Appendix C – Traffic Operations and Safety Analysis Report

Final Report

Municipal Class Environmental Assessment Study (EA) for Improvements on Gordon Street from Edinburgh Road to Lowes Road

Traffic Operations & Safety Analysis

Prepared for City of Guelph
by IBI Group

June 18, 2020

Document Control Page

CLIENT:	City of Guelph
PROJECT NAME:	Gordon Street EA Improvements from Edinburgh Road to Lowes Road
REPORT TITLE:	Municipal Class Environmental Assessment Study (EA) for Improvements on Gordon Street from Edinburgh Road to Lowes Road
IBI REFERENCE:	117734
VERSION:	7.0
DIGITAL MASTER:	[File Location]
ORIGINATOR:	Gary Yeung, Joshua Lee
REVIEWER:	Scott Johnston, John Bayley
AUTHORIZATION:	Gwen Zhang, P.Eng.
CIRCULATION LIST:	1.0 2019-11-01 2.0 2020-01-16 3.0 2020-02-03 4.0 2020-03-24 5.0 2020-05-12 6.0 2020-05-22 7.9 2020-06-18 Final Report
HISTORY:	

Table of Contents

Table of Contents (continued)

List of Exhibits

Table of Contents (continued)

Appendices

1 Introduction

IBI Group was retained by the City of Guelph ("City") to undertake a traffic operations and safety analysis of Gordon Street between Edinburgh Street to Lowes Road in support of the Municipal Class 'B' Environmental Assessment (EA) Study for improvements on Gordon Street from Edinburgh Road to Lowes Road.

1.1 Study Objectives

The objective of the traffic operations and safety analysis is to aid the Municipal Class 'B' Environmental Assessment (EA) Study for improvements on Gordon Street from Edinburgh Road to Lowes Road. The EA seeks to improve roadway, driveway and intersection operations while enhancing mobility along the Gordon Street corridor.

The surrounding road network was analysed for the traffic impacts of local developments using an existing conditions year of 2019 and horizon year of 2031.

1.2 Context

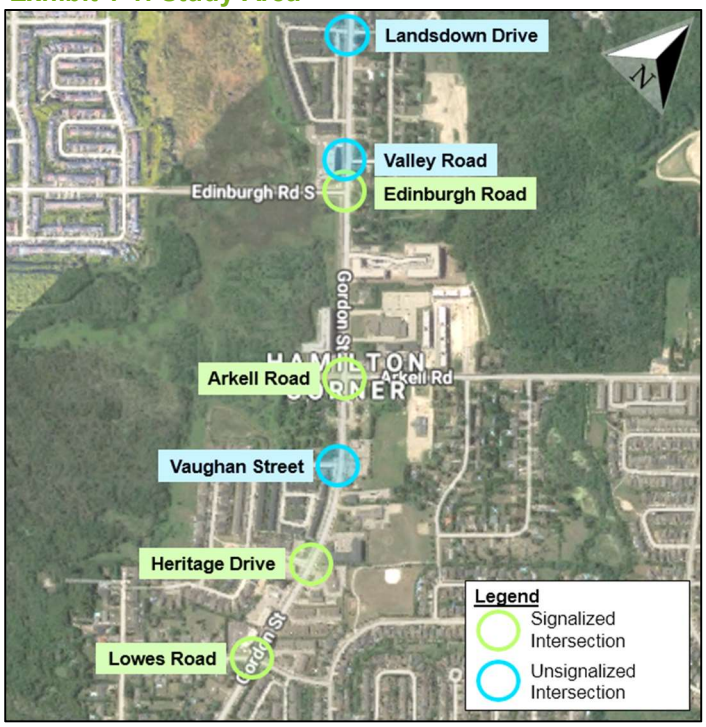
Gordon Street south of Stone Road has been identified as an intensification corridor as part of Amendment 39 to the City's Official Plan and in conformity with Ontario's "Growth Plan for the Greater Golden Horseshoe". With this plan, a number of redevelopments and intensification projects have taken place along the corridor with concentration between Edinburgh Road and Lowes Road. Under the current 4-lane configuration, sufficient capacity exists to accommodate traffic volumes, however, there are a high level of peak hour left-turn movements impeding and blocking through-traffic due to numerous driveways and insufficient storage lengths. In support of the EA, this report will undertake traffic operations and safety analysis to explore improvement measures in to enhance mobility along Gordon Street.

1.3 Study Area

The study area, as illustrated in Exhibit 1-1, is located in the southeast section of the City of Guelph. The City requested that the study area capture Landsdown Drive to the north and confirmed the following seven (7) study intersections:

- Gordon Street & Landsdown Drive;
- Gordon Street & Valley Road;
- Gordon Street & Edinburgh Road South;
- Gordon Street & Arkell Road;
- Gordon Street & Vaughan Street;
- Gordon Street & Heritage Drive; and
- Gordon Street & Lowes Road.

Exhibit 1-1: Study Area



2 Data Collection

2.1 Traffic Data

Turning movement counts (TMCs) and automatic traffic recorder (ATR) counts for the study intersections were conducted on Wednesday March 27, 2019 (to capture typical weekday conditions) by *Ontario Traffic Survey Inc*. These counts are reflective of existing traffic patterns during the period when students are still in schools nearby including the University of Guelph, and captures existing developments in the study area. Exhibit 2-1 provides a summary of the data collection, including the type of traffic control at each intersections. Full TMCs and ATR counts are provided in Appendix A.

Exhibit 2-1: Data Collection Summary Table

INTERSECTION	DATA TYPE	TRAFFIC CONTROL TYPE
Gordon Street & Landsdown Drive	TMC	Two-way stop control
Gordon Street & Valley Road	TMC	T-intersection *(stop control on minor approach)*
Gordon Street & Edinburgh Road South	TMC	Signalized
Gordon Street & Arkell Road	TMC	Signalized
Gordon Street & Vaughan Street	TMC	Two-way stop control
Gordon Street & Heritage Drive	TMC	Signalized
Gordon Street & Lowes Road	TMC	Signalized
Gordon Street between Landsdown Drive & Valley Road	ATR Counts	-
Gordon Street between Edinburgh Road South & Arkell Road	ATR Counts	-

Note: Data collected on Wednesday March 27, 2019

2.2 Bike Count Data

Bike counts for the study area was provided by the City. The survey data captures a full week with the counts conducted at midblock between Edinburgh Road and Arkell Road. These counts are summarized below in Exhibit 2-2 with the detailed report provided in Appendix A.

Exhibit 2-2: 24 Hour Bike Counts on Gordon Street (Edinburgh Road and Arkell Road)

DATE	DAY	BIKE COUNTS				
		NB *(vehs/day)*	SB *(vehs/day)*	NB/SB *(vehs/day)*	AM Peak Hour – NB/SB *(vehs/hr)*	PM Peak Hour – NB/SB *(vehs/hr)*
24-May-19	Friday	122	102	224	17	23
25-May-19	Saturday	34	63	97	8	13
26-May-19	Sunday	140	71	211	17	24
27-May-19	Monday	109	78	187	15	23
28-May-19	Tuesday	22	28	50	5	7
29-May-19	Wednesday	65	46	111	7	13
30-May-19	Thursday	77	92	169	12	16

Note: Data provided by the City

3 Existing Conditions

3.1 Existing Road Network

The following provides a summary and review of the local road network.

Gordon Street is a north-south arterial roadway. It has a typical four-lane urban cross-section with on–road bike lanes. The posted speed limit within the study area is 60 km/h. Pedestrian sidewalk facilities are provided on both sides. Gordon Street south of Stone Road is identified as an intensification corridor as per City's 39 Amendment to the City's Official Plan.

Landsdown Drive is an east-west local roadway with a two-lane cross section. With no signage present, a posted speed limit of 50 km/h is assumed. The west leg of the intersection is a private driveway connection to residential townhouses.

Valley Road is an east-west local roadway with a two-lane cross section. With no signage present, a posted speed limit if 50 km/h is assumed.

Edinburgh Road South is primarily a north-south arterial roadway that turns east as it approaches its southern terminus at Gordon Street. It has a typical two-lane cross section and a posted speed limit of 50 km/h.

Arkell Road is an east-west arterial roadway. It has a typical two-lane urban cross-section with bike lanes on both sides and a posted speed limit of 50 km/h. The west-leg of the intersection is a driveway to a residential apartment building.

Vaughan Street is an east-west local roadway and has a typical two-lane urban cross-section. It has a posted speed limit of 50 km/h. The east leg of Vaughan Street is a private driveway connection to commercial developments.

Heritage Drive is an east-west roadway with a typical two-lane cross section. With no signage present, a posted speed limit of 50 km/h is assumed. The east leg of Heritage Drive is a private driveway connecting to a small commercial plaza.

Lowes Road is an east-west roadway with a typical two-lane cross section. With no signage present, a posted speed limit of 50 km/h is assumed.

3.2 Traffic Analysis Approach

Intersection operations analysis was conducted using Synchro (version 9) and following the Highway Capacity Manual (HCM 2000) methodologies for intersection analysis. Analysis periods were limited to weekday a.m. and p.m. peak hours, when traffic volumes along the corridor are highest.

All critical traffic movements identified through the Synchro analysis are outlined and discussed in the succeeding sections, with criteria following the City of Guelph Traffic Impact Study (TIS) guidelines:

For signalized intersections,

- Volume-to-capacity ratios for overall intersection operation, through movements or shared/turning movements increased to 0.85 or above;
- Volume to capacity ratios for exclusive movements increased to 0.90 or above; or
- Queues for and individual movement are projected to exceed available turning lane storage.

For unsignalized intersections,

- Level of service (LOS) based on average delay per vehicle, on individual movements exceeds LOS “E”; or
- The estimated 95th percentile queue length for individual movement exceeds the available queue storage.
- Level of service is a measure of performance based on the control delay, as presented in Exhibit 3-1.

Exhibit 3-1: Intersection LOS Reference

HCM LOS	CONTROL DELAY PER VEHICLE (S)	
	Signalized	Unsignalized
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Operational concerns and deficiencies noted in the studied horizon years are identified and addressed through recommendations and potential mitigation measures and/or operational improvements.

3.3 Traffic Operations

Analysis was conducted for weekday a.m. and p.m. peak hours for the year of 2019, representing existing conditions. Exhibit 3-2 provides a summary of existing traffic volumes. A summary of the Synchro analysis including volume-to-capacity (v/c), 95th percentile queue and LOS is shown in Exhibit 3-3. Detailed Synchro outputs are provided in Appendix B.

During the a.m. peak hour:

- Gordon Street & Arkell Road is operating with some delays at LOS C with delays observed for the WBTR movements.
- All other signalized intersections are operating at LOS B or better.
- All unsignalized intersections are operating with no critical movements.

During the p.m. peak hour:

- Gordon Street & Landsdown Drive intersection operations are satisfactory. Although EBLTR movement operates at LOS F, it has surplus capacity (v/c = 0.66). This is not uncommon for side streets and is considered acceptable operations.
- Gordon Street & Edinburgh Road intersection operates at a satisfactory level at LOS C. For this intersection, there are heavy demands for all three approaches which compete for available green time. The high level of NBL, limited gaps in SBT traffic, and inadequate storage also prevent and block NBT traffic along Gordon Street.
- Gordon Street & Arkell Road intersection is operating with LOS C. Due to the high demands and limited gaps, both the NBT and its conflicting SBL turn movements are critical. The queues for the SBL turn lane is expected to exceed available storage of 70 metres and frequently blocking one of the SBT travel lane on Gordon Street.

In summary, existing conditions during the two peak periods indicate that there are several traffic movements in the study area are operating near capacity and/or with inadequate storage. Generally, p.m. peak traffic is more critical than a.m. peak hour. During the p.m. peak, due to high SBT volumes, the NBL movement at Edinburgh Road queues exceed available storage. At Arkell Road, the SBL movement is experiencing significant queuing with inadequate storage.

Exhibit 3-2: Existing (2019) Traffic Volumes in the AM (PM) Peak Hour

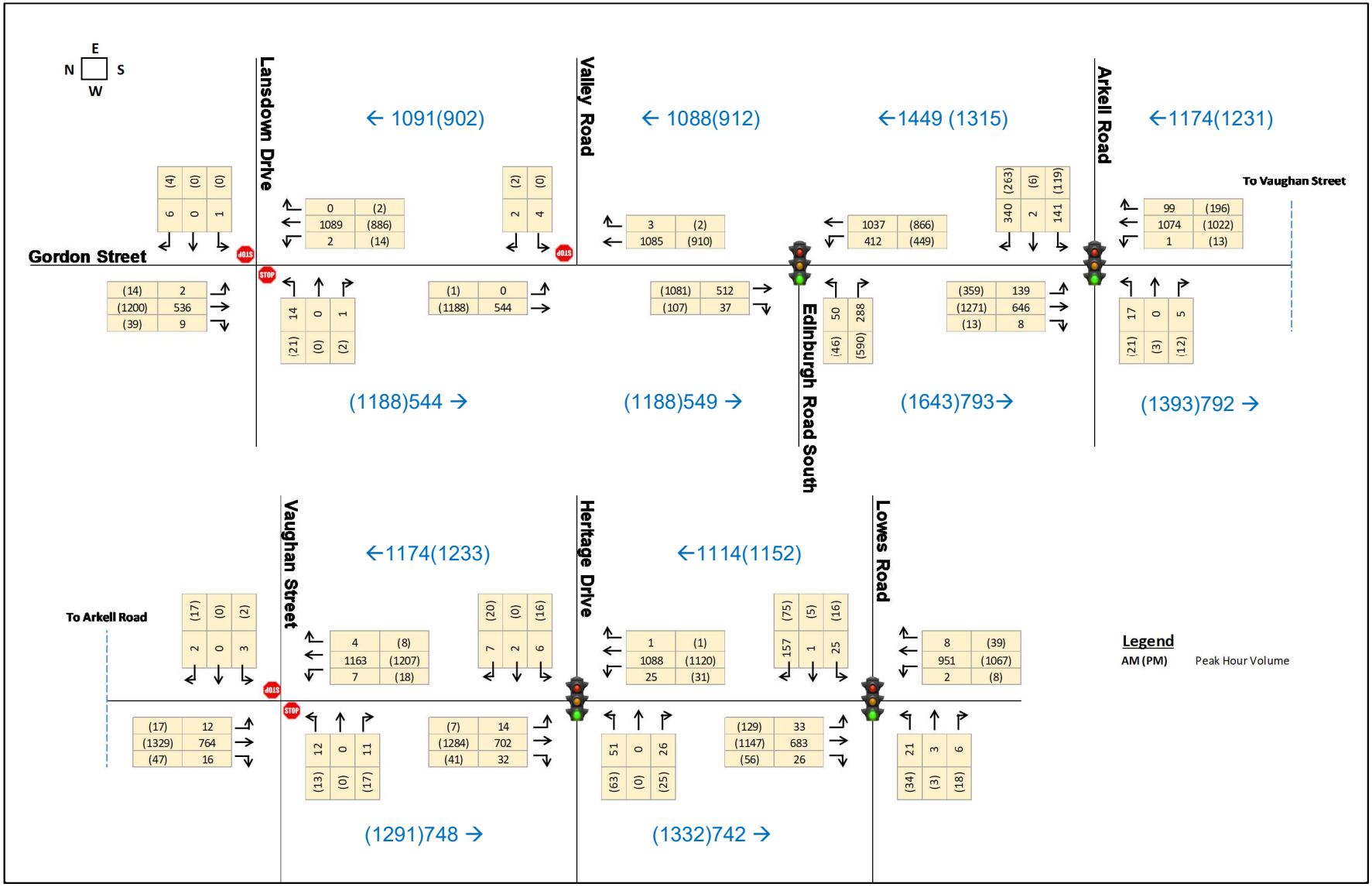


Exhibit 3-3: Existing Conditions (2019) Intersection Operation Performance Summary

Intersection	Intersection LOS	Critical Movement					Storage Length (m)
		Mvmt	LOS	Delay (s)	V/C Ratio	95th %ile Queue (m)	
AM Peak							
Gordon Street & Landsdown Drive (***Unsignalized***)	-	No critical movements					-
Gordon Street & Valley Road (***Unsignalized***)	-	No critical movements					-
Gordon Street & Edinburgh Road (***Signalized***)	B	No critical movements					-
Gordon Street & Arkell Road (***Signalized***)	C	WBTR*	D	54	0.90	70	-
Gordon Street & Vaughan Street (***Unsignalized***)	-	No critical movements					-
Gordon Street & Heritage Drive (***Signalized***)	A	No critical movements					-
Gordon Street & Lowes Road (***Signalized***)	A	No critical movements					-
PM Peak							
Gordon Street & Landsdown Drive (***Unsignalized***)	-	EBLTR	F	209	0.66	18	-
Gordon Street & Valley Road (***Unsignalized***)	-	No critical movements					-
Gordon Street & Edinburgh Road (***Signalized***)	C	EBR	D	38	0.90	167	-
		NBL	B	17	0.65	87	65
		SBT	D	36	0.92	147	-
Gordon Street & Arkell Road (***Signalized***)	C	NBT	C	28	0.85	131	-
		SBL	D	40	0.91	91	70
Gordon Street & Vaughan Street (***Unsignalized***)	-	No critical movements					-
Gordon Street & Heritage Drive (***Signalized***)	A	No critical movements					-
Gordon Street & Lowes Road (***Signalized***)	A	No critical movements					-

Note: For overlap phase, v/c and LOS for WBR was reported

4 Traffic Forecasts

To determine future needs for improvements and lane requirements, traffic forecasts were developed for the review of 2031 conditions.

4.1 Background Growth

To align with the City's population annual growth and to estimate future traffic demands, a 1.5% annual growth rate was applied to existing volumes. This corresponds to a total background growth of approximately 20% to year 2031.

4.2 Future Developments

During the development of this report, there are eleven developments proposed in the study area. For the purpose of this study, it is assumed all of them are to be fully built out by 2031. A summary of the future developments is provided in Exhibit 4-1. Details on development trips is provided in Appendix C.

Exhibit 4-1: Future Developments Summary

DEVELOPMENT	LOCATION	DESCRIPTION	BUILD OUT	REPORT
1	1242-1260 Gordon Street & 9 Valley Road	350 high rise apartment units	2025	None
2	1340 Gordon Street	700 m^2 commercial	2025	None
3	33 Arkell Road / 1408 Gordon Street & 39-47 Arkell Road	51 apartment units, 71 townhouse units	2020	TIS (2015)
4	190-216 Arkell Road	66 townhouse units	2025	None
5	388 Arkell Road	1200 student high school	2020	TIS (2017)
6	1353-1389 Gordon Street	50 townhouse units	2025	None
7	1354 Gordon Street	88 apartment units, 400 m^2 retail, 400m^2 restaurant, 8 fueling stations and 231 m^2 convenience store	2020	TIS (2019)
8	1533-1557 Gordon Street & 34 Lowes Road West	89 residential units	2020	TIS (2018)
9	19-59 Lowes Road West	36 single detached units	2025	None
10	1300 Gordon Street	32 condominium apartment units	2020	TIS (2019)
11	220 Arkell Street	31 single detached units, 60 cluster townhouse dwellings	2021	TIS (2019)

For the development planned at 1242-1260 Gordon Street & 9 Valley Road, the access road is being proposed as the 4th leg of the intersection of Gordon Street & Edinburgh Road. Upon review of the City's *Urban Design Concept Plans for the Gordon Street Intensification Corridor* (dated 2018), it was also observed that Valley Road will no longer connect onto Gordon Street. Therefore, for the purpose of analysis, Valley Road residential traffic was assumed to be diverted to this new approach at Edinburgh Road.

The total assignments for the eleven developments, including the diverted trips of Valley Road are illustrated in Exhibit 4-2.

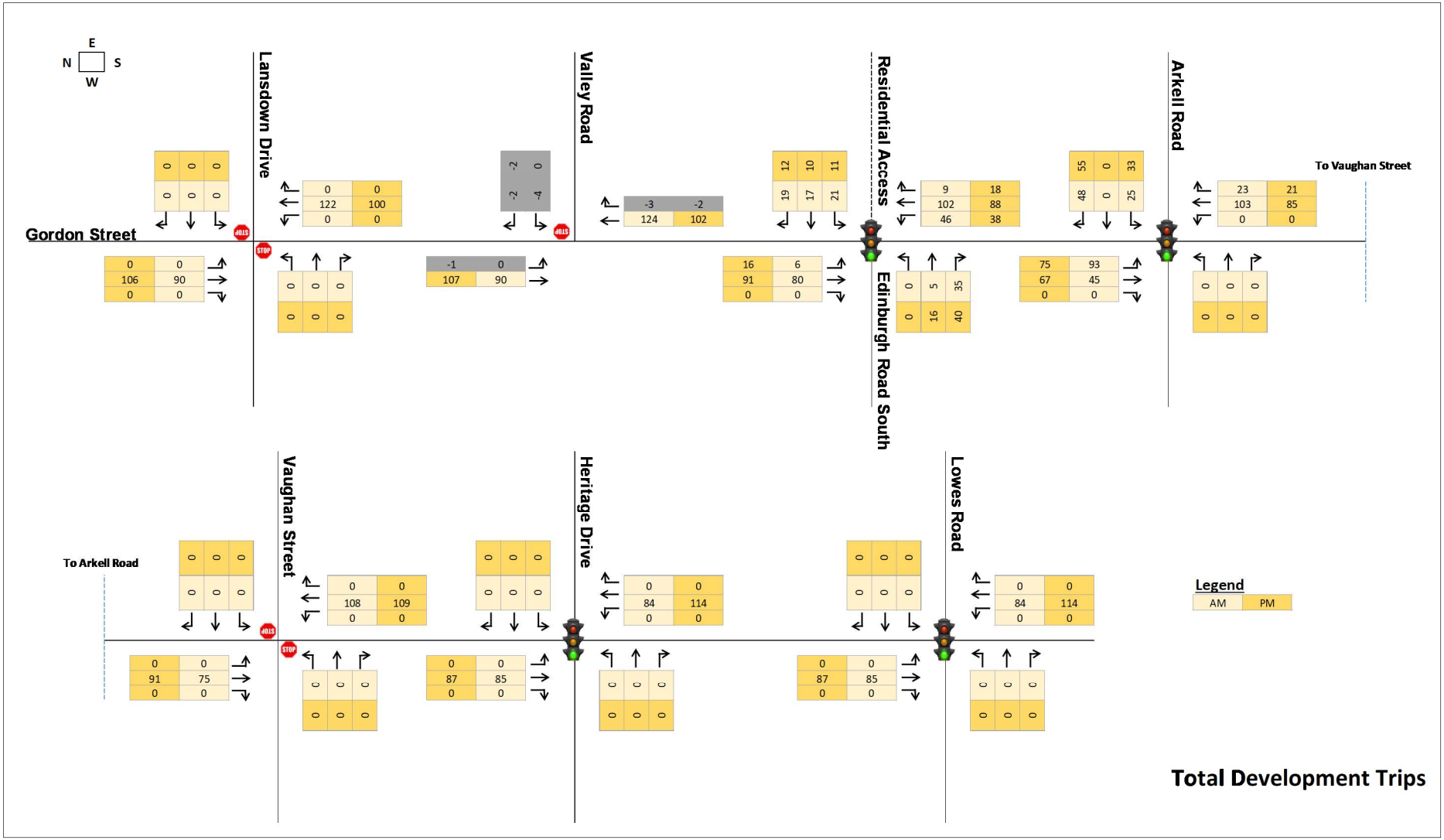
4.3 Midblock Traffic Volume vs. Capacity

With the above traffic forecasts, Gordon Street volumes were reviewed for both existing and future conditions (discussed in Section 5) to confirm and advise on the number of required through lanes.

Typically, urban arterial roadways have a planning capacity of 900 to 1000 vehicles per hour per lane (vphpl). Under the current four through lane cross section (two lanes each direction), Gordon Street can accommodate approximately 1800 to 2000 vph in each direction. From future volume diagram, as shown in Exhibit 5-1, the segment of Gordon Street between Arkell Road and Edinburgh Road show volumes that slightly exceed this threshold. This is largely due to higher turning volumes from both Edinburgh Road and Arkell Street where Edinburgh Road primarily runs in the north-south direction and is considered a major travel corridor which terminates at Gordon Street. Overall, outside of this segment and with the four through lane cross section, it is expected that sufficient through capacity is provided on Gordon Street.

Constructing a two-way left turn (TWLT) lane can be considered for this corridor as a means to improve capacity. This measure effectively removes left-turning vehicles from blocking through traffic, allowing better traffic flow on Gordon Street. Further discussions on mainline capacity and TWLT lane is provided in Section 5 and 7.1.

Exhibit 4-2: Trip Assignment Summary of Future Developments



Note: Trip assignment shown include diversion of Valley Road residential traffic (refer to Section 4.1)

5 Future 2031 Total Conditions

5.1 Future Road Network

As discussed in Section 4.1, the new development at 1242-1260 & 9 Valley Road will require a new approach to the intersection of Gordon Street & Edinburgh Road. For future conditions analysis, the westbound approach was assumed to have a dedicated left-turn lane and a shared through-right turn lane.

5.2 Traffic Operations

The existing traffic volumes were grown using the growth rates from Section 4.1. The future total conditions also include the traffic generated from planned nearby developments. Future 2031 volumes are shown in Exhibit 5-1.

A summary of critical movements identified during the future condition analysis is provided in Exhibit 5-2. Detailed Synchro outputs are provided in Appendix D.

During the a.m. peak hour:

- Gordon Street & Edinburgh Road is expected to remain at LOS B. With the increase in background traffic, the NBL turn movement is critical with queues exceeding available storage.
- Gordon Street & Arkell Road is expected to remain at LOS C. Due to high WBR demands and competing green time, the shared WBTR movement remains at LOS D with the v/c ratio increased to 0.93. With increased volumes and minimal gaps, both the shared NBTR and its opposing SBL movements are now critical with v/c = 0.87 & 0.86 respectively.
- Gordon Street and Heritage Drive is expected to remain at LOS A. The EBL movement has ample capacity with very low v/c ratio (0.49).
- With the increase in north-south volumes, the minor approach at Vaughan Street will have sufficient capacity with very low v/c ratio.

During the p.m. peak hour:

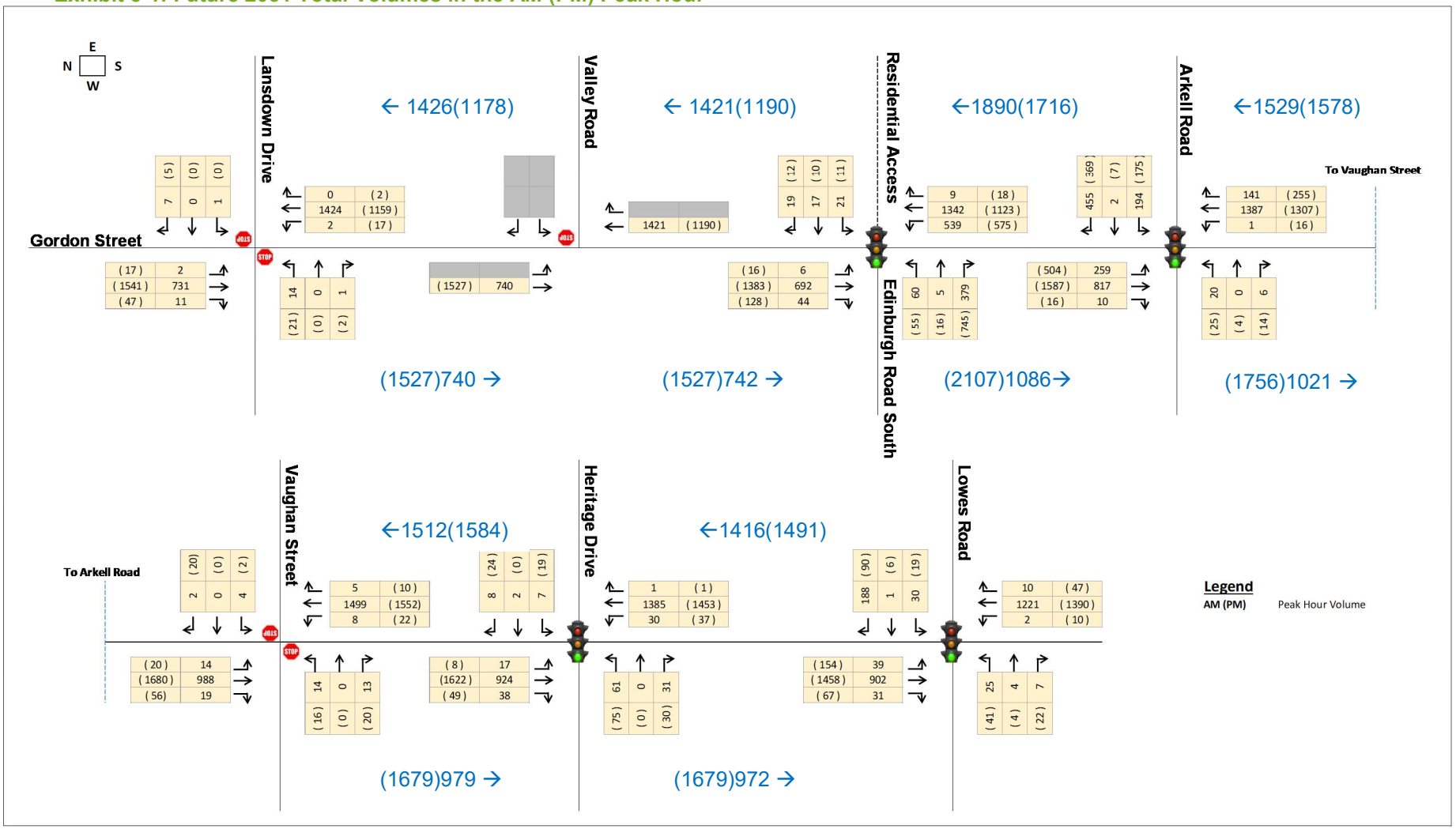
- The eastbound approach at Gordon Street and Landsdown Drive (private road approach) is above capacity with v/c ratio of 1.12. However, it is noticed that the level of turning traffic is low (only 14 vph in the a.m. peak and 21 vph in the p.m. peak). It is recommended that the City monitor the operation at this intersection as traffic signalization is not warranted under future scenarios (see Section 7.2).
- Gordon Street & Edinburgh Road is expected to operate at LOS D. With high demands, the EBR and SBT movements are overcapacity. With the limited gaps in SBT volume and insufficient green time, the NBL movement is critical, with the 95th percentile queue exceeding available storage. Due to this queueing, northbound through traffic on Gordon Street will be frequently blocked.
- Gordon Street & Arkell Road is expected to operate at LOS D. The shared NBTR movement is nearing capacity at LOS D. The SBL movement is well overcapacity (v/c = 1.20) operating at LOS F. Given the conflicting NBTR

demands, the SBL queues will spill out onto Gordon Street, blocking a southbound through lane.

- Gordon Street & Heritage Drive is expected to continue operating well at LOS A. The EBL movement continues to operate poorly at LOS D but with sufficient capacity.

Overall, the result of the future conditions analysis suggests that improvements are required at Gordon Street at Edinburgh Road and at Arkell Road with the p.m. peak hour being more critical. Improvements should be considered particularly for the SBT and NBL movements at Edinburgh Road and the NBT and SBL movements at Arkell Road to prevent queues from spilling onto through lanes. Most of the green-time is prioritized for north-south movements, with sufficient capacity expected for through movements on Gordon Street. However, side-street traffic from unsignalized intersections traffic will experience some amounts of delay for available gaps on the main street. It is noted that the side streets normally have low level of traffic so the associated v/c ratios are low. Midblock driveways and accesses will share a similar level-of-service with the unsignalized intersections unless improvements (such as a TWLT lane) are made to the Gordon Street corridor.

Exhibit 5-1: Future 2031 Total Volumes in the AM (PM) Peak Hour



Note: Trips shown include diversion of Valley Road residential traffic (refer to Section 4.1)

Exhibit 5-2: Future Total 2031 Intersection Operation Performance Summary

Intersection	Intersection LOS	Critical Movement					Storage Length (m)
		Mvmt	LOS	Delay (s)	V/C Ratio	95% Queue (m)	
AM Peak							
Gordon Street & Landsdown Drive (***Unsignalized***)	-	No critical movements					-
Gordon Street & Edinburgh Road (***Signalized***)	B	NBL	B	16	0.76	75	65
Gordon Street & Arkell Road (***Signalized***)	C	WBTR*	D	55	0.93	99	-
		NBTR	C	26	0.86	170	-
		SBL	D	48	0.86	70	70
Gordon Street & Vaughan Street (***Unsignalized***)	-	WBLTR	E	37	0.05	1	-
Gordon Street & Heritage Drive (***Signalized***)	A	No critical movements					-
Gordon Street & Lowes Road (***Signalized***)	A	No critical movements					-
PM Peak							
Gordon Street & Landsdown Drive (***Unsignalized***)	-	EBLTR	F	504	1.12	24	-
Gordon Street & Edinburgh Road (***Signalized***)	D	EBR	F	81	1.07	208	-
		NBL	C	26	0.86	116	65
		SBT	E	68	1.06	191	-
Gordon Street & Arkell Road (***Signalized***)	D	NBTR	D	38	0.96	174	-
		SBL	F	122	1.20	100	70
Gordon Street & Vaughan Street (***Unsignalized***)	-	EBLTR	E	35	0.23	7	-
Gordon Street & Heritage Drive (***Signalized***)	A	No critical movements					-
Gordon Street & Lowes Road (***Signalized***)	A	No critical movements					-

Note: For overlap phase, v/c and LOS for WBR was reported

6 Road Safety Assessment

This section provides a speed limit and collision analysis for Gordon Street.

6.1 Speed Limit

The current speed limit on Gordon Street is 60 km/h. City staff and public input through PIC 1 identified concerns about speeding, general traffic speeds, and consideration for the high number of pedestrians, cyclists, and many conflicts along the road due to driveways and accesses. The City requested consideration to lower the speed limit to 50 km/h considering these local conditions.

A speed limit assessment was undertaken using Transportation Association of Canada (TAC) Guidelines for *Establishing Posted Speed Limits* methodology. The detailed speed limit spreadsheet is included in Appendix E. The TAC methodology is based on the assessment of several risk categories, such as road geometries, driveway density, presence of vulnerable road users, etc. The recommended posted speed limit is then determined considering the road characterization, classification (e.g. local, collector, arterial, highway), the assessed risk scored and adjacent land use (urban or rural). The risk score determined through the TAC analysis was 62, which translates to a posted speed limit of 60 km/h. Therefore, under normal considerations considered by TAC, a 60 km/h speed limit is appropriate.

A speed survey was conducted on Gordon Street between Arkell Road and Edinburgh Road (refer to Appendix A). The 85th percentile speed on Gordon Street recorded in the survey was 66 km/h. The 85th percentile speed is a value used by traffic engineers representing the speed at which most motorists consider safe and reasonable given corridor conditions.

Consideration of the proposed two-way left turn lane was also checked against posted speed. Two-way left turn lanes are typically best suited to roads with operating speed at 50-70 km/h per TAC, and therefore both a posted 50 km/h and 60 km/h are acceptable. Adjacent segments of Gordon Street were also reviewed. The adjacent segment to the north is 50 km/h with a similar character to the study segment. The adjacent segment to the south is 60 km/h also with a similar character of four lanes however the road is physically divided with a median.

Given the review above, a 50 km/h speed limit is acceptable. It reflects the concerns of the City and public, and matches the adjacent segment to the north which shares character. However it is noted that the road remains a relatively wide and straight major arterial and drivers feel comfortable at speeds of 66 km/h. Therefore, compliance with a 50 km/h speed limit is likely to be lower than the current 60 km/h speed limit. Under a 50 km/h speed limit, the City should monitor traffic speed and consider speed advisory signs or other interventions if adherence is poor.

6.2 Collision Analysis

This section presents a review of traffic safety along the Gordon Street corridor. The City has provided historic collision data for the study area, consisting of reported intersection and midblock collisions along the corridor for the five-year period from January 1, 2014 through December 31, 2018. The safety analysis will aim to identify any trends in historic collisions and will propose potential solutions to mitigate those collision types.

6.2.1 General Trends

A total of 209 collisions occurred in the five year study period. Exhibit 6-1 presents the yearly collision distribution of collisions by severity. A large portion of all collisions was classified as property damage only (PDO) with a smaller portion classified as non-fatal injuries. There were no fatal injuries. There were a total of 174 PDO collisions and 35 non-fatal injuries.

Exhibit 6-1: Collisions by Year

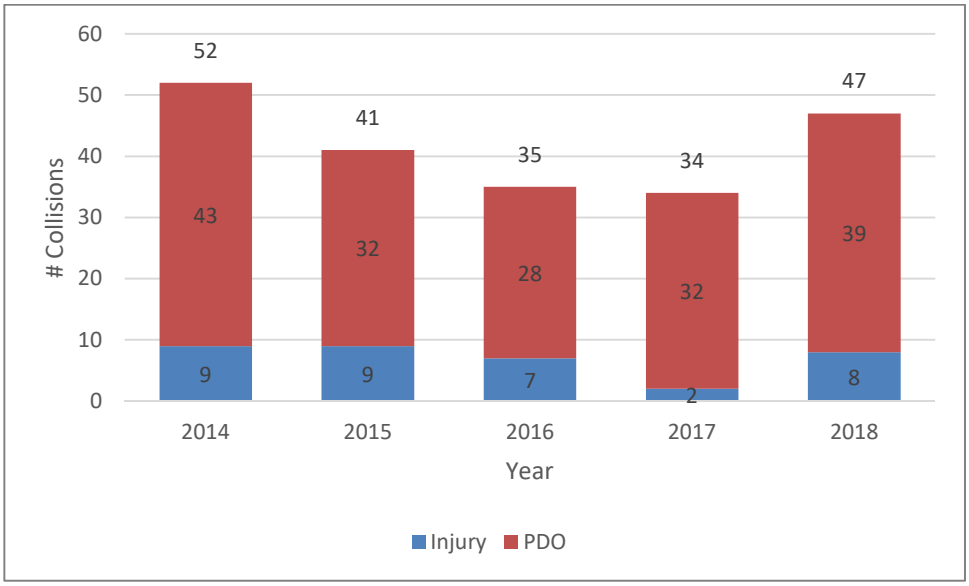


Exhibit 6-2 shows the distribution of collisions that have occurred along Gordon Street, aggregated by intersection and midblock locations. A total of 135 collisions occurred at intersections, and 74 collisions occurred at midblock locations. The intersections that had the highest number of collisions were Edinburgh Road, Arkell Street, Heritage Drive, and Lowes Road; most likely due to the high-left turning movements, lack of turning lanes at driveways and inadequate turning storage at the intersections. The midblock locations adjacent to those intersections also experienced a higher number of collisions, presumably for the same reasons. Further analysis of notable intersections and midblock segments is presented in the subsequent sections.

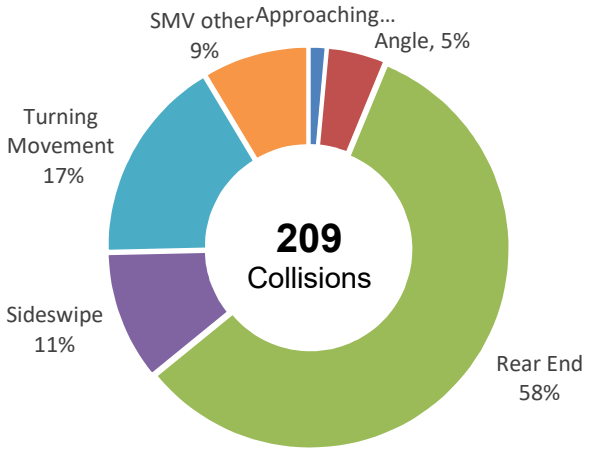
Exhibit 6-2: Collisions by Location

Intersection	Collision Frequency	Midblock	Collision Frequency
Landsdown Drive	3		
Valley Road	4	Landsdown Road to Valley Road	9
Edinburgh Road	49	Valley Road to Edinburgh Road	20
Arkell Road	39	Edinburgh Road to Arkell Road	11
Vaughan Street	6	Arkell Road to Vaughan Street	9
Heritage Drive	17	Vaughan Street to Heritage Drive	12
Lowes Road	17	Heritage Drive to Lowes Road	13

Exhibit 6-3 below shows the distribution of collisions by initial impact type. The most common impact type was rear-end collisions, which is expected for a major arterial road with higher operating speeds and frequent intersections and accesses. Correspondingly, 43% of all rear-end collisions occurred between major intersections (i.e. midblock). Providing for either a two-way left turn lane or centre median can help reduce the number of collisions and improving overall safety.

The second most common impact type was turning movement collisions. The highest portion of turning movement collisions occurred at the signalized intersection at Arkell Road (31%), at the signalized intersection at Edinburgh Road (20%), and along the segment of Gordon Street between Heritage Drive and Lowes Road (14%).

Exhibit 6-3: Initial Impact Type

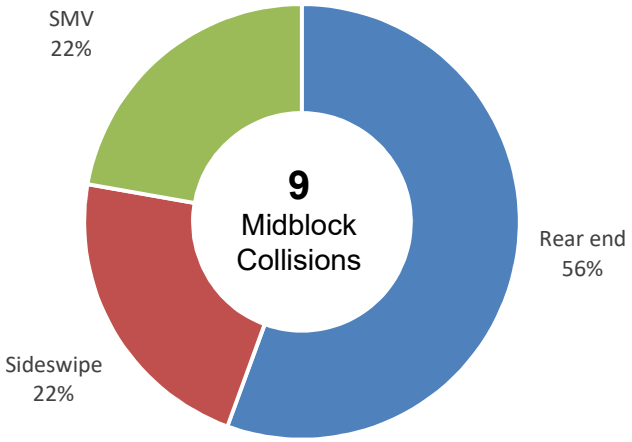


6.2.2 Landsdown Drive to Valley Road

There were a total of 9 midblock collisions that occurred along this segment of Gordon Street, all of which were classified as PDO. Exhibit 6-5 shows the distribution of these collisions according to initial impact type.

Exhibit 6-4: Landsdown Drive to Valley Road Collisions by Initial Impact Type

COLLISION TYPE	Rear end	Sideswipe	SMV other
FREQUENCY	5	2	2



The most common impact type was rear end (56%), followed by sideswipe (22%) and SMV (22%).

3 out of 5 (60%) rear end collisions occurred where one driver was either driving too fast for driving condition or following too closely.

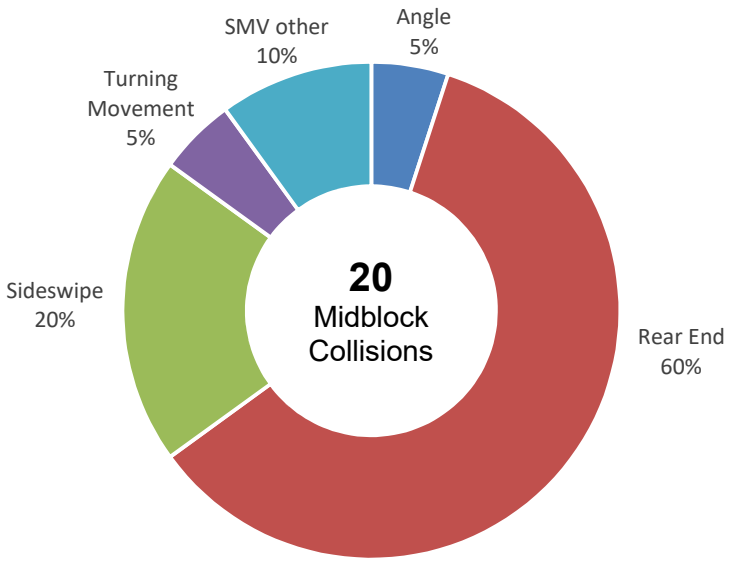
Of the SMV / other collisions, one collision occurred where a driver reversed into another parked vehicle. This segment has the least number of collisions among all segments.

6.2.3 Valley Road to Edinburgh Road

There were a total of 20 midblock collisions that occurred along this relatively short segment of Gordon Street, with 18 collisions classified as PDO and 2 collisions involving a non-fatal injury. Exhibit 6-5 shows the distribution of these collisions according to initial impact type.

Exhibit 6-5: Valley Road to Edinburgh Road Midblock Collisions by Initial Impact Type

COLLISION TYPE	Angle	Rear end	Sideswipe	Turning movement	SMV other
FREQUENCY	1	12	4	1	2



The most common impact type was rear end (60%), followed by sideswipe (20%).

6 out of 12 (50%) rear end collisions occurred in each of the north and south directions, largely due to vehicles following too closely and vehicles slowing down. 6 (50%) of these collisions occurred during the evening rush hour, when the road segment carried peak traffic volumes.

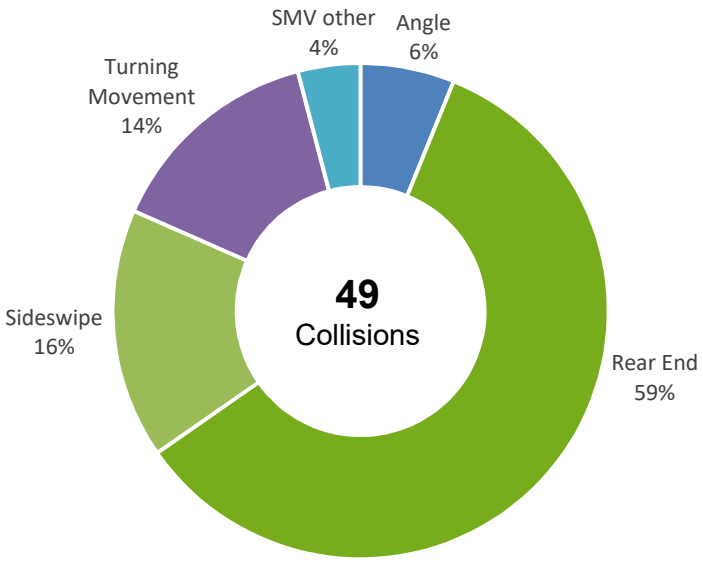
3 out of 4 (75%) sideswipe collisions were northbound and 1 (25%) was southbound related. 2 (50%) of these collisions happened during a northbound lane change.

6.2.4 Edinburgh Road

There were a total of 49 collisions that occurred at the intersection of Edinburgh Road and Gordon Street, with 38 collisions classified as PDO and the remaining 11 collisions involving a non-fatal injury. Exhibit 6-6 shows the distribution of initial impact types.

Exhibit 6-6: Edinburgh Road Collisions by Initial Impact Type

COLLISION TYPE	Angle	Rear end	Sideswipe	Turning movement	SMV other
FREQUENCY	3	29	8	7	2



The most common impact type for this intersection was rear end collisions (59%), followed by sideswipe (16%) and turning movement (14%).

Out of the 29 rear end collisions, 16 (55%) were northbound and 8 (28%) were southbound on Gordon Street, largely due to vehicles following too closely in combination with vehicles changing lanes, slowing down or stopping.

From the 8 sideswipe collisions, 6 (75%) involved southbound vehicles going through the intersection and 3 (38%) involved southbound vehicles changing lanes.

Turning movement collisions were largely due to the left turning vehicles failing to yield to right-of-way or making an improper turn. 6 out of 7 (86%) turning movement collisions involved a southbound vehicle going ahead and a northbound vehicle making a left turn. Northbound left turn is a critical movement, may require extending left turn green time to address this concern.

Since 11 (22% of total) collisions resulted in injury, high speeds may be a concern for this intersection. Out of the 11 non-fatal injuries, 2 involved an improper turn, 2 involved the failure to yield to right-of-way, and 1 involved an improper lane change.

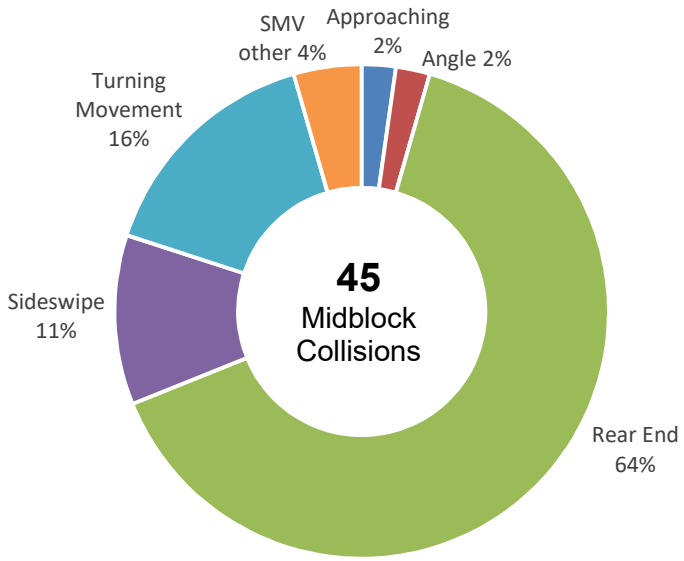
At this intersection, there are also safety concerns relating to the location of the crosswalks. The crosswalks are positioned on two separate driveways which may cause conflict and confusion between pedestrians and egressing vehicles. This may be remedied by relocating the stop bar and crosswalk farther from the intersection and is subject to further design review.

6.2.5 Edinburgh Road to Lowes Road

There were a total of 45 midblock collisions that occurred on Gordon Street, between Edinburgh Road to Lowes Road. This includes midblock collisions from Edinburgh Road to Arkell Road, from Arkell Road to Vaughan Street, from Vaughan Street to Heritage Drive, and from Heritage Drive to Lowes Road. Exhibit 6-7 shows the distribution of initial impact types.

Exhibit 6-7: Edinburgh Road to Lowes Road Midblock Collisions by Initial Impact Type

COLLISION TYPE	Approaching	Angle	Rear end	Sideswipe	Turning movement	SMV other
FREQUENCY	1	1	29	5	7	2



The most common impact type was rear end (64%), followed by turning movement (16%) and sideswipe (11%). Out of the 45 collisions, 35 collisions were classified as PDO while the remaining 10 involved non-fatal injuries.

A total of 11 collisions occurred between Edinburgh Road and Arkell Road. Of these collisions, 7 (64%) were rear end collisions involving a vehicle following too closely in combination with a slowing or stopped vehicle. 5 out of the 7 (71%) rear end collisions occurred during rush hour, indicating an increased risk during peak traffic volumes. There was 1 (9%) turning movement collision that involved a northbound vehicle going ahead and a southbound vehicle making an improper left turn into a private driveway.

A total of 9 collisions occurred between Arkell Road and Vaughan Street. Of these collisions, 8 (89%) were rear end collisions involving northbound or southbound vehicles on Gordon Street and 1 (11%) was a collision with a wild animal. 6 out of 8 (75%) rear end collisions occurred during rush hour, suggesting an increased risk during peak traffic volumes.

A total of 12 collisions occurred between Vaughan Street and Heritage Drive. Of these, 9 (75%) were rear end collisions (6 southbound and 3 northbound), involving vehicles following too closely in combination with slowing or stopped vehicles. 6 out of the 9 (67%) rear end collisions occurred during rush hour, indicating an increased risk during peak traffic volumes. There was 1 (8%) turning movement collision in which a westbound vehicle was turning left onto Gordon Street from a private driveway.

A total of 13 collisions occurred between Heritage Drive and Lowes Road. Of these, 5 (38%) were rear end collisions (3 southbound and 2 northbound) involving vehicles following too closely in combination with vehicles changing lanes, slowing, or stopping. There is a high

proportion of turning movement collisions (5 out of 13 or 38%) occurring in this road segment. 4 out of these 5 (80%) turning movement collisions involved left turn movements into or from a private driveway. 1 turning movement collision resulted in an injury.

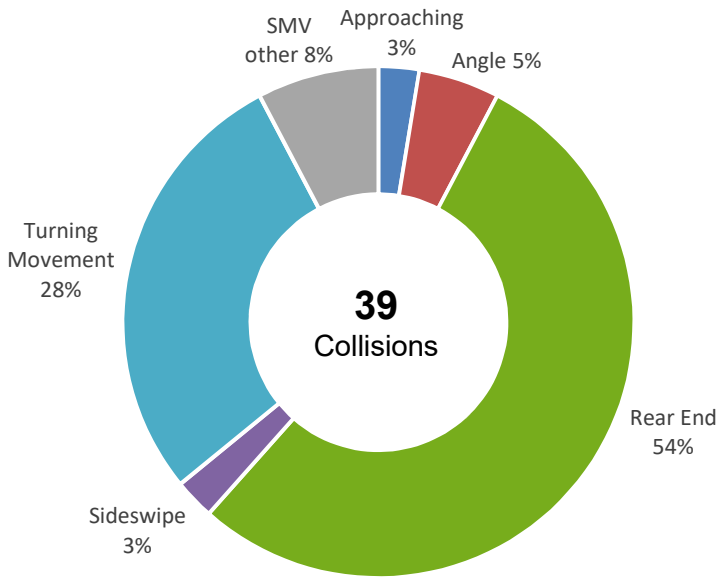
There are 24 midblock accesses along this segment of Gordon Street. 29 out of 45 (64%) midblock collisions involved slowing or stopped vehicles, which are perhaps attributable to left-turn movements into private accesses / cross roads. These occurrences could be reduced with the implementation of either a TWLT lane or a centre median.

6.2.6 Arkell Road

There were a total of 39 collisions that occurred at the intersection of Arkell Road and Gordon Street, with 34 collisions classified as PDO and the remaining 5 collisions involving a non-fatal injury. Exhibit 6-8 shows the distribution of initial impact types.

Exhibit 6-8: Arkell Road Collisions by Initial Impact Type

COLLISION TYPE	Approaching	Angle	Rear end	Sideswipe	Turning movement	SMV other
FREQUENCY	1	2	21	1	11	3



The most common impact type was rear end (54%), followed by turning movement (28%) collisions.

Out of the 23 rear end collisions observed at this intersection, as many as 16 (70%) occurred over wet, icy, slush, loose snow, or packed snow road surface conditions, indicating that a non-dry road surface is a significant contributor, in combination with slowing or stopped vehicles. The high number of rear end collisions may also be attributed to the location of the bus stop, where northbound traveling vehicles on Gordon Street may queue behind stopped transit vehicles. Due to this short distance, this queue may extend into the intersection, likely forcing vehicles to

change lane despite unacceptable gaps. These collisions may be reduced by relocating the bus stop further downstream to store queued vehicles.

Turning movement collisions were largely due to failure to yield to right-of-way. Out of the 11 turning movement collisions observed, 9 (82%) involved left turn movements, 8 of which involved the left turn movements of southbound vehicles.

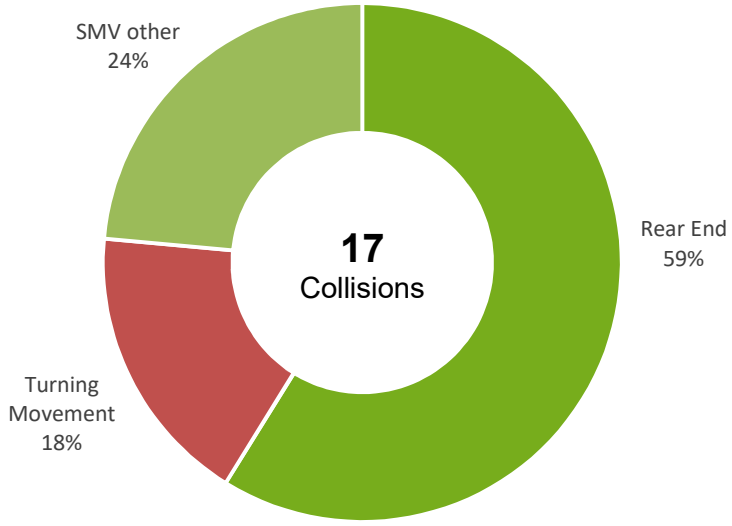
All 5 of the collisions that resulted in injury involved a left-turn movement from Gordon Street, with 3 collisions stating a failure to yield to right-of-way and 1 collision causing injury to a pedestrian crossing with right-of-way. This suggests a need to improve traffic safety for the left-turn movements at this intersection.

6.2.7 Heritage Drive

There were a total of 17 collisions that occurred at the intersection of Heritage Drive and Gordon Street, with 15 collisions classified as PDO and 2 collisions involving a non-fatal injury. Exhibit 6-9 shows the distribution of initial impact types.

Exhibit 6-9: Heritage Drive Collisions by Initial Impact Type

COLLISION TYPE	Rear end	Turning movement	SMV other
FREQUENCY	10	3	4



The most common impact type was rear end (59%), followed by SMV and other (24%) and turning movement (18%) collisions.

Out of the 10 rear end collisions observed, 9 (90%) occurred between northbound vehicles. 7 (70%) occurred during rush hour, suggesting that peak traffic volumes were a contributor.

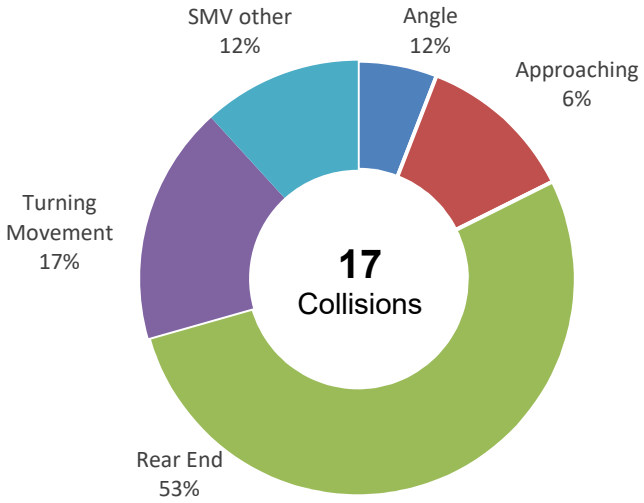
The high number of collisions at this intersection may also be attributed to the location of the raised centre median on Heritage Drive, with improper turning radius for vehicles making a NBL turn. This may be remediated by removing the median to accommodate sufficient swept paths.

6.2.8 Lowes Road

There were a total of 17 collisions that occurred at the intersection of Lowes Road and Gordon Street, with 14 collisions classified as PDO and the remaining 3 collisions involving a non-fatal injury. Exhibit 6-10 shows the distribution of initial impact types.

Exhibit 6-10: Edinburgh Road Collisions by Initial Impact Type

COLLISION TYPE	Approaching	Angle	Rear end	Turning movement	SMV other
FREQUENCY	1	2	9	3	2



The most common impact type was rear end (53%), followed closely by turning movement (18%), SMV and other (12%), and angle (12%) collisions.

Rear end collisions were largely due to vehicles speeding or following too closely, in combination with stopped or slowing vehicles. Out of the 9 rear end collisions observed, 8 (89%) occurred over wet, loose snow, or packed snow road surface conditions, indicating that non-dry road surfaces increased risk.

Out of the 3 turning movement collisions, all 3 (100%) involved southbound left turn movements and 2 (67%) occurred over slush or loosed snow road surface conditions.

3 of the collisions observed at this intersection resulted in injury. A non-fatal injury collision was due to a vehicle disobeying traffic controls and turning left onto Gordon Street. Another collision involved a vehicle on Gordon Street turning right and failing to yield to a pedestrian. The last non-fatal injury involved a cyclist turning right and vehicle with right of way. There is a higher proportion of angle collision (12%) at this intersection, both of which resulted in injury, suggests a lack of obedience to traffic controls and the need to improve pedestrian and cyclist safety at this intersection. There are physical constraints due to existing ROW. Lane configuration in the wests approach can be modified by pavement marking to ensure sufficient swept path.

7 Improvement Measures

7.1 Two-way Left-turn (TWLT) Lane vs. Centre Median

As stated in Section 1.2, a high level of peak hour left-turn movements is expected to impede and block through traffic within the study area on Gordon Street, which currently has a 4-lane cross-section, frequent accesses, and insufficient storage lengths. One design alternative is a two-way left-turn (TWLT) lane. The TWLT lane is a continuous paved lane on an undivided road that provides a deceleration and storage area for left-turning vehicles travelling in either direction. It aims to remove left-turn traffic from through lanes, thereby increasing operational efficiency, capacity, and safety. According to the *Geometric Design Guide for Canadian Roads*[1] *(GDG)*, the most common use of a TWLT lane is along an arterial road with frequent accesses on both sides that cannot be closed or consolidated.

In the case of Gordon Street, TWLT lanes provides these following benefits:

- Remove heavy left-turn traffic from through traffic so as to prevent backups along Gordon Street due to inadequate storage and help reduce rear-end and sideswipe collisions;
- Provide spatial separation between opposing traffic which lead to reduction in severe collisions (i.e. head-on collisions);
- Facilitate egress traffic from numerous driveways by providing two-step left turning maneuverings; and
- Function as a travel lane for emergency vehicles.

Another design option for Gordon Street is to provide raised centre median. As per TAC guidelines, the main uses of a centre median are to reduce the risk of head-on collisions and control access by providing a physical separation of traffic flows. Centre median is restrictive in nature, however they provide space for pedestrian refuge with room for landscaping and streetscaping treatments to enhance street aesthetics. Given the lack of reported head-on collisions (refer to Section 6), the higher implementation costs, and the number of driveways present on Gordon Street, TWLT lane is better suited for the study area.

In regards to TWLT lanes, the *GDG* does not provide any warrant to confirm need for a TWLT lane. However, it lists several key factors to justify the implementation of a TWLT lane. Exhibit 7-1 summarizes the key conditions from the *GDG* and outlines the suitability of a TWLT lane on Gordon Street.

[1] Chapter 8: Access of “Geometric Design Guide for Canadian Roads”, Transportation Association of Canada, June 2017.

Exhibit 7-1: TWLT Lane Key Conditions for Implementation on Gordon Street

KEY CONDITIONS	SUITABILITY
– Frequent accesses on both sides	Commercial and industrial developments exist on both sides of Gordon Street, with an average of 24 driveways per km (a total of 26 driveways over a distance of 1.07 km).
– 3 or 5 lane cross-section	The current 4-lane cross-section would be retrofitted into a 5-lane cross-section with a centre TWLT lane.
– Reasonably straight and flat alignments	The road segment is mostly flat with minor elevation differential (0.8%, or 9 m over a horizontal distance of 1.07 km). The segment is also mostly straight except for a slight horizontal curve between Vaughan Street and Heritage Drive.
– Operating speeds below 70 km/h	The posted speed limit is 60 km/h. The 85th percentile speeds is 66 km/h.[2]
– High trucking activity	Gordon Street has moderate to high truck volumes (% Heavy Vehicles = 10% northbound, 10% southbound).

Note: 85th percentile speed refers to the speed at or below which most motorists drive on a given road. This represents the speed of which motorists considers safe and reasonable under ideal conditions.

TWLT Lane Widths

As outlined in the GDG, widths for TWLT lanes are typically the same as the adjacent through lanes, but not less than 3.5 metres. A minimum width of 4.0 metres is desirable for design speeds greater than 60 km/h. The additional width allows drivers to recognize the use of the TWLT lane, and adds a measure of safety. Widths greater than 5.0 metres are generally avoided from an operation perspective, as it may allow unusual behaviour and conflicts within the TWLT lane. Therefore, a width of 4.0 metres is appropriate for the study area. An extract of the TAC guideline on TWLT lanes is provided in Appendix E.

Extents of the Proposed TWLT Lane

Upon further review, TWLT lane is recommended to extend from Lowes Road (south limit) to Edinburgh Road. There were several factors considered and are as follows:

- The current northbound left-turn lane at Landsdown Drive is sufficient under existing and future scenarios;
- There are sufficient space for southbound left-turn lane into the future development area via the new east approach of the Edinburgh Road intersection;
- As identified in City's Gordon Street Intensification Corridor Concept Plan", existing driveways to the single detached houses will be terminated, where Valley Road is expected to be closed to auto traffic;
- Between Landsdown Drive to Edinburgh Road (east side), the southbound left turn traffic volumes are relatively low for existing scenarios; and
- Between Landsdown Drive to Edinburgh Road (west side), the northbound left-turn lane into the two driveways can be accommodated by exclusive left-turn lane.

[2] Refer to Appendix A: Gordon Street Speed Study ("03_Gordon St Btwn Edinburgh_Arkell_Speed_60min")

7.2 Signal Warrant

Signal warrants from Ontario Traffic Manual (OTM) Book 12 (Justification 7 – Project Volumes) were used to determine whether or not signals are justified for the study area. Justification 1 and 2 must be met to 100% for signals to be warranted.

Gordon Street & Landsdown Drive

As the north most intersection in the study area, Gordon Street & Landsdown Drive is expected to experience delays for its side-street with the volume past capacity in the p.m. peak (v/c =1.12). The minor street volumes do not meet the minimum requirement which indicates a signal is not warranted for this location. Given that the threshold is not met, overall delays for the intersection will be less for existing configuration than would be with the installation of traffic signals.

Exhibit 7-2: Signal Warrant for Gordon Street & Landsdown Drive

Justification	Description	Minimum Requirement - 2 or more lanes	Compliance			Result
			Sectional		Entire %	
		Restricted Flow	Numerical	%		
1. Minimum Vehicular Volume	A. Vehicle volume, all approaches (average hour)	1080	1150	106%	8%	NOT WARRANTED
	B. Vehicle volume, all minor streets (average hour)	204	16	8%		
2. Delay to Cross Traffic	A. Vehicle volume, major street (average hour)	1080	1134	105%	5%	
	B. Combined vehicle and pedestrian volume crossing artery from minor streets (average hour)	204	11	5%		

Note: Justification 1 or 2 must be at least 100% to be justified

Gordon Street & Vaughan Street

At Gordon Street & Vaughan Street, with the west leg serving residential properties and the east leg serving a small commercial area, signalization was considered. The minor street volumes do not meet the minimum requirement for this location. As mentioned above, total intersection delay will be lessor with existing traffic control than with traffic signals. Therefore, signalization is not recommended.

Exhibit 7-3: Signal Warrant for Gordon Street & Vaughan Drive

Justification	Description	Minimum Requirement - 2 or more lanes	Compliance			Result
			Sectional		Entire %	
		Restricted Flow	Numerical	%		
1. Minimum Vehicular Volume	A. Vehicle volume, all approaches (average hour)	1080	1436	133%	11%	NOT WARRANTED
	B. Vehicle volume, all minor streets (average hour)	204	23	11%		
2. Delay to Cross Traffic	A. Vehicle volume, major street (average hour)	1080	1413	131%	4%	
	B. Combined vehicle and pedestrian volume crossing artery from minor streets (average hour)	204	9	4%		

Note: Justification 1 or 2 must be at least 100% to be justified

7.3 Gordon Street & Edinburgh Road

In the future conditions analysis, Gordon Street & Edinburgh Road intersection is expected to be severely congested. The EBR and SBT movements are operating overcapacity in the p.m. peak hour. Dual EBR turn lanes was considered to accommodate the high peak volumes (745vph p.m. peak). This configuration is not typical for a collector-arterial intersection and will present poor crossing opportunity for pedestrians. This improvement will also require significant widening to the eastbound approach and was therefore not carried forward. The EBR movement also operates with an overlap phase, where traffic can proceed simultaneously with NBL movements. With the future development planned for the 4th leg of this intersection, it was assumed and recommended that the through movement is shared with the left-turn lane to minimize impacts to the congested EBR movement. However, this is subject to future Edinburgh Road improvements. In the p.m. peak, the NBL movement is critical. With high demands (575vph) and insufficient storage, dual left-turns were considered. However, since there is a lack of right-of-way and with only one receiving lane on Edinburgh Road, dual left-turns were also not carried forward. Considering the above, lengthening the cycle length to 120 seconds was considered for this intersection with results summarized below in Exhibit 7-4. Detailed Synchro outputs are provided in Appendix E.

