Premier Gateway West Scoped Area Transportation Study Interim Report (Secondary Plan)

Technical Appendices

Paradigm Transportation Solutions Limited

April 2018

Appendix A

VISSIM Model Development and Calibration Report

Synchro and SimTraffic Parameter Adjustments and Methodology Memorandum

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Premier Gateway West Scoped Area Traffic Study
Model Development and Calibration

Paradigm Transportation Solutions Limited

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Project Summary

Project Number
170050

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Premier Gateway West Scoped Area Traffic Study Model Development and Calibration

Signatures

Signature

Disclaimer

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1 Introduction

This technical report documents the development and calibration of the micro-simulation models to be used for the Premier Gateway West Scoped Area Traffic Study. Weekday morning (AM), weekday afternoon (PM) and Saturday models have been developed using the VISSIM software package (Version 9.00) to analyze existing conditions. These models will subsequently be used to assess future conditions on the adjacent freeway and arterial road segments, weaving sections, and ramp terminal operations within the study area limits.

2 Model Development

The United States Federal Highway Administration (FHWA) document entitled "Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software – July 2004" was referenced as a guideline for developing the micro-simulation models. The document recommends completing the following four steps before calibrating and validating a model:

- Project Scope;
- Data Collection;
- Base Model Development; and
- Error Checking.

2.1 Project Scope

Figure 1 illustrates the study area for the micro-simulation modelling. The limits extend one interchange on Highway 401 on either side of the primary study area for the traffic study, which is bounded by Fifth Line North to the west and Ninth Line South to the east.

2.2 Data Collection

Reliable traffic data is imperative to accurately capturing the traffic conditions within a micro-simulation model. An extensive data collection effort was undertaken in May 2017 to provide input parameters and output measures of performance for model calibration and validation. The data included:

- Highway 401 mainline traffic volumes;
- Highway 401 travel times and speeds;
- Intersection turning movement counts;
- Posted maximum speed limits; and
- Intersection traffic control signal timings.

The Ministry of Transportation (MTO) also provided historical data for the Highway 401 mainline (link volumes and travel times) to validate the information collected for this modelling effort. The collected data for the AM and Saturday peak periods closely matched the MTO data. For the PM peak period, collected volumes were found to be about 15% lower than the MTO data. Accordingly, the Highway 401 mainline volumes used in the models were increased by this percentage in both travel directions.

Appendix A documents the comparison of the MTO and collected traffic data.

2.3 Base Model Development

Development of the AM, PM and Saturday peak period base models involved creating and coding the geometric (roadway) network over a high-quality aerial image of the study area. Highway 401 was coded with the default VISSIM "freeway" link behaviour, while the municipal road network was coded with the default "urban" link behaviour.

Once the geometric network was created, desired and reduced speeds were coded into the models. The desired speeds were based on the maximum posted speed limits. Reduced speeds for turns were based on industry accepted values. **Table 1** and **Table 2** summarize the speeds used. It is noted that on-ramp and off-ramp reduced speed area zones varied according to the posted maximum recommended advisory speeds. These reduced speed zones were coded accordingly.

Intersection control was coded within the models per signal timing plans provided by the responsible road authority (primarily Halton Region). Right-turns on red were coded where allowed in the field using the VISSIM software feature. Stop signs were coded at stop controlled intersections using the default stop parameters.

Conflict area points and priority rules were also coded within the models. Conflict areas were denoted in locations where links/connectors intersect and have the potential for vehicles to cross paths. The default parameters were used. Priority rules were incorporated into the models at certain locations where a conflict area would not accurately replicate the behaviour of conflicting vehicles. Default priority rule parameter values were utilized.

From the traffic data, volumes between all intersections were balanced and used to determine the vehicle inputs and outputs for the models. Static vehicle routing was utilized and based upon the existing traffic distribution. Vehicle inputs were coded into the models by an hourly flow rate and their corresponding vehicle composition.

Micro-Simulation Model
Study Area Limits

Figure 1.1

TABLE 1: DESIRED SPEEDS

Freeway/Road	Desired Speed (Maximum Posted)
Highway 401	100 km/h
James Snow Parkway	60 km/h
Trafalgar Road	60 km/h
Winston Churchill Boulevard	60 km/h
Steeles Avenue (between Fifth Line N – Fifth Line S)	70 km/h
Steeles Avenue (between Fifth Line S – Eighth Line S)	60 km/h
Steeles Avenue (between Eighth Line S – Ninth Line S)	80 km/h
Fifth Line N/Brownridge Road	60 km/h
Fifth Line S	60 km/h
Sixth Line N	60 km/h
Sixth Line S	60 km/h
Hornby Road	60 km/h
Eighth Line N	60 km/h
Eighth Line S	60 km/h
Ninth Line N	60 km/h
Ninth Line S	60 km/h

TABLE 2: TURN SPEEDS

Turn Direction	Reduced Speed Area Zone
Left-Turn (Passenger Vehicle)	25 km/h
Left-Turn (Truck/Heavy Vehicle)	20 km/h
Right-Turn (Passenger Vehicle)	15 km/h
Right-Turn (Truck/Heavy Vehicle)	12 km/h

2.4 Error Checking

The error checking portion of the model development process is focussed on identifying and resolving significant coding errors before commencing the time-consuming calibration and validation process. This involves a detailed review of the coded data and the simulation animation.

All coded data, including geometry, speeds, signal timing plans and traffic volumes, were examined. A detailed review of the simulation animation was also conducted to determine: if any locations within the models were missing conflict points or priority rules; whether signal timings were not functioning correctly; or if any other general coding parameters were missed or coded incorrectly. Based on the review, some parameters in the models were revised to more accurately capture the interactions of the vehicles on the network. **Appendix B** details the list of parameter adjustments.

3 Calibration and Validation

3.1 Parameters and Process

The calibration process involves the adjustment of model parameters until the simulation closely replicates actual traffic operations. The process is done iteratively until an accurate representation of the network operation is achieved, thereby providing a level of confidence in the model results.

Calibration parameters can be separated into two categories: system and operational. System calibration involves the investigation of model input assumptions (i.e., vehicle inputs, vehicle routing). Operational calibration focuses on detailed driver behaviour characteristics that affect the overall traffic operations in the model.

During the system calibration stage, input assumptions are verified and checked. The objectives are to identify where uncertainties were introduced into the base model and determine their effect on the overall system operations. System calibration parameters checked include the assumptions made on vehicle route choice, traffic demand inputs, traffic composition, study area boundaries, and the temporal distribution of demand and routing. Additionally, input data such as ramp terminal signal timings, roadway speed distributions, and roadway geometry characteristics are also verified for consistency with other model inputs.

Within the operational calibration stage, the model parameters that affect the overall traffic operations of the network are checked and modified if needed. This process consists of modifying the detailed driver behaviour parameters that affect the overall capacity of the transportation facilities, aggressiveness of drivers, and locations for lane changing. Adjustments of these parameters is essential for modelling freeway bottlenecks and local driving behaviour that can affect the overall traffic flow, speeds, capacity, and congestion. The parameters include car following characteristics (headway, standstill distance, safety distance, etc.), lane changing accepted deceleration rates, route lane change distances, and lane selection. The operational calibration stage requires the most time (and resources) to complete.

The validation process compares simulated model results with field observed data to determine the accuracy of the model. The goal is to identify parameter settings in the simulation model which produce outputs that match field data. Parameters are adjusted until an acceptable correlation is achieved between the observed field data and the modelled existing conditions. It is the final step in the iterative calibration process.

The validation check determines how closely the model is replicating actual study area conditions based on the targets set. Visual inspection of the simulation model is undertaken during this stage again. If the calibration/ validation targets are not met, the system and operational calibration

process is revisited. Data results are analyzed and evaluated to determine the most appropriate parameters to modify during the next iteration.

Once calibrated and validated, the model can be used with confidence to analyze future scenarios which may include modifications to travel demands, roadway geometry, and/or the transportation network.

3.2 Targets

The accuracy of the calibration and validation process is based on an assessment and comparison between modelled and observed values. Targets are used to assess whether the process has yielded a simulation model that reasonably corresponds to field measures of effectiveness (MOEs).

For the freeway portion of the models, the MOEs examined included mainline freeway throughput (volumes), travel time and speed, per MTO requirements. **Table 3** summarizes typical calibration targets for these MOEs, as set out in the FHWA document.

TABLE 3: FREEWAY MODEL CALIBRATION TARGETS

Criteria and Measures	Calibration Acceptance Targets
Hourly Flows, Model Versus Observed	
Individual Link Flows	
Within 15%, for 700 veh/h < Flow < 2,700 veh/h	> 85% of cases
Within 100 veh/h, for Flow < 700 veh/h	> 85% of cases
Within 400 veh/h, for Flow > 2,700 veh/h	> 85% of cases
Sum of All Link Flows	Within 5% of sum of all link counts
GEH < 5 for Individual Link Flows	> 85% of cases
GEH for Sum of All Link Flows	GEH < 4 for sum of all link counts
Travel Times, Model Versus Observed	
Journey Times, Network	
Within 15% (or 1.0 minute, if higher)	> 85% of cases
Visual Audits	
Individual Link Speeds	
Visually Acceptable Speed-Flow Relationship	To analyst's satisfaction
Bottlenecks	
Visually Acceptable Queuing	To analyst's satisfaction

Source: FHWA, Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Microsimulation Modelling Software – July 2004, Table 4, p. 64

As noted in the table, the GEH statistic is one criterion used to determine how well modelled and observed results match. The GEH statistic is a modified Chi-Squared statistic that incorporates both relatives and absolute differences, and is computed as follows:

$$GEH = \sqrt{\frac{(M-O)^2}{0.5 * (M+O)}}$$

Where:

M: Simulated/Modelled Flows
O: Observed Flows

GEH values provided an indication of the goodness of fit as outlined below:

GEH < 5	Flows can be considered a good fit
5 < GEH < 10	Flows may require further investigation
GEH > 5	Flows cannot be considered to be a good fit

For intersection turning movement volumes, the following calibration targets were set:

- Achieve 80% for most of the compared turning movement count (TMC) data sets, with an overall GEH value 5 < GEH < 10;
- Verify that no significant link, intersection approach or turning movement flows have a GEH value of greater than 10; and
- Verify that the absolute variation between the modelled and observed data is not more than 25%.

3.3 Results

The base models were calibrated based on the process and targets defined above. A three-hour simulation period was undertaken per MTO requirements. A total of five computer simulation runs were completed with the average results for the single peak hour reported and tabulated. **Table 4** summarizes the simulation time intervals.

TABLE 4: SIMULATION TIME INTERVALS

Period	Time Interval (seconds)
Seeding	1,800
Shoulder of peak hour	1,800 – 5,400
Peak Hour	5,400 – 9,000
Shoulder of peak hour	9,000 – 12,600

3.3.1 Entering/Exiting Volume Comparisons

Vehicle inputs and outputs were checked to ensure all vehicle demands were loaded onto the network and that the correct vehicle volumes were exiting. This initial check provides an indication whether there are any significant issues with the model.

Table 5 summarizes the total entering and exiting volumes for the AM, PM, and Saturday peak hour models. **Appendix C** contains the detailed output.

TABLE 5: VEHICLE INPUTS AND OUTPUTS

Time Period	Inbound			Outbound		
	Observed	Modelled	% Diff	Observed	Modelled	% Diff
AM Peak Hour	20,687	20,589	-0.5%	20,696	20,097	-2.9%
PM Peak Hour	23,152	23,069	-0.4%	23,152	22,598	-2.4%
Saturday Peak Hour	18,036	17,959	-0.4%	17,986	17,378	-3.4%

3.3.2 Highway 401 Mainline Volume Comparisons

A comparison of modelled and observed flows was conducted for the Highway 401 mainline freeway sections. The modelled traffic volumes as well as the simulation outputs were calculated as a mean of multiple computer model runs. Averaged results provided a reasonable representation, as this type of micro-simulation analysis is a stochastic process in which every computer run represents a single observation. A complete experiment therefore consisted of multiple computer runs, whose outputs were averaged to obtain the final modelled results that were then compared with the observed data.

Table 6, Table 7, and **Table 8** compare observed and modelled traffic flow on Highway 401 for the AM, PM, and Saturday peak hours. The tables show that the flows compare favourably. GEH values of less than 5 were observed for all individual link flows in the models, and a GEH less than 4 for the sum of all link counts. On all individual freeway links, flows are within the 400 vehicles per hour permissible variation. As a result, the absolute variation between the modelled and observed data is well within the 5% variation limit. The GEH values for all link flows meet the specified calibration targets.

3.3.3 Highway 401 On-Off Ramp Volume Comparisons

Table 9, Table 10, and **Table 11** compare the observed and modelled traffic volume for the Highway 401 on and off ramps for the AM, PM, and Saturday peak hours. Calibration targets are met for all link flows.

3.3.4 Intersection Volume Comparisons

Table 12, Table 13, and **Table 14** compare the observed and modelled total intersection traffic volumes for the AM, PM, and Saturday peak hours. Similar to the freeway mainline volumes, the overall intersection flows compare favourably. GEH values for all intersections are below the target of 5. Additionally, all intersection approaches and turning movements register GEH values within the specified targets. **Appendix D** provides the detailed results.

TABLE 6: COMPARISON OF HIGHWAY 401 MAINLINE VOLUMES – AM PEAK HOUR

Freeway Section	Direction	Observed	Modelled	% Diff	GEH
West of James Snow Parkway	EB	4,569	4,591	0%	0.3
James Snow Parkway – Trafalgar Road		5,266	5,238	-1%	0.4
Trafalgar Road – Highway 407		5,791	5,749	-1%	0.6
Highway 407 – Winston Churchill Boulevard		3,743	3,722	-1%	0.3
East of Winston Churchill Boulevard		3,434	3,367	-2%	1.1
East of Winston Churchill Boulevard	WB	3,446	3,466	1%	0.3
Winston Churchill Boulevard – Highway 407		3,451	3,461	0%	0.2
Highway 407 – Trafalgar Road		4,174	4,154	0%	0.3
Trafalgar Road – James Snow Parkway		4,231	4,195	-1%	0.6
West of James Snow Parkway		3,876	3,844	-1%	0.5
Eastbound Total		**22,803**	**22,667**	**-0.6%**	**0.9**
Westbound Total		**19,178**	**19,120**	**-0.3%**	**0.4**
Sum of All Link Flows		***41,981***	***41,787***	***-0.5%***	***0.9***

TABLE 7: COMPARISON OF HIGHWAY 401 MAINLINE VOLUMES – PM PEAK HOUR

Freeway Section	Direction	Observed	Modelled	% Diff	GEH
West of James Snow Parkway	EB	4,523	4,544	0%	0.3
James Snow Parkway – Trafalgar Road		4,815	4,805	0%	0.1
Trafalgar Road – Highway 407		4,823	4,812	0%	0.2
Highway 407 – Winston Churchill Boulevard		3,439	3,433	0%	0.1
East of Winston Churchill Boulevard		3,254	3,221	-1%	0.6
East of Winston Churchill Boulevard	WB	4,178	4,193	0%	0.2
Winston Churchill Boulevard – Highway 407		4,200	4,216	0%	0.2
Highway 407 – Trafalgar Road		5,946	5,785	-3%	2.1
Trafalgar Road – James Snow Parkway		5,584	5,423	-3%	2.2
West of James Snow Parkway		4,957	4,849	-2%	1.5
Eastbound Total		**20,854**	**20,815**	**0%**	**0.3**
Westbound Total		**24,865**	**24,466**	**-2%**	**2.5**
Sum of All Link Flows		***45,719***	***45,281***	***-1%***	***2.1***

TABLE 8: COMPARISON OF HIGHWAY 401 MAINLINE VOLUMES – SATURDAY PEAK HOUR

Freeway Section	Direction	Observed	Modelled	% Diff	GEH
West of James Snow Parkway	EB	4,338	4,367	1%	0.4
James Snow Parkway – Trafalgar Road		4,477	4,445	-1%	0.5
Trafalgar Road – Highway 407		4,916	4,789	-3%	1.8
Highway 407 – Winston Churchill Boulevard		3,980	3,853	-3%	2.0
East of Winston Churchill Boulevard		4,124	3,976	-4%	2.3
East of Winston Churchill Boulevard	WB	4,661	4,669	0%	0.1
Winston Churchill Boulevard – Highway 407		4,284	4,278	0%	0.1
Highway 407 – Trafalgar Road		4,932	4,889	-1%	0.6
Trafalgar Road – James Snow Parkway		4,623	4,543	-2%	1.2
West of James Snow Parkway		4,077	3,998	-2%	1.2
Eastbound Total		**21,835**	**21,430**	**-2%**	**2.8**
Westbound Total		**22,577**	**22,377**	**-1%**	**1.3**
Sum of All Link Flows		***44,412***	***43,807***	***-1%***	***2.9***

TABLE 9: COMPARISON OF HIGHWAY 401 RAMP VOLUMES – AM PEAK HOUR

Ramp Terminal	Direction		Observed	Modelled	% Diff	GEH
James Snow Parkway North Terminal	SB JSP to WB 401	On	105	103	-2%	0.2
	WB 401 to JSP	Off	702	695	-1%	0.3
	NB JSP to WB 401	On	242	241	0%	0.1
James Snow Parkway South Terminal	NB JSP to EB 401	On	922	913	-1%	0.3
	EB 401 to JSP	Off	409	390	-5%	1.0
	SB JSP to EB 401	On	184	190	3%	0.4
Trafalgar Road North Terminal	SB Trafalgar to WB 401	On	104	85	-18%	2.0
	WB 401 to Trafalgar	Off	401	399	0%	0.1
	NB Trafalgar to WB 401	On	347	349	1%	0.1
Trafalgar Road South Terminal	NB Trafalgar to EB 401	On	269	254	-6%	0.9
	EB 401 to Trafalgar	Off	230	230	0%	0.0
	SB Trafalgar to EB 401	On	486	467	-4%	0.9
Highway 407	EB 401 to WB 407	Off	173	171	-1%	0.2
	EB 401 to EB 407	Off	2131	2104	-1%	0.6
	EB 407 to EB 401	On	256	249	-3%	0.4
	WB 401 to WB 407	Off	86	97	13%	1.1
	EB 407 to WB 401	On	133	123	-5%	0.9
	WB 407 to WB 401	On	676	683	1%	0.3
Winston Churchill Blvd North Terminal	SB WCB to WB 401	On	370	350	-5%	1.1
	WB 401 to WCB	Off	618	618	0%	0.0
	NB WCB to WB 401	On	253	253	0%	0.0
Winston Churchill Blvd South Terminal	NB WCB to EB 401	On	243	241	-1%	0.1
	EB 401 to WCB	Off	801	782	-2%	0.7
	SB WCB to EB 401	On	249	241	-3%	0.5
Sum of All Link Flows			***10,390***	***10,228***	***-1.6%***	***1.6***

TABLE 10: COMPARISON OF HIGHWAY 401 RAMP VOLUMES – PM PEAK HOUR

Ramp Terminal	Direction		Observed	Modelled	% Diff	GEH
James Snow Parkway North Terminal	SB JSP to WB 401	On	110	75	-32%	3.6
	WB 401 to JSP	Off	944	915	-3%	1.0
	NB JSP to WB 401	On	207	204	-1%	0.2
James Snow Parkway South Terminal	NB JSP to EB 401	On	300	304	1%	0.2
	EB 401 to JSP	Off	274	271	-1%	0.2
	SB JSP to EB 401	On	266	265	0%	0.1
Trafalgar Road North Terminal	SB Trafalgar to WB 401	On	467	453	-3%	0.7
	WB 401 to Trafalgar	Off	887	868	-2%	0.6
	NB Trafalgar to WB 401	On	58	60	3%	0.3
Trafalgar Road South Terminal	NB Trafalgar to EB 401	On	328	322	-2%	0.3
	EB 401 to Trafalgar	Off	547	526	-4%	0.9
	SB Trafalgar to EB 401	On	227	227	0%	0.0
Highway 407	EB 401 to WB 407	Off	207	207	0%	0.0
	EB 401 to EB 407	Off	1,329	1,318	-1%	0.3
	EB 407 to EB 401	On	152	156	3%	0.3
	WB 401 to WB 407	Off	363	364	0%	0.1
	EB 407 to WB 401	On	207	208	0%	0.1
	WB 407 to WB 401	On	1,902	1,887	-1%	0.3
Winston Churchill Blvd North Terminal	SB WCB to WB 401	On	200	186	-7%	1.0
	WB 401 to WCB	Off	895	885	-1%	0.3
	NB WCB to WB 401	On	717	728	2%	0.4
Winston Churchill Blvd South Terminal	NB WCB to EB 401	On	250	236	-6%	0.9
	EB 401 to WCB	Off	611	599	-2%	0.5
	SB WCB to EB 401	On	176	170	-3%	0.5
Sum of All Link Flows			***11,624***	***11,434***	***-1.6%***	***1.8***

TABLE 11: COMPARISON OF HIGHWAY 401 RAMP VOLUMES – SAT PEAK HOUR

Ramp Terminal	Direction		Observed	Modelled	% Diff	GEH
James Snow Parkway North Terminal	SB JSP to WB 401	On	200	192	-4%	0.6
	WB 401 to JSP	Off	868	854	-2%	0.5
	NB JSP to WB 401	On	122	122	0%	0.0
James Snow Parkway South Terminal	NB JSP to EB 401	On	110	118	7%	0.7
	EB 401 to JSP	Off	179	184	3%	0.4
	SB JSP to EB 401	On	208	201	-3%	0.5
Trafalgar Road North Terminal	SB Trafalgar to WB 401	On	17	19	12%	0.5
	WB 401 to Trafalgar	Off	725	669	-8%	2.1
	NB Trafalgar to WB 401	On	399	441	11%	2.0
Trafalgar Road South Terminal	NB Trafalgar to EB 401	On	200	196	-2%	0.3
	EB 401 to Trafalgar	Off	468	469	0%	0.0
	SB Trafalgar to EB 401	On	707	646	-9%	2.3
Highway 407	EB 401 to WB 407	Off	155	158	2%	0.2
	EB 401 to EB 407	Off	865	833	-4%	1.1
	EB 407 to EB 401	On	84	91	8%	0.7
	WB 401 to WB 407	Off	72	72	0%	0.0
	EB 407 to WB 401	On	135	124	-8%	1.0
	WB 407 to WB 401	On	585	595	2%	0.4
Winston Churchill Blvd North Terminal	SB WCB to WB 401	On	210	211	0%	0.1
	WB 401 to WCB	Off	903	889	-2%	0.5
	NB WCB to WB 401	On	316	305	-3%	0.6
Winston Churchill Blvd South Terminal	NB WCB to EB 401	On	250	259	4%	0.6
	EB 401 to WCB	Off	477	463	-3%	0.6
	SB WCB to EB 401	On	371	367	-1%	0.2
Sum of All Link Flows			***8,626***	***8,478***	***-1.7%***	***1.6***

