0.23		0.12	0.01	0.34	0.34	0.14	0.47	0.47
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	92	103	85	644		168	8	1650	496	233	1574	344
v/s Ratio Prot	0.01	0.00		c0.07			0.00	0.21		c0.08	c0.31	
v/s Ratio Perm			0.00	c0.08		0.01			0.08			0.00
v/c Ratio	0.09	0.03	0.02	0.68		0.13	0.12	0.62	0.23	0.56	0.65	0.01
Uniform Delay, d1	38.0	37.3	37.2	33.2		37.7	46.6	26.1	22.3	38.0	19.0	13.2
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1	0.1	3.0		0.3	6.9	1.8	1.1	3.1	2.1	0.1
Delay (s)	38.4	37.4	37.3	36.1		38.0	53.5	27.9	23.4	41.1	21.1	13.2
Level of Service	D	D	D	D		D	D	C	C	D	C	B
Approach Delay (s)		37.7			36.7			26.8			23.3	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.70				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	73.7%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

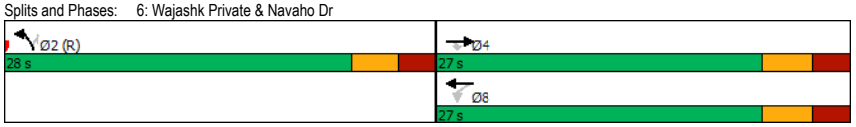
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	185	97	33	301	132	21
Future Volume (vph)	185	97	33	301	132	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1469	1691	1780	1610	1513
Flt Permitted			0.641		0.950	
Satd. Flow (perm)	1762	1439	1134	1780	1598	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		97				21
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Adj. Flow (vph)	185	97	33	301	132	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	185	97	33	301	132	21
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	27.8	27.8
Total Split (s)	27.0	27.0	27.0	27.0	28.0	28.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%
Maximum Green (s)	21.2	21.2	21.2	21.2	22.5	22.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	2	2	5	5
Act Effct Green (s)	14.6	14.6	14.6	14.6	29.1	29.1
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
v/c Ratio	0.40	0.21	0.11	0.64	0.16	0.03
Control Delay	18.0	4.7	14.1	23.5	8.8	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.0	4.7	14.1	23.5	8.8	4.5
LOS	B	A	B	C	A	A
Approach Delay	13.4			22.6	8.2	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.1	0.0	2.5	26.4	6.0	0.0
Queue Length 95th (m)	24.5	7.1	6.5	39.7	16.6	3.0
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	679	614	437	686	851	784
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.16	0.08	0.44	0.16	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 16.4		Intersection LOS: B	

Intersection Capacity Utilization 48.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	185	97	33	301	132	21
Future Volume (vph)	185	97	33	301	132	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1439	1680	1780	1610	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1439	1133	1780	1610	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	185	97	33	301	132	21
RTOR Reduction (vph)	0	71	0	0	0	10
Lane Group Flow (vph)	185	26	33	301	132	11
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	14.6	14.6	14.6	14.6	29.1	29.1
Effective Green, g (s)	14.6	14.6	14.6	14.6	29.1	29.1
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	467	381	300	472	851	774
v/s Ratio Prot	0.10			c0.17	c0.08	
v/s Ratio Perm		0.02	0.03			0.01
v/c Ratio	0.40	0.07	0.11	0.64	0.16	0.01
Uniform Delay, d1	16.6	15.1	15.3	17.9	6.6	6.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2	2.8	0.4	0.0
Delay (s)	17.1	15.2	15.4	20.7	7.0	6.2
Level of Service	B	B	B	C	A	A
Approach Delay (s)	16.5			20.2	6.9	
Approach LOS	B			C	A	

Intersection Summary				
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.32			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	48.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

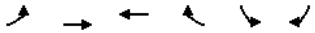
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	158	1170	53	0	1166
Future Volume (vph)	0	158	1170	53	0	1166
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.993			
Flt Protected						
Satd. Flow (prot)	0	1524	4735	0	0	4718
Flt Permitted						
Satd. Flow (perm)	0	1524	4735	0	0	4718
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	158	1170	53	0	1166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	158	1223	0	0	1166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	158	1170	53	0	1166
Future Volume (Veh/h)	0	158	1170	53	0	1166
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	158	1170	53	0	1166
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.91	0.83			0.83	
vC, conflicting volume	1605	436			1233	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	72	0			574	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	82			100	
cM capacity (veh/h)	830	887			832	

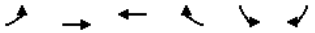
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	158	468	468	287	389	389	389
Volume Left	0	0	0	0	0	0	0
Volume Right	158	0	0	53	0	0	0
cSH	887	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.18	0.28	0.28	0.17	0.23	0.23	0.23
Queue Length 95th (m)	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.9	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	211	258	384	49	24	240
Future Volume (vph)	211	258	384	49	24	240
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.983		0.877	
Flt Protected	0.950				0.995	
Satd. Flow (prot)	1691	1762	3295	0	1553	0
Flt Permitted	0.950				0.995	
Satd. Flow (perm)	1691	1762	3295	0	1553	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	211	258	384	49	24	240
Shared Lane Traffic (%)						
Lane Group Flow (vph)	211	258	433	0	264	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	211	258	384	49	24	240
Future Volume (Veh/h)	211	258	384	49	24	240
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	211	258	384	49	24	240
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	443				1108	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	443				1108	236
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	81				85	68
cM capacity (veh/h)	1117				165	756

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	211	258	256	177	264
Volume Left	211	0	0	0	24
Volume Right	0	0	0	49	240
cSH	1117	1700	1700	1700	570
Volume to Capacity	0.19	0.15	0.15	0.10	0.46
Queue Length 95th (m)	5.3	0.0	0.0	0.0	18.5
Control Delay (s)	9.0	0.0	0.0	0.0	16.6
Lane LOS	A				C
Approach Delay (s)	4.0		0.0		16.6
Approach LOS					C

Intersection Summary				
Average Delay		5.4		
Intersection Capacity Utilization		53.4%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	689	72	125	599	372	224	943	113	473	872	212
Future Volume (vph)	187	689	72	125	599	372	224	943	113	473	872	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3281	3382	1513	1691	3382	1498	3281	3316	1498	3281	3316	1498
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3254	3382	1478	1684	3382	1463	3260	3316	1462	3269	3316	1462
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			232			155			155
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Adj. Flow (vph)	187	689	72	125	599	372	224	943	113	473	872	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	689	72	125	599	372	224	943	113	473	872	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	16.8	41.0	41.0	17.0	41.2	41.2	18.3	42.0	42.0	25.0	48.7	48.7
Total Split (%)	13.4%	32.8%	32.8%	13.6%	33.0%	33.0%	14.6%	33.6%	33.6%	20.0%	39.0%	39.0%
Maximum Green (s)	9.7	34.2	34.2	9.9	34.4	34.4	11.4	35.2	35.2	18.1	41.9	41.9
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	9.6	34.2	34.2	9.9	34.5	34.5	11.2	35.2	35.2	18.1	42.1	42.1
Actuated g/C Ratio	0.08	0.27	0.27	0.08	0.28	0.28	0.09	0.28	0.28	0.14	0.34	0.34
v/c Ratio	0.75	0.74	0.14	0.94	0.64	0.65	0.76	1.01	0.22	1.00	0.78	0.36
Control Delay	74.7	47.3	0.6	120.7	43.6	20.5	73.1	76.8	2.8	93.7	43.2	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.7	47.3	0.6	120.7	43.6	20.5	73.1	76.8	2.8	93.7	43.2	11.0
LOS	E	D	A	F	D	C	E	E	A	F	D	B
Approach Delay		49.1			44.5			69.6			54.2	
Approach LOS		D			D			E			D	
Queue Length 50th (m)	23.5	81.5	0.0	31.1	68.4	29.7	28.1	~124.4	0.0	60.7	101.4	9.7
Queue Length 95th (m)	#39.4	103.4	0.0	#69.0	88.1	64.2	#44.8	#168.4	5.6	#95.2	126.2	28.9
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	254	925	516	133	933	571	299	933	523	475	1117	595
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.74	0.14	0.94	0.64	0.65	0.75	1.01	0.22	1.00	0.78	0.36

Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 55.1	Intersection LOS: E

Intersection Capacity Utilization 99.6% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	689	72	125	599	372	224	943	113	473	872	212
Future Volume (vph)	187	689	72	125	599	372	224	943	113	473	872	212
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	187	689	72	125	599	372	224	943	113	473	872	212
RTOR Reduction (vph)	0	0	52	0	0	168	0	0	81	0	0	103
Lane Group Flow (vph)	187	689	20	125	599	204	224	943	32	473	872	109
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.6	34.2	34.2	9.9	34.5	34.5	11.2	35.2	35.2	18.1	42.1	42.1
Effective Green, g (s)	9.6	34.2	34.2	9.9	34.5	34.5	11.2	35.2	35.2	18.1	42.1	42.1
Actuated g/C Ratio	0.08	0.27	0.27	0.08	0.28	0.28	0.09	0.28	0.28	0.14	0.34	0.34
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	251	925	404	133	933	403	293	933	411	475	1116	492
v/s Ratio Prot	0.06	c0.20		c0.07	0.18		0.07	c0.28		c0.14	c0.26	
v/s Ratio Perm			0.01			0.14			0.02			0.07
v/c Ratio	0.75	0.74	0.05	0.94	0.64	0.51	0.76	1.01	0.08	1.00	0.78	0.22
Uniform Delay, d1	56.5	41.4	33.4	57.3	39.8	38.1	55.6	44.9	33.0	53.4	37.3	29.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.4	5.4	0.2	59.0	3.4	4.5	11.3	32.1	0.1	39.9	3.6	0.2
Delay (s)	67.9	46.8	33.7	116.3	43.2	42.6	66.9	77.0	33.1	93.4	40.9	29.9
Level of Service	E	D	C	F	D	D	E	E	C	F	D	C
Approach Delay (s)		50.0			51.3			71.4			55.4	
Approach LOS		D			D			E			E	

Intersection Summary				
HCM 2000 Control Delay	57.6	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.92			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	99.6%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	976	299	0	1096	0	92
Future Volume (vph)	976	299	0	1096	0	92
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.965					0.865
Flt Protected						
Satd. Flow (prot)	4654	0	0	3349	0	1540
Flt Permitted						
Satd. Flow (perm)	4654	0	0	3349	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	976	299	0	1096	0	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1275	0	0	1096	0	92
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	976	299	0	1096	0	92
Future Volume (Veh/h)	976	299	0	1096	0	92
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	976	299	0	1096	0	92
Pedestrians	10			10	10	
Lane Width (m)	3.5			3.5	3.5	
Walking Speed (m/s)	1.0			1.0	1.0	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.84		0.90	0.84
vC, conflicting volume			1285		1694	495
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			688		509	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	90
cM capacity (veh/h)			765		441	902

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	390	390	494	548	548	92
Volume Left	0	0	0	0	0	0
Volume Right	0	0	299	0	0	92
cSH	1700	1700	1700	1700	1700	902
Volume to Capacity	0.23	0.23	0.29	0.32	0.32	0.10
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	2.6
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.4
Approach LOS						A

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	44.8%	ICU Level of Service	A	
Analysis Period (min)	15			

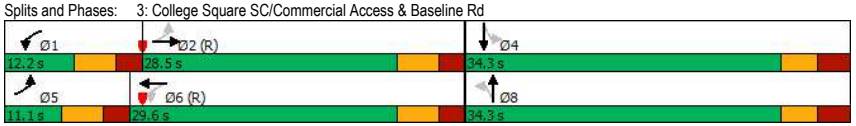
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	983	80	196	924	0	161	3	149	9	3	11
Future Volume (vph)	5	983	80	196	924	0	161	3	149	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00			0.99	0.98			0.99	
Frt		0.989						0.853			0.935	
Flt Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1691	4749	0	1691	3349	0	1674	1489	0	0	1617	0
Flt Permitted	0.309			0.173			0.742				0.873	
Satd. Flow (perm)	548	4749	0	307	3349	0	1298	1489	0	0	1435	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						149			11	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	983	80	196	924	0	161	3	149	9	3	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1063	0	196	924	0	161	152	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.1	28.5		12.2	29.6		34.3	34.3		34.3	34.3	
Total Split (%)	14.8%	38.0%		16.3%	39.5%		45.7%	45.7%		45.7%	45.7%	
Maximum Green (s)	5.0	22.5		6.1	23.6		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	36.5	31.1		45.6	44.5		16.0	16.0			16.0	
Actuated g/C Ratio	0.49	0.41		0.61	0.59		0.21	0.21			0.21	
v/c Ratio	0.01	0.54		0.54	0.47		0.58	0.35			0.07	
Control Delay	9.6	18.9		18.2	13.1		33.3	6.1			13.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	9.6	18.9		18.2	13.1		33.3	6.1			13.7	
LOS	A	B		B	B		C	A			B	
Approach Delay		18.9			14.0			20.1			13.7	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.3	39.7		9.9	29.7		21.1	0.3			1.4	
Queue Length 95th (m)	2.0	62.8		#46.4	#97.2		30.2	10.8			5.3	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	349	1982		360	1985		484	649			542	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.54		0.54	0.47		0.33	0.23			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 16.8		Intersection LOS: B	

Intersection Capacity Utilization 66.9% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



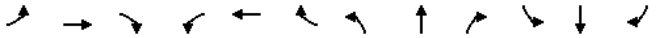
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	983	80	196	924	0	161	3	149	9	3	11
Future Volume (vph)	5	983	80	196	924	0	161	3	149	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1689	4747		1690	3349		1661	1489			1613	
Flt Permitted	0.31	1.00		0.17	1.00		0.74	1.00			0.87	
Satd. Flow (perm)	549	4747		308	3349		1298	1489			1437	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	983	80	196	924	0	161	3	149	9	3	11
RTOR Reduction (vph)	0	11	0	0	0	0	0	117	0	0	9	0
Lane Group Flow (vph)	5	1052	0	196	924	0	161	35	0	0	14	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	32.2	31.2		46.7	39.6		16.0	16.0			16.0	
Effective Green, g (s)	32.2	31.2		46.7	39.6		16.0	16.0			16.0	
Actuated g/C Ratio	0.43	0.42		0.62	0.53		0.21	0.21			0.21	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	250	1974		364	1768		276	317			306	
v/s Ratio Prot	0.00	0.22		c0.07	c0.28			0.02				
v/s Ratio Perm	0.01			c0.27			c0.12				0.01	
v/c Ratio	0.02	0.53		0.54	0.52		0.58	0.11			0.05	
Uniform Delay, d1	12.2	16.4		7.8	11.5		26.5	23.8			23.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.0	1.0		1.5	1.1		3.1	0.2			0.1	
Delay (s)	12.3	17.5		9.3	12.6		29.6	23.9			23.5	
Level of Service	B	B		A	B		C	C			C	
Approach Delay (s)		17.4			12.1			26.9			23.5	
Approach LOS		B			B			C			C	

Intersection Summary					
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.58				
Actuated Cycle Length (s)	75.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	66.9%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	920	58	231	880	40	176	0	222	81	3	65
Future Volume (vph)	114	920	58	231	880	40	176	0	222	81	3	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99				0.99	
Frt			0.850		0.993				0.850		0.941	
Flt Protected	0.950			0.950			0.950				0.974	
Satd. Flow (prot)	1674	3382	1455	1642	3314	0	1674	0	1483	0	1604	0
Flt Permitted	0.158			0.158			0.672				0.974	
Satd. Flow (perm)	278	3382	1408	272	3314	0	1177	0	1483	0	1597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			154		5				222		52	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Adj. Flow (vph)	114	920	58	231	880	40	176	0	222	81	3	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	920	58	231	920	0	176	0	222	0	149	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (k/h)	
Number of Detectors	
Detector Template	
Leading Detector (m)	
Trailing Detector (m)	
Detector 1 Position(m)	
Detector 1 Size(m)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(m)	
Detector 2 Size(m)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Detector Phase	12	2	4	12	6		4		12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	10.9	30.8	42.6	10.9	30.8		42.6		10.9	42.6	42.6	
Total Split (s)	11.0	31.4	42.6	11.0	31.4		42.6		11.0	42.6	42.6	
Total Split (%)	12.2%	34.9%	47.3%	12.2%	34.9%		47.3%		12.2%	47.3%	47.3%	
Maximum Green (s)	5.1	25.6	36.0	5.1	25.6		36.0		5.1	36.0	36.0	
Yellow Time (s)	3.7	3.7	3.3	3.7	3.7		3.3		3.7	3.3	3.3	
All-Red Time (s)	2.2	2.1	3.3	2.2	2.1		3.3		2.2	3.3	3.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Lost Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lead/Lag			Lag				Lag			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	None	C-Max	None	None	C-Max		None		None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0		18.0		29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5		5		5			5	5	
Act Effct Green (s)	50.9	31.8	20.7	50.9	31.8		20.7		19.2		20.7	
Actuated g/C Ratio	0.57	0.35	0.23	0.57	0.35		0.23		0.21		0.23	
v/c Ratio	0.25	0.77	0.13	0.52	0.78		0.65		0.45		0.37	
Control Delay	10.9	32.3	0.6	19.8	32.8		41.0		8.6		18.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	10.9	32.3	0.6	19.8	32.8		41.0		8.6		18.9	
LOS	B	C	A	B	C		D		A		B	
Approach Delay		28.4			30.2			22.9			18.9	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	6.5	69.6	0.0	14.3	69.7		28.6		0.0		14.3	
Queue Length 95th (m)	20.7	#120.6	0.0	#65.8	#122.5		37.7		20.1		22.8	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	455	1195	655	446	1174		470		491		670	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.25	0.77	0.09	0.52	0.78		0.37		0.45		0.22	

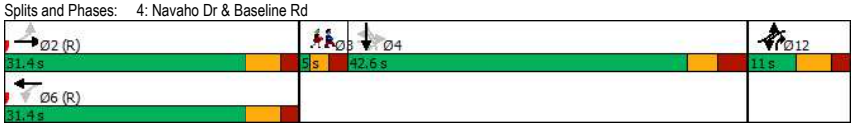
Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 27.8	Intersection LOS: C

Lane Group	Ø3
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	5.0
Total Split (s)	5.0
Total Split (%)	6%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Capacity Utilization 75.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	920	58	231	880	40	176	0	222	81	3	65
Future Volume (vph)	114	920	58	231	880	40	176	0	222	81	3	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1674	3382	1408	1641	3316		1665		1483		1597	
Flt Permitted	0.16	1.00	1.00	0.16	1.00		0.67		1.00		0.97	
Satd. Flow (perm)	278	3382	1408	273	3316		1177		1483		1597	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	920	58	231	880	40	176	0	222	81	3	65
RTOR Reduction (vph)	0	0	45	0	3	0	0	0	175	0	40	0
Lane Group Flow (vph)	114	920	13	231	917	0	176	0	47	0	109	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Actuated Green, G (s)	51.0	31.8	20.7	51.0	31.8		20.7		19.2		20.7	
Effective Green, g (s)	51.0	31.8	20.7	51.0	31.8		20.7		19.2		20.7	
Actuated g/C Ratio	0.57	0.35	0.23	0.57	0.35		0.23		0.21		0.23	
Clearance Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)	455	1194	323	446	1171		270		316		367	
v/s Ratio Prot	0.05	0.27		c0.11	c0.28				0.03			
v/s Ratio Perm	0.09		0.01	0.18			c0.15				0.07	
v/c Ratio	0.25	0.77	0.04	0.52	0.78		0.65		0.15		0.30	
Uniform Delay, d1	10.8	25.9	26.9	12.2	26.0		31.4		28.8		28.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	0.3	4.8	0.1	1.0	5.3		5.5		0.2		0.5	
Delay (s)	11.1	30.7	27.0	13.2	31.3		36.9		29.0		29.1	
Level of Service	B	C	C	B	C		D		C		C	
Approach Delay (s)		28.4			27.7			32.5			29.1	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.3	
Intersection Capacity Utilization	75.7%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

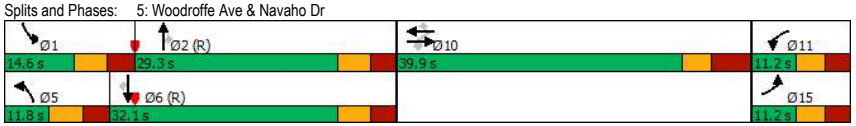
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	2	404	0	178	1	935	342	122	932	14
Future Volume (vph)	10	1	2	404	0	178	1	935	342	122	932	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1498	846	4718	1498	1674	3283	756
Flt Permitted	0.950			0.757			0.950			0.950		
Satd. Flow (perm)	838	890	741	2540	890	1467	840	4718	1461	1668	3283	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			250			342			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Adj. Flow (vph)	10	1	2	404	0	178	1	935	342	122	932	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1	2	404	0	178	1	935	342	122	932	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.3	29.3	14.6	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	30.8%	30.8%	15.4%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	22.7	22.7	7.8	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	6.0	10.9	10.9	22.2		10.9	5.5	35.2	35.2	11.8	51.4	51.4
Actuated g/C Ratio	0.06	0.11	0.11	0.23		0.11	0.06	0.37	0.37	0.12	0.54	0.54
v/c Ratio	0.19	0.01	0.01	0.61		0.46	0.02	0.53	0.45	0.59	0.52	0.03
Control Delay	50.8	29.0	0.0	32.4		4.6	44.0	26.7	5.4	53.3	19.1	0.1
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.8	29.0	0.0	32.4		4.6	44.0	26.7	5.4	53.3	19.1	0.1
LOS	D	C	A	C		A	D	C	A	D	B	A
Approach Delay		41.3			23.9			21.0			22.8	
Approach LOS		D			C			C			C	
Queue Length 50th (m)	1.8	0.2	0.0	31.9		0.0	0.2	47.9	0.0	20.9	46.9	0.0
Queue Length 95th (m)	7.1	1.2	0.0	31.6		4.0	1.8	75.4	21.4	#54.7	#136.8	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	53	299	376	661		659	48	1750	756	207	1777	487
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.00	0.01	0.61		0.27	0.02	0.53	0.45	0.59	0.52	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 22.3		Intersection LOS: C	

Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	2	404	0	178	1	935	342	122	932	14
Future Volume (vph)	10	1	2	404	0	178	1	935	342	122	932	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1467	846	4718	1461	1674	3283	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2547		1467	846	4718	1461	1674	3283	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	1	2	404	0	178	1	935	342	122	932	14
RTOR Reduction (vph)	0	0	2	0	0	158	0	0	215	0	0	7
Lane Group Flow (vph)	10	1	0	404	0	20	1	935	127	122	932	7
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	9.6	10.9	10.9	20.5		10.9	1.0	35.2	35.2	11.8	46.0	46.0
Effective Green, g (s)	9.6	10.9	10.9	20.5		10.9	1.0	35.2	35.2	11.8	46.0	46.0
Actuated g/C Ratio	0.10	0.11	0.11	0.22		0.11	0.01	0.37	0.37	0.12	0.48	0.48
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	85	102	85	615		168	8	1748	541	207	1589	351
v/s Ratio Prot	0.01	0.00		c0.07			0.00	0.20		c0.07	c0.28	
v/s Ratio Perm			0.00	c0.08		0.01			0.09			0.01
v/c Ratio	0.12	0.01	0.00	0.66		0.12	0.12	0.53	0.23	0.59	0.59	0.02
Uniform Delay, d1	38.8	37.3	37.2	33.8		37.8	46.6	23.5	20.6	39.3	17.6	12.8
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.0	0.0	2.5		0.3	6.9	1.2	1.0	4.2	1.6	0.1
Delay (s)	39.5	37.3	37.2	36.3		38.1	53.5	24.7	21.6	43.6	19.2	12.9
Level of Service	D	D	D	D		D	D	C	C	D	B	B
Approach Delay (s)		39.0			36.8			23.9			21.9	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.65				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	70.2%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

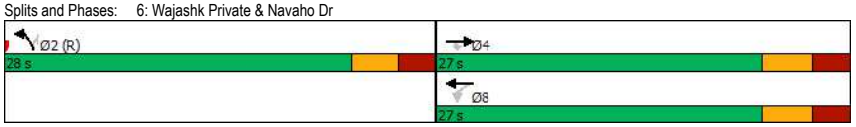
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	180	62	15	248	46	12
Future Volume (vph)	180	62	15	248	46	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1441	1691	1780	1496	1513
Flt Permitted			0.644		0.950	
Satd. Flow (perm)	1762	1412	1139	1780	1485	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		62				12
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Adj. Flow (vph)	180	62	15	248	46	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	180	62	15	248	46	12
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	25.8	25.8	25.8	25.8	26.5	26.5
Total Split (s)	27.0	27.0	27.0	27.0	28.0	28.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%
Maximum Green (s)	21.2	21.2	21.2	21.2	22.5	22.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	0	0	5	5
Act Effct Green (s)	13.4	13.4	13.4	13.4	30.3	30.3
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.55	0.55
v/c Ratio	0.42	0.16	0.05	0.57	0.06	0.01
Control Delay	19.4	5.3	13.7	22.8	7.8	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	5.3	13.7	22.8	7.8	4.9
LOS	B	A	B	C	A	A
Approach Delay	15.8			22.3	7.2	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.3	0.0	1.2	22.0	1.8	0.0
Queue Length 95th (m)	24.2	5.8	3.9	32.8	7.1	2.2
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	679	582	439	686	825	812
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.11	0.03	0.36	0.06	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 17.9		Intersection LOS: B	

Intersection Capacity Utilization 40.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	180	62	15	248	46	12
Future Volume (vph)	180	62	15	248	46	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1412	1680	1780	1496	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1412	1139	1780	1496	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	180	62	15	248	46	12
RTOR Reduction (vph)	0	47	0	0	0	5
Lane Group Flow (vph)	180	15	15	248	46	7
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	13.4	13.4	13.4	13.4	30.3	30.3
Effective Green, g (s)	13.4	13.4	13.4	13.4	30.3	30.3
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.55	0.55
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	429	344	277	433	824	805
v/s Ratio Prot	0.10			c0.14	c0.03	
v/s Ratio Perm		0.01	0.01			0.00
v/c Ratio	0.42	0.04	0.05	0.57	0.06	0.01
Uniform Delay, d1	17.5	15.9	15.9	18.3	5.7	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.1	1.8	0.1	0.0
Delay (s)	18.2	16.0	16.0	20.1	5.9	5.6
Level of Service	B	B	B	C	A	A
Approach Delay (s)	17.6			19.9	5.8	
Approach LOS	B			B	A	

Intersection Summary				
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.21			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	40.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

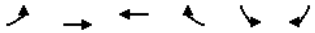
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	236	1044	79	0	1069
Future Volume (vph)	0	236	1044	79	0	1069
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.989			
Flt Protected						
Satd. Flow (prot)	0	1540	4718	0	0	4764
Flt Permitted						
Satd. Flow (perm)	0	1540	4718	0	0	4764
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	0	236	1044	79	0	1069
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	236	1123	0	0	1069
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	236	1044	79	0	1069
Future Volume (Veh/h)	0	236	1044	79	0	1069
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	236	1044	79	0	1069
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.90	0.86			0.86	
vC, conflicting volume	1460	408			1133	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	51	0			575	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	74			100	
cM capacity (veh/h)	844	918			856	

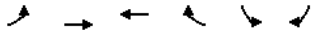
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	236	418	418	288	356	356	356
Volume Left	0	0	0	0	0	0	0
Volume Right	236	0	0	79	0	0	0
cSH	918	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.26	0.25	0.25	0.17	0.21	0.21	0.21
Queue Length 95th (m)	7.8	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.3	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	46.3%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	252	213	259	35	29	323
Future Volume (vph)	252	213	259	35	29	323
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.982		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1745	3236	0	1553	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1745	3236	0	1553	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	252	213	259	35	29	323
Shared Lane Traffic (%)						
Lane Group Flow (vph)	252	213	294	0	352	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.6%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	252	213	259	35	29	323
Future Volume (Veh/h)	252	213	259	35	29	323
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	252	213	259	35	29	323
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	304				1014	167
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	304				1014	167
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				84	61
cM capacity (veh/h)	1256				187	838

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	252	213	173	121	352
Volume Left	252	0	0	0	29
Volume Right	0	0	0	35	323
cSH	1256	1700	1700	1700	651
Volume to Capacity	0.20	0.13	0.10	0.07	0.54
Queue Length 95th (m)	5.7	0.0	0.0	0.0	24.7
Control Delay (s)	8.6	0.0	0.0	0.0	16.8
Lane LOS	A				C
Approach Delay (s)	4.7		0.0		16.8
Approach LOS					C

Intersection Summary			
Average Delay	7.3		
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

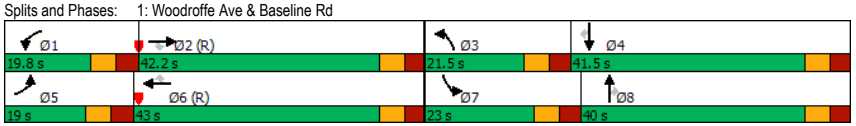
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	788	178	163	951	467	353	890	114	433	854	333
Future Volume (vph)	315	788	178	163	951	467	353	890	114	433	854	333
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3248	3349	1513	1674	3349	1483	3248	3221	1513	3216	3221	1483
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3232	3349	1478	1668	3349	1449	3227	3221	1476	3205	3221	1447
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			274			155			185
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Adj. Flow (vph)	315	788	178	163	951	467	353	890	114	433	854	333
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	788	178	163	951	467	353	890	114	433	854	333
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	19.0	42.2	42.2	19.8	43.0	43.0	21.5	40.0	40.0	23.0	41.5	41.5
Total Split (%)	15.2%	33.8%	33.8%	15.8%	34.4%	34.4%	17.2%	32.0%	32.0%	18.4%	33.2%	33.2%
Maximum Green (s)	11.9	35.4	35.4	12.7	36.2	36.2	14.6	33.2	33.2	16.1	34.7	34.7
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	11.9	35.4	35.4	12.7	36.2	36.2	14.6	33.2	33.2	16.1	34.7	34.7
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
v/c Ratio	1.02	0.83	0.34	0.96	0.98	0.76	0.93	1.04	0.23	1.05	0.96	0.62
Control Delay	111.7	50.8	9.4	115.0	69.0	25.3	86.6	86.6	3.0	109.0	65.6	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.7	50.8	9.4	115.0	69.0	25.3	86.6	86.6	3.0	109.0	65.6	22.6
LOS	F	D	A	F	E	C	F	F	A	F	E	C
Approach Delay		60.0			60.8			79.6			68.4	
Approach LOS		E			E			E			E	
Queue Length 50th (m)	~42.2	95.7	4.1	40.6	122.3	44.7	45.0	~124.3	0.0	~59.5	108.8	31.1
Queue Length 95th (m)	#71.2	120.0	21.5	#83.3	#165.7	88.2	#73.0	#164.1	5.9	#91.6	#149.0	63.5
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	309	948	529	170	969	614	379	855	505	414	894	535
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.83	0.34	0.96	0.98	0.76	0.93	1.04	0.23	1.05	0.96	0.62

Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 67.1	Intersection LOS: E

Intersection Capacity Utilization 99.2% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	788	178	163	951	467	353	890	114	433	854	333
Future Volume (vph)	315	788	178	163	951	467	353	890	114	433	854	333
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	315	788	178	163	951	467	353	890	114	433	854	333
RTOR Reduction (vph)	0	0	111	0	0	195	0	0	84	0	0	134
Lane Group Flow (vph)	315	788	67	163	951	272	353	890	30	433	854	199
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.9	35.4	35.4	12.7	36.2	36.2	14.6	33.2	33.2	16.1	34.7	34.7
Effective Green, g (s)	11.9	35.4	35.4	12.7	36.2	36.2	14.6	33.2	33.2	16.1	34.7	34.7
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	309	948	418	170	969	419	379	855	392	414	894	401
v/s Ratio Prot	0.10	0.24		c0.10	c0.28		0.11	c0.28		c0.13	0.27	
v/s Ratio Perm			0.05			0.19			0.02			0.14
v/c Ratio	1.02	0.83	0.16	0.96	0.98	0.65	0.93	1.04	0.08	1.05	0.96	0.50
Uniform Delay, d1	56.5	42.0	33.6	55.9	44.1	38.9	54.7	45.9	34.4	54.5	44.4	37.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	56.2	8.4	0.8	56.2	24.8	7.6	29.4	41.9	0.1	56.7	19.9	1.0
Delay (s)	112.8	50.4	34.5	112.1	68.8	46.5	84.1	87.8	34.5	111.2	64.3	38.8
Level of Service	F	D	C	F	E	D	F	F	C	F	E	D
Approach Delay (s)		63.5			66.7			82.4			71.6	
Approach LOS		E			E			F			E	

Intersection Summary				
HCM 2000 Control Delay	71.0	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.02			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	99.2%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1126	209	0	1581	0	41
Future Volume (vph)	1126	209	0	1581	0	41
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.977					0.865
Flt Protected						
Satd. Flow (prot)	4708	0	0	3382	0	1540
Flt Permitted						
Satd. Flow (perm)	4708	0	0	3382	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1126	209	0	1581	0	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1335	0	0	1581	0	41
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1126	209	0	1581	0	41
Future Volume (Veh/h)	1126	209	0	1581	0	41
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1126	209	0	1581	0	41
Pedestrians	10			10		
Lane Width (m)	3.5			3.5		
Walking Speed (m/s)	1.0			1.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.81		0.79	0.81
vC, conflicting volume			1335		2031	490
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			592		333	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			799		503	875

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	450	450	434	790	790	41
Volume Left	0	0	0	0	0	0
Volume Right	0	0	209	0	0	41
cSH	1700	1700	1700	1700	1700	875
Volume to Capacity	0.26	0.26	0.26	0.47	0.47	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	1.1
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.3
Approach LOS						A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

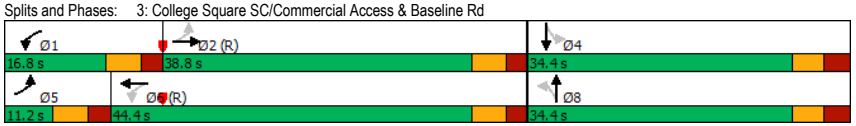
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1113	43	132	1446	9	118	1	96	6	4	17
Future Volume (vph)	11	1113	43	132	1446	9	118	1	96	6	4	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00		0.99	0.98			0.98	
Frt		0.994			0.999			0.852			0.915	
Flt Protected	0.950			0.950			0.950				0.989	
Satd. Flow (prot)	1691	4728	0	1691	3345	0	1691	1470	0	0	1589	0
Flt Permitted	0.134			0.178			0.740				0.933	
Satd. Flow (perm)	239	4728	0	316	3345	0	1305	1470	0	0	1496	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			1			96			17	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	11	1113	43	132	1446	9	118	1	96	6	4	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1156	0	132	1455	0	118	97	0	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.2	38.8		16.8	44.4		34.4	34.4		34.4	34.4	
Total Split (%)	12.4%	43.1%		18.7%	49.3%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	5.1	32.8		10.7	38.4		28.1	28.1		28.1	28.1	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	53.8	48.4		62.3	60.3		15.2	15.2			15.2	
Actuated g/C Ratio	0.60	0.54		0.69	0.67		0.17	0.17			0.17	
v/c Ratio	0.05	0.45		0.39	0.65		0.54	0.30			0.10	
Control Delay	8.0	15.1		9.5	13.9		41.2	8.3			16.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	8.0	15.1		9.5	13.9		41.2	8.3			16.2	
LOS	A	B		A	B		D	A			B	
Approach Delay		15.0			13.5			26.4			16.2	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.5	39.4		6.0	56.6		19.3	0.2			1.5	
Queue Length 95th (m)	3.1	75.0		19.1	#183.2		29.3	10.4			6.9	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	231	2545		382	2240		407	524			478	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.05	0.45		0.35	0.65		0.29	0.19			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 15.0		Intersection LOS: B	

Intersection Capacity Utilization 78.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

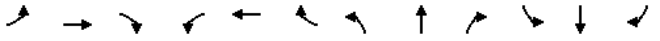
Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1113	43	132	1446	9	118	1	96	6	4	17
Future Volume (vph)	11	1113	43	132	1446	9	118	1	96	6	4	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1691	4730		1690	3345		1675	1469			1586	
Flt Permitted	0.13	1.00		0.18	1.00		0.74	1.00			0.93	
Satd. Flow (perm)	239	4730		317	3345		1304	1469			1496	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1113	43	132	1446	9	118	1	96	6	4	17
RTOR Reduction (vph)	0	3	0	0	0	0	0	80	0	0	14	0
Lane Group Flow (vph)	11	1153	0	132	1455	0	118	17	0	0	13	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	49.4	48.4		62.5	55.4		15.2	15.2			15.2	
Effective Green, g (s)	49.4	48.4		62.5	55.4		15.2	15.2			15.2	
Actuated g/C Ratio	0.55	0.54		0.69	0.62		0.17	0.17			0.17	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	147	2543		342	2059		220	248			252	
v/s Ratio Prot	0.00	0.24		c0.03	c0.43			0.01				
v/s Ratio Perm	0.04			0.23			c0.09				0.01	
v/c Ratio	0.07	0.45		0.39	0.71		0.54	0.07			0.05	
Uniform Delay, d1	10.1	12.7		5.9	11.8		34.2	31.5			31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.2	0.6		0.7	2.1		2.5	0.1			0.1	
Delay (s)	10.4	13.3		6.6	13.8		36.7	31.6			31.4	
Level of Service	B	B		A	B		D	C			C	
Approach Delay (s)		13.3			13.2			34.4			31.4	
Approach LOS		B			B			C			C	

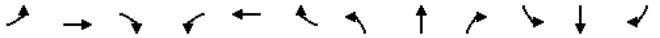
Intersection Summary					
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.69				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	78.3%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	1079	59	275	1378	42	132	0	228	105	3	77
Future Volume (vph)	104	1079	59	275	1378	42	132	0	228	105	3	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		1.00		0.99				0.98	
Frt			0.850		0.996				0.850		0.944	
Flt Protected	0.950			0.950			0.950				0.972	
Satd. Flow (prot)	1691	3349	1513	1642	3333	0	1658	0	1455	0	1566	0
Flt Permitted	0.082			0.130			0.612				0.972	
Satd. Flow (perm)	146	3349	1457	225	3333	0	1060	0	1455	0	1557	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			187		3				228		29	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Adj. Flow (vph)	104	1079	59	275	1378	42	132	0	228	105	3	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1079	59	275	1420	0	132	0	228	0	185	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø1	Ø3	Ø6
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (m)			
Storage Lanes			
Taper Length (m)			
Lane Util. Factor			
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (k/h)			
Link Distance (m)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(m)			
Link Offset(m)			
Crosswalk Width(m)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (k/h)			
Number of Detectors			
Detector Template			
Leading Detector (m)			
Trailing Detector (m)			
Detector 1 Position(m)			
Detector 1 Size(m)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(m)			
Detector 2 Size(m)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Detector Phase	12	2	4	1 12	1 6		4		1 12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	
Minimum Split (s)	11.8	31.8	42.8				42.8			42.8	42.8	
Total Split (s)	11.8	45.1	42.8				42.8			42.8	42.8	
Total Split (%)	9.4%	36.1%	34.2%				34.2%			34.2%	34.2%	
Maximum Green (s)	5.0	38.3	36.0				36.0			36.0	36.0	
Yellow Time (s)	3.7	3.7	3.7				3.7			3.7	3.7	
All-Red Time (s)	3.1	3.1	3.1				3.1			3.1	3.1	
Lost Time Adjust (s)	0.0	0.0	0.0				0.0				0.0	
Total Lost Time (s)	6.8	6.8	6.8				6.8				6.8	
Lead/Lag		Lead	Lag				Lag			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0				3.0			3.0	3.0	
Recall Mode	None	C-Max	None				None			None	None	
Walk Time (s)		7.0	7.0				7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0				29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5				5			5	5	
Act Effct Green (s)	62.5	48.7	21.8	82.8	69.0		21.8		27.3		21.8	
Actuated g/C Ratio	0.50	0.39	0.17	0.66	0.55		0.17		0.22		0.17	
v/c Ratio	0.43	0.83	0.14	0.60	0.77		0.72		0.46		0.63	
Control Delay	25.8	42.2	0.7	20.8	27.0		68.0		5.8		48.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	25.8	42.2	0.7	20.8	27.0		68.0		5.8		48.0	
LOS	C	D	A	C	C		E		A		D	
Approach Delay		38.9			26.0			28.6			48.0	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	11.3	125.6	0.0	19.6	139.0		31.4		0.0		36.4	
Queue Length 95th (m)	31.7	#193.4	0.0	45.4	#204.6		45.9		10.1		51.9	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	243	1305	552	458	1841		305		496		469	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.43	0.83	0.11	0.60	0.77		0.43		0.46		0.39	

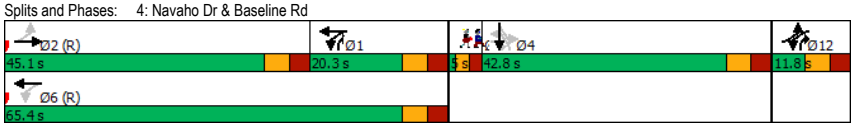
Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 32.0	Intersection LOS: C

Lane Group	Ø1	Ø3	Ø6
Turn Type			
Protected Phases	1	3	6
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	5.0
Minimum Split (s)	11.8	5.0	31.8
Total Split (s)	20.3	5.0	65.4
Total Split (%)	16%	4%	52%
Maximum Green (s)	13.5	1.0	58.6
Yellow Time (s)	3.7	2.0	3.7
All-Red Time (s)	3.1	2.0	3.1
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	C-Max
Walk Time (s)			7.0
Flash Dont Walk (s)			18.0
Pedestrian Calls (#/hr)			5
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (m)			
Queue Length 95th (m)			
Internal Link Dist (m)			
Turn Bay Length (m)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Capacity Utilization 86.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	1079	59	275	1378	42	132	0	228	105	3	77
Future Volume (vph)	104	1079	59	275	1378	42	132	0	228	105	3	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		6.8		6.8		6.8	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1691	3349	1457	1642	3332		1646		1455		1557	
Flt Permitted	0.08	1.00	1.00	0.13	1.00		0.61		1.00		0.97	
Satd. Flow (perm)	146	3349	1457	224	3332		1061		1455		1557	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	104	1079	59	275	1378	42	132	0	228	105	3	77
RTOR Reduction (vph)	0	0	49	0	1	0	0	0	178	0	24	0
Lane Group Flow (vph)	104	1079	10	275	1419	0	132	0	50	0	161	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Actuated Green, G (s)	62.5	48.7	21.8	82.8	69.0		21.8		27.3		21.8	
Effective Green, g (s)	62.5	48.7	21.8	82.8	69.0		21.8		27.3		21.8	
Actuated g/C Ratio	0.50	0.39	0.17	0.66	0.55		0.17		0.22		0.17	
Clearance Time (s)	6.8	6.8	6.8				6.8				6.8	
Vehicle Extension (s)	3.0	3.0	3.0				3.0				3.0	
Lane Grp Cap (vph)	243	1304	254	458	1839		185		317		271	
v/s Ratio Prot	0.05	0.32		c0.13	c0.43				0.03			
v/s Ratio Perm	0.17		0.01	0.27			c0.12				0.10	
v/c Ratio	0.43	0.83	0.04	0.60	0.77		0.71		0.16		0.59	
Uniform Delay, d1	22.3	34.4	42.9	20.3	21.8		48.7		39.5		47.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	1.2	6.1	0.1	2.2	2.1		12.3		0.2		3.5	
Delay (s)	23.5	40.5	43.0	22.5	23.9		60.9		39.8		51.0	
Level of Service	C	D	D	C	C		E		D		D	
Approach Delay (s)		39.2			23.7			47.5			51.0	
Approach LOS		D			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	31.2	
Intersection Capacity Utilization	86.4%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
Future Volume (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1483	846	4811	1483	1642	3316	756
Flt Permitted	0.950			0.756			0.950			0.950		
Satd. Flow (perm)	838	890	741	2537	890	1453	841	4811	1447	1637	3316	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			254			342			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Adj. Flow (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

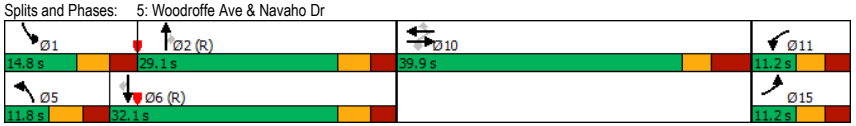
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.1	29.1	14.8	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	30.6%	30.6%	15.6%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	22.5	22.5	8.0	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	5.9	11.0	11.0	23.3		11.0	5.5	32.6	32.6	13.3	50.3	50.3
Actuated g/C Ratio	0.06	0.12	0.12	0.25		0.12	0.06	0.34	0.34	0.14	0.53	0.53
v/c Ratio	0.15	0.03	0.05	0.64		0.49	0.02	0.64	0.47	0.59	0.60	0.01
Control Delay	49.1	30.3	0.3	32.5		5.3	44.0	30.2	5.8	51.6	20.9	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	30.3	0.3	32.5		5.3	44.0	30.2	5.8	51.6	20.9	0.0
LOS	D	C	A	C		A	D	C	A	D	C	A
Approach Delay		21.2			24.4			24.2			24.2	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	1.4	0.5	0.0	35.0		0.0	0.2	58.4	0.0	22.9	58.3	0.0
Queue Length 95th (m)	6.1	2.3	0.0	35.1		5.5	1.8	#94.9	21.7	#61.1	#161.6	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	52	299	376	699		657	48	1649	720	229	1755	480
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01	0.03	0.64		0.29	0.02	0.64	0.47	0.59	0.60	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 24.2		Intersection LOS: C	

Intersection Capacity Utilization 74.6%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
Future Volume (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1453	846	4811	1447	1642	3316	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2542		1453	846	4811	1447	1642	3316	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	3	12	448	0	191	1	1053	342	135	1053	7
RTOR Reduction (vph)	0	0	11	0	0	169	0	0	225	0	0	4
Lane Group Flow (vph)	8	3	1	448	0	22	1	1053	117	135	1053	3
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	10.6	11.0	11.0	21.6		11.0	1.0	32.6	32.6	13.3	44.9	44.9
Effective Green, g (s)	10.6	11.0	11.0	21.6		11.0	1.0	32.6	32.6	13.3	44.9	44.9
Actuated g/C Ratio	0.11	0.12	0.12	0.23		0.12	0.01	0.34	0.34	0.14	0.47	0.47
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	94	103	85	650		168	8	1650	496	229	1567	342
v/s Ratio Prot	0.01	0.00		c0.08			0.00	0.22		c0.08	c0.32	
v/s Ratio Perm			0.00	c0.08		0.02			0.08			0.00
v/c Ratio	0.09	0.03	0.02	0.69		0.13	0.12	0.64	0.24	0.59	0.67	0.01
Uniform Delay, d1	37.9	37.3	37.2	33.1		37.7	46.6	26.2	22.3	38.3	19.4	13.3
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1	0.1	3.1		0.4	6.9	1.9	1.1	3.8	2.3	0.1
Delay (s)	38.2	37.4	37.3	36.1		38.1	53.5	28.1	23.4	42.1	21.7	13.3
Level of Service	D	D	D	D		D	D	C	C	D	C	B
Approach Delay (s)		37.6			36.7			27.0			23.9	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	74.6%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

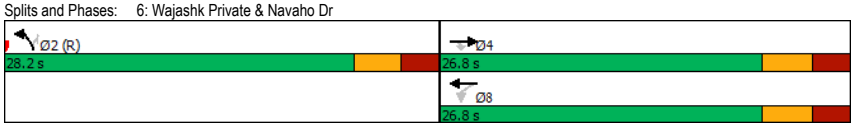
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	189	99	34	306	136	22
Future Volume (vph)	189	99	34	306	136	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1469	1691	1780	1610	1513
Flt Permitted			0.639		0.950	
Satd. Flow (perm)	1762	1439	1130	1780	1598	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		99				22
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Adj. Flow (vph)	189	99	34	306	136	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	189	99	34	306	136	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	27.8	27.8
Total Split (s)	26.8	26.8	26.8	26.8	28.2	28.2
Total Split (%)	48.7%	48.7%	48.7%	48.7%	51.3%	51.3%
Maximum Green (s)	21.0	21.0	21.0	21.0	22.7	22.7
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	2	2	5	5
Act Effct Green (s)	14.7	14.7	14.7	14.7	29.0	29.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
v/c Ratio	0.40	0.22	0.11	0.64	0.16	0.03
Control Delay	17.9	4.6	14.0	23.5	8.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.9	4.6	14.0	23.5	8.9	4.5
LOS	B	A	B	C	A	A
Approach Delay	13.4			22.6	8.3	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.4	0.0	2.6	26.8	6.3	0.0
Queue Length 95th (m)	24.9	7.1	6.7	40.2	17.1	3.1
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	672	610	431	679	847	780
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.08	0.45	0.16	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 16.3		Intersection LOS: B	

Intersection Capacity Utilization 48.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	189	99	34	306	136	22
Future Volume (vph)	189	99	34	306	136	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1439	1680	1780	1610	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1439	1129	1780	1610	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	189	99	34	306	136	22
RTOR Reduction (vph)	0	73	0	0	0	10
Lane Group Flow (vph)	189	26	34	306	136	12
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	14.7	14.7	14.7	14.7	29.0	29.0
Effective Green, g (s)	14.7	14.7	14.7	14.7	29.0	29.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	470	384	301	475	848	771
v/s Ratio Prot	0.11			c0.17	c0.08	
v/s Ratio Perm		0.02	0.03			0.01
v/c Ratio	0.40	0.07	0.11	0.64	0.16	0.02
Uniform Delay, d1	16.5	15.0	15.2	17.8	6.7	6.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2	3.0	0.4	0.0
Delay (s)	17.1	15.1	15.4	20.8	7.1	6.2
Level of Service	B	B	B	C	A	A
Approach Delay (s)	16.4			20.3	7.0	
Approach LOS	B			C	A	

Intersection Summary				
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.32			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	158	1199	53	0	1195
Future Volume (vph)	0	158	1199	53	0	1195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.994			
Flt Protected						
Satd. Flow (prot)	0	1524	4739	0	0	4718
Flt Permitted						
Satd. Flow (perm)	0	1524	4739	0	0	4718
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	158	1199	53	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	158	1252	0	0	1195
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

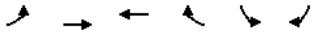
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	158	1199	53	0	1195
Future Volume (Veh/h)	0	158	1199	53	0	1195
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	158	1199	53	0	1195
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.90	0.83			0.83	
vC, conflicting volume	1644	446			1262	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	32	0			582	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	82			100	
cM capacity (veh/h)	870	882			820	

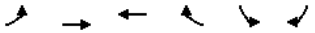
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	158	480	480	293	398	398	398
Volume Left	0	0	0	0	0	0	0
Volume Right	158	0	0	53	0	0	0
cSH	882	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.18	0.28	0.28	0.17	0.23	0.23	0.23
Queue Length 95th (m)	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	10.0	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	216	264	394	48	24	245
Future Volume (vph)	216	264	394	48	24	245
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.984		0.877	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1762	3298	0	1555	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1762	3298	0	1555	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	216	264	394	48	24	245
Shared Lane Traffic (%)						
Lane Group Flow (vph)	216	264	442	0	269	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	216	264	394	48	24	245
Future Volume (Veh/h)	216	264	394	48	24	245
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	216	264	394	48	24	245
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	452				1134	241
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	452				1134	241
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	81				85	67
cM capacity (veh/h)	1108				157	751

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	216	264	263	179	269
Volume Left	216	0	0	0	24
Volume Right	0	0	0	48	245
cSH	1108	1700	1700	1700	562
Volume to Capacity	0.19	0.16	0.15	0.11	0.48
Queue Length 95th (m)	5.5	0.0	0.0	0.0	19.6
Control Delay (s)	9.0	0.0	0.0	0.0	17.1
Lane LOS	A				C
Approach Delay (s)	4.1		0.0		17.1
Approach LOS					C

Intersection Summary				
Average Delay		5.5		
Intersection Capacity Utilization		54.2%	ICU Level of Service	A
Analysis Period (min)		15		

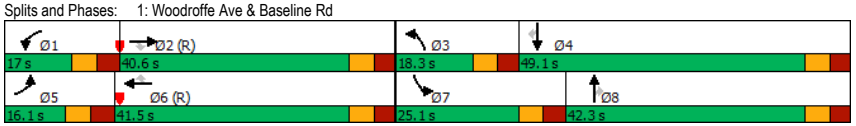
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	698	74	127	611	379	225	962	113	476	894	217
Future Volume (vph)	192	698	74	127	611	379	225	962	113	476	894	217
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3281	3382	1513	1691	3382	1498	3281	3316	1498	3281	3316	1498
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3254	3382	1478	1684	3382	1463	3261	3316	1462	3270	3316	1462
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			232			155			155
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Adj. Flow (vph)	192	698	74	127	611	379	225	962	113	476	894	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	698	74	127	611	379	225	962	113	476	894	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	16.1	40.6	40.6	17.0	41.5	41.5	18.3	42.3	42.3	25.1	49.1	49.1
Total Split (%)	12.9%	32.5%	32.5%	13.6%	33.2%	33.2%	14.6%	33.8%	33.8%	20.1%	39.3%	39.3%
Maximum Green (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.4	35.5	35.5	18.2	42.3	42.3
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.2	35.5	35.5	18.2	42.5	42.5
Actuated g/C Ratio	0.07	0.27	0.27	0.08	0.28	0.28	0.09	0.28	0.28	0.15	0.34	0.34
v/c Ratio	0.81	0.76	0.14	0.95	0.65	0.66	0.77	1.02	0.21	1.00	0.79	0.36
Control Delay	82.9	48.4	0.6	124.2	43.7	21.1	73.2	79.3	2.7	94.1	43.5	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.9	48.4	0.6	124.2	43.7	21.1	73.2	79.3	2.7	94.1	43.5	11.4
LOS	F	D	A	F	D	C	E	E	A	F	D	B
Approach Delay		51.6			45.2			71.6			54.3	
Approach LOS		D			D			E			D	
Queue Length 50th (m)	24.4	83.2	0.0	31.6	69.8	31.3	28.2	~132.1	0.0	61.0	104.3	10.5
Queue Length 95th (m)	#43.4	105.5	0.0	#69.5	89.6	66.7	#45.1	#172.4	5.6	#95.6	129.4	29.8
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	236	914	512	133	938	573	299	941	526	477	1128	599
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.76	0.14	0.95	0.65	0.66	0.75	1.02	0.21	1.00	0.79	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 116 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 56.2		Intersection LOS: E	

Intersection Capacity Utilization 100.3% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	698	74	127	611	379	225	962	113	476	894	217
Future Volume (vph)	192	698	74	127	611	379	225	962	113	476	894	217
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	192	698	74	127	611	379	225	962	113	476	894	217
RTOR Reduction (vph)	0	0	54	0	0	168	0	0	81	0	0	102
Lane Group Flow (vph)	192	698	20	127	611	211	225	962	32	476	894	115
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.2	35.5	35.5	18.2	42.5	42.5
Effective Green, g (s)	9.0	33.8	33.8	9.9	34.7	34.7	11.2	35.5	35.5	18.2	42.5	42.5
Actuated g/C Ratio	0.07	0.27	0.27	0.08	0.28	0.28	0.09	0.28	0.28	0.15	0.34	0.34
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	236	914	399	133	938	406	293	941	415	477	1127	497
v/s Ratio Prot	0.06	c0.21		c0.08	0.18		0.07	c0.29		c0.15	c0.27	
v/s Ratio Perm			0.01			0.14			0.02			0.08
v/c Ratio	0.81	0.76	0.05	0.95	0.65	0.52	0.77	1.02	0.08	1.00	0.79	0.23
Uniform Delay, d1	57.2	41.9	33.7	57.3	39.8	38.1	55.6	44.8	32.8	53.4	37.3	29.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.9	6.0	0.2	63.7	3.5	4.7	11.4	35.1	0.1	40.4	3.9	0.2
Delay (s)	76.1	48.0	34.0	121.0	43.3	42.8	67.1	79.9	32.8	93.7	41.2	29.8
Level of Service	E	D	C	F	D	D	E	E	C	F	D	C
Approach Delay (s)		52.5			52.0			73.6			55.4	
Approach LOS		D			D			E			E	

Intersection Summary						
HCM 2000 Control Delay	58.8	HCM 2000 Level of Service	E			
HCM 2000 Volume to Capacity ratio	0.93					
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6			
Intersection Capacity Utilization	100.3%	ICU Level of Service	G			
Analysis Period (min)	15					

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1000	287	0	1117	0	77
Future Volume (vph)	1000	287	0	1117	0	77
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.967					0.865
Flt Protected						
Satd. Flow (prot)	4663	0	0	3349	0	1540
Flt Permitted						
Satd. Flow (perm)	4663	0	0	3349	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	1000	287	0	1117	0	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1287	0	0	1117	0	77
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1000	287	0	1117	0	77
Future Volume (Veh/h)	1000	287	0	1117	0	77
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1000	287	0	1117	0	77
Pedestrians	10			10	10	
Lane Width (m)	3.5			3.5	3.5	
Walking Speed (m/s)	1.0			1.0	1.0	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.84		0.90	0.84
vC, conflicting volume			1297		1722	497
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			685		502	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			763		443	898

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	400	400	487	558	558	77
Volume Left	0	0	0	0	0	0
Volume Right	0	0	287	0	0	77
cSH	1700	1700	1700	1700	1700	898
Volume to Capacity	0.24	0.24	0.29	0.33	0.33	0.09
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	2.1
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.4
Approach LOS						A

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A	
Analysis Period (min)	15			

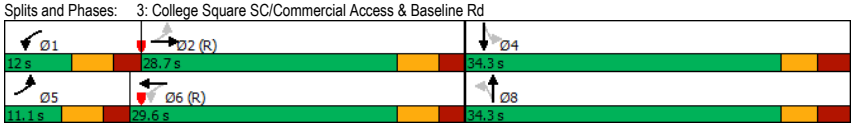
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	990	82	179	948	0	158	3	146	9	3	11
Future Volume (vph)	5	990	82	179	948	0	158	3	146	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00			0.99	0.98			0.99	
Frt		0.989						0.853			0.935	
Flt Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1691	4749	0	1691	3349	0	1674	1489	0	0	1617	0
Flt Permitted	0.302			0.174			0.742				0.874	
Satd. Flow (perm)	536	4749	0	309	3349	0	1298	1489	0	0	1437	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						146			11	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	990	82	179	948	0	158	3	146	9	3	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1072	0	179	948	0	158	149	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.1	28.7		12.0	29.6		34.3	34.3		34.3	34.3	
Total Split (%)	14.8%	38.3%		16.0%	39.5%		45.7%	45.7%		45.7%	45.7%	
Maximum Green (s)	5.0	22.7		5.9	23.6		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	37.4	32.0		45.7	44.6		15.9	15.9			15.9	
Actuated g/C Ratio	0.50	0.43		0.61	0.59		0.21	0.21			0.21	
v/c Ratio	0.01	0.53		0.52	0.48		0.57	0.35			0.07	
Control Delay	9.4	18.2		17.2	13.3		33.2	6.1			13.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	9.4	18.2		17.2	13.3		33.2	6.1			13.7	
LOS	A	B		B	B		C	A			B	
Approach Delay		18.2			13.9			20.0			13.7	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.3	38.6		8.8	30.5		20.7	0.3			1.4	
Queue Length 95th (m)	2.0	63.2		#39.0	#101.3		29.7	10.6			5.3	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	351	2039		347	1990		484	647			543	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.53		0.52	0.48		0.33	0.23			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 16.5		Intersection LOS: B	

Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



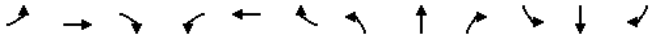
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	990	82	179	948	0	158	3	146	9	3	11
Future Volume (vph)	5	990	82	179	948	0	158	3	146	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1689	4746		1690	3349		1661	1489			1613	
Flt Permitted	0.30	1.00		0.17	1.00		0.74	1.00			0.87	
Satd. Flow (perm)	537	4746		309	3349		1298	1489			1437	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	990	82	179	948	0	158	3	146	9	3	11
RTOR Reduction (vph)	0	10	0	0	0	0	0	115	0	0	9	0
Lane Group Flow (vph)	5	1062	0	179	948	0	158	34	0	0	14	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	33.0	32.0		46.8	39.7		15.9	15.9			15.9	
Effective Green, g (s)	33.0	32.0		46.8	39.7		15.9	15.9			15.9	
Actuated g/C Ratio	0.44	0.43		0.62	0.53		0.21	0.21			0.21	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	251	2024		353	1772		275	315			304	
v/s Ratio Prot	0.00	0.22		c0.06	c0.28			0.02				
v/s Ratio Perm	0.01			0.26			c0.12				0.01	
v/c Ratio	0.02	0.52		0.51	0.53		0.57	0.11			0.05	
Uniform Delay, d1	11.8	15.9		7.5	11.6		26.5	23.8			23.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.0	1.0		1.1	1.2		2.9	0.2			0.1	
Delay (s)	11.8	16.9		8.7	12.8		29.4	24.0			23.6	
Level of Service	B	B		A	B		C	C			C	
Approach Delay (s)		16.8			12.1			26.8			23.6	
Approach LOS		B			B			C			C	

Intersection Summary					
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.58				
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	18.4		
Intersection Capacity Utilization	66.0%	ICU Level of Service	C		
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	921	59	229	884	41	180	0	220	83	3	63
Future Volume (vph)	115	921	59	229	884	41	180	0	220	83	3	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99				0.99	
Frt			0.850		0.993				0.850		0.943	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1674	3382	1455	1642	3314	0	1674	0	1483	0	1606	0
Flt Permitted	0.156			0.157			0.673				0.973	
Satd. Flow (perm)	274	3382	1408	270	3314	0	1179	0	1483	0	1600	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			154		5				220		49	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Adj. Flow (vph)	115	921	59	229	884	41	180	0	220	83	3	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	115	921	59	229	925	0	180	0	220	0	149	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (k/h)	
Number of Detectors	
Detector Template	
Leading Detector (m)	
Trailing Detector (m)	
Detector 1 Position(m)	
Detector 1 Size(m)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(m)	
Detector 2 Size(m)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Detector Phase	12	2	4	12	6		4		12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	10.9	30.8	42.6	10.9	30.8		42.6		10.9	42.6	42.6	
Total Split (s)	11.0	31.4	42.6	11.0	31.4		42.6		11.0	42.6	42.6	
Total Split (%)	12.2%	34.9%	47.3%	12.2%	34.9%		47.3%		12.2%	47.3%	47.3%	
Maximum Green (s)	5.1	25.6	36.0	5.1	25.6		36.0		5.1	36.0	36.0	
Yellow Time (s)	3.7	3.7	3.3	3.7	3.7		3.3		3.7	3.3	3.3	
All-Red Time (s)	2.2	2.1	3.3	2.2	2.1		3.3		2.2	3.3	3.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Lost Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lead/Lag			Lag				Lag			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	None	C-Max	None	None	C-Max		None		None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0		18.0		29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5		5		5			5	5	
Act Effct Green (s)	50.7	31.8	20.9	50.7	31.8		20.9		19.0		20.9	
Actuated g/C Ratio	0.56	0.35	0.23	0.56	0.35		0.23		0.21		0.23	
v/c Ratio	0.26	0.77	0.13	0.52	0.79		0.66		0.45		0.37	
Control Delay	11.1	32.4	0.6	19.9	33.0		41.1		8.6		19.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	11.1	32.4	0.6	19.9	33.0		41.1		8.6		19.2	
LOS	B	C	A	B	C		D		A		B	
Approach Delay		28.4			30.4			23.3			19.2	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	6.7	69.9	0.0	14.3	70.4		29.1		0.0		14.6	
Queue Length 95th (m)	20.9	#120.8	0.0	#64.9	#123.5		38.6		20.1		23.1	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	450	1195	655	441	1175		471		486		669	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.26	0.77	0.09	0.52	0.79		0.38		0.45		0.22	