Exhibit 7-4: Analysis of Future Improvements at Gordon Street & Edinburgh Road

Intersection	AM Peak						PM Peak					
	Int LOS (V/C)	Mvmt	LOS	Delay (s)	V/C Ratio	95% Queue (m)	Int LOS (V/C)	Mvmt	LOS	Delay (s)	V/C Ratio	95% Queue (m)
Gordon Street & Edinburgh Road / Private Access Road (Signalized) – ***No Improvements***	B (0.76)	EBTL	D	45	0.57	22	D (1.07)	EBTL	D	44	0.56	24
		EBR	C	23	0.52	50		EBR	F	81	1.07	208
		WBL	D	37	0.15	10		WBL	D	37	0.08	6
		WBTR	D	37	0.11	11		WBTR	D	37	0.06	8
		NBL	B	16	0.76	75		NBL	C	26	0.86	116
		NBTR	A	6	0.52	80		NBTR	A	7	0.44	66
		SBL	B	13	0.03	3		SBL	B	16	0.08	6
		SBTR	B	17	0.46	63		SBTR	E	68	1.06	191
Gordon Street & Edinburgh Road / Private Access Road (Signalized) – ***With Improvements***	B (0.82)	EBTL	E	67	0.65	28	D (1.03)	EBTL	E	66	0.65	30
		EBR	D	39	0.53	57		EBR	E	74	1.03	260
		WBL	D	51	0.17	12		WBL	D	50	0.09	8
		WBTR	D	50	0.12	13		WBTR	D	50	0.07	10
		NBL	C	24	0.82	110		NBL	D	37	0.80	185
		NBTR	A	3	0.50	47		NBTR	A	5	0.41	76
		SBL	A	9	0.03	3		SBL	C	21	0.08	7
		SBTR	B	11	0.35	60		SBTR	E	62	1.02	238

As shown above, extending the cycle length provides some operational benefit to the congested EBR and SBT movements in the p.m. peak. Due to the high demands of the intersection, the SBTR continues to be congested with insufficient green time. With the cycle length extension and re-optimized splits, some green time will be distributed to other movements. This is the case for the NBL turn movement which will have an improved v/c ratio (0.80) but see an increase in the 95th percentile queues of 116 metres to 185 metres.

Due to the constrained nature of this intersection, EBR turn movements are expected to continue to experience capacity constraints. With future plans to improve Hanlon Expressway, it is expected that some of the north-south travelling volumes will be re-diverted to the expressway. It is noted that Edinburgh Road also acts as a major north-south travel corridor within the City, with its terminus at Gordon Street. With this future project, both the EBR and SBT volumes may see a decrease and result in better traffic operations.

7.4 Gordon Street & Arkell Road

Volumes at this intersection are high on the north, south and east approaches. During the p.m. peak hour, the SBL movement is expected to exceed capacity. The 504vph volume is over the 500vph threshold normally considered for dual left-turn lanes. Given the right-of-way of Gordon Street and the planned TWLT lane along with the single receiving lane for Arkell Road, dual SBL lanes were not found to be suitable. During both peak hours, the shared NBTR movement is expected to operate near / at capacity. Providing a dedicated NBR lane is proposed to provide separation from through traffic. Lastly, lengthening the cycle length to 120 seconds was tested with results shown below in Exhibit 7-5. Detailed Synchro outputs are provided in Appendix E.

Exhibit 7-5: Analysis of Future Improvements Summary

Intersection	AM Peak						PM Peak					
	Int LOS (V/C)	Mvmt	LOS	Delay (s)	V/C Ratio	95% Queue (m)	Int LOS (V/C)	Mvmt	LOS	Delay (s)	V/C Ratio	95% Queue (m)
Gordon Street & Arkell Road (Signalized) – ***No Improvements***	C (0.92)	EBL	C	30	0.08	8	D (0.96)	EBL	C	31	0.10	10
		EBT	C	29	0.00	-		EBT	C	30	0.02	6
		WBL	D	49	0.78	55		WBL	D	47	0.75	48
		WBTR*	D	55	0.93	99		WBTR*	C	25	0.64	67
		NBL	B	11	0.00	1		NBL	B	15	0.11	6
		NBTR	C	26	0.87	170		NBTR	D	38	0.96	174
		SBL	D	48	0.86	70		SBL	F	122	1.20	100
		SBTR	A	6	0.37	41		SBTR	B	10	0.66	74
Gordon Street & Arkell Road (Signalized) – ***With Improvements***	C (0.81)	EBL	D	40	0.08	10	C (0.85)	EBL	D	43	0.11	13
		EBT	D	40	0.00	-		EBT	D	42	0.02	7
		WBL	E	64	0.80	66		WBL	E	78	0.86	76
		WBTR*	E	60	0.91	109		WBTR*	C	27	0.57	78
		NBL	B	13	0.00	1		NBL	C	21	0.12	7
		NBT	C	24	0.74	177		NBT	C	33	0.81	164
		NBR	B	15	0.15	23		NBR	C	22	0.29	40
		SBL	D	37	0.71	61		SBL	D	39	0.93	96
		SBTR	A	6	0.35	34		SBTR	A	9	0.61	87

Note: For overlap phase, v/c and LOS for WBR was reported

With the above improvements, the intersection is expected to operate at LOS C during both peak periods, indicating acceptable traffic operation. Separating the NBR demand from the shared NBTR lane is effective in adding capacity to the N-S approaches. With the cycle length extension, more green time is distributed to the N-S approaches as well, with the NBT and its opposing SBL movements now operating below capacity.

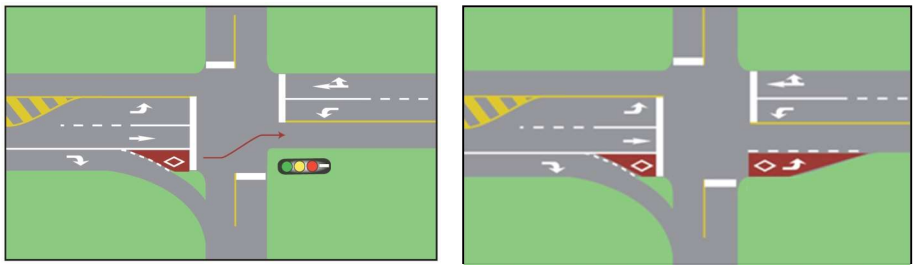
Queue Jump / By-Pass Lane

Queue jump / by-pass lanes was considered at this intersection on the east side of Gordon Street. Queue jump lanes typically are dedicated bus-only lanes with a transit signal that give early green phasing to buses.[3] This allows transit vehicles to proceed through an intersection ahead of general traffic. In addition to travel time savings, this improvement will also improve transit service and reliability, prevent blockage and conflicts with through traffic, and allow longer onboarding time to facilitate passenger boarding and alighting.

[3] "Guidelines for Planning and Implementation of Transit Priority Measures", Transportation Association of Canada, November 2012.

Queue by-pass lanes are similar to queue jump lanes, with the exception of having a receiving lane on the far side of the intersection. Exhibit 7-6 below provides an illustration of both queue jump lane and queue by-pass lane.

Exhibit 7-6: Queue Jump Lane (left image) & Queue By-Pass Lane (right image)



Source: *TAC Guidelines for Planning and Implementation of Transit Priority Measures (2012)*

Through discussions with City staff and Guelph Transit along with feedback received during public consultation, it was decided that a shared by-pass / right-turn lane is to be provided at the at the north-east corner of the Arkell Road intersection. Given sufficient ROW, it is recommended to provide enough storage to accommodate for two standard buses. This is to ensure that that stored buses will not conflict with traffic (i.e. WBR and NBT movements) at the nearby intersection.

It is noted that a queue jump / by-pass lane is recommended solely at the Gordon Street and Arkell Road intersection. This is due to higher observed bus passenger onboarding and alighting for this location, with available ROW to accommodate.

8 Conclusions and Recommendations

8.1 Traffic Operations

Existing conditions during the two peak periods indicate that there are several traffic movements in the study area operating near capacity. Generally, p.m. peak hour traffic is more critical than a.m. peak hour. In the p.m. peak hour, due to high southbound through volumes, the northbound left-turn queues at Edinburgh Road intersection exceed available storage. At Arkell Road intersection, the southbound left-turn movement is experiencing significant delay and queueing with inadequate storage.

Future conditions for both a.m. and p.m. peak periods were modelled and analyzed based on the horizon year of 2031. Forecasting was completed using a growth rate of 1.5% with additional traffic from future local developments. The analysis revealed that growth will lead to a further deterioration in traffic operations.

- Generally, the p.m. peak hour traffic continues to be more critical than a.m. peak hour;
- In the p.m. peak:
  - At Edinburgh Road, with limited gaps in southbound through traffic and insufficient green time, the northbound left-turn movement is expected to experience long traffic queues that exceed existing storage. Due to this queueing, northbound through traffic on Gordon Street will be frequently blocked.
  - At Arkell Road, the shared northbound through-right and southbound left-turn movements also exceed capacity, indicating severe congestion with queues expected to spill onto through lanes.
  - At Landsdown Drive, the eastbound minor approach will experience delays, however, minimal turning traffic are anticipated.

The required preliminary improvements include the following:

- Two-way left-turn lane on Gordon Street from Edinburgh Road to Lowes Road;
- Lengthen cycle length to 120 seconds for Gordon Street & Edinburgh Road for a.m. and p.m. peak hours;
- Lengthen cycle length to 120 seconds for Gordon Street & Arkell Road for a.m. and p.m. peak hours;
- Provision for dedicated northbound right-turn lane at Gordon Street & Arkell Road; and
- Queue by-pass / right-turn lanes at northeast corner of Gordon Street & Arkell Road intersection with space to accommodate two standard buses.

With future plans to improve Hanlon Expressway, it is expected that some of the north-south travelling volumes of Edinburgh Road and Gordon Street will be re-diverted to the expressway, thereby alleviating congestion and improving overall traffic operations.

8.2 Safety Analysis

A review of the collision history data from 2014-2018 revealed safety concerns along the Gordon Street corridor and are as follows:

- Conflicts due to frequent driveways;
- Insufficient turning storage;
- High operating speeds;
- Insufficient turning radius at the skewed intersections; and
- Insufficient bus stop and intersection spacing.

A speed limit assessment was undertaken using TAC methodology. City staff and public input through PIC 1 identified concerns about traffic speeds. The findings of the report indicate that a 50 km/h speed limit is acceptable for the corridor, and that compliance measures and monitoring may be required.

The most common impact type for the study area was rear-end collisions, which is expected for a major arterial road with multiple driveways and insufficient turning storage. Providing for a TWLT lane can help address and reduce the number of collisions, thereby improving overall traffic safety along this corridor.

The results of the safety analysis also indicate, at Heritage Drive and Gordon Street intersection, improvements can be made by removing the median in the west approach to accommodate sufficient swept paths. At the Lowes Road and Gordon Street intersection, lane configuration can be modified in the west approach by pavement marking to ensure sufficient swept paths. The safety assessment also recommends that the bus stop at Gordon Street & Arkell Road intersection be relocated further downstream to minimize queueing conflict, likely reducing rear end collisions. This recommendation is consistent with the queue by-pass / right-turn lane proposed for the Gordon Street and Arkell Road intersection on the north-east corner.

Appendix A: Traffic Data

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

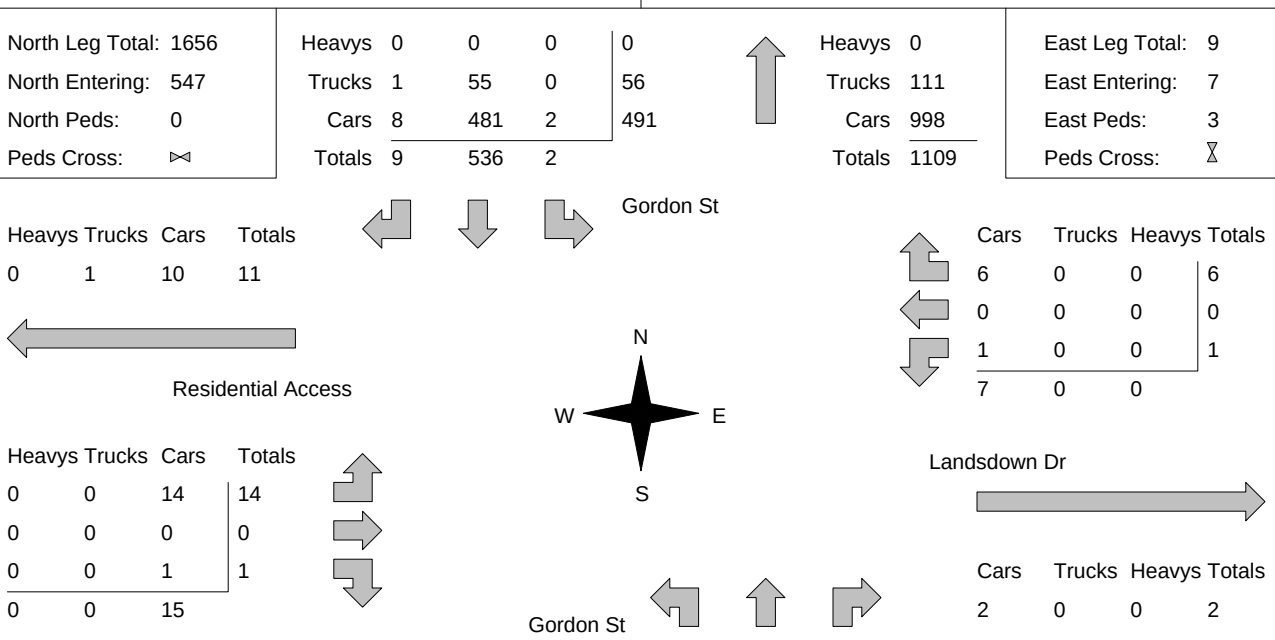
Municipality: Guelph
Site #: 1907200001
Intersection: Gordon St & Landsdown Dr-Reside
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

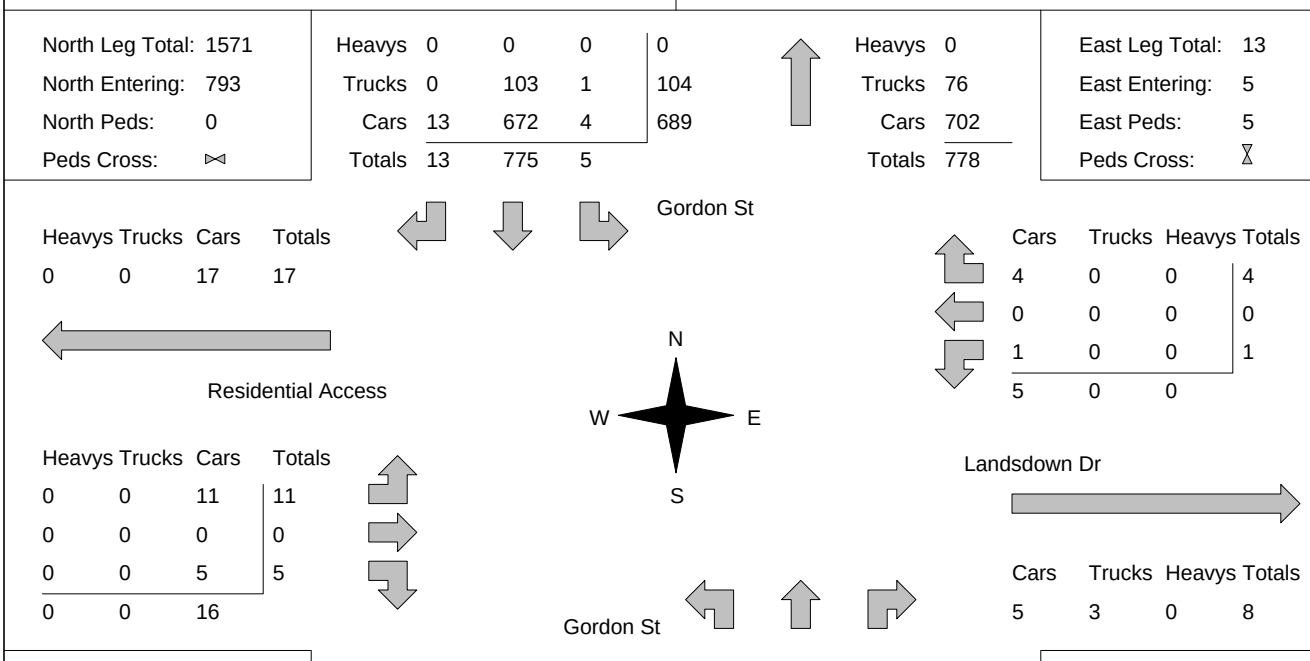
Municipality: Guelph
Site #: 1907200001
Intersection: Gordon St & Landsdown Dr-Reside
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:45:00
To: 18:45:00

Municipality: Guelph
Site #: 1907200001
Intersection: Gordon St & Landsdown Dr-Reside
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

North Leg Total: 2164
North Entering: 1253
North Peds: 1
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	3	79	0	82
Cars	36	1121	14	1171
Totals	39	1200	14	

Heavys	0
Trucks	86
Cars	825
Totals	911

East Leg Total: 20
East Entering: 4
East Peds: 6
Peds Cross: ⧖

Gordon St

Heavys	Trucks	Cars	Totals
0	3	50	53

	Cars	Trucks	Heavys	Totals
	3	1	0	4
	0	0	0	0
	0	0	0	0
	3	1	0	

Residential Access

N
W E
S

Heavys	Trucks	Cars	Totals
0	3	18	21
0	0	0	0
0	0	2	2
0	3	20	

Landsdown Dr

Cars	Trucks	Heavys	Totals
16	0	0	16

Gordon St

Peds Cross: ⧖
West Peds: 17
West Entering: 23
West Leg Total: 76

Cars	1123
Trucks	79
Heavys	0
Totals	1202

Cars	14	804	2	820
Trucks	0	82	0	82
Heavys	0	0	0	0
Totals	14	886	2	

Peds Cross: ⋈
South Peds: 8
South Entering: 902
South Leg Total: 2104

Comments

Ontario Traffic Inc.

Total Count Diagram

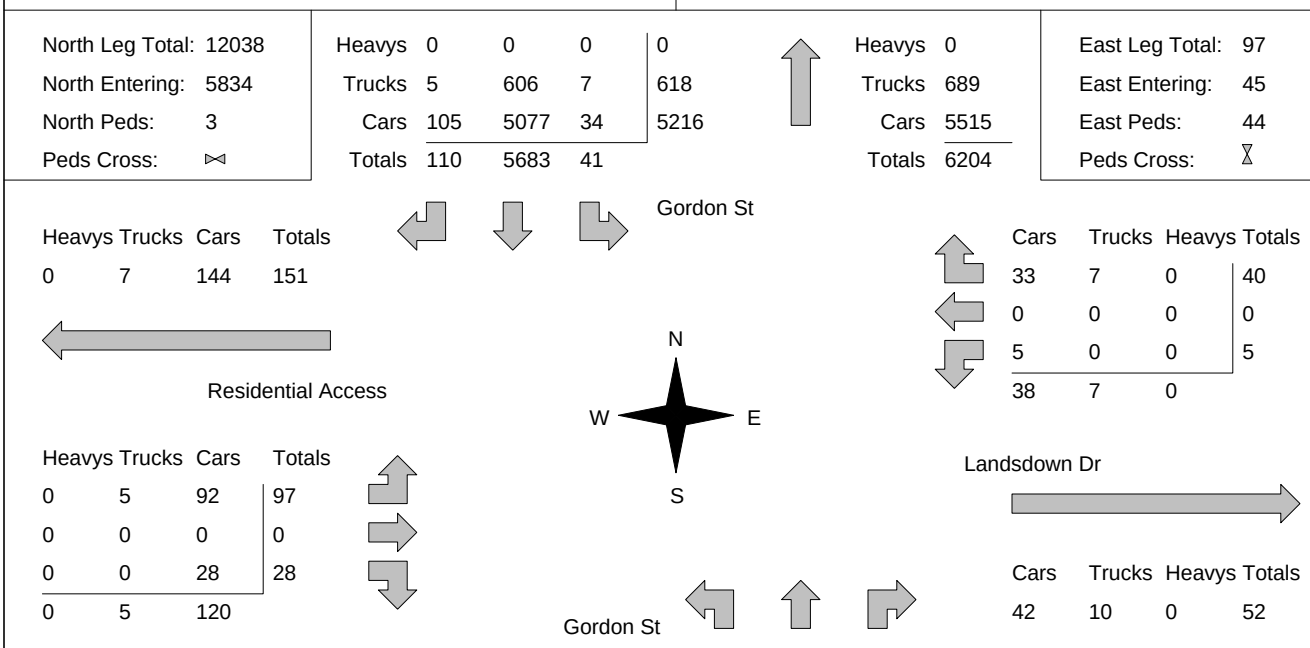
Municipality: Guelph
Site #: 1907200001
Intersection: Gordon St & Landsdown Dr-Reside
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Landsdown Dr-Resid | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	2	287	0	289	1	551
9:00:00	4	421	2	427	0	1038
10:00:00	2	536	9	547	0	1638
12:00:00	4	272	6	282	0	642
13:00:00	4	692	7	703	0	1482
17:00:00	4	842	18	864	0	1664
18:00:00	10	1080	14	1104	1	1961
19:00:00	10	1132	41	1183	1	2095
Totals:	40	5262	97	5399	3	11071

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	0	261	1	262	3
9:00:00	2	609	0	611	7
10:00:00	2	1089	0	1091	20
12:00:00	0	360	0	360	15
13:00:00	4	773	2	779	24
17:00:00	7	791	2	800	12
18:00:00	3	852	2	857	11
19:00:00	18	892	2	912	6
Totals:	36	5627	9	5672	98

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	0	2	2	0	9
9:00:00	1	0	7	8	4	17
10:00:00	1	0	6	7	3	22
12:00:00	1	0	6	7	3	16
13:00:00	1	0	4	5	7	21
17:00:00	1	0	3	4	7	26
18:00:00	0	0	4	4	8	12
19:00:00	0	0	5	5	8	28
Totals:	5	0	37	42	40	151

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	3	0	4	7	3
9:00:00	9	0	0	9	5
10:00:00	14	0	1	15	6
12:00:00	7	0	2	9	4
13:00:00	12	0	4	16	4
17:00:00	14	0	8	22	10
18:00:00	6	0	2	8	17
19:00:00	21	0	2	23	13
Totals:	86	0	23	109	62

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	7	17	35	23	37	27	18	28

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200001

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	57	57	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0
7:30:00	1	0	106	49	0	0	0	0	23	12	0	0	0	0	0	0	0	0	1	1
7:45:00	1	0	171	65	0	0	0	0	33	10	0	0	0	0	0	0	0	0	1	0
8:00:00	1	0	238	67	0	0	1	1	49	16	0	0	0	0	0	0	0	0	1	0
8:15:00	1	0	318	80	0	0	3	2	61	12	0	0	0	0	0	0	0	0	1	0
8:30:00	1	0	411	93	0	0	5	2	84	23	0	0	0	0	0	0	0	0	1	0
8:45:00	1	0	498	87	1	1	5	0	102	18	0	0	0	0	0	0	0	0	1	0
9:00:00	1	0	593	95	2	1	5	0	115	13	0	0	0	0	0	0	0	0	1	0
9:15:00	1	0	685	92	3	1	5	0	129	14	0	0	0	0	0	0	0	0	1	0
9:30:00	1	0	793	108	5	2	5	0	138	9	1	1	0	0	0	0	0	0	1	0
9:45:00	3	2	937	144	8	3	5	0	156	18	1	0	0	0	0	0	0	0	1	0
10:00:00	3	0	1074	137	10	2	5	0	170	14	1	0	0	0	0	0	0	0	1	0
10:00:55	3	0	1074	0	10	0	5	0	170	0	1	0	0	0	0	0	0	0	1	0
11:30:00	3	0	1074	0	10	0	5	0	170	0	1	0	0	0	0	0	0	0	1	0
11:45:00	5	2	1215	141	13	3	5	0	189	19	1	0	0	0	0	0	0	0	1	0
12:00:00	7	2	1309	94	16	3	5	0	207	18	1	0	0	0	0	0	0	0	1	0
12:15:00	8	1	1437	128	18	2	5	0	223	16	1	0	0	0	0	0	0	0	1	0
12:30:00	8	0	1592	155	18	0	5	0	243	20	1	0	0	0	0	0	0	0	1	0
12:45:00	9	1	1755	163	22	4	6	1	271	28	1	0	0	0	0	0	0	0	1	0
13:00:00	10	1	1917	162	23	1	6	0	291	20	1	0	0	0	0	0	0	0	1	0
13:15:00	12	2	2080	163	28	5	6	0	318	27	1	0	0	0	0	0	0	0	1	0
13:30:00	12	0	2264	184	31	3	6	0	346	28	1	0	0	0	0	0	0	0	1	0
13:32:15	12	0	2264	0	31	0	6	0	346	0	1	0	0	0	0	0	0	0	1	0
16:30:00	12	0	2264	0	31	0	6	0	346	0	1	0	0	0	0	0	0	0	1	0
16:45:00	13	1	2461	197	33	2	6	0	371	25	1	0	0	0	0	0	0	0	1	0
17:00:00	14	1	2661	200	41	8	6	0	389	18	1	0	0	0	0	0	0	0	1	0
17:15:00	17	3	2886	225	44	3	6	0	402	13	1	0	0	0	0	0	0	0	1	0
17:30:00	18	1	3121	235	49	5	6	0	429	27	1	0	0	0	0	0	0	0	1	0
17:45:00	19	1	3358	237	49	0	6	0	457	28	2	1	0	0	0	0	0	0	1	0
18:00:00	24	5	3652	294	54	5	6	0	478	21	2	0	0	0	0	0	0	0	2	1
18:15:00	26	2	3913	261	64	10	6	0	500	22	2	0	0	0	0	0	0	0	2	0
18:30:00	30	4	4206	293	71	7	6	0	520	20	4	2	0	0	0	0	0	0	2	0
18:45:00	33	3	4479	273	85	14	6	0	536	16	5	1	0	0	0	0	0	0	2	0
19:00:00	34	1	4697	218	92	7	6	0	565	29	5	0	0	0	0	0	0	0	3	1
19:15:00	34	0	4906	209	97	5	6	0	588	23	5	0	0	0	0	0	0	0	3	0
19:30:00	34	0	5077	171	105	8	7	1	606	18	5	0	0	0	0	0	0	0	3	0
19:45:00	34	0	5077	0	105	0	7	0	606	0	5	0	0	0	0	0	0	0	3	0
19:47:18	34	0	5077	0	105	0	7	0	606	0	5	0	0	0	0	0	0	0	3	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200001

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	3	2	0	0	0	0	2	0	0	0	0	0	0	0	2	2
8:45:00	1	1	0	0	7	4	0	0	0	0	2	0	0	0	0	0	0	0	2	0
9:00:00	1	0	0	0	7	0	0	0	0	0	2	0	0	0	0	0	0	0	4	2
9:15:00	1	0	0	0	9	2	0	0	0	0	2	0	0	0	0	0	0	0	5	1
9:30:00	2	1	0	0	10	1	0	0	0	0	2	0	0	0	0	0	0	0	7	2
9:45:00	2	0	0	0	13	3	0	0	0	0	2	0	0	0	0	0	0	0	7	0
10:00:00	2	0	0	0	13	0	0	0	0	0	2	0	0	0	0	0	0	0	7	0
10:00:55	2	0	0	0	13	0	0	0	0	0	2	0	0	0	0	0	0	0	7	0
11:30:00	2	0	0	0	13	0	0	0	0	0	2	0	0	0	0	0	0	0	7	0
11:45:00	2	0	0	0	16	3	0	0	0	0	3	1	0	0	0	0	0	0	9	2
12:00:00	3	1	0	0	18	2	0	0	0	0	3	0	0	0	0	0	0	0	10	1
12:15:00	3	0	0	0	19	1	0	0	0	0	3	0	0	0	0	0	0	0	14	4
12:30:00	3	0	0	0	20	1	0	0	0	0	3	0	0	0	0	0	0	0	15	1
12:45:00	3	0	0	0	20	0	0	0	0	0	3	0	0	0	0	0	0	0	16	1
13:00:00	4	1	0	0	22	2	0	0	0	0	3	0	0	0	0	0	0	0	17	1
13:15:00	4	0	0	0	23	1	0	0	0	0	3	0	0	0	0	0	0	0	20	3
13:30:00	4	0	0	0	24	1	0	0	0	0	3	0	0	0	0	0	0	0	20	0
13:32:15	4	0	0	0	24	0	0	0	0	0	3	0	0	0	0	0	0	0	20	0
16:30:00	4	0	0	0	24	0	0	0	0	0	3	0	0	0	0	0	0	0	20	0
16:45:00	4	0	0	0	25	1	0	0	0	0	3	0	0	0	0	0	0	0	24	4
17:00:00	5	1	0	0	25	0	0	0	0	0	3	0	0	0	0	0	0	0	24	0
17:15:00	5	0	0	0	25	0	0	0	0	0	3	0	0	0	0	0	0	0	30	6
17:30:00	5	0	0	0	25	0	0	0	0	0	3	0	0	0	0	0	0	0	31	1
17:45:00	5	0	0	0	27	2	0	0	0	0	3	0	0	0	0	0	0	0	31	0
18:00:00	5	0	0	0	28	1	0	0	0	0	4	1	0	0	0	0	0	0	32	1
18:15:00	5	0	0	0	29	1	0	0	0	0	4	0	0	0	0	0	0	0	34	2
18:30:00	5	0	0	0	29	0	0	0	0	0	4	0	0	0	0	0	0	0	35	1
18:45:00	5	0	0	0	30	1	0	0	0	0	4	0	0	0	0	0	0	0	37	2
19:00:00	5	0	0	0	31	1	0	0	0	0	6	2	0	0	0	0	0	0	40	3
19:15:00	5	0	0	0	32	1	0	0	0	0	6	0	0	0	0	0	0	0	44	4
19:30:00	5	0	0	0	33	1	0	0	0	0	7	1	0	0	0	0	0	0	44	0
19:45:00	5	0	0	0	33	0	0	0	0	0	7	0	0	0	0	0	0	0	44	0
19:47:18	5	0	0	0	33	0	0	0	0	0	7	0	0	0	0	0	0	0	44	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200001

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	35	35	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	89	54	0	0	0	0	22	12	1	1	0	0	0	0	0	0	2	2
7:45:00	0	0	142	53	0	0	0	0	40	18	1	0	0	0	0	0	0	0	3	1
8:00:00	0	0	211	69	0	0	0	0	50	10	1	0	0	0	0	0	0	0	3	0
8:15:00	0	0	286	75	0	0	0	0	64	14	1	0	0	0	0	0	0	0	3	0
8:30:00	0	0	387	101	0	0	0	0	82	18	1	0	0	0	0	0	0	0	3	0
8:45:00	1	1	539	152	0	0	0	0	104	22	1	0	0	0	0	0	0	0	6	3
9:00:00	2	1	738	199	0	0	0	0	132	28	1	0	0	0	0	0	0	0	10	4
9:15:00	2	0	988	250	0	0	0	0	161	29	1	0	0	0	0	0	0	0	15	5
9:30:00	2	0	1225	237	0	0	0	0	192	31	1	0	0	0	0	0	0	0	19	4
9:45:00	3	1	1460	235	0	0	0	0	214	22	1	0	0	0	0	0	0	0	24	5
10:00:00	4	1	1716	256	0	0	0	0	243	29	1	0	0	0	0	0	0	0	30	6
10:00:55	4	0	1716	0	0	0	0	0	243	0	1	0	0	0	0	0	0	0	30	0
11:30:00	4	0	1716	0	0	0	0	0	243	0	1	0	0	0	0	0	0	0	30	0
11:45:00	4	0	1882	166	0	0	0	0	263	20	1	0	0	0	0	0	0	0	39	9
12:00:00	4	0	2043	161	0	0	0	0	276	13	1	0	0	0	0	0	0	0	45	6
12:15:00	5	1	2212	169	0	0	0	0	299	23	1	0	0	0	0	0	0	0	56	11
12:30:00	7	2	2391	179	0	0	0	0	321	22	1	0	0	0	0	0	0	0	60	4
12:45:00	8	1	2568	177	1	1	0	0	335	14	2	1	0	0	0	0	0	0	64	4
13:00:00	8	0	2737	169	1	0	0	0	355	20	2	0	0	0	0	0	0	0	69	5
13:15:00	10	2	2899	162	1	0	0	0	377	22	2	0	0	0	0	0	0	0	73	4
13:30:00	11	1	3078	179	1	0	0	0	397	20	3	1	0	0	0	0	0	0	79	6
13:32:15	11	0	3078	0	1	0	0	0	397	0	3	0	0	0	0	0	0	0	79	0
16:30:00	11	0	3078	0	1	0	0	0	397	0	3	0	0	0	0	0	0	0	79	0
16:45:00	12	1	3245	167	1	0	1	1	428	31	3	0	0	0	0	0	0	0	81	2
17:00:00	14	2	3435	190	2	1	1	0	448	20	3	0	0	0	0	0	0	0	81	0
17:15:00	14	0	3607	172	3	1	1	0	471	23	3	0	0	0	0	0	0	0	86	5
17:30:00	14	0	3779	172	3	0	1	0	500	29	3	0	0	0	0	0	0	0	86	0
17:45:00	15	1	3987	208	4	1	1	0	526	26	3	0	0	0	0	0	0	0	88	2
18:00:00	17	2	4190	203	4	0	1	0	545	19	3	0	0	0	0	0	0	0	92	4
18:15:00	20	3	4391	201	5	1	1	0	563	18	3	0	0	0	0	0	0	0	95	3
18:30:00	26	6	4606	215	5	0	1	0	585	22	3	0	0	0	0	0	0	0	96	1
18:45:00	29	3	4791	185	6	1	1	0	608	23	3	0	0	0	0	0	0	0	96	0
19:00:00	34	5	4999	208	6	0	2	1	628	20	3	0	0	0	0	0	0	0	98	2
19:15:00	38	4	5179	180	7	1	2	0	654	26	3	0	0	0	0	0	0	0	99	1
19:30:00	39	1	5390	211	8	1	2	0	677	23	3	0	0	0	0	0	0	0	102	3
19:45:00	39	0	5390	0	8	0	2	0	677	0	3	0	0	0	0	0	0	0	102	0
19:47:18	39	0	5390	0	8	0	2	0	677	0	3	0	0	0	0	0	0	0	102	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200001

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:30:00	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3	1
7:45:00	3	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8:00:00	3	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8:15:00	5	2	0	0	4	0	1	1	0	0	0	0	0	0	0	0	0	0	3	0
8:30:00	6	1	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	4	1
8:45:00	7	1	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	5	1
9:00:00	11	4	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	8	3
9:15:00	19	8	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	10	2
9:30:00	25	6	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	11	1
9:45:00	25	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	14	3
10:00:00	25	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	14	0
10:00:55	25	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	14	0
11:30:00	25	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	14	0
11:45:00	27	2	0	0	7	2	2	1	0	0	0	0	0	0	0	0	0	0	16	2
12:00:00	31	4	0	0	7	0	2	0	0	0	0	0	0	0	0	0	0	0	18	2
12:15:00	31	0	0	0	7	0	2	0	0	0	0	0	0	0	0	0	0	0	18	0
12:30:00	39	8	0	0	8	1	2	0	0	0	0	0	0	0	0	0	0	0	18	0
12:45:00	42	3	0	0	9	1	2	0	0	0	0	0	0	0	0	0	0	0	21	3
13:00:00	43	1	0	0	11	2	2	0	0	0	0	0	0	0	0	0	0	0	22	1
13:15:00	49	6	0	0	12	1	2	0	0	0	0	0	0	0	0	0	0	0	24	2
13:30:00	50	1	0	0	13	1	2	0	0	0	0	0	0	0	0	0	0	0	25	1
13:32:15	50	0	0	0	13	0	2	0	0	0	0	0	0	0	0	0	0	0	25	0
16:30:00	50	0	0	0	13	0	2	0	0	0	0	0	0	0	0	0	0	0	25	0
16:45:00	54	4	0	0	14	1	2	0	0	0	0	0	0	0	0	0	0	0	29	4
17:00:00	57	3	0	0	19	5	2	0	0	0	0	0	0	0	0	0	0	0	32	3
17:15:00	59	2	0	0	19	0	2	0	0	0	0	0	0	0	0	0	0	0	37	5
17:30:00	60	1	0	0	19	0	2	0	0	0	0	0	0	0	0	0	0	0	37	0
17:45:00	61	1	0	0	20	1	2	0	0	0	0	0	0	0	0	0	0	0	42	5
18:00:00	63	2	0	0	21	1	2	0	0	0	0	0	0	0	0	0	0	0	49	7
18:15:00	66	3	0	0	21	0	3	1	0	0	0	0	0	0	0	0	0	0	54	5
18:30:00	75	9	0	0	21	0	5	2	0	0	0	0	0	0	0	0	0	0	55	1
18:45:00	79	4	0	0	22	1	5	0	0	0	0	0	0	0	0	0	0	0	59	4
19:00:00	81	2	0	0	23	1	5	0	0	0	0	0	0	0	0	0	0	0	62	3
19:15:00	87	6	0	0	27	4	5	0	0	0	0	0	0	0	0	0	0	0	66	4
19:30:00	92	5	0	0	28	1	5	0	0	0	0	0	0	0	0	0	0	0	72	6
19:45:00	92	0	0	0	28	0	5	0	0	0	0	0	0	0	0	0	0	0	72	0
19:47:18	92	0	0	0	28	0	5	0	0	0	0	0	0	0	0	0	0	0	72	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

Municipality: Guelph
Site #: 1907200002
Intersection: Gordon St & Valley Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

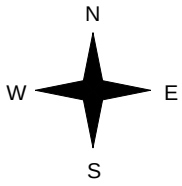
North Leg Total: 1631
North Entering: 544
North Peds: 2
Peds Cross: ⋈

Heavys	0	0	0
Trucks	53	0	53
Cars	491	0	491
Totals	544	0	

Heavys	0
Trucks	112
Cars	975
Totals	1087

East Leg Total: 9
East Entering: 6
East Peds: 9
Peds Cross: ⋈

	Cars	Trucks	Heavys	Totals
	2	0	0	2
	4	0	0	4
	6	0	0	



	Cars	Trucks	Heavys	Totals
	3	0	0	3

Cars	495		
Trucks	53		
Heavys	0		
Totals	548		

Cars	973	3	976
Trucks	112	0	112
Heavys	0	0	0
Totals	1085	3	

Peds Cross: ⋈
South Peds: 39
South Entering: 1088
South Leg Total: 1636

Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

Municipality: Guelph
Site #: 1907200002
Intersection: Gordon St & Valley Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

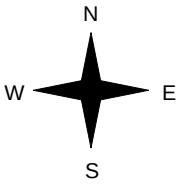
North Leg Total: 1562
North Entering: 788
North Peds: 5
Peds Cross: ⋈

Heavys	0	0	0
Trucks	103	0	103
Cars	683	2	685
Totals	786	2	

Heavys	0
Trucks	79
Cars	695
Totals	774

East Leg Total: 13
East Entering: 6
East Peds: 12
Peds Cross: ⋈

	Cars	Trucks	Heavys	Totals
	2	1	0	3
	3	0	0	3
	5	1	0	



Valley Rd

	Cars	Trucks	Heavys	Totals
	7	0	0	7

Cars	686		
Trucks	103		
Heavys	0		
Totals	789		

Cars	693	5	698
Trucks	78	0	78
Heavys	0	0	0
Totals	771	5	

Peds Cross: ⋈
South Peds: 27
South Entering: 776
South Leg Total: 1565

Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:45:00
To: 18:45:00

Municipality: Guelph
Site #: 1907200002
Intersection: Gordon St & Valley Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

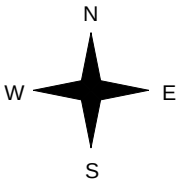
North Leg Total: 2101
North Entering: 1189
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	79	0	79
Cars	1109	1	1110
Totals	1188	1	

Heavys	0
Trucks	83
Cars	829
Totals	912

East Leg Total: 5
East Entering: 2
East Peds: 6
Peds Cross: ⋈

	Cars	Trucks	Heavys	Totals
	2	0	0	2
	0	0	0	0
	2	0	0	



	Cars	Trucks	Heavys	Totals
	3	0	0	3

Cars	827	2	829
Trucks	83	0	83
Heavys	0	0	0
Totals	910	2	

Cars	1109
Trucks	79
Heavys	0
Totals	1188

Peds Cross: ⋈
South Peds: 38
South Entering: 912
South Leg Total: 2100

Comments

Ontario Traffic Inc.

Total Count Diagram

Municipality: Guelph
Site #: 1907200002
Intersection: Gordon St & Valley Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

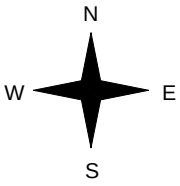
North Leg Total: 11871
North Entering: 5732
North Peds: 11
Peds Cross: ⋈

Heavys	0	0	0
Trucks	598	0	598
Cars	5129	5	5134
Totals	5727	5	

Heavys	0
Trucks	685
Cars	5454
Totals	6139

East Leg Total: 55
East Entering: 28
East Peds: 56
Peds Cross: ⋈

	Cars	Trucks	Heavys	Totals
	15	1	0	16
	11	1	0	12
	26	2	0	



	Cars	Trucks	Heavys	Totals
	27	0	0	27

Cars	5140		
Trucks	599		
Heavys	0		
Totals	5739		

Cars	5439	22	5461
Trucks	684	0	684
Heavys	0	0	0
Totals	6123	22	

Peds Cross: ⋈
South Peds: 220
South Entering: 6145
South Leg Total: 11884

Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Valley Rd | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	286	0	286	0	548
9:00:00	0	425	0	425	2	1036
10:00:00	0	544	0	544	2	1632
12:00:00	0	277	0	277	0	636
13:00:00	1	700	0	701	2	1483
17:00:00	2	854	0	856	3	1661
18:00:00	0	1072	0	1072	0	1934
19:00:00	1	1136	0	1137	0	2068
Totals:	4	5294	0	5298	9	10998

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	0	262	0	262	3
9:00:00	0	609	2	611	21
10:00:00	0	1085	3	1088	39
12:00:00	0	357	2	359	22
13:00:00	0	779	3	782	27
17:00:00	0	802	3	805	32
18:00:00	0	858	4	862	30
19:00:00	0	929	2	931	33
Totals:	0	5681	19	5700	207

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	0	0	0	1	0
9:00:00	2	0	1	3	2	3
10:00:00	4	0	2	6	9	6
12:00:00	0	0	1	1	2	1
13:00:00	3	0	5	8	12	8
17:00:00	0	0	1	1	11	1
18:00:00	0	0	4	4	7	4
19:00:00	0	0	1	1	7	1
Totals:	9	0	15	24	51	24

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	0	0	0	0	0
9:00:00	0	0	0	0	0
10:00:00	0	0	0	0	0
12:00:00	0	0	0	0	0
13:00:00	0	0	0	0	0
17:00:00	0	0	0	0	0
18:00:00	0	0	0	0	0
19:00:00	0	0	0	0	0
Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	3	25	45	22	32	35	30	33

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200002

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	52	52	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	107	55	0	0	0	0	23	11	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	170	63	0	0	0	0	32	9	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	238	68	0	0	0	0	48	16	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	319	81	0	0	0	0	60	12	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	410	91	0	0	0	0	83	23	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	501	91	0	0	0	0	100	17	0	0	0	0	0	0	0	0	1	1
9:00:00	0	0	598	97	0	0	0	0	113	13	0	0	0	0	0	0	0	0	2	1
9:15:00	0	0	693	95	0	0	0	0	127	14	0	0	0	0	0	0	0	0	4	2
9:30:00	0	0	803	110	0	0	0	0	134	7	0	0	0	0	0	0	0	0	4	0
9:45:00	0	0	947	144	0	0	0	0	152	18	0	0	0	0	0	0	0	0	4	0
10:00:00	0	0	1089	142	0	0	0	0	166	14	0	0	0	0	0	0	0	0	4	0
10:00:59	0	0	1089	0	0	0	0	0	166	0	0	0	0	0	0	0	0	0	4	0
11:30:00	0	0	1089	0	0	0	0	0	166	0	0	0	0	0	0	0	0	0	4	0
11:45:00	0	0	1237	148	0	0	0	0	184	18	0	0	0	0	0	0	0	0	4	0
12:00:00	0	0	1331	94	0	0	0	0	201	17	0	0	0	0	0	0	0	0	4	0
12:15:00	0	0	1462	131	0	0	0	0	219	18	0	0	0	0	0	0	0	0	4	0
12:30:00	1	1	1612	150	0	0	0	0	239	20	0	0	0	0	0	0	0	0	4	0
12:45:00	1	0	1776	164	0	0	0	0	266	27	0	0	0	0	0	0	0	0	5	1
13:00:00	1	0	1946	170	0	0	0	0	286	20	0	0	0	0	0	0	0	0	6	1
13:15:00	2	1	2109	163	0	0	0	0	313	27	0	0	0	0	0	0	0	0	8	2
13:30:00	3	1	2295	186	0	0	0	0	342	29	0	0	0	0	0	0	0	0	9	1
13:30:36	3	0	2295	0	0	0	0	0	342	0	0	0	0	0	0	0	0	0	9	0
16:30:00	3	0	2295	0	0	0	0	0	342	0	0	0	0	0	0	0	0	0	9	0
16:45:00	3	0	2492	197	0	0	0	0	367	25	0	0	0	0	0	0	0	0	9	0
17:00:00	3	0	2701	209	0	0	0	0	385	18	0	0	0	0	0	0	0	0	9	0
17:15:00	3	0	2921	220	0	0	0	0	398	13	0	0	0	0	0	0	0	0	9	0
17:30:00	3	0	3166	245	0	0	0	0	425	27	0	0	0	0	0	0	0	0	9	0
17:45:00	3	0	3401	235	0	0	0	0	454	29	0	0	0	0	0	0	0	0	9	0
18:00:00	3	0	3682	281	0	0	0	0	476	22	0	0	0	0	0	0	0	0	9	0
18:15:00	3	0	3935	253	0	0	0	0	498	22	0	0	0	0	0	0	0	0	9	0
18:30:00	4	1	4243	308	0	0	0	0	517	19	0	0	0	0	0	0	0	0	9	0
18:45:00	4	0	4510	267	0	0	0	0	533	16	0	0	0	0	0	0	0	0	9	0
19:00:00	4	0	4735	225	0	0	0	0	559	26	0	0	0	0	0	0	0	0	9	0
19:15:00	5	1	4952	217	0	0	0	0	580	21	0	0	0	0	0	0	0	0	9	0
19:30:00	5	0	5129	177	0	0	0	0	598	18	0	0	0	0	0	0	0	0	11	2
19:45:00	5	0	5129	0	0	0	0	0	598	0	0	0	0	0	0	0	0	0	11	0
19:45:51	5	0	5129	0	0	0	0	0	598	0	0	0	0	0	0	0	0	0	11	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200002

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0
8:45:00	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1
9:00:00	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3	1
9:15:00	1	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4	1
9:30:00	2	1	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	6	2
9:45:00	5	3	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0
10:00:00	5	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	12	6
10:00:59	5	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	12	0
11:30:00	5	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	12	0
11:45:00	5	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	12	0
12:00:00	5	0	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	14	2
12:15:00	5	0	0	0	6	2	1	0	0	0	0	0	0	0	0	0	0	0	18	4
12:30:00	5	0	0	0	7	1	1	0	0	0	0	0	0	0	0	0	0	0	21	3
12:45:00	6	1	0	0	8	1	1	0	0	0	1	1	0	0	0	0	0	0	24	3
13:00:00	8	2	0	0	8	0	1	0	0	0	1	0	0	0	0	0	0	0	26	2
13:15:00	8	0	0	0	8	0	1	0	0	0	1	0	0	0	0	0	0	0	31	5
13:30:00	8	0	0	0	9	1	1	0	0	0	1	0	0	0	0	0	0	0	33	2
13:30:36	8	0	0	0	9	0	1	0	0	0	1	0	0	0	0	0	0	0	33	0
16:30:00	8	0	0	0	9	0	1	0	0	0	1	0	0	0	0	0	0	0	33	0
16:45:00	8	0	0	0	9	0	1	0	0	0	1	0	0	0	0	0	0	0	36	3
17:00:00	8	0	0	0	9	0	1	0	0	0	1	0	0	0	0	0	0	0	37	1
17:15:00	8	0	0	0	11	2	1	0	0	0	1	0	0	0	0	0	0	0	42	5
17:30:00	8	0	0	0	12	1	1	0	0	0	1	0	0	0	0	0	0	0	43	1
17:45:00	8	0	0	0	12	0	1	0	0	0	1	0	0	0	0	0	0	0	43	0
18:00:00	8	0	0	0	13	1	1	0	0	0	1	0	0	0	0	0	0	0	44	1
18:15:00	8	0	0	0	13	0	1	0	0	0	1	0	0	0	0	0	0	0	45	1
18:30:00	8	0	0	0	14	1	1	0	0	0	1	0	0	0	0	0	0	0	46	1
18:45:00	8	0	0	0	14	0	1	0	0	0	1	0	0	0	0	0	0	0	49	3
19:00:00	8	0	0	0	14	0	1	0	0	0	1	0	0	0	0	0	0	0	51	2
19:15:00	8	0	0	0	14	0	1	0	0	0	1	0	0	0	0	0	0	0	54	3
19:30:00	11	3	0	0	15	1	1	0	0	0	1	0	0	0	0	0	0	0	56	2
19:45:00	11	0	0	0	15	0	1	0	0	0	1	0	0	0	0	0	0	0	56	0
19:45:51	11	0	0	0	15	0	1	0	0	0	1	0	0	0	0	0	0	0	56	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200002

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	39	39	0	0	0	0	8	8	0	0	0	0	0	0	0	0	1	1
7:30:00	0	0	89	50	0	0	0	0	20	12	0	0	0	0	0	0	0	0	2	1
7:45:00	0	0	145	56	0	0	0	0	38	18	0	0	0	0	0	0	0	0	2	0
8:00:00	0	0	215	70	0	0	0	0	47	9	0	0	0	0	0	0	0	0	3	1
8:15:00	0	0	292	77	1	1	0	0	60	13	0	0	0	0	0	0	0	0	5	2
8:30:00	0	0	396	104	1	0	0	0	79	19	0	0	0	0	0	0	0	0	10	5
8:45:00	0	0	550	154	2	1	0	0	100	21	0	0	0	0	0	0	0	0	17	7
9:00:00	0	0	744	194	2	0	0	0	127	27	0	0	0	0	0	0	0	0	24	7
9:15:00	0	0	994	250	2	0	0	0	156	29	0	0	0	0	0	0	0	0	35	11
9:30:00	0	0	1228	234	2	0	0	0	185	29	0	0	0	0	0	0	0	0	47	12
9:45:00	0	0	1480	252	3	1	0	0	208	23	0	0	0	0	0	0	0	0	52	5
10:00:00	0	0	1717	237	5	2	0	0	239	31	0	0	0	0	0	0	0	0	63	11
10:00:59	0	0	1717	0	5	0	0	0	239	0	0	0	0	0	0	0	0	0	63	0
11:30:00	0	0	1717	0	5	0	0	0	239	0	0	0	0	0	0	0	0	0	63	0
11:45:00	0	0	1885	168	7	2	0	0	258	19	0	0	0	0	0	0	0	0	72	9
12:00:00	0	0	2042	157	7	0	0	0	271	13	0	0	0	0	0	0	0	0	85	13
12:15:00	0	0	2219	177	7	0	0	0	295	24	0	0	0	0	0	0	0	0	92	7
12:30:00	0	0	2388	169	7	0	0	0	317	22	0	0	0	0	0	0	0	0	102	10
12:45:00	0	0	2569	181	9	2	0	0	332	15	0	0	0	0	0	0	0	0	106	4
13:00:00	0	0	2741	172	10	1	0	0	351	19	0	0	0	0	0	0	0	0	112	6
13:15:00	0	0	2906	165	11	1	0	0	374	23	0	0	0	0	0	0	0	0	121	9
13:30:00	0	0	3081	175	12	1	0	0	395	21	0	0	0	0	0	0	0	0	129	8
13:30:36	0	0	3081	0	12	0	0	0	395	0	0	0	0	0	0	0	0	0	129	0
16:30:00	0	0	3081	0	12	0	0	0	395	0	0	0	0	0	0	0	0	0	129	0
16:45:00	0	0	3261	180	12	0	0	0	428	33	0	0	0	0	0	0	0	0	137	8
17:00:00	0	0	3446	185	13	1	0	0	448	20	0	0	0	0	0	0	0	0	144	7
17:15:00	0	0	3625	179	13	0	0	0	476	28	0	0	0	0	0	0	0	0	154	10
17:30:00	0	0	3796	171	14	1	0	0	503	27	0	0	0	0	0	0	0	0	160	6
17:45:00	0	0	3999	203	16	2	0	0	530	27	0	0	0	0	0	0	0	0	161	1
18:00:00	0	0	4204	205	17	1	0	0	548	18	0	0	0	0	0	0	0	0	174	13
18:15:00	0	0	4422	218	17	0	0	0	567	19	0	0	0	0	0	0	0	0	181	7
18:30:00	0	0	4634	212	18	1	0	0	588	21	0	0	0	0	0	0	0	0	193	12
18:45:00	0	0	4826	192	18	0	0	0	613	25	0	0	0	0	0	0	0	0	199	6
19:00:00	0	0	5047	221	19	1	0	0	634	21	0	0	0	0	0	0	0	0	207	8
19:15:00	0	0	5229	182	19	0	0	0	660	26	0	0	0	0	0	0	0	0	217	10
19:30:00	0	0	5439	210	22	3	0	0	684	24	0	0	0	0	0	0	0	0	220	3
19:45:00	0	0	5439	0	22	0	0	0	684	0	0	0	0	0	0	0	0	0	220	0
19:45:51	0	0	5439	0	22	0	0	0	684	0	0	0	0	0	0	0	0	0	220	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200002

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30:36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45:51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

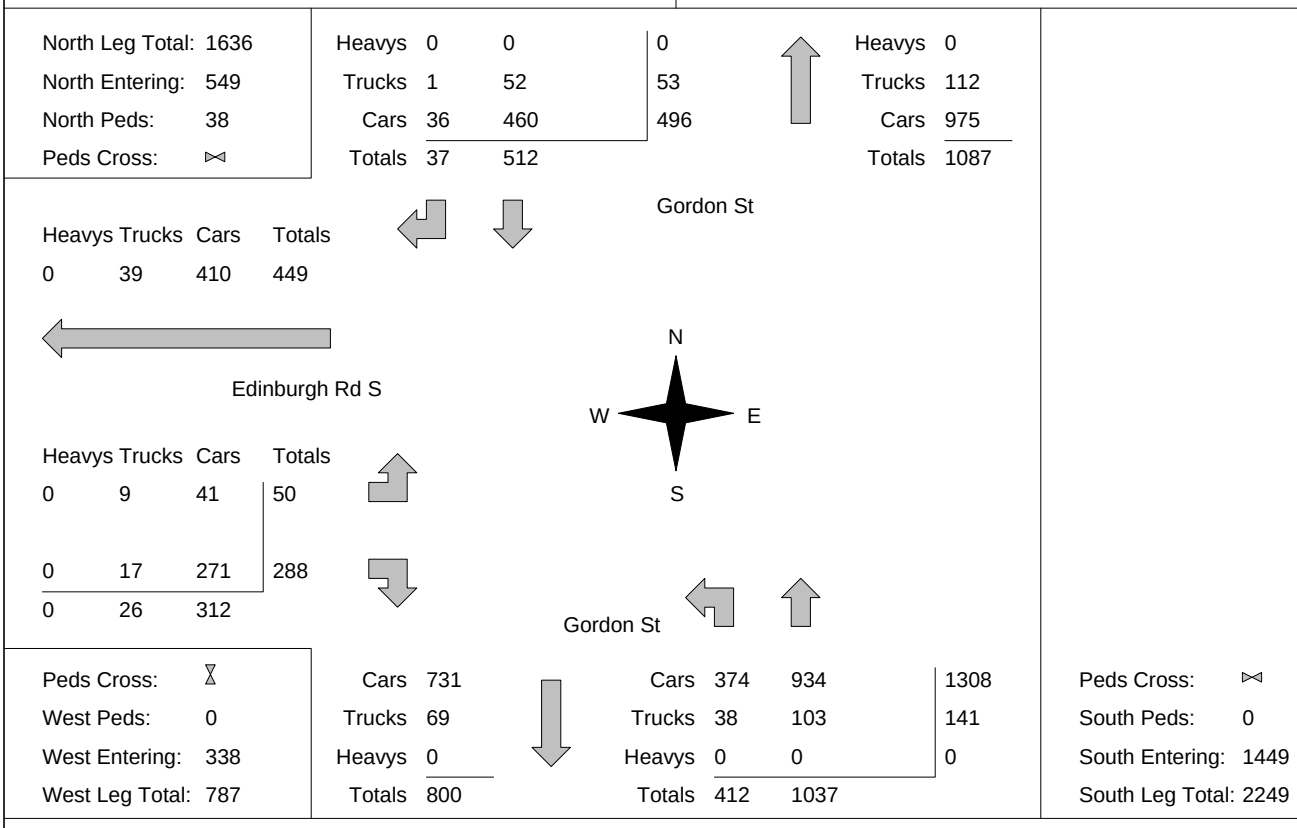
Municipality: Guelph
Site #: 1907200003
Intersection: Gordon St & Edinburgh Rd S
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

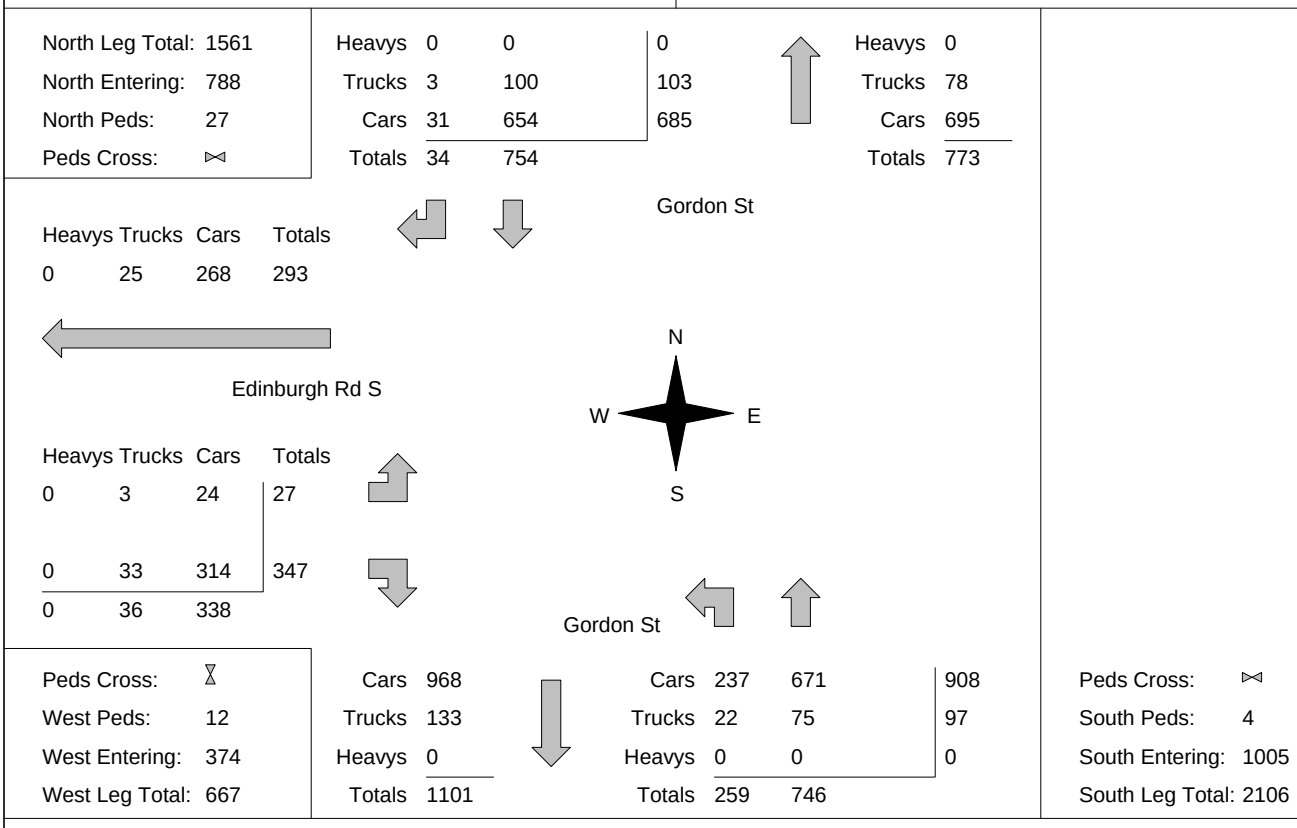
Municipality: Guelph
Site #: 1907200003
Intersection: Gordon St & Edinburgh Rd S
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:45:00
To: 18:45:00

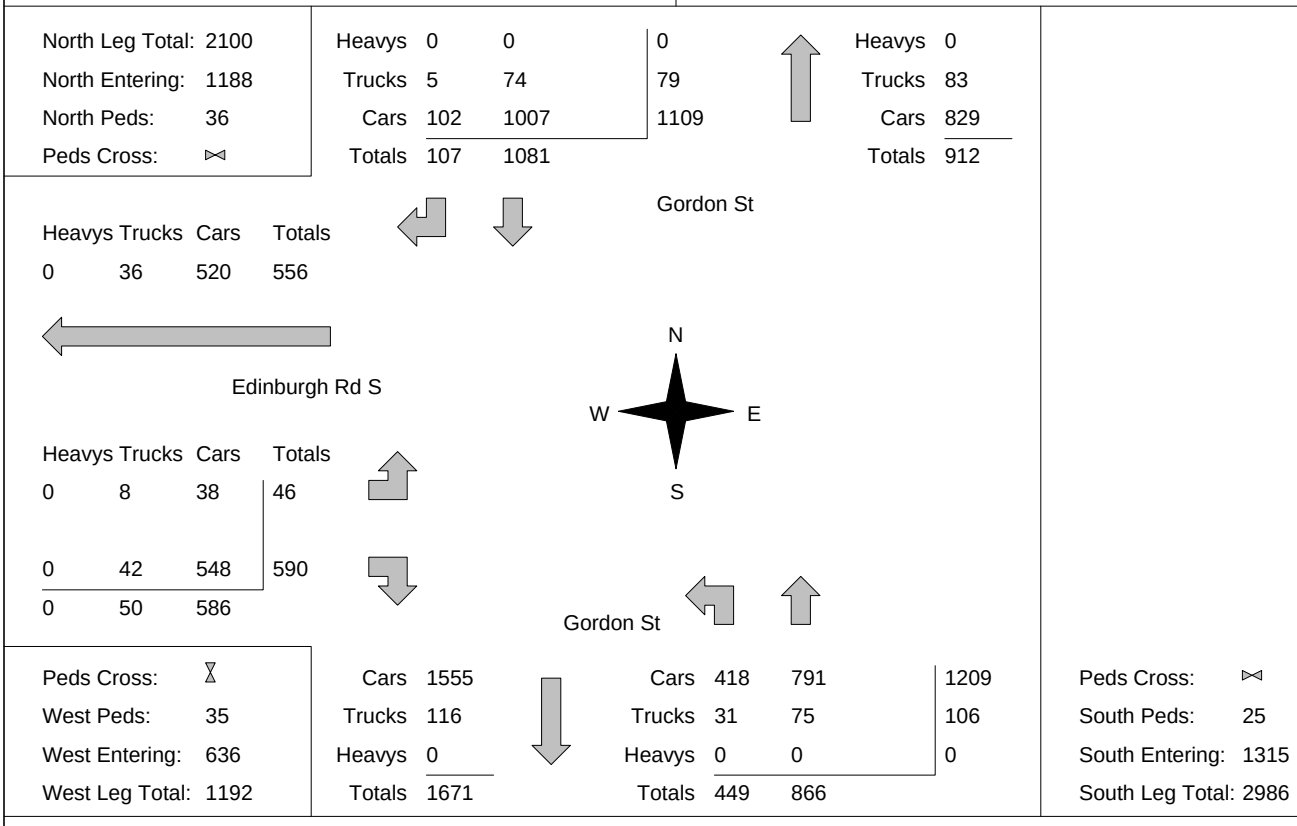
Municipality: Guelph
Site #: 1907200003
Intersection: Gordon St & Edinburgh Rd S
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Total Count Diagram

Municipality: Guelph
Site #: 1907200003
Intersection: Gordon St & Edinburgh Rd S
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

North Leg Total:	11876		
North Entering:	5736		
North Peds:	232		
Peds Cross:	⋈		

Heavys	0	0	0
Trucks	27	572	599
Cars	330	4807	5137
Totals	357	5379	

Heavys	0
Trucks	679
Cars	5461
Totals	6140

Gordon St

Heavys	Trucks	Cars	Totals
0	224	2706	2930

Edinburgh Rd S

Heavys	Trucks	Cars	Totals
0	48	239	287
0	228	2581	2809
0	276	2820	

N
W E
S

Gordon St

Peds Cross:	⋈
West Peds:	115
West Entering:	3096
West Leg Total:	6026

Cars	7388		
Trucks	800		
Heavys	0		
Totals	8188		

Cars	2376	5222	7598
Trucks	197	631	828
Heavys	0	0	0
Totals	2573	5853	

Peds Cross:	⋈
South Peds:	58
South Entering:	8426
South Leg Total:	16614

Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Edinburgh Rd S | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	277	9	286	4	642
9:00:00	0	413	15	428	21	1264
10:00:00	0	512	37	549	38	1998
12:00:00	0	259	17	276	21	751
13:00:00	0	666	34	700	27	1714
17:00:00	0	811	44	855	33	1936
18:00:00	0	1003	68	1071	37	2336
19:00:00	0	1040	96	1136	33	2462
Totals:	0	4981	320	5301	214	13103

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	117	239	0	356	1
9:00:00	246	590	0	836	0
10:00:00	412	1037	0	1449	0
12:00:00	130	345	0	475	4
13:00:00	260	754	0	1014	4
17:00:00	317	764	0	1081	4
18:00:00	445	820	0	1265	18
19:00:00	443	883	0	1326	20
Totals:	2370	5432	0	7802	51

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	0	0	0	0	161
9:00:00	0	0	0	0	0	233
10:00:00	0	0	0	0	0	338
12:00:00	0	0	0	0	0	147
13:00:00	0	0	0	0	0	342
17:00:00	0	0	0	0	0	455
18:00:00	0	0	0	0	0	534
19:00:00	0	0	0	0	0	634
Totals:	0	0	0	0	0	2844