TABLE 12: COMPARISON OF TOTAL INTERSECTION VOLUMES – AM PEAK HOUR

Intersection	Observed	Modelled	% Diff	GEH
James Snow Parkway & Hwy 401 North Terminal	1,731	1708	-1%	0.6
James Snow Parkway & Hwy 401 South Terminal	1,678	1640	-2%	0.5
Trafalgar Road & Hwy 401 North Terminal	2,594	2,549	-2%	0.9
Trafalgar Road & Hwy 401 South Terminal	2,516	2,465	-2%	1.0
Winston Churchill Boulevard & Hwy 401 North Terminal	2,802	2,785	-1%	0.3
Winston Churchill Boulevard & Hwy 401 South Terminal	2,778	2,757	-1%	0.4
Fifth Line N & Steeles Avenue	1,554	1,526	-2%	0.7
Fifth Line S & Steeles Avenue	1,299	1,272	-2%	0.8
Sixth Line N & Steeles Avenue	1,282	1,238	-3%	1.2
Sixth Line S & Steeles Avenue	1,217	1,173	-4%	1.3
Hornby Road & Steeles Avenue	1,230	1,185	-4%	1.3
Hornby Road & Trafalgar Road	1,598	1,526	-5%	1.8
Trafalgar Road & Steeles Avenue	3,527	3,321	-6%	3.5
TPO Center Mall Access & Steeles Avenue	1,852	1,724	-7%	3.0
Eighth Line N/TPO Access & Steeles Avenue	2,020	1,888	-7%	3.0
Eighth Line S & Steeles Avenue	1,571	1,503	-4%	1.7
Ninth Line N & Steeles Avenue	2,350	2,260	-4%	1.9
Ninth Line S & Steeles Avenue	2,796	2,717	-3%	1.5
James Snow Parkway & Main Street	3,480	3,435	-1%	0.8
Total Intersections	**19**			
# of Intersections GEH < 5	**19**			
% of Intersections GEH < 5	**100%**			

TABLE 13: COMPARISON OF TOTAL INTERSECTION VOLUMES – PM PEAK HOUR

Intersection	Observed	Modelled	% Diff	GEH
James Snow Parkway & Hwy 401 North Terminal	2,252	2,228	-1%	0.5
James Snow Parkway & Hwy 401 South Terminal	2,134	2,112	-1%	0.5
Trafalgar Road & Hwy 401 North Terminal	2,924	2,892	-1%	0.6
Trafalgar Road & Hwy 401 South Terminal	2,394	2,344	-2%	1.0
Winston Churchill Boulevard & Hwy 401 North Terminal	3,190	3,134	-2%	1.0
Winston Churchill Boulevard & Hwy 401 South Terminal	3,531	3,504	-1%	0.5
Fifth Line N & Steeles Avenue	2,008	2,014	0%	0.1
Fifth Line S & Steeles Avenue	1,815	1,827	1%	0.3
Sixth Line N & Steeles Avenue	1,823	1,835	1%	0.2
Sixth Line S & Steeles Avenue	1,750	1,771	1%	0.5
Hornby Road & Steeles Avenue	1,764	1,775	1%	0.3
Hornby Road & Trafalgar Road	1,411	1,318	-7%	2.5
Trafalgar Road & Steeles Avenue	4,136	3,979	-4%	2.5
TPO Center Mall Access & Steeles Avenue	2,736	2,602	-5%	2.6
Eighth Line N/TPO Access & Steeles Avenue	2,551	2,456	-4%	1.9
Eighth Line S & Steeles Avenue	2,168	2,117	-2%	1.1
Ninth Line N & Steeles Avenue	3,137	3,108	-1%	0.5
Ninth Line S & Steeles Avenue	3,573	3,534	-1%	0.7
James Snow Parkway & Main Street	3,362	3,344	-1%	0.3
Total Intersections	**19**			
# of Intersections GEH < 5	**19**			
% of Intersections GEH < 5	**100%**			

TABLE 14: COMPARISON OF TOTAL INTERSECTION VOLUMES – SATURDAY PEAK HOUR

Intersection	Observed	Modelled	% Diff	GEH
James Snow Parkway & Hwy 401 North Terminal	1,968	1,918	-3%	1.1
James Snow Parkway & Hwy 401 South Terminal	1,738	1,698	-2%	1.0
Trafalgar Road & Hwy 401 North Terminal	2,777	2,593	-7%	3.6
Trafalgar Road & Hwy 401 South Terminal	2,286	2,251	-2%	0.7
Winston Churchill Boulevard & Hwy 401 North Terminal	2,341	2,293	-2%	1.0
Winston Churchill Boulevard & Hwy 401 South Terminal	2,300	2,251	-2%	1.0
Fifth Line N & Steeles Avenue	1,004	964	-4%	1.3
Fifth Line S & Steeles Avenue	926	891	-4%	1.2
Sixth Line N & Steeles Avenue	936	892	-5%	1.5
Sixth Line S & Steeles Avenue	888	850	-4%	1.3
Hornby Road & Steeles Avenue	904	866	-4%	1.3
Hornby Road & Trafalgar Road	1,222	1,146	-6%	2.2
Trafalgar Road & Steeles Avenue	3,387	3,115	-8%	4.8
TPO Center Mall Access & Steeles Avenue	2,315	2,153	-7%	3.4
Eighth Line N/TPO Access & Steeles Avenue	1,742	1,685	-3%	1.4
Eighth Line S & Steeles Avenue	1,285	1,246	-3%	1.1
Ninth Line N & Steeles Avenue	1,838	1,823	-1%	0.4
Ninth Line S & Steeles Avenue	1,892	1,888	0%	0.1
James Snow Parkway & Main Street	-	-	-	-
Total Intersections	**18**			
# of Intersections GEH < 5	**18**			
% of Intersections GEH < 5	**100%**			

3.3.4 Highway 401 Travel Time and Speed Comparisons

Travel time survey data was collected along Highway 401 via the test vehicle method, in which the analyst collects measurements from a moving vehicle within the traffic stream. Automatic data collection equipment was utilized to aid with collection, with a GPS unit used to track the position and speed of the test vehicles as they travelled along the corridor.

Weekday and Saturday travel time studies were conducted along Highway 401 in both directions on May 4 (Thursday) and 6, 2017, respectively. **Table 15** summarizes the number of test runs conducted.

TABLE 15: TRAVEL TIME TEST RUNS

Peak Period	Eastbound	Westbound
AM (6-10AM)	19	18
PM (3-7PM)	13	12
Saturday (11AM-3PM)	19	19

Table 16 provides an excerpt from the Institute of Transportation Engineers (ITE) Manual of Transportation Engineering Studies (2nd Edition), summarizing the minimum number of test runs recommended for travel time and delay studies to achieve specified confidence levels in the collected data. The R values along the left side of the table indicate the difference in maximum and minimum running speeds, while the R values along the top indicate the desired permitted error.

The confidence level of the travel time studies was determined based on the data for the PM peak period, as the fewest number of runs were completed during this survey in the westbound direction. With a difference in maximum and minimum running speeds of approximately 40 km/h and 12 runs completed, a confidence level of 95% is achieved at a permitted error of ±8.0 km/h. The calibration targets for travel times to be achieved are that journey times through the network should be within 15% (or 1.0 minute, if higher) for greater than 85% of cases. As such, the surveys provide a reasonable level of confidence for the true travel times and speeds for the corridor.

Table 17, Table 18, and **Table 19** compare the observed and modelled travel time and speed results along Highway 401 for the AM, PM, and Saturday peak hours. The tables show that the journey travel times are within the specified target calibration criteria. The observed and modelled eastbound and westbound journey times through the network are within 15%.

Appendix E provides lane by lane speed contour graphs, further comparing the results. The graphs have also been cross-referenced to speed plot data from obtained from the MTO iCorridor website.

TABLE 16: MINIMUM NUMBER OF TEST RUNS FOR TRAVEL TIME AND DELAY STUDIES

R	Minimum Sample Size *n* for Specified Permitted Error ε									
	Confidence Level: 99.73%					Confidence Level: 95%				
MPH (KPH)	1 (1.6)	2 (3.2)	3 (4.8)	4 (6.4)	5 (8.0)	1 (1.6)	2 (3.2)	3 (4.8)	4 (6.4)	5 (8.0)
1 (1.6)	6	5	4	4	4	4	3	3	3	3
2 (3.2)	9	6	5	5	4	6	4	3	3	3
3 (4.8)	13	8	6	5	5	8	5	4	4	3
4 (6.4)	17	9	7	6	6	10	6	5	4	4
5 (8.0)	21	11	8	7	6	12	7	5	4	4
6 (9.7)	26	13	9	8	7	15	8	6	5	4
7 (11.3)	32	15	10	8	7	18	9	6	5	5
8 (12.9)	37	17	12	9	8	21	10	7	6	5
9 (14.5)	43	19	13	10	9	21	11	8	6	5
10 (16.1)	50	21	14	11	9	27	12	8	7	6
11 (17.7)	57	24	15	12	10	31	13	9	7	6
12 (19.3)	64	26	17	13	11	34	15	10	8	6
13 (20.9)	72	29	18	14	11	38	16	11	8	7
14 (22.5)	80	32	20	15	12	43	18	11	9	7
15 (24.1)	89	34	21	16	13	47	19	12	9	8
20 (32.2)	-	50	30	21	17	71	27	17	12	10
25 (40.2)	-	68	39	27	21	99	36	22	15	12
30 (48.3)	-	89	50	34	26	-	47	27	19	15

Source: Institute of Transportation Engineers, Manual of Transportation Engineering Studies (2nd Edition), 1998, Exhibit 9.1, p. 163

TABLE 17: COMPARISON OF HIGHWAY 401 TRAVEL TIMES AND SPEEDS – AM PEAK HOUR

Dir.	Section	Travel Times (seconds)			Speeds (km/h)		
		Obs.	Mod.	Diff	Obs.	Mod.	%Diff
EB	James Snow Pkwy. to Trafalgar Rd.	182	152.6	-29.5	84	100	19%
	Trafalgar Rd. to Hwy. 407	105	108.4	3.4	99	97	-2%
	Hwy. 407 to Winston Churchill Blvd.	63	64.2	1.2	107	105	-2%
WB	Winston Churchill Blvd. to Hwy. 407	57	64.3	7.3	118	105	-11%
	Hwy. 407 to Trafalgar Rd.	88	100.2	12.2	118	105	-11%
	Trafalgar Rd. to James Snow Pkwy.	137	147.0	9.9	111	103	-7%
Total EB Travel Time		**350.0**	**325.2**	**-24.8 (-7%)**	-	-	-
Total WB Travel Time		**282.0**	**311.4**	**29.4 (10%)**	-	-	-

TABLE 18: COMPARISON OF HIGHWAY 401 TRAVEL TIMES AND SPEEDS – PM PEAK HOUR

Dir.	Section	Travel Times (seconds)			Speeds (km/h)		
		Obs.	Mod.	Diff	Obs.	Mod.	%Diff
EB	James Snow Pkwy. to Trafalgar Rd.	181	193.0	12.0	84	79	-6%
	Trafalgar Rd. to Hwy. 407	113	120.7	8.7	93	87	-7%
	Hwy. 407 to Winston Churchill Blvd.	69	70.1	1.1	98	96	-2%
WB	Winston Churchill Blvd. to Hwy. 407	187	131.5	-55.5	36	51	42%
	Hwy. 407 to Trafalgar Rd.	233	228.3	-4.5	45	46	2%
	Trafalgar Rd. to James Snow Pkwy.	183	186.9	3.8	83	81	-2%
Total EB Travel Time		**362.0**	**383.9**	**21.9 (6%)**	-	-	-
Total WB Travel Time		**603.0**	**546.7**	**56.1 (-9%)**	-	-	-

TABLE 19: COMPARISON OF HIGHWAY 401 TRAVEL TIMES AND SPEEDS – SATURDAY PEAK HOUR

Dir.	Section	Travel Times (seconds)			Speeds (km/h)		
		Obs.	Mod.	Diff	Obs.	Mod.	%Diff
EB	James Snow Pkwy. to Trafalgar Rd.	157	152.0	-5.0	97	100	4%
	Trafalgar Rd. to Hwy. 407	104	103.9	-0.1	101	101	0%
	Hwy. 407 to Winston Churchill Blvd.	59	64.3	5.3	115	105	-9%
WB	Winston Churchill Blvd. to Hwy. 407	60	64.9	4.9	112	104	-7%
	Hwy. 407 to Trafalgar Rd.	91	101.8	10.8	114	103	-9%
	Trafalgar Rd. to James Snow Pkwy.	149	147.7	-1.3	102	103	1%
Total EB Travel Time		**320.0**	**320.2**	**0.2 (0%)**	-	-	-
Total WB Travel Time		**300.0**	**314.4**	**14.4 (5%)**	-	-	-

4 Conclusion

The analyses presented in this report indicate that the micro-simulation models developed from the data collected calibrate favourably to existing conditions based on the established calibration targets and visual observations in the field. Modelled volume throughput and travel times and speeds correspond to observed data, confirming the models fairly represent the base year. With confidence, it can be concluded that the base models capture the observed traffic patterns and vehicle behaviours.

On this basis, the base models will be utilized as the foundation for other VISSIM models developed for this assignment.

Appendix A

Comparison of MTO and Collected Traffic Data

Memorandum

21 December 2017

File
170050

To

From
Gene Chartier, P.Eng., FITE
Vice-President
Paradigm Transportation Solutions Limited

Highway 401 Traffic Volume and Travel Time Comparison

The following memorandum compares traffic volumes and travel time collected by the Ministry of Transportation, Ontario (MTO) and Paradigm Transportation Solutions Limited (Paradigm) for Highway 401 in support of the Town of Halton Hills Premier Gateway Traffic Study. The MTO has since suggested that Paradigm compare their traffic data to theirs in determining the appropriateness of a micro-simulation model in development.

The study limits on Highway 401 for the Premier Gateway Traffic Study is from the James Snow Parkway interchange in the west to Winston Churchill Boulevard interchange in the east.

Traffic Volumes

Location and Date

Paradigm conducted traffic counts and travel time surveys on Highway 401 in May 2017. **Table 1** shows the location and dates of the traffic counts compared with the traffic volumes provided by the MTO. MTO provide traffic volumes from 2014 to 2016 for all sections of Highway 401 except for between James Snow Parkway and Trafalgar Road. They also provided some July 2014 and October 2014 traffic counts, but those where not considered as Paradigm counts were done in the spring. Only the October 2016 traffic volumes between Highway 407 and Winston Churchill Boulevard were looked at as they are the most recent traffic volumes provided.

Table 1: Traffic Count Locations & Dates

Highway 401 Location	Date	
	Paradigm	MTO
West of James Snow Parkway		May 13, 2014 to May 19, 2014
James Snow Parkway & Trafalgar Road	May 4, 2017 & May 6, 2017	May 13, 2014 to May 19, 2014
Trafalgar Road & Highway 407	May 4, 2017 & May 6, 2017	
Highway 407 & Winston Churchill Boulevard	May 4, 2017 & May 6, 2017	May 13, 2014 to May 19, 2014
		Oct 14, 2016 to Oct 20, 2016
East of Winston Churchill Boulevard		May 25, 2014 to May 31, 2014

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Peak Hour Traffic Volumes

The weekday AM, PM, and Saturday traffic volumes for Highway 401 were compared. The traffic volumes from MTO contained seven consecutive days of traffic collection. The Tuesday, Wednesday, and Thursday traffic volumes were averaged to get the weekday AM and PM peak hour traffic volumes. The Saturday peak hour traffic volumes were obtained from the Saturday traffic counts. Paradigm only counted one weekday and one Saturday for their traffic counts. **Table 2** compares the AM, PM, and Saturday peak hour traffic volumes of Highway 401 and the locations where both Paradigm and MTO had counts available.

During the AM peak hour, the section of Highway 401 between Trafalgar Road and Highway 407 are within 1% for the eastbound direction and 5% for the westbound direction. The section between Highway 407 and Winston Churchill Boulevard, Paradigm's counts are within 3% for the eastbound direction and 2% for the westbound direction compared to the 2014 MTO traffic volumes. Paradigm's counts are within 5% for the eastbound and 2% for the westbound directions with the 2016 MTO traffic volumes.

During the PM peak hour, the Paradigm traffic volumes range from -19% to 2% difference with the MTO traffic volumes. The section of Highway 401 between Trafalgar Road and Highway 407, the eastbound direction is -8% and the westbound direction is -14%. The section between Highway 407 and Winston Churchill Boulevard, the eastbound direction is -19% compared with the 2014 traffic volumes and -15% with the 2016 volumes. The westbound direction is -13% against the 2014 volumes and 2% with the 2016 volumes.

The Saturday peak hour shows that Paradigm's traffic volumes are within 3% in both directions for the section of Highway 401 between Trafalgar Road and Highway 407. Between Highway 407 and Winston Churchill Boulevard, Paradigm's traffic volumes are within -5% for the eastbound direction and 4% for the westbound direction compared with the 2014 traffic volumes. Compared with the 2016 traffic volumes, the difference is -5% for the eastbound direction and -7% in the westbound direction.

Table 2: Peak Hour Traffic Volumes

Highway 401 Location	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	EB	WB	EB	WB	EB	WB
Paradigm (2017)						
Trafalgar Road & Highway 407	5791	4174	3970	4967	4716	4932
Highway 407 & Winston Church Boulevard	3743	3451	2849	3655	3980	4284
MTO (2014 - 2016)						
Trafalgar Road & Highway 407 (2014)	5742	3978	4300	5794	4838	5109
Highway 407 & Winston Church Boulevard (2014)	3651	3393	3505	4181	4204	4119
Highway 407 & Winston Church Boulevard (2016)	3569	3393	3345	3593	4178	4595
Difference (Paradigm - MTO)						
Trafalgar Road & Highway 407	49	196	-330	-827	-122	-177
Highway 407 & Winston Church Boulevard (2014)	92	58	-656	-526	-224	165
Highway 407 & Winston Church Boulevard (2016)	174	58	-496	62	-198	-311
Difference %						
Trafalgar Road & Highway 407	1%	5%	-8%	-14%	-3%	-3%
Highway 407 & Winston Church Boulevard (2014)	3%	2%	-19%	-13%	-5%	4%
Highway 407 & Winston Church Boulevard (2016)	5%	2%	-15%	2%	-5%	-7%

Paradigm's traffic volumes are close to MTO's traffic volumes for the AM and Saturday peak hours and should be considered acceptable. During the PM peak hour, the MTO traffic volumes could be used, or increase Paradigm's traffic volumes by 15% for both directions.

Travel Time

Location and Date

Paradigm conducted travel time surveys on Highway 401 on May 4, 2017 (Weekday) and May 6, 2017 (Saturday). The travel times were run in accordance to FHWA guidelines where multiple runs where conducted in each direction for each period (AM peak period, PM peak period, and the Saturday peak period). MTO provided their travel time data for the AM and PM peak periods. The date and year of the data was not documented in the provided information. It is noted that there is a large difference in the segment length in the between the Paradigm and MTO data for the section between Highway 407 and Winston Churchill Boulevard. Segment discrepancies are likely starting and end points of the segment lengths (i.e., start of an off-ramp, or a point where the Highway 407 mainline crosses the Highway 401).

Travel Time & Speed

Table 3 compares the AM and PM peak period and speeds for Highway 401 between James Snow Parkway and Winston Churchill Boulevard. Under the AM peak period, eastbound direction, Paradigm's travel time and speed are significantly faster from

James Snow Parkway to Winston Churchill Boulevard with the overall travel time almost 3 minutes less compared to MTO. In the westbound direction, the overall travel time is 44 seconds different. MTO iCorridor 2016 speed plot data along Highway 401 was referenced, and provides indication that the average speeds collected by Paradigm are inline with the iCorridor website data.

Under the PM peak period, travel times and speeds are relatively close.

Table 3: Travel Time and Speeds

Highway 401 Sections	Segment Distance (km)		AM					
			Average Travel Time (min)			Average Speed (km/h)		
	Paradigm	MTO	Paradigm	MTO	Diff	Paradigm	MTO	Diff
Eastbound								
James Snow Parkway to Trafalgar Rd	4.22	4.37	3.03	5.48	2.45	84	53	30
Trafalgar Rd to Highway 407	2.91	2.49	1.88	2.01	0.13	99	75	24
Highway 407 to Winston Churchill Blvd	1.87	2.56	1.05	1.47	0.42	107	105	2
Total / Average	**9.00**	**9.43**	**5.95**	**8.95**	**3.00**	**97**	**78**	**19**
Westbound								
Winston Churchill Blvd to Highway 407	1.87	2.45	0.95	1.69	0.74	118	92	26
Highway 407 to Trafalgar Rd	2.90	2.51	1.47	1.40	0.07	118	108	11
Trafalgar Rd to James Snow Parkway	4.22	4.24	2.28	2.35	0.06	111	109	2
Total / Average	**8.99**	**9.21**	**4.70**	**5.44**	**0.74**	**116**	**103**	**13**

Highway 401 Sections	Segment Distance (km)		PM					
			Average Travel Time (min)			Average Speed (km/h)		
	Paradigm	MTO	Paradigm	MTO	Diff	Paradigm	MTO	Diff
Eastbound								
James Snow Parkway to Trafalgar Rd	4.22	4.37	3.02	2.73	-0.30	84	96	-13
Trafalgar Rd to Highway 407	2.91	2.49	1.88	1.53	-0.35	93	98	-5
Highway 407 to Winston Churchill Blvd	1.87	2.56	1.15	1.40	0.25	98	110	-12
Total / Average	**9.00**	**9.43**	**6.05**	**5.66**	**-0.39**	**92**	**101**	**-10**
Westbound								
Winston Churchill Blvd to Highway 407	1.87	2.45	3.12	4.44	1.32	36	35	1
Highway 407 to Trafalgar Rd	2.90	2.51	3.88	3.64	-0.25	45	42	3
Trafalgar Rd to James Snow Parkway	4.22	4.24	3.05	3.27	0.22	83	78	5
Total / Average	**8.99**	**9.21**	**10.05**	**11.35**	**-1.30**	**54**	**52**	**3**

There could have been several factors (weather, sun, collisions, debris, etc.) that could have caused the difference between the eastbound travel times. For the study, the AM, PM and Saturday peak period travel times by Paradigm should be sufficient.

We trust that the foregoing information will meet your requirements. Please do not hesitate to contact us if we can be of further assistance.