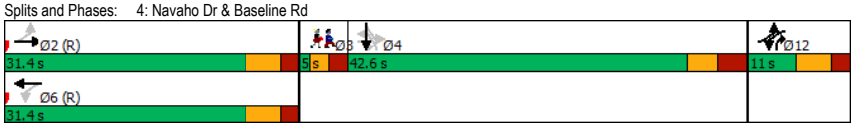
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 28.0		Intersection LOS: C	

Lane Group	Ø3
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	5.0
Total Split (s)	5.0
Total Split (%)	6%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Capacity Utilization 75.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	921	59	229	884	41	180	0	220	83	3	63
Future Volume (vph)	115	921	59	229	884	41	180	0	220	83	3	63
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1674	3382	1408	1641	3315		1665		1483		1599	
Flt Permitted	0.16	1.00	1.00	0.16	1.00		0.67		1.00		0.97	
Satd. Flow (perm)	274	3382	1408	272	3315		1180		1483		1599	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	115	921	59	229	884	41	180	0	220	83	3	63
RTOR Reduction (vph)	0	0	45	0	3	0	0	0	174	0	38	0
Lane Group Flow (vph)	115	921	14	229	922	0	180	0	46	0	111	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Actuated Green, G (s)	50.8	31.8	20.9	50.8	31.8		20.9		19.0		20.9	
Effective Green, g (s)	50.8	31.8	20.9	50.8	31.8		20.9		19.0		20.9	
Actuated g/C Ratio	0.56	0.35	0.23	0.56	0.35		0.23		0.21		0.23	
Clearance Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)	450	1194	326	442	1171		274		313		371	
v/s Ratio Prot	0.05	0.27		c0.11	c0.28				0.03			
v/s Ratio Perm	0.09		0.01	0.18			c0.15				0.07	
v/c Ratio	0.26	0.77	0.04	0.52	0.79		0.66		0.15		0.30	
Uniform Delay, d1	10.9	25.9	26.8	12.3	26.1		31.3		28.9		28.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	0.3	4.9	0.1	1.0	5.4		5.6		0.2		0.5	
Delay (s)	11.2	30.7	26.8	13.3	31.5		36.9		29.1		29.0	
Level of Service	B	C	C	B	C		D		C		C	
Approach Delay (s)		28.5			27.9			32.6			29.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.3
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	2	408	0	182	1	954	348	126	955	14
Future Volume (vph)	11	1	2	408	0	182	1	954	348	126	955	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1498	846	4718	1498	1674	3283	756
Flt Permitted	0.950			0.757			0.950			0.950		
Satd. Flow (perm)	838	890	741	2540	890	1467	841	4718	1461	1668	3283	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			249			348			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Adj. Flow (vph)	11	1	2	408	0	182	1	954	348	126	955	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1	2	408	0	182	1	954	348	126	955	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

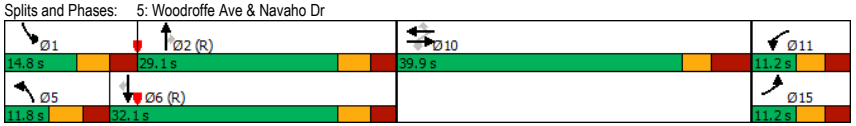
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.1	29.1	14.8	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	30.6%	30.6%	15.6%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	22.5	22.5	8.0	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	6.1	10.9	10.9	22.3		10.9	5.5	34.9	34.9	12.0	51.3	51.3
Actuated g/C Ratio	0.06	0.11	0.11	0.23		0.11	0.06	0.37	0.37	0.13	0.54	0.54
v/c Ratio	0.21	0.01	0.01	0.61		0.47	0.02	0.55	0.46	0.60	0.54	0.03
Control Delay	51.5	29.0	0.0	32.4		5.0	44.0	27.2	5.5	53.3	19.4	0.1
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	29.0	0.0	32.4		5.0	44.0	27.2	5.5	53.3	19.4	0.1
LOS	D	C	A	C		A	D	C	A	D	B	A
Approach Delay		42.6			23.9			21.4			23.1	
Approach LOS		D			C			C			C	
Queue Length 50th (m)	2.0	0.2	0.0	32.2		0.0	0.2	49.4	0.0	21.5	48.6	0.0
Queue Length 95th (m)	7.7	1.2	0.0	32.0		4.7	1.8	#79.4	21.8	#56.0	#141.7	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	53	299	376	665		659	48	1733	756	211	1774	486
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.00	0.01	0.61		0.28	0.02	0.55	0.46	0.60	0.54	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 22.6		Intersection LOS: C	

Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	2	408	0	182	1	954	348	126	955	14
Future Volume (vph)	11	1	2	408	0	182	1	954	348	126	955	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1467	846	4718	1461	1674	3283	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2547		1467	846	4718	1461	1674	3283	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1	2	408	0	182	1	954	348	126	955	14
RTOR Reduction (vph)	0	0	2	0	0	161	0	0	220	0	0	7
Lane Group Flow (vph)	11	1	0	408	0	21	1	954	128	126	955	7
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	9.7	10.9	10.9	20.6		10.9	1.0	34.9	34.9	12.0	45.9	45.9
Effective Green, g (s)	9.7	10.9	10.9	20.6		10.9	1.0	34.9	34.9	12.0	45.9	45.9
Actuated g/C Ratio	0.10	0.11	0.11	0.22		0.11	0.01	0.37	0.37	0.13	0.48	0.48
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	102	85	618		168	8	1733	536	211	1586	350
v/s Ratio Prot	0.01	0.00		c0.07			0.00	0.20		c0.08	c0.29	
v/s Ratio Perm			0.00	c0.08		0.01			0.09			0.01
v/c Ratio	0.13	0.01	0.00	0.66		0.12	0.12	0.55	0.24	0.60	0.60	0.02
Uniform Delay, d1	38.8	37.3	37.2	33.7		37.8	46.6	23.8	20.8	39.2	17.9	12.8
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.0	0.0	2.6		0.3	6.9	1.3	1.0	4.5	1.7	0.1
Delay (s)	39.5	37.3	37.2	36.3		38.1	53.5	25.1	21.9	43.7	19.6	12.9
Level of Service	D	D	D	D		D	D	C	C	D	B	B
Approach Delay (s)		39.0			36.9			24.3			22.3	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	26.1	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.66				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	70.9%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

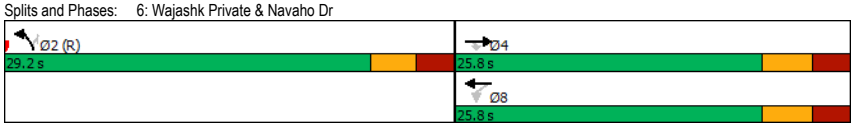
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	182	63	16	246	47	12
Future Volume (vph)	182	63	16	246	47	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1441	1691	1780	1496	1513
Flt Permitted			0.643		0.950	
Satd. Flow (perm)	1762	1412	1137	1780	1485	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		63				12
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Adj. Flow (vph)	182	63	16	246	47	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	182	63	16	246	47	12
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	25.8	25.8	25.8	25.8	26.5	26.5
Total Split (s)	25.8	25.8	25.8	25.8	29.2	29.2
Total Split (%)	46.9%	46.9%	46.9%	46.9%	53.1%	53.1%
Maximum Green (s)	20.0	20.0	20.0	20.0	23.7	23.7
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	0	0	5	5
Act Effct Green (s)	13.3	13.3	13.3	13.3	30.4	30.4
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.55	0.55
v/c Ratio	0.43	0.16	0.06	0.57	0.06	0.01
Control Delay	19.6	5.3	13.9	22.9	7.7	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	5.3	13.9	22.9	7.7	4.9
LOS	B	A	B	C	A	A
Approach Delay	15.9			22.3	7.2	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.5	0.0	1.3	21.8	1.9	0.0
Queue Length 95th (m)	24.5	5.8	4.0	32.6	7.3	2.2
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	640	553	413	647	827	815
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.11	0.04	0.38	0.06	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 18.0		Intersection LOS: B	

Intersection Capacity Utilization 41.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	182	63	16	246	47	12
Future Volume (vph)	182	63	16	246	47	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1412	1680	1780	1496	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1412	1137	1780	1496	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	182	63	16	246	47	12
RTOR Reduction (vph)	0	48	0	0	0	5
Lane Group Flow (vph)	182	15	16	246	47	7
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	13.3	13.3	13.3	13.3	30.4	30.4
Effective Green, g (s)	13.3	13.3	13.3	13.3	30.4	30.4
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.55	0.55
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	426	341	274	430	826	808
v/s Ratio Prot	0.10			c0.14	c0.03	
v/s Ratio Perm		0.01	0.01			0.00
v/c Ratio	0.43	0.04	0.06	0.57	0.06	0.01
Uniform Delay, d1	17.6	16.0	16.0	18.3	5.7	5.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.1	1.8	0.1	0.0
Delay (s)	18.3	16.0	16.1	20.2	5.8	5.5
Level of Service	B	B	B	C	A	A
Approach Delay (s)	17.7			19.9	5.8	
Approach LOS	B			B	A	

Intersection Summary				
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.21			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	41.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

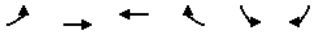
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	232	1068	79	0	1095
Future Volume (vph)	0	232	1068	79	0	1095
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.990			
Flt Protected						
Satd. Flow (prot)	0	1540	4723	0	0	4764
Flt Permitted						
Satd. Flow (perm)	0	1540	4723	0	0	4764
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	0	232	1068	79	0	1095
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	232	1147	0	0	1095
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	232	1068	79	0	1095
Future Volume (Veh/h)	0	232	1068	79	0	1095
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	232	1068	79	0	1095
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.89	0.85			0.85	
vC, conflicting volume	1492	416			1157	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	27	0			581	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	75			100	
cM capacity (veh/h)	868	913			847	

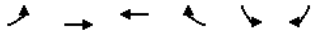
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	232	427	427	293	365	365	365
Volume Left	0	0	0	0	0	0	0
Volume Right	232	0	0	79	0	0	0
cSH	913	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.25	0.25	0.17	0.21	0.21	0.21
Queue Length 95th (m)	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.3	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay		1.0		
Intersection Capacity Utilization		46.6%	ICU Level of Service	A
Analysis Period (min)		15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	256	219	265	28	26	325
Future Volume (vph)	256	219	265	28	26	325
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.986		0.875	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1745	3247	0	1551	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1745	3247	0	1551	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	256	219	265	28	26	325
Shared Lane Traffic (%)						
Lane Group Flow (vph)	256	219	293	0	351	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	256	219	265	28	26	325
Future Volume (Veh/h)	256	219	265	28	26	325
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	256	219	265	28	26	325
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	303				1030	166
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	303				1030	166
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				86	61
cM capacity (veh/h)	1257				182	838

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	256	219	177	116	351
Volume Left	256	0	0	0	26
Volume Right	0	0	0	28	325
cSH	1257	1700	1700	1700	661
Volume to Capacity	0.20	0.13	0.10	0.07	0.53
Queue Length 95th (m)	5.8	0.0	0.0	0.0	23.9
Control Delay (s)	8.6	0.0	0.0	0.0	16.4
Lane LOS	A				C
Approach Delay (s)	4.6		0.0		16.4
Approach LOS					C

Intersection Summary				
Average Delay		7.1		
Intersection Capacity Utilization		58.7%	ICU Level of Service	B
Analysis Period (min)		15		

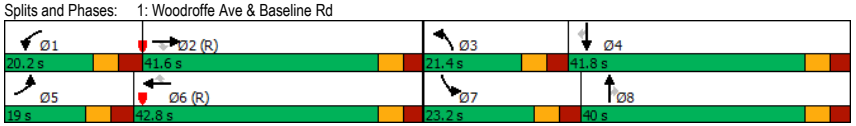
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	790	178	163	952	468	355	891	115	435	854	333
Future Volume (vph)	315	790	178	163	952	468	355	891	115	435	854	333
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3248	3349	1513	1674	3349	1483	3248	3221	1513	3216	3221	1483
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3232	3349	1478	1668	3349	1449	3227	3221	1476	3205	3221	1447
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			273			155			186
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Adj. Flow (vph)	315	790	178	163	952	468	355	891	115	435	854	333
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	790	178	163	952	468	355	891	115	435	854	333
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	19.0	41.6	41.6	20.2	42.8	42.8	21.4	40.0	40.0	23.2	41.8	41.8
Total Split (%)	15.2%	33.3%	33.3%	16.2%	34.2%	34.2%	17.1%	32.0%	32.0%	18.6%	33.4%	33.4%
Maximum Green (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
v/c Ratio	1.02	0.85	0.34	0.93	0.99	0.77	0.94	1.04	0.23	1.04	0.95	0.62
Control Delay	111.7	52.5	9.6	107.7	70.5	25.7	89.2	86.9	3.1	106.7	64.1	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.7	52.5	9.6	107.7	70.5	25.7	89.2	86.9	3.1	106.7	64.1	22.3
LOS	F	D	A	F	E	C	F	F	A	F	E	C
Approach Delay		61.0			61.1			80.4			66.9	
Approach LOS		E			E			F			E	
Queue Length 50th (m)	~42.2	96.7	4.2	40.4	122.6	45.4	45.3	~124.6	0.0	~59.3	108.5	30.8
Queue Length 95th (m)	#71.2	#121.5	21.7	#81.9	#166.7	89.1	#73.9	#164.6	6.3	#91.4	#147.9	63.0
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	309	932	523	175	964	611	376	855	505	419	901	539
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.85	0.34	0.93	0.99	0.77	0.94	1.04	0.23	1.04	0.95	0.62

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 67.2		Intersection LOS: E	

Intersection Capacity Utilization 99.4% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	790	178	163	952	468	355	891	115	435	854	333
Future Volume (vph)	315	790	178	163	952	468	355	891	115	435	854	333
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	315	790	178	163	952	468	355	891	115	435	854	333
RTOR Reduction (vph)	0	0	112	0	0	194	0	0	84	0	0	134
Lane Group Flow (vph)	315	790	66	163	952	274	355	891	31	435	854	199
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Effective Green, g (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	309	932	411	175	964	417	376	855	392	419	901	405
v/s Ratio Prot	0.10	0.24		c0.10	c0.28		0.11	c0.28		c0.14	0.27	
v/s Ratio Perm			0.04			0.19			0.02			0.14
v/c Ratio	1.02	0.85	0.16	0.93	0.99	0.66	0.94	1.04	0.08	1.04	0.95	0.49
Uniform Delay, d1	56.5	42.6	34.1	55.5	44.3	39.1	54.8	45.9	34.4	54.4	44.1	37.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	56.2	9.4	0.8	48.3	26.1	7.8	32.1	42.3	0.1	54.2	18.4	0.9
Delay (s)	112.8	52.0	34.9	103.8	70.4	46.9	87.0	88.2	34.5	108.6	62.5	38.5
Level of Service	F	D	C	F	E	D	F	F	C	F	E	D
Approach Delay (s)		64.6			66.9			83.3			69.9	
Approach LOS		E			E			F			E	

Intersection Summary				
HCM 2000 Control Delay	71.1	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.02			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1126	214	0	1583	0	44
Future Volume (vph)	1126	214	0	1583	0	44
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.976					0.865
Flt Protected						
Satd. Flow (prot)	4703	0	0	3382	0	1540
Flt Permitted						
Satd. Flow (perm)	4703	0	0	3382	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1126	214	0	1583	0	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1340	0	0	1583	0	44
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1126	214	0	1583	0	44
Future Volume (Veh/h)	1126	214	0	1583	0	44
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1126	214	0	1583	0	44
Pedestrians	10			10		
Lane Width (m)	3.5			3.5		
Walking Speed (m/s)	1.0			1.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.81		0.79	0.81
vC, conflicting volume			1340		2034	492
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			588		321	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			800		511	873

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	450	450	439	792	792	44
Volume Left	0	0	0	0	0	0
Volume Right	0	0	214	0	0	44
cSH	1700	1700	1700	1700	1700	873
Volume to Capacity	0.26	0.26	0.26	0.47	0.47	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	1.2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.3
Approach LOS						A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1116	43	139	1446	9	120	1	97	6	4	17
Future Volume (vph)	11	1116	43	139	1446	9	120	1	97	6	4	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00		0.99	0.98			0.98	
Frt		0.994			0.999			0.852			0.915	
Flt Protected	0.950			0.950			0.950				0.989	
Satd. Flow (prot)	1691	4728	0	1691	3345	0	1691	1470	0	0	1589	0
Flt Permitted	0.134			0.177			0.740				0.933	
Satd. Flow (perm)	239	4728	0	314	3345	0	1305	1470	0	0	1496	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			1			97			17	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	11	1116	43	139	1446	9	120	1	97	6	4	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1159	0	139	1455	0	120	98	0	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

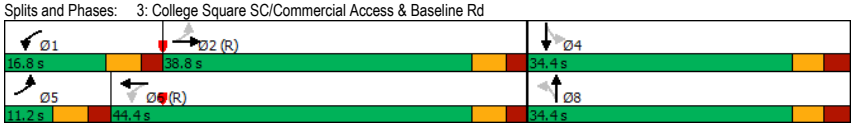
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.2	38.8		16.8	44.4		34.4	34.4		34.4	34.4	
Total Split (%)	12.4%	43.1%		18.7%	49.3%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	5.1	32.8		10.7	38.4		28.1	28.1		28.1	28.1	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	53.6	48.1		62.2	60.2		15.3	15.3			15.3	
Actuated g/C Ratio	0.60	0.53		0.69	0.67		0.17	0.17			0.17	
v/c Ratio	0.05	0.46		0.41	0.65		0.54	0.30			0.10	
Control Delay	8.1	15.3		9.8	13.9		41.4	8.3			16.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	8.1	15.3		9.8	13.9		41.4	8.3			16.1	
LOS	A	B		A	B		D	A			B	
Approach Delay		15.2			13.6			26.5			16.1	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.5	39.8		6.4	56.9		19.7	0.2			1.5	
Queue Length 95th (m)	3.1	75.3		19.9	#183.2		29.8	10.6			6.9	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	231	2532		381	2236		407	525			478	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.05	0.46		0.36	0.65		0.29	0.19			0.06	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 15.2 Intersection LOS: B

Intersection Capacity Utilization 78.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

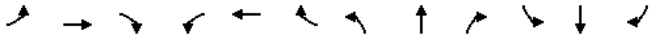
Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1116	43	139	1446	9	120	1	97	6	4	17
Future Volume (vph)	11	1116	43	139	1446	9	120	1	97	6	4	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1691	4731		1690	3345		1675	1469			1586	
Flt Permitted	0.13	1.00		0.18	1.00		0.74	1.00			0.93	
Satd. Flow (perm)	239	4731		314	3345		1304	1469			1496	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1116	43	139	1446	9	120	1	97	6	4	17
RTOR Reduction (vph)	0	3	0	0	0	0	0	81	0	0	14	0
Lane Group Flow (vph)	11	1156	0	139	1455	0	120	17	0	0	13	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	49.1	48.1		62.4	55.3		15.3	15.3			15.3	
Effective Green, g (s)	49.1	48.1		62.4	55.3		15.3	15.3			15.3	
Actuated g/C Ratio	0.55	0.53		0.69	0.61		0.17	0.17			0.17	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	146	2528		343	2055		221	249			254	
v/s Ratio Prot	0.00	0.24		c0.04	c0.43			0.01				
v/s Ratio Perm	0.04			0.24			c0.09				0.01	
v/c Ratio	0.08	0.46		0.41	0.71		0.54	0.07			0.05	
Uniform Delay, d1	10.3	12.9		6.0	11.8		34.2	31.4			31.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.2	0.6		0.8	2.1		2.7	0.1			0.1	
Delay (s)	10.5	13.5		6.8	13.9		36.9	31.5			31.4	
Level of Service	B	B		A	B		D	C			C	
Approach Delay (s)		13.5			13.3			34.5			31.4	
Approach LOS		B			B			C			C	

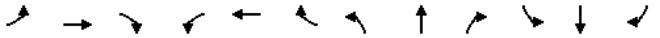
Intersection Summary					
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.69				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.4		
Intersection Capacity Utilization	78.4%	ICU Level of Service	D		
Analysis Period (min)	15				

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1082	59	278	1384	42	132	0	230	105	3	78
Future Volume (vph)	105	1082	59	278	1384	42	132	0	230	105	3	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		1.00		0.99				0.98	
Frt			0.850		0.996				0.850		0.943	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1691	3349	1513	1642	3333	0	1658	0	1455	0	1566	0
Flt Permitted	0.083			0.126			0.610				0.973	
Satd. Flow (perm)	148	3349	1457	218	3333	0	1057	0	1455	0	1557	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			187		3				230		29	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Adj. Flow (vph)	105	1082	59	278	1384	42	132	0	230	105	3	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1082	59	278	1426	0	132	0	230	0	186	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø1	Ø3	Ø6
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (m)			
Storage Lanes			
Taper Length (m)			
Lane Util. Factor			
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (k/h)			
Link Distance (m)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(m)			
Link Offset(m)			
Crosswalk Width(m)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (k/h)			
Number of Detectors			
Detector Template			
Leading Detector (m)			
Trailing Detector (m)			
Detector 1 Position(m)			
Detector 1 Size(m)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(m)			
Detector 2 Size(m)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Detector Phase	12	2	4	1 12	1 6		4		1 12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	
Minimum Split (s)	11.8	31.8	42.8				42.8			42.8	42.8	
Total Split (s)	11.8	45.1	42.8				42.8			42.8	42.8	
Total Split (%)	9.4%	36.1%	34.2%				34.2%			34.2%	34.2%	
Maximum Green (s)	5.0	38.3	36.0				36.0			36.0	36.0	
Yellow Time (s)	3.7	3.7	3.7				3.7			3.7	3.7	
All-Red Time (s)	3.1	3.1	3.1				3.1			3.1	3.1	
Lost Time Adjust (s)	0.0	0.0	0.0				0.0				0.0	
Total Lost Time (s)	6.8	6.8	6.8				6.8				6.8	
Lead/Lag		Lead	Lag				Lag			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0				3.0			3.0	3.0	
Recall Mode	None	C-Max	None				None			None	None	
Walk Time (s)		7.0	7.0				7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0				29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5				5			5	5	
Act Effct Green (s)	62.5	48.2	21.8	82.8	68.5		21.8		27.8		21.8	
Actuated g/C Ratio	0.50	0.39	0.17	0.66	0.55		0.17		0.22		0.17	
v/c Ratio	0.42	0.84	0.14	0.60	0.78		0.72		0.46		0.63	
Control Delay	25.4	43.1	0.7	21.2	27.7		68.1		5.7		48.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	25.4	43.1	0.7	21.2	27.7		68.1		5.7		48.2	
LOS	C	D	A	C	C		E		A		D	
Approach Delay		39.6			26.6			28.5			48.2	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	11.5	126.6	0.0	19.9	141.0		31.4		0.0		36.7	
Queue Length 95th (m)	31.9	#194.2	0.0	46.0	#207.0		45.9		10.2		51.9	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	250	1291	552	461	1828		304		502		469	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.42	0.84	0.11	0.60	0.78		0.43		0.46		0.40	

Intersection Summary

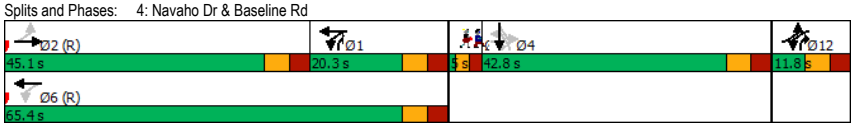
Area Type: Other
Cycle Length: 125
Actuated Cycle Length: 125
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 32.6 Intersection LOS: C

Lane Group	Ø1	Ø3	Ø6
Turn Type			
Protected Phases	1	3	6
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	5.0
Minimum Split (s)	11.8	5.0	31.8
Total Split (s)	20.3	5.0	65.4
Total Split (%)	16%	4%	52%
Maximum Green (s)	13.5	1.0	58.6
Yellow Time (s)	3.7	2.0	3.7
All-Red Time (s)	3.1	2.0	3.1
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	C-Max
Walk Time (s)			7.0
Flash Dont Walk (s)			18.0
Pedestrian Calls (#/hr)			5
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (m)			
Queue Length 95th (m)			
Internal Link Dist (m)			
Turn Bay Length (m)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Capacity Utilization 86.7% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1082	59	278	1384	42	132	0	230	105	3	78
Future Volume (vph)	105	1082	59	278	1384	42	132	0	230	105	3	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		6.8		6.8		6.8	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1691	3349	1457	1642	3332		1646		1455		1556	
Flt Permitted	0.08	1.00	1.00	0.13	1.00		0.61		1.00		0.97	
Satd. Flow (perm)	148	3349	1457	218	3332		1057		1455		1556	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	105	1082	59	278	1384	42	132	0	230	105	3	78
RTOR Reduction (vph)	0	0	49	0	1	0	0	0	179	0	24	0
Lane Group Flow (vph)	105	1082	10	278	1425	0	132	0	51	0	162	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Actuated Green, G (s)	62.5	48.2	21.8	82.8	68.5		21.8		27.8		21.8	
Effective Green, g (s)	62.5	48.2	21.8	82.8	68.5		21.8		27.8		21.8	
Actuated g/C Ratio	0.50	0.39	0.17	0.66	0.55		0.17		0.22		0.17	
Clearance Time (s)	6.8	6.8	6.8				6.8				6.8	
Vehicle Extension (s)	3.0	3.0	3.0				3.0				3.0	
Lane Grp Cap (vph)	250	1291	254	461	1825		184		323		271	
v/s Ratio Prot	0.05	0.32		c0.13	c0.43				0.04			
v/s Ratio Perm	0.16		0.01	0.27			c0.12				0.10	
v/c Ratio	0.42	0.84	0.04	0.60	0.78		0.72		0.16		0.60	
Uniform Delay, d1	22.4	34.9	42.9	21.1	22.3		48.7		39.2		47.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	1.1	6.6	0.1	2.2	2.2		12.5		0.2		3.5	
Delay (s)	23.6	41.5	43.0	23.3	24.6		61.2		39.4		51.1	
Level of Service	C	D	D	C	C		E		D		D	
Approach Delay (s)		40.0			24.4			47.4			51.1	
Approach LOS		D			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	31.2	
Intersection Capacity Utilization	86.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
Future Volume (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1483	846	4811	1483	1642	3316	756
Flt Permitted	0.950			0.756			0.950			0.950		
Satd. Flow (perm)	838	890	741	2537	890	1453	841	4811	1447	1637	3316	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			249			343			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Adj. Flow (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

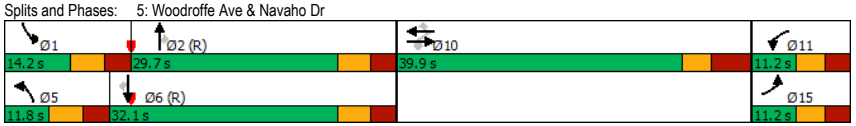
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.7	29.7	14.2	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	31.3%	31.3%	14.9%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	23.1	23.1	7.4	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	5.9	11.0	11.0	23.4		11.0	5.5	31.8	31.8	14.0	50.3	50.3
Actuated g/C Ratio	0.06	0.12	0.12	0.25		0.12	0.06	0.33	0.33	0.15	0.53	0.53
v/c Ratio	0.15	0.03	0.05	0.64		0.49	0.02	0.65	0.48	0.56	0.60	0.01
Control Delay	49.1	30.3	0.3	32.5		5.6	44.0	30.7	5.8	49.9	20.9	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	30.3	0.3	32.5		5.6	44.0	30.7	5.8	49.9	20.9	0.0
LOS	D	C	A	C		A	D	C	A	D	C	A
Approach Delay		21.2			24.5			24.6			24.1	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	1.4	0.5	0.0	35.1		0.0	0.2	59.1	0.0	22.7	58.3	0.0
Queue Length 95th (m)	6.1	2.3	0.0	35.3		6.1	1.8	#93.0	21.7	#63.1	#161.6	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	52	299	376	700		654	48	1611	712	242	1754	480
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01	0.03	0.64		0.29	0.02	0.65	0.48	0.56	0.60	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 24.4		Intersection LOS: C	

Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
Future Volume (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1453	846	4811	1447	1642	3316	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2542		1453	846	4811	1447	1642	3316	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	3	12	449	0	191	1	1055	343	135	1053	7
RTOR Reduction (vph)	0	0	11	0	0	169	0	0	228	0	0	4
Lane Group Flow (vph)	8	3	1	449	0	22	1	1055	115	135	1053	3
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	10.6	11.0	11.0	21.6		11.0	1.0	31.9	31.9	14.0	44.9	44.9
Effective Green, g (s)	10.6	11.0	11.0	21.6		11.0	1.0	31.9	31.9	14.0	44.9	44.9
Actuated g/C Ratio	0.11	0.12	0.12	0.23		0.12	0.01	0.34	0.34	0.15	0.47	0.47
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	94	103	85	650		168	8	1615	485	241	1567	342
v/s Ratio Prot	0.01	0.00		c0.08			0.00	0.22		c0.08	c0.32	
v/s Ratio Perm			0.00	c0.08		0.02			0.08			0.00
v/c Ratio	0.09	0.03	0.02	0.69		0.13	0.12	0.65	0.24	0.56	0.67	0.01
Uniform Delay, d1	37.9	37.3	37.2	33.1		37.7	46.6	26.8	22.8	37.6	19.4	13.3
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1	0.1	3.2		0.4	6.9	2.1	1.2	3.0	2.3	0.1
Delay (s)	38.2	37.4	37.3	36.3		38.1	53.5	28.9	23.9	40.6	21.7	13.3
Level of Service	D	D	D	D		D	D	C	C	D	C	B
Approach Delay (s)		37.6			36.8			27.7			23.8	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	74.7%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

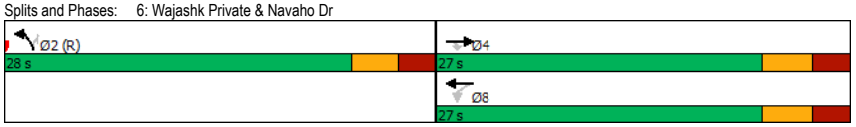
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	190	99	34	309	136	22
Future Volume (vph)	190	99	34	309	136	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1469	1691	1780	1610	1513
Flt Permitted			0.638		0.950	
Satd. Flow (perm)	1762	1439	1128	1780	1598	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		99				22
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Adj. Flow (vph)	190	99	34	309	136	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	190	99	34	309	136	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	27.8	27.8
Total Split (s)	27.0	27.0	27.0	27.0	28.0	28.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%
Maximum Green (s)	21.2	21.2	21.2	21.2	22.5	22.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	2	2	5	5
Act Effct Green (s)	14.8	14.8	14.8	14.8	28.9	28.9
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
v/c Ratio	0.40	0.22	0.11	0.65	0.16	0.03
Control Delay	17.9	4.6	13.9	23.5	8.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.9	4.6	13.9	23.5	8.9	4.5
LOS	B	A	B	C	A	A
Approach Delay	13.3			22.6	8.3	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.4	0.0	2.5	27.1	6.3	0.0
Queue Length 95th (m)	25.0	7.1	6.6	40.5	17.1	3.1
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	679	615	434	686	845	778
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.08	0.45	0.16	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 16.3		Intersection LOS: B	