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	18	0	143	161	2
9:00:00	22	0	211	233	5
10:00:00	50	0	288	338	0
12:00:00	15	0	132	147	5
13:00:00	29	0	313	342	11
17:00:00	37	0	418	455	16
18:00:00	41	0	493	534	33
19:00:00	50	0	584	634	29
Totals:	262	0	2582	2844	101

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	23	43	88	40	60	74	96	103

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200003

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	52	52	0	0	0	0	11	11	1	1	0	0	0	0	0	0	1	1
7:30:00	0	0	107	55	0	0	0	0	22	11	1	0	0	0	0	0	0	0	3	2
7:45:00	0	0	165	58	5	5	0	0	31	9	1	0	0	0	0	0	0	0	3	0
8:00:00	0	0	230	65	8	3	0	0	47	16	1	0	0	0	0	0	0	0	4	1
8:15:00	0	0	308	78	11	3	0	0	58	11	2	1	0	0	0	0	0	0	6	2
8:30:00	0	0	395	87	15	4	0	0	82	24	2	0	0	0	0	0	0	0	11	5
8:45:00	0	0	485	90	18	3	0	0	99	17	2	0	0	0	0	0	0	0	18	7
9:00:00	0	0	578	93	22	4	0	0	112	13	2	0	0	0	0	0	0	0	25	7
9:15:00	0	0	665	87	30	8	0	0	126	14	2	0	0	0	0	0	0	0	36	11
9:30:00	0	0	766	101	41	11	0	0	133	7	2	0	0	0	0	0	0	0	47	11
9:45:00	0	0	905	139	49	8	0	0	151	18	2	0	0	0	0	0	0	0	52	5
10:00:00	0	0	1038	133	58	9	0	0	164	13	3	1	0	0	0	0	0	0	63	11
10:00:53	0	0	1038	0	58	0	0	0	164	0	3	0	0	0	0	0	0	0	63	0
11:30:00	0	0	1038	0	58	0	0	0	164	0	3	0	0	0	0	0	0	0	63	0
11:45:00	0	0	1176	138	67	9	0	0	181	17	4	1	0	0	0	0	0	0	72	9
12:00:00	0	0	1264	88	73	6	0	0	197	16	5	1	0	0	0	0	0	0	84	12
12:15:00	0	0	1384	120	84	11	0	0	214	17	6	1	0	0	0	0	0	0	91	7
12:30:00	0	0	1526	142	90	6	0	0	232	18	7	1	0	0	0	0	0	0	101	10
12:45:00	0	0	1685	159	96	6	0	0	258	26	8	1	0	0	0	0	0	0	105	4
13:00:00	0	0	1849	164	104	8	0	0	278	20	8	0	0	0	0	0	0	0	111	6
13:15:00	0	0	2001	152	114	10	0	0	305	27	8	0	0	0	0	0	0	0	120	9
13:30:00	0	0	2180	179	121	7	0	0	332	27	10	2	0	0	0	0	0	0	128	8
13:32:08	0	0	2180	0	121	0	0	0	332	0	10	0	0	0	0	0	0	0	128	0
16:30:00	0	0	2180	0	121	0	0	0	332	0	10	0	0	0	0	0	0	0	128	0
16:45:00	0	0	2367	187	131	10	0	0	357	25	10	0	0	0	0	0	0	0	136	8
17:00:00	0	0	2562	195	146	15	0	0	376	19	10	0	0	0	0	0	0	0	144	8
17:15:00	0	0	2771	209	156	10	0	0	389	13	10	0	0	0	0	0	0	0	154	10
17:30:00	0	0	3002	231	170	14	0	0	412	23	14	4	0	0	0	0	0	0	161	7
17:45:00	0	0	3229	227	178	8	0	0	440	28	15	1	0	0	0	0	0	0	169	8
18:00:00	0	0	3479	250	209	31	0	0	462	22	15	0	0	0	0	0	0	0	181	12
18:15:00	0	0	3714	235	227	18	0	0	483	21	16	1	0	0	0	0	0	0	188	7
18:30:00	0	0	3995	281	254	27	0	0	499	16	19	3	0	0	0	0	0	0	200	12
18:45:00	0	0	4236	241	280	26	0	0	514	15	20	1	0	0	0	0	0	0	205	5
19:00:00	0	0	4446	210	295	15	0	0	535	21	25	5	0	0	0	0	0	0	214	9
19:15:00	0	0	4641	195	316	21	0	0	555	20	26	1	0	0	0	0	0	0	224	10
19:30:00	0	0	4807	166	330	14	0	0	572	17	27	1	0	0	0	0	0	0	232	8
19:45:00	0	0	4807	0	330	0	0	0	572	0	27	0	0	0	0	0	0	0	232	0
19:45:30	0	0	4807	0	330	0	0	0	572	0	27	0	0	0	0	0	0	0	232	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200003

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00:53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:32:08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200003

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	22	22	37	37	0	0	1	1	9	9	0	0	0	0	0	0	0	0	0	0
7:30:00	42	20	81	44	0	0	4	3	20	11	0	0	0	0	0	0	0	0	0	0
7:45:00	77	35	132	51	0	0	13	9	33	13	0	0	0	0	0	0	0	0	1	1
8:00:00	100	23	198	66	0	0	17	4	41	8	0	0	0	0	0	0	0	0	1	0
8:15:00	134	34	274	76	0	0	20	3	54	13	0	0	0	0	0	0	0	0	1	0
8:30:00	174	40	375	101	0	0	23	3	71	17	0	0	0	0	0	0	0	0	1	0
8:45:00	254	80	526	151	0	0	30	7	92	21	0	0	0	0	0	0	0	0	1	0
9:00:00	328	74	713	187	0	0	35	5	116	24	0	0	0	0	0	0	0	0	1	0
9:15:00	427	99	956	243	0	0	42	7	144	28	0	0	0	0	0	0	0	0	1	0
9:30:00	512	85	1175	219	0	0	50	8	171	27	0	0	0	0	0	0	0	0	1	0
9:45:00	602	90	1416	241	0	0	65	15	192	21	0	0	0	0	0	0	0	0	1	0
10:00:00	702	100	1647	231	0	0	73	8	219	27	0	0	0	0	0	0	0	0	1	0
10:00:53	702	0	1647	0	0	0	73	0	219	0	0	0	0	0	0	0	0	0	1	0
11:30:00	702	0	1647	0	0	0	73	0	219	0	0	0	0	0	0	0	0	0	1	0
11:45:00	763	61	1812	165	0	0	75	2	237	18	0	0	0	0	0	0	0	0	2	1
12:00:00	823	60	1962	150	0	0	82	7	249	12	0	0	0	0	0	0	0	0	5	3
12:15:00	870	47	2131	169	0	0	86	4	269	20	0	0	0	0	0	0	0	0	7	2
12:30:00	936	66	2296	165	0	0	91	5	290	21	0	0	0	0	0	0	0	0	7	0
12:45:00	996	60	2472	176	0	0	96	5	305	15	0	0	0	0	0	0	0	0	8	1
13:00:00	1064	68	2642	170	0	0	101	5	323	18	0	0	0	0	0	0	0	0	9	1
13:15:00	1114	50	2802	160	0	0	108	7	345	22	0	0	0	0	0	0	0	0	9	0
13:30:00	1173	59	2967	165	0	0	113	5	365	20	0	0	0	0	0	0	0	0	11	2
13:32:08	1173	0	2967	0	0	0	113	0	365	0	0	0	0	0	0	0	0	0	11	0
16:30:00	1173	0	2967	0	0	0	113	0	365	0	0	0	0	0	0	0	0	0	11	0
16:45:00	1264	91	3138	171	0	0	124	11	396	31	0	0	0	0	0	0	0	0	11	0
17:00:00	1350	86	3315	177	0	0	132	8	414	18	0	0	0	0	0	0	0	0	13	2
17:15:00	1451	101	3485	170	0	0	136	4	440	26	0	0	0	0	0	0	0	0	18	5
17:30:00	1562	111	3651	166	0	0	147	11	465	25	0	0	0	0	0	0	0	0	19	1
17:45:00	1658	96	3848	197	0	0	151	4	490	25	0	0	0	0	0	0	0	0	24	5
18:00:00	1768	110	4043	195	0	0	159	8	506	16	0	0	0	0	0	0	0	0	31	7
18:15:00	1876	108	4250	207	0	0	169	10	523	17	0	0	0	0	0	0	0	0	36	5
18:30:00	1976	100	4457	207	0	0	171	2	543	20	0	0	0	0	0	0	0	0	41	5
18:45:00	2076	100	4639	182	0	0	182	11	565	22	0	0	0	0	0	0	0	0	49	8
19:00:00	2180	104	4848	209	0	0	190	8	584	19	0	0	0	0	0	0	0	0	51	2
19:15:00	2275	95	5021	173	0	0	195	5	608	24	0	0	0	0	0	0	0	0	56	5
19:30:00	2376	101	5222	201	0	0	197	2	631	23	0	0	0	0	0	0	0	0	58	2
19:45:00	2376	0	5222	0	0	0	197	0	631	0	0	0	0	0	0	0	0	0	58	0
19:45:30	2376	0	5222	0	0	0	197	0	631	0	0	0	0	0	0	0	0	0	58	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200003

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	0	0	21	21	0	0	0	0	3	3	0	0	0	0	0	0	0	0
7:30:00	7	6	0	0	50	29	1	1	0	0	5	2	0	0	0	0	0	0	1	1
7:45:00	12	5	0	0	90	40	1	0	0	0	8	3	0	0	0	0	0	0	2	1
8:00:00	16	4	0	0	131	41	2	1	0	0	12	4	0	0	0	0	0	0	2	0
8:15:00	18	2	0	0	166	35	2	0	0	0	14	2	0	0	0	0	0	0	3	1
8:30:00	21	3	0	0	210	44	4	2	0	0	18	4	0	0	0	0	0	0	4	1
8:45:00	26	5	0	0	259	49	4	0	0	0	25	7	0	0	0	0	0	0	5	1
9:00:00	33	7	0	0	326	67	7	3	0	0	28	3	0	0	0	0	0	0	7	2
9:15:00	40	7	0	0	389	63	8	1	0	0	30	2	0	0	0	0	0	0	7	0
9:30:00	55	15	0	0	455	66	10	2	0	0	34	4	0	0	0	0	0	0	7	0
9:45:00	66	11	0	0	517	62	12	2	0	0	36	2	0	0	0	0	0	0	7	0
10:00:00	74	8	0	0	597	80	16	4	0	0	45	9	0	0	0	0	0	0	7	0
10:00:53	74	0	0	0	597	0	16	0	0	0	45	0	0	0	0	0	0	0	7	0
11:30:00	74	0	0	0	597	0	16	0	0	0	45	0	0	0	0	0	0	0	7	0
11:45:00	80	6	0	0	658	61	17	1	0	0	53	8	0	0	0	0	0	0	9	2
12:00:00	87	7	0	0	716	58	18	1	0	0	58	5	0	0	0	0	0	0	12	3
12:15:00	94	7	0	0	782	66	22	4	0	0	65	7	0	0	0	0	0	0	13	1
12:30:00	100	6	0	0	856	74	23	1	0	0	69	4	0	0	0	0	0	0	15	2
12:45:00	106	6	0	0	931	75	23	0	0	0	79	10	0	0	0	0	0	0	21	6
13:00:00	110	4	0	0	1001	70	24	1	0	0	86	7	0	0	0	0	0	0	23	2
13:15:00	115	5	0	0	1088	87	25	1	0	0	91	5	0	0	0	0	0	0	25	2
13:30:00	124	9	0	0	1170	82	26	1	0	0	102	11	0	0	0	0	0	0	27	2
13:32:08	124	0	0	0	1170	0	26	0	0	0	102	0	0	0	0	0	0	0	27	0
16:30:00	124	0	0	0	1170	0	26	0	0	0	102	0	0	0	0	0	0	0	27	0
16:45:00	133	9	0	0	1276	106	28	2	0	0	110	8	0	0	0	0	0	0	32	5
17:00:00	142	9	0	0	1387	111	29	1	0	0	118	8	0	0	0	0	0	0	39	7
17:15:00	151	9	0	0	1482	95	31	2	0	0	132	14	0	0	0	0	0	0	51	12
17:30:00	157	6	0	0	1593	111	33	2	0	0	143	11	0	0	0	0	0	0	55	4
17:45:00	166	9	0	0	1709	116	35	2	0	0	153	10	0	0	0	0	0	0	63	8
18:00:00	175	9	0	0	1831	122	37	2	0	0	167	14	0	0	0	0	0	0	72	9
18:15:00	187	12	0	0	1971	140	39	2	0	0	179	12	0	0	0	0	0	0	78	6
18:30:00	194	7	0	0	2109	138	40	1	0	0	188	9	0	0	0	0	0	0	87	9
18:45:00	204	10	0	0	2257	148	43	3	0	0	195	7	0	0	0	0	0	0	98	11
19:00:00	217	13	0	0	2371	114	45	2	0	0	211	16	0	0	0	0	0	0	101	3
19:15:00	226	9	0	0	2475	104	47	2	0	0	222	11	0	0	0	0	0	0	112	11
19:30:00	239	13	0	0	2581	106	48	1	0	0	228	6	0	0	0	0	0	0	115	3
19:45:00	239	0	0	0	2581	0	48	0	0	0	228	0	0	0	0	0	0	0	115	0
19:45:30	239	0	0	0	2581	0	48	0	0	0	228	0	0	0	0	0	0	0	115	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

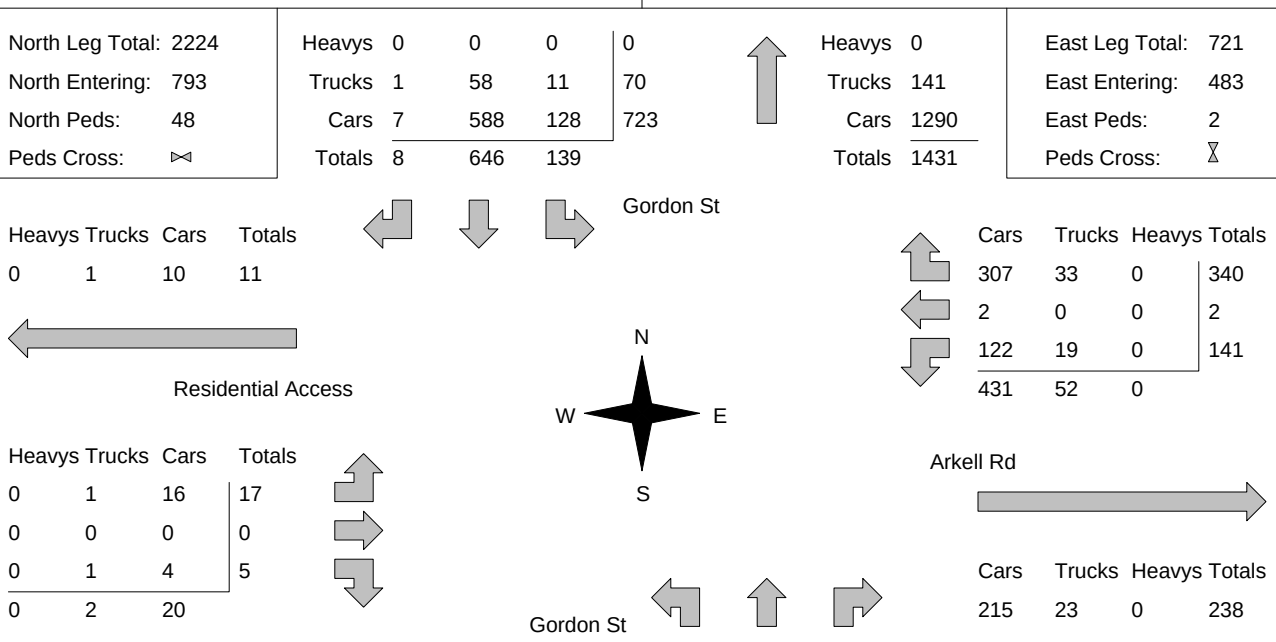
Municipality: Guelph
Site #: 1907200004
Intersection: Gordon St & Arkell Rd-Residential
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

Municipality: Guelph
Site #: 1907200004
Intersection: Gordon St & Arkell Rd-Residential
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S

Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:45:00
To: 18:45:00

Municipality: Guelph
Site #: 1907200004
Intersection: Gordon St & Arkell Rd-Residential
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S

North Leg Total: 2949
North Entering: 1643
North Peds: 27
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	0	92	29	121
Cars	13	1179	330	1522
Totals	13	1271	359	

Heavys	0
Trucks	107
Cars	1199
Totals	1306

East Leg Total: 946
East Entering: 388
East Peds: 4
Peds Cross: ⧖

Gordon St

Heavys	Trucks	Cars	Totals
0	1	31	32

Residential Access

Heavys	Trucks	Cars	Totals
0	0	21	21
0	0	3	3
0	1	11	12
0	1	35	

Cars	Trucks	Heavys	Totals
234	29	0	263
6	0	0	6
103	16	0	119
343	45	0	

N
W E
S

Arkell Rd

Cars	Trucks	Heavys	Totals
509	49	0	558

Gordon St

Peds Cross: ⧖
West Peds: 12
West Entering: 36
West Leg Total: 68

Cars	1293
Trucks	109
Heavys	0
Totals	1402

Cars	12	944	176	1132
Trucks	1	78	20	99
Heavys	0	0	0	0
Totals	13	1022	196	

Peds Cross: ⋈
South Peds: 8
South Entering: 1231
South Leg Total: 2633

Comments

Ontario Traffic Inc.

Total Count Diagram

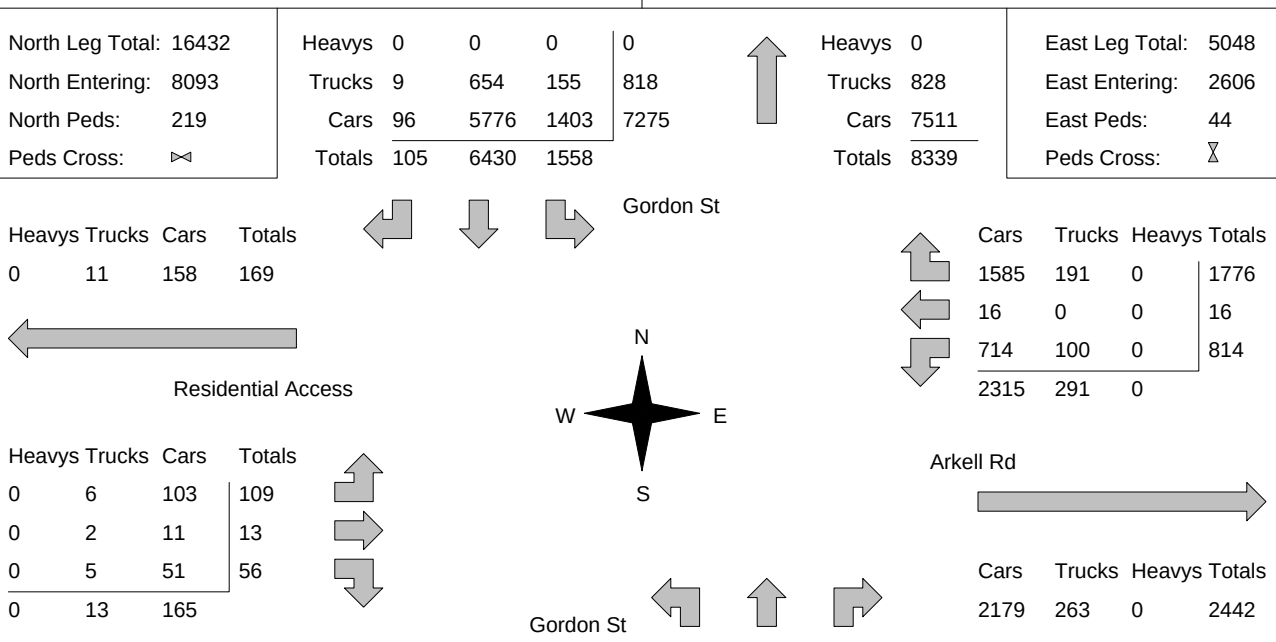
Municipality: Guelph
Site #: 1907200004
Intersection: Gordon St & Arkell Rd-Residential
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Arkell Rd-Residential | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	37	381	1	419	5	698
9:00:00	117	511	3	631	16	1320
10:00:00	139	646	8	793	48	1967
12:00:00	76	317	3	396	16	790
13:00:00	165	767	19	951	48	1824
17:00:00	240	968	18	1226	32	2201
18:00:00	293	1135	19	1447	24	2615
19:00:00	338	1241	21	1600	23	2850
Totals:	1405	5966	92	7463	212	14265

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	0	248	31	279	0
9:00:00	1	603	85	689	1
10:00:00	1	1074	99	1174	2
12:00:00	1	358	35	394	0
13:00:00	6	794	73	873	5
17:00:00	7	857	111	975	4
18:00:00	14	987	167	1168	3
19:00:00	11	1034	205	1250	11
Totals:	41	5955	806	6802	26

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	66	1	97	164	1	171
9:00:00	102	0	206	308	2	327
10:00:00	141	2	340	483	2	505
12:00:00	40	0	106	146	4	151
13:00:00	72	0	181	253	6	274
17:00:00	102	2	189	293	7	316
18:00:00	127	7	255	389	8	422
19:00:00	115	3	269	387	5	420
Totals:	765	15	1643	2423	35	2586

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	2	2	3	7	2
9:00:00	12	4	3	19	4
10:00:00	17	0	5	22	5
12:00:00	3	1	1	5	4
13:00:00	17	0	4	21	7
17:00:00	16	0	7	23	13
18:00:00	15	2	16	33	6
19:00:00	20	3	10	33	14
Totals:	102	12	49	163	55

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	75	135	210	60	142	156	176	172

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200004

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	4	4	66	66	1	1	1	1	14	14	0	0	0	0	0	0	0	0	1	1
7:30:00	7	3	142	76	1	0	1	0	27	13	0	0	0	0	0	0	0	0	3	2
7:45:00	17	10	236	94	1	0	3	2	40	13	0	0	0	0	0	0	0	0	4	1
8:00:00	31	14	322	86	1	0	6	3	59	19	0	0	0	0	0	0	0	0	5	1
8:15:00	56	25	415	93	1	0	8	2	69	10	0	0	0	0	0	0	0	0	6	1
8:30:00	74	18	529	114	1	0	14	6	91	22	0	0	0	0	0	0	0	0	7	1
8:45:00	97	23	642	113	2	1	19	5	115	24	1	1	0	0	0	0	0	0	13	6
9:00:00	132	35	763	121	3	1	22	3	129	14	1	0	0	0	0	0	0	0	21	8
9:15:00	164	32	890	127	3	0	24	2	143	14	1	0	0	0	0	0	0	0	34	13
9:30:00	190	26	1026	136	6	3	26	2	151	8	1	0	0	0	0	0	0	0	42	8
9:45:00	219	29	1189	163	6	0	26	0	171	20	1	0	0	0	0	0	0	0	49	7
10:00:00	260	41	1351	162	10	4	33	7	187	16	2	1	0	0	0	0	0	0	69	20
10:01:50	260	0	1351	0	10	0	33	0	187	0	2	0	0	0	0	0	0	0	69	0
11:30:00	260	0	1351	0	10	0	33	0	187	0	2	0	0	0	0	0	0	0	69	0
11:45:00	290	30	1518	167	11	1	41	8	205	18	3	1	0	0	0	0	0	0	78	9
12:00:00	322	32	1634	116	12	1	47	6	221	16	3	0	0	0	0	0	0	0	85	7
12:15:00	349	27	1772	138	18	6	50	3	243	22	3	0	0	0	0	0	0	0	106	21
12:30:00	385	36	1940	168	21	3	53	3	262	19	3	0	0	0	0	0	0	0	114	8
12:45:00	425	40	2139	199	26	5	63	10	288	26	4	1	0	0	0	0	0	0	121	7
13:00:00	469	44	2310	171	28	2	65	2	312	24	6	2	0	0	0	0	0	0	133	12
13:15:00	507	38	2501	191	30	2	68	3	341	29	6	0	0	0	0	0	0	0	144	11
13:30:00	565	58	2699	198	35	5	75	7	370	29	6	0	0	0	0	0	0	0	153	9
13:32:14	565	0	2699	0	35	0	75	0	370	0	6	0	0	0	0	0	0	0	153	0
16:30:00	565	0	2699	0	35	0	75	0	370	0	6	0	0	0	0	0	0	0	153	0
16:45:00	625	60	2924	225	42	7	79	4	399	29	6	0	0	0	0	0	0	0	159	6
17:00:00	687	62	3167	243	46	4	87	8	423	24	6	0	0	0	0	0	0	0	165	6
17:15:00	745	58	3405	238	52	6	93	6	438	15	6	0	0	0	0	0	0	0	175	10
17:30:00	805	60	3668	263	57	5	98	5	464	26	6	0	0	0	0	0	0	0	179	4
17:45:00	864	59	3925	257	63	6	106	8	492	28	7	1	0	0	0	0	0	0	183	4
18:00:00	952	88	4204	279	64	1	115	9	521	29	7	0	0	0	0	0	0	0	189	6
18:15:00	1018	66	4509	305	69	5	127	12	543	22	7	0	0	0	0	0	0	0	194	5
18:30:00	1109	91	4820	311	73	4	131	4	562	19	7	0	0	0	0	0	0	0	198	4
18:45:00	1194	85	5104	284	76	3	135	4	584	22	7	0	0	0	0	0	0	0	210	12
19:00:00	1266	72	5353	249	83	7	139	4	613	29	9	2	0	0	0	0	0	0	212	2
19:15:00	1338	72	5565	212	90	7	147	8	641	28	9	0	0	0	0	0	0	0	213	1
19:30:00	1403	65	5776	211	96	6	155	8	654	13	9	0	0	0	0	0	0	0	219	6
19:45:00	1403	0	5776	0	96	0	155	0	654	0	9	0	0	0	0	0	0	0	219	0
19:45:34	1403	0	5776	0	96	0	155	0	654	0	9	0	0	0	0	0	0	0	219	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200004

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	6	6	0	0	20	20	4	4	0	0	3	3	0	0	0	0	0	0	1	1
7:30:00	17	11	0	0	34	14	6	2	0	0	6	3	0	0	0	0	0	0	1	0
7:45:00	43	26	1	1	60	26	11	5	0	0	12	6	0	0	0	0	0	0	1	0
8:00:00	55	12	1	0	85	25	11	0	0	0	12	0	0	0	0	0	0	0	1	0
8:15:00	70	15	1	0	114	29	14	3	0	0	15	3	0	0	0	0	0	0	1	0
8:30:00	100	30	1	0	149	35	16	2	0	0	21	6	0	0	0	0	0	0	1	0
8:45:00	122	22	1	0	211	62	19	3	0	0	25	4	0	0	0	0	0	0	3	2
9:00:00	148	26	1	0	272	61	20	1	0	0	31	6	0	0	0	0	0	0	3	0
9:15:00	174	26	1	0	352	80	25	5	0	0	38	7	0	0	0	0	0	0	4	1
9:30:00	205	31	3	2	428	76	30	5	0	0	46	8	0	0	0	0	0	0	4	0
9:45:00	241	36	3	0	494	66	34	4	0	0	58	12	0	0	0	0	0	0	4	0
10:00:00	270	29	3	0	579	85	39	5	0	0	64	6	0	0	0	0	0	0	5	1
10:01:50	270	0	3	0	579	0	39	0	0	0	64	0	0	0	0	0	0	0	5	0
11:30:00	270	0	3	0	579	0	39	0	0	0	64	0	0	0	0	0	0	0	5	0
11:45:00	288	18	3	0	636	57	43	4	0	0	69	5	0	0	0	0	0	0	6	1
12:00:00	305	17	3	0	675	39	44	1	0	0	74	5	0	0	0	0	0	0	9	3
12:15:00	319	14	3	0	703	28	46	2	0	0	81	7	0	0	0	0	0	0	11	2
12:30:00	332	13	3	0	741	38	48	2	0	0	90	9	0	0	0	0	0	0	15	4
12:45:00	349	17	3	0	781	40	49	1	0	0	97	7	0	0	0	0	0	0	15	0
13:00:00	370	21	3	0	831	50	51	2	0	0	99	2	0	0	0	0	0	0	15	0
13:15:00	393	23	3	0	857	26	52	1	0	0	104	5	0	0	0	0	0	0	16	1
13:30:00	411	18	3	0	897	40	55	3	0	0	107	3	0	0	0	0	0	0	17	1
13:32:14	411	0	3	0	897	0	55	0	0	0	107	0	0	0	0	0	0	0	17	0
16:30:00	411	0	3	0	897	0	55	0	0	0	107	0	0	0	0	0	0	0	17	0
16:45:00	432	21	5	2	935	38	59	4	0	0	117	10	0	0	0	0	0	0	19	2
17:00:00	462	30	5	0	997	62	61	2	0	0	122	5	0	0	0	0	0	0	22	3
17:15:00	489	27	5	0	1042	45	65	4	0	0	127	5	0	0	0	0	0	0	24	2
17:30:00	513	24	6	1	1108	66	68	3	0	0	134	7	0	0	0	0	0	0	27	3
17:45:00	547	34	9	3	1171	63	74	6	0	0	138	4	0	0	0	0	0	0	28	1
18:00:00	572	25	12	3	1230	59	78	4	0	0	144	6	0	0	0	0	0	0	30	2
18:15:00	603	31	12	0	1296	66	81	3	0	0	154	10	0	0	0	0	0	0	30	0
18:30:00	627	24	13	1	1348	52	83	2	0	0	161	7	0	0	0	0	0	0	31	1
18:45:00	650	23	15	2	1405	57	90	7	0	0	167	6	0	0	0	0	0	0	32	1
19:00:00	673	23	15	0	1467	62	92	2	0	0	176	9	0	0	0	0	0	0	35	3
19:15:00	689	16	15	0	1520	53	97	5	0	0	184	8	0	0	0	0	0	0	39	4
19:30:00	714	25	16	1	1585	65	100	3	0	0	191	7	0	0	0	0	0	0	44	5
19:45:00	714	0	16	0	1585	0	100	0	0	0	191	0	0	0	0	0	0	0	44	0
19:45:34	714	0	16	0	1585	0	100	0	0	0	191	0	0	0	0	0	0	0	44	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200004

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	36	36	3	3	0	0	7	7	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	81	45	6	3	0	0	18	11	1	1	0	0	0	0	0	0	0	0
7:45:00	0	0	135	54	15	9	0	0	36	18	6	5	0	0	0	0	0	0	0	0
8:00:00	0	0	199	64	24	9	0	0	49	13	7	1	0	0	0	0	0	0	0	0
8:15:00	0	0	272	73	34	10	0	0	61	12	7	0	0	0	0	0	0	0	1	1
8:30:00	0	0	362	90	53	19	0	0	77	16	10	3	0	0	0	0	0	0	1	0
8:45:00	0	0	528	166	70	17	0	0	100	23	12	2	0	0	0	0	0	0	1	0
9:00:00	1	1	729	201	98	28	0	0	122	22	18	6	0	0	0	0	0	0	1	0
9:15:00	1	0	973	244	118	20	0	0	148	26	22	4	0	0	0	0	0	0	2	1
9:30:00	1	0	1199	226	146	28	0	0	175	27	25	3	0	0	0	0	0	0	2	0
9:45:00	2	1	1455	256	165	19	0	0	200	25	26	1	0	0	0	0	0	0	2	0
10:00:00	2	0	1696	241	185	20	0	0	229	29	30	4	0	0	0	0	0	0	3	1
10:01:50	2	0	1696	0	185	0	0	0	229	0	30	0	0	0	0	0	0	0	3	0
11:30:00	2	0	1696	0	185	0	0	0	229	0	30	0	0	0	0	0	0	0	3	0
11:45:00	2	0	1860	164	206	21	0	0	246	17	32	2	0	0	0	0	0	0	3	0
12:00:00	3	1	2023	163	217	11	0	0	260	14	33	1	0	0	0	0	0	0	3	0
12:15:00	3	0	2201	178	233	16	0	0	277	17	34	1	0	0	0	0	0	0	4	1
12:30:00	5	2	2388	187	257	24	0	0	297	20	35	1	0	0	0	0	0	0	6	2
12:45:00	6	1	2580	192	272	15	0	0	310	13	38	3	0	0	0	0	0	0	8	2
13:00:00	9	3	2749	169	283	11	0	0	328	18	40	2	0	0	0	0	0	0	8	0
13:15:00	9	0	2920	171	301	18	0	0	352	24	45	5	0	0	0	0	0	0	8	0
13:30:00	10	1	3097	177	320	19	0	0	372	20	46	1	0	0	0	0	0	0	11	3
13:32:14	10	0	3097	0	320	0	0	0	372	0	46	0	0	0	0	0	0	0	11	0
16:30:00	10	0	3097	0	320	0	0	0	372	0	46	0	0	0	0	0	0	0	11	0
16:45:00	13	3	3312	215	348	28	0	0	401	29	54	8	0	0	0	0	0	0	11	0
17:00:00	16	3	3514	202	375	27	0	0	420	19	59	5	0	0	0	0	0	0	12	1
17:15:00	19	3	3725	211	412	37	0	0	443	23	63	4	0	0	0	0	0	0	14	2
17:30:00	20	1	3935	210	447	35	1	1	471	28	68	5	0	0	0	0	0	0	14	0
17:45:00	23	3	4172	237	489	42	1	0	495	24	71	3	0	0	0	0	0	0	15	1
18:00:00	28	5	4407	235	526	37	2	1	514	19	75	4	0	0	0	0	0	0	15	0
18:15:00	30	2	4635	228	573	47	2	0	532	18	81	6	0	0	0	0	0	0	22	7
18:30:00	30	0	4888	253	630	57	2	0	549	17	88	7	0	0	0	0	0	0	22	0
18:45:00	35	5	5116	228	665	35	2	0	573	24	91	3	0	0	0	0	0	0	23	1
19:00:00	39	4	5364	248	713	48	2	0	591	18	93	2	0	0	0	0	0	0	26	3
19:15:00	42	3	5582	218	741	28	2	0	611	20	101	8	0	0	0	0	0	0	26	0
19:30:00	46	4	5823	241	765	24	2	0	631	20	106	5	0	0	0	0	0	0	26	0
19:45:00	46	0	5823	0	765	0	2	0	631	0	106	0	0	0	0	0	0	0	26	0
19:45:34	46	0	5823	0	765	0	2	0	631	0	106	0	0	0	0	0	0	0	26	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200004

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30:00	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45:00	2	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
8:00:00	2	0	2	0	2	1	0	0	0	0	1	1	0	0	0	0	0	0	2	0
8:15:00	4	2	2	0	2	0	1	1	0	0	1	0	0	0	0	0	0	0	4	2
8:30:00	8	4	3	1	3	1	1	0	0	0	1	0	0	0	0	0	0	0	5	1
8:45:00	8	0	5	2	5	2	1	0	1	1	1	0	0	0	0	0	0	0	5	0
9:00:00	13	5	5	0	5	0	1	0	1	0	1	0	0	0	0	0	0	0	6	1
9:15:00	19	6	5	0	6	1	2	1	1	0	1	0	0	0	0	0	0	0	7	1
9:30:00	23	4	5	0	7	1	2	0	1	0	1	0	0	0	0	0	0	0	7	0
9:45:00	27	4	5	0	8	1	2	0	1	0	1	0	0	0	0	0	0	0	9	2
10:00:00	29	2	5	0	9	1	2	0	1	0	2	1	0	0	0	0	0	0	11	2
10:01:50	29	0	5	0	9	0	2	0	1	0	2	0	0	0	0	0	0	0	11	0
11:30:00	29	0	5	0	9	0	2	0	1	0	2	0	0	0	0	0	0	0	11	0
11:45:00	31	2	5	0	9	0	2	0	1	0	2	0	0	0	0	0	0	0	13	2
12:00:00	32	1	6	1	9	0	2	0	1	0	3	1	0	0	0	0	0	0	15	2
12:15:00	35	3	6	0	10	1	2	0	1	0	3	0	0	0	0	0	0	0	15	0
12:30:00	39	4	6	0	10	0	2	0	1	0	3	0	0	0	0	0	0	0	18	3
12:45:00	41	2	6	0	12	2	2	0	1	0	3	0	0	0	0	0	0	0	20	2
13:00:00	47	6	6	0	13	1	4	2	1	0	3	0	0	0	0	0	0	0	22	2
13:15:00	52	5	6	0	13	0	4	0	1	0	3	0	0	0	0	0	0	0	25	3
13:30:00	56	4	6	0	15	2	4	0	1	0	3	0	0	0	0	0	0	0	26	1
13:32:14	56	0	6	0	15	0	4	0	1	0	3	0	0	0	0	0	0	0	26	0
16:30:00	56	0	6	0	15	0	4	0	1	0	3	0	0	0	0	0	0	0	26	0
16:45:00	57	1	6	0	18	3	4	0	1	0	3	0	0	0	0	0	0	0	27	1
17:00:00	62	5	6	0	20	2	5	1	1	0	3	0	0	0	0	0	0	0	35	8
17:15:00	64	2	6	0	21	1	5	0	1	0	3	0	0	0	0	0	0	0	35	0
17:30:00	68	4	6	0	26	5	5	0	1	0	3	0	0	0	0	0	0	0	39	4
17:45:00	72	4	7	1	30	4	5	0	1	0	4	1	0	0	0	0	0	0	40	1
18:00:00	77	5	8	1	34	4	5	0	1	0	5	1	0	0	0	0	0	0	41	1
18:15:00	82	5	9	1	36	2	5	0	1	0	5	0	0	0	0	0	0	0	48	7
18:30:00	85	3	9	0	37	1	5	0	1	0	5	0	0	0	0	0	0	0	50	2
18:45:00	93	8	10	1	41	4	5	0	1	0	5	0	0	0	0	0	0	0	52	2
19:00:00	96	3	11	1	44	3	6	1	1	0	5	0	0	0	0	0	0	0	55	3
19:15:00	100	4	11	0	49	5	6	0	2	1	5	0	0	0	0	0	0	0	58	3
19:30:00	103	3	11	0	51	2	6	0	2	0	5	0	0	0	0	0	0	0	61	3
19:45:00	103	0	11	0	51	0	6	0	2	0	5	0	0	0	0	0	0	0	61	0
19:45:34	103	0	11	0	51	0	6	0	2	0	5	0	0	0	0	0	0	0	61	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

Municipality: Guelph
Site #: 1907200005
Intersection: Gordon St & Vaughan St-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S

North Leg Total:	1969			
North Entering:	792			
North Peds:	0			
Peds Cross:	⋈			
Heavys	0	0	0	0
Trucks	2	76	0	78
Cars	14	688	12	714
Totals	16	764	12	
Heavys	0			
Trucks	122			
Cars	1055			
Totals	1177			
East Leg Total:	21			
East Entering:	5			
East Peds:	1			
Peds Cross:	⧖			

Gordon St

Heavys	Trucks	Cars	Totals
0	5	18	23

Cars	Trucks	Heavys	Totals
2	0	0	2
0	0	0	0
3	0	0	3
5	0	0	

Vaughan St

N
W E
S

Heavys	Trucks	Cars	Totals
0	2	10	12
0	0	0	0
0	1	10	11
0	3	20	

Commercial Access

Cars	Trucks	Heavys	Totals
15	1	0	16

Gordon St

Peds Cross:	⧖			
West Peds:	3			
West Entering:	23			
West Leg Total:	46			
Cars	701			
Trucks	77			
Heavys	0			
Totals	778			
Cars	4	1043	3	1050
Trucks	3	120	1	124
Heavys	0	0	0	0
Totals	7	1163	4	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	1174			
South Leg Total:	1952			

Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

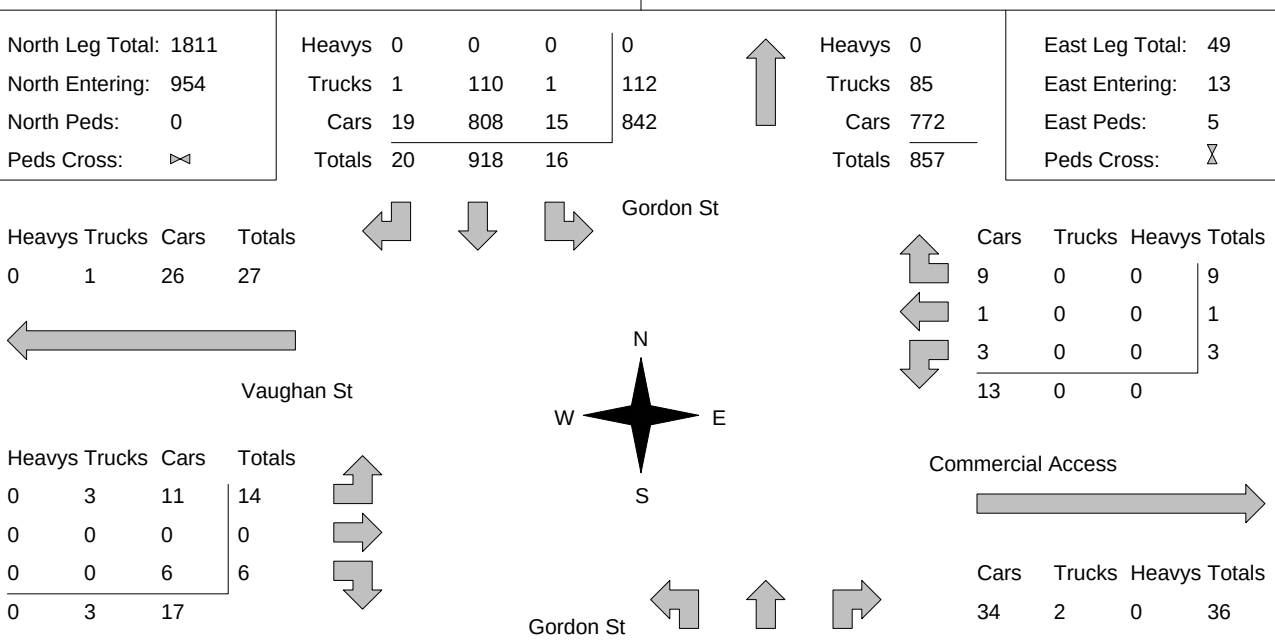
Municipality: Guelph
Site #: 1907200005
Intersection: Gordon St & Vaughan St-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:45:00
To: 18:45:00

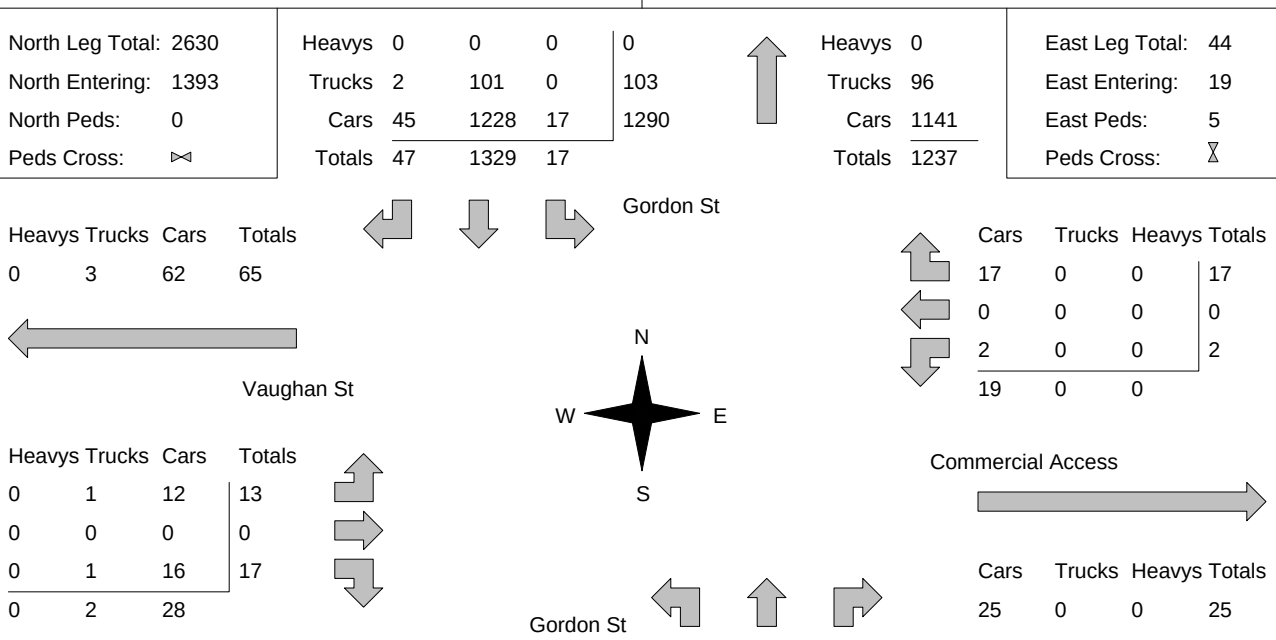
Municipality: Guelph
Site #: 1907200005
Intersection: Gordon St & Vaughan St-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Total Count Diagram

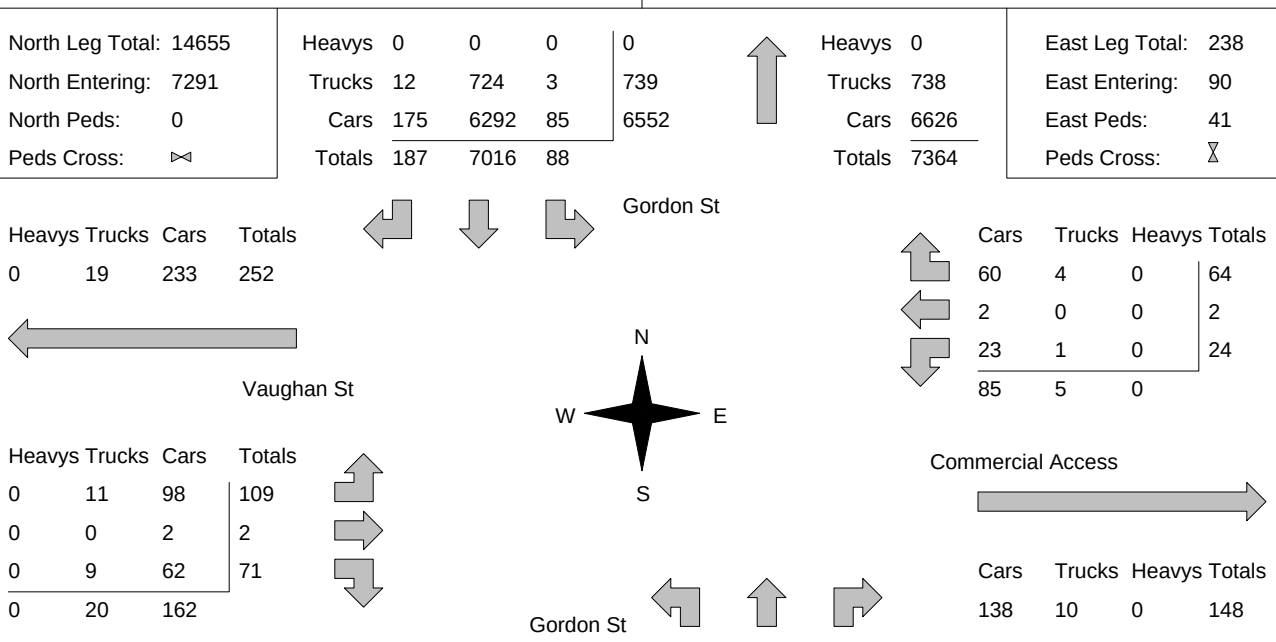
Municipality: Guelph
Site #: 1907200005
Intersection: Gordon St & Vaughan St-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

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

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Vaughan St-Commer | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	1	453	2	456	0	733
9:00:00	4	603	7	614	0	1293
10:00:00	12	764	16	792	0	1966
12:00:00	3	352	6	361	0	756
13:00:00	14	803	22	839	0	1713
17:00:00	12	1038	22	1072	0	2027
18:00:00	12	1210	49	1271	0	2432
19:00:00	21	1301	43	1365	0	2607
Totals:	79	6524	167	6770	0	13527

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	0	276	1	277	0
9:00:00	3	676	0	679	3
10:00:00	7	1163	4	1174	0
12:00:00	1	388	6	395	0
13:00:00	7	854	13	874	0
17:00:00	8	937	10	955	0
18:00:00	12	1139	10	1161	8
19:00:00	18	1217	7	1242	0
Totals:	56	6650	51	6757	11

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	0	0	0	2	17
9:00:00	2	0	3	5	0	23
10:00:00	3	0	2	5	1	28
12:00:00	1	0	1	2	5	8
13:00:00	5	1	9	15	3	40
17:00:00	4	0	10	14	10	36
18:00:00	2	1	18	21	8	39
19:00:00	3	0	18	21	5	50
Totals:	20	2	61	83	34	241

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	9	0	8	17	0
9:00:00	14	1	3	18	2
10:00:00	12	0	11	23	3
12:00:00	3	0	3	6	3
13:00:00	18	0	7	25	6
17:00:00	16	0	6	22	10
18:00:00	9	1	8	18	4
19:00:00	14	0	15	29	6
Totals:	95	2	61	158	34

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	9	20	15	4	24	20	20	17

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200005

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	77	77	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	160	83	0	0	0	0	34	17	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	281	121	1	1	0	0	51	17	0	0	0	0	0	0	0	0	0	0
8:00:00	1	1	382	101	2	1	0	0	71	20	0	0	0	0	0	0	0	0	0	0
8:15:00	1	0	487	105	4	2	0	0	84	13	0	0	0	0	0	0	0	0	0	0
8:30:00	3	2	629	142	6	2	0	0	108	24	0	0	0	0	0	0	0	0	0	0
8:45:00	4	1	764	135	6	0	1	1	133	25	0	0	0	0	0	0	0	0	0	0
9:00:00	4	0	909	145	8	2	1	0	147	14	1	1	0	0	0	0	0	0	0	0
9:15:00	6	2	1058	149	12	4	1	0	163	16	1	0	0	0	0	0	0	0	0	0
9:30:00	9	3	1220	162	15	3	1	0	176	13	2	1	0	0	0	0	0	0	0	0
9:45:00	10	1	1414	194	20	5	1	0	200	24	2	0	0	0	0	0	0	0	0	0
10:00:00	16	6	1597	183	22	2	1	0	223	23	3	1	0	0	0	0	0	0	0	0
10:02:20	16	0	1597	0	22	0	1	0	223	0	3	0	0	0	0	0	0	0	0	0
11:30:00	16	0	1597	0	22	0	1	0	223	0	3	0	0	0	0	0	0	0	0	0
11:45:00	17	1	1781	184	26	4	1	0	243	20	3	0	0	0	0	0	0	0	0	0
12:00:00	19	2	1911	130	28	2	1	0	261	18	3	0	0	0	0	0	0	0	0	0
12:15:00	22	3	2057	146	31	3	1	0	285	24	3	0	0	0	0	0	0	0	0	0
12:30:00	22	0	2237	180	34	3	1	0	303	18	3	0	0	0	0	0	0	0	0	0
12:45:00	28	6	2435	198	44	10	2	1	328	25	4	1	0	0	0	0	0	0	0	0
13:00:00	32	4	2622	187	49	5	2	0	353	25	4	0	0	0	0	0	0	0	0	0
13:15:00	36	4	2828	206	53	4	2	0	382	29	4	0	0	0	0	0	0	0	0	0
13:30:00	37	1	3045	217	53	0	2	0	413	31	4	0	0	0	0	0	0	0	0	0
13:31:29	37	0	3045	0	53	0	2	0	413	0	4	0	0	0	0	0	0	0	0	0
16:30:00	37	0	3045	0	53	0	2	0	413	0	4	0	0	0	0	0	0	0	0	0
16:45:00	39	2	3283	238	61	8	2	0	446	33	5	1	0	0	0	0	0	0	0	0
17:00:00	44	5	3541	258	68	7	2	0	472	26	7	2	0	0	0	0	0	0	0	0
17:15:00	48	4	3794	253	80	12	2	0	489	17	8	1	0	0	0	0	0	0	0	0
17:30:00	50	2	4070	276	91	11	2	0	517	28	8	0	0	0	0	0	0	0	0	0
17:45:00	52	2	4356	286	100	9	2	0	548	31	10	2	0	0	0	0	0	0	0	0
18:00:00	56	4	4642	286	114	14	2	0	581	33	10	0	0	0	0	0	0	0	0	0
18:15:00	58	2	4967	325	124	10	2	0	603	22	10	0	0	0	0	0	0	0	0	0
18:30:00	66	8	5286	319	133	9	2	0	624	21	10	0	0	0	0	0	0	0	0	0
18:45:00	69	3	5584	298	145	12	2	0	649	25	12	2	0	0	0	0	0	0	0	0
19:00:00	77	8	5843	259	155	10	2	0	681	32	12	0	0	0	0	0	0	0	0	0
19:15:00	82	5	6064	221	166	11	3	1	710	29	12	0	0	0	0	0	0	0	0	0
19:30:00	85	3	6292	228	175	9	3	0	724	14	12	0	0	0	0	0	0	0	0	0
19:45:00	85	0	6292	0	175	0	3	0	724	0	12	0	0	0	0	0	0	0	0	0
19:46:11	85	0	6292	0	175	0	3	0	724	0	12	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200005

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:15:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:30:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45:00	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00:00	2	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:15:00	3	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
9:30:00	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
9:45:00	4	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
10:00:00	5	1	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0
10:02:20	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
11:30:00	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
11:45:00	6	1	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	4	1
12:00:00	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4
12:15:00	7	1	0	0	6	0	0	0	0	0	1	1	0	0	0	0	0	0	8	0
12:30:00	9	2	0	0	9	3	1	1	0	0	1	0	0	0	0	0	0	0	10	2
12:45:00	10	1	0	0	13	4	1	0	0	0	1	0	0	0	0	0	0	0	10	0
13:00:00	10	0	1	1	14	1	1	0	0	0	1	0	0	0	0	0	0	0	11	1
13:15:00	11	1	1	0	14	0	1	0	0	0	1	0	0	0	0	0	0	0	12	1
13:30:00	12	1	1	0	18	4	1	0	0	0	1	0	0	0	0	0	0	0	15	3
13:31:29	12	0	1	0	18	0	1	0	0	0	1	0	0	0	0	0	0	0	15	0
16:30:00	12	0	1	0	18	0	1	0	0	0	1	0	0	0	0	0	0	0	15	0
16:45:00	14	2	1	0	20	2	1	0	0	0	1	0	0	0	0	0	0	0	19	4
17:00:00	14	0	1	0	24	4	1	0	0	0	1	0	0	0	0	0	0	0	21	2
17:15:00	15	1	2	1	30	6	1	0	0	0	1	0	0	0	0	0	0	0	21	0
17:30:00	16	1	2	0	30	0	1	0	0	0	2	1	0	0	0	0	0	0	26	5
17:45:00	16	0	2	0	36	6	1	0	0	0	4	2	0	0	0	0	0	0	29	3
18:00:00	16	0	2	0	39	3	1	0	0	0	4	0	0	0	0	0	0	0	29	0
18:15:00	17	1	2	0	45	6	1	0	0	0	4	0	0	0	0	0	0	0	32	3
18:30:00	18	1	2	0	51	6	1	0	0	0	4	0	0	0	0	0	0	0	32	0
18:45:00	18	0	2	0	53	2	1	0	0	0	4	0	0	0	0	0	0	0	34	2
19:00:00	19	1	2	0	57	4	1	0	0	0	4	0	0	0	0	0	0	0	34	0
19:15:00	20	1	2	0	60	3	1	0	0	0	4	0	0	0	0	0	0	0	37	3
19:30:00	23	3	2	0	60	0	1	0	0	0	4	0	0	0	0	0	0	0	41	4
19:45:00	23	0	2	0	60	0	1	0	0	0	4	0	0	0	0	0	0	0	41	0
19:46:11	23	0	2	0	60	0	1	0	0	0	4	0	0	0	0	0	0	0	41	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200005

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	38	38	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	90	52	0	0	0	0	18	11	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	150	60	0	0	0	0	40	22	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	223	73	1	1	0	0	53	13	0	0	0	0	0	0	0	0	0	0
8:15:00	1	1	306	83	1	0	0	0	64	11	0	0	0	0	0	0	0	0	0	0
8:30:00	1	0	417	111	1	0	1	1	84	20	0	0	0	0	0	0	0	0	0	0
8:45:00	1	0	601	184	1	0	2	1	109	25	0	0	0	0	0	0	0	0	0	0
9:00:00	1	0	815	214	1	0	2	0	137	28	0	0	0	0	0	0	0	0	3	3
9:15:00	2	1	1077	262	1	0	3	1	167	30	0	0	0	0	0	0	0	0	3	0
9:30:00	3	1	1321	244	1	0	4	1	196	29	0	0	0	0	0	0	0	0	3	0
9:45:00	4	1	1595	274	1	0	4	0	221	25	0	0	0	0	0	0	0	0	3	0
10:00:00	5	1	1858	263	4	3	5	1	257	36	1	1	0	0	0	0	0	0	3	0
10:02:20	5	0	1858	0	4	0	5	0	257	0	1	0	0	0	0	0	0	0	3	0
11:30:00	5	0	1858	0	4	0	5	0	257	0	1	0	0	0	0	0	0	0	3	0
11:45:00	6	1	2041	183	8	4	5	0	276	19	2	1	0	0	0	0	0	0	3	0
12:00:00	6	0	2212	171	8	0	5	0	291	15	3	1	0	0	0	0	0	0	3	0
12:15:00	8	2	2407	195	9	1	5	0	310	19	3	0	0	0	0	0	0	0	3	0
12:30:00	11	3	2613	206	9	0	5	0	331	21	3	0	0	0	0	0	0	0	3	0
12:45:00	11	0	2808	195	11	2	5	0	347	16	3	0	0	0	0	0	0	0	3	0
13:00:00	13	2	2991	183	20	9	5	0	366	19	4	1	0	0	0	0	0	0	3	0
13:15:00	16	3	3178	187	25	5	5	0	393	27	4	0	0	0	0	0	0	0	3	0
13:30:00	17	1	3365	187	28	3	5	0	413	20	4	0	0	0	0	0	0	0	3	0
13:31:29	17	0	3365	0	28	0	5	0	413	0	4	0	0	0	0	0	0	0	3	0
16:30:00	17	0	3365	0	28	0	5	0	413	0	4	0	0	0	0	0	0	0	3	0
16:45:00	20	3	3605	240	29	1	5	0	450	37	4	0	0	0	0	0	0	0	3	0
17:00:00	21	1	3820	215	30	1	5	0	474	24	4	0	0	0	0	0	0	0	3	0
17:15:00	21	0	4061	241	32	2	6	1	501	27	4	0	0	0	0	0	0	0	3	0
17:30:00	24	3	4299	238	34	2	6	0	531	30	5	1	0	0	0	0	0	0	3	0
17:45:00	26	2	4581	282	36	2	6	0	555	24	6	1	0	0	0	0	0	0	7	4
18:00:00	32	6	4856	275	38	2	6	0	577	22	6	0	0	0	0	0	0	0	11	4
18:15:00	34	2	5134	278	40	2	7	1	600	23	6	0	0	0	0	0	0	0	11	0
18:30:00	37	3	5422	288	43	3	7	0	623	23	6	0	0	0	0	0	0	0	11	0
18:45:00	43	6	5693	271	44	1	7	0	650	27	6	0	0	0	0	0	0	0	11	0
19:00:00	49	6	5979	286	45	1	7	0	671	21	6	0	0	0	0	0	0	0	11	0
19:15:00	53	4	6225	246	49	4	7	0	697	26	6	0	0	0	0	0	0	0	11	0
19:30:00	56	3	6468	243	51	2	7	0	723	26	7	1	0	0	0	0	0	0	12	1
19:45:00	56	0	6468	0	51	0	7	0	723	0	7	0	0	0	0	0	0	0	12	0
19:46:11	56	0	6468	0	51	0	7	0	723	0	7	0	0	0	0	0	0	0	12	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200005

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	4	2	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	6	2	0	0	3	1	3	2	0	0	1	1	0	0	0	0	0	0	0	0
8:00:00	6	0	0	0	7	4	3	0	0	0	1	0	0	0	0	0	0	0	0	0
8:15:00	7	1	0	0	7	0	3	0	0	0	2	1	0	0	0	0	0	0	1	1
8:30:00	15	8	1	1	8	1	3	0	0	0	2	0	0	0	0	0	0	0	2	1
8:45:00	17	2	1	0	9	1	3	0	0	0	2	0	0	0	0	0	0	0	2	0
9:00:00	20	3	1	0	9	0	3	0	0	0	2	0	0	0	0	0	0	0	2	0
9:15:00	24	4	1	0	14	5	3	0	0	0	3	1	0	0	0	0	0	0	3	1
9:30:00	26	2	1	0	15	1	5	2	0	0	3	0	0	0	0	0	0	0	3	0
9:45:00	29	3	1	0	18	3	5	0	0	0	3	0	0	0	0	0	0	0	5	2
10:00:00	30	1	1	0	19	1	5	0	0	0	3	0	0	0	0	0	0	0	5	0
10:02:20	30	0	1	0	19	0	5	0	0	0	3	0	0	0	0	0	0	0	5	0
11:30:00	30	0	1	0	19	0	5	0	0	0	3	0	0	0	0	0	0	0	5	0
11:45:00	31	1	1	0	20	1	5	0	0	0	4	1	0	0	0	0	0	0	6	1
12:00:00	33	2	1	0	20	0	5	0	0	0	5	1	0	0	0	0	0	0	8	2
12:15:00	38	5	1	0	21	1	5	0	0	0	5	0	0	0	0	0	0	0	9	1
12:30:00	44	6	1	0	22	1	5	0	0	0	5	0	0	0	0	0	0	0	12	3
12:45:00	48	4	1	0	26	4	5	0	0	0	5	0	0	0	0	0	0	0	12	0
13:00:00	51	3	1	0	27	1	5	0	0	0	5	0	0	0	0	0	0	0	14	2
13:15:00	53	2	1	0	28	1	7	2	0	0	5	0	0	0	0	0	0	0	17	3
13:30:00	55	2	1	0	28	0	8	1	0	0	5	0	0	0	0	0	0	0	17	0
13:31:29	55	0	1	0	28	0	8	0	0	0	5	0	0	0	0	0	0	0	17	0
16:30:00	55	0	1	0	28	0	8	0	0	0	5	0	0	0	0	0	0	0	17	0
16:45:00	59	4	1	0	32	4	8	0	0	0	5	0	0	0	0	0	0	0	17	0
17:00:00	64	5	1	0	32	0	8	0	0	0	6	1	0	0	0	0	0	0	24	7
17:15:00	67	3	2	1	34	2	8	0	0	0	6	0	0	0	0	0	0	0	25	1
17:30:00	69	2	2	0	34	0	8	0	0	0	6	0	0	0	0	0	0	0	25	0
17:45:00	71	2	2	0	36	2	9	1	0	0	6	0	0	0	0	0	0	0	27	2
18:00:00	72	1	2	0	39	3	9	0	0	0	7	1	0	0	0	0	0	0	28	1
18:15:00	77	5	2	0	41	2	10	1	0	0	7	0	0	0	0	0	0	0	31	3
18:30:00	81	4	2	0	44	3	10	0	0	0	7	0	0	0	0	0	0	0	33	2
18:45:00	83	2	2	0	52	8	10	0	0	0	7	0	0	0	0	0	0	0	34	1
19:00:00	85	2	2	0	54	2	10	0	0	0	7	0	0	0	0	0	0	0	34	0
19:15:00	89	4	2	0	58	4	11	1	0	0	9	2	0	0	0	0	0	0	36	2
19:30:00	98	9	2	0	62	4	11	0	0	0	9	0	0	0	0	0	0	0	38	2
19:45:00	98	0	2	0	62	0	11	0	0	0	9	0	0	0	0	0	0	0	38	0
19:46:11	98	0	2	0	62	0	11	0	0	0	9	0	0	0	0	0	0	0	38	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

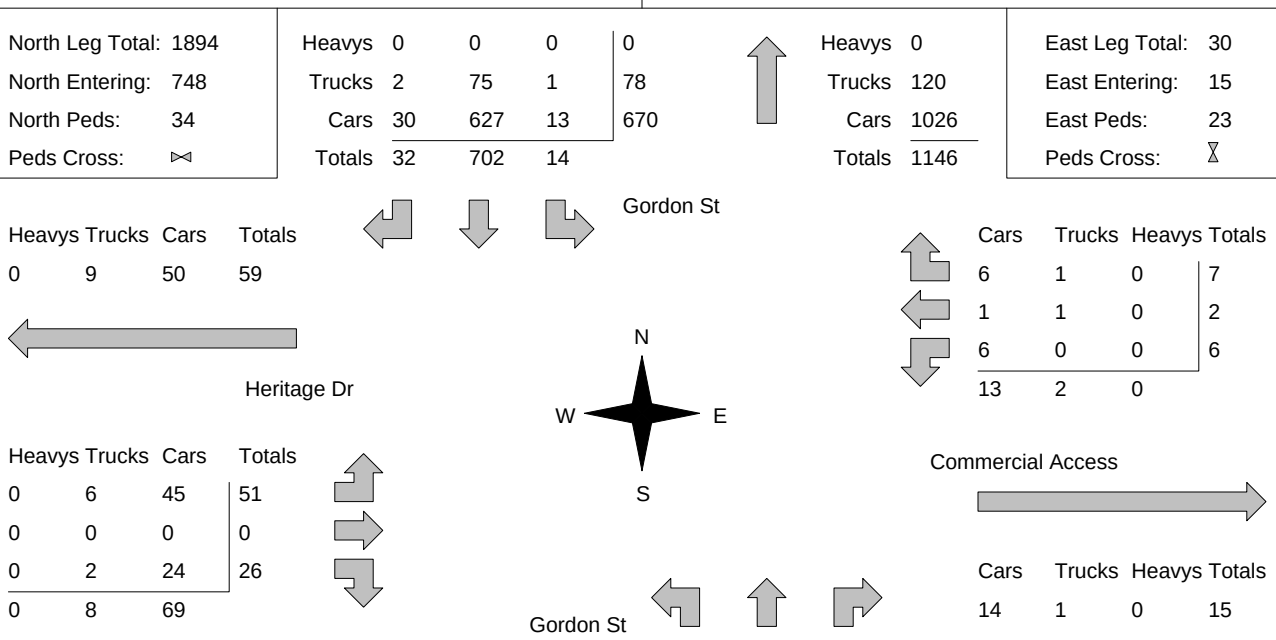
Municipality: Guelph
Site #: 1907200006
Intersection: Gordon St & Heritage Dr-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

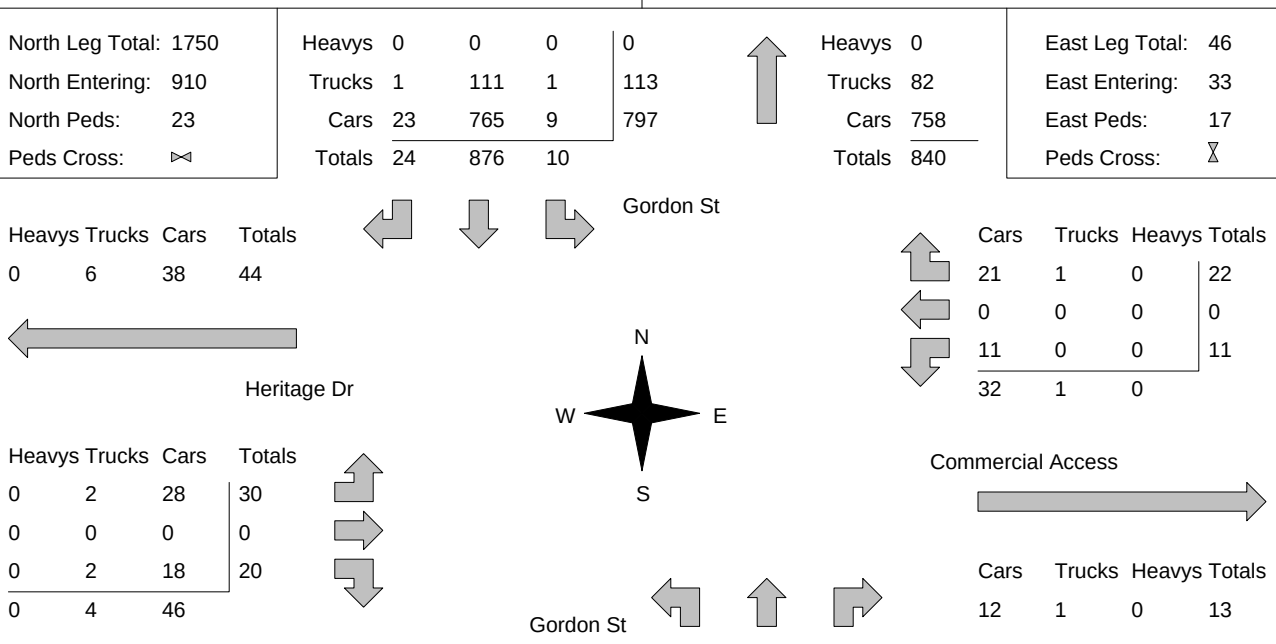
Municipality: Guelph
Site #: 1907200006
Intersection: Gordon St & Heritage Dr-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:45:00
To: 18:45:00

Municipality: Guelph
Site #: 1907200006
Intersection: Gordon St & Heritage Dr-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

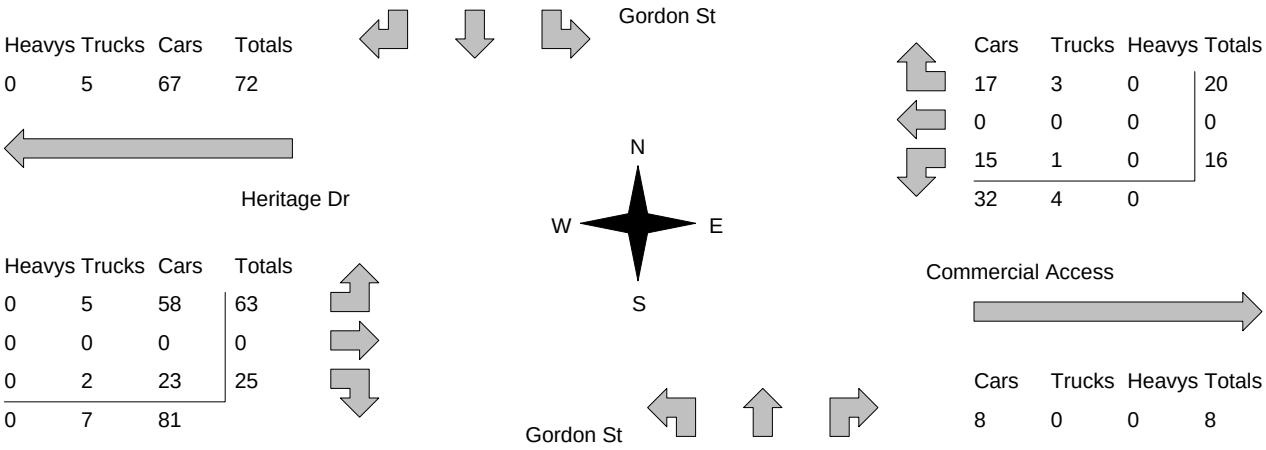
Major Road: Gordon St runs N/S

North Leg Total: 2535
North Entering: 1332
North Peds: 18
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	4	101	0	105
Cars	37	1183	7	1227
Totals	41	1284	7	

Heavys	0
Trucks	97
Cars	1106
Totals	1203

East Leg Total: 44
East Entering: 36
East Peds: 13
Peds Cross: ⧖



Heavys	Trucks	Cars	Totals
0	5	67	72

Cars	Trucks	Heavys	Totals
17	3	0	20
0	0	0	0
15	1	0	16
32	4	0	

Heavys	Trucks	Cars	Totals
0	5	58	63
0	0	0	0
0	2	23	25
0	7	81	

Cars	Trucks	Heavys	Totals
8	0	0	8

Peds Cross: ⧖
West Peds: 11
West Entering: 88
West Leg Total: 160

Cars	1221
Trucks	104
Heavys	0
Totals	1325

Cars	30	1031	1	1062
Trucks	1	89	0	90
Heavys	0	0	0	0
Totals	31	1120	1	

Peds Cross: ⋈
South Peds: 6
South Entering: 1152
South Leg Total: 2477

Comments

Ontario Traffic Inc.