Yours very truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED

Gene Chartier
M.A.Sc., P.Eng., FITE
Vice-President

Appendix B

VISSIM Parameter Adjustments

Project: Toronto Premium Outlet - Scoped Traffic Study - Calibration Report
Project #: 170050
Task: Coding Assumptions in VISSIM

Vehicle Inputs

Volumes (Truck %)	As calculated
Length of auto (default)	
Length of heavy truck (default)	

Functions

Maximum acceleration (default)
Desired acceleration (default)
Maximum decceleration (default)
Desired decceleration (default)

Routings

Static Routing - Turning movements
Distribution based on existing turning movements

Desired Speed and Reduced Speed

Highway 401	Posted speed limit (100 km/h)		
Arterials/Roads	James Snow Parkway	Posted speed limit (80 km/h)	
	Trafalgar Road	Posted speed limit (60 km/h)	
	Winston Churchill Boulevard	Posted speed limit (60 km/h)	
	Steeles Ave. (Fifth Line N - S)	Posted speed limit (70 km/h)	
	Steeles Ave. (Fifth Line S - Eighth Line S)	Posted speed limit (60 km/h)	
	Steeles Ave. (Eighth Line S - Ninth Line S)	Posted speed limit (80 km/h)	
	Fifth Line N/Fifth Line S	Posted speed limit (60 km/h)	
	Sixth Line N/Sixth Line S	Posted speed limit (60 km/h)	
	Eighth Line N/Eighth Line S	Posted speed limit (60 km/h)	
	Ninth Line N/Ninth Line S	Posted speed limit (60 km/h)	
	Hornby Road	Posted speed limit (60 km/h)	

Reduced Speed Right Turns	Auto:	15 km/h	
	Truck:	12 km/hr	
Reduced Speed Left Turns	Auto:	30 km/h	
	Truck:	20 km/h	

Conflict Area/Priority Rules

Priority Rule	Right Turning	
	Min. Gap Time: 3.0 s; Min. Headway: 5.0 m; Max. Speed: 180 km/h	default
Conflict Areas		

Driving Behaviour Parameter Sets

Urban (motorized)

Following	Wiedemann 74
Lane Change (defaults)	
Lateral (defaults)	
Signal Control (defaults)	

Freeway (free lane selection)

Following

Wiedemann 99

Look ahead distance Min: 20 m — default = 0.0 m

CC0 (Standstill Distance)	1.5 m	default
CC1 (Headway Time)	**0.5**	default = 0.9s
CC2 (Following Variation)	4.0 m	default
CC3 (Threshold for Entering 'Following')	-8	default
CC4 (Negative 'Following' Threshold)	-0.35	default
CC5 (Positive 'Following' Threshold)	0.35	default
CC6 (Speed Dependency of Oscillation)	11.44	default
CC7 (Oscillation Acceleration)	**0.75 m/s2**	default = 0.25 m/s2
CC8 (Standstill Acceleration)	**5.00 m/s2**	default = 3.50 m/s2
CC9 (Acceleration at 80 km/h)	1.5 m/s2	default

Lane Change

General Behaviour: Free Lane Selection

Necessary lane change (route)	Own	Trailing Vehicle	
Maximum deceleration:	-4.00 m/s2	-3.00 m/s2	default = -3
- 1 m/s2 per distance:	200.0 m	200.0 m	default
Accepted deceleration:	**-1.00 m/s2**	**-1.00 m/s2**	default = 0.

default = -0.50 m/s2

Waiting time before diffusion: 10.00 s — default=60 s

Min. headway (front/rear): — default=0.50 s

Safety distance reduction factor: 0.50 — default=0.60

Maximum deceleration for cooperative braking: -7.00 m/s2 — default = -3.00 m/s2

Overtake reduced speed areas: checked (active)

Advanced merging: checked (active)

Cooperative lane change: checked (active)

Maximum speed difference: 10.80 km/h		default
Maximum collision time: 10.00 s		default

Lateral (defaults)

Signal Control (defaults)

Lane Changing Distance

At least 250 m for each lane change

For a 8-lane highway, the maximum number of lane changes is 3, the lane change distance will be 750 m

Freeway (free lane selection) **PM ONLY**

Following Wiedemann 99

Look ahead distance Min: 0.50 m default = 0.0 m

CC0 (Standstill Distance)	1.5 m	default
CC1 (Headway Time)	**0.9**	default = 0.9s
CC2 (Following Variation)	4.0 m	default
CC3 (Threshold for Entering 'Following')	-8	default
CC4 (Negative 'Following' Threshold)	-0.35	default
CC5 (Positive 'Following' Threshold)	0.35	default
CC6 (Speed Dependency of Oscillation)	11.44	default
CC7 (Oscillation Acceleration)	**0.25 m/s2**	default = 0.25 m/s2
CC8 (Standstill Acceleration)	**3.50 m/s2**	default = 3.50 m/s2
CC9 (Acceleration at 80 km/h)	1.5 m/s2	default

Lane Change General Behaviour: Free Lane Selection

Necessary lane change (route)	Own	Trailing Vehicle	
Maximum deceleration:	-3.50 m/s2	-3.50 m/s2	default = -3.50 m/s2
- 1 m/s2 per distance:	200.0 m	200.0 m	default
Accepted deceleration:	**-0.50 m/s2**	**-0.50 m/s2**	default = 0.50 m/s2
	default = -0.50 m/s2		

Waiting time before diffusion: 50.00 s default=60 s

Min. headway (front/rear): default=0.50 s

Safety distance reduction factor: 0.60 default=0.60

Maximum deceleration for cooperative braking: -3.50 m/s2 default = -3.00 m/s2

Overtake reduced speed areas: unchecked (unactive)

Advanced merging: checked (active)

Cooperative lane change: checked (active)

Maximum speed difference: 10.80 km/h	default
Maximum collision time: 10.00 s	default

Lateral (defaults)

Signal Control (defaults)

Lane Changing Distance At least 250 m for each lane change
For a 8-lane highway, the maximum number of lane changes is 3, the lane change distance will be 750 m

Appendix C

Detailed Input and Output Volumes

Project: Toronto Premium Outlets - Scoped Traffic Study
Project # 170050
Task: Node Evaluation Results: Volume Check Entering/Exiting Model

		AM Peak Hour			
Node	**Description**	**Volumes**	**AVG**	**% Diff**	
1	Hwy 401 EB - In	**4569**	4565	0%	4
2	Hwy 401 WB - Out	**3876**	3763	-3%	113
3	Hwy 401 WB - In	**3446**	3474	1%	-28
4	Hwy 401 EB - Out	**3434**	3320	-3%	114
5	Steeles EB - In	**941**	951	1%	-10
6	Steeles WB - Out	**526**	475	-10%	51
7	Steeles WB - In	**812**	823	1%	-11
8	Steeles EB - Out	**1400**	1338	-4%	62
9	James Snow Pkwy NB - In	**1038**	1038	0%	0
10	James Snow Pkwy SB - Out	**1030**	980	-5%	50
11	James Snow Pkwy SB - In	**600**	581	-3%	19
12	James Snow Pkwy NB - Out	**888**	873	-2%	15
13	Fifth Line N SB - In	**89**	92	3%	-3
14	Fifth Line N NB - Out	**91**	83	-9%	8
15	Brownridge Rd NB - In	**14**	14	0%	0
16	Brownridge Rd SB - Out	**157**	165	5%	-8
17	Fifth Line S NB - In	**9**	10	11%	-1
18	Fifth Line S SB - Out	**27**	28	4%	-1
19	Sixth Line N SB - In	**41**	33	-20%	8
20	Sixth Line N NB - Out	**36**	40	11%	-4
21	Sixth Line S NB - In	**2**	2	0%	0
22	Sixth Line S SB - Out	**5**	4	-20%	1
23	Trafalgar Rd SB - In	**1229**	1193	-3%	36
24	Trafalgar Rd NB - Out	**361**	325	-10%	36
25	Trafalgar Rd NB - In	**1025**	1018	-1%	7
26	Trafalgar Rd SB - Out	**1446**	1389	-4%	57
27	Central Mall NB - In	**47**	48	2%	-1
28	Central Mall SB - Out	**40**	21	-48%	19
29	Eighth Line N SB - In	**536**	489	-9%	47
30	Eighth Line N NB - Out	**98**	90	-8%	8
31	East Mall NB - In	**12**	12	0%	0
32	East Mall SB - Out	**49**	49	0%	0
33	Eighth Line S NB - In	**1**	1	0%	0
34	Eighth Line S SB - Out	**2**	2	0%	0
35	Ninth Line N SB - In	**641**	639	0%	2
36	Ninth Line N NB - Out	**288**	285	-1%	3
37	Ninth Line S NB - In	**440**	443	1%	-3
38	Ninth Line S SB - Out	**738**	714	-3%	24
39	Hwy 401 EB to Hwy 407 WB - Out	**173**	171	-1%	2
40	Hwy 407 EB to Hwy 401 EB - In	**256**	249	-3%	7
41	Hwy 401 EB to Hwy 407 EB - Out	**2131**	2104	-1%	27
42	Hwy 407 EB to Hwy 401 WB - In	**133**	123	-8%	10
43	Hwy 407 WB to Hwy 401 WB - In	**676**	683	1%	-7
44	Hwy 401 WB to Hwy 407 WB - Out	**86**	97	13%	-11
45	Winston Churchill SB - In	**1366**	1328	-3%	38
46	Winston Churchill NB - Out	**1558**	1551	0%	7
47	Winston Churchill NB - In	**1225**	1231	0%	-6
48	Winston Churchill SB - Out	**1337**	1310	-2%	27
67	Main St EB - In	**1374**	1381	1%	-7
68	Main St WB - Out	**475**	481	1%	-6
69	Main St WB - In	**165**	168	2%	-3
70	Main St EB - Out	**444**	439	-1%	5
		41383	40686	-2%	697

In	20687	20589	-0.5%
Out	20696	20097	-2.9%

Project: Toronto Premium Outlets - Scoped Traffic Study
Project # 170050
Task: Node Evaluation Results: Volume Check Entering/Exiting Model

		PM Peak Hour			
Node	**Description**	**Volumes**	**AVG**	**% Diff**	
1	Hwy 401 EB - In	**4523**	4527	0%	-4
2	Hwy 401 WB - Out	**4957**	4850	-2%	107
3	Hwy 401 WB - In	**4178**	4178	0%	0
4	Hwy 401 EB - Out	**3254**	3219	-1%	35
5	Steeles EB - In	**739**	746	1%	-7
6	Steeles WB - Out	**1145**	1098	-4%	47
7	Steeles WB - In	**1838**	1836	0%	2
8	Steeles EB - Out	**1016**	970	-5%	46
9	James Snow Pkwy NB - In	**960**	960	0%	0
10	James Snow Pkwy SB - Out	**1037**	1017	-2%	20
11	James Snow Pkwy SB - In	**998**	955	-4%	43
12	James Snow Pkwy NB - Out	**688**	701	2%	-13
13	Fifth Line N SB - In	**169**	170	1%	-1
14	Fifth Line N NB - Out	**66**	61	-8%	5
15	Brownridge Rd NB - In	**85**	91	7%	-6
16	Brownridge Rd SB - Out	**8**	8	0%	0
17	Fifth Line S NB - In	**23**	23	0%	0
18	Fifth Line S SB - Out	**3**	2	-33%	1
19	Sixth Line N SB - In	**36**	29	-19%	7
20	Sixth Line N NB - Out	**62**	66	6%	-4
21	Sixth Line S NB - In	**9**	8	-11%	1
22	Sixth Line S SB - Out	**0**	0	#DIV/0!	0
23	Trafalgar Rd SB - In	**500**	482	-4%	18
24	Trafalgar Rd NB - Out	**902**	825	-9%	77
25	Trafalgar Rd NB - In	**1091**	1084	-1%	7
26	Trafalgar Rd SB - Out	**1122**	1079	-4%	43
27	Central Mall NB - In	**272**	279	3%	-7
28	Central Mall SB - Out	**388**	335	-14%	53
29	Eighth Line N SB - In	**110**	115	5%	-5
30	Eighth Line N NB - Out	**357**	328	-8%	29
31	East Mall NB - In	**178**	179	1%	-1
32	East Mall SB - Out	**148**	152	3%	-4
33	Eighth Line S NB - In	**6**	7	17%	-1
34	Eighth Line S SB - Out	**2**	2	0%	0
35	Ninth Line N SB - In	**333**	336	1%	-3
36	Ninth Line N NB - Out	**809**	796	-2%	13
37	Ninth Line S NB - In	**805**	809	0%	-4
38	Ninth Line S SB - Out	**520**	518	0%	2
39	Hwy 401 EB to Hwy 407 WB - Out	**207**	207	0%	0
40	Hwy 407 EB to Hwy 401 EB - In	**152**	156	3%	-4
41	Hwy 401 EB to Hwy 407 EB - Out	**1329**	1318	-1%	11
42	Hwy 407 EB to Hwy 401 WB - In	**207**	208	0%	-1
43	Hwy 407 WB to Hwy 401 WB - In	**1902**	1887	-1%	15
44	Hwy 401 WB to Hwy 407 WB - Out	**363**	364	0%	-1
45	Winston Churchill SB - In	**1287**	1249	-3%	38
46	Winston Churchill NB - Out	**1700**	1656	-3%	44
47	Winston Churchill NB - In	**1856**	1841	-1%	15
48	Winston Churchill SB - Out	**1606**	1584	-1%	22
67	Main St EB - In	**663**	670	1%	-7
68	Main St WB - Out	**1186**	1176	-1%	10
69	Main St WB - In	**232**	244	5%	-12
70	Main St EB - Out	**277**	266	-4%	11
		46304	45667	-1%	637

In	23152	23069	-0.4%
Out	23152	22598	-2.4%

Project: Toronto Premium Outlets - Scoped Traffic Study
Project # 170050
Task: Node Evaluation Results: Volume Check Entering/Exiting Model

		SAT Peak Hour			
Node	**Description**	**Volumes**	**AVG**	**% Diff**	
1	Hwy 401 EB - In	**4388**	4347	-1%	41
2	Hwy 401 WB - Out	**4077**	3996	-2%	81
3	Hwy 401 WB - In	**4661**	4670	0%	-9
4	Hwy 401 EB - Out	**4124**	3975	-4%	149
5	Steeles EB - In	**433**	433	0%	0
6	Steeles WB - Out	**543**	496	-9%	47
7	Steeles WB - In	**687**	699	2%	-12
8	Steeles EB - Out	**837**	809	-3%	28
9	James Snow Pkwy NB - In	**585**	585	0%	0
10	James Snow Pkwy SB - Out	**1199**	1158	-3%	41
11	James Snow Pkwy SB - In	**883**	847	-4%	36
12	James Snow Pkwy NB - Out	**676**	666	-1%	10
13	Fifth Line N SB - In	**49**	49	0%	0
14	Fifth Line N NB - Out	**31**	28	-10%	3
15	Brownridge Rd NB - In	**17**	17	0%	0
16	Brownridge Rd SB - Out	**9**	11	22%	-2
17	Fifth Line S NB - In	**2**	2	0%	0
18	Fifth Line S SB - Out	**3**	3	0%	0
19	Sixth Line N SB - In	**23**	18	-22%	5
20	Sixth Line N NB - Out	**40**	39	-3%	1
21	Sixth Line S NB - In	**0**	0	#DIV/0!	0
22	Sixth Line S SB - Out	**0**	0	#DIV/0!	0
23	Trafalgar Rd SB - In	**596**	570	-4%	26
24	Trafalgar Rd NB - Out	**623**	575	-8%	48
25	Trafalgar Rd NB - In	**1247**	1248	0%	-1
26	Trafalgar Rd SB - Out	**795**	771	-3%	24
27	Central Mall NB - In	**444**	457	3%	-13
28	Central Mall SB - Out	**649**	573	-12%	76
29	Eighth Line N SB - In	**132**	135	2%	-3
30	Eighth Line N NB - Out	**176**	155	-12%	21
31	East Mall NB - In	**373**	376	1%	-3
32	East Mall SB - Out	**213**	211	-1%	2
33	Eighth Line S NB - In	**8**	10	25%	-2
34	Eighth Line S SB - Out	**3**	2	-33%	1
35	Ninth Line N SB - In	**366**	365	0%	1
36	Ninth Line N NB - Out	**364**	362	-1%	2
37	Ninth Line S NB - In	**317**	327	3%	-10
38	Ninth Line S SB - Out	**278**	283	2%	-5
39	Hwy 401 EB to Hwy 407 WB - Out	**155**	158	2%	-3
40	Hwy 407 EB to Hwy 401 EB - In	**84**	91	8%	-7
41	Hwy 401 EB to Hwy 407 EB - Out	**865**	833	-4%	32
42	Hwy 407 EB to Hwy 401 WB - In	**135**	124	-8%	11
43	Hwy 407 WB to Hwy 401 WB - In	**585**	595	2%	-10
44	Hwy 401 WB to Hwy 407 WB - Out	**72**	72	0%	0
45	Winston Churchill SB - In	**1000**	974	-3%	26
46	Winston Churchill NB - Out	**918**	896	-2%	22
47	Winston Churchill NB - In	**1021**	1020	0%	1
48	Winston Churchill SB - Out	**1336**	1306	-2%	30
67	Main St EB - In		0	#DIV/0!	0
68	Main St WB - Out		0	#DIV/0!	0
69	Main St WB - In		0	#DIV/0!	0
70	Main St EB - Out		0	#DIV/0!	0
		36022	35337	-2%	685

In	18036	17959	-0.4%
Out	17986	17378	-3.4%

Appendix D

Detailed Intersection Turning Movement Volumes

Project: Toronto Premium Outlet - Scoped Traffic Study
Project # 170050
Task: Traffic Analysis
Summary of Intersection TMCs and LOS
Existing Conditions AM

49

James Snow Parkway - Highway 401 North Ramp Terminal -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	348	348	0.0	14.02	B	5.20	41.11
WBT			#DIV/0!		A		
WBR	354	347	0.4	4.35	A	0.53	19.85
NBL			#DIV/0!		A		
NBT	534	535	0.0	18.48	B	8.51	56.76
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	495	478	0.8	19.61	B	8.48	53.29
SBR			#DIV/0!		A		
ALL	1731	1708	0.6	15.02	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
0	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

50

James Snow Parkway - Highway 401 South Ramp Terminal -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	166	162	0.3	19.86	B	3.83	32.52
EBT			#DIV/0!		A		
EBR	243	228	1.0	4.75	A	8.77	44.67
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	610	614	0.2	10.53	B	5.44	54.12
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	659	636	0.9	11.46	B	5.44	49.97
SBR			#DIV/0!		A		
ALL	1678	1640	0.9	11.01	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

51

Trafalgar Road - Highway 401 North Ramp Terminal -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	112	106	0.6	10.71	B	2.25	23.50
WBT			#DIV/0!		A		
WBR	289	293	0.2	6.40	A	1.01	23.46
NBL			#DIV/0!		A		
NBT	454	465	0.5	5.31	A	1.94	30.15
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1635	1586	1.2	10.03	B	19.88	218.28
SBR	104	99	0.5	7.10	A	0.72	22.86
ALL	2594	2549	0.9	8.67	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

52

Trafalgar Road - Highway 401 South Ramp Terminal -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	45	58	1.8	40.95	D	4.15	35.75
EBT			#DIV/0!		A		
EBR	185	172	1.0	8.27	A	0.69	26.65
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	1025	1010	0.5	11.34	B	6.96	73.15
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1261	1225	1.0	8.84	A	9.44	94.22
SBR			#DIV/0!		A		
ALL	2516	2465	1.0	10.58	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

53

Winston Churchill & Hwy 401 North Terminal -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	248	248	0.0	42.06	D	11.90	51.84
WBT			#DIV/0!		A		
WBR	370	370	0.0	12.30	B	11.83	51.73
NBL			#DIV/0!		A		
NBT	1188	1189	0.0	7.26	A	7.45	61.22
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	996	978	0.6	13.79	B	10.95	86.21
SBR			#DIV/0!		A		
ALL	2802	2785	0.3	13.32	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
0	0	0			
0	0	0			
1	0	0			
1	0	0			
			1	0	0

54

Winston Churchill & Hwy 401 South Terminal -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	459	452	0.3	4.94	A	3.45	30.93
EBT			#DIV/0!		A		
EBR	342	330	0.7	5.93	A	1.55	30.45
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	982	990	0.3	18.60	B	11.67	75.08
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	995	985	0.3	13.50	B	9.49	60.89
SBR			#DIV/0!		A		
ALL	2778	2757	0.4	13.02	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

55

Fifth Line N & Steeles Ave -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	51	49	0.3	9.06	A	0.30	14.19
EBT	755	760	0.2	8.12	A	4.53	54.05
EBR	135	143	0.7	2.51	A	0.00	3.86
WBL	16	18	0.5	13.49	B	0.12	6.75
WBT	454	416	1.8	7.83	A	2.57	41.20
WBR	40	34	1.0	3.40	A	2.94	46.71
NBL	9	9	0.0	31.11	C	0.41	10.14
NBT	0.01	0	0.1	0.00	A	0.00	0.00
NBR	5	5	0.0	3.34	A	0.00	4.60
SBL	20	23	0.6	32.20	C	1.06	18.88
SBT	6	5	0.4	35.87	D	0.24	7.94
SBR	63	64	0.1	4.12	A	0.02	8.11
ALL	1554	1526	0.7	7.91	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

56

Fifth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	759	772	0.5	0.19	A	0.00	0.00
EBR	21	22	0.2	0.87	A	0.00	0.00
WBL	6	6	0.0	1.52	A	0.00	3.49
WBT	504	461	2.0	0.08	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	6	7	0.4	3.60	A	0.02	4.50
NBT			#DIV/0!		A		
NBR	3	4	0.5	2.81	A	0.01	3.42
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1299	1272	0.8	0.20	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

57

Sixth Line N & Steeles Ave -- Unsignalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	34	38	0.7	2.45	A	0.06	6.31
EBT	728	724	0.1	0.33	A	0.00	0.00
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	477	442	1.6	0.44	A	0.00	0.00
WBR	2	1	0.8	0.83	A	0.00	0.00
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	8	7	0.4	3.32	A	0.00	0.00
SBT			#DIV/0!		A		
SBR	33	26	1.3	2.21	A	0.05	7.27
ALL	1282	1238	1.2	0.49	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

58

Sixth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	733	730	0.1	0.38	A	0.00	0.00
EBR	3	3	0.0	0.70	A	0.00	0.00
WBL	2	1	0.8	2.07	A	0.00	2.26
WBT	477	437	1.9	0.30	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	2	2	0.0	5.10	A	0.00	2.43
NBT			#DIV/0!		A		
NBR	0	0	0.4	0.00	A	0.00	0.00
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1217	1173	1.3	0.36	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

59

Hornby Rd & Steeles Ave -- Unsignalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	14	13	0.3	2.56	A	0.04	4.74
EBT	719	712	0.3	0.51	A	0.00	0.00
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	449	414	1.7	0.58	A	0.00	0.00
WBR	15	14	0.3	1.39	A	0.00	3.59
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	3	6	1.4	3.95	A	0.01	4.64
SBT			#DIV/0!		A		
SBR	30	26	0.8	3.29	A	0.09	11.96
ALL	1230	1185	1.3	0.65	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