Intersection Capacity Utilization 48.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	190	99	34	309	136	22
Future Volume (vph)	190	99	34	309	136	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1439	1680	1780	1610	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1439	1128	1780	1610	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	190	99	34	309	136	22
RTOR Reduction (vph)	0	72	0	0	0	10
Lane Group Flow (vph)	190	27	34	309	136	12
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	14.8	14.8	14.8	14.8	28.9	28.9
Effective Green, g (s)	14.8	14.8	14.8	14.8	28.9	28.9
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	474	387	303	478	845	768
v/s Ratio Prot	0.11			c0.17	c0.08	
v/s Ratio Perm		0.02	0.03			0.01
v/c Ratio	0.40	0.07	0.11	0.65	0.16	0.02
Uniform Delay, d1	16.5	15.0	15.1	17.8	6.8	6.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2	3.0	0.4	0.0
Delay (s)	17.0	15.0	15.3	20.8	7.2	6.3
Level of Service	B	B	B	C	A	A
Approach Delay (s)	16.3			20.2	7.0	
Approach LOS	B			C	A	

Intersection Summary				
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.32			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	161	1200	54	0	1195
Future Volume (vph)	0	161	1200	54	0	1195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.994			
Flt Protected						
Satd. Flow (prot)	0	1524	4740	0	0	4718
Flt Permitted						
Satd. Flow (perm)	0	1524	4740	0	0	4718
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	161	1200	54	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	161	1254	0	0	1195
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

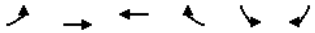
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	161	1200	54	0	1195
Future Volume (Veh/h)	0	161	1200	54	0	1195
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	161	1200	54	0	1195
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.90	0.82			0.82	
vC, conflicting volume	1645	447			1264	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	25	0			573	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	82			100	
cM capacity (veh/h)	880	879			824	

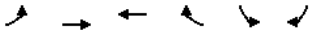
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	161	480	480	294	398	398	398
Volume Left	0	0	0	0	0	0	0
Volume Right	161	0	0	54	0	0	0
cSH	879	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.18	0.28	0.28	0.17	0.23	0.23	0.23
Queue Length 95th (m)	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.0	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	44.5%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	217	264	394	51	25	246
Future Volume (vph)	217	264	394	51	25	246
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.983		0.877	
Flt Protected	0.950				0.995	
Satd. Flow (prot)	1691	1762	3295	0	1553	0
Flt Permitted	0.950				0.995	
Satd. Flow (perm)	1691	1762	3295	0	1553	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	217	264	394	51	25	246
Shared Lane Traffic (%)						
Lane Group Flow (vph)	217	264	445	0	271	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	217	264	394	51	25	246
Future Volume (Veh/h)	217	264	394	51	25	246
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	217	264	394	51	25	246
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	455				1138	242
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	455				1138	242
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				84	67
cM capacity (veh/h)	1106				156	750

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	217	264	263	182	271
Volume Left	217	0	0	0	25
Volume Right	0	0	0	51	246
cSH	1106	1700	1700	1700	555
Volume to Capacity	0.20	0.16	0.15	0.11	0.49
Queue Length 95th (m)	5.5	0.0	0.0	0.0	20.2
Control Delay (s)	9.0	0.0	0.0	0.0	17.5
Lane LOS	A				C
Approach Delay (s)	4.1		0.0		17.5
Approach LOS					C

Intersection Summary			
Average Delay		5.6	
Intersection Capacity Utilization		54.5%	ICU Level of Service A
Analysis Period (min)		15	

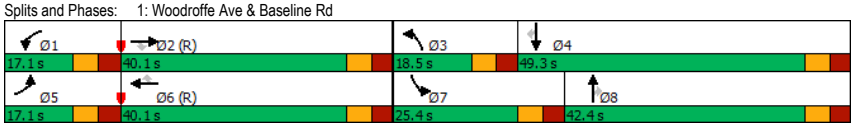
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	706	74	128	614	381	230	967	116	484	894	217
Future Volume (vph)	192	706	74	128	614	381	230	967	116	484	894	217
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3281	3382	1513	1691	3382	1498	3281	3316	1498	3281	3316	1498
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3254	3382	1478	1684	3382	1463	3261	3316	1462	3270	3316	1462
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			232			155			155
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Adj. Flow (vph)	192	706	74	128	614	381	230	967	116	484	894	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	706	74	128	614	381	230	967	116	484	894	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	17.1	40.1	40.1	17.1	40.1	40.1	18.5	42.4	42.4	25.4	49.3	49.3
Total Split (%)	13.7%	32.1%	32.1%	13.7%	32.1%	32.1%	14.8%	33.9%	33.9%	20.3%	39.4%	39.4%
Maximum Green (s)	10.0	33.3	33.3	10.0	33.3	33.3	11.6	35.6	35.6	18.5	42.5	42.5
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	9.9	33.3	33.3	10.0	33.4	33.4	11.4	35.6	35.6	18.5	42.7	42.7
Actuated g/C Ratio	0.08	0.27	0.27	0.08	0.27	0.27	0.09	0.28	0.28	0.15	0.34	0.34
v/c Ratio	0.74	0.78	0.15	0.95	0.68	0.68	0.77	1.02	0.22	1.00	0.79	0.36
Control Delay	74.1	49.7	0.6	122.0	45.5	22.4	73.3	79.7	2.9	93.6	43.2	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.1	49.7	0.6	122.0	45.5	22.4	73.3	79.7	2.9	93.6	43.2	11.3
LOS	E	D	A	F	D	C	E	E	A	F	D	B
Approach Delay		50.8			46.4			71.8			54.1	
Approach LOS		D			D			E			D	
Queue Length 50th (m)	24.1	84.8	0.0	31.9	71.4	32.5	28.9	~133.1	0.0	62.1	104.0	10.5
Queue Length 95th (m)	#40.0	107.6	0.0	#70.2	91.7	68.5	#46.2	#173.7	6.3	#96.7	129.2	29.8
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	262	900	507	135	904	560	304	944	527	485	1133	601
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.78	0.15	0.95	0.68	0.68	0.76	1.02	0.22	1.00	0.79	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 56.4		Intersection LOS: E	

Intersection Capacity Utilization 100.8% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	706	74	128	614	381	230	967	116	484	894	217
Future Volume (vph)	192	706	74	128	614	381	230	967	116	484	894	217
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3281	3382	1478	1691	3382	1463	3281	3316	1462	3281	3316	1462
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	192	706	74	128	614	381	230	967	116	484	894	217
RTOR Reduction (vph)	0	0	54	0	0	170	0	0	83	0	0	102
Lane Group Flow (vph)	192	706	20	128	614	211	230	967	33	484	894	115
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.9	33.3	33.3	10.0	33.4	33.4	11.4	35.6	35.6	18.5	42.7	42.7
Effective Green, g (s)	9.9	33.3	33.3	10.0	33.4	33.4	11.4	35.6	35.6	18.5	42.7	42.7
Actuated g/C Ratio	0.08	0.27	0.27	0.08	0.27	0.27	0.09	0.28	0.28	0.15	0.34	0.34
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	259	900	393	135	903	390	299	944	416	485	1132	499
v/s Ratio Prot	0.06	c0.21		c0.08	0.18		0.07	c0.29		c0.15	c0.27	
v/s Ratio Perm			0.01			0.14			0.02			0.08
v/c Ratio	0.74	0.78	0.05	0.95	0.68	0.54	0.77	1.02	0.08	1.00	0.79	0.23
Uniform Delay, d1	56.3	42.5	34.1	57.2	41.0	39.2	55.5	44.7	32.7	53.2	37.1	29.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.9	6.8	0.2	61.0	4.1	5.3	11.3	35.6	0.1	40.0	3.7	0.2
Delay (s)	67.2	49.3	34.3	118.2	45.1	44.5	66.8	80.3	32.8	93.3	40.8	29.6
Level of Service	E	D	C	F	D	D	E	F	C	F	D	C
Approach Delay (s)		51.7			53.3			73.8			55.2	
Approach LOS		D			D			E			E	

Intersection Summary					
HCM 2000 Control Delay	59.0	HCM 2000 Level of Service		E	
HCM 2000 Volume to Capacity ratio	0.94				
Actuated Cycle Length (s)	125.0	Sum of lost time (s)		27.6	
Intersection Capacity Utilization	100.8%	ICU Level of Service		G	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1000	306	0	1123	0	94
Future Volume (vph)	1000	306	0	1123	0	94
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.965					0.865
Flt Protected						
Satd. Flow (prot)	4654	0	0	3349	0	1540
Flt Permitted						
Satd. Flow (perm)	4654	0	0	3349	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	1000	306	0	1123	0	94
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1306	0	0	1123	0	94
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1000	306	0	1123	0	94
Future Volume (Veh/h)	1000	306	0	1123	0	94
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1000	306	0	1123	0	94
Pedestrians	10			10	10	
Lane Width (m)	3.5			3.5	3.5	
Walking Speed (m/s)	1.0			1.0	1.0	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.84		0.90	0.84
vC, conflicting volume			1316		1734	506
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			690		492	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	89
cM capacity (veh/h)			756		450	894

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	400	400	506	562	562	94
Volume Left	0	0	0	0	0	0
Volume Right	0	0	306	0	0	94
cSH	1700	1700	1700	1700	1700	894
Volume to Capacity	0.24	0.24	0.30	0.33	0.33	0.11
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	2.7
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.5
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.5
Approach LOS						A

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	45.6%	ICU Level of Service	A	
Analysis Period (min)	15			

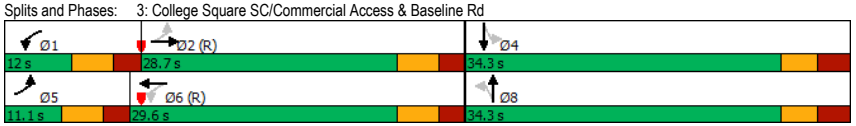
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1007	82	200	948	0	164	3	153	9	3	11
Future Volume (vph)	5	1007	82	200	948	0	164	3	153	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00			0.99	0.98			0.99	
Frt		0.989						0.853			0.935	
Flt Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1691	4749	0	1691	3349	0	1674	1489	0	0	1617	0
Flt Permitted	0.302			0.163			0.742				0.873	
Satd. Flow (perm)	536	4749	0	289	3349	0	1298	1489	0	0	1435	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18						153			11	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	1007	82	200	948	0	164	3	153	9	3	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1089	0	200	948	0	164	156	0	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.1	28.7		12.0	29.6		34.3	34.3		34.3	34.3	
Total Split (%)	14.8%	38.3%		16.0%	39.5%		45.7%	45.7%		45.7%	45.7%	
Maximum Green (s)	5.0	22.7		5.9	23.6		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	36.0	30.6		45.4	44.3		16.2	16.2			16.2	
Actuated g/C Ratio	0.48	0.41		0.61	0.59		0.22	0.22			0.22	
v/c Ratio	0.01	0.56		0.56	0.48		0.59	0.35			0.07	
Control Delay	9.6	19.4		19.2	13.4		33.4	6.1			13.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	9.6	19.4		19.2	13.4		33.4	6.1			13.7	
LOS	A	B		B	B		C	A			B	
Approach Delay		19.4			14.4			20.1			13.7	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.3	41.4		10.2	31.0		21.5	0.3			1.4	
Queue Length 95th (m)	2.0	64.3		#50.5	#101.3		30.8	10.8			5.3	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	340	1949		358	1978		484	651			542	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.56		0.56	0.48		0.34	0.24			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 17.2		Intersection LOS: B	

Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



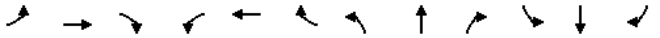
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1007	82	200	948	0	164	3	153	9	3	11
Future Volume (vph)	5	1007	82	200	948	0	164	3	153	9	3	11
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1689	4747		1690	3349		1661	1489			1614	
Flt Permitted	0.30	1.00		0.16	1.00		0.74	1.00			0.87	
Satd. Flow (perm)	537	4747		290	3349		1298	1489			1436	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	1007	82	200	948	0	164	3	153	9	3	11
RTOR Reduction (vph)	0	11	0	0	0	0	0	120	0	0	9	0
Lane Group Flow (vph)	5	1078	0	200	948	0	164	36	0	0	14	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	31.6	30.6		46.5	39.4		16.2	16.2			16.2	
Effective Green, g (s)	31.6	30.6		46.5	39.4		16.2	16.2			16.2	
Actuated g/C Ratio	0.42	0.41		0.62	0.53		0.22	0.22			0.22	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	241	1936		362	1759		280	321			310	
v/s Ratio Prot	0.00	0.23		c0.07	c0.28			0.02				
v/s Ratio Perm	0.01			c0.27			c0.13				0.01	
v/c Ratio	0.02	0.56		0.55	0.54		0.59	0.11			0.05	
Uniform Delay, d1	12.6	17.0		8.1	11.8		26.4	23.6			23.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.0	1.2		1.8	1.2		3.1	0.2			0.1	
Delay (s)	12.6	18.2		9.9	13.0		29.5	23.8			23.3	
Level of Service	B	B		A	B		C	C			C	
Approach Delay (s)		18.1			12.4			26.7			23.3	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	18.4	
Intersection Capacity Utilization	67.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	943	59	237	902	41	180	0	228	83	3	66
Future Volume (vph)	117	943	59	237	902	41	180	0	228	83	3	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99				0.99	
Frt			0.850		0.993				0.850		0.941	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1674	3382	1455	1642	3314	0	1674	0	1483	0	1602	0
Flt Permitted	0.139			0.139			0.669				0.973	
Satd. Flow (perm)	244	3382	1408	239	3314	0	1172	0	1483	0	1596	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			154		5				228		51	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Adj. Flow (vph)	117	943	59	237	902	41	180	0	228	83	3	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	943	59	237	943	0	180	0	228	0	152	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(m)	
Link Offset(m)	
Crosswalk Width(m)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (k/h)	
Number of Detectors	
Detector Template	
Leading Detector (m)	
Trailing Detector (m)	
Detector 1 Position(m)	
Detector 1 Size(m)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(m)	
Detector 2 Size(m)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Detector Phase	12	2	4	12	6		4		12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	10.9	30.8	42.6	10.9	30.8		42.6		10.9	42.6	42.6	
Total Split (s)	11.0	31.4	42.6	11.0	31.4		42.6		11.0	42.6	42.6	
Total Split (%)	12.2%	34.9%	47.3%	12.2%	34.9%		47.3%		12.2%	47.3%	47.3%	
Maximum Green (s)	5.1	25.6	36.0	5.1	25.6		36.0		5.1	36.0	36.0	
Yellow Time (s)	3.7	3.7	3.3	3.7	3.7		3.3		3.7	3.3	3.3	
All-Red Time (s)	2.2	2.1	3.3	2.2	2.1		3.3		2.2	3.3	3.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Lost Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lead/Lag			Lag				Lag			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	None	C-Max	None	None	C-Max		None		None	None	None	
Walk Time (s)		7.0	7.0		7.0		7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0		18.0		29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5		5		5			5	5	
Act Effct Green (s)	50.7	30.9	20.9	50.7	30.9		20.9		19.9		20.9	
Actuated g/C Ratio	0.56	0.34	0.23	0.56	0.34		0.23		0.22		0.23	
v/c Ratio	0.26	0.81	0.13	0.53	0.83		0.66		0.45		0.37	
Control Delay	11.5	34.8	0.6	22.4	35.5		41.2		8.4		19.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	11.5	34.8	0.6	22.4	35.5		41.2		8.4		19.1	
LOS	B	C	A	C	D		D		A		B	
Approach Delay		30.6			32.9			22.9			19.1	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	6.8	73.4	0.0	17.6	73.6		29.1		0.0		14.8	
Queue Length 95th (m)	21.8	#125.2	0.0	#71.9	#127.2		38.7		20.5		23.4	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	453	1159	655	444	1139		468		505		669	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.26	0.81	0.09	0.53	0.83		0.38		0.45		0.23	

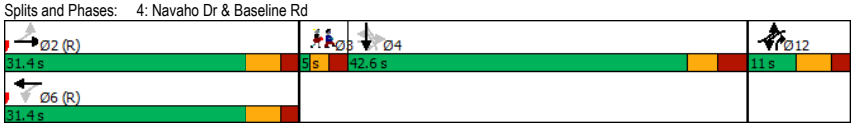
Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 29.8	Intersection LOS: C

Lane Group	Ø3
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	5.0
Total Split (s)	5.0
Total Split (%)	6%
Maximum Green (s)	1.0
Yellow Time (s)	2.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection Capacity Utilization 76.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	943	59	237	902	41	180	0	228	83	3	66
Future Volume (vph)	117	943	59	237	902	41	180	0	228	83	3	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1674	3382	1408	1641	3316		1665		1483		1597	
Flt Permitted	0.14	1.00	1.00	0.14	1.00		0.67		1.00		0.97	
Satd. Flow (perm)	246	3382	1408	241	3316		1172		1483		1597	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	117	943	59	237	902	41	180	0	228	83	3	66
RTOR Reduction (vph)	0	0	45	0	3	0	0	0	178	0	39	0
Lane Group Flow (vph)	117	943	14	237	940	0	180	0	50	0	113	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	0%	4%	3%	1%	5%	1%	0%	2%	0%	0%	2%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		Over	Perm	NA	
Protected Phases	12	2		12	6				12		4	
Permitted Phases	2		4	6			4			4		
Actuated Green, G (s)	50.8	30.9	20.9	50.8	30.9		20.9		19.9		20.9	
Effective Green, g (s)	50.8	30.9	20.9	50.8	30.9		20.9		19.9		20.9	
Actuated g/C Ratio	0.56	0.34	0.23	0.56	0.34		0.23		0.22		0.23	
Clearance Time (s)	5.9	5.8	6.6	5.9	5.8		6.6		5.9		6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)	454	1161	326	445	1138		272		327		370	
v/s Ratio Prot	0.06	0.28		c0.12	c0.28				0.03			
v/s Ratio Perm	0.09		0.01	0.18			c0.15				0.07	
v/c Ratio	0.26	0.81	0.04	0.53	0.83		0.66		0.15		0.30	
Uniform Delay, d1	11.2	26.9	26.8	12.8	27.1		31.3		28.3		28.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	0.3	6.2	0.1	1.2	6.9		5.9		0.2		0.5	
Delay (s)	11.5	33.2	26.8	14.0	34.0		37.3		28.5		29.0	
Level of Service	B	C	C	B	C		D		C		C	
Approach Delay (s)		30.6			30.0			32.4			29.0	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.3	
Intersection Capacity Utilization	76.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	2	414	0	182	1	959	351	126	956	14
Future Volume (vph)	11	1	2	414	0	182	1	959	351	126	956	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1498	846	4718	1498	1674	3283	756
Flt Permitted	0.950			0.757			0.950			0.950		
Satd. Flow (perm)	838	890	741	2540	890	1467	841	4718	1461	1669	3283	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			249			351			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Adj. Flow (vph)	11	1	2	414	0	182	1	959	351	126	956	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1	2	414	0	182	1	959	351	126	956	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

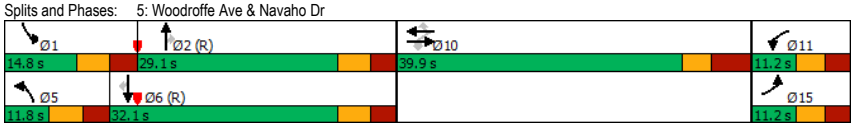
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.1	29.1	14.8	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	30.6%	30.6%	15.6%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	22.5	22.5	8.0	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	6.1	10.9	10.9	22.4		10.9	5.5	34.8	34.8	12.0	51.2	51.2
Actuated g/C Ratio	0.06	0.11	0.11	0.24		0.11	0.06	0.37	0.37	0.13	0.54	0.54
v/c Ratio	0.21	0.01	0.01	0.62		0.47	0.02	0.56	0.46	0.60	0.54	0.03
Control Delay	51.5	29.0	0.0	32.5		5.0	44.0	27.4	5.5	53.3	19.5	0.1
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	29.0	0.0	32.5		5.0	44.0	27.4	5.5	53.3	19.5	0.1
LOS	D	C	A	C		A	D	C	A	D	B	A
Approach Delay		42.6			24.1			21.5			23.1	
Approach LOS		D			C			C			C	
Queue Length 50th (m)	2.0	0.2	0.0	32.6		0.0	0.2	50.0	0.0	21.5	49.0	0.0
Queue Length 95th (m)	7.7	1.2	0.0	32.4		4.7	1.8	#82.7	22.0	#56.0	#141.8	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	53	299	376	669		659	48	1727	757	211	1770	486
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.00	0.01	0.62		0.28	0.02	0.56	0.46	0.60	0.54	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 22.7		Intersection LOS: C	

Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	2	414	0	182	1	959	351	126	956	14
Future Volume (vph)	11	1	2	414	0	182	1	959	351	126	956	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1467	846	4718	1461	1674	3283	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2547		1467	846	4718	1461	1674	3283	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1	2	414	0	182	1	959	351	126	956	14
RTOR Reduction (vph)	0	0	2	0	0	161	0	0	222	0	0	7
Lane Group Flow (vph)	11	1	0	414	0	21	1	959	129	126	956	7
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	1%	100%	3%	1%	1%	3%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	9.8	10.9	10.9	20.7		10.9	1.0	34.8	34.8	12.0	45.8	45.8
Effective Green, g (s)	9.8	10.9	10.9	20.7		10.9	1.0	34.8	34.8	12.0	45.8	45.8
Actuated g/C Ratio	0.10	0.11	0.11	0.22		0.11	0.01	0.37	0.37	0.13	0.48	0.48
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	87	102	85	621		168	8	1728	535	211	1582	349
v/s Ratio Prot	0.01	0.00		c0.07			0.00	0.20		c0.08	c0.29	
v/s Ratio Perm			0.00	c0.08		0.01			0.09			0.01
v/c Ratio	0.13	0.01	0.00	0.67		0.12	0.12	0.55	0.24	0.60	0.60	0.02
Uniform Delay, d1	38.7	37.3	37.2	33.6		37.8	46.6	23.9	20.9	39.2	18.0	12.9
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.0	0.0	2.7		0.3	6.9	1.3	1.1	4.5	1.7	0.1
Delay (s)	39.4	37.3	37.2	36.3		38.1	53.5	25.2	22.0	43.7	19.7	13.0
Level of Service	D	D	D	D		D	D	C	C	D	B	B
Approach Delay (s)		38.9			36.9			24.4			22.4	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.66				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	71.1%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

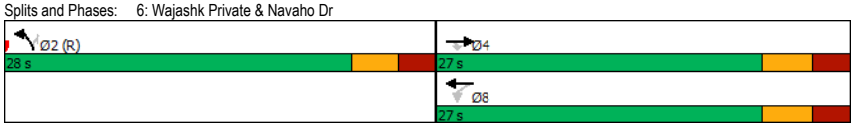
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	185	63	16	254	47	12
Future Volume (vph)	185	63	16	254	47	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1441	1691	1780	1496	1513
Flt Permitted			0.641		0.950	
Satd. Flow (perm)	1762	1412	1134	1780	1485	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		63				12
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Adj. Flow (vph)	185	63	16	254	47	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	185	63	16	254	47	12
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	25.8	25.8	25.8	25.8	26.5	26.5
Total Split (s)	27.0	27.0	27.0	27.0	28.0	28.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%
Maximum Green (s)	21.2	21.2	21.2	21.2	22.5	22.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	0	0	5	5
Act Effct Green (s)	13.5	13.5	13.5	13.5	30.2	30.2
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.55	0.55
v/c Ratio	0.43	0.16	0.06	0.58	0.06	0.01
Control Delay	19.4	5.3	13.8	22.9	7.8	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	5.3	13.8	22.9	7.8	4.9
LOS	B	A	B	C	A	A
Approach Delay	15.8			22.4	7.2	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.7	0.0	1.2	22.4	1.9	0.0
Queue Length 95th (m)	24.8	5.8	4.0	33.6	7.3	2.2
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	679	582	437	686	822	809
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.11	0.04	0.37	0.06	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 18.0		Intersection LOS: B	

Intersection Capacity Utilization 41.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	185	63	16	254	47	12
Future Volume (vph)	185	63	16	254	47	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1412	1680	1780	1496	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1412	1133	1780	1496	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	185	63	16	254	47	12
RTOR Reduction (vph)	0	48	0	0	0	5
Lane Group Flow (vph)	185	15	16	254	47	7
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	5%	0%	0%	13%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	13.5	13.5	13.5	13.5	30.2	30.2
Effective Green, g (s)	13.5	13.5	13.5	13.5	30.2	30.2
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.55	0.55
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	432	346	278	436	821	803
v/s Ratio Prot	0.10			c0.14	c0.03	
v/s Ratio Perm		0.01	0.01			0.00
v/c Ratio	0.43	0.04	0.06	0.58	0.06	0.01
Uniform Delay, d1	17.5	15.8	15.9	18.3	5.8	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.1	2.0	0.1	0.0
Delay (s)	18.2	15.9	16.0	20.3	5.9	5.6
Level of Service	B	B	B	C	A	A
Approach Delay (s)	17.6			20.0	5.9	
Approach LOS	B			B	A	

Intersection Summary				
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.22			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3	
Intersection Capacity Utilization	41.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

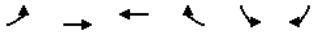
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	242	1071	81	0	1096
Future Volume (vph)	0	242	1071	81	0	1096
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.989			
Flt Protected						
Satd. Flow (prot)	0	1540	4718	0	0	4764
Flt Permitted						
Satd. Flow (perm)	0	1540	4718	0	0	4764
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	2%	0%	0%	2%
Adj. Flow (vph)	0	242	1071	81	0	1096
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	242	1152	0	0	1096
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	242	1071	81	0	1096
Future Volume (Veh/h)	0	242	1071	81	0	1096
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	242	1071	81	0	1096
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.90	0.85			0.85	
vC, conflicting volume	1497	418			1162	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	28	0			580	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	73			100	
cM capacity (veh/h)	868	911			846	

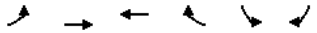
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	242	428	428	295	365	365	365
Volume Left	0	0	0	0	0	0	0
Volume Right	242	0	0	81	0	0	0
cSH	911	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.27	0.25	0.25	0.17	0.21	0.21	0.21
Queue Length 95th (m)	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.4	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	47.3%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	259	219	265	36	29	331
Future Volume (vph)	259	219	265	36	29	331
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.982		0.876	
Flt Protected	0.950				0.996	
Satd. Flow (prot)	1691	1745	3236	0	1553	0
Flt Permitted	0.950				0.996	
Satd. Flow (perm)	1691	1745	3236	0	1553	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	3%	0%	0%	0%
Adj. Flow (vph)	259	219	265	36	29	331
Shared Lane Traffic (%)						
Lane Group Flow (vph)	259	219	301	0	360	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	259	219	265	36	29	331
Future Volume (Veh/h)	259	219	265	36	29	331
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	259	219	265	36	29	331
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	311				1040	170
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	311				1040	170
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	79				84	60
cM capacity (veh/h)	1249				178	833

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	259	219	177	124	360
Volume Left	259	0	0	0	29
Volume Right	0	0	0	36	331
cSH	1249	1700	1700	1700	643
Volume to Capacity	0.21	0.13	0.10	0.07	0.56
Queue Length 95th (m)	5.9	0.0	0.0	0.0	26.4
Control Delay (s)	8.6	0.0	0.0	0.0	17.5
Lane LOS	A				C
Approach Delay (s)	4.7		0.0		17.5
Approach LOS					C

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

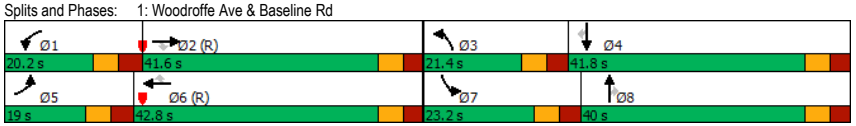
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	791	178	163	953	469	356	894	115	436	854	333
Future Volume (vph)	315	791	178	163	953	469	356	894	115	436	854	333
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		30.0	120.0		100.0	125.0		0.0	100.0		40.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	0.99		0.98	1.00		0.98	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3248	3349	1513	1674	3349	1483	3248	3221	1513	3216	3221	1483
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3232	3349	1478	1668	3349	1449	3227	3221	1476	3205	3221	1447
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			272			155			186
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		664.1			87.4			169.8			401.8	
Travel Time (s)		39.8			5.2			12.2			28.9	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Adj. Flow (vph)	315	791	178	163	953	469	356	894	115	436	854	333
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	791	178	163	953	469	356	894	115	436	854	333
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			7.0			7.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.1	39.8	39.8	12.1	39.8	39.8	11.9	36.8	36.8	11.9	36.8	36.8
Total Split (s)	19.0	41.6	41.6	20.2	42.8	42.8	21.4	40.0	40.0	23.2	41.8	41.8
Total Split (%)	15.2%	33.3%	33.3%	16.2%	34.2%	34.2%	17.1%	32.0%	32.0%	18.6%	33.4%	33.4%
Maximum Green (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.4	3.1	3.1	3.4	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		26.0	26.0		26.0	26.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		10	10		10	10		10	10		0	0
Act Effct Green (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
v/c Ratio	1.02	0.85	0.34	0.93	0.99	0.77	0.95	1.05	0.23	1.04	0.95	0.62
Control Delay	111.7	52.5	9.6	107.7	70.8	26.0	89.7	87.9	3.1	107.3	64.1	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.7	52.5	9.6	107.7	70.8	26.0	89.7	87.9	3.1	107.3	64.1	22.3
LOS	F	D	A	F	E	C	F	F	A	F	E	C
Approach Delay		61.1			61.3			81.2			67.1	
Approach LOS		E			E			F			E	
Queue Length 50th (m)	~42.2	96.8	4.2	40.4	122.7	45.9	45.5	~125.4	0.0	~59.6	108.5	30.8
Queue Length 95th (m)	#71.2	#121.9	21.7	#81.9	#167.0	89.9	#74.4	#165.2	6.3	#91.7	#147.9	63.0
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	309	932	523	175	964	610	376	855	505	419	901	539
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.85	0.34	0.93	0.99	0.77	0.95	1.05	0.23	1.04	0.95	0.62

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 67.5		Intersection LOS: E	

Intersection Capacity Utilization 99.5% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Woodroffe Ave & Baseline Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	315	791	178	163	953	469	356	894	115	436	854	333
v/c Ratio	1.02	0.85	0.34	0.93	0.99	0.77	0.95	1.05	0.23	1.04	0.95	0.62
Control Delay	111.7	52.5	9.6	107.7	70.8	26.0	89.7	87.9	3.1	107.3	64.1	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	111.7	52.5	9.6	107.7	70.8	26.0	89.7	87.9	3.1	107.3	64.1	22.3
Queue Length 50th (m)	~42.2	96.8	4.2	40.4	122.7	45.9	45.5	~125.4	0.0	~59.6	108.5	30.8
Queue Length 95th (m)	#71.2	#121.9	21.7	#81.9	#167.0	89.9	#74.4	#165.2	6.3	#91.7	#147.9	63.0
Internal Link Dist (m)		640.1			63.4			145.8			377.8	
Turn Bay Length (m)	60.0		30.0	120.0		100.0	125.0			100.0		40.0
Base Capacity (vph)	309	932	523	175	964	610	376	855	505	419	901	539
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.85	0.34	0.93	0.99	0.77	0.95	1.05	0.23	1.04	0.95	0.62