Total Count Diagram

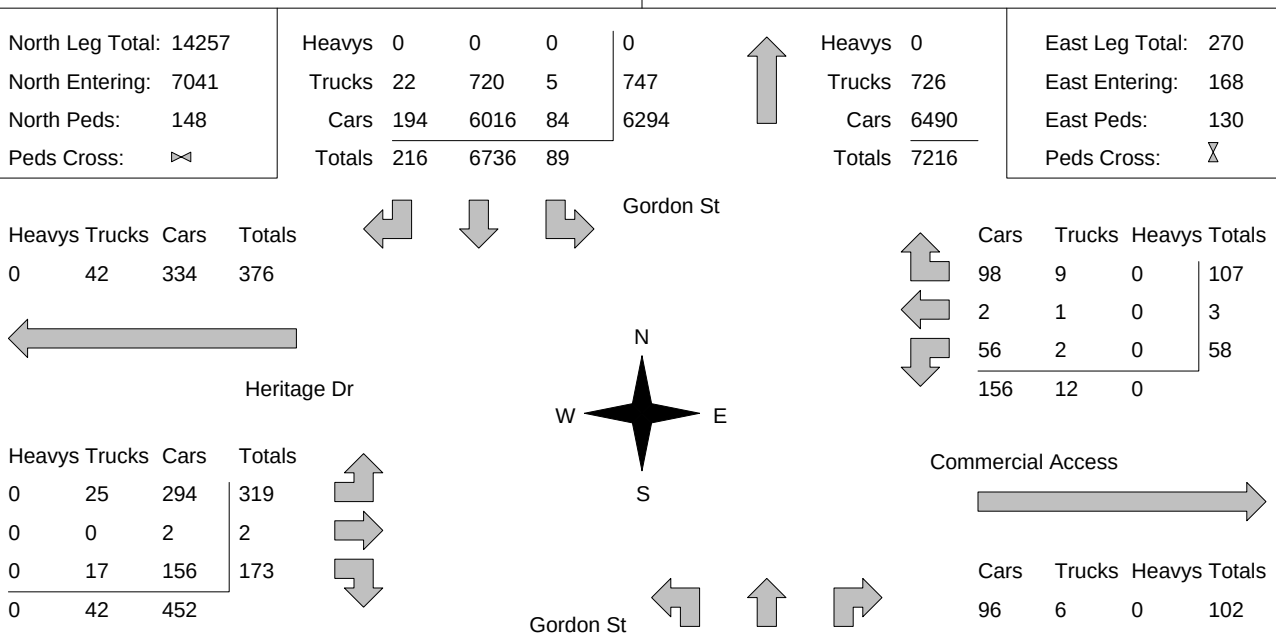
Municipality: Guelph
Site #: 1907200006
Intersection: Gordon St & Heritage Dr-Commerc
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Heritage Dr-Commer | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	8	445	8	461	7	739
9:00:00	9	573	26	608	17	1276
10:00:00	14	702	32	748	34	1862
12:00:00	9	339	12	360	6	731
13:00:00	5	779	20	804	31	1653
17:00:00	17	1005	26	1048	17	1947
18:00:00	16	1148	38	1202	19	2258
19:00:00	6	1255	42	1303	16	2484
Totals:	84	6246	204	6534	147	12950

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	2	276	0	278	2
9:00:00	8	660	0	668	4
10:00:00	25	1088	1	1114	3
12:00:00	6	364	1	371	0
13:00:00	26	821	2	849	3
17:00:00	20	875	4	899	3
18:00:00	23	1032	1	1056	3
19:00:00	32	1148	1	1181	5
Totals:	142	6264	10	6416	23

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	0	0	1	1	4	17
9:00:00	3	0	1	4	8	60
10:00:00	6	2	7	15	23	92
12:00:00	3	0	5	8	7	32
13:00:00	13	0	16	29	16	78
17:00:00	7	0	29	36	25	94
18:00:00	8	0	21	29	20	118
19:00:00	12	0	22	34	12	110
Totals:	52	2	102	156	115	601

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	8	0	8	16	2
9:00:00	29	0	27	56	5
10:00:00	51	0	26	77	6
12:00:00	18	0	6	24	4
13:00:00	30	0	19	49	8
17:00:00	38	0	20	58	17
18:00:00	60	1	28	89	11
19:00:00	53	0	23	76	6
Totals:	287	1	157	445	59

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	17	53	96	27	77	65	91	86

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200006

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	83	83	0	0	0	0	17	17	0	0	0	0	0	0	0	0	1	1
7:30:00	0	0	165	82	2	2	0	0	35	18	0	0	0	0	0	0	0	0	1	0
7:45:00	4	4	279	114	4	2	0	0	52	17	0	0	0	0	0	0	0	0	6	5
8:00:00	7	3	375	96	7	3	1	1	70	18	1	1	0	0	0	0	0	0	7	1
8:15:00	8	1	479	104	12	5	1	0	81	11	2	1	0	0	0	0	0	0	7	0
8:30:00	12	4	607	128	18	6	1	0	105	24	2	0	0	0	0	0	0	0	9	2
8:45:00	14	2	735	128	24	6	2	1	131	26	3	1	0	0	0	0	0	0	12	3
9:00:00	15	1	873	138	30	6	2	0	145	14	4	1	0	0	0	0	0	0	24	12
9:15:00	18	3	1014	141	33	3	3	1	162	17	4	0	0	0	0	0	0	0	36	12
9:30:00	22	4	1161	147	38	5	3	0	175	13	4	0	0	0	0	0	0	0	47	11
9:45:00	25	3	1339	178	47	9	3	0	199	24	4	0	0	0	0	0	0	0	51	4
10:00:00	28	3	1500	161	60	13	3	0	220	21	6	2	0	0	0	0	0	0	58	7
10:01:27	28	0	1500	0	60	0	3	0	220	0	6	0	0	0	0	0	0	0	58	0
11:30:00	28	0	1500	0	60	0	3	0	220	0	6	0	0	0	0	0	0	0	58	0
11:45:00	31	3	1681	181	64	4	4	1	240	20	6	0	0	0	0	0	0	0	59	1
12:00:00	36	5	1801	120	70	6	4	0	258	18	8	2	0	0	0	0	0	0	64	5
12:15:00	37	1	1942	141	72	2	4	0	282	24	8	0	0	0	0	0	0	0	77	13
12:30:00	39	2	2123	181	76	4	4	0	302	20	8	0	0	0	0	0	0	0	84	7
12:45:00	41	2	2308	185	85	9	4	0	325	23	8	0	0	0	0	0	0	0	85	1
13:00:00	41	0	2486	178	90	5	4	0	352	27	8	0	0	0	0	0	0	0	95	10
13:15:00	44	3	2686	200	93	3	5	1	383	31	8	0	0	0	0	0	0	0	98	3
13:30:00	48	4	2888	202	99	6	5	0	413	30	9	1	0	0	0	0	0	0	107	9
13:31:21	48	0	2888	0	99	0	5	0	413	0	9	0	0	0	0	0	0	0	107	0
16:30:00	48	0	2888	0	99	0	5	0	413	0	9	0	0	0	0	0	0	0	107	0
16:45:00	52	4	3123	235	106	7	5	0	445	32	9	0	0	0	0	0	0	0	110	3
17:00:00	57	5	3372	249	114	8	5	0	471	26	10	1	0	0	0	0	0	0	112	2
17:15:00	62	5	3614	242	118	4	5	0	487	16	13	3	0	0	0	0	0	0	116	4
17:30:00	68	6	3867	253	129	11	5	0	513	26	15	2	0	0	0	0	0	0	118	2
17:45:00	70	2	4143	276	137	8	5	0	541	28	17	2	0	0	0	0	0	0	126	8
18:00:00	73	3	4416	273	144	7	5	0	575	34	18	1	0	0	0	0	0	0	131	5
18:15:00	74	1	4729	313	152	8	5	0	596	21	18	0	0	0	0	0	0	0	136	5
18:30:00	75	1	5041	312	162	10	5	0	617	21	20	2	0	0	0	0	0	0	141	5
18:45:00	77	2	5326	285	174	12	5	0	642	25	21	1	0	0	0	0	0	0	144	3
19:00:00	79	2	5572	246	182	8	5	0	674	32	22	1	0	0	0	0	0	0	147	3
19:15:00	81	2	5789	217	187	5	5	0	705	31	22	0	0	0	0	0	0	0	147	0
19:30:00	84	3	6016	227	194	7	5	0	720	15	22	0	0	0	0	0	0	0	148	1
19:45:00	84	0	6016	0	194	0	5	0	720	0	22	0	0	0	0	0	0	0	148	0
19:45:34	84	0	6016	0	194	0	5	0	720	0	22	0	0	0	0	0	0	0	148	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200006

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:45:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	2
8:00:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
8:15:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1
8:30:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1
8:45:00	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1
9:00:00	3	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	12	5
9:15:00	3	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	16	4
9:30:00	6	3	1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	26	10
9:45:00	8	2	1	0	5	1	0	0	1	1	0	0	0	0	0	0	0	0	32	6
10:00:00	9	1	1	0	8	3	0	0	1	0	1	1	0	0	0	0	0	0	35	3
10:01:27	9	0	1	0	8	0	0	0	1	0	1	0	0	0	0	0	0	0	35	0
11:30:00	9	0	1	0	8	0	0	0	1	0	1	0	0	0	0	0	0	0	35	0
11:45:00	10	1	1	0	9	1	0	0	1	0	1	0	0	0	0	0	0	0	37	2
12:00:00	12	2	1	0	12	3	0	0	1	0	2	1	0	0	0	0	0	0	42	5
12:15:00	14	2	1	0	15	3	1	1	1	0	2	0	0	0	0	0	0	0	45	3
12:30:00	15	1	1	0	17	2	1	0	1	0	2	0	0	0	0	0	0	0	48	3
12:45:00	19	4	1	0	22	5	1	0	1	0	2	0	0	0	0	0	0	0	52	4
13:00:00	24	5	1	0	28	6	1	0	1	0	2	0	0	0	0	0	0	0	58	6
13:15:00	26	2	1	0	34	6	1	0	1	0	3	1	0	0	0	0	0	0	63	5
13:30:00	26	0	1	0	38	4	1	0	1	0	3	0	0	0	0	0	0	0	65	2
13:31:21	26	0	1	0	38	0	1	0	1	0	3	0	0	0	0	0	0	0	65	0
16:30:00	26	0	1	0	38	0	1	0	1	0	3	0	0	0	0	0	0	0	65	0
16:45:00	27	1	1	0	44	6	1	0	1	0	5	2	0	0	0	0	0	0	72	7
17:00:00	31	4	1	0	53	9	1	0	1	0	6	1	0	0	0	0	0	0	83	11
17:15:00	32	1	1	0	61	8	1	0	1	0	6	0	0	0	0	0	0	0	87	4
17:30:00	33	1	1	0	66	5	1	0	1	0	6	0	0	0	0	0	0	0	94	7
17:45:00	34	1	1	0	71	5	1	0	1	0	6	0	0	0	0	0	0	0	99	5
18:00:00	38	4	1	0	74	3	2	1	1	0	6	0	0	0	0	0	0	0	103	4
18:15:00	43	5	1	0	77	3	2	0	1	0	8	2	0	0	0	0	0	0	107	4
18:30:00	46	3	1	0	83	6	2	0	1	0	8	0	0	0	0	0	0	0	110	3
18:45:00	49	3	1	0	88	5	2	0	1	0	9	1	0	0	0	0	0	0	112	2
19:00:00	50	1	1	0	93	5	2	0	1	0	9	0	0	0	0	0	0	0	115	3
19:15:00	53	3	1	0	95	2	2	0	1	0	9	0	0	0	0	0	0	0	122	7
19:30:00	56	3	2	1	98	3	2	0	1	0	9	0	0	0	0	0	0	0	130	8
19:45:00	56	0	2	0	98	0	2	0	1	0	9	0	0	0	0	0	0	0	130	0
19:45:34	56	0	2	0	98	0	2	0	1	0	9	0	0	0	0	0	0	0	130	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200006

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	41	41	0	0	0	0	7	7	0	0	0	0	0	0	0	0	1	1
7:30:00	0	0	93	52	0	0	0	0	15	8	0	0	0	0	0	0	0	0	1	0
7:45:00	0	0	155	62	0	0	0	0	38	23	0	0	0	0	0	0	0	0	2	1
8:00:00	1	1	225	70	0	0	1	1	51	13	0	0	0	0	0	0	0	0	2	0
8:15:00	1	0	306	81	0	0	2	1	62	11	0	0	0	0	0	0	0	0	2	0
8:30:00	2	1	412	106	0	0	2	0	81	19	0	0	0	0	0	0	0	0	3	1
8:45:00	4	2	586	174	0	0	2	0	105	24	0	0	0	0	0	0	0	0	4	1
9:00:00	8	4	801	215	0	0	2	0	135	30	0	0	0	0	0	0	0	0	6	2
9:15:00	10	2	1038	237	1	1	4	2	163	28	0	0	0	0	0	0	0	0	6	0
9:30:00	14	4	1273	235	1	0	5	1	190	27	0	0	0	0	0	0	0	0	8	2
9:45:00	19	5	1536	263	1	0	7	2	214	24	0	0	0	0	0	0	0	0	8	0
10:00:00	27	8	1776	240	1	0	8	1	248	34	0	0	0	0	0	0	0	0	9	1
10:01:27	27	0	1776	0	1	0	8	0	248	0	0	0	0	0	0	0	0	0	9	0
11:30:00	27	0	1776	0	1	0	8	0	248	0	0	0	0	0	0	0	0	0	9	0
11:45:00	29	2	1950	174	1	0	8	0	267	19	0	0	0	0	0	0	0	0	9	0
12:00:00	33	4	2107	157	2	1	8	0	281	14	0	0	0	0	0	0	0	0	9	0
12:15:00	38	5	2303	196	2	0	9	1	300	19	0	0	0	0	0	0	0	0	9	0
12:30:00	43	5	2489	186	3	1	9	0	321	21	0	0	0	0	0	0	0	0	9	0
12:45:00	45	2	2667	178	3	0	9	0	335	14	0	0	0	0	0	0	0	0	9	0
13:00:00	55	10	2854	187	4	1	12	3	355	20	0	0	0	0	0	0	0	0	12	3
13:15:00	56	1	3031	177	4	0	14	2	380	25	0	0	0	0	0	0	0	0	14	2
13:30:00	58	2	3198	167	6	2	14	0	400	20	0	0	0	0	0	0	0	0	14	0
13:31:21	58	0	3198	0	6	0	14	0	400	0	0	0	0	0	0	0	0	0	14	0
16:30:00	58	0	3198	0	6	0	14	0	400	0	0	0	0	0	0	0	0	0	14	0
16:45:00	65	7	3420	222	7	1	15	1	432	32	0	0	0	0	0	0	0	0	15	1
17:00:00	71	6	3630	210	7	0	16	1	454	22	1	1	0	0	0	0	0	0	15	0
17:15:00	79	8	3842	212	7	0	17	1	479	25	1	0	0	0	0	0	0	0	16	1
17:30:00	83	4	4043	201	7	0	17	0	510	31	1	0	0	0	0	0	0	0	16	0
17:45:00	87	4	4314	271	8	1	17	0	533	23	1	0	0	0	0	0	0	0	16	0
18:00:00	93	6	4562	248	8	0	17	0	554	21	1	0	0	0	0	0	0	0	18	2
18:15:00	96	3	4835	273	8	0	17	0	573	19	1	0	0	0	0	0	0	0	19	1
18:30:00	105	9	5090	255	8	0	18	1	595	22	1	0	0	0	0	0	0	0	20	1
18:45:00	117	12	5345	255	9	1	18	0	622	27	1	0	0	0	0	0	0	0	22	2
19:00:00	124	7	5624	279	9	0	18	0	640	18	1	0	0	0	0	0	0	0	23	1
19:15:00	131	7	5856	232	9	0	18	0	666	26	1	0	0	0	0	0	0	0	25	2
19:30:00	138	7	6098	242	10	1	19	1	692	26	1	0	0	0	0	0	0	0	25	0
19:45:00	138	0	6098	0	10	0	19	0	692	0	1	0	0	0	0	0	0	0	25	0
19:45:34	138	0	6098	0	10	0	19	0	692	0	1	0	0	0	0	0	0	0	25	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200006

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30:00	2	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45:00	6	4	0	0	7	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00:00	8	2	0	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1
8:15:00	8	0	0	0	13	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:30:00	14	6	0	0	17	4	2	2	0	0	0	0	0	0	0	0	0	0	3	1
8:45:00	25	11	0	0	21	4	4	2	0	0	2	2	0	0	0	0	0	0	5	2
9:00:00	32	7	0	0	33	12	5	1	0	0	2	0	0	0	0	0	0	0	7	2
9:15:00	48	16	0	0	38	5	7	2	0	0	2	0	0	0	0	0	0	0	8	1
9:30:00	53	5	0	0	46	8	9	2	0	0	3	1	0	0	0	0	0	0	10	2
9:45:00	61	8	0	0	52	6	10	1	0	0	3	0	0	0	0	0	0	0	10	0
10:00:00	77	16	0	0	57	5	11	1	0	0	4	1	0	0	0	0	0	0	13	3
10:01:27	77	0	0	0	57	0	11	0	0	0	4	0	0	0	0	0	0	0	13	0
11:30:00	77	0	0	0	57	0	11	0	0	0	4	0	0	0	0	0	0	0	13	0
11:45:00	85	8	0	0	60	3	12	1	0	0	5	1	0	0	0	0	0	0	14	1
12:00:00	94	9	0	0	61	1	12	0	0	0	6	1	0	0	0	0	0	0	17	3
12:15:00	101	7	0	0	64	3	12	0	0	0	6	0	0	0	0	0	0	0	17	0
12:30:00	108	7	0	0	69	5	13	1	0	0	6	0	0	0	0	0	0	0	20	3
12:45:00	119	11	0	0	73	4	14	1	0	0	6	0	0	0	0	0	0	0	21	1
13:00:00	122	3	0	0	80	7	14	0	0	0	6	0	0	0	0	0	0	0	25	4
13:15:00	132	10	0	0	84	4	15	1	0	0	6	0	0	0	0	0	0	0	30	5
13:30:00	136	4	0	0	87	3	15	0	0	0	8	2	0	0	0	0	0	0	32	2
13:31:21	136	0	0	0	87	0	15	0	0	0	8	0	0	0	0	0	0	0	32	0
16:30:00	136	0	0	0	87	0	15	0	0	0	8	0	0	0	0	0	0	0	32	0
16:45:00	147	11	0	0	89	2	17	2	0	0	9	1	0	0	0	0	0	0	34	2
17:00:00	157	10	0	0	96	7	17	0	0	0	10	1	0	0	0	0	0	0	42	8
17:15:00	165	8	1	1	97	1	18	1	0	0	12	2	0	0	0	0	0	0	43	1
17:30:00	179	14	1	0	104	7	18	0	0	0	13	1	0	0	0	0	0	0	44	1
17:45:00	194	15	1	0	112	8	20	2	0	0	14	1	0	0	0	0	0	0	47	3
18:00:00	211	17	1	0	119	7	23	3	0	0	15	1	0	0	0	0	0	0	53	6
18:15:00	223	12	1	0	123	4	24	1	0	0	16	1	0	0	0	0	0	0	54	1
18:30:00	236	13	1	0	130	7	24	0	0	0	16	0	0	0	0	0	0	0	55	1
18:45:00	252	16	1	0	135	5	25	1	0	0	16	0	0	0	0	0	0	0	58	3
19:00:00	262	10	1	0	141	6	25	0	0	0	16	0	0	0	0	0	0	0	59	1
19:15:00	283	21	1	0	146	5	25	0	0	0	17	1	0	0	0	0	0	0	63	4
19:30:00	294	11	2	1	156	10	25	0	0	0	17	0	0	0	0	0	0	0	64	1
19:45:00	294	0	2	0	156	0	25	0	0	0	17	0	0	0	0	0	0	0	64	0
19:45:34	294	0	2	0	156	0	25	0	0	0	17	0	0	0	0	0	0	0	64	0

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 10:00:00

One Hour Peak
From: 9:00:00
To: 10:00:00

Municipality: Guelph
Site #: 1907200007
Intersection: Gordon St & Lowes Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S

North Leg Total: 1871
North Entering: 742
North Peds: 5
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	4	70	5	79
Cars	22	613	28	663
Totals	26	683	33	

Heavys	0
Trucks	119
Cars	1010
Totals	1129

East Leg Total: 227
East Entering: 183
East Peds: 2
Peds Cross: ⧖

Gordon St

Heavys	Trucks	Cars	Totals
0	4	25	29

Cars	Trucks	Heavys	Totals
146	11	0	157
1	0	0	1
22	3	0	25
169	14	0	

Lowes Rd

N
W E
S

Heavys	Trucks	Cars	Totals
0	3	18	21
0	0	3	3
0	0	6	6
0	3	27	

Lowes Rd

Cars	Trucks	Heavys	Totals
38	6	0	44

Gordon St

Peds Cross: ⧖
West Peds: 6
West Entering: 30
West Leg Total: 59

Cars	641
Trucks	73
Heavys	0
Totals	714

Cars	2	846	7	855
Trucks	0	105	1	106
Heavys	0	0	0	0
Totals	2	951	8	

Peds Cross: ⋈
South Peds: 0
South Entering: 961
South Leg Total: 1675

Comments

Ontario Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:30:00
To: 13:30:00

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

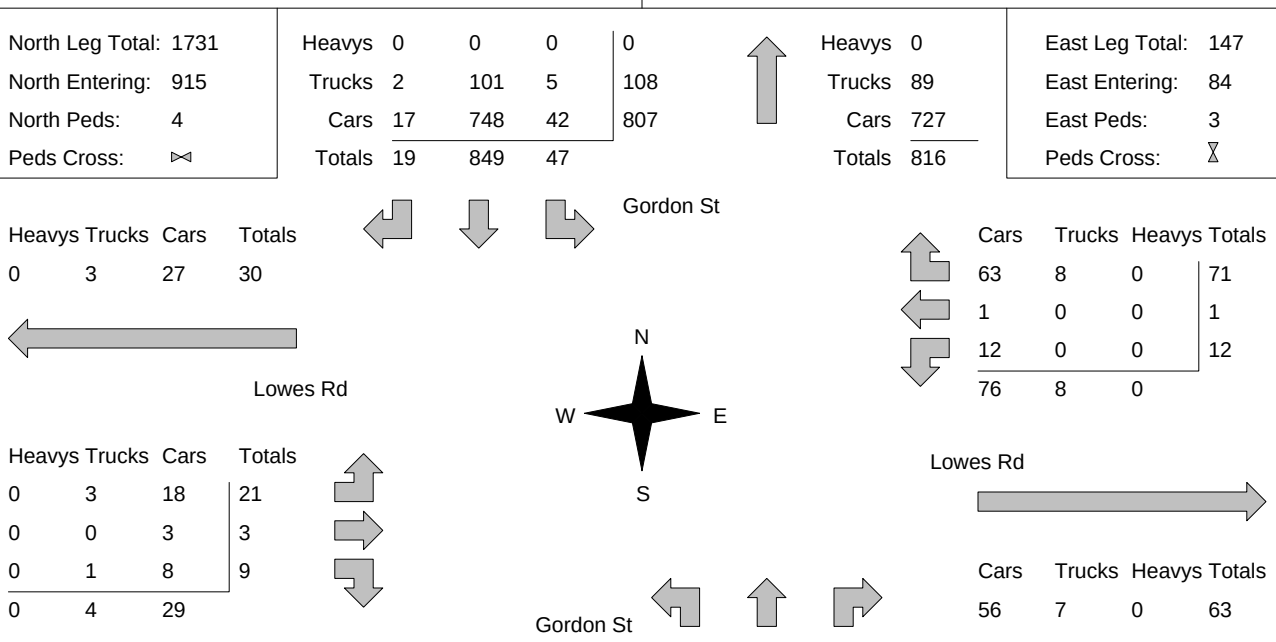
Municipality: Guelph
Site #: 1907200007
Intersection: Gordon St & Lowes Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:30:00
To: 19:30:00

One Hour Peak
From: 17:30:00
To: 18:30:00

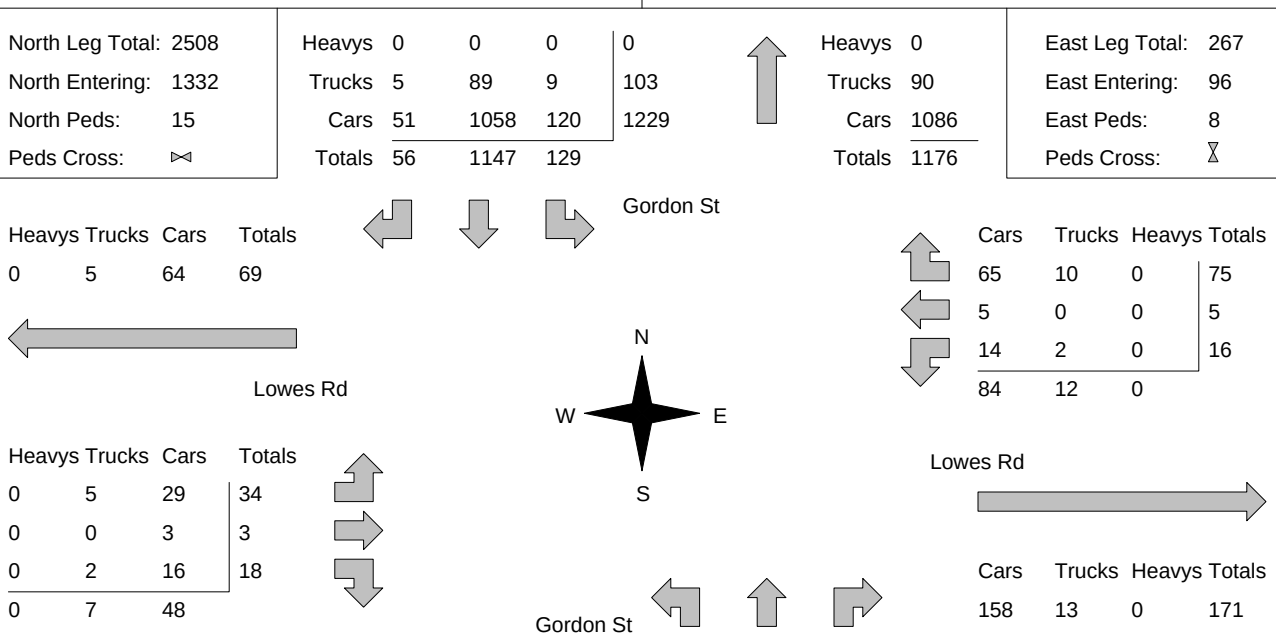
Municipality: Guelph
Site #: 1907200007
Intersection: Gordon St & Lowes Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S



Comments

Ontario Traffic Inc.

Total Count Diagram

Municipality: Guelph
Site #: 1907200007
Intersection: Gordon St & Lowes Rd
TFR File #: 1
Count date: 27-Mar-19

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Gordon St runs N/S

North Leg Total:	13835			
North Entering:	6942			
North Peds:	65			
Peds Cross:	⋈			
Heavys	0	0	0	0
Trucks	25	658	48	731
Cars	174	5630	407	6211
Totals	199	6288	455	
Heavys	0			
Trucks	721			
Cars	6172			
Totals	6893			
East Leg Total:	1362			
East Entering:	757			
East Peds:	40			
Peds Cross:	⧖			

Gordon St

Heavys	Trucks	Cars	Totals
0	33	239	272

Cars	Trucks	Heavys	Totals
549	76	0	625
15	1	0	16
105	11	0	116
669	88	0	

Lowes Rd

N
W E
S

Heavys	Trucks	Cars	Totals
0	25	162	187
0	0	24	24
0	8	61	69
0	33	247	

Lowes Rd

Cars	Trucks	Heavys	Totals
548	57	0	605

Gordon St

Peds Cross:	⧖			
West Peds:	47			
West Entering:	280			
West Leg Total:	552			
Cars	5796			
Trucks	677			
Heavys	0			
Totals	6473			
Cars	50	5461	117	5628
Trucks	7	620	9	636
Heavys	0	0	0	0
Totals	57	6081	126	
Peds Cross:	⋈			
South Peds:	15			
South Entering:	6264			
South Leg Total:	12737			

Comments

Ontario Traffic Inc.
Traffic Count Summary

Intersection: Gordon St & Lowes Rd | **Count Date:** 27-Mar-19 | **Municipality:** Guelph

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	3	437	3	443	1	662
9:00:00	17	574	4	595	1	1167
10:00:00	33	683	26	742	5	1703
12:00:00	23	310	11	344	3	680
13:00:00	42	748	22	812	7	1567
17:00:00	65	937	18	1020	12	1839
18:00:00	101	1027	45	1173	14	2178
19:00:00	128	1124	53	1305	17	2401
Totals:	412	5840	182	6434	60	12197

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	1	218	0	219	0
9:00:00	3	565	4	572	0
10:00:00	2	951	8	961	0
12:00:00	1	333	2	336	1
13:00:00	8	742	5	755	3
17:00:00	12	787	20	819	4
18:00:00	9	963	33	1005	3
19:00:00	13	1046	37	1096	3
Totals:	49	5605	109	5763	14

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	13	0	47	60	4	68
9:00:00	16	0	93	109	3	123
10:00:00	25	1	157	183	2	213
12:00:00	5	1	31	37	3	48
13:00:00	14	1	64	79	3	110
17:00:00	9	0	54	63	4	100
18:00:00	14	4	61	79	6	125
19:00:00	13	4	74	91	9	158
Totals:	109	11	581	701	34	945

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	4	1	3	8	1
9:00:00	12	0	2	14	2
10:00:00	21	3	6	30	6
12:00:00	7	2	2	11	4
13:00:00	23	1	7	31	8
17:00:00	24	4	9	37	6
18:00:00	24	5	17	46	7
19:00:00	45	5	17	67	11
Totals:	160	21	63	244	45

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	10:00	12:00	13:00	17:00	18:00	19:00
Crossing Values:	19	29	54	18	48	53	60	83

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200007

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	73	73	0	0	0	0	16	16	0	0	0	0	0	0	0	0	1	1
7:30:00	2	2	154	81	0	0	0	0	30	14	0	0	0	0	0	0	0	0	1	0
7:45:00	3	1	274	120	2	2	0	0	49	19	0	0	0	0	0	0	0	0	1	0
8:00:00	3	0	371	97	3	1	0	0	66	17	0	0	0	0	0	0	0	0	1	0
8:15:00	7	4	473	102	4	1	1	1	77	11	0	0	0	0	0	0	0	0	1	0
8:30:00	10	3	606	133	4	0	3	2	99	22	0	0	0	0	0	0	0	0	1	0
8:45:00	15	5	731	125	6	2	3	0	126	27	0	0	0	0	0	0	0	0	2	1
9:00:00	17	2	872	141	7	1	3	0	139	13	0	0	0	0	0	0	0	0	2	0
9:15:00	25	8	1010	138	12	5	5	2	154	15	2	2	0	0	0	0	0	0	4	2
9:30:00	34	9	1161	151	15	3	7	2	166	12	3	1	0	0	0	0	0	0	4	0
9:45:00	39	5	1332	171	21	6	7	0	191	25	3	0	0	0	0	0	0	0	5	1
10:00:00	45	6	1485	153	29	8	8	1	209	18	4	1	0	0	0	0	0	0	7	2
10:01:25	45	0	1485	0	29	0	8	0	209	0	4	0	0	0	0	0	0	0	7	0
11:30:00	45	0	1485	0	29	0	8	0	209	0	4	0	0	0	0	0	0	0	7	0
11:45:00	58	13	1652	167	33	4	9	1	228	19	5	1	0	0	0	0	0	0	9	2
12:00:00	66	8	1760	108	38	5	10	1	244	16	6	1	0	0	0	0	0	0	10	1
12:15:00	75	9	1885	125	43	5	13	3	266	22	6	0	0	0	0	0	0	0	12	2
12:30:00	82	7	2058	173	48	5	13	0	288	22	6	0	0	0	0	0	0	0	15	3
12:45:00	95	13	2248	190	53	5	14	1	307	19	7	1	0	0	0	0	0	0	17	2
13:00:00	103	8	2419	171	59	6	15	1	333	26	7	0	0	0	0	0	0	0	17	0
13:15:00	112	9	2611	192	63	4	17	2	358	25	7	0	0	0	0	0	0	0	18	1
13:30:00	124	12	2806	195	65	2	18	1	389	31	8	1	0	0	0	0	0	0	19	1
13:31:04	124	0	2806	0	65	0	18	0	389	0	8	0	0	0	0	0	0	0	19	0
16:30:00	124	0	2806	0	65	0	18	0	389	0	8	0	0	0	0	0	0	0	19	0
16:45:00	138	14	3008	202	68	3	21	3	423	34	9	1	0	0	0	0	0	0	21	2
17:00:00	161	23	3240	232	73	5	22	1	449	26	11	2	0	0	0	0	0	0	29	8
17:15:00	188	27	3438	198	78	5	24	2	466	17	12	1	0	0	0	0	0	0	33	4
17:30:00	207	19	3668	230	89	11	26	2	487	21	16	4	0	0	0	0	0	0	37	4
17:45:00	224	17	3934	266	96	7	30	4	511	24	17	1	0	0	0	0	0	0	40	3
18:00:00	252	28	4177	243	110	14	32	2	539	28	19	2	0	0	0	0	0	0	43	3
18:15:00	281	29	4459	282	122	12	33	1	558	19	19	0	0	0	0	0	0	0	46	3
18:30:00	327	46	4726	267	140	18	35	2	576	18	21	2	0	0	0	0	0	0	52	6
18:45:00	352	25	4995	269	148	8	38	3	598	22	22	1	0	0	0	0	0	0	58	6
19:00:00	371	19	5220	225	157	9	41	3	620	22	25	3	0	0	0	0	0	0	60	2
19:15:00	386	15	5423	203	163	6	46	5	645	25	25	0	0	0	0	0	0	0	63	3
19:30:00	407	21	5630	207	174	11	48	2	658	13	25	0	0	0	0	0	0	0	65	2
19:45:00	407	0	5630	0	174	0	48	0	658	0	25	0	0	0	0	0	0	0	65	0
19:46:53	407	0	5630	0	174	0	48	0	658	0	25	0	0	0	0	0	0	0	65	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200007

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	5	5	0	0	8	8	0	0	0	0	1	1	0	0	0	0	0	0	2	2
7:30:00	6	1	0	0	17	9	0	0	0	0	3	2	0	0	0	0	0	0	2	0
7:45:00	9	3	0	0	31	14	0	0	0	0	4	1	0	0	0	0	0	0	4	2
8:00:00	13	4	0	0	40	9	0	0	0	0	7	3	0	0	0	0	0	0	4	0
8:15:00	14	1	0	0	55	15	0	0	0	0	9	2	0	0	0	0	0	0	4	0
8:30:00	17	3	0	0	68	13	0	0	0	0	10	1	0	0	0	0	0	0	4	0
8:45:00	22	5	0	0	85	17	1	1	0	0	14	4	0	0	0	0	0	0	6	2
9:00:00	27	5	0	0	123	38	2	1	0	0	17	3	0	0	0	0	0	0	7	1
9:15:00	36	9	0	0	164	41	2	0	0	0	22	5	0	0	0	0	0	0	9	2
9:30:00	41	5	0	0	193	29	3	1	0	0	25	3	0	0	0	0	0	0	9	0
9:45:00	46	5	0	0	236	43	4	1	0	0	28	3	0	0	0	0	0	0	9	0
10:00:00	49	3	1	1	269	33	5	1	0	0	28	0	0	0	0	0	0	0	9	0
10:01:25	49	0	1	0	269	0	5	0	0	0	28	0	0	0	0	0	0	0	9	0
11:30:00	49	0	1	0	269	0	5	0	0	0	28	0	0	0	0	0	0	0	9	0
11:45:00	54	5	1	0	283	14	5	0	0	0	30	2	0	0	0	0	0	0	11	2
12:00:00	54	0	2	1	298	15	5	0	0	0	30	0	0	0	0	0	0	0	12	1
12:15:00	57	3	2	0	308	10	6	1	0	0	32	2	0	0	0	0	0	0	12	0
12:30:00	60	3	2	0	315	7	7	1	0	0	34	2	0	0	0	0	0	0	14	2
12:45:00	64	4	3	1	338	23	7	0	0	0	36	2	0	0	0	0	0	0	14	0
13:00:00	66	2	3	0	354	16	7	0	0	0	38	2	0	0	0	0	0	0	15	1
13:15:00	69	3	3	0	365	11	7	0	0	0	40	2	0	0	0	0	0	0	15	0
13:30:00	72	3	3	0	378	13	7	0	0	0	42	2	0	0	0	0	0	0	17	2
13:31:04	72	0	3	0	378	0	7	0	0	0	42	0	0	0	0	0	0	0	17	0
16:30:00	72	0	3	0	378	0	7	0	0	0	42	0	0	0	0	0	0	0	17	0
16:45:00	73	1	3	0	388	10	7	0	0	0	45	3	0	0	0	0	0	0	18	1
17:00:00	75	2	3	0	398	10	7	0	0	0	48	3	0	0	0	0	0	0	19	1
17:15:00	78	3	3	0	410	12	7	0	0	0	51	3	0	0	0	0	0	0	20	1
17:30:00	81	3	4	1	419	9	7	0	0	0	52	1	0	0	0	0	0	0	23	3
17:45:00	85	4	5	1	434	15	8	1	0	0	55	3	0	0	0	0	0	0	24	1
18:00:00	88	3	7	2	450	16	8	0	0	0	57	2	0	0	0	0	0	0	25	1
18:15:00	91	3	8	1	464	14	9	1	0	0	60	3	0	0	0	0	0	0	30	5
18:30:00	95	4	9	1	484	20	9	0	0	0	62	2	0	0	0	0	0	0	31	1
18:45:00	99	4	10	1	488	4	9	0	0	0	65	3	0	0	0	0	0	0	32	1
19:00:00	100	1	11	1	513	25	9	0	0	0	68	3	0	0	0	0	0	0	34	2
19:15:00	103	3	13	2	526	13	11	2	1	1	74	6	0	0	0	0	0	0	37	3
19:30:00	105	2	15	2	549	23	11	0	1	0	76	2	0	0	0	0	0	0	40	3
19:45:00	105	0	15	0	549	0	11	0	1	0	76	0	0	0	0	0	0	0	40	0
19:46:53	105	0	15	0	549	0	11	0	1	0	76	0	0	0	0	0	0	0	40	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200007

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	29	29	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	67	38	0	0	0	0	13	8	0	0	0	0	0	0	0	0	0	0
7:45:00	1	1	110	43	0	0	0	0	35	22	0	0	0	0	0	0	0	0	0	0
8:00:00	1	0	169	59	0	0	0	0	49	14	0	0	0	0	0	0	0	0	0	0
8:15:00	3	2	236	67	1	1	0	0	59	10	0	0	0	0	0	0	0	0	0	0
8:30:00	4	1	332	96	2	1	0	0	78	19	0	0	0	0	0	0	0	0	0	0
8:45:00	4	0	483	151	3	1	0	0	99	21	0	0	0	0	0	0	0	0	0	0
9:00:00	4	0	659	176	4	1	0	0	124	25	0	0	0	0	0	0	0	0	0	0
9:15:00	4	0	870	211	4	0	0	0	149	25	0	0	0	0	0	0	0	0	0	0
9:30:00	4	0	1069	199	7	3	0	0	175	26	0	0	0	0	0	0	0	0	0	0
9:45:00	5	1	1289	220	9	2	0	0	197	22	0	0	0	0	0	0	0	0	0	0
10:00:00	6	1	1505	216	11	2	0	0	229	32	1	1	0	0	0	0	0	0	0	0
10:01:25	6	0	1505	0	11	0	0	0	229	0	1	0	0	0	0	0	0	0	0	0
11:30:00	6	0	1505	0	11	0	0	0	229	0	1	0	0	0	0	0	0	0	0	0
11:45:00	6	0	1659	154	11	0	1	1	247	18	1	0	0	0	0	0	0	0	0	0
12:00:00	6	0	1804	145	13	2	1	0	263	16	1	0	0	0	0	0	0	0	1	1
12:15:00	6	0	1971	167	14	1	2	1	281	18	1	0	0	0	0	0	0	0	1	0
12:30:00	9	3	2157	186	15	1	2	0	296	15	1	0	0	0	0	0	0	0	1	0
12:45:00	11	2	2314	157	16	1	2	0	309	13	1	0	0	0	0	0	0	0	3	2
13:00:00	12	1	2480	166	18	2	3	1	329	20	1	0	0	0	0	0	0	0	4	1
13:15:00	15	3	2644	164	19	1	3	0	353	24	2	1	0	0	0	0	0	0	4	0
13:30:00	18	3	2803	159	26	7	3	0	374	21	3	1	0	0	0	0	0	0	4	0
13:31:04	18	0	2803	0	26	0	3	0	374	0	3	0	0	0	0	0	0	0	4	0
16:30:00	18	0	2803	0	26	0	3	0	374	0	3	0	0	0	0	0	0	0	4	0
16:45:00	20	2	3012	209	31	5	3	0	405	31	3	0	0	0	0	0	0	0	6	2
17:00:00	22	2	3173	161	36	5	5	2	423	18	3	0	0	0	0	0	0	0	8	2
17:15:00	24	2	3376	203	42	6	6	1	442	19	5	2	0	0	0	0	0	0	8	0
17:30:00	25	1	3563	187	46	4	7	1	469	27	5	0	0	0	0	0	0	0	11	3
17:45:00	26	1	3812	249	52	6	7	0	489	20	6	1	0	0	0	0	0	0	11	0
18:00:00	29	3	4049	237	64	12	7	0	510	21	8	2	0	0	0	0	0	0	11	0
18:15:00	29	0	4315	266	73	9	7	0	525	15	9	1	0	0	0	0	0	0	11	0
18:30:00	33	4	4555	240	81	8	7	0	544	19	9	0	0	0	0	0	0	0	11	0
18:45:00	40	7	4785	230	90	9	7	0	564	20	9	0	0	0	0	0	0	0	14	3
19:00:00	42	2	5030	245	100	10	7	0	575	11	9	0	0	0	0	0	0	0	14	0
19:15:00	44	2	5236	206	109	9	7	0	596	21	9	0	0	0	0	0	0	0	15	1
19:30:00	50	6	5461	225	117	8	7	0	620	24	9	0	0	0	0	0	0	0	15	0
19:45:00	50	0	5461	0	117	0	7	0	620	0	9	0	0	0	0	0	0	0	15	0
19:46:53	50	0	5461	0	117	0	7	0	620	0	9	0	0	0	0	0	0	0	15	0

Ontario Traffic Inc.

Count Date: 27-Mar-19 Site #: 1907200007

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	1	0	1	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	2	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	3	1	1	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15:00	4	1	1	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30:00	6	2	1	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	2	1
8:45:00	13	7	1	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00:00	15	2	1	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1
9:15:00	20	5	2	1	5	0	2	1	0	0	0	0	0	0	0	0	0	0	5	2
9:30:00	24	4	3	1	6	1	3	1	0	0	0	0	0	0	0	0	0	0	6	1
9:45:00	28	4	3	0	9	3	3	0	0	0	0	0	0	0	0	0	0	0	8	2
10:00:00	33	5	4	1	11	2	4	1	0	0	0	0	0	0	0	0	0	0	9	1
10:01:25	33	0	4	0	11	0	4	0	0	0	0	0	0	0	0	0	0	0	9	0
11:30:00	33	0	4	0	11	0	4	0	0	0	0	0	0	0	0	0	0	0	9	0
11:45:00	38	5	5	1	12	1	4	0	0	0	1	1	0	0	0	0	0	0	11	2
12:00:00	40	2	6	1	12	0	4	0	0	0	1	0	0	0	0	0	0	0	13	2
12:15:00	47	7	6	0	13	1	5	1	0	0	1	0	0	0	0	0	0	0	13	0
12:30:00	51	4	7	1	13	0	7	2	0	0	2	1	0	0	0	0	0	0	14	1
12:45:00	57	6	7	0	14	1	7	0	0	0	3	1	0	0	0	0	0	0	18	4
13:00:00	59	2	7	0	17	3	8	1	0	0	3	0	0	0	0	0	0	0	21	3
13:15:00	61	2	8	1	20	3	10	2	0	0	3	0	0	0	0	0	0	0	21	0
13:30:00	69	8	10	2	21	1	10	0	0	0	3	0	0	0	0	0	0	0	21	0
13:31:04	69	0	10	0	21	0	10	0	0	0	3	0	0	0	0	0	0	0	21	0
16:30:00	69	0	10	0	21	0	10	0	0	0	3	0	0	0	0	0	0	0	21	0
16:45:00	76	7	10	0	23	2	10	0	0	0	3	0	0	0	0	0	0	0	23	2
17:00:00	81	5	11	1	26	3	10	0	0	0	3	0	0	0	0	0	0	0	27	4
17:15:00	84	3	12	1	28	2	14	4	0	0	3	0	0	0	0	0	0	0	30	3
17:30:00	88	4	15	3	31	3	15	1	0	0	5	2	0	0	0	0	0	0	32	2
17:45:00	95	7	15	0	34	3	15	0	0	0	7	2	0	0	0	0	0	0	32	0
18:00:00	98	3	16	1	39	5	17	2	0	0	7	0	0	0	0	0	0	0	34	2
18:15:00	107	9	18	2	43	4	18	1	0	0	7	0	0	0	0	0	0	0	37	3
18:30:00	117	10	18	0	47	4	20	2	0	0	7	0	0	0	0	0	0	0	42	5
18:45:00	126	9	19	1	52	5	22	2	0	0	8	1	0	0	0	0	0	0	43	1
19:00:00	137	11	21	2	55	3	23	1	0	0	8	0	0	0	0	0	0	0	45	2
19:15:00	153	16	23	2	59	4	25	2	0	0	8	0	0	0	0	0	0	0	46	1
19:30:00	162	9	24	1	61	2	25	0	0	0	8	0	0	0	0	0	0	0	47	1
19:45:00	162	0	24	0	61	0	25	0	0	0	8	0	0	0	0	0	0	0	47	0
19:46:53	162	0	24	0	61	0	25	0	0	0	8	0	0	0	0	0	0	0	47	0

Ontario Traffic Inc

17705 Leslie Street, Unit 6
Newmarket, ON L3Y 3E3, Canada

Site Code: 1
Station ID:
Gordon St between Landsdown Dr & Valley Rd

Start Time	27-Mar-19 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		3	193			2	144				
12:15		6	210			7	176				
12:30		7	194			8	192				
12:45		11	192	27	789	14	185	31	697	58	1486
01:00		17	191			23	191				
01:15		26	201			21	213				
01:30		62	178			31	162				
01:45		23	238	128	808	21	175	96	741	224	1549
02:00		19	228			11	185				
02:15		16	212			11	214				
02:30		12	184			14	172				
02:45		8	197	55	821	9	210	45	781	100	1602
03:00		6	206			7	204				
03:15		6	198			7	221				
03:30		7	180			6	226				
03:45		7	189	26	773	9	215	29	866	55	1639
04:00		7	194			4	186				
04:15		4	226			4	211				
04:30		5	203			6	223				
04:45		6	213	22	836	3	224	17	844	39	1680
05:00		2	197			5	238				
05:15		6	202			10	262				
05:30		9	237			6	266				
05:45		11	226	28	862	15	316	36	1082	64	1944
06:00		10	224			22	283				
06:15		16	248			31	313				
06:30		28	213			39	290				
06:45		44	233	98	918	32	248	124	1134	222	2052
07:00		45	213			68	236				
07:15		68	241			63	190				
07:30		73	217			75	181				
07:45		80	230	266	901	85	197	291	804	557	1705
08:00		93	170			92	186				
08:15		122	168			116	186				
08:30		179	171			106	163				
08:45		231	144	625	653	108	151	422	686	1047	1339
09:00		289	122			107	168				
09:15		275	133			118	120				
09:30		260	122			162	137				
09:45		285	127	1109	504	151	140	538	565	1647	1069
10:00		243	91			128	123				
10:15		202	103			151	137				
10:30		187	87			113	117				
10:45		195	78	827	359	149	108	541	485	1368	844
11:00		199	79			158	95				
11:15		196	89			132	71				
11:30		193	54			162	50				
11:45		180	57	768	279	113	70	565	286	1333	565
Total		3979	8503			2735	8971			6714	17474
Percent		31.9%	68.1%			23.4%	76.6%			27.8%	72.2%
Grand Total		3979	8503			2735	8971			6714	17474
Percent		31.9%	68.1%			23.4%	76.6%			27.8%	72.2%
ADT		ADT 24,188		AADT 24,188							

Ontario Traffic Inc
17705 Leslie Street, Unit 6
Newmarket, ON L3Y 3E3, Canada

Site Code: 1
Station ID:
Gordon St between Landsdown Dr & Valley Rd

Start Time	27-Mar-19 Wed	NB	SB	Combined Total
12:00 AM		27	31	58
01:00		128	96	224
02:00		55	45	100
03:00		26	29	55
04:00		22	17	39
05:00		28	36	64
06:00		98	124	222
07:00		266	291	557
08:00		625	422	1047
09:00		1109	538	1647
10:00		827	541	1368
11:00		768	565	1333
12:00 PM		789	697	1486
01:00		808	741	1549
02:00		821	781	1602
03:00		773	866	1639
04:00		836	844	1680
05:00		862	1082	1944
06:00		918	1134	2052
07:00		901	804	1705
08:00		653	686	1339
09:00		504	565	1069
10:00		359	485	844
11:00		279	286	565
Total		12482	11706	
Percent		51.6%	48.4%	
Grand Total		12482	11706	
Percentage		51.6%	48.4%	
ADT		ADT 24,188		AADT 24,188

Ontario Traffic Inc

17705 Leslie Street, Unit 6
Newmarket, ON L3Y 3E3, Canada

Site Code: 2
Station ID:
Gordon St between Edinburgh Rd S & Arkell Rd

Start Time	27-Mar-19 Wed	NB		Hour Totals		SB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		6	200			12	210				
12:15		9	193			11	238				
12:30		13	197			12	270				
12:45		11	193	39	783	19	261	54	979	93	1762
01:00		23	188			35	271				
01:15		25	195			48	299				
01:30		63	175			41	245				
01:45		19	225	130	783	30	249	154	1064	284	1847
02:00		20	233			20	270				
02:15		13	203			16	299				
02:30		13	185			20	237				
02:45		7	195	53	816	17	295	73	1101	126	1917
03:00		5	209			13	272				
03:15		6	194			9	268				
03:30		9	190			9	310				
03:45		8	168	28	761	7	288	38	1138	66	1899
04:00		4	197			9	245				
04:15		4	214			7	321				
04:30		5	213			10	326				
04:45		6	205	19	829	4	333	30	1225	49	2054
05:00		3	207			7	331				
05:15		5	199			13	376				
05:30		9	233			13	381				
05:45		11	222	28	861	22	408	55	1496	83	2357
06:00		9	238			33	408				
06:15		15	235			42	444				
06:30		31	217			50	411				
06:45		38	243	93	933	52	361	177	1624	270	2557
07:00		47	208			87	330				
07:15		62	238			97	295				
07:30		69	217			110	276				
07:45		79	221	257	884	126	306	420	1207	677	2091
08:00		91	178			126	294				
08:15		123	176			159	274				
08:30		177	171			163	266				
08:45		221	145	612	670	176	243	624	1077	1236	1747
09:00		279	127			166	240				
09:15		263	137			178	190				
09:30		275	122			221	224				
09:45		270	128	1087	514	235	205	800	859	1887	1373
10:00		235	91			204	167				
10:15		193	107			214	211				
10:30		184	86			164	172				
10:45		195	80	807	364	197	157	779	707	1586	1071
11:00		188	78			226	141				
11:15		187	89			192	104				
11:30		190	57			224	76				
11:45		170	56	735	280	167	95	809	416	1544	696
Total		3888	8478			4013	12893			7901	21371
Percent		31.4%	68.6%			23.7%	76.3%			27.0%	73.0%
Grand Total		3888	8478			4013	12893			7901	21371
Percent		31.4%	68.6%			23.7%	76.3%			27.0%	73.0%
ADT		ADT 29,272		AADT 29,272							

Ontario Traffic Inc
17705 Leslie Street, Unit 6
Newmarket, ON L3Y 3E3, Canada

Site Code: 2
Station ID:
Gordon St between Edinburgh Rd S &
Arkell Rd

Start Time	27-Mar-19 Wed	NB	SB	Combined Total
12:00 AM		39	54	93
01:00		130	154	284
02:00		53	73	126
03:00		28	38	66
04:00		19	30	49
05:00		28	55	83
06:00		93	177	270
07:00		257	420	677
08:00		612	624	1236
09:00		1087	800	1887
10:00		807	779	1586
11:00		735	809	1544
12:00 PM		783	979	1762
01:00		783	1064	1847
02:00		816	1101	1917
03:00		761	1138	1899
04:00		829	1225	2054
05:00		861	1496	2357
06:00		933	1624	2557
07:00		884	1207	2091
08:00		670	1077	1747
09:00		514	859	1373
10:00		364	707	1071
11:00		280	416	696
Total		12366	16906	
Percent		42.2%	57.8%	
Grand Total		12366	16906	
Percentage		42.2%	57.8%	
ADT		ADT 29,272		AADT 29,272

Ontario Traffic Inc

17705 Leslie Street, Unit 6
Newmarket, ON L3Y 3E3, Canada

Site Code:
Station ID:
Gordon St between Vaughan St & Heritage Dr

Start Time	27-Mar-19 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		11	220			13	172				
12:15		14	236			16	202				
12:30		9	219			12	228				
12:45		13	206	47	881	16	213	57	815	104	1696
01:00		30	218			20	237				
01:15		31	214			30	249				
01:30		88	221			33	201				
01:45		22	240	171	893	18	223	101	910	272	1803
02:00		25	273			17	227				
02:15		20	234			17	251				
02:30		19	242			11	196				
02:45		8	206	72	955	13	252	58	926	130	1881
03:00		7	242			10	236				
03:15		8	218			9	249				
03:30		9	228			8	271				
03:45		5	218	29	906	5	230	32	986	61	1892
04:00		7	250			7	216				
04:15		3	277			5	251				
04:30		6	283			12	277				
04:45		8	248	24	1058	3	285	27	1029	51	2087
05:00		5	277			7	273				
05:15		7	271			14	305				
05:30		12	317			17	319				
05:45		9	301	33	1166	23	323	61	1220	94	2386
06:00		15	313			33	350				
06:15		20	321			44	344				
06:30		34	302			56	331				
06:45		43	313	112	1249	64	294	197	1319	309	2568
07:00		47	280			95	257				
07:15		66	278			101	249				
07:30		86	269			140	226				
07:45		86	254	285	1081	125	243	461	975	746	2056
08:00		96	231			119	223				
08:15		140	225			167	225				
08:30		211	213			162	193				
08:45		246	198	693	867	160	205	608	846	1301	1713
09:00		296	187			172	196				
09:15		277	164			176	155				
09:30		302	165			222	180				
09:45		302	160	1177	676	208	161	778	692	1955	1368
10:00		243	133			185	140				
10:15		202	154			191	147				
10:30		210	117			168	139				
10:45		223	108	878	512	204	118	748	544	1626	1056
11:00		208	108			198	104				
11:15		216	94			190	81				
11:30		204	69			207	57				
11:45		188	71	816	342	149	69	744	311	1560	653
Total		4337	10586			3872	10573			8209	21159
Percent		29.1%	70.9%			26.8%	73.2%			28.0%	72.0%
Grand Total		4337	10586			3872	10573			8209	21159
Percent		29.1%	70.9%			26.8%	73.2%			28.0%	72.0%
ADT		ADT 29,368		AADT 29,368							

Ontario Traffic Inc
17705 Leslie Street, Unit 6
Newmarket, ON L3Y 3E3, Canada

Site Code:
Station ID:
Gordon St between Vaughan St & Heritage Dr

Start Time	27-Mar-19 Wed	NB	SB	Combined Total
12:00 AM		47	57	104
01:00		171	101	272
02:00		72	58	130
03:00		29	32	61
04:00		24	27	51
05:00		33	61	94
06:00		112	197	309
07:00		285	461	746
08:00		693	608	1301
09:00		1177	778	1955
10:00		878	748	1626
11:00		816	744	1560
12:00 PM		881	815	1696
01:00		893	910	1803
02:00		955	926	1881
03:00		906	986	1892
04:00		1058	1029	2087
05:00		1166	1220	2386
06:00		1249	1319	2568
07:00		1081	975	2056
08:00		867	846	1713
09:00		676	692	1368
10:00		512	544	1056
11:00		342	311	653
Total		14923	14445	
Percent		50.8%	49.2%	
Grand Total		14923	14445	
Percentage		50.8%	49.2%	
ADT		ADT 29,368		AADT 29,368