60

Hornby Rd & Trafalgar Rd -- Unsignalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	2	2	0.0	21.90	C	0.22	21.10
WBT			#DIV/0!		A		
WBR	338	297	2.3	0.63	A	0.00	0.00
NBL			#DIV/0!		A		
NBT	23	23	0.0	16.97	C	0.56	15.93
NBR	6	5	0.4	14.52	B	0.13	16.37
SBL	1195	1168	0.8	0.31	A	0.00	0.00
SBT	34	31	0.5	0.00	A	0.00	0.00
SBR			#DIV/0!		A		
ALL	1598	1526	1.8	0.69	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
0	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

61

Trafalgar Rd & Steeles Ave -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	31	34	0.5	29.09	C	1.43	20.70
EBT	496	486	0.5	54.59	D	25.11	108.54
EBR	198	205	0.5	15.76	B	1.88	35.49
WBL	500	459	1.9	69.36	E	30.67	102.64
WBT	318	298	1.1	38.19	D	10.58	52.72
WBR	40	40	0.0	4.43	A	0.05	10.61
NBL	138	124	1.2	61.98	E	8.99	34.42
NBT	269	223	2.9	31.07	C	7.71	52.94
NBR	336	298	2.1	9.28	A	9.90	57.77
SBL	152	139	1.1	21.78	C	4.70	42.50
SBT	1041	1007	1.1	43.30	D	44.92	157.14
SBR	8	8	0.0	43.85	D	48.94	162.96
ALL	3527	3321	3.5	41.71	D	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
			1	0	0

62

Central Mall & Steeles Ave -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	944	891	1.7	19.03	B	15.52	134.71
EBR	40	21	3.4	2.31	A	0.01	7.86
WBL	0.1	0	0.4	0.00	A	0.00	0.00
WBT	821	766	2.0	13.11	B	6.94	104.53
WBR			#DIV/0!		A		
NBL	37	35	0.3	34.89	C	1.68	18.17
NBT			#DIV/0!		A		
NBR	10	11	0.3	8.25	A	1.88	19.01
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1852	1724	3.0	16.45	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

63

East Mall & Steeles Ave -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	74	67	0.8	25.95	C	2.46	25.55
EBT	867	822	1.5	42.83	D	34.42	147.46
EBR	13	12	0.3	9.21	A	0.00	0.00
WBL	31	31	0.0	23.75	C	0.91	18.98
WBT	464	457	0.3	40.52	D	17.87	84.87
WBR	23	22	0.2	30.80	C	19.05	86.98
NBL	3	3	0.0	50.07	D	0.19	7.68
NBT	1	1	0.0	27.33	C	0.19	7.68
NBR	8	8	0.0	4.93	A	0.00	4.89
SBL	177	158	1.5	154.65	F	162.58	225.39
SBT	5	5	0.0	170.63	F	161.31	225.59
SBR	354	302	2.9	114.78	F	164.57	229.15
ALL	2020	1888	3.0	62.05	E	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
0	0	0			
0	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

64

Eighth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	1051	980	2.2	0.51	A	0.00	0.00
EBR	1	1	0.0	0.73	A	0.00	0.00
WBL	1	2	0.8	9.14	A	0.01	4.52
WBT	517	519	0.1	0.15	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	1	1	0.0	2.99	A	0.00	1.08
NBT			#DIV/0!		A		
NBR	0.1	0	0.4	0.00	A	0.00	0.00
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1571	1503	1.7	0.40	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

65

Ninth Line N & Steeles Ave -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	75	75	0.0	16.35	B	1.11	22.09
EBT	976	902	2.4	16.06	B	13.24	158.33
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	445	450	0.2	14.25	B	5.21	42.45
WBR	213	211	0.1	3.35	A	0.16	17.85
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	568	552	0.7	77.11	E	125.22	330.60
SBT			#DIV/0!		A		
SBR	73	70	0.4	20.23	C	127.92	333.57
ALL	2350	2260	1.9	29.56	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
0	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

66

Ninth Line S & Steeles Ave -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	1117	1049	2.1	14.27	B	11.25	150.59
EBR	427	411	0.8	6.99	A	1.40	50.89
WBL	311	302	0.5	101.74	F	63.14	196.30
WBT	501	513	0.5	9.70	A	3.53	39.95
WBR			#DIV/0!		A		
NBL	157	153	0.3	40.22	D	11.11	55.78
NBT			#DIV/0!		A		
NBR	283	289	0.4	11.44	B	11.11	55.78
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	2796	2717	1.5	23.19	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

71

James Snow Parkway & Main Street -- Signalized Intersection							
Movement	AM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	753	745	0.3	49.03	D	35.64	136.68
EBT	215	219	0.3	30.76	C	10.46	65.37
EBR	406	396	0.5	10.21	B	4.00	61.03
WBL	74	71	0.4	18.62	B	1.83	23.00
WBT	43	44	0.2	43.50	D	2.47	17.95
WBR	48	50	0.3	7.56	A	0.44	17.22
NBL	199	209	0.7	25.08	C	7.39	62.58
NBT	730	732	0.1	5.54	A	3.79	30.15
NBR	109	104	0.5	4.75	A	0.75	29.41
SBL	120	115	0.5	3.74	A	0.35	22.56
SBT	550	522	1.2	33.87	C	16.64	76.45
SBR	233	228	0.3	6.86	A	1.22	35.45
ALL	3480	3435	0.8	23.40	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

107	0	0	19	0	0
100%	0%	0%	100%	0%	0%
107			19		

Project: Toronto Premium Outlet - Scoped Traffic Study
Project # 170050
Task: Traffic Analysis
Summary of Intersection TMCs and LOS
Existing Conditions PM

49

James Snow Parkway - Highway 401 North Ramp Terminal -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	676	655	0.8	15.75	B	9.90	59.19
WBT			#DIV/0!		A		
WBR	268	260	0.5	3.87	A	0.18	13.70
NBL			#DIV/0!		A		
NBT	420	433	0.6	19.51	B	7.29	49.73
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	888	880	0.3	19.80	B	16.01	80.64
SBR			#DIV/0!		A		
ALL	2252	2228	0.5	16.69	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

50

James Snow Parkway - Highway 401 South Ramp Terminal -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	65	66	0.1	19.96	B	1.65	21.40
EBT			#DIV/0!		A		
EBR	209	205	0.3	6.30	A	4.55	33.39
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	562	571	0.4	11.19	B	5.45	52.24
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1298	1270	0.8	13.73	B	14.32	96.04
SBR			#DIV/0!		A		
ALL	2134	2112	0.5	12.52	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

51

Trafalgar Road - Highway 401 North Ramp Terminal -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	299	288	0.6	38.83	D	13.26	65.66
WBT			#DIV/0!		A		
WBR	588	580	0.3	13.39	B	12.66	65.79
NBL			#DIV/0!		A		
NBT	886	882	0.1	5.67	A	3.42	42.60
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	684	683	0.0	6.58	A	3.68	63.18
SBR	467	459	0.4	7.52	A	5.07	87.37
ALL	2924	2892	0.6	11.03	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

52

Trafalgar Road - Highway 401 South Ramp Terminal -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	181	190	0.7	43.91	D	15.72	81.39
EBT			#DIV/0!		A		
EBR	366	336	1.6	9.52	A	9.27	72.29
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	1091	1074	0.5	11.86	B	8.13	81.60
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	756	744	0.4	5.21	A	2.70	63.18
SBR			#DIV/0!		A		
ALL	2394	2344	1.0	12.01	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

53

Winston Churchill & Hwy 401 North Terminal -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	403	407	0.2	35.69	D	14.90	68.21
WBT			#DIV/0!		A		
WBR	492	478	0.6	13.61	B	14.79	68.10
NBL			#DIV/0!		A		
NBT	1208	1186	0.6	15.04	B	15.83	87.47
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1087	1063	0.7	18.81	B	18.05	120.97
SBR			#DIV/0!		A		
ALL	3190	3134	1.0	18.78	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

54

Winston Churchill & Hwy 401 South Terminal -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	319	309	0.6	5.98	A	2.81	25.72
EBT			#DIV/0!		A		
EBR	292	290	0.1	6.16	A	1.59	25.17
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	1606	1605	0.0	12.43	B	13.23	101.26
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1314	1300	0.4	8.90	A	7.94	61.06
SBR			#DIV/0!		A		
ALL	3531	3504	0.5	10.03	B	-	-

TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

55

Fifth Line N & Steeles Ave -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	47	41	0.9	18.42	B	0.39	15.30
EBT	689	697	0.3	7.69	A	3.86	47.73
EBR	3	2	0.6	1.33	A	0.00	0.00
WBL	2	2	0.0	18.31	B	0.01	2.33
WBT	1001	1000	0.0	9.76	A	8.11	90.93
WBR	12	12	0.0	7.78	A	9.19	96.44
NBL	43	46	0.4	31.30	C	2.13	23.25
NBT	7	8	0.4	27.20	C	0.39	13.76
NBR	35	36	0.2	5.16	A	0.15	14.08
SBL	65	64	0.1	28.75	C	2.73	31.75
SBT	3	4	0.5	32.65	C	0.14	6.59
SBR	101	102	0.1	6.21	A	0.10	11.73
ALL	2008	2014	0.1	10.16	B	-	-

TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

56

Fifth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	788	799	0.4	0.07	A	0.00	0.00
EBR	1	1	0.0	0.88	A	0.00	0.00
WBL	2	1	0.8	1.88	A	0.00	2.28
WBT	1001	1003	0.1	0.11	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	14	14	0.0	6.02	A	0.02	4.75
NBT			#DIV/0!		A		
NBR	9	9	0.0	1.60	A	0.01	6.03
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1815	1827	0.3	0.15	A	-	-

TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
0	0	0			
			1	0	0

57

Sixth Line N & Steeles Ave -- Unsignalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	44	46	0.3	8.70	A	0.52	20.22
EBT	753	754	0.0	0.29	A	0.00	0.00
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	972	985	0.4	0.93	A	0.00	0.00
WBR	18	20	0.5	1.11	A	0.00	0.00
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	5	5	0.0	4.77	A	0.00	0.00
SBT			#DIV/0!		A		
SBR	33	25	1.5	7.34	A	0.21	10.21
ALL	1825	1835	0.2	0.96	A	-	-

TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

58

Sixth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	758	762	0.1	0.29	A	0.00	0.00
EBR	0.01	0	0.1	0.00	A	0.00	0.00
WBL	0.01	0	0.1	0.00	A	0.00	0.00
WBT	983	1002	0.6	0.41	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	7	6	0.4	10.63	B	0.02	5.99
NBT			#DIV/0!		A		
NBR	2	1	0.8	0.70	A	0.00	0.00
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1750.02	1771	0.5	0.39	A	-	-

TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

59

Hornby Rd & Steeles Ave -- Unsignalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	30	26	0.8	8.11	A	0.24	8.52
EBT	730	734	0.1	0.50	A	0.00	0.00
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	922	936	0.5	0.76	A	0.00	0.00
WBR	14	16	0.5	1.49	A	0.00	5.93
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	7	4	1.3	15.43	C	0.10	14.26
SBT			#DIV/0!		A		
SBR	61	59	0.3	8.49	A	0.69	17.26
ALL	1764	1775	0.3	1.06	A	-	-

TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

60

Hornby Rd & Trafalgar Rd -- Unsignalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	3	2	0.6	1.43	A	0.00	2.19
WBT			#DIV/0!		A		
WBR	864	791	2.5	0.61	A	0.00	0.00
NBL			#DIV/0!		A		
NBT	38	37	0.2	15.02	C	0.80	19.64
NBR	6	5	0.4	5.94	A	0.13	20.64
SBL	435	423	0.6	0.09	A	0.00	0.00
SBT	65	60	0.6	0.00	A	0.00	0.00
SBR			#DIV/0!		A		
ALL	1411	1318	2.5	0.84	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

61

Trafalgar Rd & Steeles Ave -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	55	62	0.9	28.06	C	2.26	29.02
EBT	497	487	0.5	51.19	D	22.83	86.95
EBR	185	191	0.4	10.25	B	0.99	31.40
WBL	611	614	0.1	78.64	E	49.18	147.39
WBT	728	720	0.3	39.27	D	26.30	104.02
WBR	145	141	0.3	6.71	A	0.45	23.82
NBL	192	228	2.5	57.98	E	13.89	50.53
NBT	667	581	3.4	28.75	C	18.32	100.02
NBR	615	538	3.2	14.02	B	21.19	104.85
SBL	70	72	0.2	21.45	C	1.94	34.53
SBT	355	331	1.3	33.83	C	11.45	55.03
SBR	16	14	0.5	28.26	C	14.09	60.85
ALL	4136	3979	2.5	39.39	D	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

62

Central Mall & Steeles Ave -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	814	744	2.5	21.54	C	14.25	95.98
EBR	368	317	2.8	6.45	A	2.57	57.65
WBL	20	20	0.0	5.94	A	0.06	6.44
WBT	1262	1241	0.6	8.33	A	3.41	48.83
WBR			#DIV/0!		A		
NBL	222	221	0.1	39.44	D	8.70	42.70
NBT			#DIV/0!		A		
NBR	50	59	1.2	7.52	A	9.20	43.54
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	2736	2602	2.6	14.48	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

63

East Mall & Steeles Ave -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	217	197	1.4	45.24	D	13.14	61.99
EBT	632	588	1.8	19.48	B	10.50	53.29
EBR	15	14	0.3	2.52	A	0.00	0.00
WBL	114	119	0.5	35.44	D	6.63	57.06
WBT	1172	1139	1.0	65.02	E	90.31	190.71
WBR	113	105	0.8	60.19	E	91.97	192.82
NBL	52	52	0.0	37.05	D	3.22	29.77
NBT	27	25	0.4	22.84	C	3.22	29.77
NBR	99	102	0.3	6.87	A	2.36	31.77
SBL	33	34	0.2	56.98	E	2.80	25.67
SBT	19	19	0.0	51.77	D	2.47	37.65
SBR	58	62	0.5	16.81	B	2.36	41.21
ALL	2551	2456	1.9	45.67	D	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

64

Eighth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	762	732	1.1	0.25	A	0.00	0.00
EBR	2	2	0.0	0.81	A	0.00	0.00
WBL	0.1	0	0.4	0.00	A	0.00	0.00
WBT	1398	1376	0.6	0.31	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	1	1	0.0	11.67	B	0.01	2.15
NBT			#DIV/0!		A		
NBR	5	6	0.4	1.94	A	0.01	4.74
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	2168	2117	1.1	0.30	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

65

Ninth Line N & Steeles Ave -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	103	93	1.0	17.15	B	0.89	28.95
EBT	664	644	0.8	15.62	B	7.00	99.41
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	1331	1326	0.1	24.45	C	35.83	223.86
WBR	706	707	0.0	16.72	B	13.50	198.71
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	266	273	0.4	52.92	D	24.95	110.90
SBT			#DIV/0!		A		
SBR	67	65	0.2	8.99	A	27.14	113.87
ALL	3137	3108	0.5	22.82	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

66

Ninth Line S & Steeles Ave -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	698	661	1.4	46.69	D	27.98	119.70
EBR	232	238	0.4	15.31	B	3.56	58.08
WBL	288	279	0.5	19.28	B	6.88	66.68
WBT	1550	1570	0.5	12.98	B	17.19	149.39
WBR			#DIV/0!		A		
NBL	487	477	0.5	77.45	E	89.60	281.43
NBT			#DIV/0!		A		
NBR	318	309	0.5	12.68	B	89.60	281.43
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	3573	3534	0.7	28.61	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

71

James Snow Parkway & Main Street -- Signalized Intersection							
Movement	PM						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	344	358	0.7	37.17	D	12.43	58.88
EBT	70	70	0.0	24.97	C	2.34	30.03
EBR	249	242	0.4	7.81	A	0.93	26.88
WBL	79	84	0.6	21.50	C	2.54	34.91
WBT	119	125	0.5	34.98	C	4.89	29.84
WBR	34	36	0.3	6.48	A	1.79	29.11
NBL	355	360	0.3	41.78	D	24.13	118.19
NBT	484	481	0.1	5.31	A	2.79	21.95
NBR	121	114	0.6	4.39	A	0.34	21.20
SBL	86	83	0.3	2.16	A	0.08	12.13
SBT	709	699	0.4	29.15	C	19.06	86.63
SBR	712	692	0.8	22.94	C	29.32	187.15
ALL	3362	3344	0.3	23.29	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

115	0	0	19	0	0
100%	0%	0%	100%	0%	0%
115			19		

Project: Toronto Premium Outlet - Scoped Traffic Study
Project # 170050
Task: Traffic Analysis
Summary of Intersection TMCs and LOS
Existing Conditions SAT

49

James Snow Parkway - Highway 401 North Ramp Terminal -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	609	593	0.7	15.00	B	8.97	59.54
WBT			#DIV/0!		A		
WBR	259	261	0.1	3.60	A	0.26	14.47
NBL			#DIV/0!		A		
NBT	417	409	0.4	18.81	B	6.70	46.52
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	683	655	1.1	19.64	B	11.76	68.90
SBR			#DIV/0!		A		
ALL	1968	1918	1.1	15.85	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

50

James Snow Parkway - Highway 401 South Ramp Terminal -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	64	64	0.0	20.90	C	1.86	16.07
EBT			#DIV/0!		A		
EBR	115	120	0.5	5.27	A	4.74	28.23
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	475	467	0.4	9.94	A	4.12	37.61
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1084	1047	1.1	13.18	B	10.55	82.11
SBR			#DIV/0!		A		
ALL	1738	1698	1.0	12.02	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
0	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

51

Trafalgar Road - Highway 401 North Ramp Terminal -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	135	131	0.3	40.15	D	37.51	159.83
WBT			#DIV/0!		A		
WBR	590	538	2.2	72.47	E	36.94	159.79
NBL			#DIV/0!		A		
NBT	892	847	1.5	62.71	E	87.20	357.94
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1143	1060	2.5	14.55	B	13.64	63.01
SBR	17	17	0.0	12.78	B	0.25	11.11
ALL	2777	2593	3.6	43.58	D	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
			1	0	0

52

Trafalgar Road - Highway 401 South Ramp Terminal -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	244	236	0.5	51.01	D	24.85	135.56
EBT			#DIV/0!		A		
EBR	224	233	0.6	6.00	A	17.62	126.46
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	1247	1237	0.3	15.29	B	14.69	153.57
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	571	545	1.1	5.19	A	1.61	33.47
SBR			#DIV/0!		A		
ALL	2286	2251	0.7	15.63	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

53

Winston Churchill & Hwy 401 North Terminal -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	633	631	0.1	36.56	D	21.91	93.63
WBT			#DIV/0!		A		
WBR	270	258	0.7	7.55	A	21.81	93.51
NBL			#DIV/0!		A		
NBT	648	641	0.3	17.64	B	10.10	77.84
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	790	763	1.0	18.79	B	11.70	80.95
SBR			#DIV/0!		A		
ALL	2341	2293	1.0	22.09	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

54

Winston Churchill & Hwy 401 South Terminal -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	193	185	0.6	8.23	A	2.47	30.32
EBT			#DIV/0!		A		
EBR	284	278	0.4	6.37	A	1.24	29.84
WBL			#DIV/0!		A		
WBT			#DIV/0!		A		
WBR			#DIV/0!		A		
NBL			#DIV/0!		A		
NBT	771	761	0.4	12.82	B	6.51	44.74
NBR			#DIV/0!		A		
SBL			#DIV/0!		A		
SBT	1052	1027	0.8	12.88	B	9.19	85.45
SBR			#DIV/0!		A		
ALL	2300	2251	1.0	11.67	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

55

Fifth Line N & Steeles Ave -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	27	24	0.6	12.08	B	0.23	11.94
EBT	402	401	0.0	7.30	A	2.15	31.72
EBR	4	6	0.9	2.38	A	0.00	0.00
WBL	3	3	0.0	13.17	B	0.03	3.84
WBT	499	461	1.7	7.60	A	2.79	46.69
WBR	3	4	0.5	5.25	A	3.16	52.20
NBL	10	10	0.0	28.20	C	0.37	10.84
NBT	1	0	1.4	13.64	B	0.03	2.57
NBR	6	7	0.4	3.32	A	0.00	5.05
SBL	13	13	0.0	33.31	C	0.63	10.38
SBT	2	1	0.8	17.70	B	0.03	4.03
SBR	34	34	0.0	4.45	A	0.01	10.88
ALL	1004	964	1.3	7.99	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
0	0	0			
			1	0	0

56

Fifth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	418	419	0.0	0.04	A	0.00	0.00
EBR	3	3	0.0	0.67	A	0.00	0.00
WBL	0.1	0	0.4	0.00	A	0.00	0.00
WBT	503	467	1.6	0.07	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	2	2	0.0	2.17	A	0.00	0.00
NBT			#DIV/0!		A		
NBR	0.1	0	0.4	0.00	A	0.00	0.00
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	926.2	891	1.2	0.06	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
0	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

57

Sixth Line N & Steeles Ave -- Unsignalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	32	31	0.2	2.07	A	0.03	6.07
EBT	386	379	0.4	0.17	A	0.00	0.00
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	487	456	1.4	0.43	A	0.00	0.00
WBR	8	8	0.0	0.90	A	0.00	0.00
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	7	6	0.4	2.41	A	0.00	0.00
SBT			#DIV/0!		A		
SBR	16	12	1.1	2.08	A	0.02	6.29
ALL	936	892	1.5	0.42	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
			1	0	0

58

Sixth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	393	387	0.3	0.16	A	0.00	0.00
EBR	0.01	0	0.1	0.00	A	0.00	0.00
WBL	0.01	0	0.1	0.00	A	0.00	0.00
WBT	495	463	1.5	0.23	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	0.1	0	0.4	0.00	A	0.00	0.00
NBT			#DIV/0!		A		
NBR	0.1	0	0.4	0.00	A	0.00	0.00
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	888.22	850	1.3	0.20	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

59

Hornby Rd & Steeles Ave -- Unsignalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	31	29	0.4	2.15	A	0.05	10.65
EBT	362	358	0.2	0.33	A	0.00	0.00
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	423	393	1.5	0.58	A	0.00	0.00
WBR	9	10	0.3	1.08	A	0.00	2.37
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	7	6	0.4	1.57	A	0.01	7.08
SBT			#DIV/0!		A		
SBR	72	70	0.2	2.50	A	0.01	7.08
ALL	904	866	1.3	0.70	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