Intersection Summary
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	791	178	163	953	469	356	894	115	436	854	333
Future Volume (vph)	315	791	178	163	953	469	356	894	115	436	854	333
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3248	3349	1478	1674	3349	1449	3248	3221	1476	3216	3221	1447
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	315	791	178	163	953	469	356	894	115	436	854	333
RTOR Reduction (vph)	0	0	112	0	0	194	0	0	84	0	0	134
Lane Group Flow (vph)	315	791	66	163	953	275	356	894	31	436	854	199
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	1%	5%	0%	2%	5%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Effective Green, g (s)	11.9	34.8	34.8	13.1	36.0	36.0	14.5	33.2	33.2	16.3	35.0	35.0
Actuated g/C Ratio	0.10	0.28	0.28	0.10	0.29	0.29	0.12	0.27	0.27	0.13	0.28	0.28
Clearance Time (s)	7.1	6.8	6.8	7.1	6.8	6.8	6.9	6.8	6.8	6.9	6.8	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	309	932	411	175	964	417	376	855	392	419	901	405
v/s Ratio Prot	0.10	0.24		c0.10	c0.28		0.11	c0.28		c0.14	0.27	
v/s Ratio Perm			0.04			0.19			0.02			0.14
v/c Ratio	1.02	0.85	0.16	0.93	0.99	0.66	0.95	1.05	0.08	1.04	0.95	0.49
Uniform Delay, d1	56.5	42.6	34.1	55.5	44.3	39.1	54.9	45.9	34.4	54.4	44.1	37.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	56.2	9.5	0.8	48.3	26.4	8.0	32.6	43.4	0.1	54.9	18.4	0.9
Delay (s)	112.8	52.1	34.9	103.8	70.7	47.1	87.5	89.3	34.5	109.2	62.5	38.5
Level of Service	F	D	C	F	E	D	F	F	C	F	E	D
Approach Delay (s)		64.6			67.1			84.2			70.1	
Approach LOS		E			E			F			E	

Intersection Summary				
HCM 2000 Control Delay	71.4	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.02			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	27.6	
Intersection Capacity Utilization	99.5%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1126	216	0	1585	0	54
Future Volume (vph)	1126	216	0	1585	0	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.976					0.865
Flt Protected						
Satd. Flow (prot)	4703	0	0	3382	0	1540
Flt Permitted						
Satd. Flow (perm)	4703	0	0	3382	0	1540
Link Speed (k/h)	60			60	50	
Link Distance (m)	87.4			126.9	114.2	
Travel Time (s)	5.2			7.6	8.2	
Confl. Peds. (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1126	216	0	1585	0	54
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1342	0	0	1585	0	54
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1126	216	0	1585	0	54
Future Volume (Veh/h)	1126	216	0	1585	0	54
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1126	216	0	1585	0	54
Pedestrians	10			10		
Lane Width (m)	3.5			3.5		
Walking Speed (m/s)	1.0			1.0		
Percent Blockage	1			1		
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	87			127		
pX, platoon unblocked			0.81		0.79	0.81
vC, conflicting volume			1342		2036	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			588		319	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	94
cM capacity (veh/h)			799		513	872

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	450	450	441	792	792	54
Volume Left	0	0	0	0	0	0
Volume Right	0	0	216	0	0	54
cSH	1700	1700	1700	1700	1700	872
Volume to Capacity	0.26	0.26	0.26	0.47	0.47	0.06
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	1.5
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.4
Approach LOS						A

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

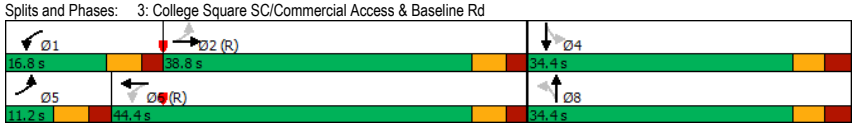
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1126	43	140	1446	9	122	1	101	6	4	17
Future Volume (vph)	11	1126	43	140	1446	9	122	1	101	6	4	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	40.0		0.0	70.0		0.0	40.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00		0.99	0.98			0.98	
Frt		0.994			0.999			0.851			0.915	
Flt Protected	0.950			0.950			0.950				0.989	
Satd. Flow (prot)	1691	4729	0	1691	3345	0	1691	1468	0	0	1589	0
Flt Permitted	0.134			0.174			0.740				0.932	
Satd. Flow (perm)	239	4729	0	309	3345	0	1305	1468	0	0	1495	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			1			101			17	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		126.9			414.7			154.6			49.9	
Travel Time (s)		7.6			24.9			11.1			3.6	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	11	1126	43	140	1446	9	122	1	101	6	4	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1169	0	140	1455	0	122	102	0	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	28.0		11.1	28.0		34.3	34.3		34.3	34.3	
Total Split (s)	11.2	38.8		16.8	44.4		34.4	34.4		34.4	34.4	
Total Split (%)	12.4%	43.1%		18.7%	49.3%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	5.1	32.8		10.7	38.4		28.1	28.1		28.1	28.1	
Yellow Time (s)	3.7	3.7		3.7	3.7		3.3	3.3		3.3	3.3	
All-Red Time (s)	2.4	2.3		2.4	2.3		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		15.0			15.0		21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	53.4	48.0		62.1	60.1		15.4	15.4			15.4	
Actuated g/C Ratio	0.59	0.53		0.69	0.67		0.17	0.17			0.17	
v/c Ratio	0.05	0.46		0.41	0.65		0.55	0.31			0.10	
Control Delay	8.1	15.4		10.0	14.0		41.5	8.2			16.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	8.1	15.4		10.0	14.0		41.5	8.2			16.1	
LOS	A	B		A	B		D	A			B	
Approach Delay		15.3			13.6			26.4			16.1	
Approach LOS		B			B			C			B	
Queue Length 50th (m)	0.5	40.5		6.5	57.2		20.0	0.2			1.5	
Queue Length 95th (m)	3.1	76.1		20.0	#183.2		30.1	10.7			6.9	
Internal Link Dist (m)		102.9			390.7			130.6			25.9	
Turn Bay Length (m)	40.0			70.0			40.0					
Base Capacity (vph)	230	2525		377	2233		407	527			478	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.05	0.46		0.37	0.65		0.30	0.19			0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 15.3		Intersection LOS: B	

Intersection Capacity Utilization 78.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: College Square SC/Commercial Access & Baseline Rd



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	11	1169	140	1455	122	102	27
v/c Ratio	0.05	0.46	0.41	0.65	0.55	0.31	0.10
Control Delay	8.1	15.4	10.0	14.0	41.5	8.2	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.1	15.4	10.0	14.0	41.5	8.2	16.1
Queue Length 50th (m)	0.5	40.5	6.5	57.2	20.0	0.2	1.5
Queue Length 95th (m)	3.1	76.1	20.0	#183.2	30.1	10.7	6.9
Internal Link Dist (m)		102.9		390.7		130.6	25.9
Turn Bay Length (m)	40.0		70.0		40.0		
Base Capacity (vph)	230	2525	377	2233	407	527	478
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.46	0.37	0.65	0.30	0.19	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

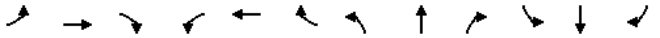
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1126	43	140	1446	9	122	1	101	6	4	17
Future Volume (vph)	11	1126	43	140	1446	9	122	1	101	6	4	17
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Lane Util. Factor	1.00	0.91		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85			0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1691	4731		1690	3345		1675	1469			1586	
Flt Permitted	0.13	1.00		0.17	1.00		0.74	1.00			0.93	
Satd. Flow (perm)	238	4731		309	3345		1304	1469			1495	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	1126	43	140	1446	9	122	1	101	6	4	17
RTOR Reduction (vph)	0	3	0	0	0	0	0	84	0	0	14	0
Lane Group Flow (vph)	11	1166	0	140	1455	0	122	18	0	0	13	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	49.0	48.0		62.3	55.2		15.4	15.4			15.4	
Effective Green, g (s)	49.0	48.0		62.3	55.2		15.4	15.4			15.4	
Actuated g/C Ratio	0.54	0.53		0.69	0.61		0.17	0.17			0.17	
Clearance Time (s)	6.1	6.0		6.1	6.0		6.3	6.3			6.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	145	2523		339	2051		223	251			255	
v/s Ratio Prot	0.00	0.25		c0.04	c0.43			0.01				
v/s Ratio Perm	0.04			0.25			c0.09				0.01	
v/c Ratio	0.08	0.46		0.41	0.71		0.55	0.07			0.05	
Uniform Delay, d1	10.3	13.0		6.1	11.9		34.1	31.3			31.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.2	0.6		0.8	2.1		2.7	0.1			0.1	
Delay (s)	10.5	13.6		6.9	14.0		36.8	31.4			31.3	
Level of Service	B	B		A	B		D	C			C	
Approach Delay (s)		13.6			13.4			34.4			31.3	
Approach LOS		B			B			C			C	

Intersection Summary					
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.69				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		18.4	
Intersection Capacity Utilization	78.5%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	1096	59	278	1385	42	132	0	230	105	3	78
Future Volume (vph)	106	1096	59	278	1385	42	132	0	230	105	3	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	60.0		0.0	125.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		1.00		0.99				0.98	
Frt			0.850		0.996				0.850		0.943	
Flt Protected	0.950			0.950			0.950				0.973	
Satd. Flow (prot)	1691	3349	1513	1642	3333	0	1658	0	1455	0	1566	0
Flt Permitted	0.083			0.121			0.610				0.973	
Satd. Flow (perm)	148	3349	1457	209	3333	0	1057	0	1455	0	1557	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			187		3				230		29	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		414.7			651.9			185.7			181.3	
Travel Time (s)		24.9			39.1			13.4			13.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Adj. Flow (vph)	106	1096	59	278	1385	42	132	0	230	105	3	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	106	1096	59	278	1427	0	132	0	230	0	186	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1		1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	

Lane Group	Ø1	Ø3	Ø6
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (m)			
Storage Lanes			
Taper Length (m)			
Lane Util. Factor			
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (k/h)			
Link Distance (m)			
Travel Time (s)			
Confl. Peds. (#/hr)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(m)			
Link Offset(m)			
Crosswalk Width(m)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (k/h)			
Number of Detectors			
Detector Template			
Leading Detector (m)			
Trailing Detector (m)			
Detector 1 Position(m)			
Detector 1 Size(m)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Detector 2 Position(m)			
Detector 2 Size(m)			
Detector 2 Type			
Detector 2 Channel			
Detector 2 Extend (s)			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Detector Phase	12	2	4	1 12	1 6		4		1 12	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0				5.0			5.0	5.0	
Minimum Split (s)	11.8	31.8	42.8				42.8			42.8	42.8	
Total Split (s)	11.8	45.1	42.8				42.8			42.8	42.8	
Total Split (%)	9.4%	36.1%	34.2%				34.2%			34.2%	34.2%	
Maximum Green (s)	5.0	38.3	36.0				36.0			36.0	36.0	
Yellow Time (s)	3.7	3.7	3.7				3.7			3.7	3.7	
All-Red Time (s)	3.1	3.1	3.1				3.1			3.1	3.1	
Lost Time Adjust (s)	0.0	0.0	0.0				0.0				0.0	
Total Lost Time (s)	6.8	6.8	6.8				6.8				6.8	
Lead/Lag		Lead	Lag				Lag			Lag	Lag	
Lead-Lag Optimize?		Yes	Yes				Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0				3.0			3.0	3.0	
Recall Mode	None	C-Max	None				None			None	None	
Walk Time (s)		7.0	7.0				7.0			7.0	7.0	
Flash Dont Walk (s)		18.0	29.0				29.0			29.0	29.0	
Pedestrian Calls (#/hr)		5	5				5			5	5	
Act Effct Green (s)	62.5	48.2	21.8	82.8	68.5		21.8		27.8		21.8	
Actuated g/C Ratio	0.50	0.39	0.17	0.66	0.55		0.17		0.22		0.17	
v/c Ratio	0.42	0.85	0.14	0.61	0.78		0.72		0.46		0.63	
Control Delay	25.7	43.8	0.7	21.7	27.7		68.1		5.7		48.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay	25.7	43.8	0.7	21.7	27.7		68.1		5.7		48.2	
LOS	C	D	A	C	C		E		A		D	
Approach Delay		40.3			26.7			28.5			48.2	
Approach LOS		D			C			C			D	
Queue Length 50th (m)	11.6	129.1	0.0	19.9	141.1		31.4		0.0		36.7	
Queue Length 95th (m)	32.1	#197.9	0.0	46.0	#207.6		45.9		10.2		51.9	
Internal Link Dist (m)		390.7			627.9			161.7			157.3	
Turn Bay Length (m)	60.0			125.0								
Base Capacity (vph)	250	1291	552	457	1828		304		502		469	
Starvation Cap Reductn	0	0	0	0	0		0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0		0	
Reduced v/c Ratio	0.42	0.85	0.11	0.61	0.78		0.43		0.46		0.40	

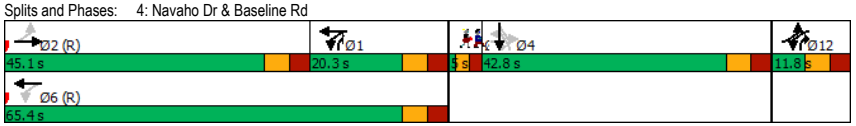
Intersection Summary	
Area Type:	Other
Cycle Length: 125	
Actuated Cycle Length: 125	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 32.9	Intersection LOS: C

Lane Group	Ø1	Ø3	Ø6
Turn Type			
Protected Phases	1	3	6
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	5.0	1.0	5.0
Minimum Split (s)	11.8	5.0	31.8
Total Split (s)	20.3	5.0	65.4
Total Split (%)	16%	4%	52%
Maximum Green (s)	13.5	1.0	58.6
Yellow Time (s)	3.7	2.0	3.7
All-Red Time (s)	3.1	2.0	3.1
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	None	None	C-Max
Walk Time (s)			7.0
Flash Dont Walk (s)			18.0
Pedestrian Calls (#/hr)			5
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (m)			
Queue Length 95th (m)			
Internal Link Dist (m)			
Turn Bay Length (m)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Intersection Capacity Utilization 87.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Navaho Dr & Baseline Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBT
Lane Group Flow (vph)	106	1096	59	278	1427	132	230	186
v/c Ratio	0.42	0.85	0.14	0.61	0.78	0.72	0.46	0.63
Control Delay	25.7	43.8	0.7	21.7	27.7	68.1	5.7	48.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	43.8	0.7	21.7	27.7	68.1	5.7	48.2
Queue Length 50th (m)	11.6	129.1	0.0	19.9	141.1	31.4	0.0	36.7
Queue Length 95th (m)	32.1	#197.9	0.0	46.0	#207.6	45.9	10.2	51.9
Internal Link Dist (m)		390.7			627.9			157.3
Turn Bay Length (m)	60.0			125.0				
Base Capacity (vph)	250	1291	552	457	1828	304	502	469
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.85	0.11	0.61	0.78	0.43	0.46	0.40

Intersection Summary
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	1096	59	278	1385	42	132	0	230	105	3	78
Future Volume (vph)	106	1096	59	278	1385	42	132	0	230	105	3	78
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		6.8		6.8		6.8	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00		1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00		1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		0.99		1.00		0.99	
Frt	1.00	1.00	0.85	1.00	1.00		1.00		0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)	1691	3349	1457	1642	3332		1646		1455		1556	
Flt Permitted	0.08	1.00	1.00	0.12	1.00		0.61		1.00		0.97	
Satd. Flow (perm)	148	3349	1457	209	3332		1057		1455		1556	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	106	1096	59	278	1385	42	132	0	230	105	3	78
RTOR Reduction (vph)	0	0	49	0	1	0	0	0	179	0	24	0
Lane Group Flow (vph)	106	1096	10	278	1426	0	132	0	51	0	162	0
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	2%	0%	4%	2%	33%	4%
Turn Type	pm+pt	NA	custom	pm+pt	NA		D.Pm		pt+ov	Perm	NA	
Protected Phases	12	2		1 12	1 6				1 12		4	
Permitted Phases	2		4	1 6			4			4		
Actuated Green, G (s)	62.5	48.2	21.8	82.8	68.5		21.8		27.8		21.8	
Effective Green, g (s)	62.5	48.2	21.8	82.8	68.5		21.8		27.8		21.8	
Actuated g/C Ratio	0.50	0.39	0.17	0.66	0.55		0.17		0.22		0.17	
Clearance Time (s)	6.8	6.8	6.8				6.8				6.8	
Vehicle Extension (s)	3.0	3.0	3.0				3.0				3.0	
Lane Grp Cap (vph)	250	1291	254	457	1825		184		323		271	
v/s Ratio Prot	0.05	0.33		c0.14	c0.43				0.04			
v/s Ratio Perm	0.16		0.01	0.27			c0.12				0.10	
v/c Ratio	0.42	0.85	0.04	0.61	0.78		0.72		0.16		0.60	
Uniform Delay, d1	22.5	35.1	42.9	22.1	22.3		48.7		39.2		47.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2	1.2	7.1	0.1	2.3	2.2		12.5		0.2		3.5	
Delay (s)	23.6	42.2	43.0	24.4	24.6		61.2		39.4		51.1	
Level of Service	C	D	D	C	C		E		D		D	
Approach Delay (s)		40.6			24.5			47.4			51.1	
Approach LOS		D			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	31.2	
Intersection Capacity Utilization	87.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

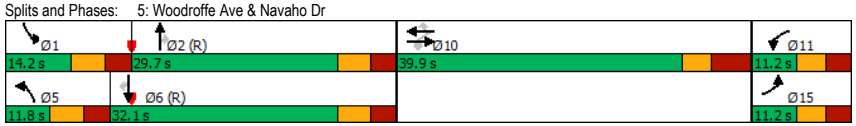
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
Future Volume (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	135.0		0.0	65.0		60.0	80.0		35.0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor	0.99		0.98	0.99		0.98	0.99		0.98	1.00		0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	846	890	756	3216	890	1483	846	4811	1483	1642	3316	756
Flt Permitted	0.950			0.756			0.950			0.950		
Satd. Flow (perm)	838	890	741	2537	890	1453	841	4811	1447	1637	3316	725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			249			343			206
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		197.2			158.9			341.1			140.8	
Travel Time (s)		14.2			11.4			24.6			10.1	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Adj. Flow (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.0			7.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Detector Phase	15	10	10	11	10	10	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	28.6	28.6	11.8	28.6	28.6
Total Split (s)	11.2	39.9	39.9	11.2	39.9	39.9	11.8	29.7	29.7	14.2	32.1	32.1
Total Split (%)	11.8%	42.0%	42.0%	11.8%	42.0%	42.0%	12.4%	31.3%	31.3%	14.9%	33.8%	33.8%
Maximum Green (s)	5.0	32.0	32.0	5.0	32.0	32.0	5.0	23.1	23.1	7.4	25.5	25.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	4.6	4.6	2.9	4.6	4.6	3.1	2.9	2.9	3.1	2.9	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	7.9	7.9	6.2	7.9	7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		25.0	25.0		25.0	25.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	5.9	11.0	11.0	23.5		11.0	5.5	31.7	31.7	14.0	50.2	50.2
Actuated g/C Ratio	0.06	0.12	0.12	0.25		0.12	0.06	0.33	0.33	0.15	0.53	0.53
v/c Ratio	0.15	0.03	0.05	0.64		0.49	0.02	0.66	0.48	0.56	0.60	0.01
Control Delay	49.1	30.3	0.3	32.5		5.6	44.0	30.8	5.8	49.9	21.0	0.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	30.3	0.3	32.5		5.6	44.0	30.8	5.8	49.9	21.0	0.0
LOS	D	C	A	C		A	D	C	A	D	C	A
Approach Delay		21.2			24.5			24.7			24.1	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	1.4	0.5	0.0	35.4		0.0	0.2	59.2	0.0	22.7	58.4	0.0
Queue Length 95th (m)	6.1	2.3	0.0	35.5		6.1	1.8	#93.0	21.7	#63.1	#161.6	0.0
Internal Link Dist (m)		173.2			134.9			317.1			116.8	
Turn Bay Length (m)				135.0			65.0		60.0	80.0		35.0
Base Capacity (vph)	52	299	376	703		654	48	1606	711	242	1751	480
Starvation Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01	0.03	0.64		0.29	0.02	0.66	0.48	0.56	0.60	0.01

Intersection Summary
Area Type: Other
Cycle Length: 95
Actuated Cycle Length: 95
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 24.4 Intersection LOS: C

Intersection Capacity Utilization 74.8% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Woodroffe Ave & Navaho Dr



Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	8	3	12	453	191	1	1055	343	135	1053	7
v/c Ratio	0.15	0.03	0.05	0.64	0.49	0.02	0.66	0.48	0.56	0.60	0.01
Control Delay	49.1	30.3	0.3	32.5	5.6	44.0	30.8	5.8	49.9	21.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	30.3	0.3	32.5	5.6	44.0	30.8	5.8	49.9	21.0	0.0
Queue Length 50th (m)	1.4	0.5	0.0	35.4	0.0	0.2	59.2	0.0	22.7	58.4	0.0
Queue Length 95th (m)	6.1	2.3	0.0	35.5	6.1	1.8	#93.0	21.7	#63.1	#161.6	0.0
Internal Link Dist (m)		173.2					317.1			116.8	
Turn Bay Length (m)				135.0		65.0		60.0	80.0		35.0
Base Capacity (vph)	52	299	376	703	654	48	1606	711	242	1751	480
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.01	0.03	0.64	0.29	0.02	0.66	0.48	0.56	0.60	0.01

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
Future Volume (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Lane Util. Factor	1.00	1.00	1.00	0.97		1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00		0.98	1.00	1.00	0.98	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00		0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	846	890	741	3195		1453	846	4811	1447	1642	3316	725
Flt Permitted	0.95	1.00	1.00	0.76		1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	846	890	741	2542		1453	846	4811	1447	1642	3316	725
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	3	12	453	0	191	1	1055	343	135	1053	7
RTOR Reduction (vph)	0	0	11	0	0	169	0	0	228	0	0	4
Lane Group Flow (vph)	8	3	1	453	0	22	1	1055	115	135	1053	3
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Heavy Vehicles (%)	100%	100%	100%	2%	100%	2%	100%	1%	2%	3%	2%	100%
Turn Type	Prot	NA	Perm	pm+pt		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	15	10		11	10		5	2		1	6	
Permitted Phases			10	10		10			2			6
Actuated Green, G (s)	10.7	11.0	11.0	21.7		11.0	1.0	31.8	31.8	14.0	44.8	44.8
Effective Green, g (s)	10.7	11.0	11.0	21.7		11.0	1.0	31.8	31.8	14.0	44.8	44.8
Actuated g/C Ratio	0.11	0.12	0.12	0.23		0.12	0.01	0.33	0.33	0.15	0.47	0.47
Clearance Time (s)	6.2	7.9	7.9	6.2		7.9	6.8	6.6	6.6	6.8	6.6	6.6
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	95	103	85	654		168	8	1610	484	241	1563	341
v/s Ratio Prot	0.01	0.00		c0.08			0.00	0.22		c0.08	c0.32	
v/s Ratio Perm			0.00	c0.08		0.02			0.08			0.00
v/c Ratio	0.08	0.03	0.02	0.69		0.13	0.12	0.66	0.24	0.56	0.67	0.01
Uniform Delay, d1	37.8	37.3	37.2	33.0		37.7	46.6	26.9	22.8	37.6	19.4	13.3
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1	0.1	3.2		0.4	6.9	2.1	1.2	3.0	2.3	0.1
Delay (s)	38.1	37.4	37.3	36.2		38.1	53.5	29.0	24.0	40.6	21.8	13.4
Level of Service	D	D	D	D		D	D	C	C	D	C	B
Approach Delay (s)		37.6			36.8			27.8			23.9	
Approach LOS		D			D			C			C	

Intersection Summary

HCM 2000 Control Delay	28.2	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	95.0	Sum of lost time (s)		27.5	
Intersection Capacity Utilization	74.8%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

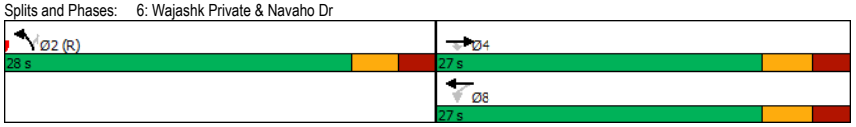
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	190	99	34	309	136	22
Future Volume (vph)	190	99	34	309	136	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)		40.0	50.0		50.0	0.0
Storage Lanes		1	1		1	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98	0.99		0.99	0.97
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1762	1469	1691	1780	1610	1513
Flt Permitted			0.638		0.950	
Satd. Flow (perm)	1762	1439	1128	1780	1598	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		99				22
Link Speed (k/h)	50			50	50	
Link Distance (m)	51.0			248.5	199.4	
Travel Time (s)	3.7			17.9	14.4	
Confl. Peds. (#/hr)		10	10		10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Adj. Flow (vph)	190	99	34	309	136	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	190	99	34	309	136	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	6.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2	1	1	2	1	1
Detector Template	Thru	Right	Left	Thru	Left	Right
Leading Detector (m)	30.5	6.1	6.1	30.5	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	1.8	6.1	6.1	1.8	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	27.8	27.8
Total Split (s)	27.0	27.0	27.0	27.0	28.0	28.0
Total Split (%)	49.1%	49.1%	49.1%	49.1%	50.9%	50.9%
Maximum Green (s)	21.2	21.2	21.2	21.2	22.5	22.5
Yellow Time (s)	3.3	3.3	3.3	3.3	3.0	3.0
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	13.0	13.0	13.0	13.0	14.0	14.0
Pedestrian Calls (#/hr)	5	5	2	2	5	5
Act Effct Green (s)	14.8	14.8	14.8	14.8	28.9	28.9
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
v/c Ratio	0.40	0.22	0.11	0.65	0.16	0.03
Control Delay	17.9	4.6	13.9	23.5	8.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.9	4.6	13.9	23.5	8.9	4.5
LOS	B	A	B	C	A	A
Approach Delay	13.3			22.6	8.3	
Approach LOS	B			C	A	
Queue Length 50th (m)	15.4	0.0	2.5	27.1	6.3	0.0
Queue Length 95th (m)	25.0	7.1	6.6	40.5	17.1	3.1
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	679	615	434	686	845	778
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.08	0.45	0.16	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 55			
Actuated Cycle Length: 55			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 16.3		Intersection LOS: B	

Intersection Capacity Utilization 48.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Wajashk Private & Navaho Dr



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	190	99	34	309	136	22
v/c Ratio	0.40	0.22	0.11	0.65	0.16	0.03
Control Delay	17.9	4.6	13.9	23.5	8.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.9	4.6	13.9	23.5	8.9	4.5
Queue Length 50th (m)	15.4	0.0	2.5	27.1	6.3	0.0
Queue Length 95th (m)	25.0	7.1	6.6	40.5	17.1	3.1
Internal Link Dist (m)	27.0			224.5	175.4	
Turn Bay Length (m)		40.0	50.0		50.0	
Base Capacity (vph)	679	615	434	686	845	778
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.08	0.45	0.16	0.03

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	190	99	34	309	136	22
Future Volume (vph)	190	99	34	309	136	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1762	1439	1680	1780	1610	1463
Flt Permitted	1.00	1.00	0.64	1.00	0.95	1.00
Satd. Flow (perm)	1762	1439	1128	1780	1610	1463
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	190	99	34	309	136	22
RTOR Reduction (vph)	0	72	0	0	0	10
Lane Group Flow (vph)	190	27	34	309	136	12
Confl. Peds. (#/hr)		10	10		10	10
Heavy Vehicles (%)	1%	3%	0%	0%	5%	0%
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	14.8	14.8	14.8	14.8	28.9	28.9
Effective Green, g (s)	14.8	14.8	14.8	14.8	28.9	28.9
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.53	0.53
Clearance Time (s)	5.8	5.8	5.8	5.8	5.5	5.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	474	387	303	478	845	768
v/s Ratio Prot	0.11			c0.17	c0.08	
v/s Ratio Perm		0.02	0.03			0.01
v/c Ratio	0.40	0.07	0.11	0.65	0.16	0.02
Uniform Delay, d1	16.5	15.0	15.1	17.8	6.8	6.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.1	0.2	3.0	0.4	0.0
Delay (s)	17.0	15.0	15.3	20.8	7.2	6.3
Level of Service	B	B	B	C	A	A
Approach Delay (s)	16.3			20.2	7.0	
Approach LOS	B			C	A	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.3
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	165	1200	54	0	1195
Future Volume (vph)	4	165	1200	54	0	1195
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Ped Bike Factor						
Frt		0.865	0.994			
Flt Protected	0.950					
Satd. Flow (prot)	0	1524	4740	0	0	4718
Flt Permitted	0.950					
Satd. Flow (perm)	0	1524	4740	0	0	4718
Link Speed (k/h)	50		50			50
Link Distance (m)	106.0		140.8			169.8
Travel Time (s)	7.6		10.1			12.2
Confl. Peds. (#/hr)	10	10		10	10	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	4	165	1200	54	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	165	1254	0	0	1195
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		7.0			7.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

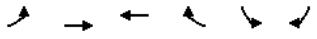
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	165	1200	54	0	1195
Future Volume (Veh/h)	4	165	1200	54	0	1195
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	165	1200	54	0	1195
Pedestrians	10		10			10
Lane Width (m)	3.5		3.5			3.5
Walking Speed (m/s)	1.0		1.0			1.0
Percent Blockage	1		1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			141			170
pX, platoon unblocked	0.90	0.82			0.82	
vC, conflicting volume	1645	447			1264	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	23	0			571	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	81			100	
cM capacity (veh/h)	882	878			825	

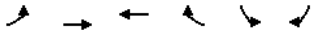
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	169	480	480	294	398	398	398
Volume Left	4	0	0	0	0	0	0
Volume Right	165	0	0	54	0	0	0
cSH	879	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.19	0.28	0.28	0.17	0.23	0.23	0.23
Queue Length 95th (m)	5.4	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	217	264	394	51	25	250
Future Volume (vph)	217	264	394	51	25	250
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.983		0.877	
Flt Protected	0.950				0.995	
Satd. Flow (prot)	1691	1762	3295	0	1553	0
Flt Permitted	0.950				0.995	
Satd. Flow (perm)	1691	1762	3295	0	1553	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		158.9	54.3		98.4	
Travel Time (s)		11.4	3.9		7.1	
Confl. Peds. (#/hr)	10			10	10	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%
Adj. Flow (vph)	217	264	394	51	25	250
Shared Lane Traffic (%)						
Lane Group Flow (vph)	217	264	445	0	275	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.0	6.0		3.5	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	217	264	394	51	25	250
Future Volume (Veh/h)	217	264	394	51	25	250
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	217	264	394	51	25	250
Pedestrians		10	10		10	
Lane Width (m)		3.5	3.5		3.5	
Walking Speed (m/s)		1.0	1.0		1.0	
Percent Blockage		1	1		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		159	105			
pX, platoon unblocked						
vC, conflicting volume	455				1138	242
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	455				1138	242
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	80				84	67
cM capacity (veh/h)	1106				156	750