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/24/19	2	122	8	8	1	0	2	0	0	0	0	0	0	2	145
01:00	0	55	5	1	1	0	1	0	0	0	0	0	0	0	63
02:00	1	39	6	1	1	0	0	0	0	0	0	0	0	0	48
03:00	0	23	1	0	1	0	0	0	0	0	0	0	0	0	25
04:00	0	37	3	2	0	0	0	0	0	0	0	0	0	0	42
05:00	3	97	15	6	1	0	1	1	0	0	0	0	0	0	124
06:00	2	298	48	11	14	3	2	3	1	0	0	0	0	4	386
07:00	1	620	88	14	20	2	3	6	1	1	0	0	1	18	775
08:00	12	1042	125	18	27	3	13	9	1	1	0	0	2	31	1284
09:00	5	731	100	9	19	2	9	7	3	1	0	0	1	17	904
10:00	5	761	114	9	20	1	7	12	2	1	0	0	0	17	949
11:00	11	792	108	9	22	5	8	7	3	0	0	0	0	14	979
12 PM	6	815	117	6	16	1	6	4	1	0	0	0	3	16	991
13:00	3	825	134	10	25	5	6	4	1	3	0	0	1	25	1042
14:00	16	856	104	7	22	1	14	10	3	0	1	0	1	21	1056
15:00	9	910	120	17	17	1	4	8	0	0	0	0	1	23	1110
16:00	8	1018	128	8	14	2	10	5	0	0	0	0	0	30	1223
17:00	11	1097	105	6	9	6	10	11	5	0	1	0	4	25	1290
18:00	9	953	103	4	13	3	9	8	3	0	0	0	2	18	1125
19:00	5	748	80	8	1	5	8	6	1	0	0	0	0	11	873
20:00	4	598	63	11	6	2	6	3	0	0	0	0	0	13	706
21:00	2	573	46	9	6	1	3	2	1	0	0	0	0	11	654
22:00	4	461	39	7	4	0	0	1	1	1	0	0	0	3	521
23:00	3	308	23	7	2	0	2	0	1	0	0	0	0	3	349
Total	122	13779	1683	188	262	43	124	107	28	8	2	0	16	302	16664
Percent	0.7%	82.7%	10.1%	1.1%	1.6%	0.3%	0.7%	0.6%	0.2%	0.0%	0.0%	0.0%	0.1%	1.8%	
AM Peak	08:00	08:00	08:00	08:00	08:00	11:00	08:00	10:00	09:00	07:00			08:00	08:00	
Vol.	12	1042	125	18	27	5	13	12	3	1			2	31	
PM Peak	14:00	17:00	13:00	15:00	13:00	17:00	14:00	17:00	17:00	13:00	14:00		17:00	16:00	
Vol.	16	1097	134	17	25	6	14	11	5	3	1		4	30	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/25/19	1	216	15	7	3	0	0	0	0	0	0	0	0	3	245
01:00	0	110	8	2	0	0	0	0	0	0	0	0	1	0	121
02:00	0	88	3	1	0	0	0	0	0	0	0	0	0	0	92
03:00	0	41	1	0	0	0	0	0	0	0	0	0	0	0	42
04:00	0	51	4	2	0	0	0	0	0	0	0	0	0	0	57
05:00	0	52	7	2	1	0	0	1	0	0	0	0	0	0	63
06:00	0	124	13	7	6	1	0	0	1	1	0	0	0	2	155
07:00	0	236	38	8	3	4	1	0	0	0	0	0	2	4	296
08:00	0	429	40	11	11	9	1	1	0	0	0	0	0	15	517
09:00	0	603	60	10	15	7	3	2	4	2	0	0	1	33	740
10:00	0	790	79	4	10	7	5	2	1	2	0	0	0	30	930
11:00	1	843	100	5	11	5	6	6	1	0	0	0	0	23	1001
12 PM	1	893	120	4	11	3	11	7	0	0	0	0	1	22	1073
13:00	6	945	114	6	18	2	11	8	0	0	0	0	1	14	1125
14:00	10	883	103	4	7	2	16	5	1	0	0	0	0	15	1046
15:00	2	862	85	4	11	1	8	8	0	0	0	0	0	18	999
16:00	4	847	75	7	12	3	14	9	1	0	0	0	0	21	993
17:00	1	707	74	6	4	5	9	7	1	0	0	0	0	20	834
18:00	1	767	49	5	6	5	9	6	0	1	1	0	0	17	867
19:00	3	641	58	8	5	0	6	4	1	0	0	0	0	7	733
20:00	1	538	54	5	9	0	6	2	0	0	0	0	0	7	622
21:00	2	462	51	6	7	0	2	0	0	0	0	0	0	9	539
22:00	1	364	26	5	3	1	1	2	0	0	0	0	0	1	404
23:00	0	403	29	7	3	0	0	0	0	0	0	0	0	2	444
Total	34	11895	1206	126	156	55	109	70	11	6	1	0	6	263	13938
Percent	0.2%	85.3%	8.7%	0.9%	1.1%	0.4%	0.8%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	1.9%	
AM Peak	00:00	11:00	11:00	08:00	09:00	08:00	11:00	11:00	09:00	09:00			07:00	09:00	
Vol.	1	843	100	11	15	9	6	6	4	2			2	33	
PM Peak	14:00	13:00	12:00	19:00	13:00	17:00	14:00	16:00	14:00	18:00	18:00		12:00	12:00	
Vol.	10	945	120	8	18	5	16	9	1	1	1		1	22	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/26/19	0	227	18	6	0	0	0	3	0	0	0	0	0	1	255
01:00	0	164	9	1	1	0	0	0	0	0	0	0	0	0	175
02:00	0	114	2	0	0	0	0	0	0	0	0	0	0	0	116
03:00	0	72	4	0	0	0	0	0	0	0	0	0	0	0	76
04:00	0	39	4	0	0	0	0	0	0	0	0	0	0	0	43
05:00	0	43	2	0	0	0	0	0	0	0	0	0	0	0	45
06:00	0	87	13	2	2	0	0	1	0	0	0	0	0	0	105
07:00	3	168	28	1	3	0	0	0	0	0	0	0	0	1	204
08:00	5	355	45	2	10	0	0	1	0	0	0	0	0	8	426
09:00	13	574	54	8	3	0	2	1	0	0	0	0	0	6	661
10:00	9	722	89	6	10	0	7	4	0	0	0	0	0	7	854
11:00	14	836	81	4	7	2	7	6	0	0	0	0	1	20	978
12 PM	16	851	98	5	11	2	6	12	0	0	0	0	0	16	1017
13:00	13	935	98	6	3	1	9	9	1	0	0	0	0	19	1094
14:00	18	907	98	4	7	2	10	7	0	0	0	0	0	16	1069
15:00	9	916	94	3	10	1	11	5	0	0	1	0	1	20	1071
16:00	7	811	77	7	7	1	6	8	0	0	0	0	0	10	934
17:00	8	707	67	8	7	0	5	7	0	0	0	0	0	14	823
18:00	10	660	65	8	9	3	5	5	0	0	0	0	0	9	774
19:00	9	596	64	1	4	2	5	1	1	0	0	0	0	12	695
20:00	5	552	45	2	6	3	6	4	1	0	0	0	0	1	625
21:00	0	453	34	1	2	2	2	1	0	0	0	0	0	3	498
22:00	1	317	24	1	5	1	0	0	0	0	0	0	0	3	352
23:00	0	165	14	2	0	0	1	2	0	0	0	0	0	0	184
Total	140	11271	1127	78	107	20	82	77	3	0	1	0	2	166	13074
Percent	1.1%	86.2%	8.6%	0.6%	0.8%	0.2%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	
AM Peak	11:00	11:00	10:00	09:00	08:00	11:00	10:00	11:00					11:00	11:00	
Vol.	14	836	89	8	10	2	7	6					1	20	
PM Peak	14:00	13:00	12:00	17:00	12:00	18:00	15:00	12:00	13:00		15:00		15:00	15:00	
Vol.	18	935	98	8	11	3	11	12	1		1		1	20	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/27/19	0	99	7	2	0	0	0	0	0	0	0	0	0	0	108
01:00	0	46	2	1	2	0	0	0	0	0	0	0	0	0	51
02:00	0	19	3	0	1	0	0	0	0	0	0	0	0	0	23
03:00	0	19	0	0	0	0	0	0	0	0	0	0	0	0	19
04:00	0	37	5	3	1	0	0	0	0	0	0	0	0	0	46
05:00	2	97	17	6	3	0	2	0	0	0	0	0	0	0	127
06:00	1	299	61	10	14	1	2	2	1	0	0	0	1	2	394
07:00	8	624	79	18	17	5	8	3	1	2	0	0	2	8	775
08:00	11	1074	113	28	27	6	11	10	0	2	0	0	3	33	1318
09:00	6	755	107	10	20	1	11	9	2	1	0	0	1	19	942
10:00	7	708	120	8	15	3	4	8	1	0	0	0	0	10	884
11:00	7	670	105	12	14	3	8	8	2	0	1	0	0	9	839
12 PM	5	741	99	10	16	3	10	1	2	0	0	0	0	17	904
13:00	7	692	102	11	22	3	4	5	0	0	0	0	1	10	857
14:00	3	701	124	17	23	3	1	9	0	0	0	0	0	23	904
15:00	12	842	110	15	22	5	11	8	0	0	0	1	2	24	1052
16:00	12	923	124	11	20	2	10	7	3	0	0	0	1	20	1133
17:00	9	1027	121	7	18	2	10	2	0	1	0	0	0	20	1217
18:00	7	898	95	8	14	1	10	1	0	0	0	0	2	20	1056
19:00	3	712	52	8	7	2	2	5	0	0	1	0	0	7	799
20:00	1	579	54	9	6	0	4	2	0	2	0	0	0	8	665
21:00	3	404	24	7	7	0	3	2	0	0	0	0	0	8	458
22:00	4	281	12	6	1	0	2	1	0	1	0	0	0	3	311
23:00	1	166	7	9	2	0	0	0	0	0	0	0	0	0	185
Total	109	12413	1543	216	272	40	113	83	12	9	2	1	13	241	15067
Percent	0.7%	82.4%	10.2%	1.4%	1.8%	0.3%	0.7%	0.6%	0.1%	0.1%	0.0%	0.0%	0.1%	1.6%	
AM Peak	08:00	08:00	10:00	08:00	08:00	08:00	08:00	08:00	09:00	07:00	11:00		08:00	08:00	
Vol.	11	1074	120	28	27	6	11	10	2	2	1		3	33	
PM Peak	15:00	17:00	14:00	14:00	14:00	15:00	15:00	14:00	16:00	20:00	19:00	15:00	15:00	15:00	
Vol.	12	1027	124	17	23	5	11	9	3	2	1	1	2	24	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/28/19	0	65	8	7	3	0	0	0	0	0	0	0	0	1	84
01:00	0	40	4	0	1	0	0	0	0	0	0	0	0	0	45
02:00	2	31	4	0	1	0	0	0	0	0	0	0	0	0	38
03:00	0	15	1	1	0	0	0	0	0	0	0	0	0	0	17
04:00	0	37	1	2	3	0	0	0	0	0	0	0	0	0	43
05:00	0	99	21	6	0	2	0	1	0	0	0	0	0	7	136
06:00	0	272	58	8	9	6	5	0	0	0	0	0	0	26	384
07:00	3	658	64	17	9	10	5	0	4	1	0	0	1	19	791
08:00	1	1106	92	24	20	8	19	9	4	0	0	0	0	75	1358
09:00	0	737	85	13	19	3	8	6	2	0	0	0	1	32	906
10:00	0	663	82	13	21	6	2	4	2	2	0	0	1	15	811
11:00	0	716	79	11	13	1	8	3	1	0	0	0	1	15	848
12 PM	0	732	82	10	15	7	6	6	2	0	0	0	2	13	875
13:00	2	712	110	9	19	5	8	5	0	1	0	0	0	22	893
14:00	2	712	100	17	20	4	11	0	2	0	0	0	0	27	895
15:00	3	814	92	14	21	8	13	1	5	0	0	0	2	32	1005
16:00	1	917	85	6	8	4	18	11	1	0	0	0	0	29	1080
17:00	2	990	108	6	12	3	9	9	0	0	0	0	1	19	1159
18:00	2	916	74	5	5	3	9	5	1	0	0	0	2	23	1045
19:00	1	715	57	11	4	3	3	1	0	0	0	0	1	15	811
20:00	2	566	45	9	1	0	2	0	0	0	0	0	0	11	636
21:00	0	454	32	8	4	1	3	3	0	0	0	0	0	4	509
22:00	1	302	12	8	3	0	2	0	1	0	0	0	0	3	332
23:00	0	149	14	10	6	0	0	0	0	0	0	0	0	1	180
Total	22	12418	1310	215	217	74	131	64	25	4	0	0	12	389	14881
Percent	0.1%	83.4%	8.8%	1.4%	1.5%	0.5%	0.9%	0.4%	0.2%	0.0%	0.0%	0.0%	0.1%	2.6%	
AM Peak	07:00	08:00	08:00	08:00	10:00	07:00	08:00	08:00	07:00	10:00			07:00	08:00	
Vol.	3	1106	92	24	21	10	19	9	4	2			1	75	
PM Peak	15:00	17:00	13:00	14:00	15:00	15:00	16:00	16:00	15:00	13:00			12:00	15:00	
Vol.	3	990	110	17	21	8	18	11	5	1			2	32	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/29/19	0	105	12	9	1	0	0	0	0	0	0	0	0	0	127
01:00	0	55	2	1	1	1	1	0	0	0	0	0	0	0	61
02:00	2	30	6	0	0	0	0	0	0	0	0	0	0	0	38
03:00	0	16	3	0	0	0	0	0	0	0	0	0	0	0	19
04:00	0	29	6	3	1	0	0	0	0	0	0	0	0	0	39
05:00	0	99	22	7	1	0	1	0	0	0	0	0	0	0	130
06:00	2	305	55	12	11	1	3	1	0	0	0	0	1	2	393
07:00	2	634	78	16	24	7	3	5	3	0	0	0	1	10	783
08:00	3	1163	113	23	15	5	18	18	0	0	0	0	1	28	1387
09:00	4	761	81	12	19	9	11	7	2	0	0	0	1	38	945
10:00	3	645	81	9	24	5	11	3	1	1	0	0	2	35	820
11:00	4	725	96	14	16	4	8	6	2	1	0	0	0	13	889
12 PM	4	776	84	11	15	7	6	6	2	0	0	0	3	12	926
13:00	2	701	86	14	16	0	7	3	1	0	0	0	1	19	850
14:00	4	726	95	10	22	3	6	6	3	0	0	0	1	18	894
15:00	6	846	113	13	19	2	7	6	2	0	0	0	3	18	1035
16:00	6	884	99	12	14	4	9	9	0	0	0	0	2	20	1059
17:00	2	1077	102	9	10	4	16	5	0	0	0	0	0	21	1246
18:00	6	1014	106	6	11	3	6	6	2	0	0	0	1	19	1180
19:00	6	714	75	9	5	2	9	3	0	0	0	0	0	13	836
20:00	5	663	62	9	5	1	7	6	0	0	0	0	1	9	768
21:00	1	493	41	10	3	0	2	1	0	0	0	0	0	4	555
22:00	2	295	19	8	4	0	3	4	1	0	0	0	0	2	338
23:00	1	192	14	9	1	0	0	0	0	0	0	0	0	3	220
Total	65	12948	1451	226	238	58	134	95	19	2	0	0	18	284	15538
Percent	0.4%	83.3%	9.3%	1.5%	1.5%	0.4%	0.9%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.8%	
AM Peak	09:00	08:00	08:00	08:00	07:00	09:00	08:00	08:00	07:00	10:00			10:00	09:00	
Vol.	4	1163	113	23	24	9	18	18	3	1			2	38	
PM Peak	15:00	17:00	15:00	13:00	14:00	12:00	17:00	16:00	14:00				12:00	17:00	
Vol.	6	1077	113	14	22	7	16	9	3				3	21	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/30/19	1	93	3	8	1	0	0	0	0	0	0	0	0	0	106
01:00	0	42	6	2	0	0	0	0	0	0	0	0	0	0	50
02:00	1	27	3	0	0	0	0	0	0	0	0	0	0	0	31
03:00	0	18	1	0	1	0	0	0	0	0	0	0	0	0	20
04:00	1	37	3	3	1	0	0	0	0	0	0	0	0	0	45
05:00	1	102	20	6	3	1	1	0	1	0	0	0	0	0	135
06:00	2	294	48	10	3	2	4	1	0	1	0	0	2	3	370
07:00	5	652	76	16	8	4	6	6	1	1	0	0	1	8	784
08:00	4	1065	107	28	20	5	20	11	1	1	0	0	2	40	1304
09:00	3	756	112	9	15	7	3	7	2	0	0	0	2	16	932
10:00	1	696	106	12	27	3	5	8	1	0	0	0	0	24	883
11:00	4	692	87	13	23	6	6	10	3	0	0	0	1	16	861
12 PM	1	809	123	6	18	2	5	9	0	0	0	0	1	21	995
13:00	6	778	114	13	22	0	6	10	0	0	1	0	0	18	968
14:00	6	782	113	12	16	2	4	8	2	0	0	0	1	12	958
15:00	9	875	121	18	23	1	9	9	0	1	0	0	1	22	1089
16:00	4	991	121	6	19	1	8	7	0	1	0	0	2	15	1175
17:00	3	1096	123	6	13	1	12	14	0	0	1	0	0	27	1296
18:00	3	1010	125	8	9	2	10	6	0	0	1	0	1	11	1186
19:00	5	761	101	8	8	1	2	4	0	1	0	0	1	5	897
20:00	5	646	63	8	8	0	7	2	0	0	0	0	0	11	750
21:00	3	454	47	7	4	1	3	4	0	0	0	0	1	4	528
22:00	5	295	28	8	1	1	3	1	0	0	0	0	1	2	345
23:00	4	254	19	7	1	0	1	0	1	0	0	0	0	2	289
Total	77	13225	1670	214	244	40	115	117	12	6	3	0	17	257	15997
Percent	0.5%	82.7%	10.4%	1.3%	1.5%	0.3%	0.7%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%	1.6%	
AM Peak	07:00	08:00	09:00	08:00	10:00	09:00	08:00	08:00	11:00	06:00			06:00	08:00	
Vol.	5	1065	112	28	27	7	20	11	3	1			2	40	
PM Peak	15:00	17:00	18:00	15:00	15:00	12:00	17:00	17:00	14:00	15:00	13:00		16:00	17:00	
Vol.	9	1096	125	18	23	2	12	14	2	1	1		2	27	
Grand Total	569	87949	9990	1263	1496	330	808	613	110	35	9	1	84	1902	105159
Percent	0.5%	83.6%	9.5%	1.2%	1.4%	0.3%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.8%	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/24/19	0	96	4	7	1	0	0	0	0	0	0	0	0	0	108
01:00	0	51	1	3	0	0	0	0	0	0	0	0	0	0	55
02:00	0	41	4	1	3	0	0	0	0	0	0	0	0	0	49
03:00	1	28	2	0	0	0	0	0	0	0	0	0	0	0	31
04:00	1	46	9	0	1	0	0	0	0	0	0	0	0	0	57
05:00	0	156	31	3	5	0	0	1	0	0	0	0	0	0	196
06:00	6	314	57	10	5	2	0	2	0	1	0	0	0	3	400
07:00	6	538	77	13	23	1	2	3	1	1	0	0	1	6	672
08:00	2	694	118	11	17	3	10	4	0	0	0	0	0	4	863
09:00	5	665	101	9	13	2	4	5	3	0	0	0	1	8	816
10:00	6	659	77	15	20	4	4	11	2	0	0	0	0	8	806
11:00	6	815	97	8	24	2	4	14	2	0	0	0	0	15	987
12 PM	5	921	111	9	23	2	5	8	3	0	0	0	0	11	1098
13:00	3	878	124	8	19	2	8	11	2	1	0	0	2	20	1078
14:00	7	910	124	11	22	5	17	4	3	0	0	0	1	23	1127
15:00	7	1057	94	21	26	3	14	9	1	0	0	0	0	19	1251
16:00	13	1316	110	17	15	2	21	12	0	0	0	0	1	18	1525
17:00	10	1305	91	4	11	2	10	6	1	0	0	0	1	26	1467
18:00	8	1068	94	7	8	0	8	3	1	0	0	0	0	17	1214
19:00	7	719	68	3	8	4	12	3	0	0	0	0	0	12	836
20:00	6	531	35	1	11	2	2	1	1	0	0	0	0	4	594
21:00	0	388	34	2	2	2	2	0	0	0	0	0	0	3	433
22:00	2	327	18	1	3	1	1	1	0	0	0	0	0	2	356
23:00	1	240	9	1	2	0	1	0	0	0	0	0	0	1	255
Total	102	13763	1490	165	262	39	125	98	20	3	0	0	7	200	16274
Percent	0.6%	84.6%	9.2%	1.0%	1.6%	0.2%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	1.2%	
AM Peak	06:00	11:00	08:00	10:00	11:00	10:00	08:00	11:00	09:00	06:00			07:00	11:00	
Vol.	6	815	118	15	24	4	10	14	3	1			1	15	
PM Peak	16:00	16:00	13:00	15:00	15:00	14:00	16:00	16:00	12:00	13:00			13:00	17:00	
Vol.	13	1316	124	21	26	5	21	12	3	1			2	26	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/25/19	2	116	9	2	0	0	0	0	0	0	0	0	0	1	130
01:00	0	39	3	1	0	0	0	0	0	0	0	0	0	0	43
02:00	1	28	1	0	0	0	0	0	0	0	0	0	0	0	30
03:00	0	12	3	0	1	0	0	0	0	0	0	0	0	0	16
04:00	0	33	7	3	0	0	0	0	0	0	0	0	0	0	43
05:00	1	107	20	4	0	0	1	0	1	0	0	0	0	1	135
06:00	1	283	59	10	9	2	1	1	0	0	0	0	0	5	371
07:00	1	639	69	11	12	5	1	4	1	1	0	0	0	10	754
08:00	2	1112	107	22	22	5	12	9	1	0	0	0	1	19	1312
09:00	4	750	82	16	20	3	5	9	1	1	0	0	1	8	900
10:00	3	703	116	12	16	4	9	5	1	0	0	0	0	8	877
11:00	7	661	97	10	26	3	9	8	0	0	0	0	1	11	833
12 PM	3	737	103	10	18	2	7	6	2	0	1	0	0	15	904
13:00	4	684	84	9	22	2	8	14	0	1	0	0	0	13	841
14:00	3	664	114	9	18	5	7	6	1	0	0	0	0	14	841
15:00	3	787	104	23	18	3	8	7	1	0	0	0	2	12	968
16:00	3	919	97	9	23	6	10	4	0	0	0	0	0	21	1092
17:00	8	1002	109	12	19	0	9	8	0	0	0	0	0	9	1176
18:00	3	888	86	6	15	3	15	6	1	0	1	0	0	12	1036
19:00	6	737	74	10	6	1	2	4	2	1	0	0	1	11	855
20:00	4	597	62	9	3	1	7	2	0	0	0	0	0	9	694
21:00	1	405	32	8	4	0	0	2	1	0	0	0	0	3	456
22:00	2	278	25	8	1	0	2	0	0	0	0	0	0	3	319
23:00	1	168	12	10	3	0	0	0	0	0	0	0	0	2	196
Total	63	12349	1475	214	256	45	113	95	13	4	2	0	6	187	14822
Percent	0.4%	83.3%	10.0%	1.4%	1.7%	0.3%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	1.3%	
AM Peak	11:00	08:00	10:00	08:00	11:00	07:00	08:00	08:00	05:00	07:00			08:00	08:00	
Vol.	7	1112	116	22	26	5	12	9	1	1			1	19	
PM Peak	17:00	17:00	14:00	15:00	16:00	16:00	18:00	13:00	12:00	13:00	12:00		15:00	16:00	
Vol.	8	1002	114	23	23	6	15	14	2	1	1		2	21	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/26/19	1	92	8	10	0	1	0	0	0	0	0	0	0	0	112
01:00	1	44	0	1	0	0	0	0	0	0	0	0	0	0	46
02:00	2	42	2	0	0	0	0	0	0	0	0	0	0	0	46
03:00	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	42	4	4	0	0	0	0	0	0	0	0	0	0	50
05:00	2	90	23	6	3	1	0	0	0	0	0	0	0	1	126
06:00	1	308	52	11	9	3	0	1	1	0	0	0	0	5	391
07:00	2	662	76	13	14	1	4	4	1	1	0	0	0	12	790
08:00	3	1166	108	22	25	5	10	6	1	0	0	0	0	31	1377
09:00	2	729	93	9	10	2	4	5	0	0	1	0	1	12	868
10:00	1	597	109	12	14	1	11	2	2	0	0	0	0	19	768
11:00	3	752	107	12	18	2	11	9	1	0	0	0	0	7	922
12 PM	1	689	119	9	19	3	7	9	1	1	0	0	0	15	873
13:00	4	708	87	12	19	2	14	2	0	0	0	0	0	18	866
14:00	6	750	100	15	23	3	7	5	1	0	0	0	2	7	919
15:00	1	845	125	13	32	0	20	8	0	0	0	0	0	30	1074
16:00	10	986	118	10	12	3	7	6	0	0	0	0	0	16	1168
17:00	4	1015	119	8	11	0	12	6	1	0	0	0	2	22	1200
18:00	6	941	100	7	16	1	7	7	0	0	0	0	1	20	1106
19:00	7	716	53	11	8	0	6	5	0	0	0	0	0	6	812
20:00	7	672	68	9	6	0	4	5	0	0	0	0	0	9	780
21:00	3	545	46	6	2	0	6	3	2	0	0	0	0	6	619
22:00	2	294	23	10	2	0	1	0	1	0	0	0	0	0	333
23:00	2	178	15	9	3	0	1	0	0	0	0	0	0	2	210
Total	71	12872	1556	219	246	28	132	83	12	2	1	0	6	238	15466
Percent	0.5%	83.2%	10.1%	1.4%	1.6%	0.2%	0.9%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	1.5%	
AM Peak	08:00	08:00	10:00	08:00	08:00	08:00	10:00	11:00	10:00	07:00	09:00		09:00	08:00	
Vol.	3	1166	109	22	25	5	11	9	2	1	1		1	31	
PM Peak	16:00	17:00	15:00	14:00	15:00	12:00	15:00	12:00	21:00	12:00			14:00	15:00	
Vol.	10	1015	125	15	32	3	20	9	2	1			2	30	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/27/19	0	118	7	10	0	0	0	0	0	0	0	0	0	0	135
01:00	1	49	5	1	0	0	0	0	0	0	0	0	0	0	56
02:00	1	37	3	1	0	0	0	0	0	0	0	0	0	0	42
03:00	0	14	1	1	0	0	0	0	0	0	0	0	0	0	16
04:00	1	35	4	4	2	0	0	0	0	0	0	0	0	0	46
05:00	0	99	20	3	1	3	0	0	0	0	0	0	0	2	128
06:00	1	295	61	8	5	3	1	1	0	2	0	0	1	5	383
07:00	1	615	81	17	13	5	11	4	1	0	0	0	1	7	756
08:00	2	1059	107	23	22	5	12	6	0	0	0	0	2	35	1273
09:00	9	742	94	10	18	2	5	2	2	0	0	0	2	11	897
10:00	3	654	101	8	20	4	4	7	2	0	0	0	1	10	814
11:00	2	698	107	13	22	3	2	3	3	3	0	0	0	10	866
12 PM	1	692	100	11	15	1	10	5	0	0	0	0	1	22	858
13:00	13	705	57	9	15	3	3	3	1	0	0	0	0	15	824
14:00	20	559	58	10	6	9	2	2	0	0	0	0	0	12	678
15:00	1	831	89	10	21	8	9	8	2	0	0	0	0	19	998
16:00	0	905	116	8	15	2	10	9	0	0	0	0	0	19	1084
17:00	2	1038	92	9	9	5	8	5	1	0	0	0	2	20	1191
18:00	2	848	77	5	4	5	13	2	0	0	0	0	2	19	977
19:00	9	587	38	4	3	7	7	1	1	0	0	0	0	6	663
20:00	6	545	32	5	3	1	4	3	1	1	0	0	0	7	608
21:00	0	411	21	6	2	1	1	1	0	0	0	0	0	4	447
22:00	2	273	16	8	1	1	1	0	0	0	0	0	0	3	305
23:00	1	258	28	7	1	0	1	1	1	0	0	0	0	2	300
Total	78	12067	1315	191	198	68	104	63	15	6	0	0	12	228	14345
Percent	0.5%	84.1%	9.2%	1.3%	1.4%	0.5%	0.7%	0.4%	0.1%	0.0%	0.0%	0.0%	0.1%	1.6%	
AM Peak	09:00	08:00	08:00	08:00	08:00	07:00	08:00	10:00	11:00	11:00			08:00	08:00	
Vol.	9	1059	107	23	22	5	12	7	3	3			2	35	
PM Peak	14:00	17:00	16:00	12:00	15:00	14:00	18:00	16:00	15:00	20:00			17:00	12:00	
Vol.	20	1038	116	11	21	9	13	9	2	1			2	22	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/28/19	1	89	4	6	1	0	0	0	0	0	0	0	0	0	101
01:00	0	40	4	1	1	0	0	0	0	0	0	0	0	0	46
02:00	0	21	2	1	1	0	0	0	0	0	0	0	0	0	25
03:00	0	19	2	0	2	0	0	0	0	0	0	0	0	0	23
04:00	1	40	10	0	2	0	0	0	0	0	0	0	0	0	53
05:00	0	142	31	3	5	0	3	0	0	0	0	0	0	0	184
06:00	1	328	62	10	8	1	0	2	0	0	0	0	0	3	415
07:00	2	516	74	18	17	0	2	4	0	0	0	0	1	8	642
08:00	1	667	87	11	14	3	6	3	2	0	2	0	0	13	809
09:00	3	575	87	16	23	1	4	9	3	1	0	0	0	11	733
10:00	0	556	79	10	23	1	1	7	2	1	0	0	1	10	691
11:00	0	678	88	6	12	0	11	8	1	0	0	0	0	17	821
12 PM	1	794	103	12	21	3	14	2	1	0	0	0	1	18	970
13:00	0	732	83	8	18	3	13	10	2	0	0	0	0	8	877
14:00	2	792	104	8	23	1	6	9	1	1	0	0	2	20	969
15:00	3	925	102	20	12	3	10	7	0	1	0	0	0	14	1097
16:00	1	1157	96	16	9	5	23	12	1	0	0	0	0	29	1349
17:00	5	1273	78	4	11	3	17	6	0	0	0	0	2	25	1424
18:00	2	976	86	8	9	1	8	4	0	0	0	0	0	8	1102
19:00	3	858	66	6	10	1	6	2	0	0	0	0	0	12	964
20:00	2	700	57	8	6	1	1	3	0	0	0	0	0	4	782
21:00	0	536	29	9	2	0	2	1	0	0	0	0	0	2	581
22:00	0	271	14	10	2	0	0	0	0	0	0	0	0	1	298
23:00	0	182	7	9	3	1	0	0	1	0	0	0	0	0	203
Total	28	12867	1355	200	235	28	127	89	14	4	2	0	7	203	15159
Percent	0.2%	84.9%	8.9%	1.3%	1.6%	0.2%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	1.3%	
AM Peak	09:00	11:00	11:00	07:00	09:00	08:00	11:00	09:00	09:00	09:00	08:00		07:00	11:00	
Vol.	3	678	88	18	23	3	11	9	3	1	2		1	17	
PM Peak	17:00	17:00	14:00	15:00	14:00	16:00	16:00	16:00	13:00	14:00			14:00	16:00	
Vol.	5	1273	104	20	23	5	23	12	2	1			2	29	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/29/19	0	90	4	7	2	0	0	0	0	0	0	0	0	0	103
01:00	0	44	3	3	0	0	0	0	0	0	0	0	0	0	50
02:00	0	31	6	0	0	0	0	0	0	0	0	0	0	0	37
03:00	0	16	4	0	0	0	0	0	0	0	0	0	0	0	20
04:00	1	51	8	1	1	0	0	0	0	0	0	0	0	0	62
05:00	0	164	24	3	3	0	1	0	0	0	0	0	0	0	195
06:00	1	346	63	8	5	1	0	1	0	0	0	0	1	3	429
07:00	5	513	66	10	18	0	3	3	1	0	1	0	1	8	629
08:00	0	660	69	12	13	2	9	4	1	0	0	0	1	12	783
09:00	1	601	93	9	19	3	3	7	0	0	0	0	1	15	752
10:00	0	595	83	8	29	3	3	6	1	0	0	0	0	9	737
11:00	1	734	88	8	10	3	5	6	1	0	0	0	0	12	868
12 PM	1	826	121	11	16	4	9	8	2	0	0	0	1	18	1017
13:00	2	780	85	9	15	4	6	0	2	0	0	0	0	11	914
14:00	5	754	87	8	17	3	7	8	1	1	0	0	1	18	910
15:00	5	952	92	19	24	3	15	10	1	1	0	0	0	22	1144
16:00	6	1186	111	11	12	6	22	10	1	1	0	0	1	25	1392
17:00	4	1330	81	7	15	4	9	6	0	0	0	0	0	20	1476
18:00	5	1101	77	7	8	0	14	4	1	0	0	0	0	20	1237
19:00	7	811	81	6	6	2	8	7	1	0	0	0	0	9	938
20:00	0	785	53	7	5	1	4	3	0	0	0	0	0	9	867
21:00	2	565	24	7	3	0	2	2	0	0	0	0	0	3	608
22:00	0	323	17	11	1	0	1	1	1	0	0	0	0	3	358
23:00	0	211	12	7	2	0	0	0	1	0	0	0	0	2	235
Total	46	13469	1352	179	224	39	121	86	15	3	1	0	7	219	15761
Percent	0.3%	85.5%	8.6%	1.1%	1.4%	0.2%	0.8%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	1.4%	
AM Peak	07:00	11:00	09:00	08:00	10:00	09:00	08:00	09:00	07:00		07:00		06:00	09:00	
Vol.	5	734	93	12	29	3	9	7	1		1		1	15	
PM Peak	19:00	17:00	12:00	15:00	15:00	16:00	16:00	15:00	12:00	14:00			12:00	16:00	
Vol.	7	1330	121	19	24	6	22	10	2	1			1	25	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/30/19	0	95	4	7	2	0	0	0	0	0	0	0	0	0	108
01:00	1	43	1	3	0	0	0	0	0	0	0	0	0	0	48
02:00	0	33	4	0	0	0	0	0	0	0	0	0	0	0	37
03:00	0	21	4	0	0	0	0	1	0	0	0	0	0	0	26
04:00	2	51	5	0	1	0	0	0	0	0	0	0	0	0	59
05:00	2	150	29	4	2	0	0	0	0	0	0	0	0	0	187
06:00	2	338	56	10	3	0	1	0	0	0	0	0	0	3	413
07:00	5	547	80	11	14	4	3	7	1	1	0	0	0	9	682
08:00	4	672	92	12	7	3	6	3	0	2	0	0	0	15	816
09:00	3	650	84	10	21	5	4	3	1	0	0	0	4	6	791
10:00	1	686	98	15	17	2	3	6	2	2	0	0	1	8	841
11:00	8	769	101	8	13	4	10	11	2	0	0	0	0	11	937
12 PM	5	807	97	9	14	4	9	11	1	1	0	0	0	23	981
13:00	7	774	95	7	14	4	17	4	3	1	1	0	0	13	940
14:00	6	892	87	8	21	2	8	5	1	0	1	0	1	15	1047
15:00	5	964	111	18	14	1	14	14	0	0	0	0	2	18	1161
16:00	5	1194	101	7	10	3	14	8	1	0	0	0	0	22	1365
17:00	3	1326	110	5	9	2	10	13	0	0	0	0	1	20	1499
18:00	7	1022	70	6	5	4	12	7	1	0	0	0	0	15	1149
19:00	11	827	70	4	9	0	8	3	0	0	0	0	0	9	941
20:00	10	811	73	7	5	0	7	4	0	0	0	0	1	9	927
21:00	1	567	45	8	4	0	5	0	0	0	0	0	0	7	637
22:00	3	313	15	9	1	0	2	0	1	0	0	0	0	1	345
23:00	1	250	15	6	2	0	2	1	0	0	0	0	1	0	278
Total	92	13802	1447	174	188	38	135	101	14	7	2	0	11	204	16215
Percent	0.6%	85.1%	8.9%	1.1%	1.2%	0.2%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.3%	
AM Peak	11:00	11:00	11:00	10:00	09:00	09:00	11:00	11:00	10:00	08:00			09:00	08:00	
Vol.	8	769	101	15	21	5	10	11	2	2			4	15	
PM Peak	19:00	17:00	15:00	15:00	14:00	12:00	13:00	15:00	13:00	12:00	13:00		15:00	12:00	
Vol.	11	1326	111	18	21	4	17	14	3	1	1		2	23	
Grand Total	480	91189	9990	1342	1609	285	857	615	103	29	8	0	56	1479	108042
Percent	0.4%	84.4%	9.2%	1.2%	1.5%	0.3%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.4%	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/24/19	2	218	12	15	2	0	2	0	0	0	0	0	0	2	253
01:00	0	106	6	4	1	0	1	0	0	0	0	0	0	0	118
02:00	1	80	10	2	4	0	0	0	0	0	0	0	0	0	97
03:00	1	51	3	0	1	0	0	0	0	0	0	0	0	0	56
04:00	1	83	12	2	1	0	0	0	0	0	0	0	0	0	99
05:00	3	253	46	9	6	0	1	2	0	0	0	0	0	0	320
06:00	8	612	105	21	19	5	2	5	1	1	0	0	0	7	786
07:00	7	1158	165	27	43	3	5	9	2	2	0	0	2	24	1447
08:00	14	1736	243	29	44	6	23	13	1	1	0	0	2	35	2147
09:00	10	1396	201	18	32	4	13	12	6	1	0	0	2	25	1720
10:00	11	1420	191	24	40	5	11	23	4	1	0	0	0	25	1755
11:00	17	1607	205	17	46	7	12	21	5	0	0	0	0	29	1966
12 PM	11	1736	228	15	39	3	11	12	4	0	0	0	3	27	2089
13:00	6	1703	258	18	44	7	14	15	3	4	0	0	3	45	2120
14:00	23	1766	228	18	44	6	31	14	6	0	1	0	2	44	2183
15:00	16	1967	214	38	43	4	18	17	1	0	0	0	1	42	2361
16:00	21	2334	238	25	29	4	31	17	0	0	0	0	1	48	2748
17:00	21	2402	196	10	20	8	20	17	6	0	1	0	5	51	2757
18:00	17	2021	197	11	21	3	17	11	4	0	0	0	2	35	2339
19:00	12	1467	148	11	9	9	20	9	1	0	0	0	0	23	1709
20:00	10	1129	98	12	17	4	8	4	1	0	0	0	0	17	1300
21:00	2	961	80	11	8	3	5	2	1	0	0	0	0	14	1087
22:00	6	788	57	8	7	1	1	2	1	1	0	0	0	5	877
23:00	4	548	32	8	4	0	3	0	1	0	0	0	0	4	604
Total	224	27542	3173	353	524	82	249	205	48	11	2	0	23	502	32938
Percent	0.7%	83.6%	9.6%	1.1%	1.6%	0.2%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.5%	
AM Peak	11:00	08:00	08:00	08:00	11:00	11:00	08:00	10:00	09:00	07:00			07:00	08:00	
Vol.	17	1736	243	29	46	7	23	23	6	2			2	35	
PM Peak	14:00	17:00	13:00	15:00	13:00	19:00	14:00	15:00	14:00	13:00	14:00		17:00	17:00	
Vol.	23	2402	258	38	44	9	31	17	6	4	1		5	51	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/25/19	3	332	24	9	3	0	0	0	0	0	0	0	0	4	375
01:00	0	149	11	3	0	0	0	0	0	0	0	0	1	0	164
02:00	1	116	4	1	0	0	0	0	0	0	0	0	0	0	122
03:00	0	53	4	0	1	0	0	0	0	0	0	0	0	0	58
04:00	0	84	11	5	0	0	0	0	0	0	0	0	0	0	100
05:00	1	159	27	6	1	0	1	1	1	0	0	0	0	1	198
06:00	1	407	72	17	15	3	1	1	1	1	0	0	0	7	526
07:00	1	875	107	19	15	9	2	4	1	1	0	0	2	14	1050
08:00	2	1541	147	33	33	14	13	10	1	0	0	0	1	34	1829
09:00	4	1353	142	26	35	10	8	11	5	3	0	0	2	41	1640
10:00	3	1493	195	16	26	11	14	7	2	2	0	0	0	38	1807
11:00	8	1504	197	15	37	8	15	14	1	0	0	0	1	34	1834
12 PM	4	1630	223	14	29	5	18	13	2	0	1	0	1	37	1977
13:00	10	1629	198	15	40	4	19	22	0	1	0	0	1	27	1966
14:00	13	1547	217	13	25	7	23	11	2	0	0	0	0	29	1887
15:00	5	1649	189	27	29	4	16	15	1	0	0	0	2	30	1967
16:00	7	1766	172	16	35	9	24	13	1	0	0	0	0	42	2085
17:00	9	1709	183	18	23	5	18	15	1	0	0	0	0	29	2010
18:00	4	1655	135	11	21	8	24	12	1	1	2	0	0	29	1903
19:00	9	1378	132	18	11	1	8	8	3	1	0	0	1	18	1588
20:00	5	1135	116	14	12	1	13	4	0	0	0	0	0	16	1316
21:00	3	867	83	14	11	0	2	2	1	0	0	0	0	12	995
22:00	3	642	51	13	4	1	3	2	0	0	0	0	0	4	723
23:00	1	571	41	17	6	0	0	0	0	0	0	0	0	4	640
Total	97	24244	2681	340	412	100	222	165	24	10	3	0	12	450	28760
Percent	0.3%	84.3%	9.3%	1.2%	1.4%	0.3%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	1.6%	
AM Peak	11:00	08:00	11:00	08:00	11:00	08:00	11:00	11:00	09:00	09:00			07:00	09:00	
Vol.	8	1541	197	33	37	14	15	14	5	3			2	41	
PM Peak	14:00	16:00	12:00	15:00	13:00	16:00	16:00	13:00	19:00	13:00	18:00		15:00	16:00	
Vol.	13	1766	223	27	40	9	24	22	3	1	2		2	42	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/26/19	1	319	26	16	0	1	0	3	0	0	0	0	0	1	367
01:00	1	208	9	2	1	0	0	0	0	0	0	0	0	0	221
02:00	2	156	4	0	0	0	0	0	0	0	0	0	0	0	162
03:00	0	81	5	0	0	0	0	0	0	0	0	0	0	0	86
04:00	0	81	8	4	0	0	0	0	0	0	0	0	0	0	93
05:00	2	133	25	6	3	1	0	0	0	0	0	0	0	1	171
06:00	1	395	65	13	11	3	0	2	1	0	0	0	0	5	496
07:00	5	830	104	14	17	1	4	4	1	1	0	0	0	13	994
08:00	8	1521	153	24	35	5	10	7	1	0	0	0	0	39	1803
09:00	15	1303	147	17	13	2	6	6	0	0	1	0	1	18	1529
10:00	10	1319	198	18	24	1	18	6	2	0	0	0	0	26	1622
11:00	17	1588	188	16	25	4	18	15	1	0	0	0	1	27	1900
12 PM	17	1540	217	14	30	5	13	21	1	1	0	0	0	31	1890
13:00	17	1643	185	18	22	3	23	11	1	0	0	0	0	37	1960
14:00	24	1657	198	19	30	5	17	12	1	0	0	0	2	23	1988
15:00	10	1761	219	16	42	1	31	13	0	0	1	0	1	50	2145
16:00	17	1797	195	17	19	4	13	14	0	0	0	0	0	26	2102
17:00	12	1722	186	16	18	0	17	13	1	0	0	0	2	36	2023
18:00	16	1601	165	15	25	4	12	12	0	0	0	0	1	29	1880
19:00	16	1312	117	12	12	2	11	6	1	0	0	0	0	18	1507
20:00	12	1224	113	11	12	3	10	9	1	0	0	0	0	10	1405
21:00	3	998	80	7	4	2	8	4	2	0	0	0	0	9	1117
22:00	3	611	47	11	7	1	1	0	1	0	0	0	0	3	685
23:00	2	343	29	11	3	0	2	2	0	0	0	0	0	2	394
Total	211	24143	2683	297	353	48	214	160	15	2	2	0	8	404	28540
Percent	0.7%	84.6%	9.4%	1.0%	1.2%	0.2%	0.7%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	1.4%	
AM Peak	11:00	11:00	10:00	08:00	08:00	08:00	10:00	11:00	10:00	07:00	09:00		09:00	08:00	
Vol.	17	1588	198	24	35	5	18	15	2	1	1		1	39	
PM Peak	14:00	16:00	15:00	14:00	15:00	12:00	15:00	12:00	21:00	12:00	15:00		14:00	15:00	
Vol.	24	1797	219	19	42	5	31	21	2	1	1		2	50	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/27/19	0	217	14	12	0	0	0	0	0	0	0	0	0	0	243
01:00	1	95	7	2	2	0	0	0	0	0	0	0	0	0	107
02:00	1	56	6	1	1	0	0	0	0	0	0	0	0	0	65
03:00	0	33	1	1	0	0	0	0	0	0	0	0	0	0	35
04:00	1	72	9	7	3	0	0	0	0	0	0	0	0	0	92
05:00	2	196	37	9	4	3	2	0	0	0	0	0	0	2	255
06:00	2	594	122	18	19	4	3	3	1	2	0	0	2	7	777
07:00	9	1239	160	35	30	10	19	7	2	2	0	0	3	15	1531
08:00	13	2133	220	51	49	11	23	16	0	2	0	0	5	68	2591
09:00	15	1497	201	20	38	3	16	11	4	1	0	0	3	30	1839
10:00	10	1362	221	16	35	7	8	15	3	0	0	0	1	20	1698
11:00	9	1368	212	25	36	6	10	11	5	3	1	0	0	19	1705
12 PM	6	1433	199	21	31	4	20	6	2	0	0	0	1	39	1762
13:00	20	1397	159	20	37	6	7	8	1	0	0	0	1	25	1681
14:00	23	1260	182	27	29	12	3	11	0	0	0	0	0	35	1582
15:00	13	1673	199	25	43	13	20	16	2	0	0	1	2	43	2050
16:00	12	1828	240	19	35	4	20	16	3	0	0	0	1	39	2217
17:00	11	2065	213	16	27	7	18	7	1	1	0	0	2	40	2408
18:00	9	1746	172	13	18	6	23	3	0	0	0	0	4	39	2033
19:00	12	1299	90	12	10	9	9	6	1	0	1	0	0	13	1462
20:00	7	1124	86	14	9	1	8	5	1	3	0	0	0	15	1273
21:00	3	815	45	13	9	1	4	3	0	0	0	0	0	12	905
22:00	6	554	28	14	2	1	3	1	0	1	0	0	0	6	616
23:00	2	424	35	16	3	0	1	1	1	0	0	0	0	2	485
Total	187	24480	2858	407	470	108	217	146	27	15	2	1	25	469	29412
Percent	0.6%	83.2%	9.7%	1.4%	1.6%	0.4%	0.7%	0.5%	0.1%	0.1%	0.0%	0.0%	0.1%	1.6%	
AM Peak	09:00	08:00	10:00	08:00	08:00	08:00	08:00	08:00	11:00	11:00	11:00		08:00	08:00	
Vol.	15	2133	221	51	49	11	23	16	5	3	1		5	68	
PM Peak	14:00	17:00	16:00	14:00	15:00	15:00	18:00	15:00	16:00	20:00	19:00	15:00	18:00	15:00	
Vol.	23	2065	240	27	43	13	23	16	3	3	1	1	4	43	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/28/19	1	154	12	13	4	0	0	0	0	0	0	0	0	1	185
01:00	0	80	8	1	2	0	0	0	0	0	0	0	0	0	91
02:00	2	52	6	1	2	0	0	0	0	0	0	0	0	0	63
03:00	0	34	3	1	2	0	0	0	0	0	0	0	0	0	40
04:00	1	77	11	2	5	0	0	0	0	0	0	0	0	0	96
05:00	0	241	52	9	5	2	3	1	0	0	0	0	0	7	320
06:00	1	600	120	18	17	7	5	2	0	0	0	0	0	29	799
07:00	5	1174	138	35	26	10	7	4	4	1	0	0	2	27	1433
08:00	2	1773	179	35	34	11	25	12	6	0	2	0	0	88	2167
09:00	3	1312	172	29	42	4	12	15	5	1	0	0	1	43	1639
10:00	0	1219	161	23	44	7	3	11	4	3	0	0	2	25	1502
11:00	0	1394	167	17	25	1	19	11	2	0	0	0	1	32	1669
12 PM	1	1526	185	22	36	10	20	8	3	0	0	0	3	31	1845
13:00	2	1444	193	17	37	8	21	15	2	1	0	0	0	30	1770
14:00	4	1504	204	25	43	5	17	9	3	1	0	0	2	47	1864
15:00	6	1739	194	34	33	11	23	8	5	1	0	0	2	46	2102
16:00	2	2074	181	22	17	9	41	23	2	0	0	0	0	58	2429
17:00	7	2263	186	10	23	6	26	15	0	0	0	0	3	44	2583
18:00	4	1892	160	13	14	4	17	9	1	0	0	0	2	31	2147
19:00	4	1573	123	17	14	4	9	3	0	0	0	0	1	27	1775
20:00	4	1266	102	17	7	1	3	3	0	0	0	0	0	15	1418
21:00	0	990	61	17	6	1	5	4	0	0	0	0	0	6	1090
22:00	1	573	26	18	5	0	2	0	1	0	0	0	0	4	630
23:00	0	331	21	19	9	1	0	0	1	0	0	0	0	1	383
Total	50	25285	2665	415	452	102	258	153	39	8	2	0	19	592	30040
Percent	0.2%	84.2%	8.9%	1.4%	1.5%	0.3%	0.9%	0.5%	0.1%	0.0%	0.0%	0.0%	0.1%	2.0%	
AM Peak	07:00	08:00	08:00	07:00	10:00	08:00	08:00	09:00	08:00	10:00	08:00		07:00	08:00	
Vol.	5	1773	179	35	44	11	25	15	6	3	2		2	88	
PM Peak	17:00	17:00	14:00	15:00	14:00	15:00	16:00	16:00	15:00	13:00			12:00	16:00	
Vol.	7	2263	204	34	43	11	41	23	5	1			3	58	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/29/19	0	195	16	16	3	0	0	0	0	0	0	0	0	0	230
01:00	0	99	5	4	1	1	1	0	0	0	0	0	0	0	111
02:00	2	61	12	0	0	0	0	0	0	0	0	0	0	0	75
03:00	0	32	7	0	0	0	0	0	0	0	0	0	0	0	39
04:00	1	80	14	4	2	0	0	0	0	0	0	0	0	0	101
05:00	0	263	46	10	4	0	2	0	0	0	0	0	0	0	325
06:00	3	651	118	20	16	2	3	2	0	0	0	0	2	5	822
07:00	7	1147	144	26	42	7	6	8	4	0	1	0	2	18	1412
08:00	3	1823	182	35	28	7	27	22	1	0	0	0	2	40	2170
09:00	5	1362	174	21	38	12	14	14	2	0	0	0	2	53	1697
10:00	3	1240	164	17	53	8	14	9	2	1	0	0	2	44	1557
11:00	5	1459	184	22	26	7	13	12	3	1	0	0	0	25	1757
12 PM	5	1602	205	22	31	11	15	14	4	0	0	0	4	30	1943
13:00	4	1481	171	23	31	4	13	3	3	0	0	0	1	30	1764
14:00	9	1480	182	18	39	6	13	14	4	1	0	0	2	36	1804
15:00	11	1798	205	32	43	5	22	16	3	1	0	0	3	40	2179
16:00	12	2070	210	23	26	10	31	19	1	1	0	0	3	45	2451
17:00	6	2407	183	16	25	8	25	11	0	0	0	0	0	41	2722
18:00	11	2115	183	13	19	3	20	10	3	0	0	0	1	39	2417
19:00	13	1525	156	15	11	4	17	10	1	0	0	0	0	22	1774
20:00	5	1448	115	16	10	2	11	9	0	0	0	0	1	18	1635
21:00	3	1058	65	17	6	0	4	3	0	0	0	0	0	7	1163
22:00	2	618	36	19	5	0	4	5	2	0	0	0	0	5	696
23:00	1	403	26	16	3	0	0	0	1	0	0	0	0	5	455
Total	111	26417	2803	405	462	97	255	181	34	5	1	0	25	503	31299
Percent	0.4%	84.4%	9.0%	1.3%	1.5%	0.3%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.6%	
AM Peak	07:00	08:00	11:00	08:00	10:00	09:00	08:00	08:00	07:00	10:00	07:00		06:00	09:00	
Vol.	7	1823	184	35	53	12	27	22	4	1	1		2	53	
PM Peak	19:00	17:00	16:00	15:00	15:00	12:00	16:00	16:00	12:00	14:00			12:00	16:00	
Vol.	13	2407	210	32	43	11	31	19	4	1			4	45	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classed	Total
05/30/19	1	188	7	15	3	0	0	0	0	0	0	0	0	0	214
01:00	1	85	7	5	0	0	0	0	0	0	0	0	0	0	98
02:00	1	60	7	0	0	0	0	0	0	0	0	0	0	0	68
03:00	0	39	5	0	1	0	0	1	0	0	0	0	0	0	46
04:00	3	88	8	3	2	0	0	0	0	0	0	0	0	0	104
05:00	3	252	49	10	5	1	1	0	1	0	0	0	0	0	322
06:00	4	632	104	20	6	2	5	1	0	1	0	0	2	6	783
07:00	10	1199	156	27	22	8	9	13	2	2	0	0	1	17	1466
08:00	8	1737	199	40	27	8	26	14	1	3	0	0	2	55	2120
09:00	6	1406	196	19	36	12	7	10	3	0	0	0	6	22	1723
10:00	2	1382	204	27	44	5	8	14	3	2	0	0	1	32	1724
11:00	12	1461	188	21	36	10	16	21	5	0	0	0	1	27	1798
12 PM	6	1616	220	15	32	6	14	20	1	1	0	0	1	44	1976
13:00	13	1552	209	20	36	4	23	14	3	1	2	0	0	31	1908
14:00	12	1674	200	20	37	4	12	13	3	0	1	0	2	27	2005
15:00	14	1839	232	36	37	2	23	23	0	1	0	0	3	40	2250
16:00	9	2185	222	13	29	4	22	15	1	1	0	0	2	37	2540
17:00	6	2422	233	11	22	3	22	27	0	0	1	0	1	47	2795
18:00	10	2032	195	14	14	6	22	13	1	0	1	0	1	26	2335
19:00	16	1588	171	12	17	1	10	7	0	1	0	0	1	14	1838
20:00	15	1457	136	15	13	0	14	6	0	0	0	0	1	20	1677
21:00	4	1021	92	15	8	1	8	4	0	0	0	0	1	11	1165
22:00	8	608	43	17	2	1	5	1	1	0	0	0	1	3	690
23:00	5	504	34	13	3	0	3	1	1	0	0	0	1	2	567
Total	169	27027	3117	388	432	78	250	218	26	13	5	0	28	461	32212
Percent	0.5%	83.9%	9.7%	1.2%	1.3%	0.2%	0.8%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%	1.4%	
AM Peak	11:00	08:00	10:00	08:00	10:00	09:00	08:00	11:00	11:00	08:00			09:00	08:00	
Vol.	12	1737	204	40	44	12	26	21	5	3			6	55	
PM Peak	19:00	17:00	17:00	15:00	14:00	12:00	13:00	17:00	13:00	12:00	13:00		15:00	17:00	
Vol.	16	2422	233	36	37	6	23	27	3	1	2		3	47	
Grand Total	1049	179138	19980	2605	3105	615	1665	1228	213	64	17	1	140	3381	213201
Percent	0.5%	84.0%	9.4%	1.2%	1.5%	0.3%	0.8%	0.6%	0.1%	0.0%	0.0%	0.0%	0.1%	1.6%	

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/24/19	1	2	0	3	8	25	32	38	35	1	0	0	145
01:00	0	1	2	2	4	16	13	14	10	1	0	0	63
02:00	1	0	0	4	2	5	8	19	8	1	0	0	48
03:00	0	0	1	1	4	1	5	9	1	2	0	1	25
04:00	0	0	0	1	5	4	10	15	6	1	0	0	42
05:00	0	0	1	1	10	20	31	31	26	2	1	1	124
06:00	1	0	4	12	18	86	87	114	52	12	0	0	386
07:00	6	13	4	45	40	193	183	190	94	6	1	0	775
08:00	13	72	66	178	200	375	204	135	41	0	0	0	1284
09:00	3	2	10	68	91	303	174	172	77	4	0	0	904
10:00	3	3	5	39	107	313	218	165	88	8	0	0	949
11:00	6	5	16	74	120	316	202	188	48	3	1	0	979
12 PM	3	3	12	74	111	340	201	183	59	5	0	0	991
13:00	1	15	12	61	129	334	225	168	88	9	0	0	1042
14:00	7	7	20	98	138	342	215	171	52	5	1	0	1056
15:00	15	14	28	116	146	336	228	161	59	6	1	0	1110
16:00	32	93	67	205	212	293	158	122	37	4	0	0	1223
17:00	32	61	59	217	219	329	179	159	31	4	0	0	1290
18:00	10	32	38	107	133	354	227	162	58	4	0	0	1125
19:00	4	11	10	49	69	254	208	179	85	4	0	0	873
20:00	5	2	4	27	77	258	151	133	42	7	0	0	706
21:00	2	5	10	57	95	232	127	100	24	2	0	0	654
22:00	2	1	2	22	47	157	115	135	35	5	0	0	521
23:00	0	0	2	17	33	105	58	77	51	6	0	0	349
Total	147	342	373	1478	2018	4991	3259	2840	1107	102	5	2	16664

15th Percentile :	49 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	72 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	11090
Percent in Pace :	66.6%
Number of Vehicles > 60 KPH :	6663
Percent of Vehicles > 60 KPH :	40.0%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/25/19	1	1	1	6	21	68	56	60	28	3	0	0	245
01:00	0	0	2	6	5	30	36	28	12	2	0	0	121
02:00	0	1	0	2	4	16	19	31	18	0	0	1	92
03:00	1	0	0	3	0	9	6	9	11	2	1	0	42
04:00	0	0	0	2	5	8	11	16	12	1	2	0	57
05:00	0	2	2	2	4	13	16	13	10	1	0	0	63
06:00	0	2	1	9	6	39	41	32	20	5	0	0	155
07:00	0	0	3	11	22	82	73	65	37	3	0	0	296
08:00	0	0	3	18	45	146	127	117	54	7	0	0	517
09:00	0	1	3	36	57	215	194	165	67	2	0	0	740
10:00	0	2	10	53	104	287	234	185	54	1	0	0	930
11:00	0	7	13	64	134	313	212	184	70	4	0	0	1001
12 PM	8	16	37	84	124	355	187	190	68	4	0	0	1073
13:00	2	8	9	63	111	371	236	235	81	9	0	0	1125
14:00	6	18	25	136	153	314	187	152	53	2	0	0	1046
15:00	2	8	4	52	80	365	218	188	75	7	0	0	999
16:00	5	12	10	80	127	317	205	178	54	4	1	0	993
17:00	5	71	40	163	125	205	100	87	37	1	0	0	834
18:00	0	4	4	52	83	279	206	176	60	3	0	0	867
19:00	3	2	2	23	61	219	158	185	74	5	1	0	733
20:00	1	1	1	13	42	187	130	162	72	11	2	0	622
21:00	0	3	8	44	52	159	139	94	31	6	3	0	539
22:00	0	2	1	21	46	100	93	95	42	4	0	0	404
23:00	0	4	4	19	46	117	119	87	45	3	0	0	444
Total	34	165	183	962	1457	4214	3003	2734	1085	90	10	1	13938

15th Percentile :	51 KPH
50th Percentile :	58 KPH
85th Percentile :	67 KPH
95th Percentile :	73 KPH

Statistics

Mean Speed(Average) :	60 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9951
Percent in Pace :	71.4%
Number of Vehicles > 60 KPH :	6322
Percent of Vehicles > 60 KPH :	45.4%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/26/19	0	0	1	11	17	72	66	57	27	3	1	0	255
01:00	0	0	1	4	12	47	43	32	33	2	1	0	175
02:00	1	1	0	2	3	23	25	36	21	3	0	1	116
03:00	0	1	0	4	8	13	16	24	7	2	1	0	76
04:00	0	1	1	1	1	10	12	13	4	0	0	0	43
05:00	0	1	0	2	1	7	11	12	10	0	1	0	45
06:00	0	0	1	1	8	26	20	30	15	4	0	0	105
07:00	3	0	1	2	4	43	57	58	34	2	0	0	204
08:00	1	1	1	8	14	72	90	142	83	14	0	0	426
09:00	9	0	3	31	49	163	165	173	59	7	2	0	661
10:00	4	5	12	49	67	256	202	182	71	6	0	0	854
11:00	11	6	16	62	104	310	213	189	64	2	1	0	978
12 PM	10	10	12	51	110	312	220	207	81	3	1	0	1017
13:00	5	17	19	109	138	343	237	177	48	1	0	0	1094
14:00	9	17	14	60	107	377	243	177	61	4	0	0	1069
15:00	16	13	22	124	117	326	223	182	47	1	0	0	1071
16:00	4	5	15	74	120	281	193	173	61	6	1	1	934
17:00	10	22	6	54	78	215	169	191	72	5	0	1	823
18:00	4	1	1	27	50	175	197	204	99	16	0	0	774
19:00	3	4	1	20	36	152	169	201	97	12	0	0	695
20:00	2	11	5	20	43	174	150	141	68	10	1	0	625
21:00	0	2	1	19	53	142	93	118	67	3	0	0	498
22:00	0	2	3	10	26	79	69	117	38	8	0	0	352
23:00	0	1	0	3	10	41	44	59	22	4	0	0	184
Total	92	121	136	748	1176	3659	2927	2895	1189	118	10	3	13074

15th Percentile :	52 KPH
50th Percentile :	60 KPH
85th Percentile :	67 KPH
95th Percentile :	74 KPH

Statistics

Mean Speed(Average) :	61 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9481
Percent in Pace :	72.5%
Number of Vehicles > 60 KPH :	6557
Percent of Vehicles > 60 KPH :	50.1%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/27/19	0	0	0	4	2	23	15	37	25	2	0	0	108
01:00	0	0	0	1	2	17	10	13	7	1	0	0	51
02:00	0	0	0	1	1	4	5	8	1	1	2	0	23
03:00	0	0	0	0	2	3	5	4	5	0	0	0	19
04:00	0	0	0	3	3	11	10	11	8	0	0	0	46
05:00	0	0	2	3	3	22	33	40	20	4	0	0	127
06:00	1	1	3	11	17	82	107	119	49	3	1	0	394
07:00	12	17	27	35	59	235	149	172	64	5	0	0	775
08:00	27	72	57	186	212	378	196	152	35	3	0	0	1318
09:00	7	13	25	70	102	298	203	167	54	3	0	0	942
10:00	7	4	13	54	104	286	225	151	39	1	0	0	884
11:00	6	6	12	51	85	255	209	150	62	3	0	0	839
12 PM	3	2	14	73	139	274	190	166	42	0	0	1	904
13:00	5	2	16	58	92	249	214	153	62	6	0	0	857
14:00	2	6	7	67	94	290	181	186	67	3	1	0	904
15:00	22	25	30	109	166	301	201	138	54	5	1	0	1052
16:00	5	52	40	160	169	345	169	141	48	4	0	0	1133
17:00	92	134	115	175	179	263	128	101	29	0	1	0	1217
18:00	8	12	33	99	122	358	207	142	68	6	1	0	1056
19:00	3	0	6	40	95	225	190	167	65	8	0	0	799
20:00	1	2	3	41	80	194	143	135	64	2	0	0	665
21:00	5	1	1	21	54	132	117	92	33	2	0	0	458
22:00	0	0	1	7	27	83	69	89	29	6	0	0	311
23:00	0	0	1	3	16	51	34	53	24	3	0	0	185
Total	206	349	406	1272	1825	4379	3010	2587	954	71	7	1	15067

15th Percentile :	49 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9976
Percent in Pace :	66.2%
Number of Vehicles > 60 KPH :	6028
Percent of Vehicles > 60 KPH :	40.0%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/28/19	0	1	0	5	4	18	17	25	12	1	0	1	84
01:00	0	0	0	1	1	8	11	11	12	1	0	0	45
02:00	1	1	0	2	3	7	6	13	4	0	1	0	38
03:00	0	0	1	0	1	8	2	2	3	0	0	0	17
04:00	0	0	1	3	5	11	8	5	10	0	0	0	43
05:00	0	0	2	3	13	25	29	37	25	1	1	0	136
06:00	0	1	5	13	24	105	87	93	48	7	1	0	384
07:00	1	7	20	48	81	215	191	168	58	2	0	0	791
08:00	30	63	69	227	254	398	173	107	33	4	0	0	1358
09:00	3	21	17	94	119	293	183	141	35	0	0	0	906
10:00	1	13	19	62	101	241	181	137	50	5	1	0	811
11:00	4	12	17	62	120	276	170	143	44	0	0	0	848
12 PM	1	8	22	97	122	242	179	156	46	2	0	0	875
13:00	0	2	9	78	113	300	176	162	47	6	0	0	893
14:00	0	12	37	96	137	297	156	119	40	1	0	0	895
15:00	10	39	44	141	149	311	150	121	37	3	0	0	1005
16:00	58	83	78	191	130	262	133	111	30	3	0	1	1080
17:00	91	137	104	199	140	241	124	86	35	2	0	0	1159
18:00	1	22	27	87	151	375	183	148	46	5	0	0	1045
19:00	0	4	8	55	97	271	164	143	62	7	0	0	811
20:00	1	2	12	42	64	190	151	109	59	6	0	0	636
21:00	0	3	6	31	55	166	91	110	47	0	0	0	509
22:00	1	4	7	14	31	69	70	99	35	2	0	0	332
23:00	0	1	2	9	9	45	36	43	33	1	1	0	180
Total	203	436	507	1560	1924	4374	2671	2289	851	59	5	2	14881

15th Percentile :	47 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	57 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9334
Percent in Pace :	62.7%
Number of Vehicles > 60 KPH :	5343
Percent of Vehicles > 60 KPH :	35.9%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/29/19	0	0	2	4	4	24	25	47	19	2	0	0	127
01:00	0	0	1	0	3	9	15	20	11	2	0	0	61
02:00	1	1	0	0	2	6	8	9	11	0	0	0	38
03:00	0	0	0	2	1	1	5	5	5	0	0	0	19
04:00	0	0	0	2	3	16	2	8	6	2	0	0	39
05:00	0	0	1	4	7	21	32	35	27	2	1	0	130
06:00	2	0	1	13	18	86	111	95	60	7	0	0	393
07:00	10	15	17	32	77	201	161	193	72	5	0	0	783
08:00	64	168	132	223	197	344	133	99	26	1	0	0	1387
09:00	2	7	15	88	148	322	182	139	41	1	0	0	945
10:00	7	9	15	74	96	236	168	169	43	2	1	0	820
11:00	4	17	30	93	119	269	159	143	52	3	0	0	889
12 PM	4	23	22	84	125	279	194	143	49	2	1	0	926
13:00	4	12	17	73	106	253	194	135	51	3	1	1	850
14:00	6	14	18	80	112	295	177	135	56	1	0	0	894
15:00	31	46	36	108	147	298	176	136	54	1	2	0	1035
16:00	60	68	60	183	149	233	149	123	28	6	0	0	1059
17:00	80	152	122	231	187	251	123	77	23	0	0	0	1246
18:00	52	66	61	147	170	285	185	163	48	3	0	0	1180
19:00	4	10	15	68	71	265	172	169	59	2	1	0	836
20:00	2	7	12	48	78	239	180	147	48	6	1	0	768
21:00	1	2	8	31	72	201	116	89	34	0	1	0	555
22:00	0	2	2	13	26	91	76	77	48	3	0	0	338
23:00	0	2	0	7	17	42	60	56	31	5	0	0	220
Total	334	621	587	1608	1935	4267	2803	2412	902	59	9	1	15538

15th Percentile :	46 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	57 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9482
Percent in Pace :	61.0%
Number of Vehicles > 60 KPH :	5625
Percent of Vehicles > 60 KPH :	36.2%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/30/19	1	1	2	2	9	27	28	19	11	4	0	2	106
01:00	0	0	0	0	0	8	15	14	13	0	0	0	50
02:00	0	1	0	2	2	9	8	7	2	0	0	0	31
03:00	0	0	0	1	1	4	2	5	7	0	0	0	20
04:00	0	1	1	5	3	9	10	11	5	0	0	0	45
05:00	0	0	0	5	10	27	34	42	15	2	0	0	135
06:00	2	0	4	16	30	83	91	90	48	6	0	0	370
07:00	15	25	14	44	61	218	181	160	63	3	0	0	784
08:00	37	66	62	211	190	385	200	121	28	1	1	2	1304
09:00	5	18	39	109	140	287	187	103	41	2	1	0	932
10:00	2	11	29	95	125	271	157	138	52	3	0	0	883
11:00	18	23	18	80	127	252	163	146	29	5	0	0	861
12 PM	14	27	36	126	181	260	174	130	44	3	0	0	995
13:00	31	41	33	94	142	290	166	131	36	4	0	0	968
14:00	14	26	34	118	136	299	150	128	49	4	0	0	958
15:00	26	68	49	132	155	321	166	136	36	0	0	0	1089
16:00	112	123	81	188	181	261	99	92	34	4	0	0	1175
17:00	44	103	99	167	169	360	192	129	32	1	0	0	1296
18:00	17	64	30	139	159	372	216	137	46	4	1	1	1186
19:00	3	5	11	53	72	241	207	207	88	9	0	1	897
20:00	4	6	12	67	90	202	138	176	52	3	0	0	750
21:00	1	1	6	27	54	195	108	89	43	3	1	0	528
22:00	2	1	3	22	29	84	69	92	39	3	1	0	345
23:00	1	1	5	18	30	53	71	73	35	2	0	0	289
Total	349	612	568	1721	2096	4518	2832	2376	848	66	5	6	15997

15th Percentile :	46 KPH
50th Percentile :	56 KPH
85th Percentile :	65 KPH
95th Percentile :	70 KPH

Statistics

Mean Speed(Average) :	56 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9726
Percent in Pace :	60.8%
Number of Vehicles > 60 KPH :	5567
Percent of Vehicles > 60 KPH :	34.8%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/24/19	0	0	1	4	9	18	28	28	14	5	1	0	108
01:00	0	0	1	2	1	16	7	18	9	1	0	0	55
02:00	0	0	0	0	3	8	9	18	10	1	0	0	49
03:00	0	0	0	1	0	6	8	11	5	0	0	0	31
04:00	0	0	1	0	4	12	12	14	12	2	0	0	57
05:00	0	0	0	3	5	29	37	65	50	6	1	0	196
06:00	2	3	1	9	9	66	82	125	91	9	3	0	400
07:00	2	3	0	29	38	143	139	206	102	7	2	1	672
08:00	10	25	23	39	110	255	191	145	60	4	1	0	863
09:00	17	9	24	66	88	233	182	134	61	2	0	0	816
10:00	5	11	2	38	57	239	209	181	63	1	0	0	806
11:00	6	7	19	78	111	307	210	167	76	4	1	1	987
12 PM	3	19	24	95	143	348	219	193	47	5	2	0	1098
13:00	4	16	17	67	123	337	239	191	72	11	1	0	1078
14:00	2	7	18	95	125	388	224	200	64	2	2	0	1127
15:00	8	20	27	129	191	395	247	187	45	1	0	1	1251
16:00	9	58	66	227	256	491	233	140	41	4	0	0	1525
17:00	35	74	76	186	215	416	234	178	53	0	0	0	1467
18:00	4	7	20	121	178	356	264	198	62	4	0	0	1214
19:00	5	3	3	57	81	209	189	209	67	13	0	0	836
20:00	3	2	3	18	30	145	133	158	90	10	2	0	594
21:00	0	1	0	11	26	122	118	110	43	2	0	0	433
22:00	2	3	1	16	29	84	85	91	40	5	0	0	356
23:00	0	1	2	17	19	61	48	72	28	5	2	0	255
Total	117	269	329	1308	1851	4684	3347	3039	1205	104	18	3	16274