60

Hornby Rd & Trafalgar Rd -- Unsignalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT			#DIV/0!		A		
EBR			#DIV/0!		A		
WBL	2	1	0.8	4.11	A	0.00	2.12
WBT			#DIV/0!		A		
WBR	584	536	2.0	0.51	A	0.00	0.00
NBL			#DIV/0!		A		
NBT	39	39	0.0	12.39	B	0.70	16.32
NBR	1	1	0.0	5.24	A	0.04	17.32
SBL	519	494	1.1	0.11	A	0.00	0.00
SBT	77	75	0.2	0.01	A	0.00	0.00
SBR			#DIV/0!		A		
ALL	1222	1146	2.2	0.72	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
0	0	0			
0	0	0			
1	0	0			
1	0	0			
			1	0	0

61

Trafalgar Rd & Steeles Ave -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	35	33	0.3	16.93	B	0.75	17.57
EBT	242	239	0.2	33.20	C	7.74	39.47
EBR	92	91	0.1	6.72	A	0.14	16.70
WBL	628	574	2.2	156.37	F	162.26	316.63
WBT	334	319	0.8	30.26	C	8.74	50.34
WBR	54	55	0.1	5.63	A	0.07	13.36
NBL	87	76	1.2	49.50	D	4.82	22.80
NBT	497	446	2.3	36.42	D	292.48	361.94
NBR	898	788	3.8	96.07	F	297.25	366.78
SBL	69	69	0.0	24.51	C	2.04	24.56
SBT	440	414	1.3	34.15	C	13.67	62.59
SBR	11	11	0.0	27.96	C	16.53	68.41
ALL	3387	3115	4.8	70.84	E	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
0	0	0			
			1	0	0

62

Central Mall & Steeles Ave -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	600	541	2.5	17.87	B	8.48	51.46
EBR	609	535	3.1	6.47	A	4.17	61.08
WBL	40	39	0.2	17.29	B	0.56	13.38
WBT	622	597	1.0	44.97	D	18.89	83.61
WBR			#DIV/0!		A		
NBL	394	388	0.3	58.09	E	14.17	59.82
NBT			#DIV/0!		A		
NBR	50	53	0.4	6.02	A	14.66	60.66
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	2315	2153	3.4	29.50	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

63

East Mall & Steeles Ave -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	128	108	1.8	14.70	B	2.09	22.76
EBT	494	463	1.4	17.49	B	8.05	29.89
EBR	28	23	1.0	2.81	A	0.00	0.00
WBL	158	158	0.0	20.01	C	4.38	52.00
WBT	410	409	0.0	30.93	C	10.70	65.27
WBR	19	18	0.2	20.51	C	11.70	67.38
NBL	164	162	0.2	38.73	D	6.99	38.23
NBT	29	29	0.0	23.26	C	6.99	38.23
NBR	180	182	0.1	8.70	A	6.87	40.23
SBL	17	16	0.2	53.18	D	1.11	13.20
SBT	27	30	0.6	55.04	E	5.11	56.71
SBR	88	87	0.1	21.78	C	5.35	60.27
ALL	1742	1685	1.4	23.06	C	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
0	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

64

Eighth Line S & Steeles Ave -- Unsignalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	689	657	1.2	0.16	A	0.00	0.00
EBR	2	1	0.8	0.64	A	0.00	0.00
WBL	1	1	0.0	1.66	A	0.00	0.00
WBT	585	577	0.3	0.17	A	0.00	0.00
WBR			#DIV/0!		A		
NBL	2	2	0.0	1.66	A	0.00	2.32
NBT			#DIV/0!		A		
NBR	6	8	0.8	2.44	A	0.01	5.99
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1285	1246	1.1	0.18	A	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
0	0	0			
1	0	0			
0	0	0			
1	0	0			
			1	0	0

65

Ninth Line N & Steeles Ave -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL	91	79	1.3	8.65	A	0.55	23.23
EBT	604	583	0.9	7.25	A	2.88	59.79
EBR			#DIV/0!		A		
WBL			#DIV/0!		A		
WBT	504	507	0.1	17.62	B	6.76	56.15
WBR	273	285	0.7	7.01	A	2.06	50.32
NBL			#DIV/0!		A		
NBT			#DIV/0!		A		
NBR			#DIV/0!		A		
SBL	284	288	0.2	57.10	E	28.22	100.40
SBT			#DIV/0!		A		
SBR	82	81	0.1	4.98	A	30.45	103.38
ALL	1838	1823	0.4	17.93	B	-	-

TMC GEH Summary			Total Intersection GEH Summar		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

66

Ninth Line S & Steeles Ave -- Signalized Intersection							
Movement	SAT						
	Obs	Modelled	GEH	Delay	LOS	Avg Q	Max Q
EBL			#DIV/0!		A		
EBT	703	669	1.3	34.29	C	20.12	91.69
EBR	185	193	0.6	7.95	A	1.02	38.64
WBL	93	91	0.2	14.14	B	1.40	25.31
WBT	594	609	0.6	9.59	A	4.11	45.98
WBR			#DIV/0!		A		
NBL	183	187	0.3	41.43	D	12.87	68.48
NBT			#DIV/0!		A		
NBR	134	139	0.4	6.82	A	12.87	68.48
SBL			#DIV/0!		A		
SBT			#DIV/0!		A		
SBR			#DIV/0!		A		
ALL	1892	1888	0.1	21.34	C	-	-

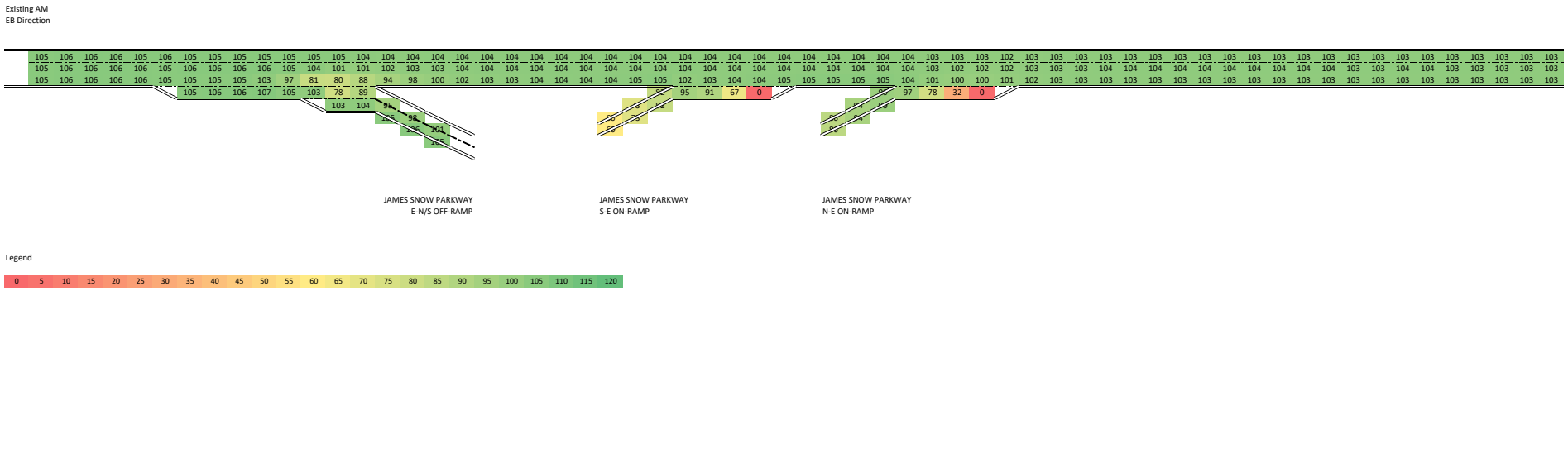
TMC GEH Summary			Total Intersection GEH Summary		
AM GEH			AM GEH		
1-5	5-10	>10	1-5	5-10	>10
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
1	0	0			
			1	0	0

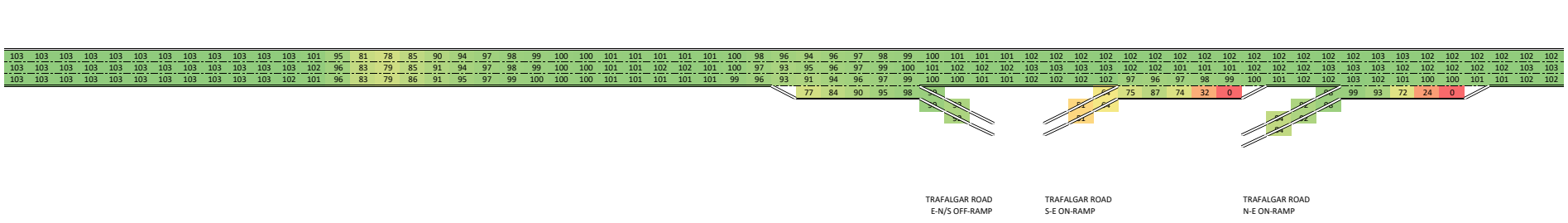
98	0	0	18	0	0
100%	0%	0%	100%	0%	0%
98			18		

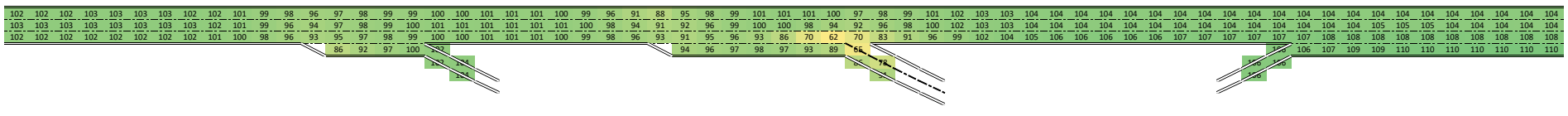
Appendix E

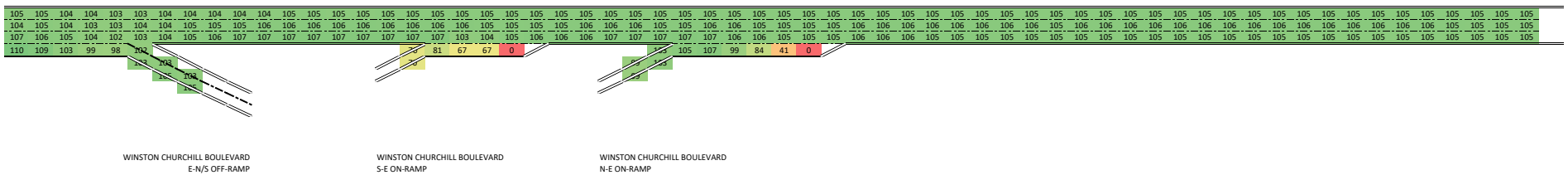
Lane by Lane Speed Plots

Existing AM
EB Direction

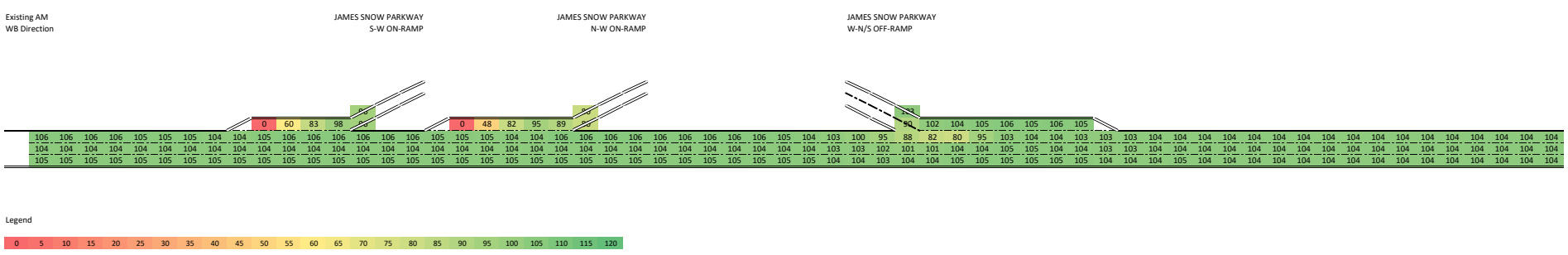


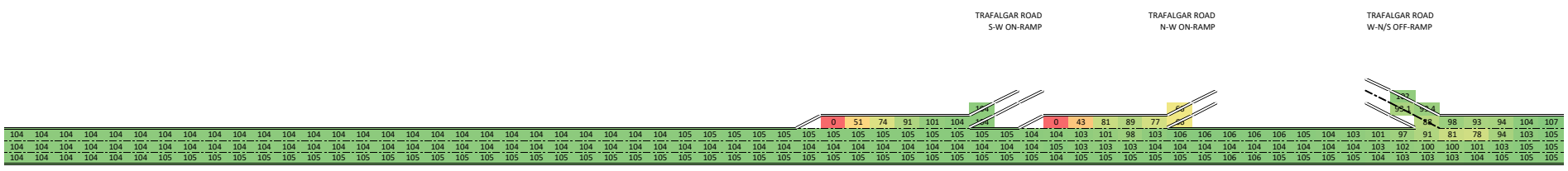


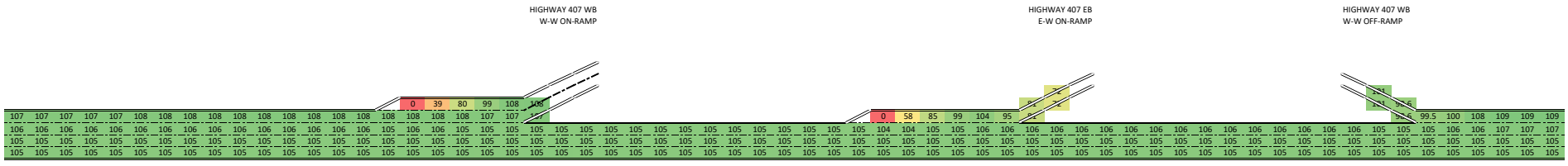

HIGHWAY 407 WB
E-S OFF-RAMP
HIGHWAY 407 EB
E-E OFF-RAMP
HIGHWAY 407 EB
E-E ON-RAMP

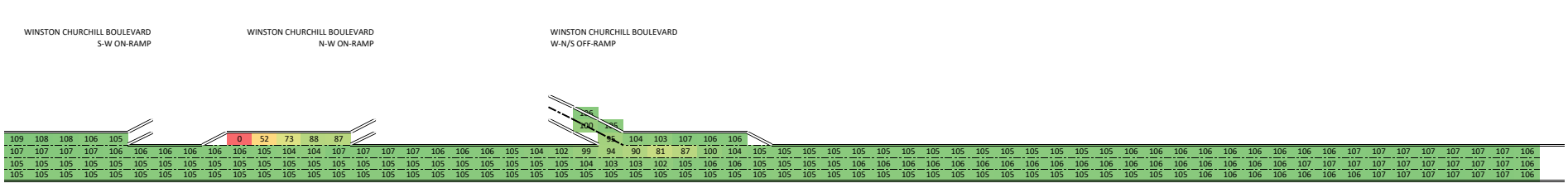

WINSTON CHURCHILL BOULEVARD
E-N/S OFF-RAMP
WINSTON CHURCHILL BOULEVARD
S-E ON-RAMP
WINSTON CHURCHILL BOULEVARD
N-E ON-RAMP

Existing AM
WB Direction

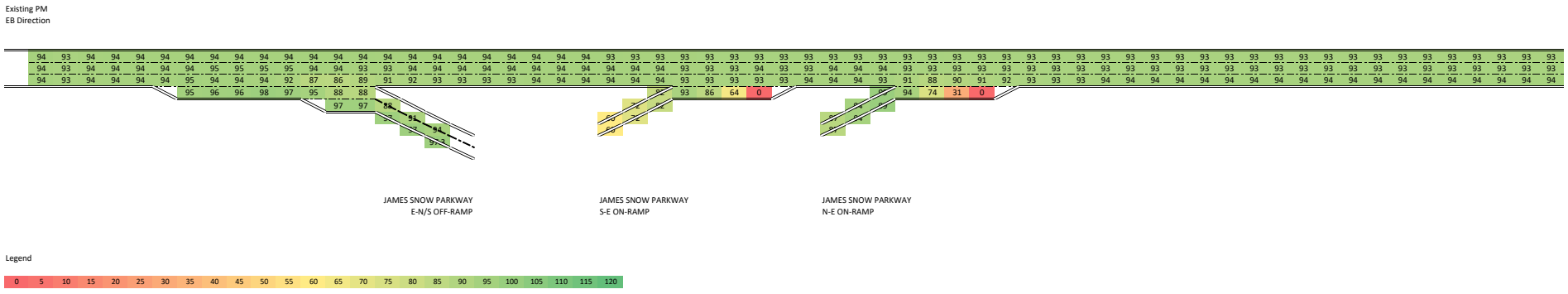


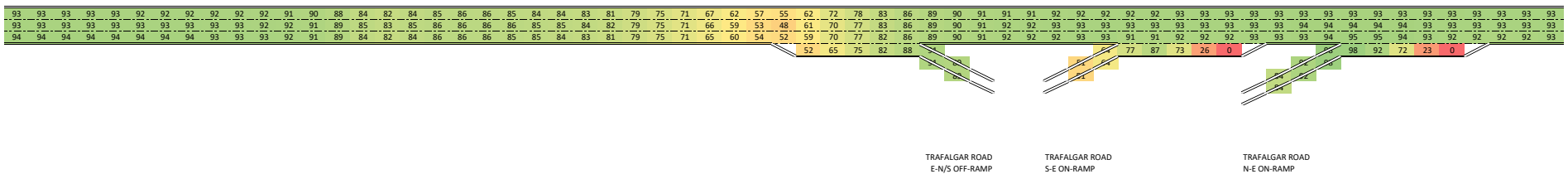


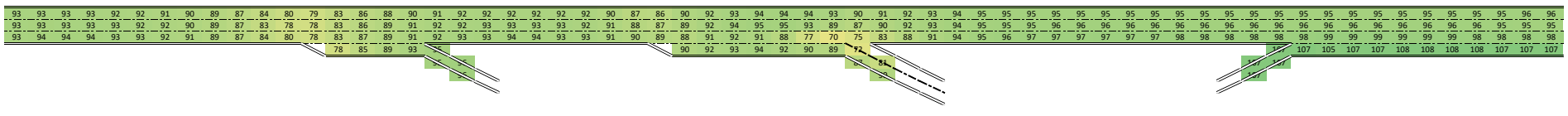

HIGHWAY 407 WB
W-W ON-RAMP
HIGHWAY 407 EB
E-W ON-RAMP
HIGHWAY 407 WB
W-W OFF-RAMP

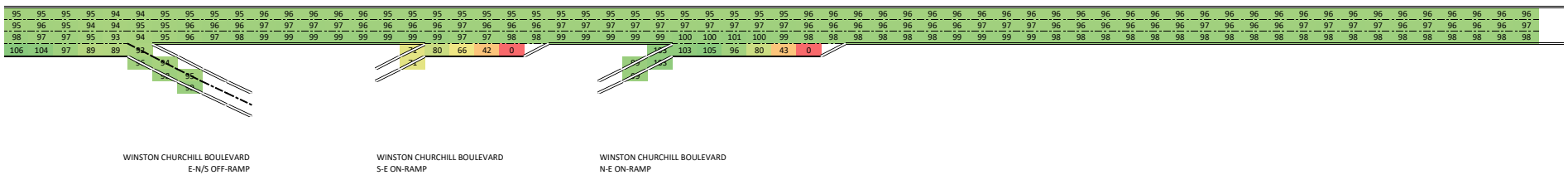

WINSTON CHURCHILL BOULEVARD
S-W ON-RAMP
WINSTON CHURCHILL BOULEVARD
N-W ON-RAMP
WINSTON CHURCHILL BOULEVARD
W-N/S OFF-RAMP

Existing PM
EB Direction

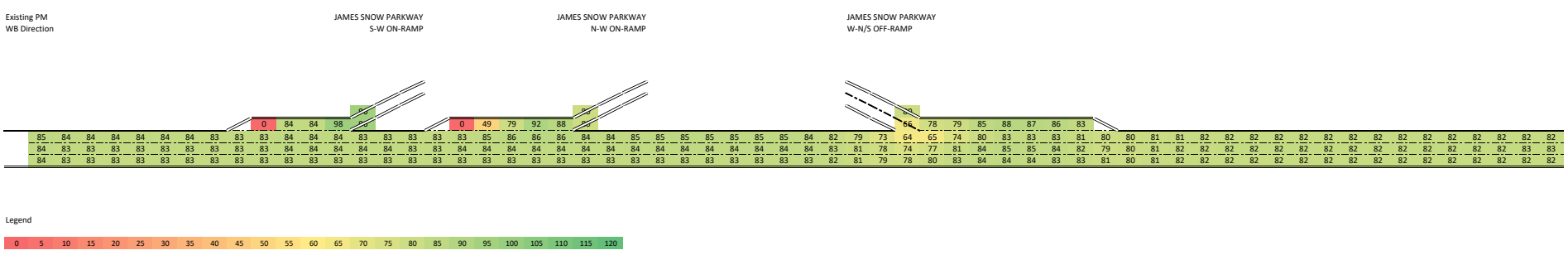


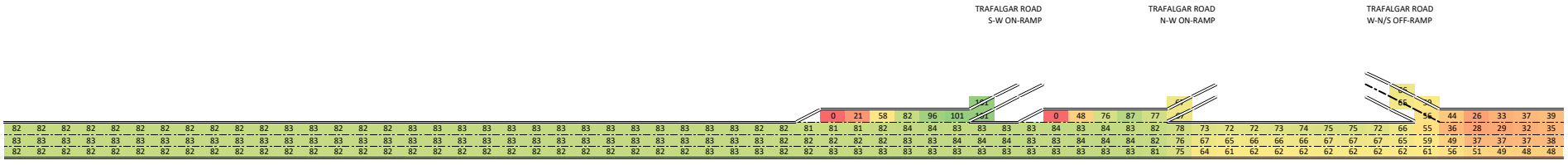


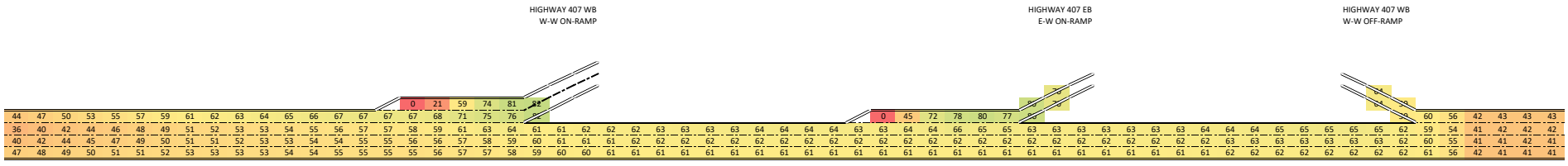

HIGHWAY 407 WB
E-S OFF-RAMP
HIGHWAY 407 EB
E-E OFF-RAMP
HIGHWAY 407 EB
E-E ON-RAMP

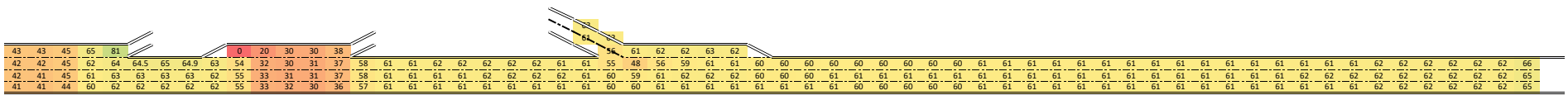

WINSTON CHURCHILL BOULEVARD
E-N/S OFF-RAMP
WINSTON CHURCHILL BOULEVARD
S-E ON-RAMP
WINSTON CHURCHILL BOULEVARD
N-E ON-RAMP