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	217	264	263	182	275
Volume Left	217	0	0	0	25
Volume Right	0	0	0	51	250
cSH	1106	1700	1700	1700	557
Volume to Capacity	0.20	0.16	0.15	0.11	0.49
Queue Length 95th (m)	5.5	0.0	0.0	0.0	20.6
Control Delay (s)	9.0	0.0	0.0	0.0	17.6
Lane LOS	A				C
Approach Delay (s)	4.1		0.0		17.6
Approach LOS					C

Intersection Summary				
Average Delay		5.7		
Intersection Capacity Utilization		54.7%	ICU Level of Service	A
Analysis Period (min)		15		

Appendix G

City of Ottawa Collision Data

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: ADIRONDACK DR @ WOODROFFE AVE

Traffic Control: Stop sign **Total Collisions:** 4

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Mar-03, Tue,09:52	Clear	Turning movement	P.D. only	Wet	North	Turning left	Passenger van	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Feb-01, Tue,20:14	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Oct-19, Wed,10:30	Clear	Angle	Non-fatal injury	Dry					0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jun-12, Wed,17:15	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	

Location: BASELINE RD @ COLLEGE SQUARE SC

Traffic Control: Traffic signal **Total Collisions:** 11

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-May-07, Tue,10:20	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Bus (other)	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Aug-30, Fri,14:03	Clear	Rear end	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Sep-20, Fri,16:16	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-11, Fri,10:30	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Feb-13, Thu,12:00	Snow	Rear end	P.D. only	Loose snow	West	Slowing or stopping	Delivery van	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ COLLEGE SQUARE SC

Traffic Control: Traffic signal **Total Collisions:** 11

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2021-May-05, Wed,11:46	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Nov-11, Thu,17:35	Clear	Sideswipe	Non-fatal injury	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Dec-31, Fri,17:40	Clear	Rear end	P.D. only	Dry	East	Turning left	Unknown	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2022-Jul-28, Thu,05:30	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2022-Sep-12, Mon,15:28	Clear	Rear end	Non-fatal injury	Dry	West	Stopped	Pick-up truck	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
					West	Going ahead	Pick-up truck	Other motor vehicle	
2022-Oct-29, Sat,23:07	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Other	Automobile, station wagon	Other motor vehicle	

Location: BASELINE RD @ NAVAHO DR

Traffic Control: Traffic signal **Total Collisions:** 55

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-03, Thu,12:09	Rain	SMV other	Non-fatal injury	Wet	South	Turning right	Automobile, station wagon	Pedestrian	1
2019-Feb-11, Mon,09:40	Clear	Rear end	P.D. only	Dry	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Mar-10, Sun,03:21	Clear	Turning movement	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Pick-up truck	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ NAVAHO DR

Traffic Control: Traffic signal **Total Collisions:** 55

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Mar-23, Sat,01:00	Snow	Turning movement	P.D. only	Slush	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Unknown	Other motor vehicle	
2019-Mar-29, Fri,18:00	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Apr-20, Sat,18:50	Clear	Rear end	Non-fatal injury	Wet	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jun-27, Thu,15:55	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-05, Fri,19:16	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Aug-12, Mon,16:30	Rain	Rear end	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Aug-28, Wed,13:10	Rain	SMV other	Non-fatal injury	Wet	North	Turning left	Automobile, station wagon	Pedestrian	1
2020-Jan-14, Tue,11:15	Clear	Rear end	P.D. only	Wet	West	Going ahead	Passenger van	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2020-Jan-21, Tue,09:37	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Pick-up truck	Other motor vehicle	
2020-Feb-02, Sun,15:10	Snow	SMV other	Non-fatal injury	Wet	Unknown	Unknown	Unknown	Pedestrian	1
2020-Feb-07, Fri,13:45	Snow	Rear end	P.D. only	Loose snow	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Turning left	Unknown	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ NAVAHO DR

Traffic Control: Traffic signal **Total Collisions:** 55

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Mar-23, Mon,15:10	Snow	Rear end	P.D. only	Wet	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Mar-27, Fri,17:37	Clear	Rear end	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2020-May-23, Sat,19:50	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jul-10, Fri,14:40	Clear	Rear end	P.D. only	Dry	North	Turning right	Unknown	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2020-Jul-18, Sat,11:10	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
2020-Sep-18, Fri,11:30	Clear	Angle	P.D. only	Dry	North	Making "U" turn	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Pick-up truck	Other motor vehicle	
2020-Nov-14, Sat,14:50	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2020-Nov-20, Fri,14:00	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Jan-05, Tue,16:19	Clear	SMV other	Non-fatal injury	Dry	North	Turning right	Automobile, station wagon	Pedestrian	2
2021-Jan-20, Wed,17:31	Clear	SMV other	Non-fatal injury	Dry	South	Turning left	Automobile, station wagon	Pedestrian	1
2021-Jan-31, Sun,17:30	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Passenger van	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ NAVAHO DR

Traffic Control: Traffic signal **Total Collisions:** 55

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2021-Mar-30, Tue,13:49	Clear	Rear end	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Jun-10, Thu,22:36	Clear	Turning movement	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Automobile, station wagon	Other motor vehicle	
2021-Jun-11, Fri,23:22	Clear	SMV other	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Pedestrian	1
2021-Jul-15, Thu,15:00	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					East	Stopped	Truck - open	Other motor vehicle	
2021-Sep-23, Thu,20:09	Rain	Rear end	P.D. only	Wet	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Oct-18, Mon,19:05	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Cyclist	0
					West	Going ahead	Bicycle	Other motor vehicle	
2021-Nov-22, Mon,14:50	Clear	SMV other	Non-fatal injury	Dry	West	Turning left	Pick-up truck	Pedestrian	1
2021-Dec-02, Thu,18:30	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Jan-01, Sat,18:07	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jan-07, Fri,17:24	Clear	Rear end	P.D. only	Loose snow	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Jan-07, Fri,19:19	Clear	Rear end	P.D. only	Dry	East	Unknown	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Apr-12, Tue,09:50	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Pick-up truck	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ NAVAHO DR

Traffic Control: Traffic signal **Total Collisions:** 55

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2022-Jun-07, Tue,15:31	Rain	Turning movement	P.D. only	Wet	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Pick-up truck	Other motor vehicle	
2022-Aug-10, Wed,19:00	Clear	SMV other	Non-fatal injury	Dry	North	Turning right	Automobile, station wagon	Pedestrian	1
2022-Aug-27, Sat,23:34	Clear	Turning movement	Non-fatal injury	Dry	East	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
2022-Sep-07, Wed,17:53	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Oct-06, Thu,14:00	Clear	Other	Non-fatal injury	Dry	South	Turning right	Automobile, station wagon	Pole (utility, power)	0
					East	Stopped	Automobile, station wagon	Pole (utility, power)	
					West	Stopped	Automobile, station wagon	Pole (utility, power)	
2022-Oct-13, Thu,21:30	Clear	Rear end	P.D. only	Dry	West	Going ahead	Unknown	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Nov-11, Fri,15:45	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Nov-11, Fri,15:59	Rain	Sideswipe	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Changing lanes	Automobile, station wagon	Other motor vehicle	
2024-Jan-16, Tue,15:10	Snow	Rear end	P.D. only	Slush	East	Stopped	Automobile, station wagon	Other motor vehicle	0
					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2024-Jan-23, Tue,07:40	Drifting Snow	Turning movement	P.D. only	Ice	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Automobile, station wagon	Other motor vehicle	
2024-Jan-29, Mon,03:15	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Unknown	Other motor vehicle	
2024-Jun-04, Tue,11:15	Clear	Turning movement	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ NAVAHO DR

Traffic Control: Traffic signal **Total Collisions:** 55

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Jun-10, Mon,04:30	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2024-Jun-19, Wed,19:45	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jul-12, Fri,09:42	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Changing lanes	Automobile, station wagon	Other motor vehicle	
2024-Aug-08, Thu,12:00	Clear	Turning movement	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Pick-up truck	Other motor vehicle	
2024-Aug-22, Thu,20:00	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Dec-16, Mon,22:49	Rain	SMV other	Non-fatal injury	Wet	North	Turning left	Automobile, station wagon	Pedestrian	1

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-05, Sat,12:43	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jan-11, Fri,10:00	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jan-14, Mon,09:44	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jan-24, Thu,14:11	Clear	Rear end	P.D. only	Wet	East	Turning left	Unknown	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Feb-12, Tue,11:12	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Feb-22, Fri,17:33	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Unknown	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Mar-05, Tue,16:15	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Mar-22, Fri,16:06	Clear	Sideswipe	P.D. only	Wet	East	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Mar-23, Sat,11:12	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Apr-22, Mon,17:13	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Pick-up truck	Other motor vehicle	
2019-Apr-28, Sun,14:25	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-May-08, Wed,15:30	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jun-04, Tue,11:20	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Unknown	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-18, Tue,08:00	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jun-19, Wed,06:30	Clear	Rear end	P.D. only	Dry	East	Turning right	Unknown	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jul-06, Sat,14:47	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-18, Thu,08:24	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jul-28, Sun,17:30	Clear	Rear end	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-29, Mon,06:37	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Aug-10, Sat,23:22	Clear	Turning movement	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Sep-03, Tue,08:01	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Sep-11, Wed,09:53	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Sep-23, Mon,11:00	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Unknown	Unknown	Other motor vehicle	
2019-Sep-27, Fri,09:41	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Sep-29, Sun,17:20	Clear	Rear end	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Oct-23, Wed,08:50	Clear	Rear end	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Nov-07, Thu,06:59	Rain	Sideswipe	P.D. only	Slush	East	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Truck - open	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Nov-13, Wed,12:54	Clear	Other	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Pole (utility, power)	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Pole (utility, power)	
2019-Nov-16, Sat,08:53	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Dec-09, Mon,08:24	Rain	Sideswipe	Non-fatal injury	Wet	East	Changing lanes	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Dec-12, Thu,13:41	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2019-Dec-13, Fri,10:45	Clear	Rear end	P.D. only	Dry	East	Turning left	Pick-up truck	Other motor vehicle	0
					East	Unknown	Unknown	Other motor vehicle	
2020-Jan-16, Thu,19:45	Snow	Rear end	P.D. only	Packed snow	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Automobile, station wagon	Other motor vehicle	
2020-Jan-19, Sun,02:43	Snow	Angle	Non-fatal injury	Loose snow	South	Going ahead	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jan-22, Wed,14:00	Clear	Rear end	P.D. only	Dry	West	Turning right	Pick-up truck	Other motor vehicle	0
					West	Turning right	Pick-up truck	Other motor vehicle	
2020-Jan-25, Sat,07:59	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2020-Feb-05, Wed,12:37	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
					South	Turning left	Automobile, station wagon	Other motor vehicle	

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Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Feb-06, Thu,18:10	Rain	Angle	Non-fatal injury	Wet	West	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Feb-25, Tue,09:22	Clear	Other	P.D. only	Dry	North	Reversing	Truck - open	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2020-Mar-30, Mon,09:20	Rain	Rear end	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Apr-04, Sat,13:30	Clear	Sideswipe	P.D. only	Dry	South	Unknown	Pick-up truck	Other motor vehicle	0
					South	Unknown	Pick-up truck	Other motor vehicle	
2020-May-14, Thu,22:32	Clear	Turning movement	P.D. only	Dry	North	Turning left	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Pick-up truck	Other motor vehicle	
2020-Jun-06, Sat,12:55	Clear	Rear end	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Jun-09, Tue,12:35	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Unknown	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2020-Jun-15, Mon,10:15	Clear	Rear end	P.D. only	Dry	North	Turning right	Unknown	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2020-Jun-18, Thu,10:41	Clear	Rear end	P.D. only	Dry	South	Unknown	Unknown	Other motor vehicle	0
					South	Stopped	Pick-up truck	Other motor vehicle	
2020-Jul-01, Wed,20:25	Clear	Rear end	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Turning right	Pick-up truck	Other motor vehicle	
2020-Jul-22, Wed,12:07	Clear	Rear end	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Turning right	Pick-up truck	Other motor vehicle	
2020-Jul-24, Fri,08:00	Clear	Rear end	P.D. only	Dry	North	Turning right	Pick-up truck	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	

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Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

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2020-Aug-07, Fri,10:47	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2020-Sep-14, Mon,07:30	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Pick-up truck	Other motor vehicle	
2020-Sep-16, Wed,07:51	Clear	SMV other	P.D. only	Dry	North	Going ahead	Pick-up truck	Pole (utility, power)	0
2020-Nov-02, Mon,11:25	Clear	Rear end	P.D. only	Dry	North	Turning right	Pick-up truck	Other motor vehicle	0
					North	Turning right	Pick-up truck	Other motor vehicle	
2020-Nov-10, Tue,08:56	Clear	Sideswipe	Non-fatal injury	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Nov-23, Mon,21:52	Clear	Sideswipe	P.D. only	Wet	North	Slowing or stopping	Municipal transit bus	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2020-Dec-06, Sun,17:02	Clear	Rear end	P.D. only	Wet	East	Going ahead	Passenger van	Other motor vehicle	0
					East	Slowing or stopping	Pick-up truck	Other motor vehicle	
2021-Feb-19, Fri,16:53	Snow	Rear end	P.D. only	Loose snow	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Feb-25, Thu,08:15	Clear	Rear end	P.D. only	Slush	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Pick-up truck	Other motor vehicle	
2021-Feb-25, Thu,08:34	Snow	Rear end	P.D. only	Ice	South	Slowing or stopping	Delivery van	Skidding/sliding	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Mar-15, Mon,23:19	Clear	Turning movement	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Automobile, station wagon	Other motor vehicle	
2021-Mar-20, Sat,14:19	Clear	Rear end	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2021-May-10, Mon,13:29	Clear	Sideswipe	P.D. only	Dry	South	Turning left	Unknown	Other motor vehicle	0
					South	Turning left	Passenger van	Other motor vehicle	
2021-May-13, Thu,16:30	Clear	Rear end	Non-fatal injury	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Jun-21, Mon,16:26	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2021-Jun-29, Tue,21:30	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Jul-14, Wed,15:15	Clear	Rear end	Non-fatal injury	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Pick-up truck	Other motor vehicle	
2021-Jul-16, Fri,23:04	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Aug-20, Fri,16:22	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					East	Stopped	Pick-up truck	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Pick-up truck	Other motor vehicle	
2021-Sep-14, Tue,15:23	Clear	Turning movement	P.D. only	Dry	East	Going ahead	Passenger van	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
2021-Sep-16, Thu,21:58	Clear	SMV other	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Pole (utility, power)	0
2021-Oct-22, Fri,14:30	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Pick-up truck	Other motor vehicle	
2021-Oct-23, Sat,11:10	Clear	Sideswipe	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2021-Oct-28, Thu,11:45	Clear	Rear end	P.D. only	Dry	West	Turning right	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Automobile, station wagon	Other motor vehicle	
2021-Oct-28, Thu,15:05	Rain	Other	P.D. only	Wet	West	Reversing	Pick-up truck	Other motor vehicle	0
					East	Stopped	Passenger van	Other motor vehicle	
2021-Nov-01, Mon,11:30	Clear	Rear end	P.D. only	Dry	West	Unknown	Unknown	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2021-Nov-18, Thu,16:19	Rain	Rear end	P.D. only	Wet	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2021-Dec-01, Wed,11:29	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2021-Dec-01, Wed,14:05	Clear	Rear end	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
					South	Slowing or stopping	Pick-up truck	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Dec-14, Tue,16:01	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2022-Jan-15, Sat,15:00	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2022-Jan-16, Sun,20:51	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Feb-16, Wed,15:59	Clear	Sideswipe	Non-fatal injury	Dry	South	Changing lanes	Truck - closed	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	

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Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2022-Mar-28, Mon,21:30	Clear	Turning movement	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
2022-Apr-12, Tue,15:12	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Pick-up truck	Other motor vehicle	
2022-Apr-17, Sun,16:42	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Apr-23, Sat,12:00	Clear	Rear end	Non-fatal injury	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2022-May-10, Tue,16:53	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2022-May-21, Sat,19:30	Rain	Rear end	P.D. only	Wet	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2022-Jun-08, Wed,22:50	Clear	Rear end	Non-fatal injury	Dry	West	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Jul-14, Thu,13:31	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jul-16, Sat,13:00	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jul-28, Thu,18:30	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Truck - closed	Other motor vehicle	
2022-Jul-30, Sat,06:05	Clear	Angle	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Aug-12, Fri,15:00	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	

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Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2022-Aug-12, Fri,15:58	Clear	Turning movement	P.D. only	Dry	North	Stopped	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2022-Aug-22, Mon,08:10	Clear	Rear end	P.D. only	Dry	West		Unknown	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Sep-24, Sat,09:15	Clear	Rear end	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Sep-26, Mon,12:00	Clear	Sideswipe	P.D. only	Dry	North	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Nov-13, Sun,14:45	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Changing lanes	Automobile, station wagon	Other motor vehicle	
2022-Nov-23, Wed,16:10	Clear	Rear end	P.D. only	Dry	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2022-Nov-26, Sat,22:40	Clear	Other	P.D. only	Dry	South	Stopped	Automobile, station wagon	Other motor vehicle	0
					South	Reversing	Pick-up truck	Other motor vehicle	
2022-Dec-03, Sat,10:50	Clear	Sideswipe	P.D. only	Dry	North	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Tow truck	Other motor vehicle	
2022-Dec-08, Thu,08:15	Clear	Rear end	P.D. only	Dry	North	Stopped	Passenger van	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2022-Dec-10, Sat,00:45	Clear	Rear end	P.D. only	Dry	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Dec-20, Tue,14:00	Clear	Turning movement	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Passenger van	Other motor vehicle	
2024-Jan-15, Mon,08:20	Clear	Rear end	P.D. only	Dry	North	Stopped	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	

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2024-Jan-15, Mon,11:00	Clear	Rear end	P.D. only	Packed snow	South	Stopped	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2024-Jan-18, Thu,12:30	Freezing Rain	Rear end	P.D. only	Ice	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2024-Jan-24, Wed,07:50	Snow	Rear end	P.D. only	Loose snow	South	Stopped	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2024-Jan-26, Fri,20:00	Freezing Rain	Angle	P.D. only	Ice	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jan-27, Sat,23:40	Clear	Rear end	P.D. only	Wet	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2024-Feb-02, Fri,03:10	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Changing lanes	Automobile, station wagon	Other motor vehicle	
2024-Feb-03, Sat,14:45	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Feb-06, Tue,04:45	Clear	Rear end	P.D. only	Dry	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Feb-12, Mon,07:00	Rain	Rear end	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2024-Feb-14, Wed,11:50	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Passenger van	Other motor vehicle	
2024-Feb-28, Wed,21:10	Strong wind	Rear end	P.D. only	Dry	North	Stopped	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	

From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD @ WOODROFFE AVE

Traffic Control: Traffic signal **Total Collisions:** 127

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Feb-29, Thu,17:30	Clear	Rear end	P.D. only	Dry	West	Stopped	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Truck - closed	Other motor vehicle	
2024-Apr-05, Fri,06:55	Snow	Rear end	P.D. only	Packed snow	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2024-May-21, Tue,23:56	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Passenger van	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2024-May-23, Thu,10:15	Clear	Turning movement	P.D. only	Dry	West	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-May-25, Sat,15:00	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jun-11, Tue,14:20	Clear	Rear end	P.D. only	Dry	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2024-Jul-04, Thu,08:15	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Changing lanes	Automobile, station wagon	Other motor vehicle	
2024-Jul-22, Mon,09:55	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2024-Aug-14, Wed,11:57	Clear	Sideswipe	P.D. only	Dry	North	Merging	Unknown	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Aug-26, Mon,13:54	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	

Location: BASELINE RD btwn COLLEGE SQUARE SC & WOODROFFE AVE

Traffic Control: No control **Total Collisions:** 7

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD btwn COLLEGE SQUARE SC & WOODROFFE AVE

Traffic Control: No control **Total Collisions:** 7

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-29, Tue,13:31	Snow	Rear end	P.D. only	Slush	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Feb-15, Fri,14:00	Rain	Angle	P.D. only	Wet	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Unknown	Automobile, station wagon	Other motor vehicle	
2020-Jan-17, Fri,11:00	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Delivery van	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jan-24, Fri,00:34	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Jan-22, Fri,12:36	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2022-Jun-23, Thu,16:52	Clear	Angle	Non-fatal injury	Dry	North	Turning right	Automobile, station wagon	Cyclist	0
					West	Going ahead	Bicycle	Other motor vehicle	
2024-Feb-16, Fri,22:30	Clear	SMV other	P.D. only	Ice	East	Changing lanes	Automobile, station wagon	Other	0

Location: BASELINE RD btwn CONSTELLATION DR & WOODROFFE AVE

Traffic Control: No control **Total Collisions:** 7

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Nov-13, Wed,15:02	Clear	Rear end	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2020-Mar-03, Tue,07:50	Clear	Rear end	P.D. only	Wet	East	Going ahead	Ambulance	Other motor vehicle	0
					East	Stopped	Delivery van	Other motor vehicle	
2021-Nov-19, Fri,17:27	Clear	Sideswipe	Non-fatal injury	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD btwn CONSTELLATION DR & WOODROFFE AVE

Traffic Control: No control **Total Collisions:** 7

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2022-Jan-04, Tue,15:08	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jan-19, Wed,12:55	Clear	Rear end	P.D. only	Loose snow	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Dec-23, Fri,03:14	Snow	SMV other	P.D. only	Loose snow	West	Going ahead	Automobile, station wagon	Ran off road	0
2023-May-02, Tue,08:57	Clear	SMV other	Non-fatal injury	Dry	East	Going ahead	Passenger van	Pedestrian	1

Location: BASELINE RD btwn NAVAHO DR & COLLEGE SQUARE SC

Traffic Control: No control **Total Collisions:** 19

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Feb-08, Fri,15:26	Clear	Rear end	P.D. only	Wet	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-May-23, Thu,17:40	Rain	Sideswipe	P.D. only	Wet	East	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-19, Wed,10:10	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jul-02, Tue,12:00	Clear	Angle	Non-fatal injury	Dry	West	Going ahead	Bicycle	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Cyclist	
2019-Sep-12, Thu,16:12	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Delivery van	Other motor vehicle	0
					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					East	Slowing or stopping	Passenger van	Other motor vehicle	
2019-Oct-27, Sun,14:21	Rain	Angle	P.D. only	Wet	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: BASELINE RD btwn NAVAHO DR & COLLEGE SQUARE SC

Traffic Control: No control **Total Collisions:** 19

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Nov-13, Wed,15:08	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2019-Dec-05, Thu,16:31	Clear	Rear end	P.D. only	Wet	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Dec-19, Thu,08:36	Clear	Rear end	P.D. only	Ice	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Jan-12, Sun,12:10	Snow	Angle	P.D. only	Loose snow	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Aug-26, Wed,13:38	Clear	SMV other	Non-fatal injury	Dry	North	Turning right	Automobile, station wagon	Pedestrian	1
2021-Mar-15, Mon,01:39	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Unknown	Other motor vehicle	0
					West	Stopped	Pick-up truck	Other motor vehicle	
2021-May-20, Thu,12:48	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2021-Jun-18, Fri,23:22	Rain	Turning movement	P.D. only	Wet	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Automobile, station wagon	Other motor vehicle	
2021-Sep-17, Fri,19:58	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Unknown	Automobile, station wagon	Other motor vehicle	
2021-Dec-21, Tue,16:06	Clear	Sideswipe	P.D. only	Dry	West	Merging	Delivery van	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Mar-04, Fri,15:00	Clear	Angle	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Oct-03, Thu,03:30	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	

Location: BASELINE RD btwn NAVAHO DR & COLLEGE SQUARE SC

Traffic Control: No control **Total Collisions:** 19

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Dec-05, Thu,18:00	Snow	Sideswipe	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Overtaking	Pick-up truck	Other motor vehicle	

Location: CONSTELLATION CRES @ BASELINE RD

Traffic Control: Traffic signal **Total Collisions:** 6

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-May-21, Tue,14:35	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-10, Wed,08:26	Clear	Rear end	P.D. only	Dry	East	Going ahead	Pick-up truck	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Nov-06, Wed,09:34	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Nov-19, Thu,22:07	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2022-May-21, Sat,18:39	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2022-May-26, Thu,22:30	Clear	Rear end	P.D. only	Dry	West	Unknown	Unknown	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	

Location: NAVAHO DR @ DEERFIELD DR

Traffic Control: Stop sign **Total Collisions:** 2

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-28, Mon,08:45	Clear	SMV other	Non-fatal injury	Loose snow	West	Turning right	Automobile, station wagon	Pedestrian	1

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From: January 1, 2019 **To:** December 31, 2024

Location: NAVAHO DR @ DEERFIELD DR

Traffic Control: Stop sign **Total Collisions:** 2

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Jan-18, Thu,20:30	Snow	Rear end	P.D. only	Loose snow	West	Stopped	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Truck - closed	Other motor vehicle	

Location: NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-17, Thu,12:44	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jan-24, Thu,06:33	Freezing Rain	Turning movement	P.D. only	Slush	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jan-28, Mon,13:45	Clear	Rear end	P.D. only	Ice	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Mar-06, Wed,14:45	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Passenger van	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2019-Mar-22, Fri,07:50	Rain	Sideswipe	P.D. only	Wet	South	Changing lanes	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Mar-23, Sat,10:40	Clear	Rear end	P.D. only	Wet	West	Turning right	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Automobile, station wagon	Other motor vehicle	
2019-May-26, Sun,21:20	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-10, Mon,17:44	Rain	Rear end	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jul-12, Fri,11:00	Clear	Rear end	P.D. only	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-25, Thu,10:38	Clear	Rear end	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Aug-16, Fri,22:09	Clear	Other	P.D. only	Dry	North	Slowing or stopping	Motorcycle	Curb	0
					West	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Aug-29, Thu,08:15	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-01, Sun,14:45	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-01, Tue,11:38	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Unknown	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Oct-10, Thu,08:46	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Nov-04, Mon,06:12	Clear	SMV other	P.D. only	Ice	North	Going ahead	Automobile, station wagon	Pole (sign, parking meter)	0
2019-Nov-11, Mon,17:14	Snow	Rear end	P.D. only	Loose snow	North	Turning right	Unknown	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Nov-27, Wed,07:06	Rain	Rear end	P.D. only	Wet	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Nov-29, Fri,12:05	Clear	Rear end	P.D. only	Wet	West	Turning right	Automobile, station wagon	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Nov-29, Fri,16:44	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Feb-14, Fri,14:08	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2020-Aug-27, Thu,10:15	Rain	Rear end	P.D. only	Wet	West	Turning right	Passenger van	Other motor vehicle	0
					West	Turning right	Pick-up truck	Other motor vehicle	
2020-Dec-18, Fri,10:06	Clear	Turning movement	P.D. only	Dry	South	Turning left	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Feb-19, Fri,16:10	Clear	Rear end	P.D. only	Loose snow	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Pick-up truck	Other motor vehicle	
2021-Mar-07, Sun,09:30	Clear	Rear end	P.D. only	Dry	West	Turning right	Pick-up truck	Other motor vehicle	0
					West	Turning right	Pick-up truck	Other motor vehicle	
2021-Jul-18, Sun,13:21	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Aug-22, Sun,16:49	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Sep-30, Thu,21:45	Clear	Sideswipe	P.D. only	Dry	South	Making "U" turn	Pick-up truck	Other motor vehicle	0
					South	Making "U" turn	Automobile, station wagon	Other motor vehicle	
2021-Oct-26, Tue,19:17	Rain	Turning movement	Non-fatal injury	Wet	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Dec-18, Sat,18:47	Snow	Turning movement	P.D. only	Loose snow	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jan-07, Fri,11:55	Clear	Rear end	P.D. only	Dry	West	Turning right	Pick-up truck	Other motor vehicle	0
					West	Turning right	Automobile, station wagon	Other motor vehicle	
2022-Feb-15, Tue,14:15	Clear	Rear end	P.D. only	Dry	North	Turning right	Pick-up truck	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2022-Feb-25, Fri,19:45	Snow	Turning movement	Non-fatal injury	Loose snow	South	Turning left	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2022-May-27, Fri,17:03	Clear	Angle	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Cyclist	0
					East	Going ahead	Bicycle	Other motor vehicle	
2022-Aug-07, Sun,11:58	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Sep-13, Tue,08:15	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jan-25, Thu,22:40	Other	Rear end	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Feb-13, Tue,14:30	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2024-Feb-14, Wed,14:20	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-May-24, Fri,16:43	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jun-13, Thu,18:45	Rain	Rear end	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2024-Jul-13, Sat,02:00	Clear	SMV other	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Curb	0
2024-Oct-30, Wed,17:35	Clear	SMV other	Non-fatal injury	Dry	North	Turning right	Automobile, station wagon	Pedestrian	1
2024-Oct-31, Thu,13:35	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Pick-up truck	Cyclist	0
					North	Going ahead	Bicycle	Other motor vehicle	

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From: January 1, 2019 **To:** December 31, 2024

Location: NAVAHO DR @ WOODROFFE AVE/TRANSITWAY N BASELINE STN

Traffic Control: Traffic signal **Total Collisions:** 46

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Dec-04, Wed,19:00	Snow	Turning movement	P.D. only	Packed snow	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Unknown	Other motor vehicle	
2024-Dec-05, Thu,15:46	Snow	Turning movement	Non-fatal injury	Loose snow	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

Location: NAVAHO DR btwn NAVAHO DR & DEERFIELD DR

Traffic Control: No control **Total Collisions:** 8

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Mar-23, Sat,11:30	Clear	Angle	P.D. only	Dry	East	Turning left	Unknown	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Oct-08, Tue,08:32	Clear	Angle	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Passenger van	Other motor vehicle	
2020-Oct-23, Fri,15:48	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	1
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Feb-06, Sat,22:43	Clear	Angle	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2021-Sep-05, Sun,12:02	Rain	Angle	P.D. only	Wet	East	Turning left	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Dec-04, Sat,12:31	Snow	SMV other	P.D. only	Loose snow	South	Going ahead	Automobile, station wagon	Skidding/sliding	0
2022-Mar-08, Tue,12:53	Clear	Angle	Non-fatal injury	Wet	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Oct-13, Thu,22:46	Rain	Turning movement	P.D. only	Wet	North	Making "U" turn	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: NAVAHO DR btwn WOODROFFE AVE & 265 E OF WOODROFFE AVE

Traffic Control: No control **Total Collisions:** 5

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-21, Mon,08:53	Clear	Angle	P.D. only	Packed snow	East	Turning left	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-19, Thu,20:20	Clear	SMV other	Non-fatal injury	Dry	West	Going ahead	Motorcycle	Skidding/sliding	0
2020-Feb-14, Fri,15:07	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Dec-16, Thu,09:41	Clear	Turning movement	P.D. only	Wet	East	Turning right	Truck - dump	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2024-Jul-04, Thu,22:39	Clear	SMV other	Non-fatal injury	Wet	West	Going ahead	Pick-up truck	Pedestrian	1

Location: WOODROFFE AVE @ ALGONQUIN COLLEGE/TRANSITWAY S BASELINE

Traffic Control: Traffic signal **Total Collisions:** 18

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Feb-16, Sat,09:58	Clear	Angle	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Municipal transit bus	Other motor vehicle	
2019-Mar-03, Sun,07:34	Clear	SMV other	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Pedestrian	1
2019-Mar-15, Fri,21:27	Rain	Turning movement	P.D. only	Wet	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2019-Aug-12, Mon,08:47	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Oct-03, Thu,15:24	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Truck - closed	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: WOODROFFE AVE @ ALGONQUIN COLLEGE/TRANSITWAY S BASELINE