15th Percentile :	50 KPH
50th Percentile :	58 KPH
85th Percentile :	67 KPH
95th Percentile :	73 KPH

Statistics

Mean Speed(Average) :	59 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	11070
Percent in Pace :	68.0%
Number of Vehicles > 60 KPH :	7047
Percent of Vehicles > 60 KPH :	43.3%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/25/19	0	0	0	2	8	20	26	43	28	2	0	1	130
01:00	0	1	0	1	3	12	6	12	7	1	0	0	43
02:00	0	0	0	0	5	8	4	9	2	2	0	0	30
03:00	0	0	0	2	4	5	0	5	0	0	0	0	16
04:00	0	0	0	3	5	13	7	10	5	0	0	0	43
05:00	0	1	1	6	13	24	29	42	19	0	0	0	135
06:00	0	1	2	19	15	81	83	116	50	3	1	0	371
07:00	5	14	13	33	46	223	178	168	65	8	1	0	754
08:00	36	93	77	192	213	358	190	118	31	4	0	0	1312
09:00	12	26	19	74	98	287	187	141	48	7	1	0	900
10:00	1	1	10	50	108	292	192	183	38	1	1	0	877
11:00	2	13	20	89	102	246	178	133	46	4	0	0	833
12 PM	2	16	18	73	111	292	181	159	50	2	0	0	904
13:00	10	25	20	79	94	249	168	150	44	2	0	0	841
14:00	3	3	8	56	103	278	168	154	62	6	0	0	841
15:00	14	20	35	109	149	278	176	127	55	5	0	0	968
16:00	26	57	48	156	181	274	171	116	59	4	0	0	1092
17:00	86	103	46	129	169	315	162	126	37	3	0	0	1176
18:00	1	20	26	103	112	320	199	202	50	3	0	0	1036
19:00	4	10	26	44	93	255	171	176	65	7	3	1	855
20:00	6	1	5	36	73	199	141	150	79	4	0	0	694
21:00	0	0	2	22	52	139	101	96	41	3	0	0	456
22:00	0	1	3	11	27	88	81	72	31	5	0	0	319
23:00	0	1	2	8	10	45	50	40	38	1	1	0	196
Total	208	407	381	1297	1794	4301	2849	2548	950	77	8	2	14822

15th Percentile :	48 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	72 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9698
Percent in Pace :	65.4%
Number of Vehicles > 60 KPH :	5864
Percent of Vehicles > 60 KPH :	39.6%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/26/19	0	1	0	4	10	17	19	33	23	4	1	0	112
01:00	1	0	0	1	2	7	8	21	5	0	1	0	46
02:00	1	2	1	1	0	10	8	13	9	0	1	0	46
03:00	0	0	0	0	0	4	2	4	0	0	0	0	10
04:00	0	0	0	0	2	15	10	13	9	1	0	0	50
05:00	1	0	2	5	6	21	27	39	22	3	0	0	126
06:00	1	0	2	6	22	94	89	110	64	3	0	0	391
07:00	15	10	11	44	65	217	186	156	76	10	0	0	790
08:00	39	80	104	211	216	371	191	122	37	6	0	0	1377
09:00	3	9	19	74	94	271	169	166	55	8	0	0	868
10:00	2	6	7	51	90	238	183	148	34	8	1	0	768
11:00	6	15	17	82	141	301	191	129	33	7	0	0	922
12 PM	1	15	25	89	141	273	159	118	50	2	0	0	873
13:00	8	27	15	62	113	272	162	156	48	3	0	0	866
14:00	8	10	15	97	142	265	191	142	44	5	0	0	919
15:00	13	11	26	115	142	338	196	169	58	4	1	1	1074
16:00	41	73	83	179	182	316	133	121	36	3	1	0	1168
17:00	56	110	77	188	178	267	141	135	46	2	0	0	1200
18:00	7	28	36	138	140	346	194	149	60	7	1	0	1106
19:00	4	5	10	53	81	219	219	159	58	3	1	0	812
20:00	4	7	12	46	96	253	180	129	50	3	0	0	780
21:00	1	8	15	53	78	212	118	99	33	2	0	0	619
22:00	0	0	5	23	37	96	67	70	32	3	0	0	333
23:00	0	2	4	2	8	41	49	74	29	1	0	0	210
Total	212	419	486	1524	1986	4464	2892	2475	911	88	8	1	15466

15th Percentile :	47 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	57 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	9831
Percent in Pace :	63.6%
Number of Vehicles > 60 KPH :	5797
Percent of Vehicles > 60 KPH :	37.5%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/27/19	0	0	1	4	4	38	31	30	22	4	1	0	135
01:00	1	0	0	3	4	12	12	18	4	2	0	0	56
02:00	0	1	0	0	0	10	7	16	7	0	1	0	42
03:00	0	0	0	0	0	3	3	4	4	1	1	0	16
04:00	1	0	0	4	2	12	11	10	5	1	0	0	46
05:00	0	0	1	7	6	26	22	39	24	3	0	0	128
06:00	1	2	4	13	18	69	79	128	58	8	3	0	383
07:00	4	11	14	42	87	202	182	161	50	2	1	0	756
08:00	12	69	66	183	186	326	201	167	58	4	0	1	1273
09:00	10	25	17	80	102	268	177	152	62	3	1	0	897
10:00	2	4	19	81	105	219	190	137	55	2	0	0	814
11:00	1	8	17	86	92	275	199	146	42	0	0	0	866
12 PM	1	13	36	113	158	289	137	87	21	3	0	0	858
13:00	3	66	65	176	146	192	92	54	26	4	0	0	824
14:00	8	54	63	97	106	162	86	69	29	3	1	0	678
15:00	15	25	31	117	160	312	149	126	58	4	0	1	998
16:00	21	41	65	157	181	309	146	124	37	3	0	0	1084
17:00	99	115	99	221	194	285	94	65	18	1	0	0	1191
18:00	5	19	42	97	163	311	159	128	48	5	0	0	977
19:00	2	29	54	158	118	164	48	57	31	2	0	0	663
20:00	5	10	32	91	95	192	87	57	32	7	0	0	608
21:00	0	0	4	24	62	135	87	100	29	6	0	0	447
22:00	1	3	6	15	31	70	61	75	41	2	0	0	305
23:00	0	1	1	14	17	70	59	81	53	3	1	0	300
Total	192	496	637	1783	2037	3951	2319	2031	814	73	10	2	14345

15th Percentile :	46 KPH
50th Percentile :	56 KPH
85th Percentile :	65 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	56 KPH
15 KPH Pace Speed :	50-64 KPH
Number in Pace :	8307
Percent in Pace :	57.9%
Number of Vehicles > 60 KPH :	4785
Percent of Vehicles > 60 KPH :	33.4%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/28/19	1	0	1	9	5	27	16	21	18	3	0	0	101
01:00	0	1	0	2	1	11	10	14	5	1	1	0	46
02:00	0	1	0	0	1	1	3	11	7	1	0	0	25
03:00	0	1	0	0	1	3	3	9	4	2	0	0	23
04:00	0	0	0	2	2	15	8	14	12	0	0	0	53
05:00	0	0	0	3	1	38	35	53	48	6	0	0	184
06:00	0	2	1	17	35	97	96	95	62	10	0	0	415
07:00	0	2	2	36	65	190	144	142	58	3	0	0	642
08:00	1	13	26	115	116	265	144	98	30	1	0	0	809
09:00	0	7	19	87	129	233	137	96	23	2	0	0	733
10:00	0	8	13	60	100	222	131	123	28	6	0	0	691
11:00	4	10	19	78	125	275	168	101	39	2	0	0	821
12 PM	0	5	17	100	146	326	182	152	42	0	0	0	970
13:00	4	3	11	78	140	273	163	150	51	4	0	0	877
14:00	2	16	24	125	165	300	163	134	35	5	0	0	969
15:00	3	10	19	128	171	339	194	162	70	1	0	0	1097
16:00	3	12	34	204	228	442	227	150	44	5	0	0	1349
17:00	85	71	73	219	249	415	181	110	20	1	0	0	1424
18:00	4	5	2	67	120	327	261	256	56	4	0	0	1102
19:00	3	10	7	45	88	290	233	207	72	8	1	0	964
20:00	3	1	3	27	66	218	183	196	82	3	0	0	782
21:00	0	0	0	30	68	158	123	135	63	4	0	0	581
22:00	0	0	1	13	16	73	62	90	36	6	1	0	298
23:00	0	2	2	12	13	52	32	54	31	4	1	0	203
Total	113	180	274	1457	2051	4590	2899	2573	936	82	4	0	15159

15th Percentile :	49 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	10062
Percent in Pace :	66.4%
Number of Vehicles > 60 KPH :	5914
Percent of Vehicles > 60 KPH :	39.0%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/29/19	0	0	0	5	8	20	22	27	19	2	0	0	103
01:00	0	0	0	4	5	6	10	14	9	2	0	0	50
02:00	0	0	1	2	2	3	5	11	13	0	0	0	37
03:00	0	0	0	0	0	2	7	7	3	1	0	0	20
04:00	0	1	0	3	3	11	12	20	10	1	1	0	62
05:00	2	0	0	4	4	43	35	60	46	1	0	0	195
06:00	0	2	2	14	32	106	79	134	54	6	0	0	429
07:00	3	0	7	38	65	165	134	139	75	3	0	0	629
08:00	0	6	16	83	131	265	149	99	32	2	0	0	783
09:00	0	7	23	92	107	252	125	108	35	3	0	0	752
10:00	3	13	15	64	112	231	141	115	37	6	0	0	737
11:00	4	7	15	62	137	270	175	153	41	2	2	0	868
12 PM	1	9	13	89	150	339	182	176	54	3	1	0	1017
13:00	1	4	21	77	126	291	193	152	45	4	0	0	914
14:00	2	10	24	125	122	272	153	144	56	2	0	0	910
15:00	3	5	8	105	145	394	239	170	71	4	0	0	1144
16:00	11	23	42	155	208	439	271	202	36	5	0	0	1392
17:00	185	183	129	192	216	326	147	84	11	3	0	0	1476
18:00	42	58	48	102	152	375	222	186	50	2	0	0	1237
19:00	5	9	6	44	99	291	200	201	77	6	0	0	938
20:00	0	6	4	30	81	286	208	189	58	5	0	0	867
21:00	1	1	4	27	46	203	137	142	45	2	0	0	608
22:00	0	1	3	5	27	88	77	104	45	4	3	1	358
23:00	0	0	0	10	16	46	60	64	34	4	0	1	235
Total	263	345	381	1332	1994	4724	2983	2701	956	73	7	2	15761

15th Percentile :	49 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	10408
Percent in Pace :	66.0%
Number of Vehicles > 60 KPH :	6125
Percent of Vehicles > 60 KPH :	38.9%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/30/19	0	0	0	3	11	34	19	21	17	2	1	0	108
01:00	1	0	0	0	3	8	12	15	7	2	0	0	48
02:00	0	0	1	1	2	7	7	13	5	1	0	0	37
03:00	0	0	0	1	0	4	2	9	9	1	0	0	26
04:00	0	0	0	2	1	12	13	20	10	1	0	0	59
05:00	1	1	1	4	7	27	35	66	40	5	0	0	187
06:00	1	0	3	12	21	70	84	115	96	10	1	0	413
07:00	2	2	3	31	68	192	144	148	90	1	1	0	682
08:00	3	5	29	93	109	234	168	129	44	2	0	0	816
09:00	14	20	19	75	104	262	154	110	33	0	0	0	791
10:00	14	61	57	101	83	246	132	119	25	2	1	0	841
11:00	5	10	26	109	146	293	173	123	46	5	1	0	937
12 PM	2	9	10	110	161	311	178	157	41	2	0	0	981
13:00	3	16	25	104	115	323	182	138	30	4	0	0	940
14:00	10	17	32	112	201	329	174	126	36	6	4	0	1047
15:00	7	35	28	150	166	348	226	151	47	3	0	0	1161
16:00	28	28	49	155	223	490	221	139	31	1	0	0	1365
17:00	28	48	61	209	291	491	223	118	30	0	0	0	1499
18:00	31	30	37	114	146	357	231	154	41	7	1	0	1149
19:00	6	1	5	33	113	330	198	188	62	4	0	1	941
20:00	3	4	10	52	106	309	196	173	60	11	1	2	927
21:00	0	2	1	32	72	214	145	113	49	8	1	0	637
22:00	2	6	0	14	19	81	70	95	52	6	0	0	345
23:00	0	1	8	15	29	60	55	72	32	4	2	0	278
Total	161	296	405	1532	2197	5032	3042	2512	933	88	14	3	16215

15th Percentile :	49 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	10586
Percent in Pace :	65.3%
Number of Vehicles > 60 KPH :	5984
Percent of Vehicles > 60 KPH :	36.9%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/24/19	1	2	1	7	17	43	60	66	49	6	1	0	253
01:00	0	1	3	4	5	32	20	32	19	2	0	0	118
02:00	1	0	0	4	5	13	17	37	18	2	0	0	97
03:00	0	0	1	2	4	7	13	20	6	2	0	1	56
04:00	0	0	1	1	9	16	22	29	18	3	0	0	99
05:00	0	0	1	4	15	49	68	96	76	8	2	1	320
06:00	3	3	5	21	27	152	169	239	143	21	3	0	786
07:00	8	16	4	74	78	336	322	396	196	13	3	1	1447
08:00	23	97	89	217	310	630	395	280	101	4	1	0	2147
09:00	20	11	34	134	179	536	356	306	138	6	0	0	1720
10:00	8	14	7	77	164	552	427	346	151	9	0	0	1755
11:00	12	12	35	152	231	623	412	355	124	7	2	1	1966
12 PM	6	22	36	169	254	688	420	376	106	10	2	0	2089
13:00	5	31	29	128	252	671	464	359	160	20	1	0	2120
14:00	9	14	38	193	263	730	439	371	116	7	3	0	2183
15:00	23	34	55	245	337	731	475	348	104	7	1	1	2361
16:00	41	151	133	432	468	784	391	262	78	8	0	0	2748
17:00	67	135	135	403	434	745	413	337	84	4	0	0	2757
18:00	14	39	58	228	311	710	491	360	120	8	0	0	2339
19:00	9	14	13	106	150	463	397	388	152	17	0	0	1709
20:00	8	4	7	45	107	403	284	291	132	17	2	0	1300
21:00	2	6	10	68	121	354	245	210	67	4	0	0	1087
22:00	4	4	3	38	76	241	200	226	75	10	0	0	877
23:00	0	1	4	34	52	166	106	149	79	11	2	0	604
Total	264	611	702	2786	3869	9675	6606	5879	2312	206	23	5	32938

15th Percentile :	49 KPH
50th Percentile :	58 KPH
85th Percentile :	66 KPH
95th Percentile :	72 KPH

Statistics

Mean Speed(Average) :	59 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	22160
Percent in Pace :	67.3%
Number of Vehicles > 60 KPH :	13710
Percent of Vehicles > 60 KPH :	41.6%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/25/19	1	1	1	8	29	88	82	103	56	5	0	1	375
01:00	0	1	2	7	8	42	42	40	19	3	0	0	164
02:00	0	1	0	2	9	24	23	40	20	2	0	1	122
03:00	1	0	0	5	4	14	6	14	11	2	1	0	58
04:00	0	0	0	5	10	21	18	26	17	1	2	0	100
05:00	0	3	3	8	17	37	45	55	29	1	0	0	198
06:00	0	3	3	28	21	120	124	148	70	8	1	0	526
07:00	5	14	16	44	68	305	251	233	102	11	1	0	1050
08:00	36	93	80	210	258	504	317	235	85	11	0	0	1829
09:00	12	27	22	110	155	502	381	306	115	9	1	0	1640
10:00	1	3	20	103	212	579	426	368	92	2	1	0	1807
11:00	2	20	33	153	236	559	390	317	116	8	0	0	1834
12 PM	10	32	55	157	235	647	368	349	118	6	0	0	1977
13:00	12	33	29	142	205	620	404	385	125	11	0	0	1966
14:00	9	21	33	192	256	592	355	306	115	8	0	0	1887
15:00	16	28	39	161	229	643	394	315	130	12	0	0	1967
16:00	31	69	58	236	308	591	376	294	113	8	1	0	2085
17:00	91	174	86	292	294	520	262	213	74	4	0	0	2010
18:00	1	24	30	155	195	599	405	378	110	6	0	0	1903
19:00	7	12	28	67	154	474	329	361	139	12	4	1	1588
20:00	7	2	6	49	115	386	271	312	151	15	2	0	1316
21:00	0	3	10	66	104	298	240	190	72	9	3	0	995
22:00	0	3	4	32	73	188	174	167	73	9	0	0	723
23:00	0	5	6	27	56	162	169	127	83	4	1	0	640
Total	242	572	564	2259	3251	8515	5852	5282	2035	167	18	3	28760

15th Percentile :	50 KPH
50th Percentile :	58 KPH
85th Percentile :	67 KPH
95th Percentile :	72 KPH

Statistics

Mean Speed(Average) :	59 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	19649
Percent in Pace :	68.3%
Number of Vehicles > 60 KPH :	12187
Percent of Vehicles > 60 KPH :	42.4%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/26/19	0	1	1	15	27	89	85	90	50	7	2	0	367
01:00	1	0	1	5	14	54	51	53	38	2	2	0	221
02:00	2	3	1	3	3	33	33	49	30	3	1	1	162
03:00	0	1	0	4	8	17	18	28	7	2	1	0	86
04:00	0	1	1	1	3	25	22	26	13	1	0	0	93
05:00	1	1	2	7	7	28	38	51	32	3	1	0	171
06:00	1	0	3	7	30	120	109	140	79	7	0	0	496
07:00	18	10	12	46	69	260	243	214	110	12	0	0	994
08:00	40	81	105	219	230	443	281	264	120	20	0	0	1803
09:00	12	9	22	105	143	434	334	339	114	15	2	0	1529
10:00	6	11	19	100	157	494	385	330	105	14	1	0	1622
11:00	17	21	33	144	245	611	404	318	97	9	1	0	1900
12 PM	11	25	37	140	251	585	379	325	131	5	1	0	1890
13:00	13	44	34	171	251	615	399	333	96	4	0	0	1960
14:00	17	27	29	157	249	642	434	319	105	9	0	0	1988
15:00	29	24	48	239	259	664	419	351	105	5	1	1	2145
16:00	45	78	98	253	302	597	326	294	97	9	2	1	2102
17:00	66	132	83	242	256	482	310	326	118	7	0	1	2023
18:00	11	29	37	165	190	521	391	353	159	23	1	0	1880
19:00	7	9	11	73	117	371	388	360	155	15	1	0	1507
20:00	6	18	17	66	139	427	330	270	118	13	1	0	1405
21:00	1	10	16	72	131	354	211	217	100	5	0	0	1117
22:00	0	2	8	33	63	175	136	187	70	11	0	0	685
23:00	0	3	4	5	18	82	93	133	51	5	0	0	394
Total	304	540	622	2272	3162	8123	5819	5370	2100	206	18	4	28540

15th Percentile :	49 KPH
50th Percentile :	58 KPH
85th Percentile :	67 KPH
95th Percentile :	73 KPH

Statistics

Mean Speed(Average) :	59 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	19312
Percent in Pace :	67.7%
Number of Vehicles > 60 KPH :	12353
Percent of Vehicles > 60 KPH :	43.3%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/27/19	0	0	1	8	6	61	46	67	47	6	1	0	243
01:00	1	0	0	4	6	29	22	31	11	3	0	0	107
02:00	0	1	0	1	1	14	12	24	8	1	3	0	65
03:00	0	0	0	0	2	6	8	8	9	1	1	0	35
04:00	1	0	0	7	5	23	21	21	13	1	0	0	92
05:00	0	0	3	10	9	48	55	79	44	7	0	0	255
06:00	2	3	7	24	35	151	186	247	107	11	4	0	777
07:00	16	28	41	77	146	437	331	333	114	7	1	0	1531
08:00	39	141	123	369	398	704	397	319	93	7	0	1	2591
09:00	17	38	42	150	204	566	380	319	116	6	1	0	1839
10:00	9	8	32	135	209	505	415	288	94	3	0	0	1698
11:00	7	14	29	137	177	530	408	296	104	3	0	0	1705
12 PM	4	15	50	186	297	563	327	253	63	3	0	1	1762
13:00	8	68	81	234	238	441	306	207	88	10	0	0	1681
14:00	10	60	70	164	200	452	267	255	96	6	2	0	1582
15:00	37	50	61	226	326	613	350	264	112	9	1	1	2050
16:00	26	93	105	317	350	654	315	265	85	7	0	0	2217
17:00	191	249	214	396	373	548	222	166	47	1	1	0	2408
18:00	13	31	75	196	285	669	366	270	116	11	1	0	2033
19:00	5	29	60	198	213	389	238	224	96	10	0	0	1462
20:00	6	12	35	132	175	386	230	192	96	9	0	0	1273
21:00	5	1	5	45	116	267	204	192	62	8	0	0	905
22:00	1	3	7	22	58	153	130	164	70	8	0	0	616
23:00	0	1	2	17	33	121	93	134	77	6	1	0	485
Total	398	845	1043	3055	3862	8330	5329	4618	1768	144	17	3	29412

15th Percentile :	47 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	57 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	18277
Percent in Pace :	62.1%
Number of Vehicles > 60 KPH :	10813
Percent of Vehicles > 60 KPH :	36.8%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/28/19	1	1	1	14	9	45	33	46	30	4	0	1	185
01:00	0	1	0	3	2	19	21	25	17	2	1	0	91
02:00	1	2	0	2	4	8	9	24	11	1	1	0	63
03:00	0	1	1	0	2	11	5	11	7	2	0	0	40
04:00	0	0	1	5	7	26	16	19	22	0	0	0	96
05:00	0	0	2	6	14	63	64	90	73	7	1	0	320
06:00	0	3	6	30	59	202	183	188	110	17	1	0	799
07:00	1	9	22	84	146	405	335	310	116	5	0	0	1433
08:00	31	76	95	342	370	663	317	205	63	5	0	0	2167
09:00	3	28	36	181	248	526	320	237	58	2	0	0	1639
10:00	1	21	32	122	201	463	312	260	78	11	1	0	1502
11:00	8	22	36	140	245	551	338	244	83	2	0	0	1669
12 PM	1	13	39	197	268	568	361	308	88	2	0	0	1845
13:00	4	5	20	156	253	573	339	312	98	10	0	0	1770
14:00	2	28	61	221	302	597	319	253	75	6	0	0	1864
15:00	13	49	63	269	320	650	344	283	107	4	0	0	2102
16:00	61	95	112	395	358	704	360	261	74	8	0	1	2429
17:00	176	208	177	418	389	656	305	196	55	3	0	0	2583
18:00	5	27	29	154	271	702	444	404	102	9	0	0	2147
19:00	3	14	15	100	185	561	397	350	134	15	1	0	1775
20:00	4	3	15	69	130	408	334	305	141	9	0	0	1418
21:00	0	3	6	61	123	324	214	245	110	4	0	0	1090
22:00	1	4	8	27	47	142	132	189	71	8	1	0	630
23:00	0	3	4	21	22	97	68	97	64	5	2	0	383
Total	316	616	781	3017	3975	8964	5570	4862	1787	141	9	2	30040

15th Percentile :	48 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	58 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	19396
Percent in Pace :	64.6%
Number of Vehicles > 60 KPH :	11257
Percent of Vehicles > 60 KPH :	37.5%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/29/19	0	0	2	9	12	44	47	74	38	4	0	0	230
01:00	0	0	1	4	8	15	25	34	20	4	0	0	111
02:00	1	1	1	2	4	9	13	20	24	0	0	0	75
03:00	0	0	0	2	1	3	12	12	8	1	0	0	39
04:00	0	1	0	5	6	27	14	28	16	3	1	0	101
05:00	2	0	1	8	11	64	67	95	73	3	1	0	325
06:00	2	2	3	27	50	192	190	229	114	13	0	0	822
07:00	13	15	24	70	142	366	295	332	147	8	0	0	1412
08:00	64	174	148	306	328	609	282	198	58	3	0	0	2170
09:00	2	14	38	180	255	574	307	247	76	4	0	0	1697
10:00	10	22	30	138	208	467	309	284	80	8	1	0	1557
11:00	8	24	45	155	256	539	334	296	93	5	2	0	1757
12 PM	5	32	35	173	275	618	376	319	103	5	2	0	1943
13:00	5	16	38	150	232	544	387	287	96	7	1	1	1764
14:00	8	24	42	205	234	567	330	279	112	3	0	0	1804
15:00	34	51	44	213	292	692	415	306	125	5	2	0	2179
16:00	71	91	102	338	357	672	420	325	64	11	0	0	2451
17:00	265	335	251	423	403	577	270	161	34	3	0	0	2722
18:00	94	124	109	249	322	660	407	349	98	5	0	0	2417
19:00	9	19	21	112	170	556	372	370	136	8	1	0	1774
20:00	2	13	16	78	159	525	388	336	106	11	1	0	1635
21:00	2	3	12	58	118	404	253	231	79	2	1	0	1163
22:00	0	3	5	18	53	179	153	181	93	7	3	1	696
23:00	0	2	0	17	33	88	120	120	65	9	0	1	455
Total	597	966	968	2940	3929	8991	5786	5113	1858	132	16	3	31299

15th Percentile :	47 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	71 KPH

Statistics

Mean Speed(Average) :	57 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	19890
Percent in Pace :	63.5%
Number of Vehicles > 60 KPH :	11751
Percent of Vehicles > 60 KPH :	37.5%

Accu-Traffic Inc.
85 West Wilmot St., Unit 13,
Richmond Hill, ON, L4B 1K7
Tel: 1- 416-910-0171 Fax: 1-888-711-3125
E-mail: solutions@accu-traffic.ca
URL: http://www.accu-traffic.ca

Site Code: 03
Station ID: MC34/MC03
Gordon St btwn Edinburgh/Arkel (HP#282)

Latitude: 0' 0.0000 Undefined

NB, SB

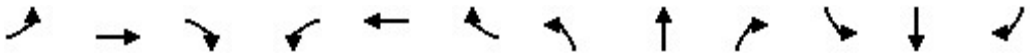
Start	1	30	40	45	50	55	60	65	70	80	90	100	
Time	29	39	44	49	54	59	64	69	79	89	99	9999	Total
05/30/19	1	1	2	5	20	61	47	40	28	6	1	2	214
01:00	1	0	0	0	3	16	27	29	20	2	0	0	98
02:00	0	1	1	3	4	16	15	20	7	1	0	0	68
03:00	0	0	0	2	1	8	4	14	16	1	0	0	46
04:00	0	1	1	7	4	21	23	31	15	1	0	0	104
05:00	1	1	1	9	17	54	69	108	55	7	0	0	322
06:00	3	0	7	28	51	153	175	205	144	16	1	0	783
07:00	17	27	17	75	129	410	325	308	153	4	1	0	1466
08:00	40	71	91	304	299	619	368	250	72	3	1	2	2120
09:00	19	38	58	184	244	549	341	213	74	2	1	0	1723
10:00	16	72	86	196	208	517	289	257	77	5	1	0	1724
11:00	23	33	44	189	273	545	336	269	75	10	1	0	1798
12 PM	16	36	46	236	342	571	352	287	85	5	0	0	1976
13:00	34	57	58	198	257	613	348	269	66	8	0	0	1908
14:00	24	43	66	230	337	628	324	254	85	10	4	0	2005
15:00	33	103	77	282	321	669	392	287	83	3	0	0	2250
16:00	140	151	130	343	404	751	320	231	65	5	0	0	2540
17:00	72	151	160	376	460	851	415	247	62	1	0	0	2795
18:00	48	94	67	253	305	729	447	291	87	11	2	1	2335
19:00	9	6	16	86	185	571	405	395	150	13	0	2	1838
20:00	7	10	22	119	196	511	334	349	112	14	1	2	1677
21:00	1	3	7	59	126	409	253	202	92	11	2	0	1165
22:00	4	7	3	36	48	165	139	187	91	9	1	0	690
23:00	1	2	13	33	59	113	126	145	67	6	2	0	567
Total	510	908	973	3253	4293	9550	5874	4888	1781	154	19	9	32212

15th Percentile :	47 KPH
50th Percentile :	57 KPH
85th Percentile :	66 KPH
95th Percentile :	70 KPH

Statistics

Mean Speed(Average) :	57 KPH
15 KPH Pace Speed :	55-69 KPH
Number in Pace :	20312
Percent in Pace :	63.1%
Number of Vehicles > 60 KPH :	11550
Percent of Vehicles > 60 KPH :	35.9%

Appendix B: Synchro Outputs Existing Conditions (2019)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	1	1	0	6	2	1089	0	2	536	9
Future Volume (Veh/h)	14	0	1	1	0	6	2	1089	0	2	536	9
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	0	1	1	0	7	2	1184	0	2	583	10
Pedestrians		6			3			20				
Lane Width (m)		3.7			3.7			3.7				
Walking Speed (m/s)		1.1			1.1			1.1				
Percent Blockage		1			0			2				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								348				
pX, platoon unblocked	0.91	0.91		0.91	0.91	0.91				0.91		
vC, conflicting volume	1201	1789	322	1508	1794	595	599			1187		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1025	1671	322	1362	1676	360	599			1010		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	91	100	100	99	100	99	100			100		
cM capacity (veh/h)	170	87	663	96	86	583	982			631		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	16	8	2	789	395	2	389	204
Volume Left	15	1	2	0	0	2	0	0
Volume Right	1	7	0	0	0	0	0	10
cSH	178	357	982	1700	1700	631	1700	1700
Volume to Capacity	0.09	0.02	0.00	0.46	0.23	0.00	0.23	0.12
Queue Length 95th (m)	2.2	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Control Delay (s)	27.2	15.3	8.7	0.0	0.0	10.7	0.0	0.0
Lane LOS	D	C	A			B		
Approach Delay (s)	27.2	15.3	0.0			0.0		
Approach LOS	D	C						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	45.3%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	2	1085	3	0	544
Future Volume (Veh/h)	4	2	1085	3	0	544
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	2	1179	3	0	591
Pedestrians	9		39			2
Lane Width (m)	3.7		3.7			3.7
Walking Speed (m/s)	1.1		1.1			1.1
Percent Blockage	1		4			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			62			
pX, platoon unblocked	0.89	0.89			0.89	
vC, conflicting volume	1524	602			1191	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1339	301			964	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			100	
cM capacity (veh/h)	125	616			636	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	786	396	197	394
Volume Left	4	0	0	0	0
Volume Right	2	0	3	0	0
cSH	170	1700	1700	636	1700
Volume to Capacity	0.04	0.46	0.23	0.00	0.23
Queue Length 95th (m)	0.8	0.0	0.0	0.0	0.0
Control Delay (s)	27.0	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	27.0	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	50	288	412	1037	512
Future Volume (vph)	50	288	412	1037	512
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	7	5	5	2	6
Permitted Phases		7	2		
Detector Phase	7	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	15.0	15.0	63.0	45.0
Total Split (s)	27.0	18.0	18.0	63.0	45.0
Total Split (%)	30.0%	20.0%	20.0%	70.0%	50.0%
Yellow Time (s)	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	2.0	0.0	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	3.0	3.0	6.0	6.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Max	C-Max
Act Effct Green (s)	8.6	25.5	74.7	72.9	55.5
Actuated g/C Ratio	0.10	0.28	0.83	0.81	0.62
v/c Ratio	0.37	0.54	0.62	0.42	0.29
Control Delay	44.3	11.3	9.7	5.6	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	11.3	9.7	5.6	10.4
LOS	D	B	A	A	B
Approach Delay	16.2			6.8	10.4
Approach LOS	B			A	B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 55.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Gordon Street & Edinburgh Road

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	54	313	448	1127	597
v/c Ratio	0.37	0.54	0.62	0.42	0.29
Control Delay	44.3	11.3	9.7	5.6	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	11.3	9.7	5.6	10.4
Queue Length 50th (m)	8.9	14.0	24.2	28.1	24.6
Queue Length 95th (m)	19.3	29.8	m62.0	69.8	44.7
Internal Link Dist (m)	641.3			382.4	38.5
Turn Bay Length (m)	50.0		65.0		
Base Capacity (vph)	360	625	751	2688	2038
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.50	0.60	0.42	0.29

Intersection Summary

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

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	288	412	1037	512	37
Future Volume (vph)	50	288	412	1037	512	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	3.0	3.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1547	1541	1674	3318	3299	
Flt Permitted	0.95	1.00	0.39	1.00	1.00	
Satd. Flow (perm)	1547	1541	692	3318	3299	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	313	448	1127	557	40
RTOR Reduction (vph)	0	156	0	0	4	0
Lane Group Flow (vph)	54	157	448	1127	593	0
Confl. Peds. (#/hr)	38					
Heavy Vehicles (%)	18%	6%	9%	10%	10%	3%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	7	5	5	2	6	
Permitted Phases		7	2			
Actuated Green, G (s)	7.5	20.7	70.5	70.5	54.3	
Effective Green, g (s)	7.5	20.7	70.5	70.5	54.3	
Actuated g/C Ratio	0.08	0.23	0.78	0.78	0.60	
Clearance Time (s)	6.0	3.0	3.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	128	354	686	2599	1990	
v/s Ratio Prot	0.03	c0.06	c0.10	0.34	0.18	
v/s Ratio Perm		0.04	c0.42			
v/c Ratio	0.42	0.44	0.65	0.43	0.30	
Uniform Delay, d1	39.2	29.7	3.2	3.2	8.6	
Progression Factor	1.00	1.00	2.75	1.49	1.00	
Incremental Delay, d2	2.2	0.9	1.6	0.4	0.4	
Delay (s)	41.4	30.6	10.3	5.1	9.0	
Level of Service	D	C	B	A	A	
Approach Delay (s)	32.2			6.6	9.0	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

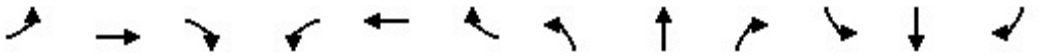
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	0	141	2	340	1	1074	139	646
Future Volume (vph)	17	0	141	2	340	1	1074	139	646
Turn Type	Perm	NA	Perm	NA	pm+ov	Perm	NA	pm+pt	NA
Protected Phases		4		8	1		2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	1	2	2	1	6
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)	27.0	27.0	27.0	27.0	11.0	45.0	45.0	11.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	15.0	48.0	48.0	15.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	16.7%	53.3%	53.3%	16.7%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	15.6	15.6	15.6	15.6	26.4	49.6	49.6	64.4	62.4
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.29	0.55	0.55	0.72	0.69
v/c Ratio	0.08	0.01	0.69	0.01	0.84	0.00	0.71	0.49	0.31
Control Delay	29.5	0.0	50.5	27.5	40.7	12.0	18.9	18.3	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	0.0	50.5	27.5	40.7	12.0	18.9	18.3	5.0
LOS	C	A	D	C	D	B	B	B	A
Approach Delay		23.1		43.5			18.9		7.3
Approach LOS		C		D			B		A

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 20.0	Intersection LOS: C
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Gordon Street & Arkell Road

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	18	5	153	2	370	1	1275	151	711
v/c Ratio	0.08	0.01	0.69	0.01	0.84	0.00	0.71	0.49	0.31
Control Delay	29.5	0.0	50.5	27.5	40.7	12.0	18.9	18.3	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	0.0	50.5	27.5	40.7	12.0	18.9	18.3	5.0
Queue Length 50th (m)	2.6	0.0	25.0	0.3	48.9	0.1	80.6	6.2	15.6
Queue Length 95th (m)	7.8	0.0	42.1	2.0	70.1	0.9	125.0	28.0	25.8
Internal Link Dist (m)		49.1		643.7			166.1		382.4
Turn Bay Length (m)			55.0			40.0		70.0	
Base Capacity (vph)	300	506	298	448	475	402	1804	341	2316
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.01	0.51	0.00	0.78	0.00	0.71	0.44	0.31

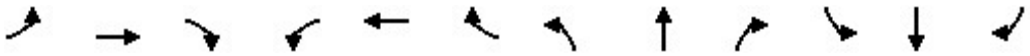
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	5	141	2	340	1	1074	99	139	646	8
Future Volume (vph)	17	0	5	141	2	340	1	1074	99	139	646	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	4.0	6.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.95	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.94	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1616	1341		1611	1921	1416	1821	3265		1690	3340	
Flt Permitted	0.76	1.00		0.75	1.00	1.00	0.38	1.00		0.13	1.00	
Satd. Flow (perm)	1287	1341		1279	1921	1416	731	3265		228	3340	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	0	5	153	2	370	1	1167	108	151	702	9
RTOR Reduction (vph)	0	4	0	0	0	27	0	6	0	0	1	0
Lane Group Flow (vph)	18	1	0	153	2	343	1	1269	0	151	710	0
Confl. Peds. (#/hr)	48		2	2		48	5		2	2		5
Heavy Vehicles (%)	6%	0%	20%	13%	0%	10%	0%	10%	12%	8%	9%	13%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA		pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	15.6	15.6		15.6	15.6	24.4	49.6	49.6		62.4	62.4	
Effective Green, g (s)	15.6	15.6		15.6	15.6	24.4	49.6	49.6		62.4	62.4	
Actuated g/C Ratio	0.17	0.17		0.17	0.17	0.27	0.55	0.55		0.69	0.69	
Clearance Time (s)	6.0	6.0		6.0	6.0	4.0	6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	223	232		221	332	383	402	1799		301	2315	
v/s Ratio Prot		0.00			0.00	c0.09		c0.39		0.05	0.21	
v/s Ratio Perm	0.01			0.12		0.15	0.00			0.30		
v/c Ratio	0.08	0.00		0.69	0.01	0.90	0.00	0.71		0.50	0.31	
Uniform Delay, d1	31.2	30.8		34.9	30.8	31.6	9.1	14.8		9.1	5.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		2.24	0.78	
Incremental Delay, d2	0.2	0.0		9.0	0.0	22.5	0.0	2.4		1.2	0.3	
Delay (s)	31.3	30.8		44.0	30.8	54.1	9.1	17.2		21.6	4.5	
Level of Service	C	C		D	C	D	A	B		C	A	
Approach Delay (s)		31.2			51.0			17.2			7.5	
Approach LOS		C			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	0	11	3	0	2	7	1163	4	12	764	16
Future Volume (Veh/h)	12	0	11	3	0	2	7	1163	4	12	764	16
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	0	12	3	0	2	8	1264	4	13	830	17
Pedestrians		3			1							
Lane Width (m)		3.7			3.7							
Walking Speed (m/s)		1.1			1.1							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								232			190	
pX, platoon unblocked	0.90	0.90	0.93	0.90	0.90	0.87	0.93			0.87		
vC, conflicting volume	1518	2152	426	1736	2159	635	850			1269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1012	1718	239	1255	1725	268	693			1000		
tC, single (s)	7.8	6.5	7.1	7.5	6.5	6.9	5.0			4.1		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.5	4.0	3.3	2.6			2.2		
p0 queue free %	91	100	98	97	100	100	99			98		
cM capacity (veh/h)	151	78	689	112	78	637	624			605		

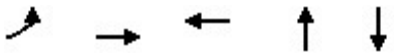
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	25	5	640	636	428	432
Volume Left	13	3	8	0	13	0
Volume Right	12	2	0	4	0	17
cSH	241	167	624	1700	605	1700
Volume to Capacity	0.10	0.03	0.01	0.37	0.02	0.25
Queue Length 95th (m)	2.6	0.7	0.3	0.0	0.5	0.0
Control Delay (s)	21.7	27.3	0.4	0.0	0.6	0.0
Lane LOS	C	D	A		A	
Approach Delay (s)	21.7	27.3	0.2		0.3	
Approach LOS	C	D				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	47.2%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	51	0	6	2	25	1088	14	702
Future Volume (vph)	51	0	6	2	25	1088	14	702
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	9.0	9.0		9.0		62.5		62.5
Actuated g/C Ratio	0.11	0.11		0.11		0.78		0.78
v/c Ratio	0.40	0.08		0.11		0.51		0.34
Control Delay	40.9	0.4		23.8		5.4		4.2
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	40.9	0.4		23.8		5.4		4.2
LOS	D	A		C		A		A
Approach Delay		27.2		23.8		5.4		4.2
Approach LOS		C		C		A		A

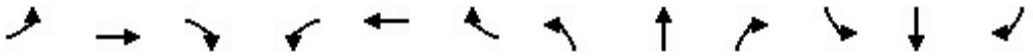
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.9	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 72.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 6: Gordon Street & Heritage Drive



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	55	28	17	1211	813
v/c Ratio	0.40	0.08	0.11	0.51	0.34
Control Delay	40.9	0.4	23.8	5.4	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	0.4	23.8	5.4	4.2
Queue Length 50th (m)	7.7	0.0	1.2	33.0	18.0
Queue Length 95th (m)	18.0	0.0	6.6	56.7	31.4
Internal Link Dist (m)		117.5	89.0	213.2	208.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	322	554	355	2390	2368
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.05	0.05	0.51	0.34

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	0	26	6	2	7	25	1088	1	14	702	32
Future Volume (vph)	51	0	26	6	2	7	25	1088	1	14	702	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.98			0.98			1.00			1.00	
Flpb, ped/bikes	0.96	1.00			1.00			1.00			1.00	
Frt	1.00	0.85			0.94			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			1.00	
Satd. Flow (prot)	1567	1489			1528			3305			3269	
Flt Permitted	0.75	1.00			0.85			0.92			0.92	
Satd. Flow (perm)	1231	1489			1332			3058			3023	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	0	28	7	2	8	27	1183	1	15	763	35
RTOR Reduction (vph)	0	25	0	0	7	0	0	0	0	0	2	0
Lane Group Flow (vph)	55	3	0	0	10	0	0	1211	0	0	811	0
Confl. Peds. (#/hr)	34		3	3		34	6		23	23		6
Heavy Vehicles (%)	12%	0%	8%	0%	50%	14%	24%	10%	0%	7%	11%	6%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	7.9	7.9			7.9			61.2			61.2	
Effective Green, g (s)	7.9	7.9			7.9			61.2			61.2	
Actuated g/C Ratio	0.10	0.10			0.10			0.75			0.75	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	119	145			129			2307			2281	
v/s Ratio Prot		0.00										
v/s Ratio Perm	c0.04				0.01			c0.40			0.27	
v/c Ratio	0.46	0.02			0.08			0.52			0.36	
Uniform Delay, d1	34.6	33.1			33.3			4.0			3.3	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	2.8	0.1			0.3			0.9			0.4	
Delay (s)	37.4	33.1			33.5			4.9			3.8	
Level of Service	D	C			C			A			A	
Approach Delay (s)		36.0			33.5			4.9			3.8	
Approach LOS		D			C			A			A	

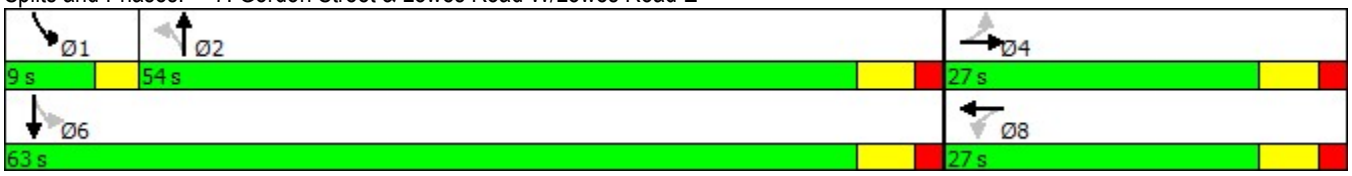
Intersection Summary			
HCM 2000 Control Delay	5.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	81.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	21	3	25	1	2	951	33	683
Future Volume (vph)	21	3	25	1	2	951	33	683
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	54.0
Total Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	60.0%	60.0%	10.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0	6.0	3.0	6.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Max	Max	None	Max
Act Effct Green (s)		8.3		8.3	51.8	51.8	60.1	57.1
Actuated g/C Ratio		0.11		0.11	0.67	0.67	0.78	0.74
v/c Ratio		0.39		0.64	0.00	0.47	0.09	0.29
Control Delay		40.0		18.1	7.0	8.4	3.1	4.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		40.0		18.1	7.0	8.4	3.1	4.0
LOS		D		B	A	A	A	A
Approach Delay		40.0		18.1		8.4		4.0
Approach LOS		D		B		A		A

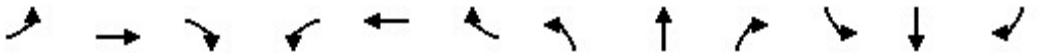
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 77.4	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 8.1	Intersection LOS: A
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: Gordon Street & Lowes Road W/Lowes Road E



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	33	199	2	1043	36	770
v/c Ratio	0.39	0.64	0.00	0.47	0.09	0.29
Control Delay	40.0	18.1	7.0	8.4	3.1	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	18.1	7.0	8.4	3.1	4.0
Queue Length 50th (m)	3.6	3.8	0.1	37.3	0.8	13.9
Queue Length 95th (m)	11.8	22.0	0.9	65.6	3.5	29.0
Internal Link Dist (m)	98.7	115.8		108.7		213.2
Turn Bay Length (m)			45.0		70.0	
Base Capacity (vph)	205	523	461	2197	392	2663
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	0.16	0.38	0.00	0.47	0.09	0.29

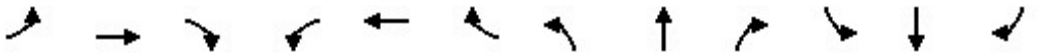
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	3	6	25	1	157	2	951	8	33	683	26
Future Volume (vph)	21	3	6	25	1	157	2	951	8	33	683	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.88		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1639			1543		1822	3283		1587	3607	
Flt Permitted		0.43			0.95		0.36	1.00		0.23	1.00	
Satd. Flow (perm)		737			1469		690	3283		385	3607	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	3	7	27	1	171	2	1034	9	36	742	28
RTOR Reduction (vph)	0	6	0	0	153	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	27	0	0	46	0	2	1043	0	36	768	0
Confl. Peds. (#/hr)	5					5	6		2	2		6
Heavy Vehicles (%)	14%	0%	0%	12%	0%	7%	0%	11%	13%	15%	0%	15%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.3			8.3		51.8	51.8		58.3	58.3	
Effective Green, g (s)		8.3			8.3		51.8	51.8		58.3	58.3	
Actuated g/C Ratio		0.11			0.11		0.66	0.66		0.74	0.74	
Clearance Time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		77			155		454	2163		339	2675	
v/s Ratio Prot								c0.32		0.00	c0.21	
v/s Ratio Perm		c0.04			0.03		0.00			0.07		
v/c Ratio		0.35			0.30		0.00	0.48		0.11	0.29	
Uniform Delay, d1		32.6			32.5		4.6	6.7		3.2	3.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.7			1.1		0.0	0.8		0.1	0.3	
Delay (s)		35.3			33.5		4.6	7.5		3.4	3.6	
Level of Service		D			C		A	A		A	A	
Approach Delay (s)		35.3			33.5			7.5			3.6	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	15.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	2	0	0	4	14	886	2	14	1200	39
Future Volume (Veh/h)	21	0	2	0	0	4	14	886	2	14	1200	39
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	0	2	0	0	4	15	963	2	15	1304	42
Pedestrians		17			6			8			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								348				
pX, platoon unblocked	0.99	0.99		0.99	0.99	0.99				0.99		
vC, conflicting volume	1888	2373	698	1692	2393	490	1363			971		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1874	2365	698	1674	2385	456	1363			944		
tC, single (s)	7.8	6.5	6.9	7.5	6.5	7.4	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.5	2.2			2.2		
p0 queue free %	34	100	99	100	100	99	97			98		
cM capacity (veh/h)	35	33	379	58	32	484	503			721		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	25	4	15	642	323	15	869	477
Volume Left	23	0	15	0	0	15	0	0
Volume Right	2	4	0	0	2	0	0	42
cSH	38	484	503	1700	1700	721	1700	1700
Volume to Capacity	0.66	0.01	0.03	0.38	0.19	0.02	0.51	0.28
Queue Length 95th (m)	18.0	0.2	0.7	0.0	0.0	0.5	0.0	0.0
Control Delay (s)	209.2	12.5	12.4	0.0	0.0	10.1	0.0	0.0
Lane LOS	F	B	B			B		
Approach Delay (s)	209.2	12.5	0.2			0.1		
Approach LOS	F	B						

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	50.4%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	2	910	2	1	1188
Future Volume (Veh/h)	0	2	910	2	1	1188
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2	989	2	1	1291
Pedestrians	6		38			
Lane Width (m)	3.7		3.7			
Walking Speed (m/s)	1.1		1.1			
Percent Blockage	1		4			
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			62			
pX, platoon unblocked	0.93	0.93			0.93	
vC, conflicting volume	1682	502			997	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1586	321			852	
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	100			100	
cM capacity (veh/h)	90	631			738	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	659	332	431	861
Volume Left	0	0	0	1	0
Volume Right	2	0	2	0	0
cSH	631	1700	1700	738	1700
Volume to Capacity	0.00	0.39	0.20	0.00	0.51
Queue Length 95th (m)	0.1	0.0	0.0	0.0	0.0
Control Delay (s)	10.7	0.0	0.0	0.0	0.0
Lane LOS	B			A	
Approach Delay (s)	10.7	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	46	590	449	866	1081
Future Volume (vph)	46	590	449	866	1081
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	7	5	5	2	6
Permitted Phases		7	2		
Detector Phase	7	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	27.0	18.0	18.0	63.0	45.0
Total Split (s)	27.0	18.0	18.0	63.0	45.0
Total Split (%)	30.0%	20.0%	20.0%	70.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	0.0	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	-1.0	-2.0	0.0	0.0
Total Lost Time (s)	4.0	2.0	1.0	6.0	6.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?		Yes	Yes		Yes
Recall Mode	None	None	None	C-Max	C-Max
Act Effct Green (s)	8.4	41.4	80.7	78.1	39.4
Actuated g/C Ratio	0.09	0.46	0.90	0.87	0.44
v/c Ratio	0.34	0.90	0.64	0.32	0.88
Control Delay	43.9	40.1	18.2	5.0	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	40.1	18.2	5.0	31.5
LOS	D	D	B	A	C
Approach Delay	40.4			9.5	31.5
Approach LOS	D			A	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 24.1	Intersection LOS: C
Intersection Capacity Utilization 80.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Gordon Street & Edinburgh Road

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	50	641	488	941	1291
v/c Ratio	0.34	0.90	0.64	0.32	0.88
Control Delay	43.9	40.1	18.2	5.0	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	40.1	18.2	5.0	31.5
Queue Length 50th (m)	8.3	91.9	65.7	40.2	103.9
Queue Length 95th (m)	18.5	#167.2	m87.0	m56.5	#146.7
Internal Link Dist (m)	641.3			382.4	38.5
Turn Bay Length (m)	50.0		65.0		
Base Capacity (vph)	398	711	759	2907	1469
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.90	0.64	0.32	0.88

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	46	590	449	866	1081	107
Future Volume (vph)	46	590	449	866	1081	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	2.0	1.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1560	1519	1706	3349	3339	
Flt Permitted	0.95	1.00	0.10	1.00	1.00	
Satd. Flow (perm)	1560	1519	176	3349	3339	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	641	488	941	1175	116
RTOR Reduction (vph)	0	12	0	0	9	0
Lane Group Flow (vph)	50	629	488	941	1282	0
Confl. Peds. (#/hr)	36	25	35			35
Heavy Vehicles (%)	17%	7%	7%	9%	7%	5%
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	7	5	5	2	6	
Permitted Phases		7	2			
Actuated Green, G (s)	5.9	39.3	74.1	74.1	37.7	
Effective Green, g (s)	5.9	41.3	76.1	74.1	37.7	
Actuated g/C Ratio	0.07	0.46	0.85	0.82	0.42	
Clearance Time (s)	4.0	3.0	3.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	102	697	750	2757	1398	
v/s Ratio Prot	0.03	c0.34	0.26	0.28	c0.38	
v/s Ratio Perm		0.07	0.29			
v/c Ratio	0.49	0.90	0.65	0.34	0.92	
Uniform Delay, d1	40.6	22.5	16.7	2.0	24.7	
Progression Factor	1.00	1.00	0.92	2.19	1.00	
Incremental Delay, d2	3.7	15.0	1.3	0.2	11.0	
Delay (s)	44.3	37.5	16.6	4.5	35.7	
Level of Service	D	D	B	A	D	
Approach Delay (s)	38.0			8.6	35.7	
Approach LOS	D			A	D	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	21	3	119	6	263	13	1022	359	1271
Future Volume (vph)	21	3	119	6	263	13	1022	359	1271
Turn Type	Perm	NA	Perm	NA	pm+ov	Perm	NA	pm+pt	NA
Protected Phases		4		8	1		2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	1	2	2	1	6
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)	27.0	27.0	27.0	27.0	15.0	45.0	45.0	15.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	15.0	48.0	48.0	15.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	16.7%	53.3%	53.3%	16.7%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	6.0	6.0	3.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	14.4	14.4	14.4	14.4	34.0	42.0	42.0	66.6	63.6
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.38	0.47	0.47	0.74	0.71
v/c Ratio	0.10	0.06	0.64	0.02	0.50	0.09	0.86	0.90	0.58
Control Delay	30.6	16.3	49.0	28.7	19.4	15.2	27.8	41.4	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	16.3	49.0	28.7	19.4	15.2	27.8	41.4	9.1
LOS	C	B	D	C	B	B	C	D	A
Approach Delay		24.8		28.6			27.6		16.1
Approach LOS		C		C			C		B

Intersection Summary

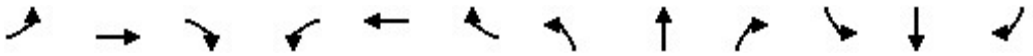
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 22.0 — Intersection LOS: C
Intersection Capacity Utilization 83.6% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 4: Gordon Street & Arkell Road

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	16	129	7	286	14	1324	390	1396
v/c Ratio	0.10	0.06	0.64	0.02	0.50	0.09	0.86	0.90	0.58
Control Delay	30.6	16.3	49.0	28.7	19.4	15.2	27.8	41.4	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	16.3	49.0	28.7	19.4	15.2	27.8	41.4	9.1
Queue Length 50th (m)	3.4	0.5	21.1	1.0	28.6	1.3	100.8	53.2	53.9
Queue Length 95th (m)	9.2	5.3	36.0	4.3	49.8	5.0	131.3	m#90.8	m81.4
Internal Link Dist (m)		49.1		643.7			166.1		382.4
Turn Bay Length (m)			55.0			40.0		70.0	
Base Capacity (vph)	325	372	293	448	570	160	1546	431	2405
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.04	0.44	0.02	0.50	0.09	0.86	0.90	0.58

Intersection Summary

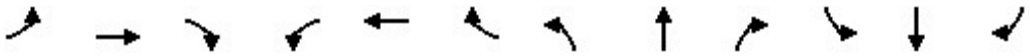
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	3	12	119	6	263	13	1022	196	359	1271	13
Future Volume (vph)	21	3	12	119	6	263	13	1022	196	359	1271	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	4.0	6.0	6.0		3.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.97	1.00		0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1762	1556		1599	1921	1441	1687	3275		1690	3407	
Flt Permitted	0.75	1.00		0.75	1.00	1.00	0.19	1.00		0.09	1.00	
Satd. Flow (perm)	1397	1556		1257	1921	1441	342	3275		155	3407	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	3	13	129	7	286	14	1111	213	390	1382	14
RTOR Reduction (vph)	0	11	0	0	0	28	0	18	0	0	1	0
Lane Group Flow (vph)	23	5	0	129	7	258	14	1306	0	390	1395	0
Confl. Peds. (#/hr)	27		8	8		27	12		4	4		12
Heavy Vehicles (%)	0%	0%	8%	13%	0%	11%	8%	8%	10%	8%	7%	0%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA		pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	14.4	14.4		14.4	14.4	32.0	42.0	42.0		63.6	63.6	
Effective Green, g (s)	14.4	14.4		14.4	14.4	32.0	42.0	42.0		64.6	63.6	
Actuated g/C Ratio	0.16	0.16		0.16	0.16	0.36	0.47	0.47		0.72	0.71	
Clearance Time (s)	6.0	6.0		6.0	6.0	4.0	6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	223	248		201	307	512	159	1528		428	2407	
v/s Ratio Prot		0.00			0.00	0.10		0.40		c0.19	0.41	
v/s Ratio Perm	0.02			c0.10		0.08	0.04			c0.47		
v/c Ratio	0.10	0.02		0.64	0.02	0.50	0.09	0.85		0.91	0.58	
Uniform Delay, d1	32.3	31.9		35.4	31.9	22.8	13.3	21.3		26.0	6.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.08	1.16	
Incremental Delay, d2	0.2	0.0		6.8	0.0	0.8	1.1	6.3		12.4	0.5	
Delay (s)	32.5	31.9		42.2	31.9	23.6	14.4	27.6		40.3	8.0	
Level of Service	C	C		D	C	C	B	C		D	A	
Approach Delay (s)		32.2			29.4			27.5			15.1	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	17	2	0	17	18	1207	8	17	1329	47
Future Volume (Veh/h)	13	0	17	2	0	17	18	1207	8	17	1329	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	0	18	2	0	18	20	1312	9	18	1445	51
Pedestrians		7			5			4				
Lane Width (m)		3.7			3.7			3.7				
Walking Speed (m/s)		1.1			1.1			1.1				
Percent Blockage		1			0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								232			190	
pX, platoon unblocked	0.86	0.86	0.79	0.86	0.86	0.85	0.79			0.85		
vC, conflicting volume	2228	2880	759	2142	2900	666	1503			1326		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1337	2095	154	1238	2119	265	1099			1039		
tC, single (s)	7.7	6.5	7.0	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.4	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	83	100	97	98	100	97	96			97		
cM capacity (veh/h)	82	42	664	104	40	628	476			575		

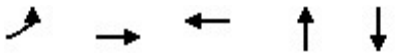
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	32	20	676	665	740	774
Volume Left	14	2	20	0	18	0
Volume Right	18	18	0	9	0	51
cSH	162	418	476	1700	575	1700
Volume to Capacity	0.20	0.05	0.04	0.39	0.03	0.46
Queue Length 95th (m)	5.4	1.1	1.0	0.0	0.7	0.0
Control Delay (s)	32.6	14.0	1.2	0.0	0.9	0.0
Lane LOS	D	B	A		A	
Approach Delay (s)	32.6	14.0	0.6		0.4	
Approach LOS	D	B				

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	63.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	63	0	16	0	31	1120	7	1284
Future Volume (vph)	63	0	16	0	31	1120	7	1284
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	9.5	9.5		9.5		61.3		61.3
Actuated g/C Ratio	0.12	0.12		0.12		0.77		0.77
v/c Ratio	0.45	0.12		0.21		0.55		0.59
Control Delay	41.3	4.4		14.5		6.2		6.6
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	41.3	4.4		14.5		6.2		6.6
LOS	D	A		B		A		A
Approach Delay		30.8		14.5		6.2		6.6
Approach LOS		C		B		A		A

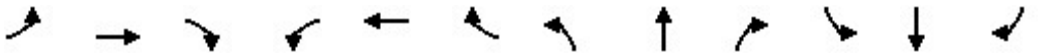
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.3	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: Gordon Street & Heritage Drive



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	68	27	39	1252	1449
v/c Ratio	0.45	0.12	0.21	0.55	0.59
Control Delay	41.3	4.4	14.5	6.2	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	4.4	14.5	6.2	6.6
Queue Length 50th (m)	9.6	0.0	0.4	37.6	45.6
Queue Length 95th (m)	21.1	2.8	8.4	65.3	77.8
Internal Link Dist (m)		117.5	89.0	213.2	208.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	337	432	377	2274	2461
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	0.06	0.10	0.55	0.59

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	0	25	16	0	20	31	1120	1	7	1284	41
Future Volume (vph)	63	0	25	16	0	20	31	1120	1	7	1284	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.98			0.98			1.00			1.00	
Flpb, ped/bikes	0.98	1.00			1.00			1.00			1.00	
Frt	1.00	0.85			0.92			1.00			1.00	
Flt Protected	0.95	1.00			0.98			1.00			1.00	
Satd. Flow (prot)	1657	1484			1531			3379			3360	
Flt Permitted	0.73	1.00			0.85			0.87			0.95	
Satd. Flow (perm)	1276	1484			1324			2939			3183	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	0	27	17	0	22	34	1217	1	8	1396	45
RTOR Reduction (vph)	0	24	0	0	32	0	0	0	0	0	2	0
Lane Group Flow (vph)	68	3	0	0	7	0	0	1252	0	0	1447	0
Confl. Peds. (#/hr)	18		6	6		18	11		13	13		11
Heavy Vehicles (%)	8%	0%	8%	6%	0%	15%	3%	8%	0%	0%	8%	10%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.4	8.4			8.4			60.1			60.1	
Effective Green, g (s)	8.4	8.4			8.4			60.1			60.1	
Actuated g/C Ratio	0.10	0.10			0.10			0.75			0.75	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	133	154			138			2194			2376	
v/s Ratio Prot		0.00										
v/s Ratio Perm	c0.05				0.01			0.43			c0.45	
v/c Ratio	0.51	0.02			0.05			0.57			0.61	
Uniform Delay, d1	34.1	32.4			32.5			4.5			4.7	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	3.3	0.0			0.1			1.1			1.2	
Delay (s)	37.4	32.4			32.6			5.6			5.9	
Level of Service	D	C			C			A			A	
Approach Delay (s)		36.0			32.6			5.6			5.9	
Approach LOS		D			C			A			A	

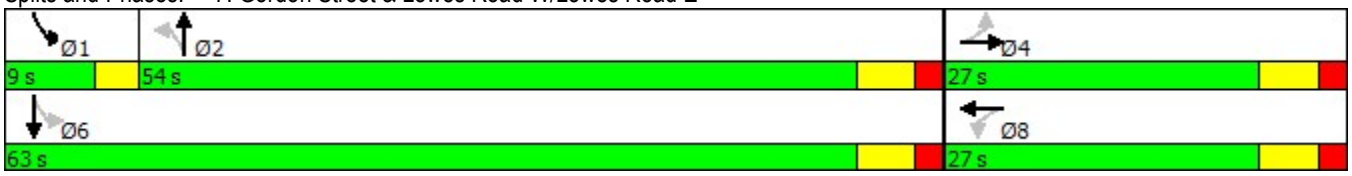
Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	3	16	5	8	1067	129	1147
Future Volume (vph)	34	3	16	5	8	1067	129	1147
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	54.0
Total Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	60.0%	60.0%	10.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0	6.0	3.0	6.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Max	Max	None	Max
Act Effct Green (s)		8.1		8.1	48.4	48.4	60.5	58.9
Actuated g/C Ratio		0.11		0.11	0.65	0.65	0.81	0.79
v/c Ratio		0.38		0.47	0.03	0.55	0.38	0.50
Control Delay		30.3		18.8	7.0	9.4	5.3	4.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		30.3		18.8	7.0	9.4	5.3	4.9
LOS		C		B	A	A	A	A
Approach Delay		30.3		18.8		9.4		5.0
Approach LOS		C		B		A		A

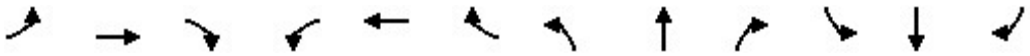
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.9	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 71.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Gordon Street & Lowes Road W/Lowes Road E



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	60	104	9	1202	140	1308
v/c Ratio	0.38	0.47	0.03	0.55	0.38	0.50
Control Delay	30.3	18.8	7.0	9.4	5.3	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	18.8	7.0	9.4	5.3	4.9
Queue Length 50th (m)	5.5	3.0	0.5	47.0	3.5	32.5
Queue Length 95th (m)	16.1	16.2	2.4	73.1	8.9	55.8
Internal Link Dist (m)	98.7	115.8		108.7		213.2
Turn Bay Length (m)			45.0		70.0	
Base Capacity (vph)	385	450	261	2190	370	2636
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	0.16	0.23	0.03	0.55	0.38	0.50

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	3	18	16	5	75	8	1067	39	129	1147	56
Future Volume (vph)	34	3	18	16	5	75	8	1067	39	129	1147	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.89		1.00	0.99		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1563			1482		1823	3387		1705	3350	
Flt Permitted		0.82			0.93		0.21	1.00		0.18	1.00	
Satd. Flow (perm)		1316			1388		404	3387		322	3350	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	3	20	17	5	82	9	1160	42	140	1247	61
RTOR Reduction (vph)	0	18	0	0	75	0	0	2	0	0	3	0
Lane Group Flow (vph)	0	42	0	0	29	0	9	1200	0	140	1305	0
Confl. Peds. (#/hr)	15					15	10		8	8		10
Heavy Vehicles (%)	15%	0%	11%	13%	0%	13%	0%	7%	10%	7%	8%	9%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		6.8			6.8		48.4	48.4		57.4	57.4	
Effective Green, g (s)		6.8			6.8		48.4	48.4		57.4	57.4	
Actuated g/C Ratio		0.09			0.09		0.64	0.64		0.75	0.75	
Clearance Time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		117			123		256	2151		351	2523	
v/s Ratio Prot								c0.35		0.03	c0.39	
v/s Ratio Perm		c0.03			0.02		0.02			0.27		
v/c Ratio		0.36			0.24		0.04	0.56		0.40	0.52	
Uniform Delay, d1		32.6			32.3		5.2	7.9		4.0	3.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.9			1.0		0.3	1.1		0.7	0.8	
Delay (s)		34.5			33.3		5.4	8.9		4.7	4.6	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		34.5			33.3			8.9			4.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	76.2	Sum of lost time (s)	15.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