Existing PM
WB Direction

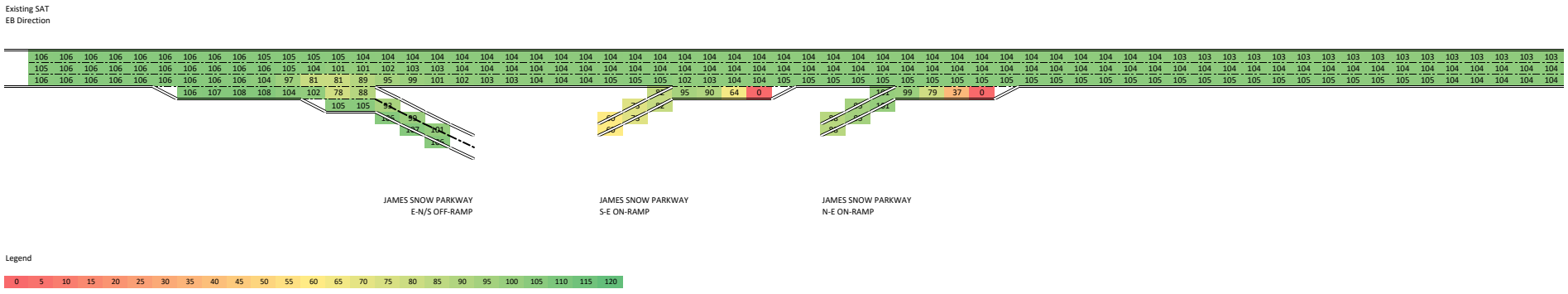


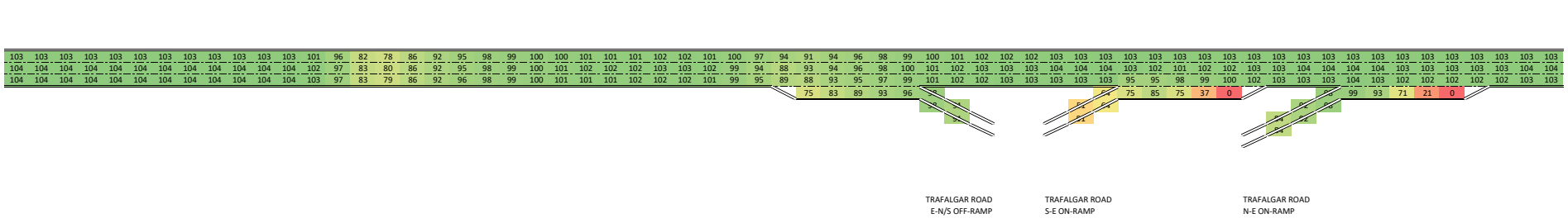


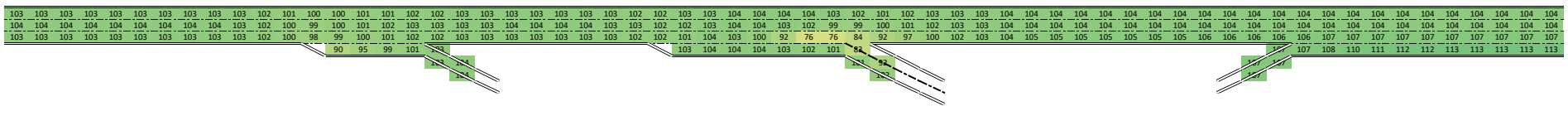

HIGHWAY 407 WB
W-W ON-RAMP
HIGHWAY 407 EB
E-W ON-RAMP
HIGHWAY 407 WB
W-W OFF-RAMP

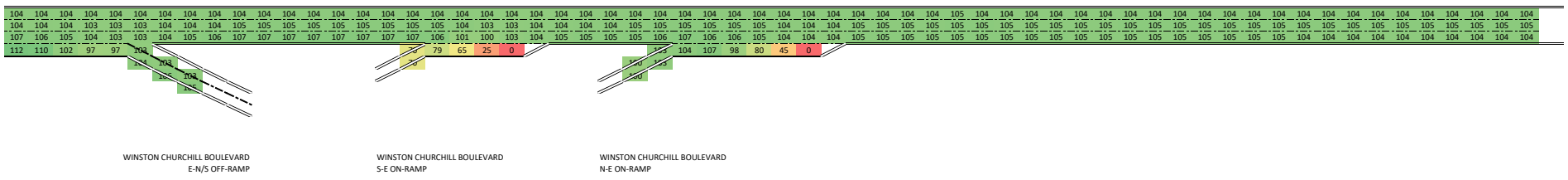

WINSTON CHURCHILL BOULEVARD
S-W ON-RAMP
WINSTON CHURCHILL BOULEVARD
N-W ON-RAMP
WINSTON CHURCHILL BOULEVARD
W-N/S OFF-RAMP

Existing SAT
EB Direction

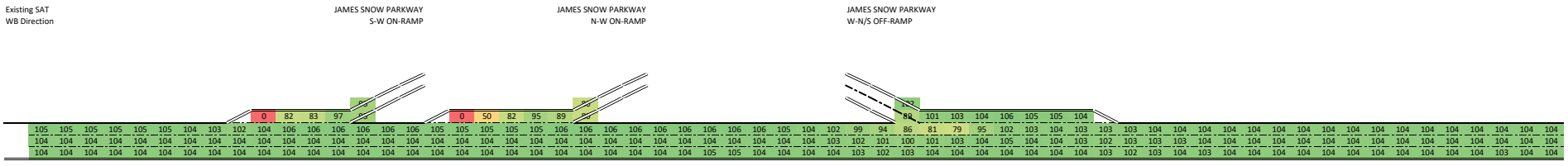


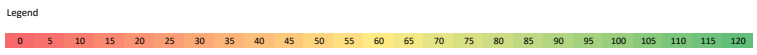


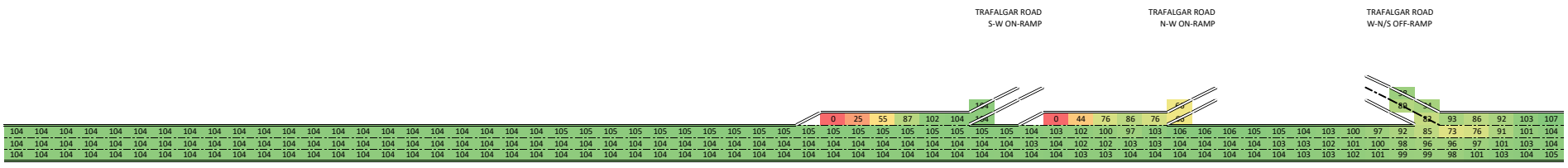

HIGHWAY 407 WB
E-S OFF-RAMP
HIGHWAY 407 EB
E-E OFF-RAMP
HIGHWAY 407 EB
E-E ON-RAMP

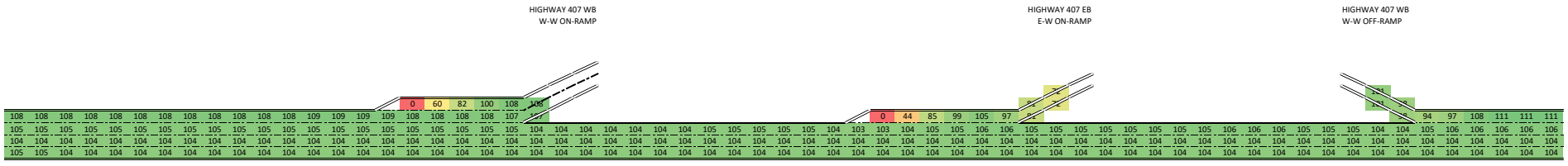

WINSTON CHURCHILL BOULEVARD
E-N/S OFF-RAMP
WINSTON CHURCHILL BOULEVARD
S-E ON-RAMP
WINSTON CHURCHILL BOULEVARD
N-E ON-RAMP

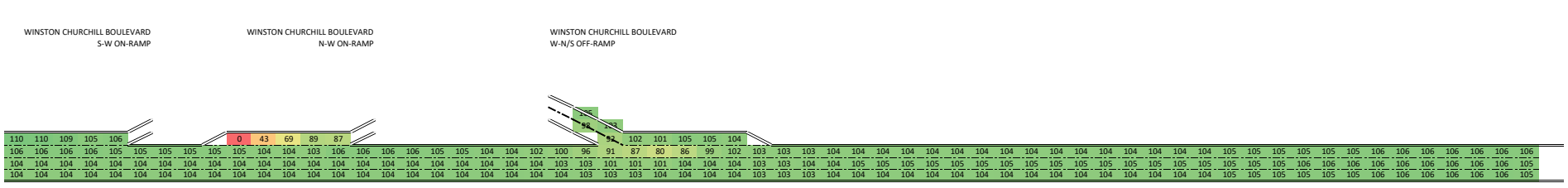
Existing SAT
WB Direction

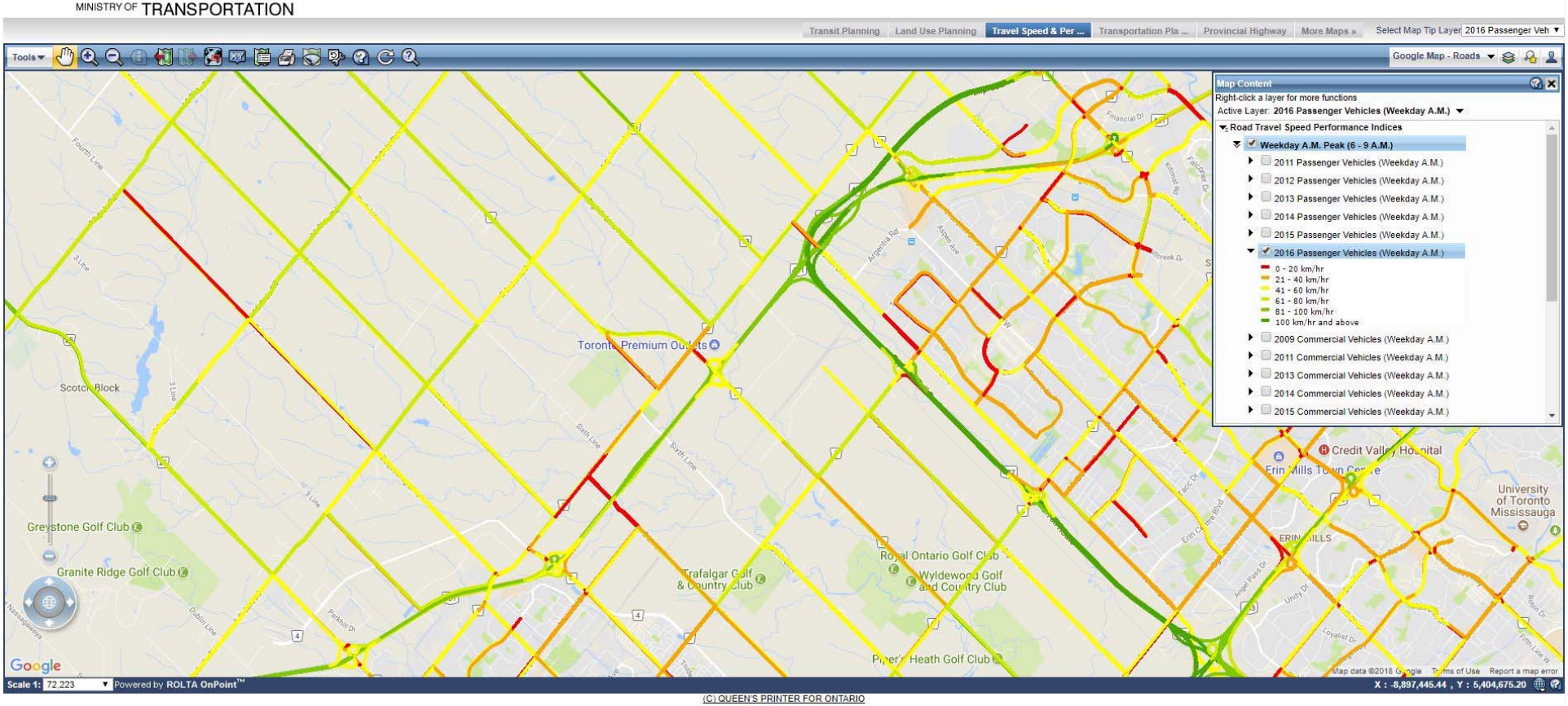


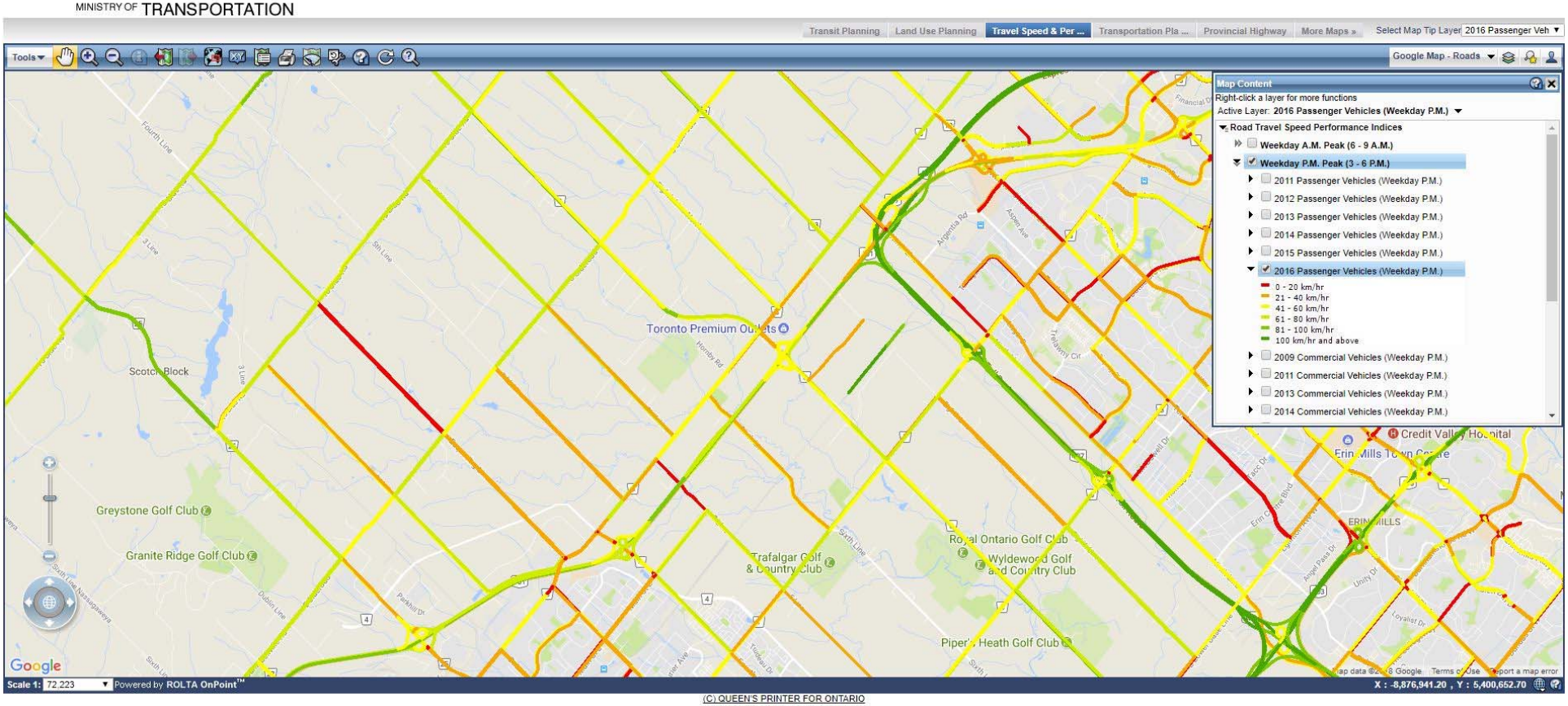





HIGHWAY 407 WB
W-W ON-RAMP
HIGHWAY 407 EB
E-W ON-RAMP
HIGHWAY 407 WB
W-W OFF-RAMP

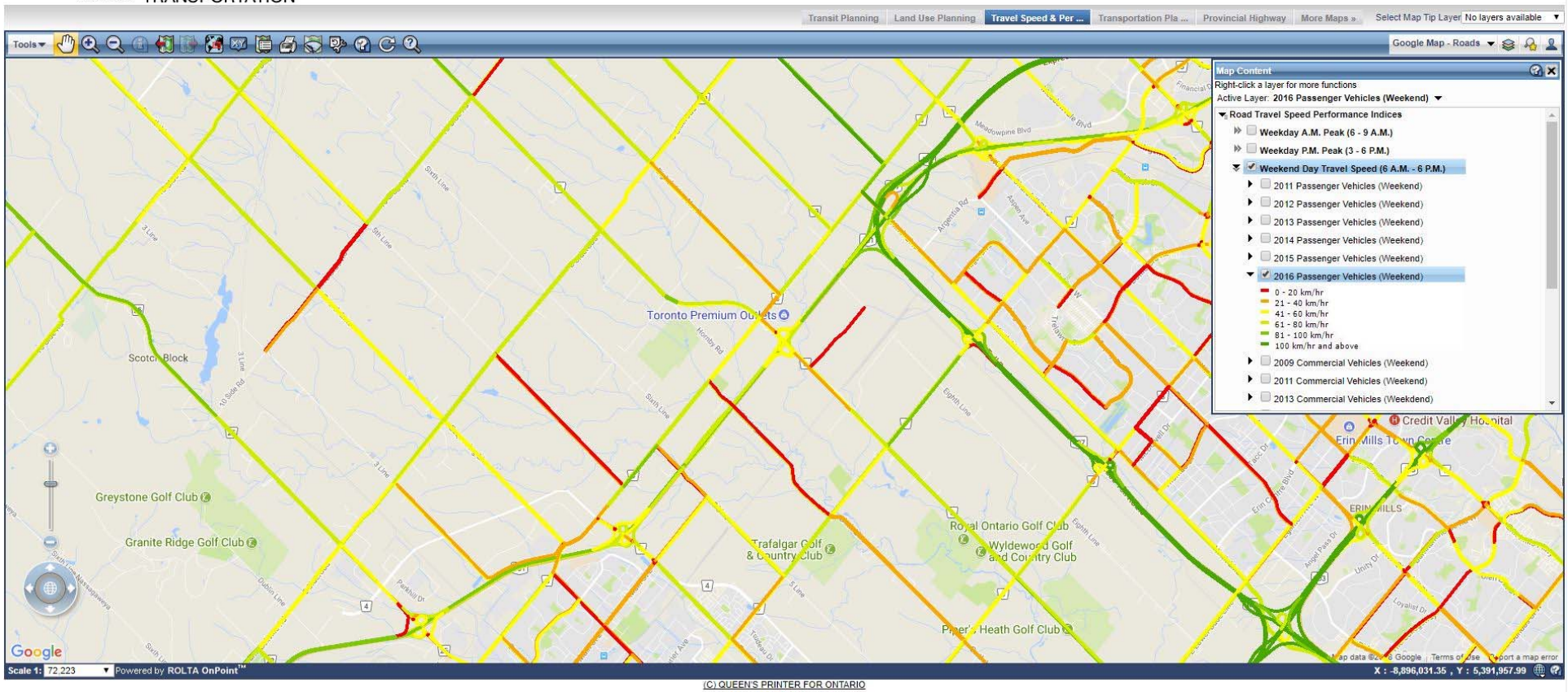

WINSTON CHURCHILL BOULEVARD
S-W ON-RAMP
WINSTON CHURCHILL BOULEVARD
N-W ON-RAMP
WINSTON CHURCHILL BOULEVARD
W-N/S OFF-RAMP





Ontario

MINISTRY OF TRANSPORTATION



Memorandum

26 February 2018

File
170050

To
File

From
Gene Chartier, P.Eng., FITE
Vice-President
Paradigm Transportation Solutions Limited

Premier Gateway West Scoped Area Traffic Study Synchro and SimTraffic Model Analysis Parameters and Methodology

This memorandum documents the parameter adjustments and methodology applied for the Synchro and SimTraffic models developed and utilized for analysis in the Premier Gateway West Scoped Area Traffic Study.

Synchro Parameter Adjustments and Methodology

Synchro will be used to assess traffic operational performance at intersections and optimize traffic control signal timings. The following parameters adjustments were made in calibrating the models to base year conditions, or will be applied in horizon year analyses:

- Existing lane arrangements and auxiliary turn lane storage and taper lengths were obtained from field conditions.
- Heavy vehicle percentages were derived from existing traffic count data.
- Conflicting pedestrian volumes were derived from existing traffic count data.
- Existing signal timing parameters provided by responsible road authority were used (includes minimum green times, clearance intervals, pedestrian walk and flashing do not walk (FDW) times, vehicle extensions).
- For future horizon year assessments, signal timing splits and intersection offsets will be optimized (only applicable if signal timing plans are currently coordinated and if warranted by the traffic growth flow patterns due to proposed development trips and distribution).
- Calculated overall intersection peak hour factors were applied to all study area intersections.
- For any traffic movements with a volume-to-capacity (V/C) ratio greater than 1.00 under existing conditions, Halton Region indicated that no adjustments to default Synchro parameters will be accepted. The Region will allow for signal phasing changes under existing conditions. If capacity issues remain following signal phasing adjustments, Halton

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Region will review and advise if saturation flow rate adjustments are warranted.

- Synchro default values were applied for all other inputs, including left and right turning speeds, lost time adjustment values, etc.

SimTraffic Parameter Adjustments and Methodology

Given the proximity of several intersections within the study area, SimTraffic will be used to assess vehicle queuing, including the interaction of adjacent intersection queues and potential queue impacts. The following parameters adjustments were made in calibrating the models to base year conditions, or will be applied in horizon year analyses:

- Seeding interval time of 15-minutes.
- Recording/Analysis time of 60-minutes.
- Five (5) simulation runs, beginning with random seed zero (0).
- 95th percentile queue results will be taken from the five (5) simulation runs report generated using the "Multiple Runs" option.
- SimTraffic default values for all other inputs, including vehicle, driver and interval parameters.