Traffic Control: Traffic signal **Total Collisions:** 18

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Aug-17, Mon,09:47	Clear	Angle	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Oct-20, Tue,07:49	Rain	Rear end	P.D. only	Wet	North	Changing lanes	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Truck - dump	Other motor vehicle	
2021-Jun-22, Tue,17:02	Clear	Rear end	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Nov-19, Fri,15:24	Clear	Angle	Non-fatal injury	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Municipal transit bus	Other motor vehicle	
2022-Jan-17, Mon,10:08	Snow	Approaching	P.D. only	Loose snow	West	Going ahead	Municipal transit bus	Other motor vehicle	0
					East	Going ahead	Municipal transit bus	Other motor vehicle	
2022-Jan-22, Sat,11:49	Clear	Turning movement	P.D. only	Ice	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2022-Mar-10, Thu,20:12	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Jun-09, Thu,15:45	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Passenger van	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Oct-13, Thu,17:30	Rain	Turning movement	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Turning left	Automobile, station wagon	Other motor vehicle	
2022-Oct-17, Mon,07:50	Rain	Rear end	P.D. only	Wet	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2022-Dec-08, Thu,17:10	Clear	Angle	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2022-Dec-13, Tue,10:55	Clear	Turning movement	P.D. only	Slush	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: WOODROFFE AVE @ ALGONQUIN COLLEGE/TRANSITWAY S BASELINE

Traffic Control: Traffic signal **Total Collisions:** 18

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Sep-06, Fri,12:13	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	

Location: WOODROFFE AVE @ FIRESTATION

Traffic Control: MPS **Total Collisions:** 5

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jun-11, Tue,16:05	Clear	Rear end	P.D. only	Dry	South	Unknown	Unknown	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Feb-05, Wed,13:00	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Skidding/sliding	0
					South	Stopped	Police vehicle	Other motor vehicle	
					South	Stopped	Pick-up truck	Other motor vehicle	
					South	Stopped	Pick-up truck	Other motor vehicle	
2020-Jul-22, Wed,15:00	Clear	Rear end	Non-fatal injury	Dry	South	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					South	Stopped	Pick-up truck	Other motor vehicle	
2021-Jul-19, Mon,13:12	Clear	Turning movement	P.D. only	Dry	North	Turning left	Fire vehicle	Other motor vehicle	0
					South	Going ahead	Pick-up truck	Other motor vehicle	
2022-May-08, Sun,11:13	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Location: WOODROFFE AVE btwn ADIRONDACK DR & FIRESTATION

Traffic Control: No control **Total Collisions:** 1

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Jan-18, Sat,09:00	Clear	SMV other	P.D. only	Dry	North	Slowing or stopping	Pick-up truck	Animal - domestic	0

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: WOODROFFE AVE btwn BASELINE RD & NAVAHO DR/TRANSITWAY

Traffic Control: No control **Total Collisions:** 10

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Feb-28, Thu,15:21	Clear	Sideswipe	P.D. only	Dry	South	Pulling away from shoulder or curb	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Mar-05, Tue,13:06	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2019-Aug-02, Fri,11:55	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Delivery van	Other motor vehicle	
2019-Oct-02, Wed,11:14	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Dec-04, Wed,12:40	Clear	Rear end	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Sep-21, Mon,16:30	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Apr-07, Wed,14:28	Clear	Angle	P.D. only	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Pick-up truck	Other motor vehicle	
2021-Aug-03, Tue,09:35	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2022-Jul-27, Wed,09:01	Clear	Sideswipe	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Changing lanes	Automobile, station wagon	Other motor vehicle	
2022-Nov-08, Tue,18:30	Clear	Rear end	P.D. only	Dry	North	Stopped	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Changing lanes	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: WOODROFFE AVE btwn FIRESTATION & BASELINE RD

Traffic Control: No control **Total Collisions:** 24

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-01, Tue,19:14	Clear	Rear end	P.D. only	Loose snow	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Pick-up truck	Other motor vehicle	
					North	Slowing or stopping	Pick-up truck	Other motor vehicle	
2019-Feb-28, Thu,11:46	Clear	Rear end	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2019-Mar-05, Tue,15:43	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2019-Jun-04, Tue,11:10	Clear	Sideswipe	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-03, Tue,11:19	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Truck - dump	Other motor vehicle	
2019-Sep-24, Tue,16:10	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-27, Fri,12:12	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Oct-27, Sun,16:03	Rain	Rear end	P.D. only	Wet	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Passenger van	Other motor vehicle	
2019-Oct-28, Mon,18:59	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Dec-02, Mon,15:45	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Pick-up truck	Other motor vehicle	
2019-Dec-09, Mon,07:50	Rain	Sideswipe	P.D. only	Wet	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Dec-15, Sun,07:43	Snow	SMV other	P.D. only	Ice	North	Going ahead	Automobile, station wagon	Ran off road	0

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: WOODROFFE AVE btwn FIRESTATION & BASELINE RD

Traffic Control: No control **Total Collisions:** 24

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Dec-21, Sat,16:30	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Feb-15, Sat,09:00	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Mar-04, Wed,18:50	Clear	Sideswipe	Non-fatal injury	Dry	North	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Changing lanes	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Aug-10, Mon,17:57	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2020-Sep-30, Wed,17:00	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Dec-06, Sun,00:02	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Municipal transit bus	Other motor vehicle	
2021-Mar-11, Thu,19:43	Clear	Other	P.D. only	Dry	South	Unknown	Automobile, station wagon	Debris falling off vehicle	0
					North	Unknown	Unknown	Other	
2022-Feb-23, Wed,16:15	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2022-Aug-20, Sat,03:10	Clear	Other	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other	0
					South	Going ahead	Pick-up truck	Debris falling off vehicle	
2022-Dec-27, Tue,10:30	Snow	Rear end	P.D. only	Slush	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2024-Jul-14, Sun,17:20	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2024

Location: WOODROFFE AVE btwn FIRESTATION & BASELINE RD

Traffic Control: No control **Total Collisions:** 24

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2024-Jul-23, Tue,16:00	Clear	Sideswipe	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Changing lanes	Automobile, station wagon	Other motor vehicle	

Location: WOODROFFE AVE btwn TRANSITWAY - BASELINE/ALGONQUIN COLL & NAVAHO DR

Traffic Control: No control **Total Collisions:** 3

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2020-Feb-01, Sat,02:55	Clear	Rear end	Non-fatal injury	Wet	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Stopped	Truck - closed	Other motor vehicle	
2020-Mar-13, Fri,07:40	Rain	Rear end	Non-fatal injury	Wet	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2020-Nov-25, Wed,15:23	Snow	SMV other	P.D. only	Slush	South	Going ahead	Automobile, station wagon	Cable guide rail	0

Appendix H

Other Adjacent Development Background Traffic Volumes

Figure 11: 2023 Future Background Volumes

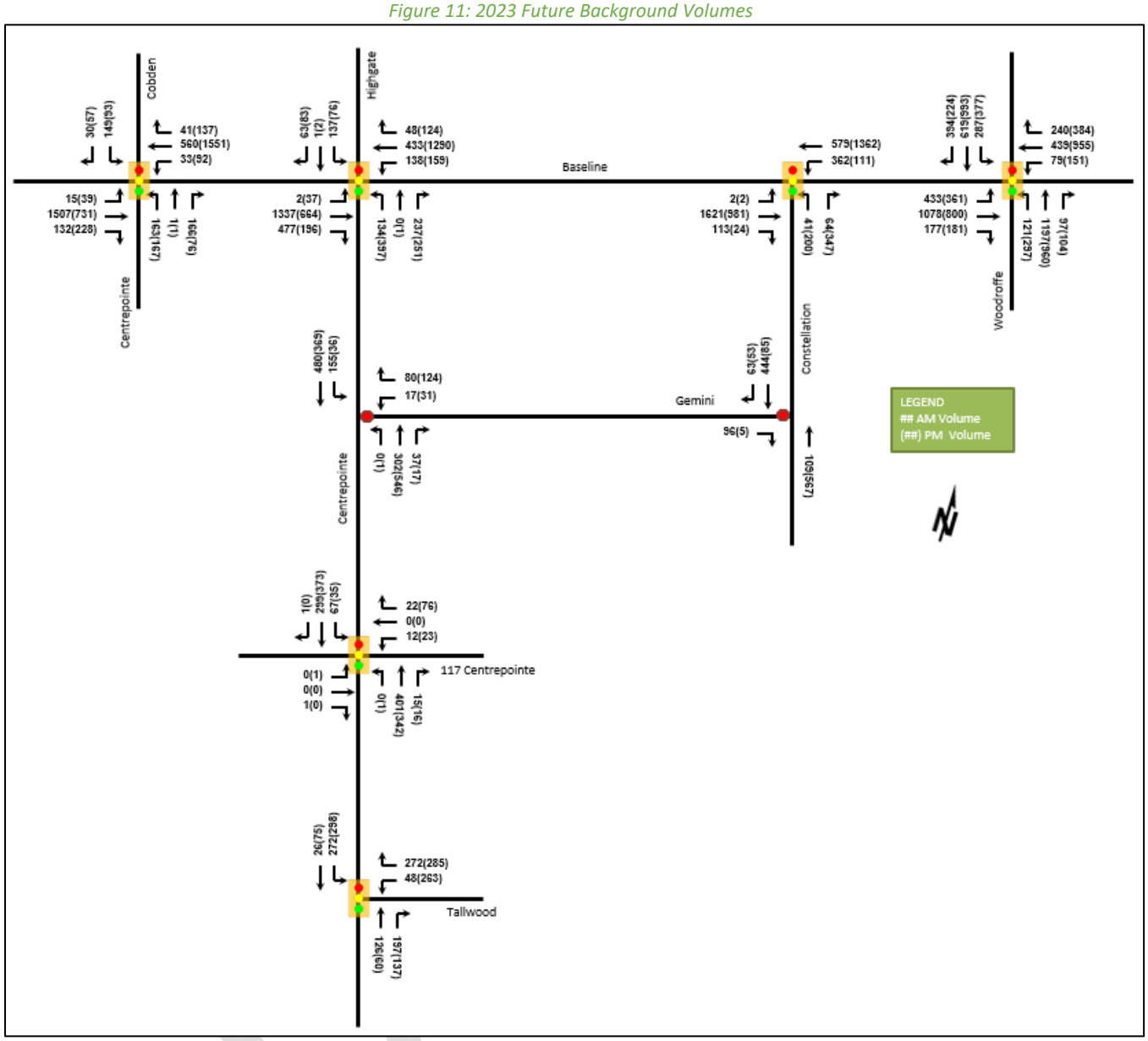


Table 15: 2023 Future Background Intersection Operations

Intersection	Lane	AM Peak Hour				PM Peak Hour			
		LOS	V/C	Delay	Q (95th)	LOS	V/C	Delay	Q (95th)
Baseline Road & Centrepointe Drive/Cobden Road ***Signalized***	EBL	A	0.17	62.9	11.0	A	0.36	66.6	21.0
	EBT	B	0.65	15.1	177.4	A	0.36	13.7	71.8
	EBR	A	0.12	2.1	8.2	A	0.23	2.3	11.8
	WBL	A	0.32	**80.8**	17.2	A	0.58	68.3	m33.7
	WBT	A	0.23	3.3	30.7	B	0.70	6.8	61.4
	WBR	A	0.04	0.4	1.1	A	0.13	1.9	m4.2
	NBL/T	C	0.71	69.4	60.9	B	0.72	69.6	61.8
	NBR	A	0.11	0.2	0.0	A	0.05	0.1	0.0
	SBL/T	B	0.65	65.3	56.0	A	0.40	54.5	36.5
	SBR	A	0.11	0.8	0.0	A	0.21	6.1	6.6
	Overall	**B**	-	**17.8**	-	**B**	-	**14.9**	-

Figure 10: Projected Study Area Intersection Peak Hour Volumes – 2021

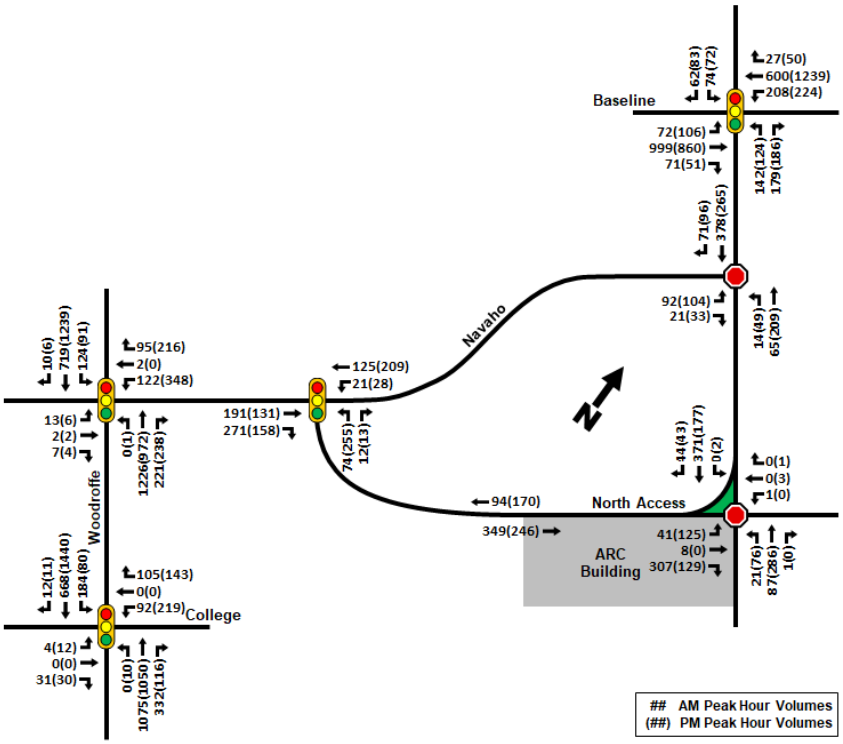
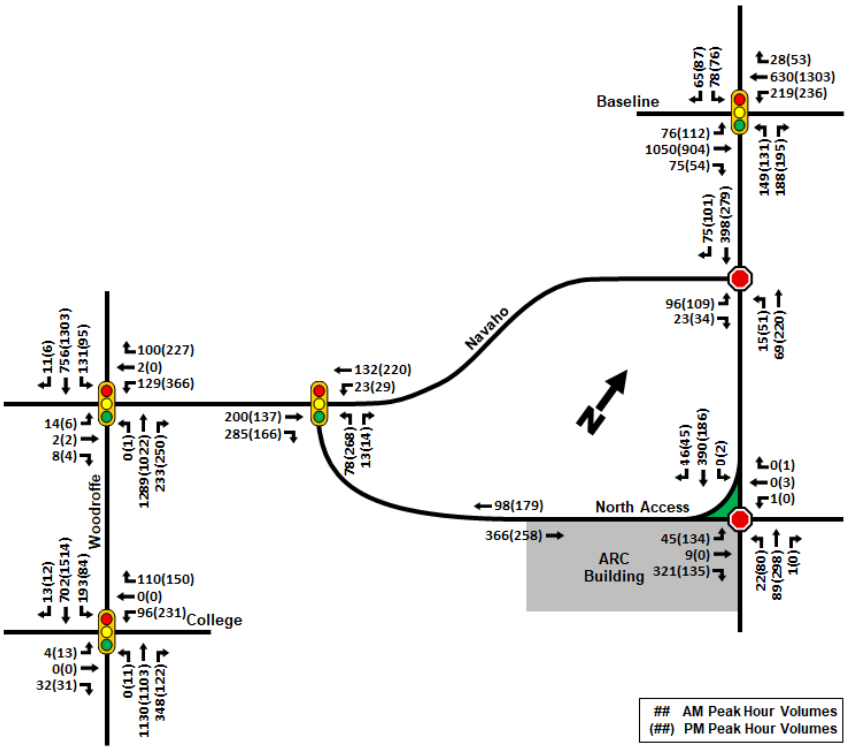
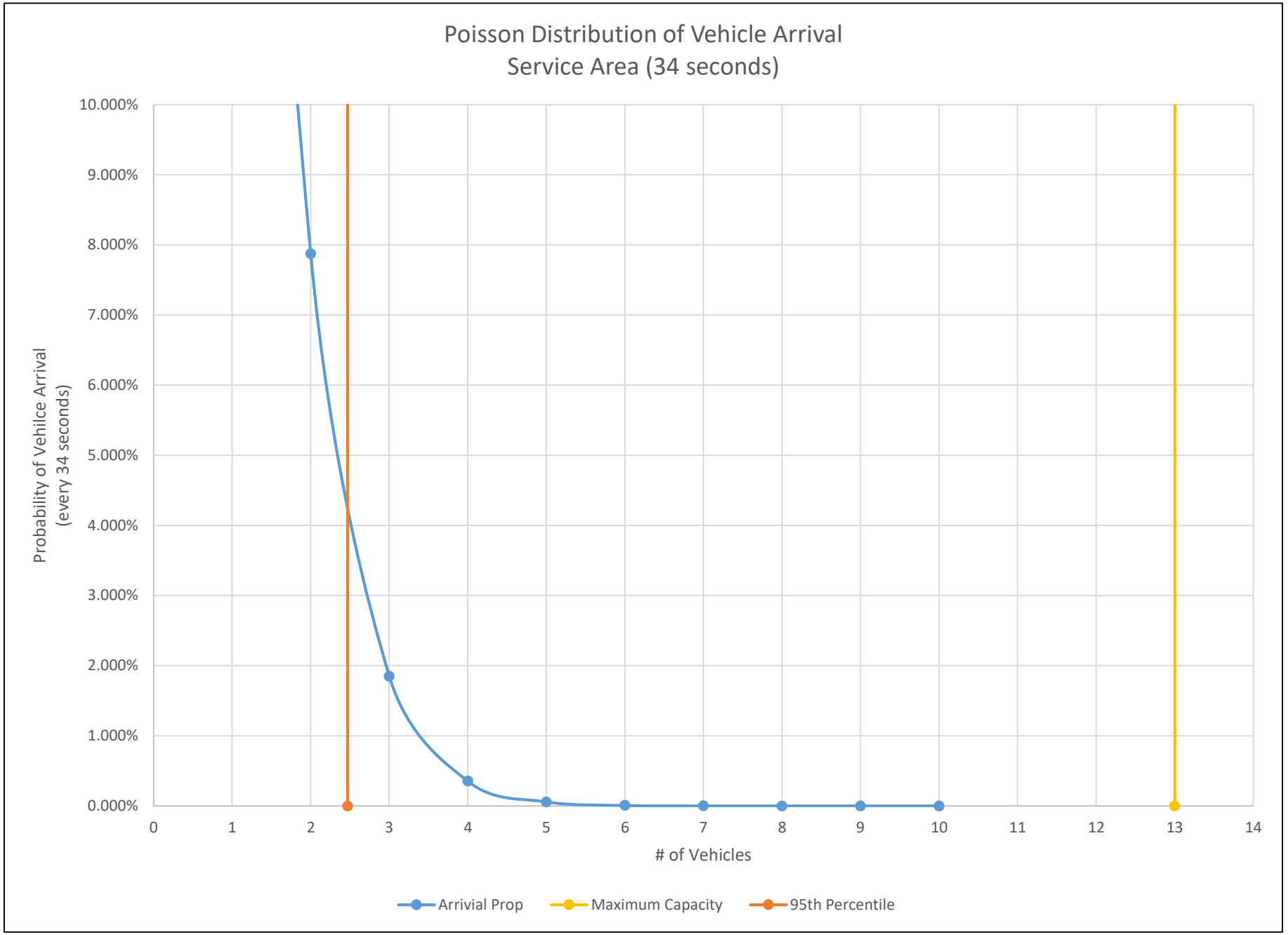


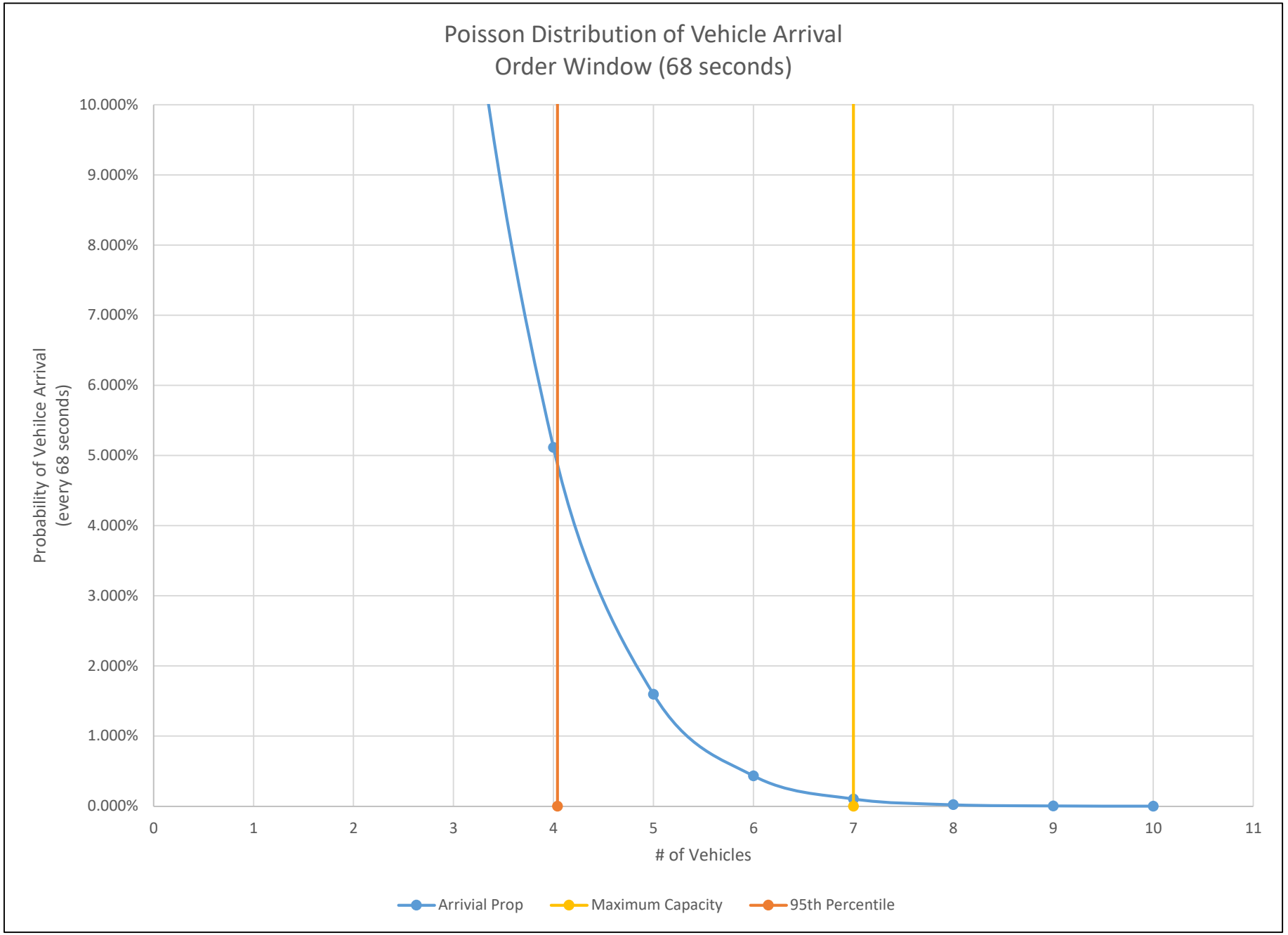
Figure 11: Projected Study Area Intersection Peak Hour Volumes – 2026

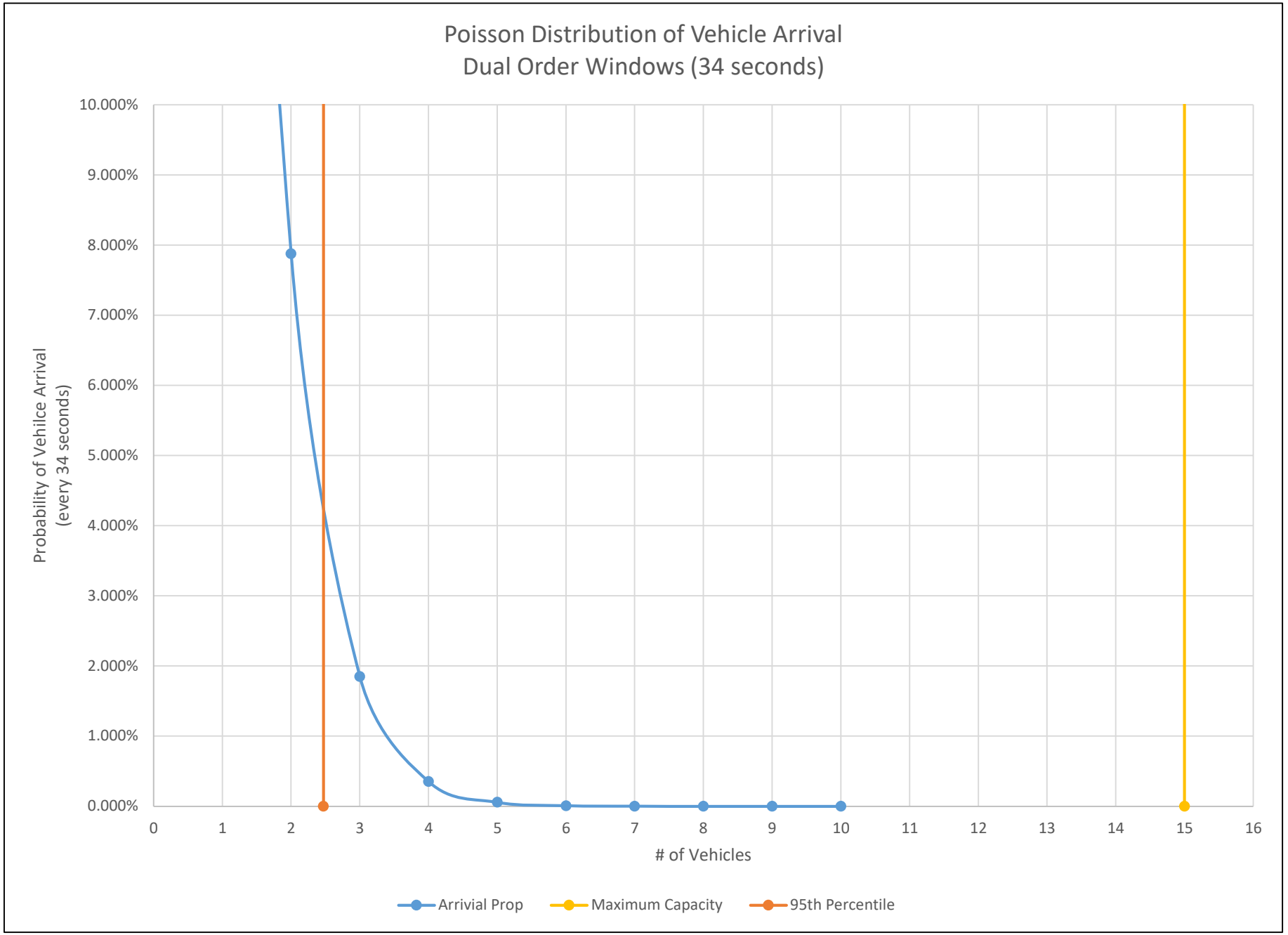


Appendix I

Queuing Operational Analysis


Poisson Distribution of Vehicle Arrival
Service Area (34 seconds)
Probability of Vehilce Arrival
(every 34 seconds)
10.000%
9.000%
8.000%
7.000%
6.000%
5.000%
4.000%
3.000%
2.000%
1.000%
0.000%
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
# of Vehicles
Arrivial Prop
Maximum Capacity
95th Percentile


Poisson Distribution of Vehicle Arrival
Order Window (68 seconds)
Probability of Vehilce Arrival
(every 68 seconds)
10.000%
9.000%
8.000%
7.000%
6.000%
5.000%
4.000%
3.000%
2.000%
1.000%
0.000%
0
1
2
3
4
5
6
7
8
9
10
11
# of Vehicles
Arrivial Prop
Maximum Capacity
95th Percentile


Poisson Distribution of Vehicle Arrival
Dual Order Windows (34 seconds)
Probability of Vehilce Arrival
(every 34 seconds)
10.000%
9.000%
8.000%
7.000%
6.000%
5.000%
4.000%
3.000%
2.000%
1.000%
0.000%
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
# of Vehicles
Arrivial Prop
Maximum Capacity
95th Percentile

Appendix J

Detailed MMLOS Segment Analysis

Multi-Modal Level of Service - Segments Form

Project: Chick-fil-A College Square TIA
Consultant: EXP
Date: Dec 18, 2025
Scenario: Existing Conditions

	Road Name	Baseline Rd (Woodroffe Ave to Navaho Dr)				Woodroffe Ave (Baseline Rd to Navaho Dr)			
	OP Transect / Policy Area	Within 600m of a rapid transit station				Within 600m of a rapid transit station			
	Segment Component	Majority (>50%)		Critical		Majority (>50%)		Critical	
	Side of Street	W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S
Pedestrian	PLOS Inputs								
	Posted Speed (km/h)	60 km/h		60 km/h		60 km/h		60 km/h	
	Two-Way ADT	33,946		33,946		62,404		62,404	
	Pedestrian Facility	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk	Sidewalk
	Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Facility Width (m)	2.00m	2.00m	2.00m	2.00m	2.00m	2.00m	2.00m	2.00m
	Offset from Motor Vehicle Travel Lanes (m)	1.5-2.99m	1.5-2.99m	1.5-2.99m	1.5-2.99m	< 0.5m	< 0.5m	< 0.5m	< 0.5m
	Presence of Adjacent Parking?	-	-	-	-	-	-	-	-
	General Purpose Curb Lane ADT	≤ 3000	> 3000	> 3000	> 3000	> 3000	> 3000	> 3000	> 3000
	Max. Distance between Controlled Crossings (m)	≤ 200m	291-400m	291-400m	291-400m	261-290m	291-400m	261-290m	261-290m
	Score	5.00	3.25	3.25	3.25	2.00	1.75	2.00	2.00
	PLOS	A	C	C	C	D	D	D	D
	Target PLOS	A				A			
Bicycle	BLOS Inputs								
	Cycling Route Classification	Cross-Town Bikeway				Elsewhere			
	Cycling Facility	Paved Shoulder without Buffer	Paved Shoulder without Buffer	Paved Shoulder without Buffer	Paved Shoulder without Buffer	Shared Operating Space	Shared Operating Space	Shared Operating Space	Shared Operating Space
	Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)	No	No	No	No	-	-	-	-
	Facility Operation	-	-	-	-	-	-	-	-
	Pedestrian/Cyclist Volume	-	-	-	-	-	-	-	-
	Facility Width	≥ 2.0m	≥ 2.0m	≥ 2.0m	≥ 2.0m	-	-	-	-
	Boulevard/Buffer Width (excluding curb)	-	-	-	-	-	-	-	-
	Unsignalized Roadway Crossing Type (where cyclists are required to yield)	None	None	None	None	None	None	None	None
	Number of Travel Lanes at Crossing	-	-	-	-	-	-	-	-
	Crossing includes Median Refuge (≥ 2.7m)	-	-	-	-	-	-	-	-
	Cross-street Posted Speed (km/h)	-	-	-	-	-	-	-	-
	Cycling Path Blockages (e.g. bus stops and/or loading zones)	Rare	Rare	Rare	Rare	Rare	Rare	Rare	Rare
	Score	1.60	1.60	1.60	1.60	0.75	0.75	0.75	0.75
	BLOS	D	D	D	D	E	E	E	E
	Target BLOS	A				B			
Transit	TLOS Inputs								
	Transit Facility	Mixed Traffic				Mixed Traffic			
	Facility Type	Mixed Traffic	Mixed Traffic			Mixed Traffic	Mixed Traffic		
	Expected Transit Running Time	Not Applicable (speeds available)	Not Applicable (speeds available)			Moderately Impeded	Moderately Impeded		
	Transit Travel Speed (if available)	29 km/h	29 km/h			30 km/h	30 km/h		
	TLOS	N/A (No transit on segment)	N/A (No transit on segment)			E	E		
	Target TLOS	E (D for frequent transit routes)				E (D for frequent transit routes)			
Public Realm	PRLOS Inputs								
	Context	Other Streets	Other Streets			Other Streets	Other Streets		
	Inner Boulevard Width	2.0-3.99m	2.0-3.99m			2.0-3.99m	2.0-3.99m		
	Middle Boulevard Width	≥ 3.0m	≥ 3.0m			≥ 3.0m	≥ 3.0m		
	Outer Boulevard (Frontage) Width	≥ 3.0m	≥ 3.0m			≥ 3.0m	≥ 3.0m		
	Transit Route on Segment?	No	No			No	No		
	Bus Stop Elements	-	-			-	-		
	Number of Midblock Traffic Lanes (both travel directions)	5				≥ 6			
	Score	23.40	19.80			17.10	16.20		
	PRLOS	B	C			C	C		
		B				C			