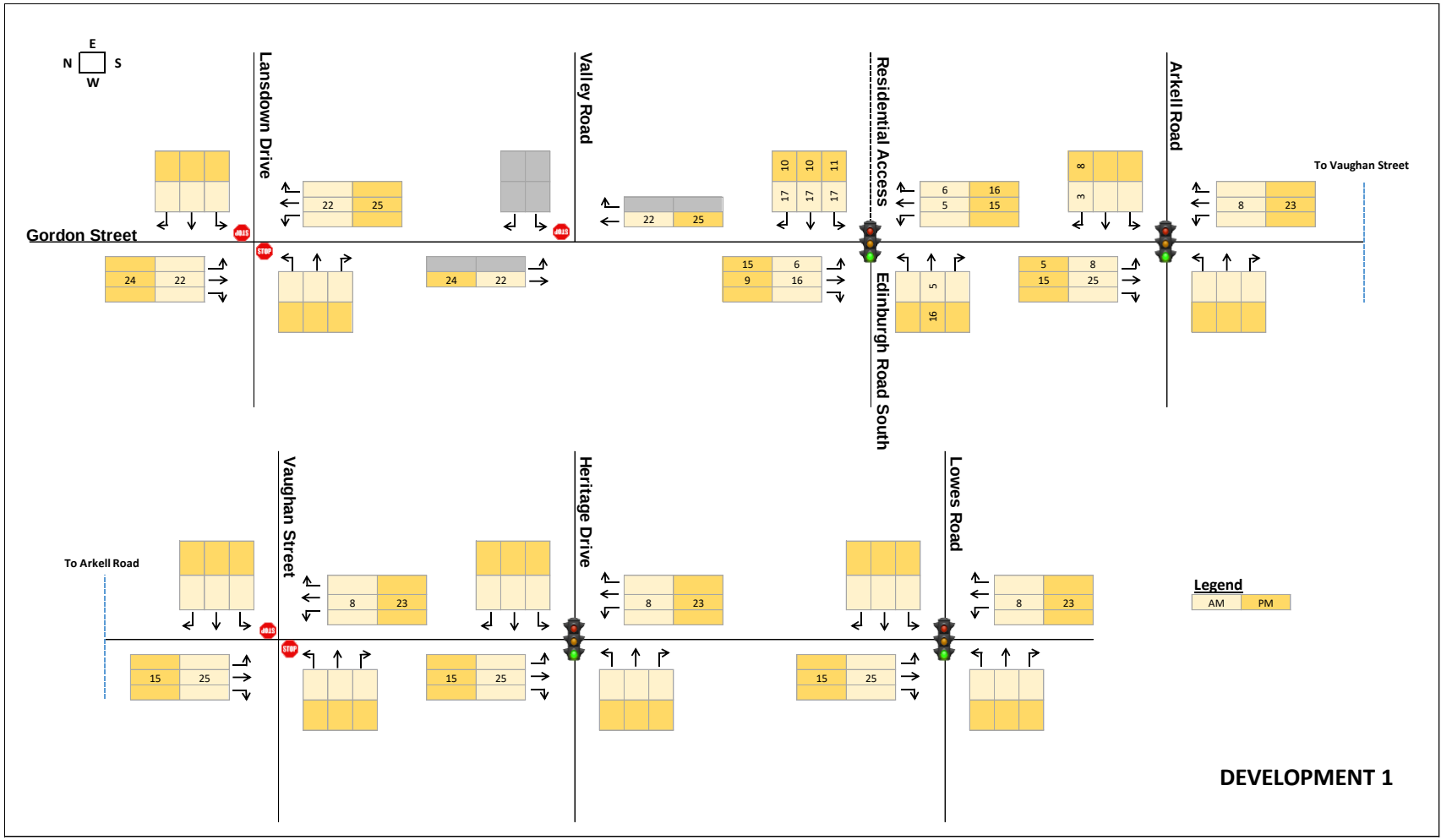
c Critical Lane Group

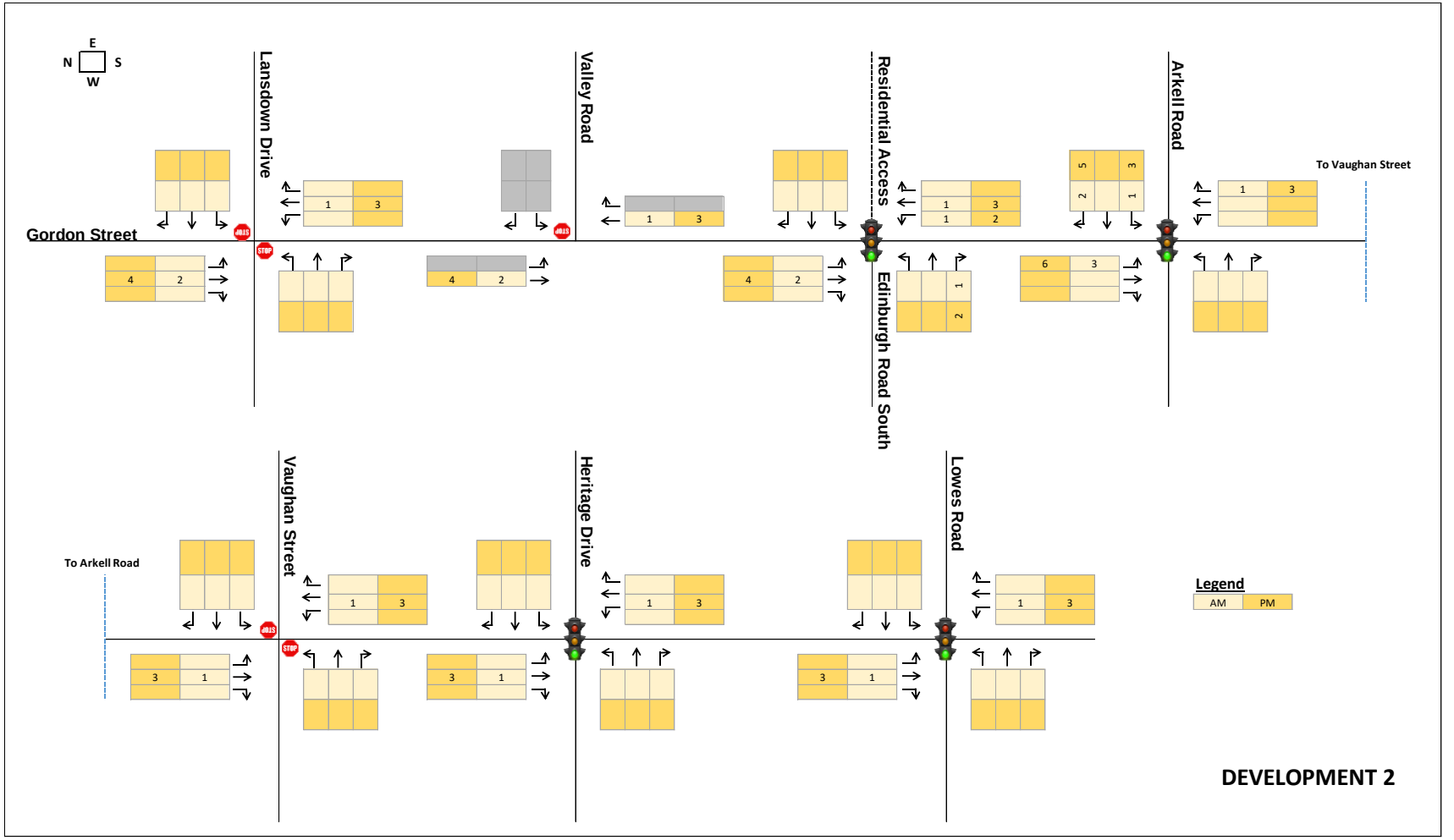
Appendix C: Development Trips

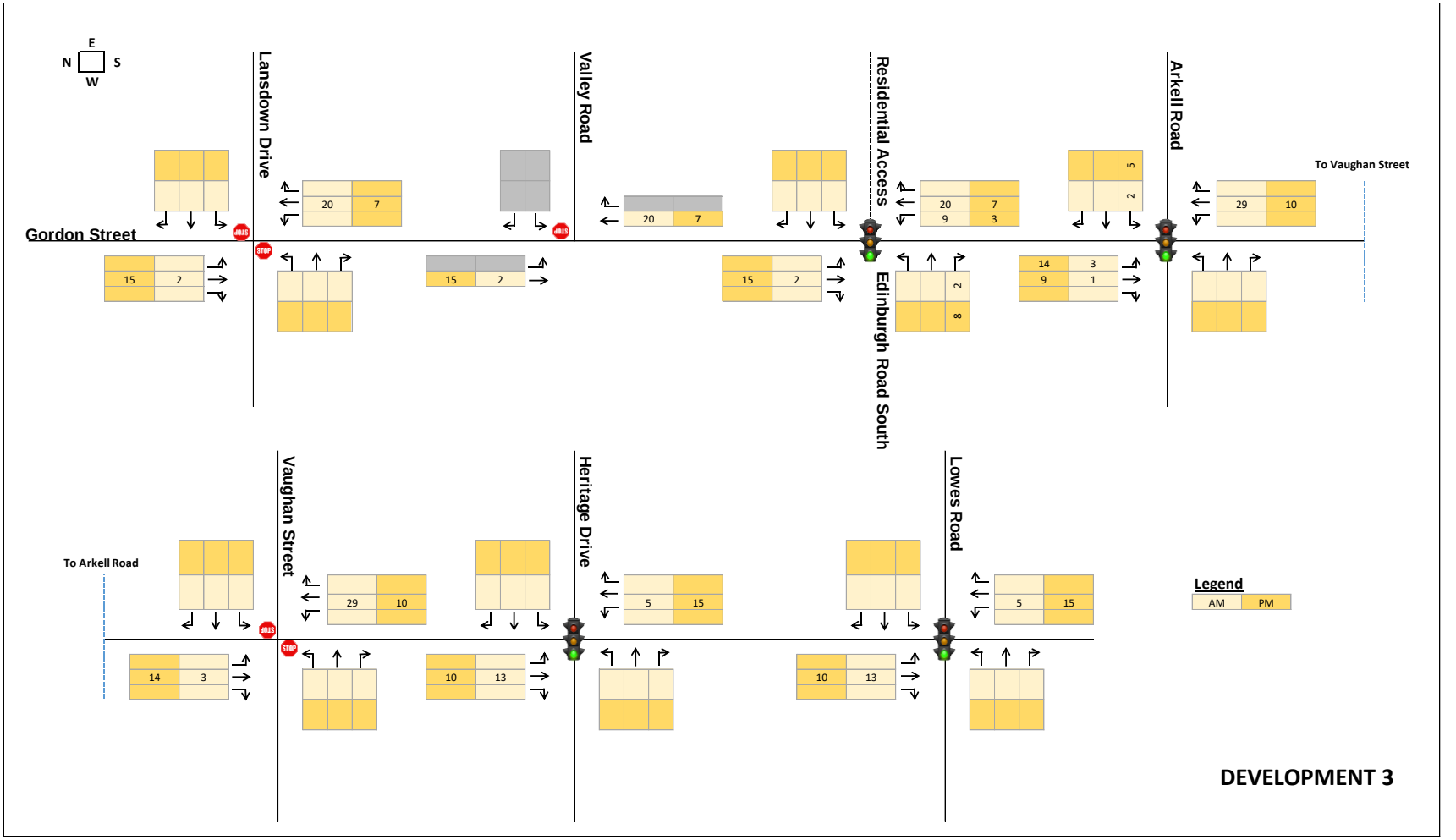
Gordon Street – Development Map

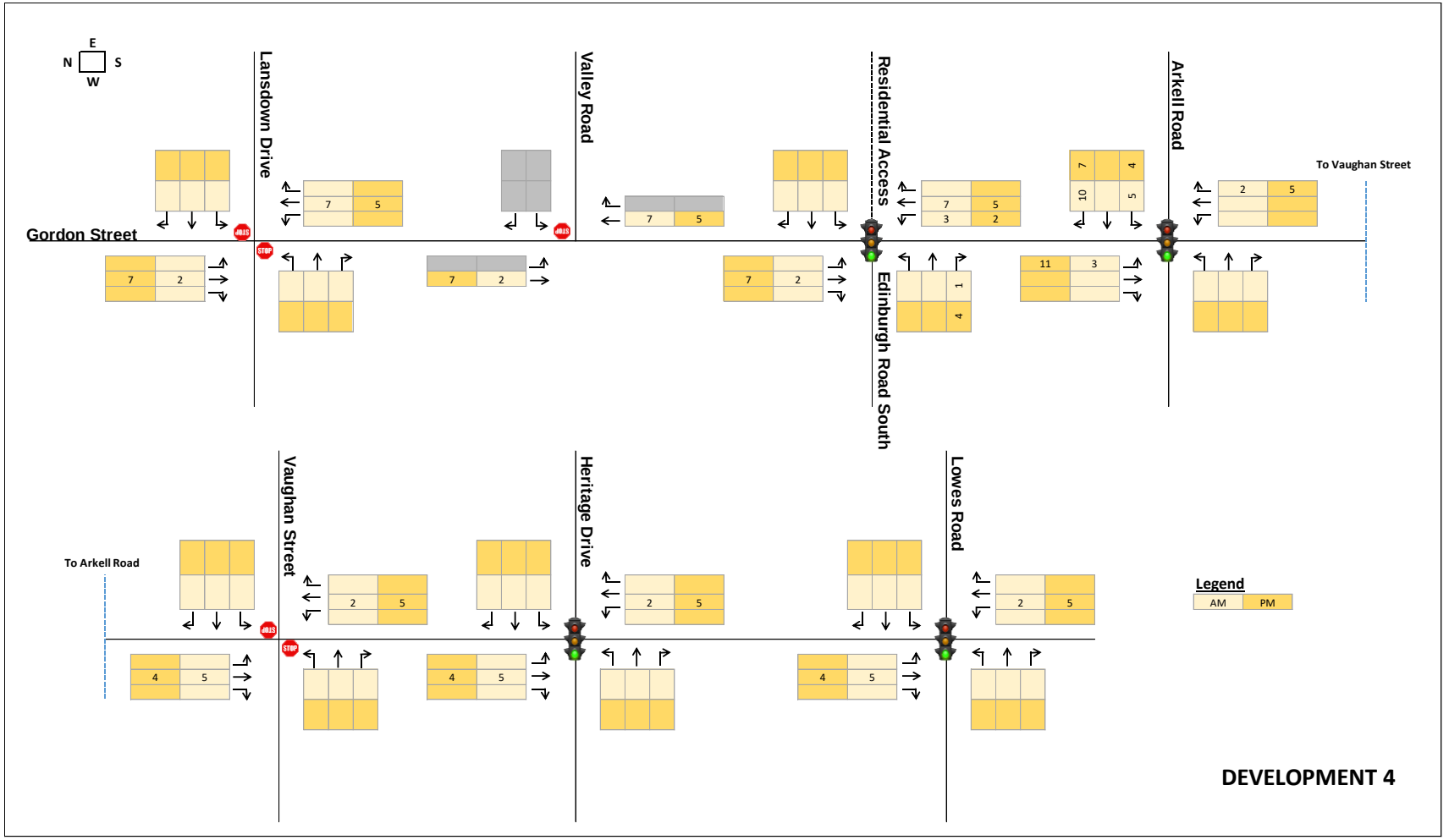
Source:

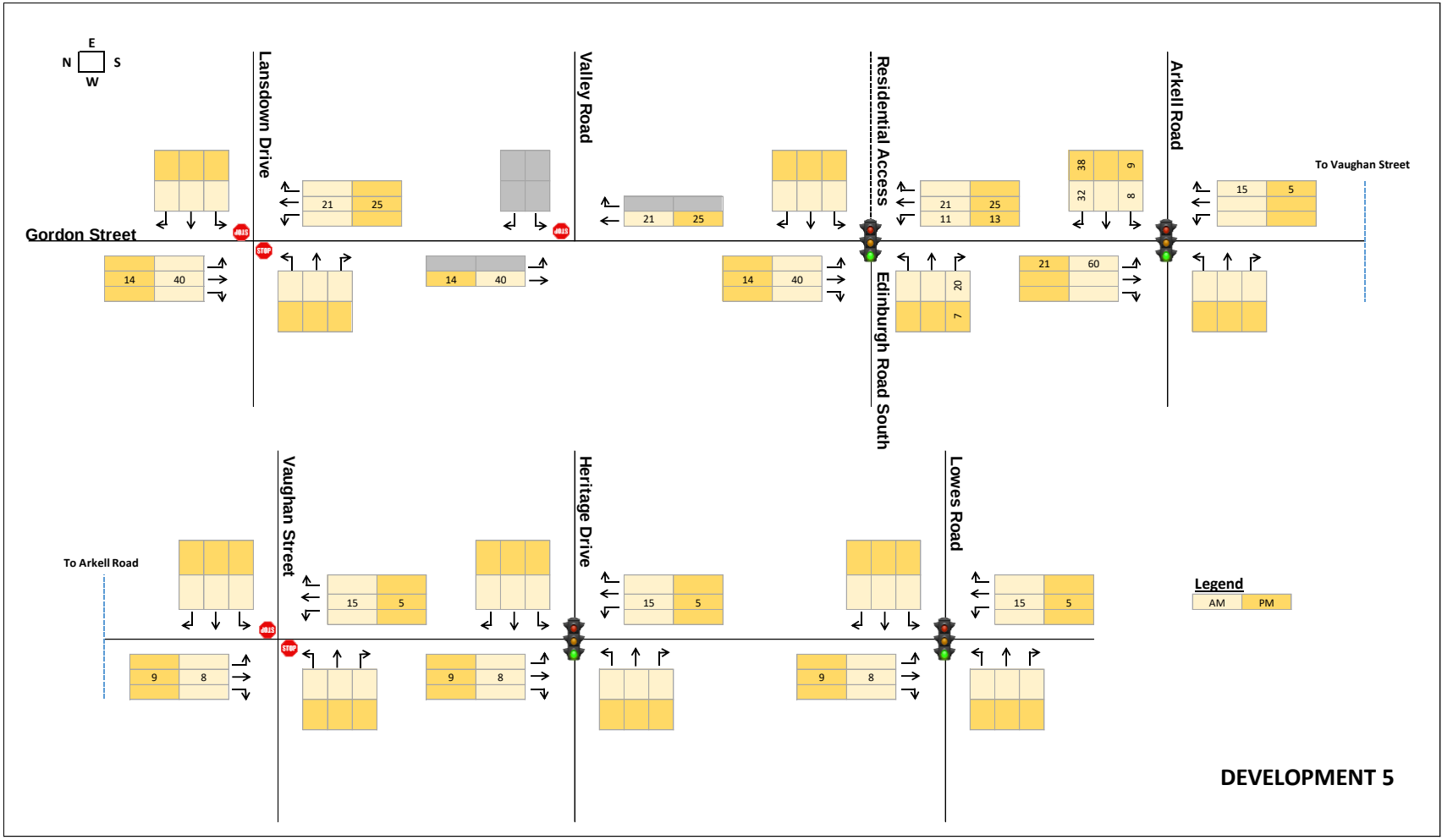
- R.J. Burnside & Associates Limited, 1354 Gordon Street Mixed-Use Development Transportation Impact Study Guelph, ON, August 2019
- Paradigm Transportation Solutions Limited, 33 Arkell Road Apartment Traffic Impact Study, August 2015.
- Paradigm Transportation Solutions Limited, 388 Arkell Road Transportation Impact Study, August 2017.
- Paradigm Transportation Solutions Limited, 34 Lowes Road West & 1533-1577 Gordon Street Traffic Impact Study – Addendum, December 2018.
- Paradigm Transportation Solutions Limited, 1300 Gordon Street Transportation Impact Study Update, December 2019.
- Paradigm Transportation Solutions Limited, 220 Arkell Road Transportation Impact Study, April 2019.

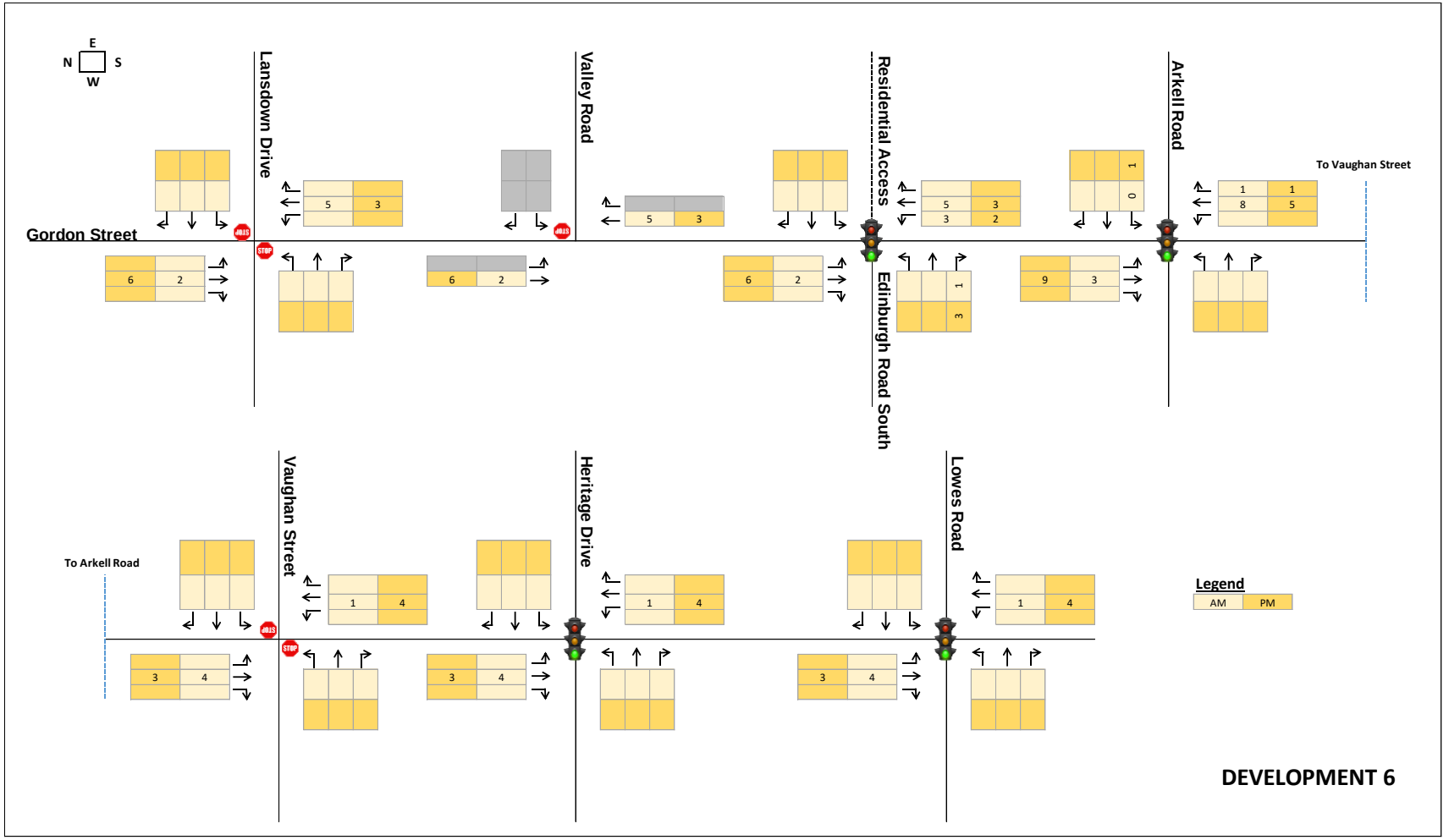

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
STOP
Legend
AM
PM
DEVELOPMENT 1

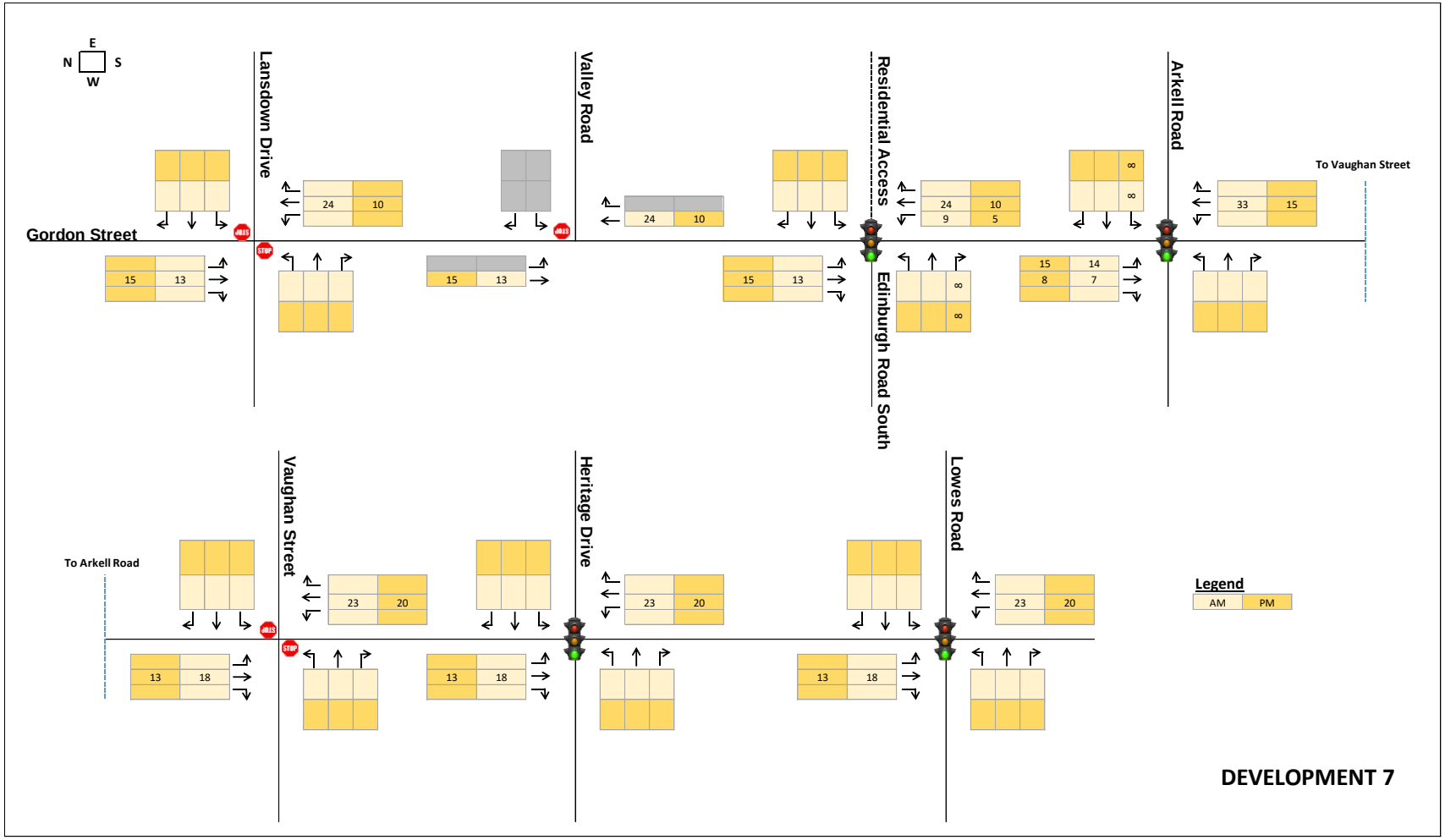

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 2

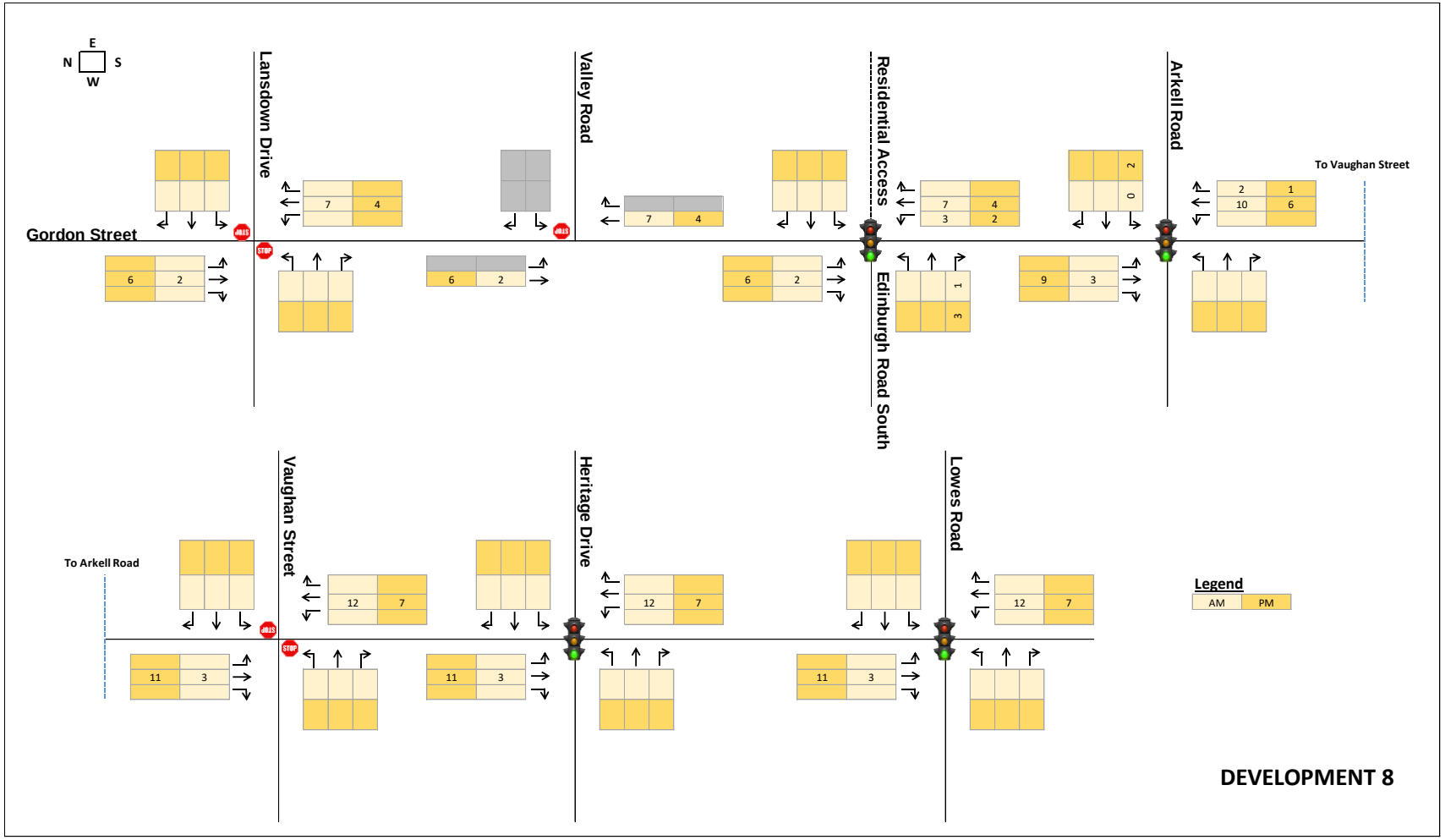

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 3

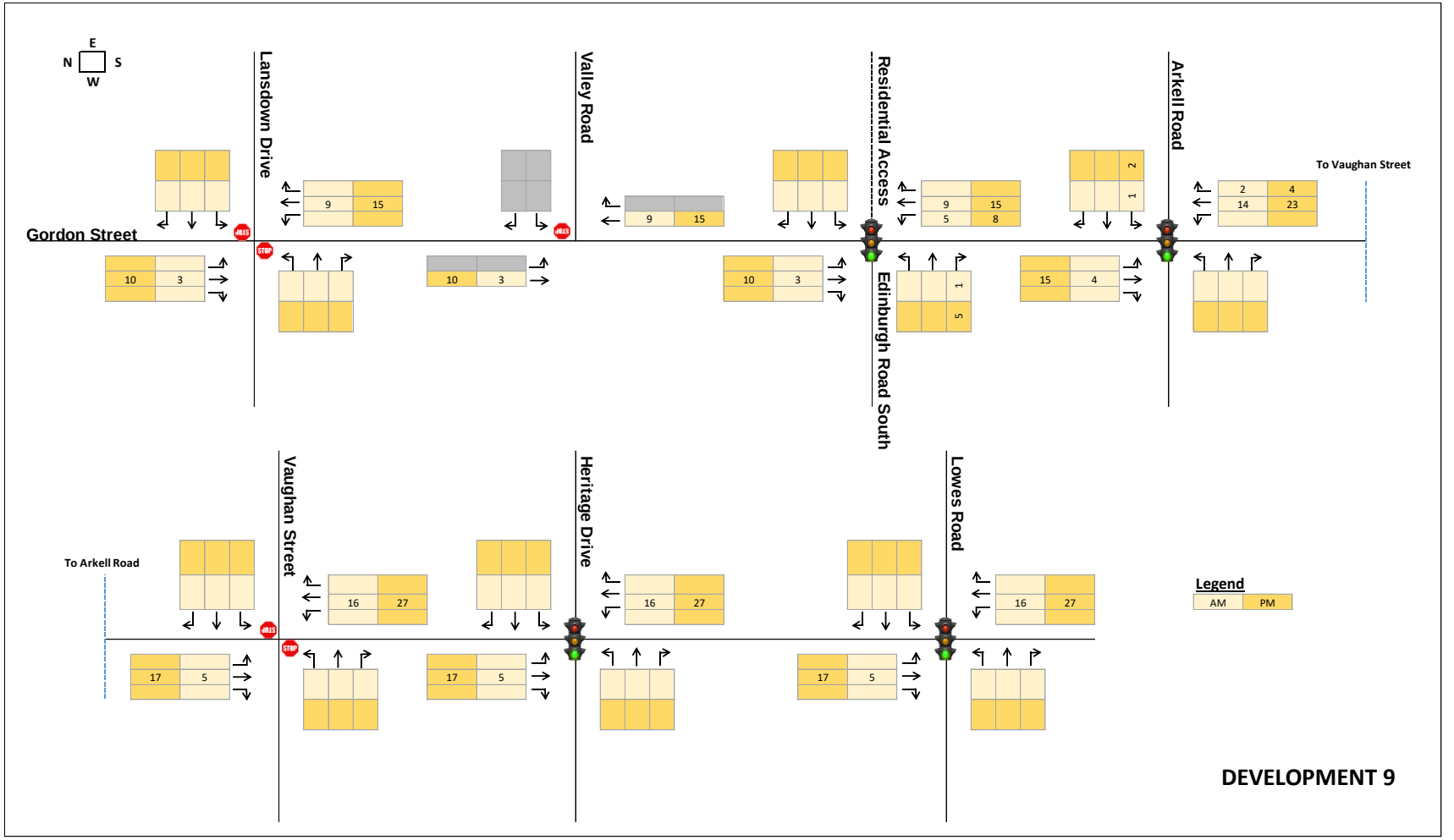

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 4

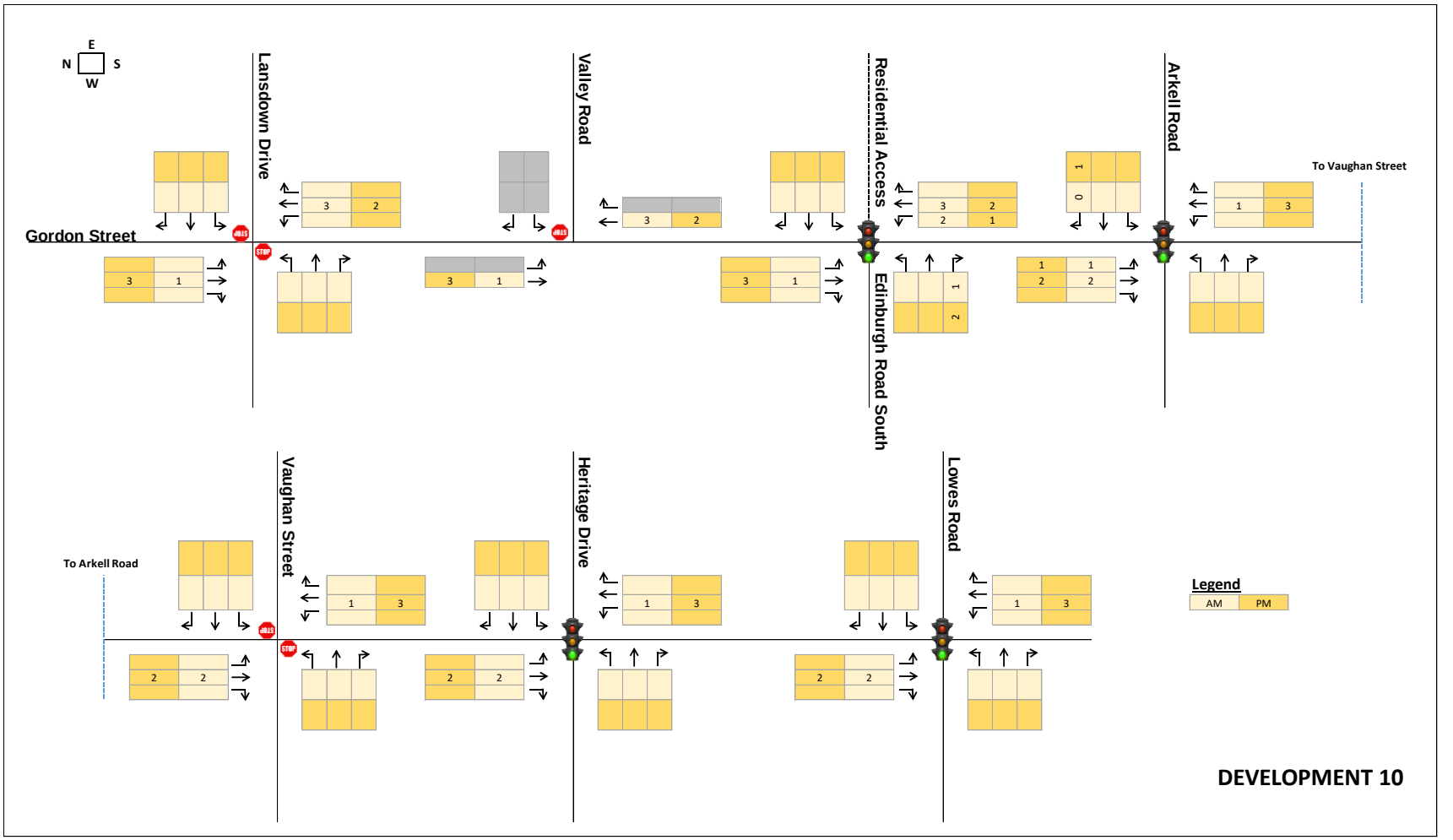

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 5

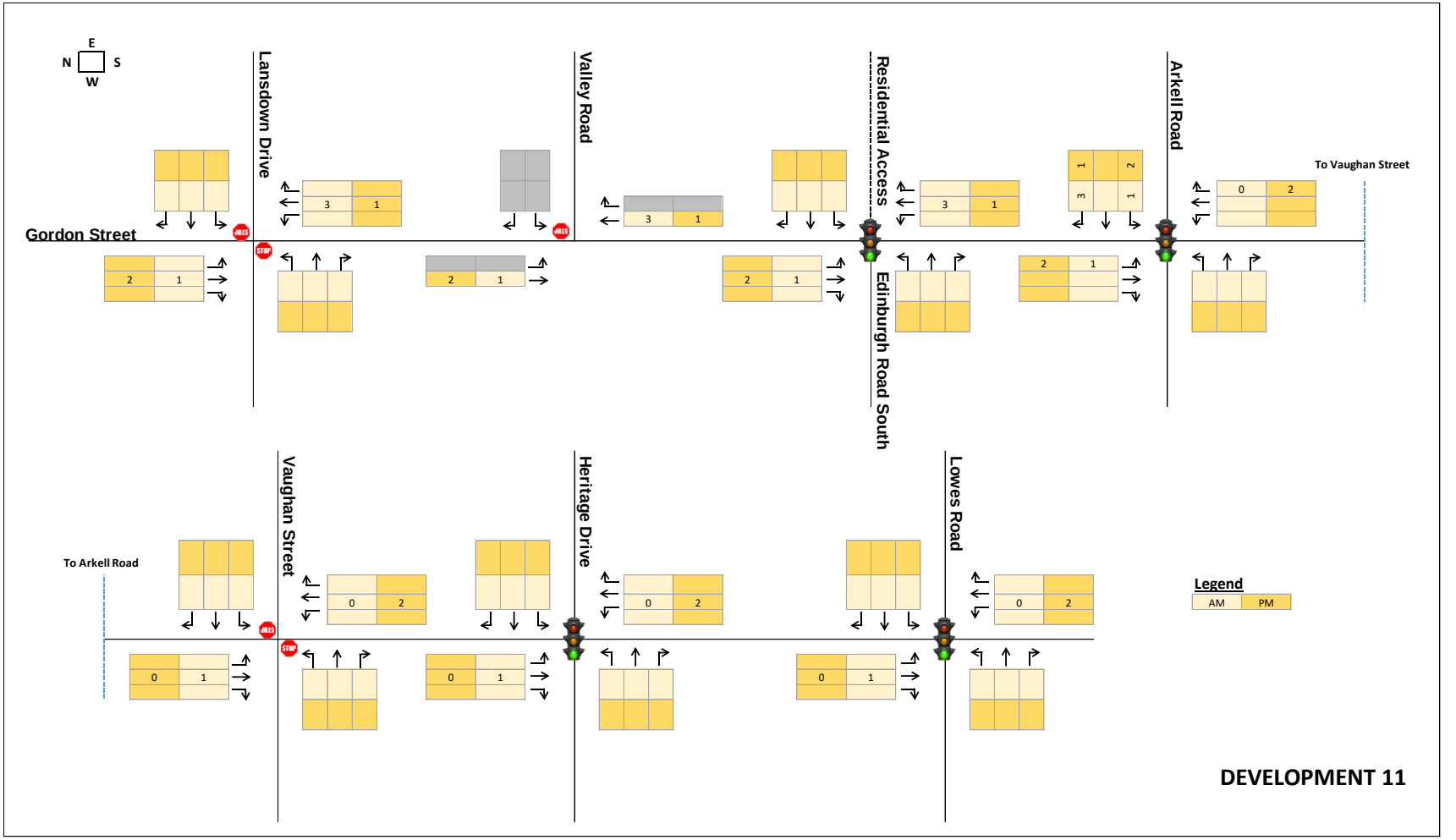

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 6

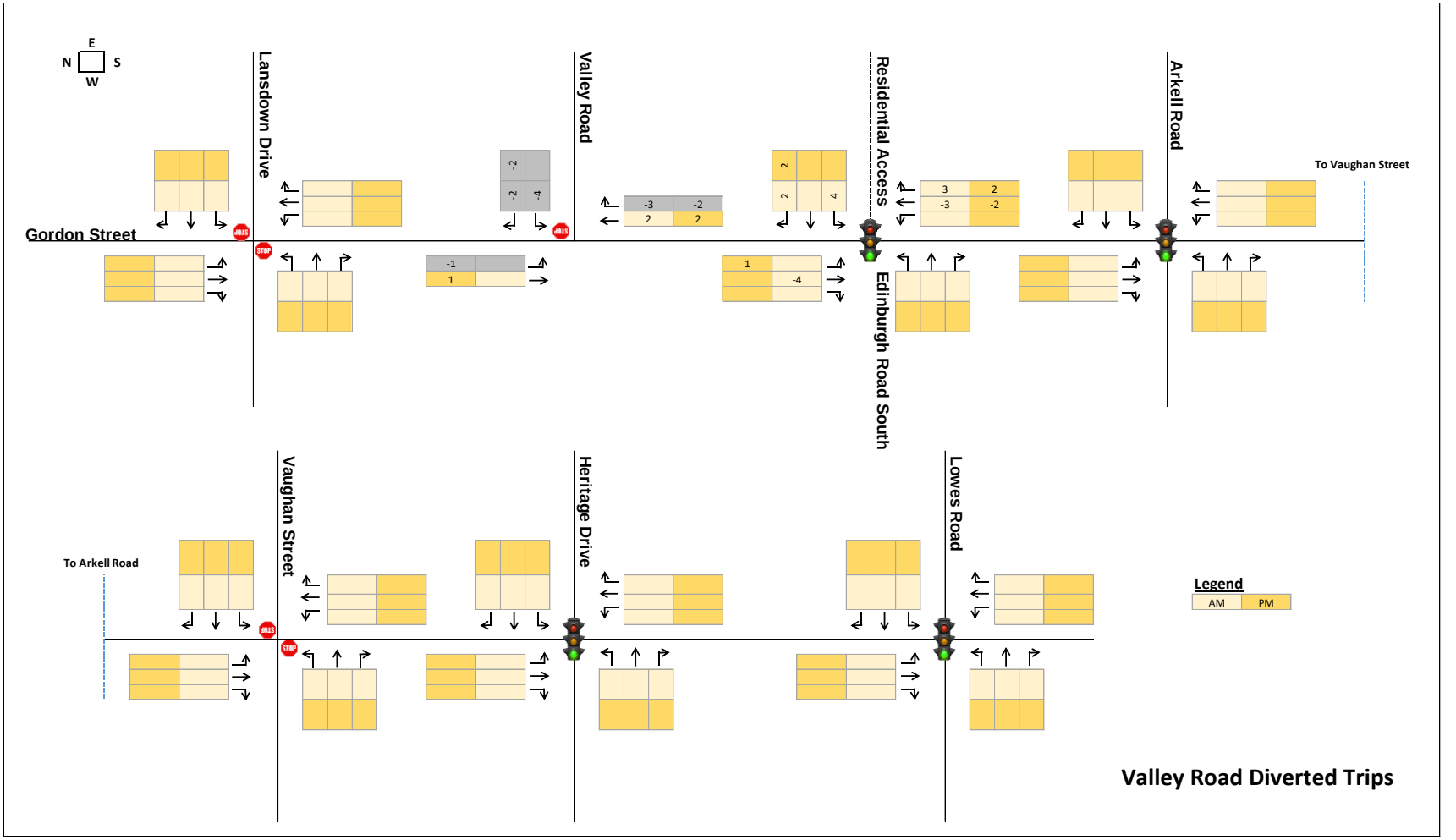

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 7


E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 8

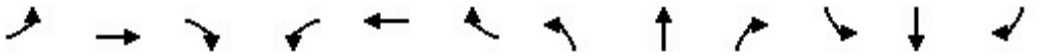

E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 9


E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 10


E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
DEVELOPMENT 11


E
N
S
W
Lansdown Drive
Valley Road
Residential Access
Arkell Road
Gordon Street
To Vaughan Street
Edinburgh Road South
Vaughan Street
Heritage Drive
Lowes Road
To Arkell Road
Legend
AM
PM
Valley Road Diverted Trips

Appendix D: Synchro Outputs Future Total Conditions (2031)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	1	1	0	7	2	1424	0	2	731	11
Future Volume (Veh/h)	14	0	1	1	0	7	2	1424	0	2	731	11
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	14	0	1	1	0	7	2	1424	0	2	731	11
Pedestrians		6			3			20				
Lane Width (m)		3.7			3.7			3.7				
Walking Speed (m/s)		1.1			1.1			1.1				
Percent Blockage		1			0			2				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								348				
pX, platoon unblocked	0.85	0.85		0.85	0.85	0.85				0.85		
vC, conflicting volume	1470	2178	397	1822	2183	715	748			1427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1204	2035	397	1617	2041	319	748			1154		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	100	100	98	100	99	100			100		
cM capacity (veh/h)	118	48	593	58	48	580	865			521		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	15	8	2	949	475	2	487	255
Volume Left	14	1	2	0	0	2	0	0
Volume Right	1	7	0	0	0	0	0	11
cSH	124	273	865	1700	1700	521	1700	1700
Volume to Capacity	0.12	0.03	0.00	0.56	0.28	0.00	0.29	0.15
Queue Length 95th (m)	3.0	0.7	0.1	0.0	0.0	0.1	0.0	0.0
Control Delay (s)	37.9	18.6	9.2	0.0	0.0	11.9	0.0	0.0
Lane LOS	E	C	A			B		
Approach Delay (s)	37.9	18.6	0.0			0.0		
Approach LOS	E	C						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	54.7%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	1421	0	0	740
Future Volume (Veh/h)	0	0	1421	0	0	740
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	0	1421	0	0	740
Pedestrians	9		39			2
Lane Width (m)	3.7		3.7			3.7
Walking Speed (m/s)	1.1		1.1			1.1
Percent Blockage	1		4			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			62			
pX, platoon unblocked	0.85	0.85			0.85	
vC, conflicting volume	1839	722			1430	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1630	310			1147	
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	100			100	
cM capacity (veh/h)	76	580			518	

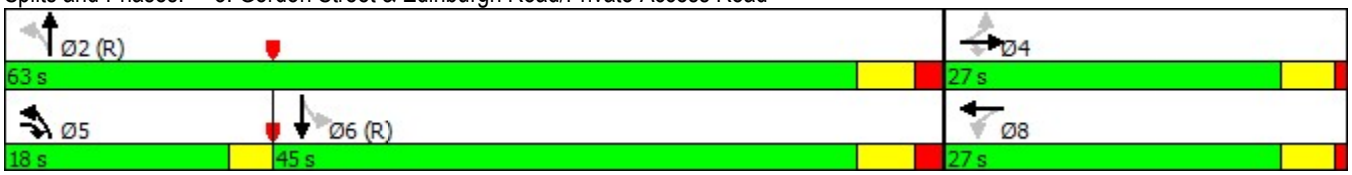
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	947	474	247	493
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1700	518	1700
Volume to Capacity	0.00	0.56	0.28	0.00	0.29
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.0	0.0		0.0	
Approach LOS	A				

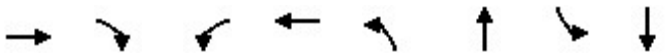
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	60	5	379	21	17	539	1342	6	692
Future Volume (vph)	60	5	379	21	17	539	1342	6	692
Turn Type	Perm	NA	pm+ov	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		4	5		8	5	2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	4	4	5	8	8	5	2	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
Minimum Split (s)	22.5	22.5	15.0	22.5	22.5	15.0	63.0	45.0	45.0
Total Split (s)	27.0	27.0	18.0	27.0	27.0	18.0	63.0	45.0	45.0
Total Split (%)	30.0%	30.0%	20.0%	30.0%	30.0%	20.0%	70.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.0	3.5	3.5	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	3.0	4.5	4.5	3.0	6.0	6.0	6.0
Lead/Lag			Lead			Lead		Lag	Lag
Lead-Lag Optimize?			Yes			Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		10.3	36.8	10.3	10.3	74.2	72.4	44.2	44.2
Actuated g/C Ratio		0.11	0.41	0.11	0.11	0.82	0.80	0.49	0.49
v/c Ratio		0.51	0.53	0.14	0.17	0.73	0.51	0.03	0.45
Control Delay		50.1	14.5	35.7	22.4	17.0	7.3	15.3	17.2
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		50.1	14.5	35.7	22.4	17.0	7.3	15.3	17.2
LOS		D	B	D	C	B	A	B	B
Approach Delay		19.7			27.3		10.0		17.2
Approach LOS		B			C		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 13.4	Intersection LOS: B
Intersection Capacity Utilization 72.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Gordon Street & Edinburgh Road/Private Access Road

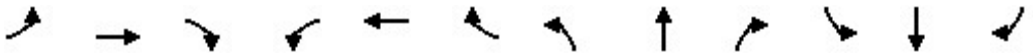




Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	379	21	36	539	1351	6	736
v/c Ratio	0.51	0.53	0.14	0.17	0.73	0.51	0.03	0.45
Control Delay	50.1	14.5	35.7	22.4	17.0	7.3	15.3	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	14.5	35.7	22.4	17.0	7.3	15.3	17.2
Queue Length 50th (m)	10.7	28.1	3.3	2.7	54.2	56.6	0.6	44.6
Queue Length 95th (m)	22.1	50.1	9.5	10.5	m75.3	m79.7	2.9	62.6
Internal Link Dist (m)	641.3			79.7		382.4		38.5
Turn Bay Length (m)					65.0		10.0	
Base Capacity (vph)	279	709	336	448	734	2667	186	1624
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	0.23	0.53	0.06	0.08	0.73	0.51	0.03	0.45

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	5	379	21	17	19	539	1342	9	6	692	44
Future Volume (vph)	60	5	379	21	17	19	539	1342	9	6	692	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	3.0	4.5	4.5		3.0	6.0		6.0	6.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.95	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.92		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1494	1541	1789	1734		1674	3317		1789	3301	
Flt Permitted		0.72	1.00	0.71	1.00		0.29	1.00		0.20	1.00	
Satd. Flow (perm)		1119	1541	1346	1734		517	3317		380	3301	
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)	60	5	379	21	17	19	539	1342	9	6	692	44
RTOR Reduction (vph)	0	0	84	0	17	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	65	295	21	19	0	539	1351	0	6	731	0
Confl. Peds. (#/hr)	38											
Heavy Vehicles (%)	18%	2%	6%	2%	2%	2%	9%	10%	2%	2%	10%	3%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		9.2	33.2	9.2	9.2		70.3	70.3		43.3	43.3	
Effective Green, g (s)		9.2	33.2	9.2	9.2		70.3	70.3		43.3	43.3	
Actuated g/C Ratio		0.10	0.37	0.10	0.10		0.78	0.78		0.48	0.48	
Clearance Time (s)		4.5	3.0	4.5	4.5		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		114	568	137	177		712	2590		182	1588	
v/s Ratio Prot			0.14		0.01		c0.20	0.41			0.22	
v/s Ratio Perm		c0.06	0.05	0.02			c0.39			0.02		
v/c Ratio		0.57	0.52	0.15	0.11		0.76	0.52		0.03	0.46	
Uniform Delay, d1		38.5	22.2	36.8	36.7		6.7	3.6		12.3	15.6	
Progression Factor		1.00	1.00	1.00	1.00		2.08	1.62		1.00	1.00	
Incremental Delay, d2		6.7	0.8	0.5	0.3		2.4	0.4		0.3	1.0	
Delay (s)		45.2	23.0	37.4	36.9		16.4	6.3		12.6	16.5	
Level of Service		D	C	D	D		B	A		B	B	
Approach Delay (s)		26.2			37.1			9.1			16.5	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	20	0	194	2	455	1	1387	259	817
Future Volume (vph)	20	0	194	2	455	1	1387	259	817
Turn Type	Perm	NA	Perm	NA	pm+ov	Perm	NA	pm+pt	NA
Protected Phases		4		8	1		2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	1	2	2	1	6
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)	27.0	27.0	27.0	27.0	15.0	45.0	45.0	15.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	15.0	48.0	48.0	15.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	16.7%	53.3%	53.3%	16.7%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	17.6	17.6	17.6	17.6	32.4	45.6	45.6	63.4	60.4
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.36	0.51	0.51	0.70	0.67
v/c Ratio	0.08	0.01	0.78	0.01	0.85	0.00	0.88	0.85	0.37
Control Delay	28.4	0.0	55.1	27.0	38.7	13.0	28.0	46.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	0.0	55.1	27.0	38.7	13.0	28.0	46.0	6.7
LOS	C	A	E	C	D	B	C	D	A
Approach Delay		21.8		43.6			28.0		16.1
Approach LOS		C		D			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 27.1	Intersection LOS: C
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: Gordon Street & Arkell Road

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	20	6	194	2	455	1	1528	259	827
v/c Ratio	0.08	0.01	0.78	0.01	0.85	0.00	0.88	0.85	0.37
Control Delay	28.4	0.0	55.1	27.0	38.7	13.0	28.0	46.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	0.0	55.1	27.0	38.7	13.0	28.0	46.0	6.7
Queue Length 50th (m)	2.8	0.0	31.4	0.3	56.8	0.1	120.7	31.7	17.5
Queue Length 95th (m)	8.4	0.0	#54.8	2.0	#98.8	0.9	#169.9	#69.9	41.2
Internal Link Dist (m)		49.1		643.7			166.1		382.4
Turn Bay Length (m)			55.0			40.0		70.0	
Base Capacity (vph)	300	463	298	448	543	330	1746	317	2243
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.01	0.65	0.00	0.84	0.00	0.88	0.82	0.37

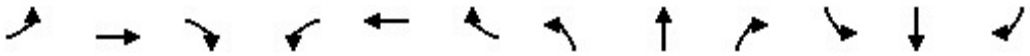
Intersection Summary

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)	20	0	6	194	2	455	1	1387	141	259	817	10
Future Volume (vph)	20	0	6	194	2	455	1	1387	141	259	817	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	3.0	6.0	6.0		3.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	*1.00		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.96	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.94	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1616	1341		1611	1921	1420	1822	3432		1690	3340	
Flt Permitted	0.76	1.00		0.75	1.00	1.00	0.34	1.00		0.08	1.00	
Satd. Flow (perm)	1287	1341		1278	1921	1420	652	3432		146	3340	
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)	20	0	6	194	2	455	1	1387	141	259	817	10
RTOR Reduction (vph)	0	5	0	0	0	24	0	8	0	0	1	0
Lane Group Flow (vph)	20	1	0	194	2	431	1	1520	0	259	826	0
Confl. Peds. (#/hr)	48		2	2		48	5		2	2		5
Heavy Vehicles (%)	6%	0%	20%	13%	0%	10%	0%	10%	12%	8%	9%	13%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA		pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	17.6	17.6		17.6	17.6	29.4	45.6	45.6		60.4	60.4	
Effective Green, g (s)	17.6	17.6		17.6	17.6	29.4	45.6	45.6		60.4	60.4	
Actuated g/C Ratio	0.20	0.20		0.20	0.20	0.33	0.51	0.51		0.67	0.67	
Clearance Time (s)	6.0	6.0		6.0	6.0	3.0	6.0	6.0		3.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	251	262		249	375	463	330	1738		300	2241	
v/s Ratio Prot		0.00			0.00	c0.12		0.44		0.11	0.25	
v/s Ratio Perm	0.02			0.15		0.18	0.00			c0.46		
v/c Ratio	0.08	0.00		0.78	0.01	0.93	0.00	0.87		0.86	0.37	
Uniform Delay, d1	29.6	29.1		34.4	29.2	29.3	11.0	19.7		24.6	6.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.13	0.89	
Incremental Delay, d2	0.1	0.0		14.2	0.0	25.5	0.0	6.5		19.9	0.4	
Delay (s)	29.7	29.2		48.6	29.2	54.8	11.0	26.1		47.9	6.2	
Level of Service	C	C		D	C	D	B	C		D	A	
Approach Delay (s)		29.6			52.8			26.1			16.1	
Approach LOS		C			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	13	4	0	2	8	1499	5	14	988	19
Future Volume (Veh/h)	14	0	13	4	0	2	8	1499	5	14	988	19
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	14	0	13	4	0	2	8	1499	5	14	988	19
Pedestrians		3			1							
Lane Width (m)		3.7			3.7							
Walking Speed (m/s)		1.1			1.1							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								232			190	
pX, platoon unblocked	0.86	0.86	0.90	0.86	0.86	0.81	0.90			0.81		
vC, conflicting volume	1796	2550	506	2054	2556	753	1010			1505		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1078	1959	236	1379	1967	215	794			1147		
tC, single (s)	7.8	6.5	7.1	7.5	6.5	6.9	5.0			4.1		
tC, 2 stage (s)												
tF (s)	3.7	4.0	3.4	3.5	4.0	3.3	2.6			2.2		
p0 queue free %	89	100	98	95	100	100	99			97		
cM capacity (veh/h)	127	53	670	85	52	642	543			497		

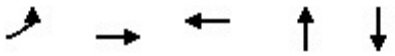
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	27	6	758	754	508	513
Volume Left	14	4	8	0	14	0
Volume Right	13	2	0	5	0	19
cSH	208	120	543	1700	497	1700
Volume to Capacity	0.13	0.05	0.01	0.44	0.03	0.30
Queue Length 95th (m)	3.3	1.2	0.3	0.0	0.7	0.0
Control Delay (s)	24.9	36.6	0.4	0.0	0.8	0.0
Lane LOS	C	E	A		A	
Approach Delay (s)	24.9	36.6	0.2		0.4	
Approach LOS	C	E				

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	57.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	61	0	7	2	30	1385	17	924
Future Volume (vph)	61	0	7	2	30	1385	17	924
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	9.3	9.3		9.3		61.3		61.3
Actuated g/C Ratio	0.12	0.12		0.12		0.78		0.78
v/c Ratio	0.42	0.10		0.10		0.60		0.42
Control Delay	41.0	0.6		23.8		6.7		4.9
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	41.0	0.6		23.8		6.7		4.9
LOS	D	A		C		A		A
Approach Delay		27.4		23.8		6.7		4.9
Approach LOS		C		C		A		A

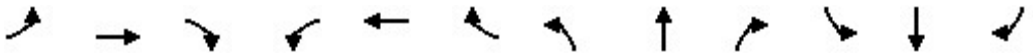
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 6.9	Intersection LOS: A
Intersection Capacity Utilization 84.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Gordon Street & Heritage Drive



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	61	31	17	1416	979
v/c Ratio	0.42	0.10	0.10	0.60	0.42
Control Delay	41.0	0.6	23.8	6.7	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	0.6	23.8	6.7	4.9
Queue Length 50th (m)	8.5	0.0	1.2	44.9	24.3
Queue Length 95th (m)	19.5	0.0	6.6	77.6	42.2
Internal Link Dist (m)		117.5	89.0	213.2	208.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	325	510	360	2350	2324
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.19	0.06	0.05	0.60	0.42

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	0	31	7	2	8	30	1385	1	17	924	38
Future Volume (vph)	61	0	31	7	2	8	30	1385	1	17	924	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.98			0.98			1.00			1.00	
Flpb, ped/bikes	0.96	1.00			1.00			1.00			1.00	
Frt	1.00	0.85			0.94			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			1.00	
Satd. Flow (prot)	1567	1489			1528			3306			3271	
Flt Permitted	0.75	1.00			0.86			0.92			0.92	
Satd. Flow (perm)	1231	1489			1337			3031			2997	
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)	61	0	31	7	2	8	30	1385	1	17	924	38
RTOR Reduction (vph)	0	28	0	0	7	0	0	0	0	0	2	0
Lane Group Flow (vph)	61	3	0	0	10	0	0	1416	0	0	977	0
Confl. Peds. (#/hr)	34		3	3		34	6		23	23		6
Heavy Vehicles (%)	12%	0%	8%	0%	50%	14%	24%	10%	0%	7%	11%	6%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.2	8.2			8.2			60.1			60.1	
Effective Green, g (s)	8.2	8.2			8.2			60.1			60.1	
Actuated g/C Ratio	0.10	0.10			0.10			0.75			0.75	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	125	152			136			2268			2243	
v/s Ratio Prot		0.00										
v/s Ratio Perm	c0.05				0.01			c0.47			0.33	
v/c Ratio	0.49	0.02			0.07			0.62			0.44	
Uniform Delay, d1	34.1	32.4			32.6			4.8			3.8	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	3.0	0.1			0.2			1.3			0.6	
Delay (s)	37.0	32.5			32.8			6.1			4.4	
Level of Service	D	C			C			A			A	
Approach Delay (s)		35.5			32.8			6.1			4.4	
Approach LOS		D			C			A			A	

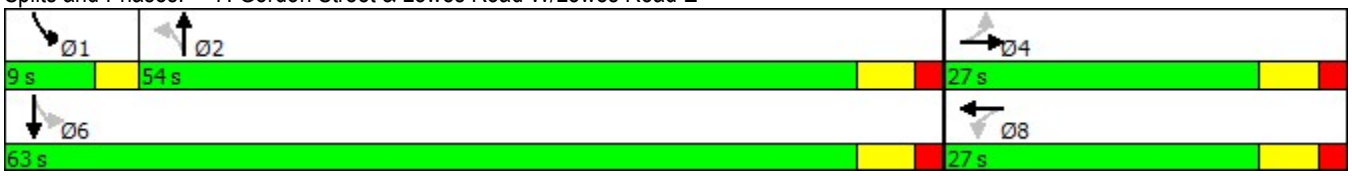
Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	80.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	4	30	1	2	1221	39	902
Future Volume (vph)	25	4	30	1	2	1221	39	902
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	54.0
Total Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	60.0%	60.0%	10.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0	6.0	3.0	6.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Max	Max	None	Max
Act Effct Green (s)		9.3		9.3	51.9	51.9	60.2	57.1
Actuated g/C Ratio		0.12		0.12	0.66	0.66	0.77	0.73
v/c Ratio		0.41		0.68	0.01	0.57	0.12	0.35
Control Delay		41.0		21.2	7.5	10.1	3.8	4.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		41.0		21.2	7.5	10.1	3.8	4.8
LOS		D		C	A	B	A	A
Approach Delay		41.0		21.2		10.1		4.7
Approach LOS		D		C		B		A

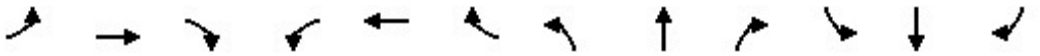
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.5	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 64.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Gordon Street & Lowes Road W/Lowes Road E



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	219	2	1231	39	933
v/c Ratio	0.41	0.68	0.01	0.57	0.12	0.35
Control Delay	41.0	21.2	7.5	10.1	3.8	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	21.2	7.5	10.1	3.8	4.8
Queue Length 50th (m)	4.0	7.3	0.1	51.3	1.0	19.8
Queue Length 95th (m)	12.6	27.2	1.0	89.7	4.1	40.6
Internal Link Dist (m)	98.7	115.8		108.7		213.2
Turn Bay Length (m)			45.0		70.0	
Base Capacity (vph)	189	514	388	2171	322	2630
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	0.19	0.43	0.01	0.57	0.12	0.35

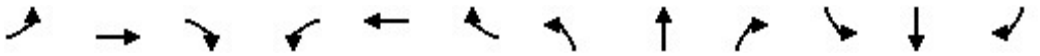
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	4	7	30	1	188	2	1221	10	39	902	31
Future Volume (vph)	25	4	7	30	1	188	2	1221	10	39	902	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.88		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1644			1543		1823	3283		1587	3611	
Flt Permitted		0.40			0.94		0.31	1.00		0.18	1.00	
Satd. Flow (perm)		687			1468		588	3283		293	3611	
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)	25	4	7	30	1	188	2	1221	10	39	902	31
RTOR Reduction (vph)	0	6	0	0	147	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	30	0	0	72	0	2	1231	0	39	931	0
Confl. Peds. (#/hr)	5					5	6		2	2		6
Heavy Vehicles (%)	14%	0%	0%	12%	0%	7%	0%	11%	13%	15%	0%	15%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.3			9.3		51.9	51.9		58.4	58.4	
Effective Green, g (s)		9.3			9.3		51.9	51.9		58.4	58.4	
Actuated g/C Ratio		0.12			0.12		0.65	0.65		0.73	0.73	
Clearance Time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		80			171		382	2137		271	2645	
v/s Ratio Prot								c0.37		0.01	c0.26	
v/s Ratio Perm		0.04			c0.05		0.00			0.10		
v/c Ratio		0.37			0.42		0.01	0.58		0.14	0.35	
Uniform Delay, d1		32.5			32.7		4.9	7.8		4.0	3.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.9			1.7		0.0	1.1		0.2	0.4	
Delay (s)		35.4			34.4		4.9	8.9		4.3	4.2	
Level of Service		D			C		A	A		A	A	
Approach Delay (s)		35.4			34.4			8.9			4.2	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	79.7	Sum of lost time (s)	15.0
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	2	0	0	5	17	1159	2	17	1541	47
Future Volume (Veh/h)	21	0	2	0	0	5	17	1159	2	17	1541	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	21	0	2	0	0	5	17	1159	2	17	1541	47
Pedestrians		17			6			8			1	
Lane Width (m)		3.5			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								348				
pX, platoon unblocked	0.92	0.92		0.92	0.92	0.92				0.92		
vC, conflicting volume	2235	2816	819	2014	2839	588	1605			1167		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2164	2800	819	1924	2824	365	1605			998		
tC, single (s)	7.8	6.5	6.9	7.5	6.5	7.4	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.5	2.2			2.2		
p0 queue free %	0	100	99	100	100	99	96			97		
cM capacity (veh/h)	19	16	316	35	15	519	407			639		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	23	5	17	773	388	17	1027	561
Volume Left	21	0	17	0	0	17	0	0
Volume Right	2	5	0	0	2	0	0	47
cSH	21	519	407	1700	1700	639	1700	1700
Volume to Capacity	1.12	0.01	0.04	0.45	0.23	0.03	0.60	0.33
Queue Length 95th (m)	23.5	0.2	1.0	0.0	0.0	0.6	0.0	0.0
Control Delay (s)	504.1	12.0	14.2	0.0	0.0	10.8	0.0	0.0
Lane LOS	F	B	B			B		
Approach Delay (s)	504.1	12.0	0.2			0.1		
Approach LOS	F	B						

Intersection Summary				
Average Delay	4.3			
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	1190	0	0	1527
Future Volume (Veh/h)	0	0	1190	0	0	1527
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	0	1190	0	0	1527
Pedestrians	6					
Lane Width (m)	3.7					
Walking Speed (m/s)	1.1					
Percent Blockage	1					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			62			
pX, platoon unblocked	0.89	0.89			0.89	
vC, conflicting volume	1960	601			1196	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1827	296			967	
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	100			100	
cM capacity (veh/h)	62	623			636	

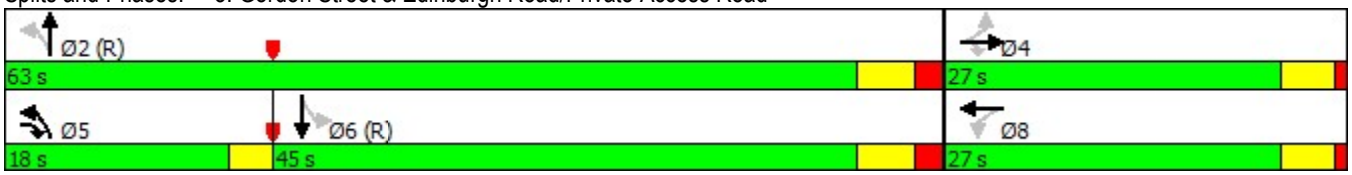
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	793	397	509	1018
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1700	636	1700
Volume to Capacity	0.00	0.47	0.23	0.00	0.60
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.0	0.0		0.0	
Approach LOS	A				

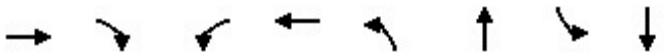
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	55	16	745	11	10	575	1123	16	1383
Future Volume (vph)	55	16	745	11	10	575	1123	16	1383
Turn Type	Perm	NA	pm+ov	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		4	5		8	5	2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	4	4	5	8	8	5	2	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
Minimum Split (s)	22.5	22.5	18.0	22.5	22.5	18.0	63.0	45.0	45.0
Total Split (s)	27.0	27.0	18.0	27.0	27.0	18.0	63.0	45.0	45.0
Total Split (%)	30.0%	30.0%	20.0%	30.0%	30.0%	20.0%	70.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.0	3.5	3.5	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	-1.0	0.0	0.0	-2.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	2.0	4.5	4.5	1.0	6.0	6.0	6.0
Lead/Lag			Lead			Lead		Lag	Lag
Lead-Lag Optimize?			Yes			Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		10.3	41.4	10.3	10.3	76.2	72.4	39.0	39.0
Actuated g/C Ratio		0.11	0.46	0.11	0.11	0.85	0.80	0.43	0.43
v/c Ratio		0.50	1.05	0.07	0.11	0.85	0.42	0.08	1.04
Control Delay		48.7	71.6	34.3	23.1	27.8	7.7	16.4	60.4
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		48.7	71.6	34.3	23.1	27.8	7.7	16.4	60.4
LOS		D	E	C	C	C	A	B	E
Approach Delay		69.6			26.8		14.4		59.9
Approach LOS		E			C		B		E

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 42.5	Intersection LOS: D
Intersection Capacity Utilization 107.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 3: Gordon Street & Edinburgh Road/Private Access Road





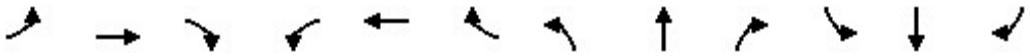
Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	745	11	22	575	1141	16	1511
v/c Ratio	0.50	1.05	0.07	0.11	0.85	0.42	0.08	1.04
Control Delay	48.7	71.6	34.3	23.1	27.8	7.7	16.4	60.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.7	71.6	34.3	23.1	27.8	7.7	16.4	60.4
Queue Length 50th (m)	11.7	~139.5	1.7	1.6	82.8	55.8	1.6	~149.1
Queue Length 95th (m)	23.6	#207.5	6.2	7.8	m#115.7	m65.8	5.6	#190.8
Internal Link Dist (m)	641.3			84.2		382.4		38.5
Turn Bay Length (m)					65.0		10.0	
Base Capacity (vph)	308	712	334	441	679	2693	203	1456
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	0.23	1.05	0.03	0.05	0.85	0.42	0.08	1.04

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.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	16	745	11	10	12	575	1123	18	16	1383	128
Future Volume (vph)	55	16	745	11	10	12	575	1123	18	16	1383	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	2.0	4.5	4.5		1.0	6.0		6.0	6.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		0.96	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.92		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1562	1507	1789	1729		1706	3344		1789	3343	
Flt Permitted		0.76	1.00	0.71	1.00		0.10	1.00		0.25	1.00	
Satd. Flow (perm)		1233	1507	1339	1729		175	3344		469	3343	
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)	55	16	745	11	10	12	575	1123	18	16	1383	128
RTOR Reduction (vph)	0	0	20	0	11	0	0	1	0	0	8	0
Lane Group Flow (vph)	0	71	725	11	11	0	575	1140	0	16	1503	0
Confl. Peds. (#/hr)	36		25				35					35
Heavy Vehicles (%)	17%	2%	7%	2%	2%	2%	7%	9%	2%	2%	7%	5%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		9.2	38.4	9.2	9.2		70.3	70.3		38.1	38.1	
Effective Green, g (s)		9.2	40.4	9.2	9.2		72.3	70.3		38.1	38.1	
Actuated g/C Ratio		0.10	0.45	0.10	0.10		0.80	0.78		0.42	0.42	
Clearance Time (s)		4.5	3.0	4.5	4.5		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		126	676	136	176		671	2612		198	1415	
v/s Ratio Prot			c0.36		0.01		0.30	0.34			c0.45	
v/s Ratio Perm		0.06	0.12	0.01			0.39			0.03		
v/c Ratio		0.56	1.07	0.08	0.06		0.86	0.44		0.08	1.06	
Uniform Delay, d1		38.5	24.8	36.6	36.5		22.5	3.3		15.5	25.9	
Progression Factor		1.00	1.00	1.00	1.00		0.89	1.97		1.00	1.00	
Incremental Delay, d2		5.7	55.8	0.3	0.2		5.4	0.3		0.8	42.3	
Delay (s)		44.2	80.6	36.8	36.7		25.5	6.7		16.3	68.3	
Level of Service		D	F	D	D		C	A		B	E	
Approach Delay (s)		77.4			36.7			13.0			67.7	
Approach LOS		E			D			B			E	

Intersection Summary					
HCM 2000 Control Delay	46.5	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	1.07				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		12.5	
Intersection Capacity Utilization	107.3%	ICU Level of Service		G	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	25	4	175	7	369	16	1307	504	1587
Future Volume (vph)	25	4	175	7	369	16	1307	504	1587
Turn Type	Perm	NA	Perm	NA	pm+ov	Perm	NA	pm+pt	NA
Protected Phases		4		8	1		2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	1	2	2	1	6
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)	27.0	27.0	27.0	27.0	15.0	48.0	48.0	15.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	15.0	48.0	48.0	15.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	16.7%	53.3%	53.3%	16.7%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	2.0	6.0	6.0	1.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	16.8	16.8	16.8	16.8	38.0	42.0	42.0	66.2	61.2
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.42	0.47	0.47	0.74	0.68
v/c Ratio	0.10	0.06	0.74	0.02	0.59	0.11	0.96	1.18	0.66
Control Delay	29.0	15.8	53.3	27.3	21.4	16.2	38.2	111.4	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	15.8	53.3	27.3	21.4	16.2	38.2	111.4	11.2
LOS	C	B	D	C	C	B	D	F	B
Approach Delay		23.4		31.6			38.0		35.2
Approach LOS		C		C			D		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 18 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 35.6	Intersection LOS: D
Intersection Capacity Utilization 102.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 4: Gordon Street & Arkell Road

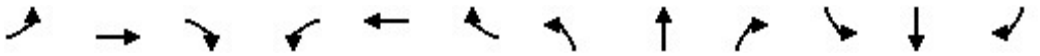
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	25	18	175	7	369	16	1562	504	1603
v/c Ratio	0.10	0.06	0.74	0.02	0.59	0.11	0.96	1.18	0.66
Control Delay	29.0	15.8	53.3	27.3	21.4	16.2	38.2	111.4	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	15.8	53.3	27.3	21.4	16.2	38.2	111.4	11.2
Queue Length 50th (m)	3.6	0.6	28.5	1.0	40.7	1.5	123.4	~93.9	71.0
Queue Length 95th (m)	9.7	5.8	48.4	4.3	67.2	5.6	#173.5	m#100.0	m73.6
Internal Link Dist (m)		49.1		643.7			166.1		382.4
Turn Bay Length (m)			55.0			40.0		70.0	
Base Capacity (vph)	325	377	293	448	626	140	1628	427	2439
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.05	0.60	0.02	0.59	0.11	0.96	1.18	0.66

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.