PARADIGM TRANSPORTATION SOLUTIONS LIMITED

Gene Chartier
M.A.Sc., P.Eng., FITE
Vice-President

Appendix B

Traffic Count Data

Ontario Traffic Inc

Morning Peak Diagram

Specified Period
From: 6:00:00
To: 10:00:00

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

Municipality: Milton
Site #: 1711400001
Intersection: Trafalgar Rd & Hwy 401 North Ram
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 2255
North Entering: 1519
North Peds: 0
Peds Cross: ⋈

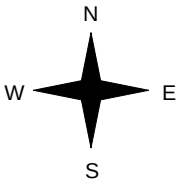
Heavys	0	0	0
Trucks	119	0	119
Cars	1400	0	1400
Totals	1519	0	

Heavys	0
Trucks	125
Cars	611
Totals	736

East Leg Total: 394
East Entering: 394
East Peds: 0
Peds Cross: ⋈

Trafalgar Rd

	Cars	Trucks	Heavys	Totals
	177	105	0	282
	69	43	0	112
	246	148	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

Trafalgar Rd

Cars	1469
Trucks	162
Heavys	0
Totals	1631

Cars	434	0	434
Trucks	20	0	20
Heavys	0	0	0
Totals	454	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 454
South Leg Total: 2085

Comments

Ontario Traffic Inc

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 19:00:00

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

Municipality: Milton
Site #: 1711400001
Intersection: Trafalgar Rd & Hwy 401 North Ram
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 2072
North Entering: 684
North Peds: 0
Peds Cross: ⋈

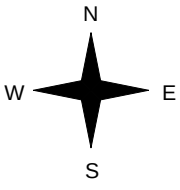
Heavys	0	0	0
Trucks	37	0	37
Cars	647	0	647
Totals	684	0	

Heavys	0
Trucks	50
Cars	1338
Totals	1388

East Leg Total: 887
East Entering: 887
East Peds: 0
Peds Cross: ⋈

Trafalgar Rd

Cars	Trucks	Heavys	Totals
564	24	0	588
288	11	0	299
852	35	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

Trafalgar Rd

Cars	935
Trucks	48
Heavys	0
Totals	983

Cars	774	0	774
Trucks	26	0	26
Heavys	0	0	0
Totals	800	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 800
South Leg Total: 1783

Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 1711400001
Intersection: Trafalgar Rd & Hwy 401 North Ram
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 14604
North Entering: 6823
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	623	0	623
Cars	6200	0	6200
Totals	6823	0	

Heavys	0
Trucks	747
Cars	7034
Totals	7781

East Leg Total: 4562
East Entering: 4562
East Peds: 0
Peds Cross: ⋈

Trafalgar Rd

	Cars	Trucks	Heavys	Totals
	2629	521	0	3150
	1209	203	0	1412
	3838	724	0	

N
W E
S

Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

Trafalgar Rd

Cars	7409
Trucks	826
Heavys	0
Totals	8235

Cars	4405	0	4405
Trucks	226	0	226
Heavys	0	0	0
Totals	4631	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 4631
South Leg Total: 12866

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Trafalgar Rd & Hwy 401 North Ra | **Count Date:** 4-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	913	0	913	0	1272
8:00:00	0	1364	0	1364	0	1815
9:00:00	0	1268	0	1268	0	1730
10:00:00	0	785	0	785	0	1206
15:00:00	0	0	0	0	0	0
16:00:00	0	626	0	626	0	1305
17:00:00	0	657	0	657	0	1436
18:00:00	0	684	0	684	0	1484
19:00:00	0	526	0	526	0	1206
Totals:	0	6823	0	6823	0	11454

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	0	359	0	359	0
8:00:00	0	451	0	451	0
9:00:00	0	462	0	462	0
10:00:00	0	421	0	421	0
15:00:00	0	0	0	0	0
16:00:00	0	679	0	679	0
17:00:00	0	779	0	779	0
18:00:00	0	800	0	800	0
19:00:00	0	680	0	680	0
Totals:	0	4631	0	4631	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	108	0	207	315	0	315
8:00:00	99	0	257	356	0	356
9:00:00	103	0	268	371	0	371
10:00:00	91	0	301	392	0	392
15:00:00	0	0	0	0	0	0
16:00:00	212	0	525	737	0	737
17:00:00	195	0	447	642	0	642
18:00:00	299	0	588	887	0	887
19:00:00	305	0	557	862	0	862
Totals:	1412	0	3150	4562	0	4562

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
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
15:00:00	0	0	0	0	0
16:00:00	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:	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00
Crossing Values:	108	99	103	91	212	195	299	305

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400001

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	166	166	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	356	190	0	0	0	0	36	15	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	587	231	0	0	0	0	64	28	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	831	244	0	0	0	0	82	18	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	1067	236	0	0	0	0	104	22	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	1375	308	0	0	0	0	124	20	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1734	359	0	0	0	0	158	34	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	2094	360	0	0	0	0	183	25	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	2420	326	0	0	0	0	211	28	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	2775	355	0	0	0	0	243	32	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	3049	274	0	0	0	0	287	44	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	3233	184	0	0	0	0	312	25	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	3447	214	0	0	0	0	342	30	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	3606	159	0	0	0	0	377	35	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	3771	165	0	0	0	0	411	34	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	3886	115	0	0	0	0	444	33	0	0	0	0	0	0	0	0	0	0
10:02:10	0	0	3886	0	0	0	0	0	444	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	3886	0	0	0	0	0	444	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	4022	136	0	0	0	0	464	20	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	4175	153	0	0	0	0	482	18	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	4305	130	0	0	0	0	499	17	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	4447	142	0	0	0	0	509	10	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	4607	160	0	0	0	0	522	13	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	4753	146	0	0	0	0	531	9	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	4905	152	0	0	0	0	545	14	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	5056	151	0	0	0	0	557	12	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	5237	181	0	0	0	0	569	12	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	5387	150	0	0	0	0	573	4	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	5545	158	0	0	0	0	581	8	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	5703	158	0	0	0	0	594	13	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	5839	136	0	0	0	0	597	3	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	5996	157	0	0	0	0	606	9	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	6097	101	0	0	0	0	616	10	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	6200	103	0	0	0	0	623	7	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	6200	0	0	0	0	0	623	0	0	0	0	0	0	0	0	0	0	0
19:17:20	0	0	6200	0	0	0	0	0	623	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400001

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	9	9	0	0	20	20	6	6	0	0	8	8	0	0	0	0	0	0	0	0
6:30:00	31	22	0	0	57	37	17	11	0	0	24	16	0	0	0	0	0	0	0	0
6:45:00	59	28	0	0	97	40	29	12	0	0	45	21	0	0	0	0	0	0	0	0
7:00:00	73	14	0	0	139	42	35	6	0	0	68	23	0	0	0	0	0	0	0	0
7:15:00	88	15	0	0	170	31	43	8	0	0	85	17	0	0	0	0	0	0	0	0
7:30:00	106	18	0	0	209	39	51	8	0	0	105	20	0	0	0	0	0	0	0	0
7:45:00	122	16	0	0	252	43	59	8	0	0	137	32	0	0	0	0	0	0	0	0
8:00:00	140	18	0	0	294	42	67	8	0	0	170	33	0	0	0	0	0	0	0	0
8:15:00	155	15	0	0	335	41	81	14	0	0	197	27	0	0	0	0	0	0	0	0
8:30:00	175	20	0	0	386	51	94	13	0	0	210	13	0	0	0	0	0	0	0	0
8:45:00	187	12	0	0	432	46	102	8	0	0	241	31	0	0	0	0	0	0	0	0
9:00:00	202	15	0	0	469	37	108	6	0	0	263	22	0	0	0	0	0	0	0	0
9:15:00	220	18	0	0	500	31	111	3	0	0	291	28	0	0	0	0	0	0	0	0
9:30:00	233	13	0	0	553	53	122	11	0	0	313	22	0	0	0	0	0	0	0	0
9:45:00	245	12	0	0	603	50	130	8	0	0	344	31	0	0	0	0	0	0	0	0
10:00:00	264	19	0	0	660	57	137	7	0	0	373	29	0	0	0	0	0	0	0	0
10:02:10	264	0	0	0	660	0	137	0	0	0	373	0	0	0	0	0	0	0	0	0
15:00:00	264	0	0	0	660	0	137	0	0	0	373	0	0	0	0	0	0	0	0	0
15:15:00	315	51	0	0	790	130	145	8	0	0	392	19	0	0	0	0	0	0	0	0
15:30:00	355	40	0	0	898	108	150	5	0	0	413	21	0	0	0	0	0	0	0	0
15:45:00	392	37	0	0	1021	123	161	11	0	0	427	14	0	0	0	0	0	0	0	0
16:00:00	440	48	0	0	1118	97	173	12	0	0	440	13	0	0	0	0	0	0	0	0
16:15:00	485	45	0	0	1219	101	177	4	0	0	450	10	0	0	0	0	0	0	0	0
16:30:00	528	43	0	0	1324	105	178	1	0	0	458	8	0	0	0	0	0	0	0	0
16:45:00	580	52	0	0	1398	74	183	5	0	0	466	8	0	0	0	0	0	0	0	0
17:00:00	624	44	0	0	1533	135	184	1	0	0	472	6	0	0	0	0	0	0	0	0
17:15:00	691	67	0	0	1658	125	187	3	0	0	482	10	0	0	0	0	0	0	0	0
17:30:00	770	79	0	0	1805	147	189	2	0	0	486	4	0	0	0	0	0	0	0	0
17:45:00	840	70	0	0	1938	133	190	1	0	0	488	2	0	0	0	0	0	0	0	0
18:00:00	912	72	0	0	2097	159	195	5	0	0	496	8	0	0	0	0	0	0	0	0
18:15:00	990	78	0	0	2235	138	196	1	0	0	502	6	0	0	0	0	0	0	0	0
18:30:00	1060	70	0	0	2382	147	198	2	0	0	508	6	0	0	0	0	0	0	0	0
18:45:00	1144	84	0	0	2518	136	201	3	0	0	513	5	0	0	0	0	0	0	0	0
19:00:00	1209	65	0	0	2629	111	203	2	0	0	521	8	0	0	0	0	0	0	0	0
19:15:00	1209	0	0	0	2629	0	203	0	0	0	521	0	0	0	0	0	0	0	0	0
19:17:20	1209	0	0	0	2629	0	203	0	0	0	521	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400001

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	69	69	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	155	86	0	0	0	0	9	3	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	237	82	0	0	0	0	14	5	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	336	99	0	0	0	0	23	9	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	449	113	0	0	0	0	28	5	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	567	118	0	0	0	0	35	7	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	662	95	0	0	0	0	41	6	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	767	105	0	0	0	0	43	2	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	884	117	0	0	0	0	48	5	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1001	117	0	0	0	0	55	7	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	1105	104	0	0	0	0	61	6	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	1200	95	0	0	0	0	72	11	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	1308	108	0	0	0	0	84	12	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	1393	85	0	0	0	0	92	8	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	1497	104	0	0	0	0	99	7	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	1586	89	0	0	0	0	107	8	0	0	0	0	0	0	0	0	0	0
10:02:10	0	0	1586	0	0	0	0	0	107	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1586	0	0	0	0	0	107	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1720	134	0	0	0	0	121	14	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	1879	159	0	0	0	0	132	11	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	2044	165	0	0	0	0	141	9	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	2213	169	0	0	0	0	159	18	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	2405	192	0	0	0	0	165	6	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	2571	166	0	0	0	0	171	6	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	2772	201	0	0	0	0	177	6	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	2968	196	0	0	0	0	183	6	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	3190	222	0	0	0	0	191	8	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	3363	173	0	0	0	0	198	7	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	3544	181	0	0	0	0	207	9	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	3742	198	0	0	0	0	209	2	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	3922	180	0	0	0	0	214	5	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	4092	170	0	0	0	0	220	6	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	4264	172	0	0	0	0	221	1	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	4405	141	0	0	0	0	226	5	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	4405	0	0	0	0	0	226	0	0	0	0	0	0	0	0	0	0	0
19:17:20	0	0	4405	0	0	0	0	0	226	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400001

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10:02:10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	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
19:17:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Mid-day Peak Diagram

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

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

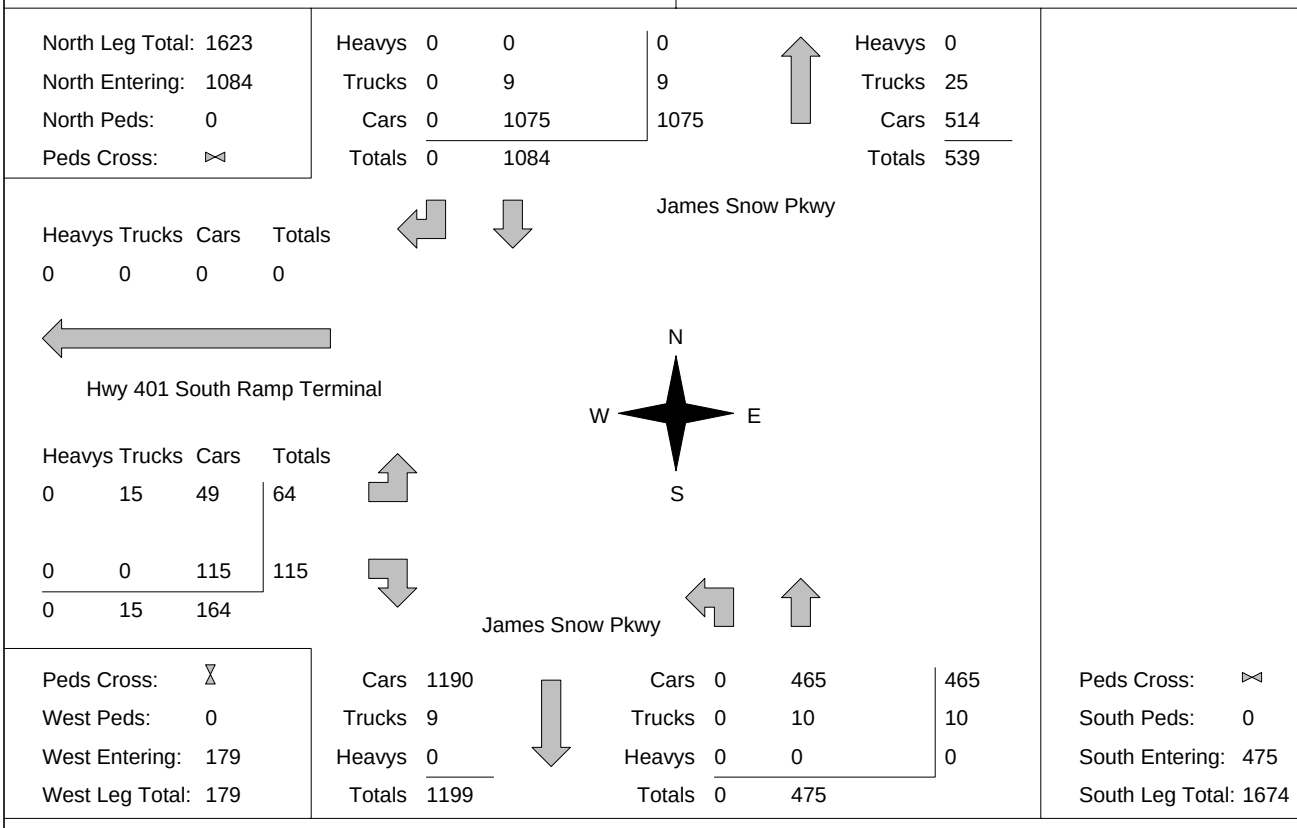
Municipality: Milton
Site #: 1711400010
Intersection: James Snow Pkwy & Hwy 401 Sou
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

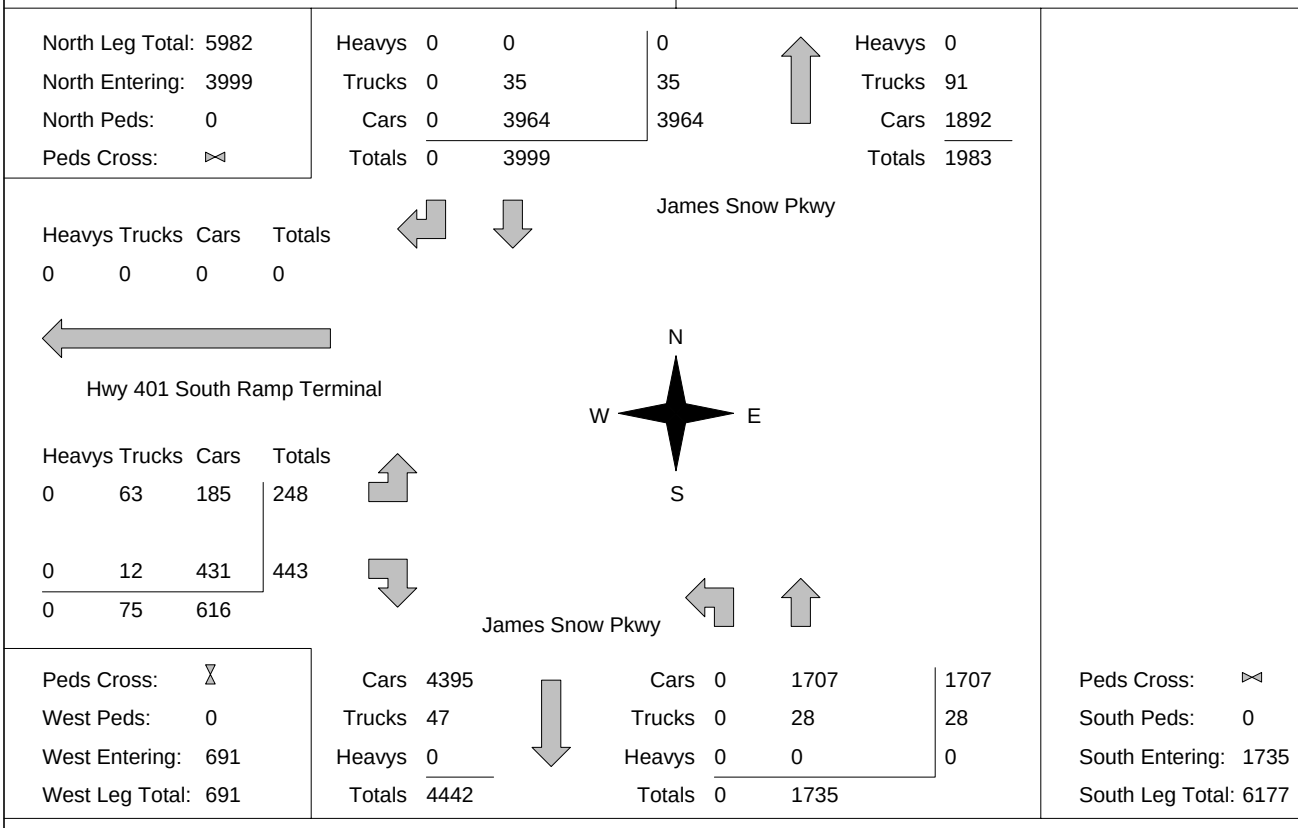


Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton	**Weather conditions:**
Site #: 1711400010	
Intersection: James Snow Pkwy & Hwy 401 Sou	**Person(s) who counted:**
TFR File #: 1	
Count date: 6-May-17	
**** Signalized Intersection ****	**Major Road:** James Snow Pkwy runs N/S



Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: James Snow Pkwy & Hwy 401 So | **Count Date:** 6-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	909	0	909	0	1351
13:00:00	0	961	0	961	0	1369
14:00:00	0	1058	0	1058	0	1503
15:00:00	0	1071	0	1071	0	1511
Totals:	0	3999	0	3999	0	5734

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	442	0	442	0
13:00:00	0	408	0	408	0
14:00:00	0	445	0	445	0
15:00:00	0	440	0	440	0
Totals:	0	1735	0	1735	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	0	0	0	0	148
13:00:00	0	0	0	0	0	183
14:00:00	0	0	0	0	0	171
15:00:00	0	0	0	0	0	189
Totals:	0	0	0	0	0	691

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	48	0	100	148	0
13:00:00	65	0	118	183	0
14:00:00	69	0	102	171	0
15:00:00	66	0	123	189	0
Totals:	248	0	443	691	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	0:00	0:00	0:00	11:00	12:00	13:00	14:00	15:00
Crossing Values:	0	0	0	0	48	65	69	66

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400010

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	196	196	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	397	201	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	632	235	0	0	0	0	8	4	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	898	266	0	0	0	0	11	3	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	1133	235	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	1352	219	0	0	0	0	13	2	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1594	242	0	0	0	0	16	3	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1853	259	0	0	0	0	17	1	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	2105	252	0	0	0	0	21	4	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	2378	273	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	2649	271	0	0	0	0	24	3	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	2903	254	0	0	0	0	25	1	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	3199	296	0	0	0	0	27	2	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	3453	254	0	0	0	0	30	3	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	3679	226	0	0	0	0	31	1	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	3964	285	0	0	0	0	35	4	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3964	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0
15:16:12	0	0	3964	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400010

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	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
13:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:16:12	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: 6-May-17 Site #: 1711400010

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	108	108	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	231	123	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	336	105	0	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	434	98	0	0	0	0	8	1	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	511	77	0	0	0	0	12	4	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	622	111	0	0	0	0	13	1	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	724	102	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	837	113	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	938	101	0	0	0	0	14	1	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1039	101	0	0	0	0	15	1	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1158	119	0	0	0	0	17	2	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	1276	118	0	0	0	0	19	2	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	1392	116	0	0	0	0	23	4	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	1504	112	0	0	0	0	25	2	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	1606	102	0	0	0	0	26	1	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1707	101	0	0	0	0	28	2	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1707	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0
15:16:12	0	0	1707	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400010

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	7	7	0	0	26	26	3	3	0	0	0	0	0	0	0	0	0	0	0	0
11:30:00	14	7	0	0	47	21	11	8	0	0	1	1	0	0	0	0	0	0	0	0
11:45:00	22	8	0	0	75	28	11	0	0	0	2	1	0	0	0	0	0	0	0	0
12:00:00	33	11	0	0	97	22	15	4	0	0	3	1	0	0	0	0	0	0	0	0
12:15:00	43	10	0	0	125	28	18	3	0	0	4	1	0	0	0	0	0	0	0	0
12:30:00	52	9	0	0	153	28	21	3	0	0	9	5	0	0	0	0	0	0	0	0
12:45:00	73	21	0	0	183	30	23	2	0	0	12	3	0	0	0	0	0	0	0	0
13:00:00	87	14	0	0	206	23	26	3	0	0	12	0	0	0	0	0	0	0	0	0
13:15:00	99	12	0	0	229	23	30	4	0	0	12	0	0	0	0	0	0	0	0	0
13:30:00	109	10	0	0	252	23	37	7	0	0	12	0	0	0	0	0	0	0	0	0
13:45:00	124	15	0	0	276	24	41	4	0	0	12	0	0	0	0	0	0	0	0	0
14:00:00	140	16	0	0	308	32	42	1	0	0	12	0	0	0	0	0	0	0	0	0
14:15:00	147	7	0	0	333	25	47	5	0	0	12	0	0	0	0	0	0	0	0	0
14:30:00	158	11	0	0	367	34	52	5	0	0	12	0	0	0	0	0	0	0	0	0
14:45:00	175	17	0	0	404	37	59	7	0	0	12	0	0	0	0	0	0	0	0	0
15:00:00	185	10	0	0	431	27	63	4	0	0	12	0	0	0	0	0	0	0	0	0
15:15:00	185	0	0	0	431	0	63	0	0	0	12	0	0	0	0	0	0	0	0	0
15:16:12	185	0	0	0	431	0	63	0	0	0	12	0	0	0	0	0	0	0	0	0