Appendix K

City of Ottawa TDM Infrastructure Checklist

TDM Measures Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

Legend

BASIC — The measure is generally feasible and effective, and in most cases would benefit the development and its users

BETTER — The measure could maximize support for users of sustainable modes, and optimize development performance

★ — The measure is one of the most dependably effective tools to encourage the use of sustainable modes

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
	1.	**TDM PROGRAM MANAGEMENT**	
	1.1	**Program coordinator**	
BASIC ★	1.1.1	Designate an internal coordinator, or contract with an external coordinator	☑
	1.2	**Travel surveys**	
BETTER	1.2.1	Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress	☑
	2.	**WALKING AND CYCLING**	
	2.1	**Information on walking/cycling routes & destinations**	
BASIC	2.1.1	Display local area maps with walking/cycling access routes and key destinations at major entrances	☑
	2.2	**Bicycle skills training**	
		Commuter travel	
BETTER ★	2.2.1	Offer on-site cycling courses for commuters, or subsidize off-site courses	☐
	2.3	**Valet bike parking**	
		Visitor travel	
BETTER	2.3.1	Offer secure valet bike parking during public events when demand exceeds fixed supply (e.g. for festivals, concerts, games)	☐

			TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		3.	**TRANSIT**	
		3.1	**Transit information**	
BASIC		3.1.1	Display relevant transit schedules and route maps at entrances	☑
BASIC		3.1.2	Provide online links to OC Transpo and STO information	☑
BETTER		3.1.3	Provide real-time arrival information display at entrances	☐
		3.2	**Transit fare incentives**	
			Commuter travel	
BETTER		3.2.1	Offer preloaded PRESTO cards to encourage commuters to use transit	☐
BETTER	★	3.2.2	Subsidize or reimburse monthly transit pass purchases by employees	☐
			Visitor travel	
BETTER		3.2.3	Arrange inclusion of same-day transit fare in price of tickets (e.g. for festivals, concerts, games)	☐
		3.3	**Enhanced public transit service**	
			Commuter travel	
BETTER		3.3.1	Contract with OC Transpo to provide enhanced transit services (e.g. for shift changes, weekends)	☐
			Visitor travel	
BETTER		3.3.2	Contract with OC Transpo to provide enhanced transit services (e.g. for festivals, concerts, games)	☐
		3.4	**Private transit service**	
			Commuter travel	
BETTER		3.4.1	Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for shift changes, weekends)	☐
			Visitor travel	
BETTER		3.4.2	Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for festivals, concerts, games)	☐

			TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		4.	**RIDESHARING**	
		4.1	**Ridematching service**	
			Commuter travel	
BASIC	★	4.1.1	Provide a dedicated ridematching portal at OttawaRideMatch.com	☑
		4.2	**Carpool parking price incentives**	
			Commuter travel	
BETTER		4.2.1	Provide discounts on parking costs for registered carpools	☐
		4.3	**Vanpool service**	
			Commuter travel	
BETTER		4.3.1	Provide a vanpooling service for long-distance commuters	☐
		5.	**CARSHARING & BIKESHARING**	
		5.1	**Bikeshare stations & memberships**	
BETTER		5.1.1	Contract with provider to install on-site bikeshare station for use by commuters and visitors	☐
			Commuter travel	
BETTER		5.1.2	Provide employees with bikeshare memberships for local business travel	☐
		5.2	**Carshare vehicles & memberships**	
			Commuter travel	
BETTER		5.2.1	Contract with provider to install on-site carshare vehicles and promote their use by tenants	☐
BETTER		5.2.2	Provide employees with carshare memberships for local business travel	☐
		6.	**PARKING**	
		6.1	**Priced parking**	
			Commuter travel	
BASIC	★	6.1.1	Charge for long-term parking (daily, weekly, monthly)	☐
BASIC		6.1.2	Unbundle parking cost from lease rates at multi-tenant sites	☐
			Visitor travel	
BETTER		6.1.3	Charge for short-term parking (hourly)	☐

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		7. TDM MARKETING & COMMUNICATIONS	
		7.1 Multimodal travel information	
		Commuter travel	
BASIC	★	7.1.1 Provide a multimodal travel option information package to new/relocating employees and students	☑
		Visitor travel	
BETTER	★	7.1.2 Include multimodal travel option information in invitations or advertising that attract visitors or customers (e.g. for festivals, concerts, games)	☐
		7.2 Personalized trip planning	
		Commuter travel	
BETTER	★	7.2.1 Offer personalized trip planning to new/relocating employees	☐
		7.3 Promotions	
		Commuter travel	
BETTER		7.3.1 Deliver promotions and incentives to maintain awareness, build understanding, and encourage trial of sustainable modes	☐
		8. OTHER INCENTIVES & AMENITIES	
		8.1 Emergency ride home	
		Commuter travel	
BETTER	★	8.1.1 Provide emergency ride home service to non-driving commuters	☐
		8.2 Alternative work arrangements	
		Commuter travel	
BASIC	★	8.2.1 Encourage flexible work hours	☐
BETTER		8.2.2 Encourage compressed workweeks	☐
BETTER	★	8.2.3 Encourage telework	☐
		8.3 Local business travel options	
		Commuter travel	
BASIC	★	8.3.1 Provide local business travel options that minimize the need for employees to bring a personal car to work	☑
		8.4 Commuter incentives	
		Commuter travel	
BETTER		8.4.1 Offer employees a taxable, mode-neutral commuting allowance	☐
		8.5 On-site amenities	
		Commuter travel	
BETTER		8.5.1 Provide on-site amenities/services to minimize mid-day or mid-commute errands	☐

Appendix L

Detailed MMLOS Intersection Analysis

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Project: Chick-fil-A College Square TIA
Consultant: EXP
Date: Dec 18, 2025
Scenario: Existing Conditions - Weekday PM

	Intersection Name	Baseline Rd & Woodroffe Ave				Woodroffe & Navaho Drive				Baseline Rd & Navaho Drive				Baseline Rd & College Square				Navaho Drive & Wajashk Private			
	OP Transect / Policy Area	Within 600m of a rapid transit station				Within 600m of a rapid transit station				Within 600m of a rapid transit station				Within 600m of a rapid transit station				Within 600m of a rapid transit station			
Pedestrian	PLOS Inputs																				
	Pedestrians Crossing the	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg
	Number of Travel Lanes Crossed	≥ 9	≥ 9	8	8	≥ 9	≥ 9	6	5	1-3	1-3	6	7	1-3	1-3	6	6		1-3	1-3	1-3
	Median Refuge (≥2.7m)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No		No	No	Yes
	Crosswalk Treatment	Std Transverse Markings	Std Transverse Markings	Std Transverse Markings	Std Transverse Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Std Transverse Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Std Transverse Markings	Zebra Stripe Hi-Vis Markings	Zebra Stripe Hi-Vis Markings	Std Transverse Markings		Std Transverse Markings	Std Transverse Markings	Std Transverse Markings
	Signal Cycle Length (sec)	130.0				130.0				130.0				130.0					65.0		
	Effective Walk Time (sec)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
	Conflict with Right-Turn Vehicles (For PLOS & BLOS)	WBR	EBR	NBR	SBR	WBR	EBR	NBR	SBR	WBR	EBR	NBR	SBR	WBR	EBR	NBR	SBR	WBR	EBR	NBR	SBR
	Right-Turn Geometry	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Conventional Right-Turn Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel		Right-Turn With No Channel	Right-Turn With No Channel	Right-Turn With No Channel
	Right-Turn Signal Phasing	-	-	-	-	-	-	-	-	Permissive	Protected-Permissive	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive		Permissive	Permissive	Permissive
	Right-Turn Volume	> 300 veh/h	≤ 150 veh/h	> 300 veh/h	> 150 to 300 veh/h	≤ 150 veh/h	> 300 veh/h	> 150 to 300 veh/h	≤ 150 veh/h	≤ 150 veh/h	> 150 to 300 veh/h	≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h		≤ 150 veh/h	≤ 150 veh/h	≤ 150 veh/h
	Right-Turn Effective Corner Radius	-	-	-	-	-	-	-	-	> 8m	> 8m	> 8m	> 8m	> 8m	> 8m	> 8m	> 8m		> 8m	> 8m	> 8m
	Cross-street Posted Speed (km/h)	60 km/h			60 km/h	60 km/h			60 km/h	60 km/h			50 km/h	30 km/h			60 km/h	30 km/h		60 km/h	
	Conflict with Left-Turn Vehicles (For PLOS & BLOS)	EBL	WBL	SBL	NBL	EBL	WBL	SBL	NBL	EBL	WBL	SBL	NBL	EBL	WBL	SBL	NBL	EBL	WBL	SBL	NBL
	Left-Turn Signal Phasing	Fully Protected	Fully Protected	Fully Protected	Fully Protected	Fully Protected	Fully Protected	Perm or Prot+Perm	Perm or Prot+Perm	Fully Protected	Fully Protected	Perm or Prot+Perm (with LPI)	Perm or Prot+Perm (with LPI)	Fully Protected	Fully Protected	Perm or Prot+Perm	Perm or Prot+Perm		Fully Protected	Perm or Prot+Perm	No Left-Turn / Prohib.
	Left-Turn Volume	-	-	-	-	-	-	> 100 veh/h	≤ 50 veh/h	-	-	> 100 veh/h	> 50 to 100 veh/h	-	-	> 100 veh/h	≤ 50 veh/h		-	≤ 50 veh/h	-
	Left-Turn Opposing Lanes	-	-	-	-	-	-	-	-	-	-	≤ 1	≤ 1	-	-	-	-	-	-	-	-
	Score	0.55	0.70	1.15	1.30	0.75	0.60	2.30	3.15	4.05	3.90	-	1.80	4.15	4.20	2.05	2.20	-	4.45	4.30	4.30
	PLOS	E	E	E	E	E	E	D	C	B	B	-	D	B	B	D	D	-	B	B	B
		E				D				C				C				B			
	Target PLOS	A				A				A				A				A			
Bicycle	BLOS Inputs																				
	Cycling Route Classification	Cross-Town Bikeway				Elsewhere				Elsewhere				Elsewhere				Elsewhere			
	Cyclists Crossing the	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg	North Leg	South Leg	East Leg	West Leg
	Type of Cycling Facility Across Leg	Mixed Traffic	Mixed Traffic	Bike Lane Through Intersection	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Bike Lane Through Intersection	Mixed Traffic	Mixed Traffic	Mixed Traffic	Bike Lane Through Intersection	Input PLOS First	Mixed Traffic	Mixed Traffic	Bike Lane Through Intersection
	Two-Way ADT (in Cyclist Travel Direction)	28,730		27,590		24,990		6,390		5,250		28,260		2,340		26,490		1,520		5,840	
	Floating Bike Lane or Right-Turn Lane Crossover Approaching the Crossing?	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No		No	No	No
	Crossride Operation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Target Crossride Setback Met?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Right-Turn Vehicle Volume from Adjacent Roadway ≥ 100 veh/h?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cyclist Left-Turn Operation	WBL	EBL	NBL	SBL	WBL	EBL	NBL	SBL	WBL	EBL	NBL	SBL	WBL	EBL	NBL	SBL	WBL	EBL	NBL	SBL
	Cyclist Left-Turn Treatment Type	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Dual Left-Turn Lanes	General Purpose Dual Left-Turn Lanes	General Purpose Dual Left-Turn Lanes	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	One-Stage Bike Box	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane	General Purpose Through-Left or Single Left-Turn Lane
	Vehicle Lanes Crossed by Cyclists	Two or More Lanes Crossed	Two or More Lanes Crossed	-	-	-	One Lane Crossed	Two or More Lanes Crossed	Two or More Lanes Crossed	Two or More Lanes Crossed	Two or More Lanes Crossed	One Lane Crossed	-	Two or More Lanes Crossed	Two or More Lanes Crossed	One Lane Crossed	No Lane Crossed	One Lane Crossed	One Lane Crossed	One Lane Crossed	No Lane Crossed
	Score	0	10	25	10	10	10	-30	10	30	20	Input PLOS First	55	110	110	0	75	-	125	40	75
	BLOS	F	F	E	F	F	F	F	F	E	E	-	D	B	B	F	C	-	A	D	C
		F				F				E				C				C			
	Target BLOS	A				B				B				B				B			
Transit	TLOS Inputs																				
	Transit Facility	Mixed Traffic				Mixed Traffic				Select Transit Designation				Select Transit Designation				Select Transit Designation			
	Vehicles Travelling	Southbound	Northbound	Westbound	Eastbound	Southbound	Northbound	Westbound	Eastbound	Southbound	Northbound	Westbound	Eastbound	Southbound	Northbound	Westbound	Eastbound	Southbound	Northbound	Westbound	Eastbound
	Average Transit Delay (if available)	> 80 sec	56-80 sec	> 80 sec	56-80 sec	11-20 sec	21-35 sec	≤ 10 sec	≤ 10 sec	36-55 sec	Unavailable	36-55 sec	36-55 sec	21-35 sec	11-20 sec	11-20 sec	≤ 10 sec		≤ 10 sec	11-20 sec	21-35 sec
	Example Transit Priority Treatment	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-
	TLOS	F	E	F	E	B	C	A	A	D	-	D	D	C	B	B	A	-	A	B	C
		E				B				D				B				B			
	Target TLOS	E (D for frequent transit routes)				E (D for frequent transit routes)				-				-				-			
Auto	AutoLOS Inputs																				
	Overall Intersection Volume to Capacity Ratio	> 1.00				0.71 to 0.80				0.81 to 0.90				0.61 to 0.70				0.61 to 0.70			
	Individual Movements V/C Ratios and Queue Lengths	See Separate Traffic Operations Table				See Separate Traffic Operations Table				See Separate Traffic Operations Table				See Separate Traffic Operations Table				See Separate Traffic Operations Table			
	AutoLOS	F				C				D				B				B			
	Target AutoLOS	E				E				E				E				E			

Appendix M

Proxy Chick-Fil-A Survey

Chick-Fil-A Drive-Through - 2331 Appleby Line, Burlington, ON L7L 0J3	
Surveyor	Ahmed Hassan
Weather	11:00 :- 16°c [clear], 5:00 :- 12°c [clear]
Date	Saturday Jan 31, 2026

Start Time	End Time	# IN	No.	# OUT	No.
11:00:00 AM	11:15:00 AM	111	3	𝍸	5
11:15:00 AM	11:30:00 AM	𝍸 𝍸 11	12	𝍸 𝍸 1	11
11:30:00 AM	11:45:00 AM	𝍸 1111	9	𝍸 111	8
11:45:00 AM	12:00:00 PM	𝍸 11	7	𝍸 1	6
12:00:00 PM	12:15:00 PM	𝍸 𝍸 111	13	𝍸 𝍸	10
12:15:00 PM	12:30:00 PM	𝍸 𝍸 1	11	𝍸 11	7
12:30:00 PM	12:45:00 PM	𝍸 𝍸 𝍸 1	16	𝍸 𝍸 𝍸	15
12:45:00 PM	1:00:00 PM	𝍸 𝍸 𝍸 11	17	𝍸 𝍸 11	12

Start Time	End Time	# IN	No.	# OUT	No.
1:00:00 PM	1:15:00 PM	𝍸 𝍸 I	11	𝍸 𝍸 IIII	14
1:15:00 PM	1:30:00 PM	𝍸 𝍸 I	11	𝍸 IIII	9
1:30:00 PM	1:45:00 PM	𝍸 𝍸 𝍸 𝍸 II	22	𝍸 𝍸 IIII	14
1:45:00 PM	2:00:00 PM	𝍸 𝍸 III	13	𝍸 𝍸 𝍸 𝍸	20
2:00:00 PM	2:15:00 PM	𝍸 𝍸 I	11	𝍸 𝍸 III	13
2:15:00 PM	2:30:00 PM	𝍸 𝍸 𝍸 𝍸	20	𝍸 𝍸 𝍸	15
2:30:00 PM	2:45:00 PM	𝍸 𝍸 II	12	𝍸 𝍸 𝍸 I	16
2:45:00 PM	3:00:00 PM	𝍸 III	8	𝍸 II	7
3:00:00 PM	3:15:00 PM	𝍸 𝍸	10	𝍸 I	6
3:15:00 PM	3:30:00 PM	𝍸 𝍸	10	𝍸 𝍸 𝍸 I	16
3:30:00 PM	3:45:00 PM	IIII	4	𝍸 IIII	9

Start Time	End Time	# IN	No.	# OUT	No.
3:45:00 PM	4:00:00 PM	18	18	15	15
4:00:00 PM	4:15:00 PM	17	17	14	14
4:15:00 PM	4:30:00 PM	6	6	11	11
4:30:00 PM	4:45:00 PM	12	12	9	9
4:45:00 PM	5:00:00 PM	17	17	9	9
5:00:00 PM	5:15:00 PM	9	9	17	17
5:15:00 PM	5:30:00 PM	12	12	11	11
5:30:00 PM	5:45:00 PM	12	12	9	9
5:45:00 PM	6:00:00 PM	9	9	10	10
6:00:00 PM	6:15:00 PM	13	13	9	9
6:15:00 PM	6:30:00 PM	9	9	14	14

Start Time	End Time	# IN	No.	# OUT	No.
6:30:00 PM	6:45:00 PM	𝍸 𝍸	10	𝍸 𝍸 ||||	14
6:45:00 PM	7:00:00 PM	𝍸 𝍸 𝍸 |||	18	𝍸 𝍸 𝍸 ||	16

Extra Notes

12:01: 3 ~~cars~~ vehicles queued

12:04: 4 ~~cars~~ vehicles queued

12:40: 8 ~~cars~~ vehicles queued

1:40: 13 vehicles queued

2:18: 14 vehicles queued [MAX]

4:17: 10 vehicles queued

Whenever ~~traffic~~ the queue ~~for~~ to enter the Drive thru would get long enough to spill into the adjacent road this would cause vehicles travelling down the adjacent road to drive around the cars guard up.

Also when the drive thru queue got long enough to fill up the entire drive thru, vehicles waiting to turn into the drive thru would cause traffic to build behind them

Chick-Fil-A Drive-Through - 2331 Appleby Line, Burlington, ON L7L 0J3	
Surveyor	Ahmed Hassan
Weather	11:00 : -5°C overcast
Date	Tuesday February 3, 2026

Start Time	End Time	# IN	No.	# OUT	No.
11:00:00 AM	11:15:00 AM	1111	4	𝍸	5
11:15:00 AM	11:30:00 AM	𝍸 1111	9	1111	4
11:30:00 AM	11:45:00 AM	𝍸 111	8	𝍸 1111	9
11:45:00 AM	12:00:00 PM	1111	4	𝍸 111	8
12:00:00 PM	12:15:00 PM	𝍸 𝍸 11	12	𝍸 11	7
12:15:00 PM	12:30:00 PM	𝍸 𝍸 𝍸 11	17	𝍸 𝍸 1111	14
12:30:00 PM	12:45:00 PM	𝍸 𝍸 𝍸 1	16	𝍸 𝍸 𝍸 1111	19
12:45:00 PM	1:00:00 PM	𝍸 𝍸 1	11	𝍸 𝍸 1111	14

exp.

rt Time	End Time	# IN	No.	# OUT	No.
1:00:00 PM	1:15:00 PM	19	16	13	13
1:15:00 PM	1:30:00 PM	12	12	13	13
1:30:00 PM	1:45:00 PM	13	13	13	13
1:45:00 PM	2:00:00 PM	10	10	12	12
2:00:00 PM	2:15:00 PM	10	10	6	6
2:15:00 PM	2:30:00 PM	6	6	9	9
2:30:00 PM	2:45:00 PM	13	13	11	11
2:45:00 PM	3:00:00 PM	8	8	8	8
3:00:00 PM	3:15:00 PM	7	7	7	7
3:15:00 PM	3:30:00 PM	9	9	12	12
3:30:00 PM	3:45:00 PM	6	6	7	7

Start Time	End Time	# IN	No.	# OUT	No.
3:45:00 PM	4:00:00 PM	11	11	5	5
4:00:00 PM	4:15:00 PM	4	4	10	10
4:15:00 PM	4:30:00 PM	13	13	4	4
4:30:00 PM	4:45:00 PM	13	13	16	16
4:45:00 PM	5:00:00 PM	11	11	14	14
5:00:00 PM	5:15:00 PM	9	9	6	6
5:15:00 PM	5:30:00 PM	12	12	12	12
5:30:00 PM	5:45:00 PM	11	11	11	11
5:45:00 PM	6:00:00 PM	9	9	11	11
6:00:00 PM	6:15:00 PM	10	10	9	9
6:15:00 PM	6:30:00 PM	18	18	16	16

Start Time	End Time	# IN	No.	# OUT	No.
6:30:00 PM	6:45:00 PM	𝍸 𝍸 ||	12	𝍸 𝍸 𝍸 |	16
6:45:00 PM	7:00:00 PM	𝍸 ||	7	𝍸 |||	8

Extra Notes

Vehicles in Drive-Through queue

11:00 : 2 vehicles

12:00 : 5 vehicles

1:00 : 2 vehicles

2:00 : 2 vehicles

3:00 : 5 vehicles

4:00 : 7 vehicles

4:30 : 10 vehicles [MAX]

5:00 : 3 vehicles

5:30 : 6 vehicles

6:00 : 5 vehicles

~~7:00~~

6:30 : 8 vehicles

7:00 : 3 vehicles

Chick-Fil-A Parking Utilization Study - 2331 Appleby Line, Burlington, ON L7L 0J3	
Surveyor	Adnan Abou Alway
Weather	Sunny Clear -16° (11:00)
Number of Available Parking Spaces	31
Date	January 31 st, 2026 (Saturday)

Time	# of Parking Spaces Utilized	Notes
11:00:00 AM	9	
11:15:00 AM	8	
11:30:00 AM	10	
11:45:00 AM	17	People are Parking in the chick-fil-A parking and going to Fire house subs
12:00:00 PM	14	
12:15:00 PM	21	
12:30:00 PM	23	
12:45:00 PM	25	
1:00:00 PM	23	
1:15:00 PM	27	People are parking in nearby spots.
1:30:00 PM	28	
1:45:00 PM	23	

...e	# of Parking Spaces Utilized	Notes
2:00:00 PM	23	
2:15:00 PM	25	
2:30:00 PM	20	
2:45:00 PM	21	
3:00:00 PM	21	
3:15:00 PM	18	
3:30:00 PM	18	
3:45:00 PM	15	
4:00:00 PM	25	
4:15:00 PM	29	Busy Parking conditions.
4:30:00 PM	25	
4:45:00 PM	26	
5:00:00 PM	27	
5:15:00 PM	21	
5:30:00 PM	31	

ıe	# of Parking Spaces Utilized	Notes
5:45:00 PM	25	
6:00:00 PM	21	
6:15:00 PM	24	
6:30:00 PM	16	
6:45:00 PM	19	
7:00:00 PM	23	

Extra Notes

ime	# of Parking Spaces Utilized	Notes

Chick-Fil-A Parking Utilization Study - 2331 Appleby Line, Burlington, ON L7L 0J3	
Surveyor	Alyssa Speiran
Weather	-5°C, light snow, cloudy
Number of Available Parking Spaces	29
Date	Tuesday, February 3, 2026

Time	# of Parking Spaces Utilized	Notes
11:00:00 AM	𝍸 𝍸 ||||	
11:15:00 AM	𝍸 𝍸 𝍸 𝍸 ||	
11:30:00 AM	𝍸 𝍸 𝍸 |||	
11:45:00 AM	𝍸 𝍸 𝍸 𝍸	
12:00:00 PM	𝍸 𝍸 𝍸 𝍸 |	
12:15:00 PM	𝍸 𝍸 𝍸 𝍸 |||	
12:30:00 PM	𝍸 𝍸 𝍸 𝍸 𝍸 |	
12:45:00 PM	𝍸 𝍸 𝍸 𝍸 ||	
1:00:00 PM	𝍸 𝍸 𝍸 ||||	
1:15:00 PM	𝍸 𝍸 𝍸 |	
1:30:00 PM	𝍸 𝍸 𝍸 𝍸 |	
1:45:00 PM	𝍸 𝍸 𝍸 𝍸 |	

Time	# of Parking Spaces Utilized	Notes
2:00:00 PM	16	
2:15:00 PM	16	
2:30:00 PM	16	
2:45:00 PM	16	
3:00:00 PM	16	
3:15:00 PM	11	
3:30:00 PM	14	
3:45:00 PM	11	
4:00:00 PM	15	
4:15:00 PM	14	
4:30:00 PM	17	
4:45:00 PM	11	
5:00:00 PM	13	
5:15:00 PM	19	
5:30:00 PM	18	

Time	# of Parking Spaces Utilized	Notes
5:45:00 PM	𝍸 𝍸 𝍸 𝍸 ||	
6:00:00 PM	𝍸 𝍸 𝍸 𝍸 𝍸	
6:15:00 PM	𝍸 𝍸 𝍸 𝍸	
6:30:00 PM	𝍸 𝍸 𝍸 𝍸 |	
6:45:00 PM	𝍸 𝍸 𝍸 𝍸 ||	
7:00:00 PM	𝍸 𝍸 𝍸 𝍸 |	

Extra Notes

Chick-Fil-A Trip Generation - 2331 Appleby Line, Burlington, ON L7L 0J3	
Surveyor	Adnan Abou Alway
Weather	Sunny clear -16° (11:00)
Date	January 31st, 2026 (Saturday)

Start Time	End Time	# IN	No.	# OUT	No.
11:00:00 AM	11:15:00 AM	8	8	9	9
11:15:00 AM	11:30:00 AM	18	18	18	18
11:30:00 AM	11:45:00 AM	17	17	17	17
11:45:00 AM	12:00:00 PM	15	15	19	19
12:00:00 PM	12:15:00 PM	14	14	15	15
12:15:00 PM	12:30:00 PM	27	27	19	19
12:30:00 PM	12:45:00 PM	16	16	20	20
12:45:00 PM	1:00:00 PM	25	25	22	22

Start Time	End Time	# IN	No.	# OUT	No.
1:00:00 PM	1:15:00 PM		30		27
1:15:00 PM	1:30:00 PM		31		24
1:30:00 PM	1:45:00 PM		27		33
1:45:00 PM	2:00:00 PM		26		31
2:00:00 PM	2:15:00 PM		23		27
2:15:00 PM	2:30:00 PM		22		32
2:30:00 PM	2:45:00 PM		16		21
2:45:00 PM	3:00:00 PM		13		17
3:00:00 PM	3:15:00 PM		15		14
3:15:00 PM	3:30:00 PM		19		25

Start Time	End Time	# IN	No.	# OUT	No.
3:30:00 PM	3:45:00 PM		9		16
3:45:00 PM	4:00:00 PM		22		18
4:00:00 PM	4:15:00 PM		33		18
4:15:00 PM	4:30:00 PM		12		16
4:30:00 PM	4:45:00 PM		15		15
4:45:00 PM	5:00:00 PM		21		16
5:00:00 PM	5:15:00 PM		16		25
5:15:00 PM	5:30:00 PM		31		25
5:30:00 PM	5:45:00 PM		18		19
5:45:00 PM	6:00:00 PM		20		26

Start Time	End Time	# IN	No.	# OUT	No.
6:00:00 PM	6:15:00 PM	𝍸 𝍸 𝍸 ||	17	𝍸 𝍸 |||	13
6:15:00 PM	6:30:00 PM	𝍸 𝍸 𝍸 |||	18	𝍸 𝍸 𝍸 𝍸 |||	23
6:30:00 PM	6:45:00 PM	𝍸 𝍸 |||	13	𝍸 𝍸 𝍸 𝍸	20
6:45:00 PM	7:00:00 PM	𝍸 𝍸 𝍸 𝍸 ||||	24	𝍸 𝍸 𝍸 𝍸 ||	22

Extra Notes

Start Time	End Time	# IN	No.	# OUT	No.

Chick-Fil-A Trip Generation - 2331 Appleby Line, Burlington, ON L7L 0J3	
Surveyor	Alyssa Speiran
Weather	-5°C, light snow, cloudy
Date	Tuesday, February 3, 2026

Start Time	End Time	# IN	No.	# OUT	No.
11:00:00 AM	11:15:00 AM	5 |	8	5 |	9
11:15:00 AM	11:30:00 AM	5 5 | |	12	5 5 5 |	16
11:30:00 AM	11:45:00 AM	5 5 5 | | |	18	5 5 5 | | | |	19
11:45:00 AM	12:00:00 PM	5 5 | | | |	14	5 5 | | |	13
12:00:00 PM	12:15:00 PM	5 5 5	15	5 5 | | | |	14
12:15:00 PM	12:30:00 PM	5 5 5 5 | |	22	5 5 5 5 | | | |	24
12:30:00 PM	12:45:00 PM	5 5 5 | | | |	19	5 5 5 5 5	30
12:45:00 PM	1:00:00 PM	5 5 5 | | |	18	5 5 5 | | |	18

Start Time	End Time	# IN	No.	# OUT	No.
1:00:00 PM	1:15:00 PM	16	16	23	23
1:15:00 PM	1:30:00 PM	16	16	15	15
1:30:00 PM	1:45:00 PM	14	14	19	19
1:45:00 PM	2:00:00 PM	19	19	18	18
2:00:00 PM	2:15:00 PM	10	10	8	8
2:15:00 PM	2:30:00 PM	8	8	12	12
2:30:00 PM	2:45:00 PM	15	15	17	17
2:45:00 PM	3:00:00 PM	15	15	13	13
3:00:00 PM	3:15:00 PM	15	15	20	20
3:15:00 PM	3:30:00 PM	13	13	13	13
3:30:00 PM	3:45:00 PM	10	10	10	10

Start Time	End Time	# IN	No.	# OUT	No.
3:45:00 PM	4:00:00 PM	9	10	4	9
4:00:00 PM	4:15:00 PM	13	13	18	18
4:15:00 PM	4:30:00 PM	13	18	7	12
4:30:00 PM	4:45:00 PM	18	18	23	23
4:45:00 PM	5:00:00 PM	14	15	15	15
5:00:00 PM	5:15:00 PM	6	11	16	16
5:15:00 PM	5:30:00 PM	17	17	12	12
5:30:00 PM	5:45:00 PM	22	22	15	15
5:45:00 PM	6:00:00 PM	9	14	18	18
6:00:00 PM	6:15:00 PM	13	13	14	14
6:15:00 PM	6:30:00 PM	24	24	21	21

Start Time	End Time	# IN	No.	# OUT	No.
6:30:00 PM	6:45:00 PM	𝍸 𝍸 𝍸 ||||	19	𝍸 𝍸 𝍸 𝍸 ||	22
6:45:00 PM	7:00:00 PM	𝍸 ||	7	𝍸 𝍸 |||	14

Extra Notes