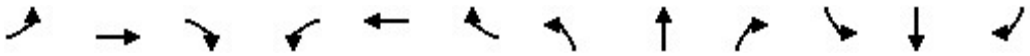
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	4	14	175	7	369	16	1307	255	504	1587	16
Future Volume (vph)	25	4	14	175	7	369	16	1307	255	504	1587	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	2.0	6.0	6.0		1.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	*1.00		1.00	*1.00	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.97	1.00		0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1762	1570		1599	1921	1438	1687	3446		1690	3587	
Flt Permitted	0.75	1.00		0.75	1.00	1.00	0.17	1.00		0.09	1.00	
Satd. Flow (perm)	1397	1570		1255	1921	1438	301	3446		162	3587	
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)	25	4	14	175	7	369	16	1307	255	504	1587	16
RTOR Reduction (vph)	0	11	0	0	0	22	0	19	0	0	1	0
Lane Group Flow (vph)	25	7	0	175	7	347	16	1543	0	504	1602	0
Confl. Peds. (#/hr)	27		8	8		27	12		4	4		12
Heavy Vehicles (%)	0%	0%	8%	13%	0%	11%	8%	8%	10%	8%	7%	0%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA		pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	16.8	16.8		16.8	16.8	34.0	42.0	42.0		61.2	61.2	
Effective Green, g (s)	16.8	16.8		16.8	16.8	34.0	42.0	42.0		62.2	61.2	
Actuated g/C Ratio	0.19	0.19		0.19	0.19	0.38	0.47	0.47		0.69	0.68	
Clearance Time (s)	6.0	6.0		6.0	6.0	2.0	6.0	6.0		2.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	260	293		234	358	543	140	1608		420	2439	
v/s Ratio Prot		0.00			0.00	0.12		c0.45		c0.24	0.45	
v/s Ratio Perm	0.02			c0.14		0.12	0.05			0.59		
v/c Ratio	0.10	0.02		0.75	0.02	0.64	0.11	0.96		1.20	0.66	
Uniform Delay, d1	30.3	29.9		34.6	29.9	23.0	13.5	23.2		27.8	8.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.06	1.19	
Incremental Delay, d2	0.2	0.0		12.3	0.0	2.5	1.7	14.7		92.3	0.1	
Delay (s)	30.5	29.9		46.9	29.9	25.4	15.2	37.9		121.8	10.0	
Level of Service	C	C		D	C	C	B	D		F	B	
Approach Delay (s)		30.2			32.3			37.6			36.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	0	20	2	0	20	22	1552	10	20	1680	56
Future Volume (Veh/h)	16	0	20	2	0	20	22	1552	10	20	1680	56
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	16	0	20	2	0	20	22	1552	10	20	1680	56
Pedestrians		7			5			4				
Lane Width (m)		3.7			3.7			3.7				
Walking Speed (m/s)		1.1			1.1			1.1				
Percent Blockage		1			0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								232			190	
pX, platoon unblocked	0.82	0.82	0.72	0.82	0.82	0.78	0.72			0.78		
vC, conflicting volume	2595	3366	879	2510	3389	786	1743			1567		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1332	2268	39	1229	2296	178	1245			1174		
tC, single (s)	7.7	6.5	7.0	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.4	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	79	100	97	98	100	97	94			96		
cM capacity (veh/h)	78	30	717	99	29	656	380			470		

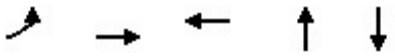
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	36	22	798	786	860	896
Volume Left	16	2	22	0	20	0
Volume Right	20	20	0	10	0	56
cSH	154	434	380	1700	470	1700
Volume to Capacity	0.23	0.05	0.06	0.46	0.04	0.53
Queue Length 95th (m)	6.6	1.2	1.4	0.0	1.0	0.0
Control Delay (s)	35.4	13.7	2.0	0.0	1.4	0.0
Lane LOS	E	B	A		A	
Approach Delay (s)	35.4	13.7	1.0		0.7	
Approach LOS	E	B				

Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	76.7%	ICU Level of Service	D	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	75	0	19	0	37	1453	8	1622
Future Volume (vph)	75	0	19	0	37	1453	8	1622
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	10.0	10.0		9.9		61.3		61.3
Actuated g/C Ratio	0.13	0.13		0.12		0.77		0.77
v/c Ratio	0.47	0.14		0.22		0.67		0.69
Control Delay	42.0	10.8		15.7		8.4		8.4
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	42.0	10.8		15.7		8.4		8.4
LOS	D	B		B		A		A
Approach Delay		33.0		15.7		8.4		8.4
Approach LOS		C		B		A		A

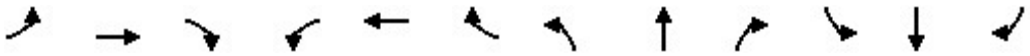
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.7	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Gordon Street & Heritage Drive



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	75	30	43	1491	1679
v/c Ratio	0.47	0.14	0.22	0.67	0.69
Control Delay	42.0	10.8	15.7	8.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	10.8	15.7	8.4	8.4
Queue Length 50th (m)	10.6	0.0	0.9	54.7	62.4
Queue Length 95th (m)	22.8	6.0	9.4	98.1	109.5
Internal Link Dist (m)		117.5	89.0	213.2	208.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	334	417	374	2213	2449
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.07	0.11	0.67	0.69

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	0	30	19	0	24	37	1453	1	8	1622	49
Future Volume (vph)	75	0	30	19	0	24	37	1453	1	8	1622	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.98			0.98			1.00			1.00	
Flpb, ped/bikes	0.98	1.00			1.00			1.00			1.00	
Frt	1.00	0.85			0.92			1.00			1.00	
Flt Protected	0.95	1.00			0.98			1.00			1.00	
Satd. Flow (prot)	1657	1484			1533			3379			3361	
Flt Permitted	0.73	1.00			0.84			0.85			0.95	
Satd. Flow (perm)	1271	1484			1321			2876			3180	
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)	75	0	30	19	0	24	37	1453	1	8	1622	49
RTOR Reduction (vph)	0	27	0	0	32	0	0	0	0	0	2	0
Lane Group Flow (vph)	75	3	0	0	11	0	0	1491	0	0	1677	0
Confl. Peds. (#/hr)	18		6	6		18	11		13	13		11
Heavy Vehicles (%)	8%	0%	8%	6%	0%	15%	3%	8%	0%	0%	8%	10%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.8	8.8			8.8			60.1			60.1	
Effective Green, g (s)	8.8	8.8			8.8			60.1			60.1	
Actuated g/C Ratio	0.11	0.11			0.11			0.74			0.74	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	138	161			143			2136			2362	
v/s Ratio Prot		0.00										
v/s Ratio Perm	c0.06				0.01			0.52			c0.53	
v/c Ratio	0.54	0.02			0.08			0.70			0.71	
Uniform Delay, d1	34.1	32.2			32.4			5.6			5.7	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	4.3	0.1			0.2			1.9			1.8	
Delay (s)	38.5	32.3			32.6			7.5			7.5	
Level of Service	D	C			C			A			A	
Approach Delay (s)		36.7			32.6			7.5			7.5	
Approach LOS		D			C			A			A	

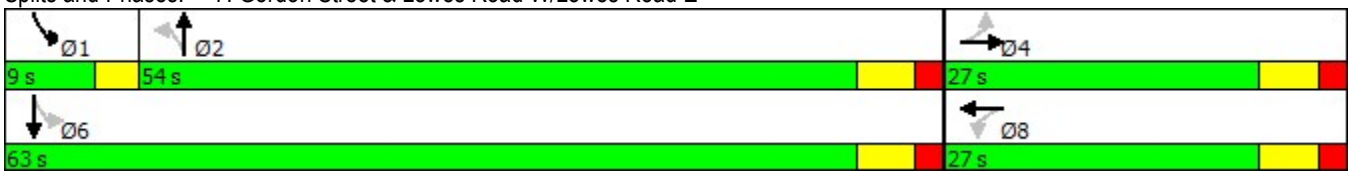
Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	80.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	4	19	6	10	1390	154	1458
Future Volume (vph)	41	4	19	6	10	1390	154	1458
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	54.0
Total Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	60.0%	60.0%	10.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0	6.0	3.0	6.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Max	Max	None	Max
Act Effct Green (s)		8.4		8.4	48.4	48.4	60.5	58.9
Actuated g/C Ratio		0.11		0.11	0.64	0.64	0.80	0.78
v/c Ratio		0.42		0.49	0.05	0.66	0.52	0.58
Control Delay		31.8		18.8	7.5	11.3	10.7	5.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		31.8		18.8	7.5	11.3	10.7	5.9
LOS		C		B	A	B	B	A
Approach Delay		31.8		18.8		11.3		6.4
Approach LOS		C		B		B		A

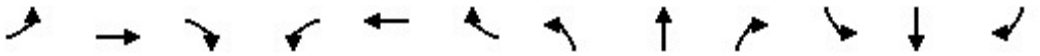
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 75.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 9.5	Intersection LOS: A
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: Gordon Street & Lowes Road W/Lowes Road E



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	67	115	10	1437	154	1525
v/c Ratio	0.42	0.49	0.05	0.66	0.52	0.58
Control Delay	31.8	18.8	7.5	11.3	10.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	18.8	7.5	11.3	10.7	5.9
Queue Length 50th (m)	6.2	3.4	0.5	64.0	4.0	43.9
Queue Length 95th (m)	17.4	17.3	2.7	99.8	15.5	75.3
Internal Link Dist (m)	98.7	115.8		108.7		213.2
Turn Bay Length (m)			45.0		70.0	
Base Capacity (vph)	368	454	207	2181	297	2625
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	0.18	0.25	0.05	0.66	0.52	0.58

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	4	22	19	6	90	10	1390	47	154	1458	67
Future Volume (vph)	41	4	22	19	6	90	10	1390	47	154	1458	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.89		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1567			1484		1823	3389		1706	3352	
Flt Permitted		0.78			0.93		0.17	1.00		0.12	1.00	
Satd. Flow (perm)		1253			1387		322	3389		220	3352	
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)	41	4	22	19	6	90	10	1390	47	154	1458	67
RTOR Reduction (vph)	0	20	0	0	82	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	47	0	0	33	0	10	1435	0	154	1523	0
Confl. Peds. (#/hr)	15					15	10		8	8		10
Heavy Vehicles (%)	15%	0%	11%	13%	0%	13%	0%	7%	10%	7%	8%	9%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.1			7.1		48.5	48.5		57.5	57.5	
Effective Green, g (s)		7.1			7.1		48.5	48.5		57.5	57.5	
Actuated g/C Ratio		0.09			0.09		0.63	0.63		0.75	0.75	
Clearance Time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		116			128		203	2145		281	2516	
v/s Ratio Prot								c0.42		0.04	c0.45	
v/s Ratio Perm		c0.04			0.02		0.03			0.37		
v/c Ratio		0.41			0.26		0.05	0.67		0.55	0.61	
Uniform Delay, d1		32.8			32.3		5.3	8.9		6.3	4.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.3			1.1		0.5	1.7		2.2	1.1	
Delay (s)		35.1			33.4		5.8	10.6		8.5	5.5	
Level of Service		D			C		A	B		A	A	
Approach Delay (s)		35.1			33.4			10.6			5.7	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	76.6	Sum of lost time (s)	15.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix E: TAC Guidelines / Warrant

Automated Speed Limit Guidelines

FORM A - Automated Speed Limit Guidelines Spreadsheet

Version: 10-Apr-09

Name of Corridor:	Gordon Street				
Segment Evaluated:	Landsdown Drive	to	Lowes Road		
Geographic Region:	City of Guelph				
Road Agency:					
Road Classification:	Arterial	Length of Corridor:	1,400	m	
Urban / Rural:	Urban	Design Speed: (Required for Freeway, Expressway, Highway)		km/h	
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	60	km/h	
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)		km/h	
# Through Lanes Per Direction:	2+ lanes	Policy: (Maximum Posted Speed)	No policy		

		RISK	Score
A1	**GEOMETRY (Horizontal)**	Lower	2
A2	**GEOMETRY (Vertical)**	Lower	2
A3	**AVERAGE LANE WIDTH**	Medium	4
B	**ROADSIDE HAZARDS**	Higher	3
C1	**PEDESTRIAN EXPOSURE**	Medium	6
C2	**CYCLIST EXPOSURE**	Medium	6
D	**PAVEMENT SURFACE**	Lower	1
E1	**NUMBER OF INTERSECTIONS WITH PUBLIC ROADS**	*Number of Occurrences*	23
	STOP controlled intersection	3	
	Signalized intersection	4	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
	Sidestreet STOP-controlled or lane	0	
E2	**NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS**	*Number of Occurrences*	15
	Left turn movements permitted	27	
	Right-in / Right-out only	0	
E3	**NUMBER OF INTERCHANGES**	*Number of Occurrences*	0
	Number of interchanges along corridor	0	
F	**ON-STREET PARKING**	N/A	0

Total Risk Score:

62

Recommended Posted Speed Limit (km/h):

As determined by road characteristics

60

As determined by policy

No policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:

- Frequent obliteration of pavement markings can be expected, such as in areas with significant snow accumulation.
- Intense roadside development reduces the effectiveness of side mounted signs.
- Misuse of the two-way left-turn lane is prevalent and uncontrollable by the pavement markings and normal signage.
- The two-way left-turn lane is on a multi-lane arterial roadway with frequent signalized intersections.

Overhead signs are typically placed at one- quarter or one-half points between major cross roads. They are positioned a minimum of 50 m away from the intersections to assist in adequate visibility.

Two-way left-turn lanes are generally not extended through a major intersection. They are terminated prior to the intersection and replaced with a single exclusive left-turn lane. Appropriate pavement markings or divisional islands should be used to terminate the two-way left-turn lane in advance of the exclusive left-turn lane at the major intersection.

8.6.2 WIDTH

Widths for TWLTLs are generally the same as the adjacent through lane, but not less than 3.5 m for design speeds equal to or less than 60 km/h. A width of 4.0 m is desirable for design speeds greater than 60 km/h. The additional width over the adjacent lane recognizes that vehicles are making turning maneuvers from both directions simultaneously, and adds a measure of safety. Widths greater than 5.0 m are generally avoided due to operational problems.

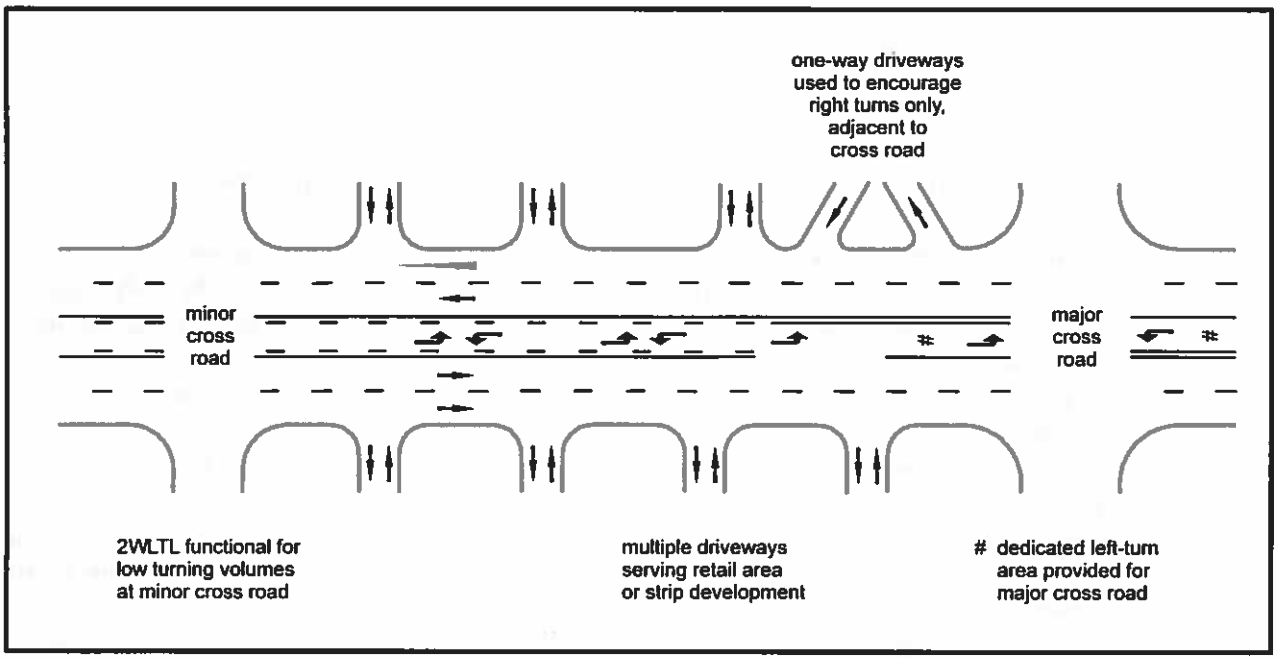


Figure 8.6.1: Typical Two-Way Left-Turn Lane (TWLTL)

- Frequent obliteration of pavement markings can be expected, such as in areas with significant snow accumulation.
- Intense roadside development reduces the effectiveness of side mounted signs.
- Misuse of the two-way left-turn lane is prevalent and uncontrollable by the pavement markings and normal signage.
- The two-way left-turn lane is on a multi-lane arterial roadway with frequent signalized intersections.

Overhead signs are typically placed at one- quarter or one-half points between major cross roads. They are positioned a minimum of 50 m away from the intersections to assist in adequate visibility.

Two-way left-turn lanes are generally not extended through a major intersection. They are terminated prior to the intersection and replaced with a single exclusive left-turn lane. Appropriate pavement markings or divisional islands should be used to terminate the two-way left-turn lane in advance of the exclusive left-turn lane at the major intersection.

8.6.2 WIDTH

Widths for TWLTLs are generally the same as the adjacent through lane, but not less than 3.5 m for design speeds equal to or less than 60 km/h. A width of 4.0 m is desirable for design speeds greater than 60 km/h. The additional width over the adjacent lane recognizes that vehicles are making turning maneuvers from both directions simultaneously, and adds a measure of safety. Widths greater than 5.0 m are generally avoided due to operational problems.

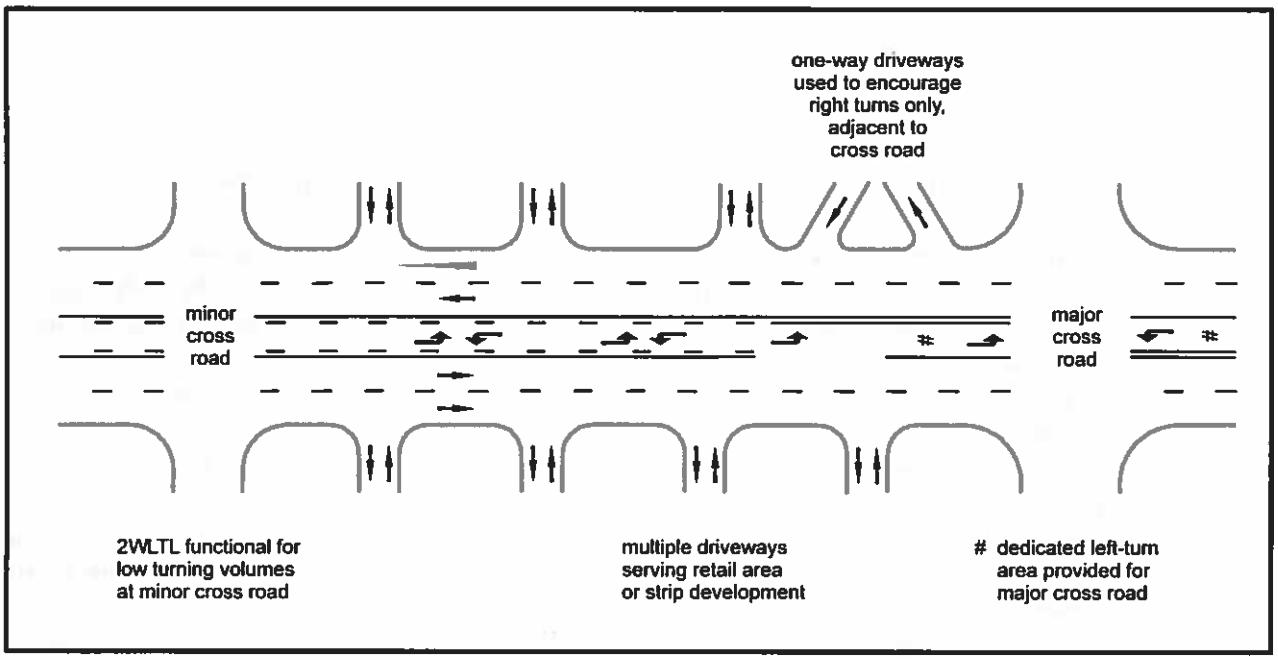
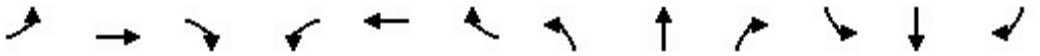


Figure 8.6.1: Typical Two-Way Left-Turn Lane (TWLTL)

Appendix F: Synchro Outputs Future Improvement Condition



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	1	1	0	7	2	1424	0	2	731	11
Future Volume (Veh/h)	14	0	1	1	0	7	2	1424	0	2	731	11
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	14	0	1	1	0	7	2	1424	0	2	731	11
Pedestrians		6			3			20				
Lane Width (m)		3.7			3.7			3.7				
Walking Speed (m/s)		1.1			1.1			1.1				
Percent Blockage		1			0			2				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								348				
pX, platoon unblocked	0.88	0.88		0.88	0.88	0.88				0.88		
vC, conflicting volume	1470	2178	397	1822	2183	715	748			1427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1255	2062	397	1656	2068	394	748			1206		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	100	100	98	100	99	100			100		
cM capacity (veh/h)	111	48	593	56	47	534	865			512		

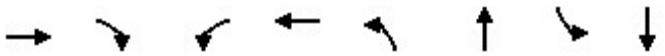
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	15	8	2	949	475	2	487	255
Volume Left	14	1	2	0	0	2	0	0
Volume Right	1	7	0	0	0	0	0	11
cSH	117	257	865	1700	1700	512	1700	1700
Volume to Capacity	0.13	0.03	0.00	0.56	0.28	0.00	0.29	0.15
Queue Length 95th (m)	3.2	0.7	0.1	0.0	0.0	0.1	0.0	0.0
Control Delay (s)	40.1	19.4	9.2	0.0	0.0	12.1	0.0	0.0
Lane LOS	E	C	A			B		
Approach Delay (s)	40.1	19.4	0.0			0.0		
Approach LOS	E	C						

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	54.7%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	1421	0	0	740
Future Volume (Veh/h)	0	0	1421	0	0	740
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	0	1421	0	0	740
Pedestrians	9		39			2
Lane Width (m)	3.7		3.7			3.7
Walking Speed (m/s)	1.1		1.1			1.1
Percent Blockage	1		4			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			62			
pX, platoon unblocked	0.88	0.88			0.88	
vC, conflicting volume	1839	722			1430	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1673	396			1206	
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	100			100	
cM capacity (veh/h)	74	527			508	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	947	474	247	493
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1700	508	1700
Volume to Capacity	0.00	0.56	0.28	0.00	0.29
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.0	0.0		0.0	
Approach LOS	A				

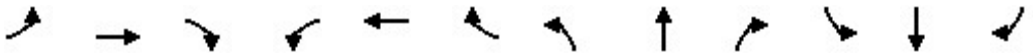
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	379	21	36	539	1351	6	736
v/c Ratio	0.59	0.62	0.16	0.19	0.79	0.49	0.02	0.35
Control Delay	70.8	17.4	49.3	29.4	23.6	2.9	11.3	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.8	17.4	49.3	29.4	23.6	2.9	11.3	12.1
Queue Length 50th (m)	14.8	28.0	4.6	3.7	46.4	20.2	0.6	44.0
Queue Length 95th (m)	28.3	57.0	11.8	13.0	#110.0	47.1	2.6	59.5
Internal Link Dist (m)	641.3			82.9		382.4		38.5
Turn Bay Length (m)					65.0		10.0	
Base Capacity (vph)	206	609	252	340	679	2782	241	2098
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	0.32	0.62	0.08	0.11	0.79	0.49	0.02	0.35

Intersection Summary

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



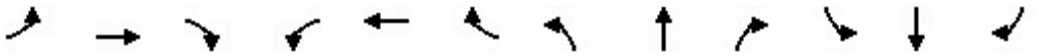
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	5	379	21	17	19	539	1342	9	6	692	44
Future Volume (vph)	60	5	379	21	17	19	539	1342	9	6	692	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	3.0	4.5	4.5		3.0	6.0		6.0	6.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.93	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.92		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1468	1541	1789	1734		1674	3317		1789	3301	
Flt Permitted		0.72	1.00	0.71	1.00		0.33	1.00		0.20	1.00	
Satd. Flow (perm)		1100	1541	1346	1734		578	3317		380	3301	
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)	60	5	379	21	17	19	539	1342	9	6	692	44
RTOR Reduction (vph)	0	0	168	0	17	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	65	211	21	19	0	539	1351	0	6	733	0
Confl. Peds. (#/hr)	38											
Heavy Vehicles (%)	18%	2%	6%	2%	2%	2%	9%	10%	2%	2%	10%	3%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		11.0	31.3	11.0	11.0		98.5	98.5		75.2	75.2	
Effective Green, g (s)		11.0	31.3	11.0	11.0		98.5	98.5		75.2	75.2	
Actuated g/C Ratio		0.09	0.26	0.09	0.09		0.82	0.82		0.63	0.63	
Clearance Time (s)		4.5	3.0	4.5	4.5		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		100	401	123	158		659	2722		238	2068	
v/s Ratio Prot			0.09		0.01		c0.14	0.41			0.22	
v/s Ratio Perm		c0.06	0.05	0.02			c0.53			0.02		
v/c Ratio		0.65	0.53	0.17	0.12		0.82	0.50		0.03	0.35	
Uniform Delay, d1		52.6	38.0	50.3	50.0		4.9	3.2		8.5	10.7	
Progression Factor		1.00	1.00	1.00	1.00		3.94	0.65		1.00	1.00	
Incremental Delay, d2		14.1	1.3	0.7	0.3		5.3	0.4		0.2	0.5	
Delay (s)		66.8	39.3	51.0	50.4		24.4	2.5		8.7	11.2	
Level of Service		E	D	D	D		C	A		A	B	
Approach Delay (s)		43.3			50.6			8.8			11.2	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	20	6	194	2	455	1	1387	141	259	827
v/c Ratio	0.08	0.01	0.80	0.01	0.86	0.00	0.74	0.18	0.70	0.35
Control Delay	38.0	0.0	70.0	35.5	47.5	18.0	26.6	10.5	33.2	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	0.0	70.0	35.5	47.5	18.0	26.6	10.5	33.2	6.0
Queue Length 50th (m)	3.9	0.0	43.7	0.4	86.1	0.1	122.9	9.0	35.1	28.6
Queue Length 95th (m)	10.1	0.0	66.4	2.5	109.4	1.2	176.7	23.3	60.6	34.4
Internal Link Dist (m)		49.1		643.7			166.1			382.4
Turn Bay Length (m)			55.0			40.0		35.0	70.0	
Base Capacity (vph)	304	483	308	464	578	349	1869	791	418	2374
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.01	0.63	0.00	0.79	0.00	0.74	0.18	0.62	0.35

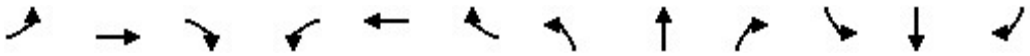
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	0	6	194	2	455	1	1387	141	259	817	10
Future Volume (vph)	20	0	6	194	2	455	1	1387	141	259	817	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	3.0	6.0	6.0	6.0	3.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	*1.00	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.92	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1580	1340		1610	1921	1408	1821	3493	1424	1690	3340	
Flt Permitted	0.76	1.00		0.75	1.00	1.00	0.34	1.00	1.00	0.11	1.00	
Satd. Flow (perm)	1259	1340		1277	1921	1408	652	3493	1424	194	3340	
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)	20	0	6	194	2	455	1	1387	141	259	817	10
RTOR Reduction (vph)	0	5	0	0	0	18	0	0	29	0	1	0
Lane Group Flow (vph)	20	1	0	194	2	437	1	1387	112	259	826	0
Confl. Peds. (#/hr)	48		2	2		48	5		2	2		5
Heavy Vehicles (%)	6%	0%	20%	13%	0%	10%	0%	10%	12%	8%	9%	13%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	22.7	22.7		22.7	22.7	40.8	64.2	64.2	64.2	85.3	85.3	
Effective Green, g (s)	22.7	22.7		22.7	22.7	40.8	64.2	64.2	64.2	85.3	85.3	
Actuated g/C Ratio	0.19	0.19		0.19	0.19	0.34	0.54	0.54	0.54	0.71	0.71	
Clearance Time (s)	6.0	6.0		6.0	6.0	3.0	6.0	6.0	6.0	3.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	238	253		241	363	478	348	1868	761	363	2374	
v/s Ratio Prot		0.00			0.00	c0.14		c0.40		0.11	0.25	
v/s Ratio Perm	0.02			0.15		0.17	0.00		0.08	0.40		
v/c Ratio	0.08	0.00		0.80	0.01	0.91	0.00	0.74	0.15	0.71	0.35	
Uniform Delay, d1	40.1	39.5		46.5	39.5	37.9	13.0	21.5	14.1	23.3	6.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.32	0.77	
Incremental Delay, d2	0.2	0.0		17.5	0.0	22.0	0.0	2.7	0.4	6.0	0.4	
Delay (s)	40.2	39.5		64.0	39.5	59.9	13.0	24.2	14.5	36.8	5.5	
Level of Service	D	D		E	D	E	B	C	B	D	A	
Approach Delay (s)		40.1			61.1			23.3			13.0	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

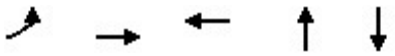
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	13	4	0	2	8	1499	5	14	988	19
Future Volume (Veh/h)	14	0	13	4	0	2	8	1499	5	14	988	19
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	14	0	13	4	0	2	8	1499	5	14	988	19
Pedestrians		3			1							
Lane Width (m)		3.7			3.7							
Walking Speed (m/s)		1.1			1.1							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (m)								232			190	
pX, platoon unblocked	0.85	0.85	0.91	0.85	0.85	0.81	0.91			0.81		
vC, conflicting volume	1796	2550	506	2054	2556	753	1010			1505		
vC1, stage 1 conf vol	1028	1028		1518	1518							
vC2, stage 2 conf vol	768	1521		535	1038							
vCu, unblocked vol	1118	2003	265	1421	2012	215	817			1147		
tC, single (s)	7.8	6.5	7.1	7.5	6.5	6.9	5.0			4.1		
tC, 2 stage (s)	6.8	5.5		6.5	5.5							
tF (s)	3.7	4.0	3.4	3.5	4.0	3.3	2.6			2.2		
p0 queue free %	94	100	98	98	100	100	99			97		
cM capacity (veh/h)	245	173	648	161	180	642	536			497		

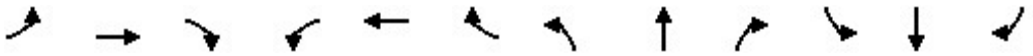
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	27	6	758	754	508	513
Volume Left	14	4	8	0	14	0
Volume Right	13	2	0	5	0	19
cSH	350	214	536	1700	497	1700
Volume to Capacity	0.08	0.03	0.01	0.44	0.03	0.30
Queue Length 95th (m)	1.9	0.7	0.3	0.0	0.7	0.0
Control Delay (s)	16.1	22.3	0.4	0.0	0.8	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	16.1	22.3	0.2		0.4	
Approach LOS	C	C				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	57.2%	ICU Level of Service	B	
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	61	31	17	1416	979
v/c Ratio	0.42	0.10	0.10	0.60	0.42
Control Delay	41.0	0.6	23.8	6.7	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	0.6	23.8	6.7	4.9
Queue Length 50th (m)	8.5	0.0	1.2	44.9	24.3
Queue Length 95th (m)	19.5	0.0	6.6	77.6	42.2
Internal Link Dist (m)		117.5	89.0	213.2	208.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	325	510	360	2350	2324
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.19	0.06	0.05	0.60	0.42

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	0	31	7	2	8	30	1385	1	17	924	38
Future Volume (vph)	61	0	31	7	2	8	30	1385	1	17	924	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.98			0.98			1.00			1.00	
Flpb, ped/bikes	0.96	1.00			1.00			1.00			1.00	
Frt	1.00	0.85			0.94			1.00			0.99	
Flt Protected	0.95	1.00			0.98			1.00			1.00	
Satd. Flow (prot)	1567	1489			1528			3306			3271	
Flt Permitted	0.75	1.00			0.86			0.92			0.92	
Satd. Flow (perm)	1231	1489			1337			3031			2997	
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)	61	0	31	7	2	8	30	1385	1	17	924	38
RTOR Reduction (vph)	0	28	0	0	7	0	0	0	0	0	2	0
Lane Group Flow (vph)	61	3	0	0	10	0	0	1416	0	0	977	0
Confl. Peds. (#/hr)	34		3	3		34	6		23	23		6
Heavy Vehicles (%)	12%	0%	8%	0%	50%	14%	24%	10%	0%	7%	11%	6%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.2	8.2			8.2			60.1			60.1	
Effective Green, g (s)	8.2	8.2			8.2			60.1			60.1	
Actuated g/C Ratio	0.10	0.10			0.10			0.75			0.75	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	125	152			136			2268			2243	
v/s Ratio Prot		0.00										
v/s Ratio Perm	c0.05				0.01			c0.47			0.33	
v/c Ratio	0.49	0.02			0.07			0.62			0.44	
Uniform Delay, d1	34.1	32.4			32.6			4.8			3.8	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	3.0	0.1			0.2			1.3			0.6	
Delay (s)	37.0	32.5			32.8			6.1			4.4	
Level of Service	D	C			C			A			A	
Approach Delay (s)		35.5			32.8			6.1			4.4	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	80.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

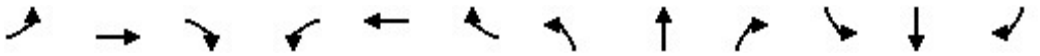
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	219	2	1231	39	933
v/c Ratio	0.41	0.68	0.01	0.57	0.12	0.35
Control Delay	41.0	21.2	7.5	10.1	3.8	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	21.2	7.5	10.1	3.8	4.8
Queue Length 50th (m)	4.0	7.3	0.1	51.3	1.0	19.8
Queue Length 95th (m)	12.6	27.2	1.0	89.7	4.1	40.6
Internal Link Dist (m)	98.7	115.8		108.7		213.2
Turn Bay Length (m)			45.0		70.0	
Base Capacity (vph)	189	514	388	2171	322	2630
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	0.19	0.43	0.01	0.57	0.12	0.35

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	4	7	30	1	188	2	1221	10	39	902	31
Future Volume (vph)	25	4	7	30	1	188	2	1221	10	39	902	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.88		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1644			1543		1823	3283		1587	3611	
Flt Permitted		0.40			0.94		0.31	1.00		0.18	1.00	
Satd. Flow (perm)		687			1468		588	3283		293	3611	
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)	25	4	7	30	1	188	2	1221	10	39	902	31
RTOR Reduction (vph)	0	6	0	0	147	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	30	0	0	72	0	2	1231	0	39	931	0
Confl. Peds. (#/hr)	5					5	6		2	2		6
Heavy Vehicles (%)	14%	0%	0%	12%	0%	7%	0%	11%	13%	15%	0%	15%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.3			9.3		51.9	51.9		58.4	58.4	
Effective Green, g (s)		9.3			9.3		51.9	51.9		58.4	58.4	
Actuated g/C Ratio		0.12			0.12		0.65	0.65		0.73	0.73	
Clearance Time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		80			171		382	2137		271	2645	
v/s Ratio Prot								c0.37		0.01	c0.26	
v/s Ratio Perm		0.04			c0.05		0.00			0.10		
v/c Ratio		0.37			0.42		0.01	0.58		0.14	0.35	
Uniform Delay, d1		32.5			32.7		4.9	7.8		4.0	3.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.9			1.7		0.0	1.1		0.2	0.4	
Delay (s)		35.4			34.4		4.9	8.9		4.3	4.2	
Level of Service		D			C		A	A		A	A	
Approach Delay (s)		35.4			34.4			8.9			4.2	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	79.7	Sum of lost time (s)	15.0
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	2	0	0	5	17	1159	2	17	1541	47
Future Volume (Veh/h)	21	0	2	0	0	5	17	1159	2	17	1541	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	21	0	2	0	0	5	17	1159	2	17	1541	47
Pedestrians		17			6			8			1	
Lane Width (m)		3.7			3.7			3.7			3.7	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			1			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								348				
pX, platoon unblocked	0.93	0.93		0.93	0.93	0.93				0.93		
vC, conflicting volume	2235	2816	819	2014	2839	588	1605			1167		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2175	2802	819	1937	2826	399	1605			1023		
tC, single (s)	7.8	6.5	6.9	7.5	6.5	7.4	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.5	2.2			2.2		
p0 queue free %	0	100	99	100	100	99	96			97		
cM capacity (veh/h)	19	16	315	34	15	498	406			633		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	23	5	17	773	388	17	1027	561
Volume Left	21	0	17	0	0	17	0	0
Volume Right	2	5	0	0	2	0	0	47
cSH	20	498	406	1700	1700	633	1700	1700
Volume to Capacity	1.13	0.01	0.04	0.45	0.23	0.03	0.60	0.33
Queue Length 95th (m)	23.6	0.2	1.0	0.0	0.0	0.6	0.0	0.0
Control Delay (s)	510.9	12.3	14.2	0.0	0.0	10.8	0.0	0.0
Lane LOS	F	B	B			B		
Approach Delay (s)	510.9	12.3	0.2			0.1		
Approach LOS	F	B						

Intersection Summary				
Average Delay	4.4			
Intersection Capacity Utilization	60.1%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	1190	0	0	1527
Future Volume (Veh/h)	0	0	1190	0	0	1527
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	0	1190	0	0	1527
Pedestrians	6		38			
Lane Width (m)	3.7		3.7			
Walking Speed (m/s)	1.1		1.1			
Percent Blockage	1		4			
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			62			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1998	601			1196	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1896	359			1014	
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	100			100	
cM capacity (veh/h)	55	581			625	

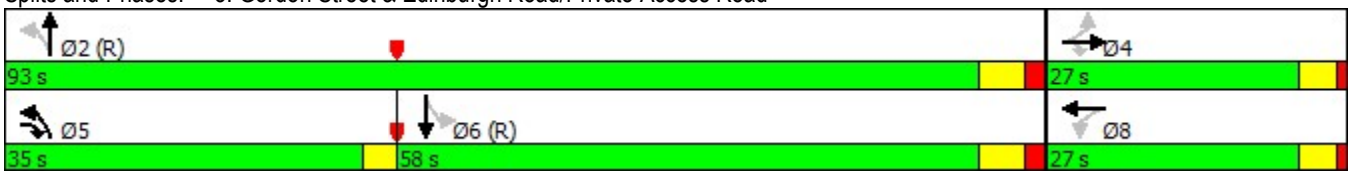
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	793	397	509	1018
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1700	625	1700
Volume to Capacity	0.00	0.47	0.23	0.00	0.60
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.0	0.0		0.0	
Approach LOS	A				

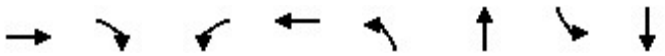
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	55	16	745	11	10	575	1123	16	1383
Future Volume (vph)	55	16	745	11	10	575	1123	16	1383
Turn Type	Perm	NA	pm+ov	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		4	5		8	5	2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	4	4	5	8	8	5	2	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
Minimum Split (s)	22.5	22.5	18.0	22.5	22.5	18.0	63.0	45.0	45.0
Total Split (s)	27.0	27.0	35.0	27.0	27.0	35.0	93.0	58.0	58.0
Total Split (%)	22.5%	22.5%	29.2%	22.5%	22.5%	29.2%	77.5%	48.3%	48.3%
Yellow Time (s)	3.5	3.5	3.0	3.5	3.5	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	0.0	1.0	1.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	-1.0	0.0	0.0	-2.0	0.0	0.0	-2.0
Total Lost Time (s)		4.5	2.0	4.5	4.5	1.0	6.0	6.0	4.0
Lead/Lag			Lead			Lead		Lag	Lag
Lead-Lag Optimize?			Yes			Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)		12.2	58.4	11.9	11.9	104.6	100.8	52.0	54.0
Actuated g/C Ratio		0.10	0.49	0.10	0.10	0.87	0.84	0.43	0.45
v/c Ratio		0.58	1.02	0.08	0.12	0.79	0.41	0.08	1.00
Control Delay		68.8	69.1	47.5	30.2	38.4	6.2	21.5	57.2
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		68.8	69.1	47.5	30.2	38.4	6.2	21.5	57.2
LOS		E	E	D	C	D	A	C	E
Approach Delay		69.1			36.0		17.0		56.8
Approach LOS		E			D		B		E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 42.4	Intersection LOS: D
Intersection Capacity Utilization 105.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 3: Gordon Street & Edinburgh Road/Private Access Road



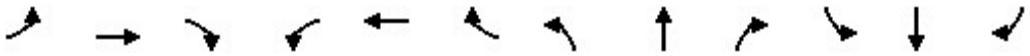


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	745	11	22	575	1141	16	1511
v/c Ratio	0.58	1.02	0.08	0.12	0.79	0.41	0.08	1.00
Control Delay	68.8	69.1	47.5	30.2	38.4	6.2	21.5	57.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.8	69.1	47.5	30.2	38.4	6.2	21.5	57.2
Queue Length 50th (m)	16.2	~174.6	2.4	2.2	126.1	44.0	2.2	~184.3
Queue Length 95th (m)	30.1	#260.2	7.8	9.6	#185.3	75.7	6.8	#237.7
Internal Link Dist (m)	641.3			81.9		382.4		38.5
Turn Bay Length (m)					65.0		10.0	
Base Capacity (vph)	228	732	251	333	726	2809	203	1505
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	0.31	1.02	0.04	0.07	0.79	0.41	0.08	1.00

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)	55	16	745	11	10	12	575	1123	18	16	1383	128
Future Volume (vph)	55	16	745	11	10	12	575	1123	18	16	1383	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	2.0	4.5	4.5		1.0	6.0		6.0	4.0	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99	1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		0.95	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	0.92		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1540	1507	1789	1729		1706	3344		1789	3335	
Flt Permitted		0.76	1.00	0.71	1.00		0.07	1.00		0.25	1.00	
Satd. Flow (perm)		1215	1507	1339	1729		133	3344		469	3335	
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)	55	16	745	11	10	12	575	1123	18	16	1383	128
RTOR Reduction (vph)	0	0	0	0	11	0	0	1	0	0	6	0
Lane Group Flow (vph)	0	71	745	11	11	0	575	1140	0	16	1505	0
Confl. Peds. (#/hr)	36		25				35					35
Heavy Vehicles (%)	17%	2%	7%	2%	2%	2%	7%	9%	2%	2%	7%	5%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		10.8	55.4	10.8	10.8		98.7	98.7		51.1	51.1	
Effective Green, g (s)		10.8	57.4	10.8	10.8		100.7	98.7		51.1	53.1	
Actuated g/C Ratio		0.09	0.48	0.09	0.09		0.84	0.82		0.43	0.44	
Clearance Time (s)		4.5	3.0	4.5	4.5		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		109	720	120	155		722	2750		199	1475	
v/s Ratio Prot			c0.39		0.01		0.31	0.34			c0.45	
v/s Ratio Perm		0.06	0.10	0.01			0.36			0.03		
v/c Ratio		0.65	1.03	0.09	0.07		0.80	0.41		0.08	1.02	
Uniform Delay, d1		52.8	31.3	50.1	50.0		28.1	2.9		20.5	33.5	
Progression Factor		1.00	1.00	1.00	1.00		1.18	1.77		1.00	1.00	
Incremental Delay, d2		13.1	42.8	0.3	0.2		4.1	0.3		0.8	28.8	
Delay (s)		65.9	74.1	50.4	50.2		37.4	5.4		21.3	62.2	
Level of Service		E	E	D	D		D	A		C	E	
Approach Delay (s)		73.4			50.3			16.1			61.8	
Approach LOS		E			D			B			E	

Intersection Summary			
HCM 2000 Control Delay	44.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	105.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	25	4	175	7	369	16	1307	255	504	1587
Future Volume (vph)	25	4	175	7	369	16	1307	255	504	1587
Turn Type	Perm	NA	Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA
Protected Phases		4		8	1		2		1	6
Permitted Phases	4		8		8	2		2	6	
Detector Phase	4	4	8	8	1	2	2	2	1	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
Minimum Split (s)	27.0	27.0	27.0	27.0	15.0	48.0	48.0	48.0	15.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	35.0	58.0	58.0	58.0	35.0	93.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	29.2%	48.3%	48.3%	48.3%	29.2%	77.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	2.0	6.0	6.0	6.0	1.0	6.0
Lead/Lag					Lead	Lag	Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	None	C-Max
Act Effct Green (s)	19.5	19.5	19.5	19.5	55.3	54.7	54.7	54.7	93.5	88.5
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.46	0.46	0.46	0.46	0.78	0.74
v/c Ratio	0.11	0.07	0.87	0.02	0.55	0.12	0.81	0.35	0.92	0.61
Control Delay	43.3	22.5	85.2	41.4	23.4	23.4	33.8	13.4	35.4	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	22.5	85.2	41.4	23.4	23.4	33.8	13.4	35.4	9.9
LOS	D	C	F	D	C	C	C	B	D	A
Approach Delay		34.6		43.3			30.4			16.0
Approach LOS		C		D			C			B

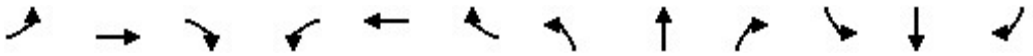
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 25.0	Intersection LOS: C
Intersection Capacity Utilization 94.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: Gordon Street & Arkell Road

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	25	18	175	7	369	16	1307	255	504	1603
v/c Ratio	0.11	0.07	0.87	0.02	0.55	0.12	0.81	0.35	0.92	0.61
Control Delay	43.3	22.5	85.2	41.4	23.4	23.4	33.8	13.4	35.4	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	22.5	85.2	41.4	23.4	23.4	33.8	13.4	35.4	9.9
Queue Length 50th (m)	5.0	0.8	40.0	1.4	51.6	2.2	135.2	20.3	96.5	84.3
Queue Length 95th (m)	13.0	7.2	#76.2	5.6	78.2	7.3	163.9	40.4	m95.7	m86.7
Internal Link Dist (m)		49.1		643.7			166.1			382.4
Turn Bay Length (m)			55.0			40.0		35.0	70.0	
Base Capacity (vph)	241	285	218	336	692	137	1621	722	567	2647
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.06	0.80	0.02	0.53	0.12	0.81	0.35	0.89	0.61

Intersection Summary

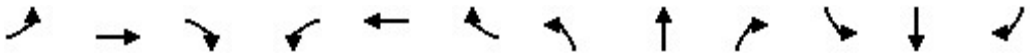
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	4	14	175	7	369	16	1307	255	504	1587	16
Future Volume (vph)	25	4	14	175	7	369	16	1307	255	504	1587	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	2.0	6.0	6.0	6.0	1.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	*1.00	1.00	1.00	*1.00	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	0.95	1.00		0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1741	1566		1593	1921	1439	1686	3558	1446	1690	3586	
Flt Permitted	0.75	1.00		0.75	1.00	1.00	0.17	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	1381	1566		1251	1921	1439	301	3558	1446	172	3586	
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)	25	4	14	175	7	369	16	1307	255	504	1587	16
RTOR Reduction (vph)	0	12	0	0	0	15	0	0	63	0	1	0
Lane Group Flow (vph)	25	6	0	175	7	354	16	1307	192	504	1602	0
Confl. Peds. (#/hr)	27		8	8		27	12		4	4		12
Heavy Vehicles (%)	0%	0%	8%	13%	0%	11%	8%	8%	10%	8%	7%	0%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	19.5	19.5		19.5	19.5	51.4	54.6	54.6	54.6	88.5	88.5	
Effective Green, g (s)	19.5	19.5		19.5	19.5	51.4	54.6	54.6	54.6	89.5	88.5	
Actuated g/C Ratio	0.16	0.16		0.16	0.16	0.43	0.46	0.46	0.46	0.75	0.74	
Clearance Time (s)	6.0	6.0		6.0	6.0	2.0	6.0	6.0	6.0	2.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	224	254		203	312	616	136	1618	657	544	2644	
v/s Ratio Prot		0.00			0.00	0.15		c0.37		c0.25	0.45	
v/s Ratio Perm	0.02			c0.14		0.09	0.05		0.13	0.44		
v/c Ratio	0.11	0.02		0.86	0.02	0.57	0.12	0.81	0.29	0.93	0.61	
Uniform Delay, d1	42.9	42.3		48.9	42.2	26.0	18.8	28.2	20.6	32.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.08	1.25	
Incremental Delay, d2	0.2	0.0		29.2	0.0	1.3	1.8	4.4	1.1	3.0	0.1	
Delay (s)	43.1	42.3		78.2	42.3	27.3	20.6	32.6	21.7	38.5	9.4	
Level of Service	D	D		E	D	C	C	C	C	D	A	
Approach Delay (s)		42.8			43.6			30.7			16.4	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	0	20	2	0	20	22	1552	10	20	1680	56
Future Volume (Veh/h)	16	0	20	2	0	20	22	1552	10	20	1680	56
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	16	0	20	2	0	20	22	1552	10	20	1680	56
Pedestrians		7			5			4				
Lane Width (m)		3.7			3.7			3.7				
Walking Speed (m/s)		1.1			1.1			1.1				
Percent Blockage		1			0			0				
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (m)								232			190	
pX, platoon unblocked	0.88	0.88	0.77	0.88	0.88	0.78	0.77			0.78		
vC, conflicting volume	2595	3366	879	2510	3389	786	1743			1567		
vC1, stage 1 conf vol	1755	1755		1606	1606							
vC2, stage 2 conf vol	840	1611		904	1783							
vCu, unblocked vol	1433	2312	242	1336	2338	178	1366			1174		
tC, single (s)	7.7	6.5	7.0	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.7	5.5		6.5	5.5							
tF (s)	3.6	4.0	3.4	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	84	100	96	99	100	97	94			96		
cM capacity (veh/h)	102	114	568	138	106	656	366			470		

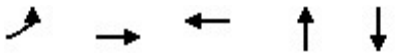
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	36	22	798	786	860	896
Volume Left	16	2	22	0	20	0
Volume Right	20	20	0	10	0	56
cSH	188	489	366	1700	470	1700
Volume to Capacity	0.19	0.05	0.06	0.46	0.04	0.53
Queue Length 95th (m)	5.2	1.1	1.5	0.0	1.0	0.0
Control Delay (s)	28.6	12.7	2.1	0.0	1.4	0.0
Lane LOS	D	B	A		A	
Approach Delay (s)	28.6	12.7	1.1		0.7	
Approach LOS	D	B				

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	76.7%	ICU Level of Service	D	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	75	0	19	0	37	1453	8	1622
Future Volume (vph)	75	0	19	0	37	1453	8	1622
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (s)	27.0	27.0	27.0	27.0	63.0	63.0	63.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)	10.0	10.0		9.9		61.3		61.3
Actuated g/C Ratio	0.13	0.13		0.12		0.77		0.77
v/c Ratio	0.47	0.14		0.22		0.67		0.69
Control Delay	42.0	10.8		15.7		8.4		8.4
Queue Delay	0.0	0.0		0.0		0.0		0.0
Total Delay	42.0	10.8		15.7		8.4		8.4
LOS	D	B		B		A		A
Approach Delay		33.0		15.7		8.4		8.4
Approach LOS		C		B		A		A

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.7	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Gordon Street & Heritage Drive



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	75	30	43	1491	1679
v/c Ratio	0.47	0.14	0.22	0.67	0.69
Control Delay	42.0	10.8	15.7	8.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	10.8	15.7	8.4	8.4
Queue Length 50th (m)	10.6	0.0	0.9	54.7	62.4
Queue Length 95th (m)	22.8	6.0	9.4	98.1	109.5
Internal Link Dist (m)		117.5	89.0	213.2	208.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	334	417	374	2213	2449
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.07	0.11	0.67	0.69

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	0	30	19	0	24	37	1453	1	8	1622	49
Future Volume (vph)	75	0	30	19	0	24	37	1453	1	8	1622	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0			6.0			6.0			6.0	
Lane Util. Factor	1.00	1.00			1.00			0.95			0.95	
Frpb, ped/bikes	1.00	0.98			0.98			1.00			1.00	
Flpb, ped/bikes	0.98	1.00			1.00			1.00			1.00	
Frt	1.00	0.85			0.92			1.00			1.00	
Flt Protected	0.95	1.00			0.98			1.00			1.00	
Satd. Flow (prot)	1657	1484			1533			3379			3361	
Flt Permitted	0.73	1.00			0.84			0.85			0.95	
Satd. Flow (perm)	1271	1484			1321			2876			3180	
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)	75	0	30	19	0	24	37	1453	1	8	1622	49
RTOR Reduction (vph)	0	27	0	0	32	0	0	0	0	0	2	0
Lane Group Flow (vph)	75	3	0	0	11	0	0	1491	0	0	1677	0
Confl. Peds. (#/hr)	18		6	6		18	11		13	13		11
Heavy Vehicles (%)	8%	0%	8%	6%	0%	15%	3%	8%	0%	0%	8%	10%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.8	8.8			8.8			60.1			60.1	
Effective Green, g (s)	8.8	8.8			8.8			60.1			60.1	
Actuated g/C Ratio	0.11	0.11			0.11			0.74			0.74	
Clearance Time (s)	6.0	6.0			6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)	138	161			143			2136			2362	
v/s Ratio Prot		0.00										
v/s Ratio Perm	c0.06				0.01			0.52			c0.53	
v/c Ratio	0.54	0.02			0.08			0.70			0.71	
Uniform Delay, d1	34.1	32.2			32.4			5.6			5.7	
Progression Factor	1.00	1.00			1.00			1.00			1.00	
Incremental Delay, d2	4.3	0.1			0.2			1.9			1.8	
Delay (s)	38.5	32.3			32.6			7.5			7.5	
Level of Service	D	C			C			A			A	
Approach Delay (s)		36.7			32.6			7.5			7.5	
Approach LOS		D			C			A			A	

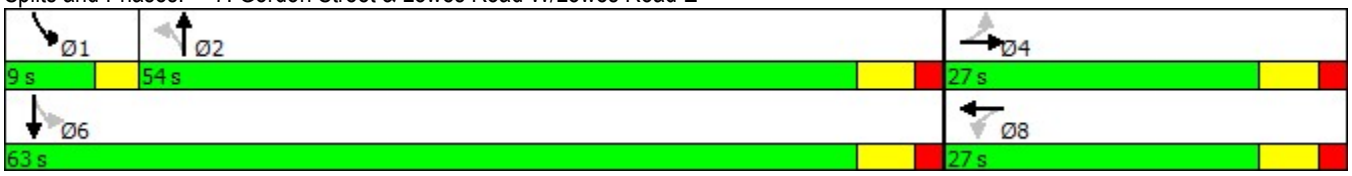
Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	80.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	4	19	6	10	1390	154	1458
Future Volume (vph)	41	4	19	6	10	1390	154	1458
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0
Minimum Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	54.0
Total Split (s)	27.0	27.0	27.0	27.0	54.0	54.0	9.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	60.0%	60.0%	10.0%	70.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0	6.0	3.0	6.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Max	Max	None	Max
Act Effct Green (s)		8.4		8.4	48.4	48.4	60.5	58.9
Actuated g/C Ratio		0.11		0.11	0.64	0.64	0.80	0.78
v/c Ratio		0.42		0.49	0.05	0.66	0.52	0.58
Control Delay		31.8		18.8	7.5	11.3	10.7	5.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		31.8		18.8	7.5	11.3	10.7	5.9
LOS		C		B	A	B	B	A
Approach Delay		31.8		18.8		11.3		6.4
Approach LOS		C		B		B		A

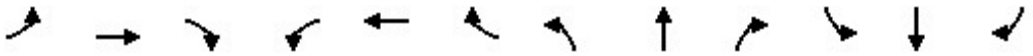
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 75.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 9.5	Intersection LOS: A
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: Gordon Street & Lowes Road W/Lowes Road E



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	67	115	10	1437	154	1525
v/c Ratio	0.42	0.49	0.05	0.66	0.52	0.58
Control Delay	31.8	18.8	7.5	11.3	10.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	18.8	7.5	11.3	10.7	5.9
Queue Length 50th (m)	6.2	3.4	0.5	64.0	4.0	43.9
Queue Length 95th (m)	17.4	17.3	2.7	99.8	15.5	75.3
Internal Link Dist (m)	98.7	115.8		108.7		213.2
Turn Bay Length (m)			45.0		70.0	
Base Capacity (vph)	368	454	207	2181	297	2625
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	0.18	0.25	0.05	0.66	0.52	0.58

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	4	22	19	6	90	10	1390	47	154	1458	67
Future Volume (vph)	41	4	22	19	6	90	10	1390	47	154	1458	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.89		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1567			1484		1823	3389		1706	3352	
Flt Permitted		0.78			0.93		0.17	1.00		0.12	1.00	
Satd. Flow (perm)		1253			1387		322	3389		220	3352	
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)	41	4	22	19	6	90	10	1390	47	154	1458	67
RTOR Reduction (vph)	0	20	0	0	82	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	47	0	0	33	0	10	1435	0	154	1523	0
Confl. Peds. (#/hr)	15					15	10		8	8		10
Heavy Vehicles (%)	15%	0%	11%	13%	0%	13%	0%	7%	10%	7%	8%	9%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.1			7.1		48.5	48.5		57.5	57.5	
Effective Green, g (s)		7.1			7.1		48.5	48.5		57.5	57.5	
Actuated g/C Ratio		0.09			0.09		0.63	0.63		0.75	0.75	
Clearance Time (s)		6.0			6.0		6.0	6.0		3.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		116			128		203	2145		281	2516	
v/s Ratio Prot								c0.42		0.04	c0.45	
v/s Ratio Perm		c0.04			0.02		0.03			0.37		
v/c Ratio		0.41			0.26		0.05	0.67		0.55	0.61	
Uniform Delay, d1		32.8			32.3		5.3	8.9		6.3	4.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.3			1.1		0.5	1.7		2.2	1.1	
Delay (s)		35.1			33.4		5.8	10.6		8.5	5.5	
Level of Service		D			C		A	B		A	A	
Approach Delay (s)		35.1			33.4			10.6			5.7	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	76.6	Sum of lost time (s)	15.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group