James Snow Pkwy @ Main St E

Morning Peak Diagram

Specified Period
From: 5:30:00
To: 10:00:00

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

Municipality: Halton Region
Site #: 0000002734
Intersection: James Snow Pkwy & Main St E
TFR File #: 23
Count date: 8-Nov-2016

Weather conditions:
Clear/Dry

Person(s) who counted:
Cam

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

North Leg Total:	2484			
North Entering:	737			
North Peds:	6			
Peds Cross:	⋈			
Heavys	6	29	6	41
Trucks	8	8	2	18
Cars	176	412	90	678
Totals	190	449	98	
Heavys	31			
Trucks	9			
Cars	1707			
Totals	1747			
East Leg Total:	594			
East Entering:	172			
East Peds:	3			
Peds Cross:	⧖			

James Snow Pkwy

Heavys	Trucks	Cars	Totals
13	8	411	432

	Cars	Trucks	Heavys	Totals
	45	0	10	55
	42	0	1	43
	72	1	1	74
	159	1	12	

Main St E

N
W E
S

Heavys	Trucks	Cars	Totals
8	4	847	859
0	0	215	215
6	0	400	406
14	4	1462	

Main St E

Cars	Trucks	Heavys	Totals
412	3	7	422

James Snow Pkwy

Peds Cross:	⧖			
West Peds:	2			
West Entering:	1480			
West Leg Total:	1912			
Cars	884			
Trucks	9			
Heavys	36			
Totals	929			
Cars	193	815	107	1115
Trucks	0	5	1	6
Heavys	6	13	1	20
Totals	199	833	109	
Peds Cross:	⋈			
South Peds:	2			
South Entering:	1141			
South Leg Total:	2070			

Comments

James Snow Pkwy @ Main St E

Mid-day Peak Diagram

Specified Period
From: 12:00:00
To: 14:00:00

One Hour Peak
From: 12:15:00
To: 13:15:00

Municipality: Halton Region
Site #: 0000002734
Intersection: James Snow Pkwy & Main St E
TFR File #: 23
Count date: 8-Nov-2016

Weather conditions:
Clear/Dry

Person(s) who counted:
Cam

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

North Leg Total:	1482			
North Entering:	793			
North Peds:	7			
Peds Cross:	⋈			

Heavys	8	27	5	40
Trucks	11	7	4	22
Cars	324	283	124	731
Totals	343	317	133	

Heavys	40	
Trucks	12	
Cars	637	
Totals	689	

East Leg Total:	505		
East Entering:	204		
East Peds:	4		
Peds Cross:	⧖		

James Snow Pkwy

Heavys	Trucks	Cars	Totals
8	13	547	568

Cars	Trucks	Heavys	Totals
25	3	13	41
89	1	0	90
67	1	5	73
181	5	18	

Main St E

N
W E
S

Heavys	Trucks	Cars	Totals
4	3	292	299
2	0	95	97
0	1	139	140
6	4	526	

Main St E

Cars	Trucks	Heavys	Totals
285	4	12	301

James Snow Pkwy

Peds Cross:	⧖		
West Peds:	1		
West Entering:	536		
West Leg Total:	1104		

Cars	489			
Trucks	9			
Heavys	32			
Totals	530			

Cars	134	320	66	520
Trucks	1	6	0	7
Heavys	0	23	5	28
Totals	135	349	71	

Peds Cross:	⋈		
South Peds:	4		
South Entering:	555		
South Leg Total:	1085		

Comments

James Snow Pkwy @ Main St E

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 22:00:00

One Hour Peak
From: 17:15:00
To: 18:15:00

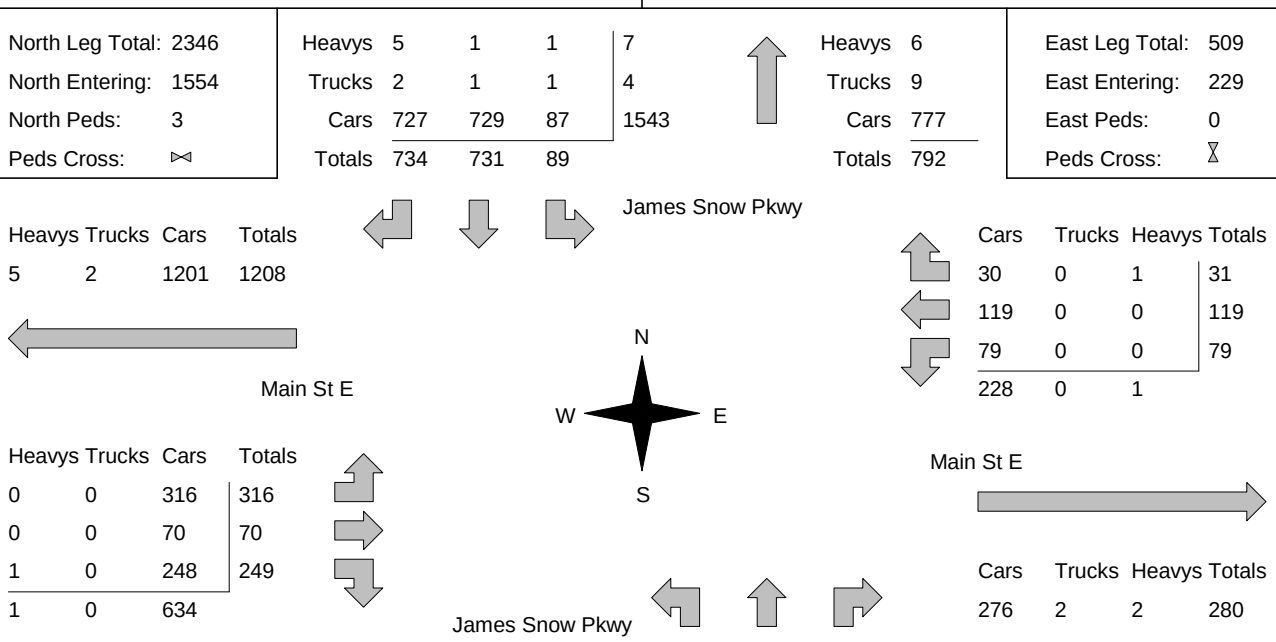
Municipality: Halton Region
Site #: 0000002734
Intersection: James Snow Pkwy & Main St E
TFR File #: 23
Count date: 8-Nov-2016

Weather conditions:
Clear/Dry

Person(s) who counted:
Cam

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S



Comments

James Snow Pkwy @ Main St E

Total Count Diagram

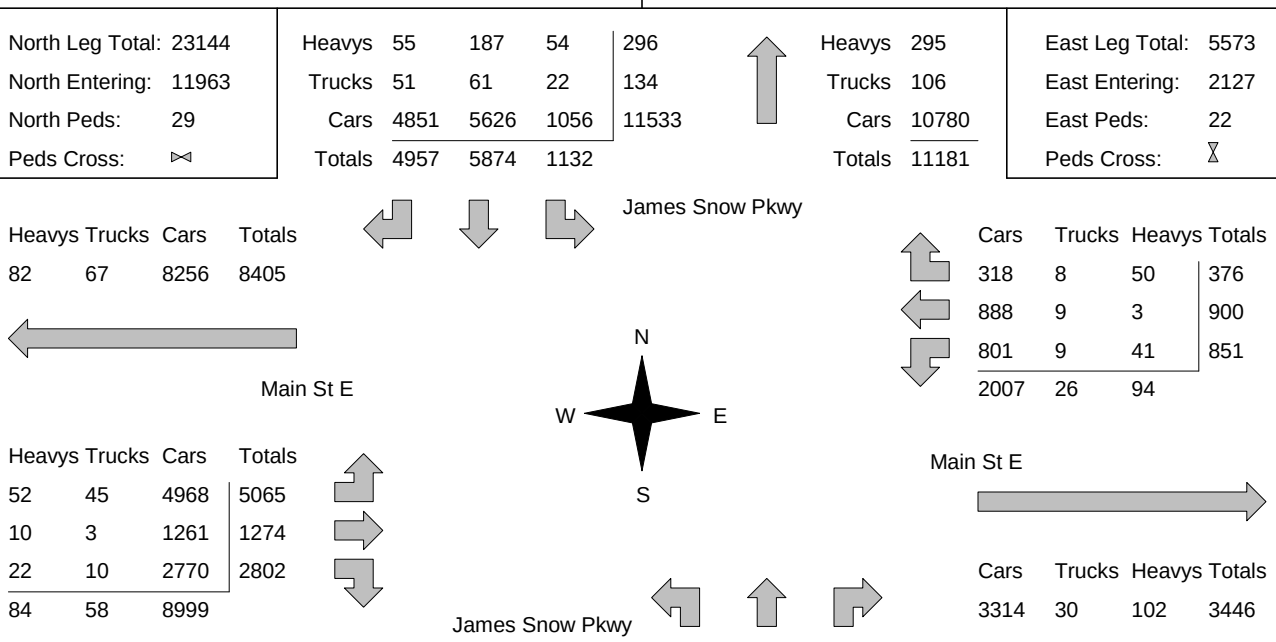
Municipality: Halton Region
Site #: 0000002734
Intersection: James Snow Pkwy & Main St E
TFR File #: 23
Count date: 8-Nov-2016

Weather conditions:
Clear/Dry

Person(s) who counted:
Cam

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S



Comments

Trafalgar Rd @ 5 Side Rd

Morning Peak Diagram

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

One Hour Peak
From: 7:15:00
To: 8:15:00

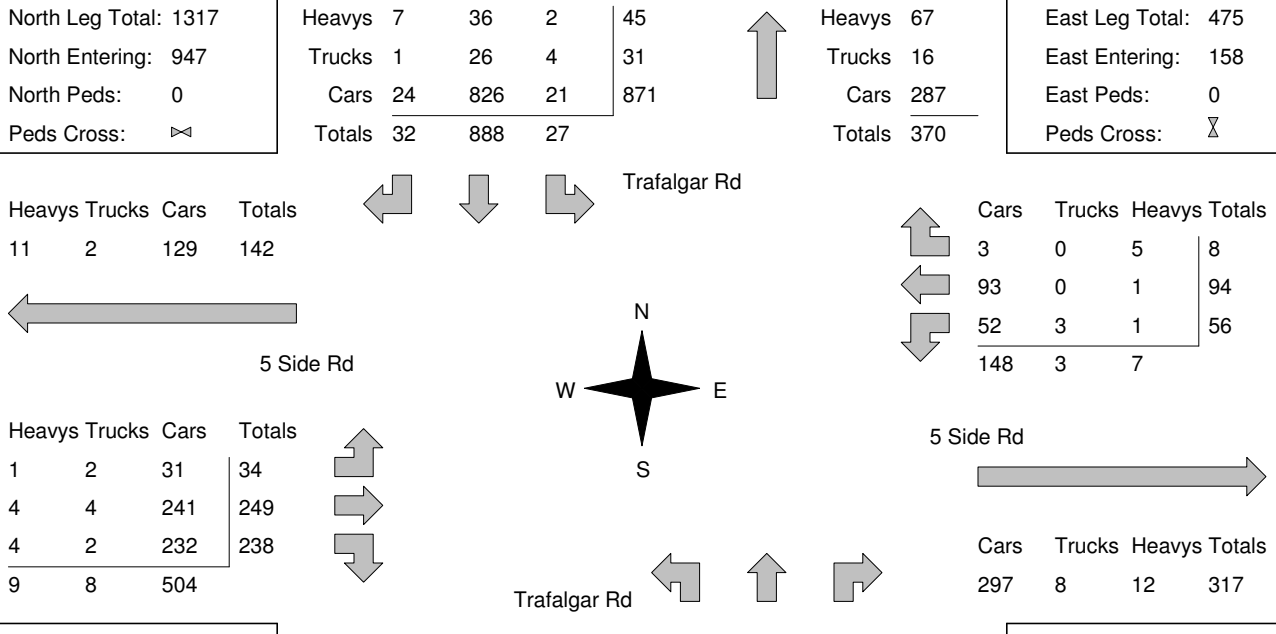
Municipality: Halton Region
Site #: 0000002630
Intersection: Trafalgar Rd & 5 Side Rd
TFR File #: 4
Count date: 27-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Trafalgar Rd @ 5 Side Rd

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

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

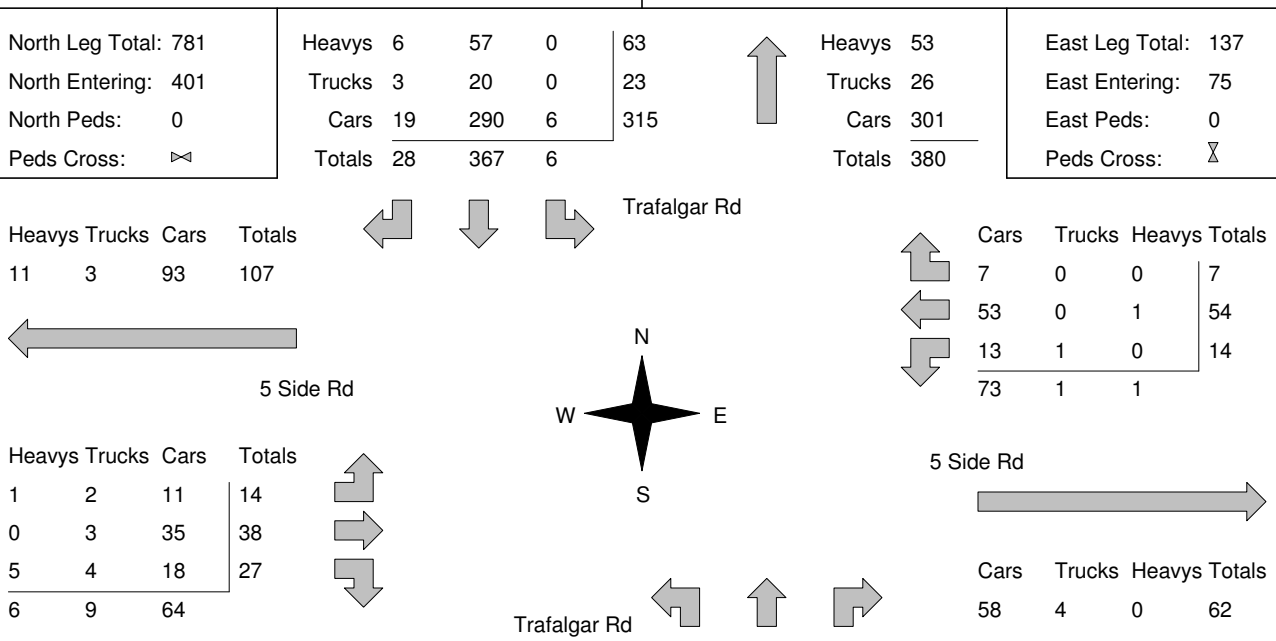
Municipality: Halton Region
Site #: 0000002630
Intersection: Trafalgar Rd & 5 Side Rd
TFR File #: 4
Count date: 27-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Trafalgar Rd @ 5 Side Rd

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

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

Municipality: Halton Region
Site #: 0000002630
Intersection: Trafalgar Rd & 5 Side Rd
TFR File #: 4
Count date: 27-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total:	1423			
North Entering:	520			
North Peds:	0			
Peds Cross:	⋈			
Heavys	2	17	0	19
Trucks	2	7	1	10
Cars	54	431	6	491
Totals	58	455	7	
Heavys	17			
Trucks	23			
Cars	863			
Totals	903			
East Leg Total:	474			
East Entering:	272			
East Peds:	0			
Peds Cross:	⧖			

Trafalgar Rd

Heavys	Trucks	Cars	Totals
2	5	335	342

5 Side Rd

Cars	Trucks	Heavys	Totals
35	0	0	35
197	1	0	198
39	0	0	39
271	1	0	

N
W E
S

Heavys	Trucks	Cars	Totals
1	3	43	47
1	2	141	144
3	0	32	35
5	5	216	

5 Side Rd

Cars	Trucks	Heavys	Totals
198	3	1	202

Trafalgar Rd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	226			
West Leg Total:	568			
Cars	502			
Trucks	7			
Heavys	20			
Totals	529			
Cars	84	785	51	920
Trucks	2	20	0	22
Heavys	0	16	0	16
Totals	86	821	51	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	958			
South Leg Total:	1487			

Comments

Trafalgar Rd @ 5 Side Rd

Total Count Diagram

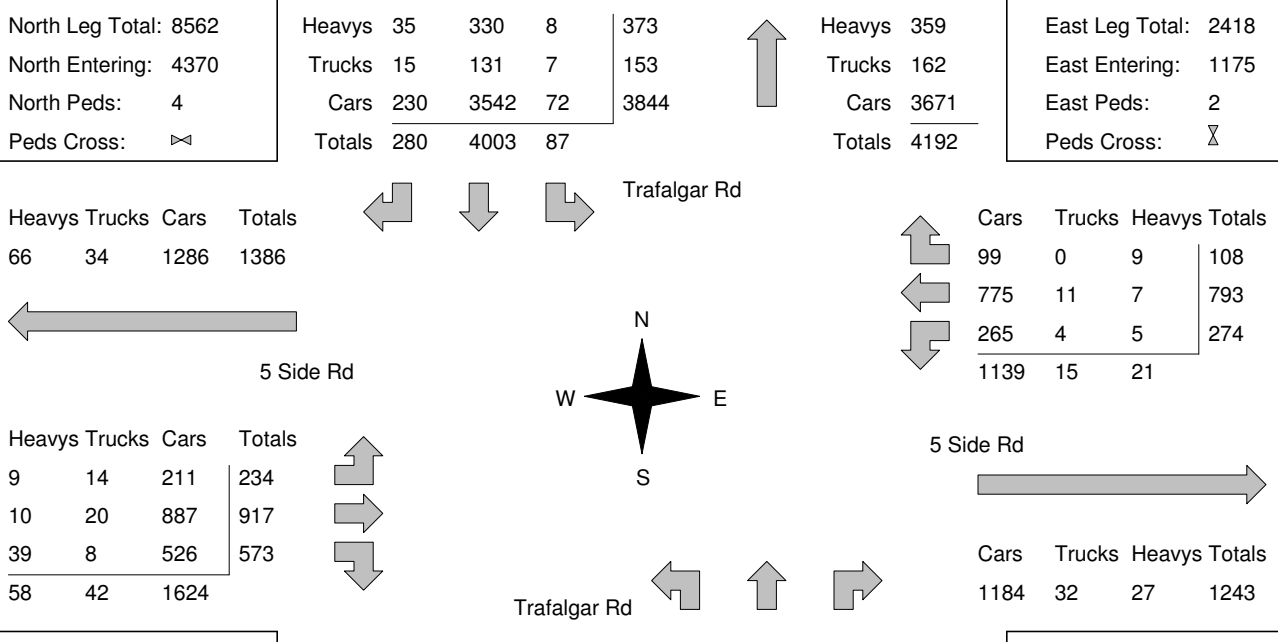
Municipality: Halton Region
Site #: 0000002630
Intersection: Trafalgar Rd & 5 Side Rd
TFR File #: 4
Count date: 27-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Ninth Line @ 5 Side Rd

Morning Peak Diagram

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

One Hour Peak
From: 7:15:00
To: 8:15:00

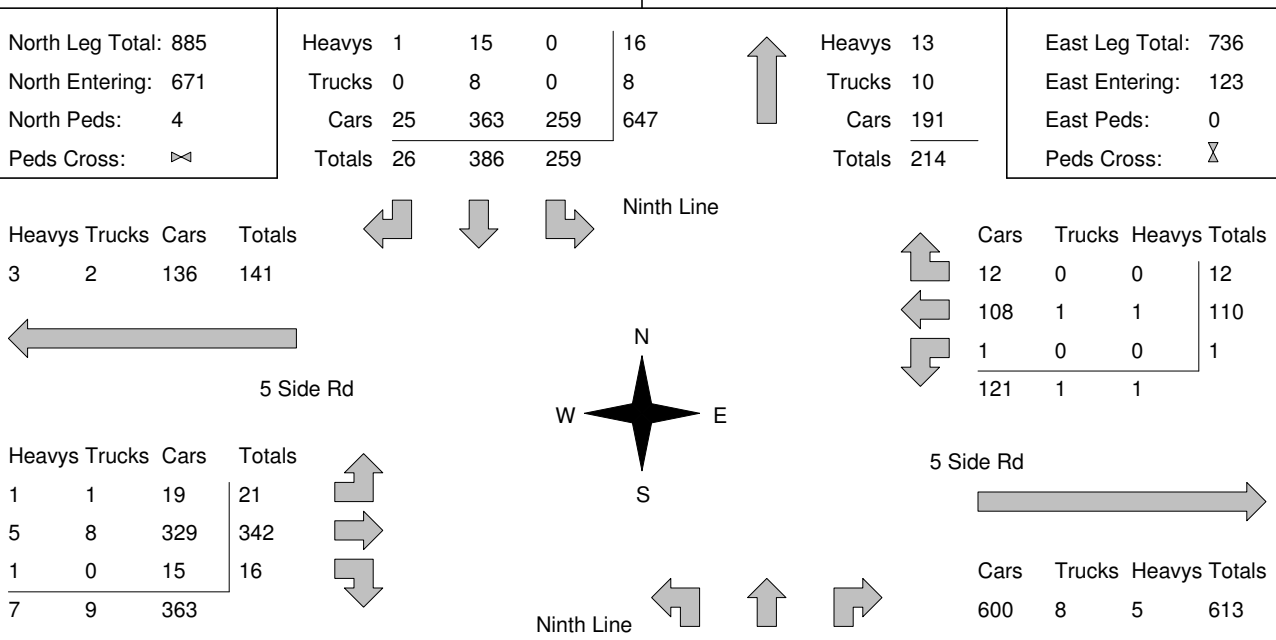
Municipality: Halton Region
Site #: 0000002592
Intersection: Ninth Line & 5 Side Rd
TFR File #: 3
Count date: 26-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S



Comments

Ninth Line @ 5 Side Rd

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

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

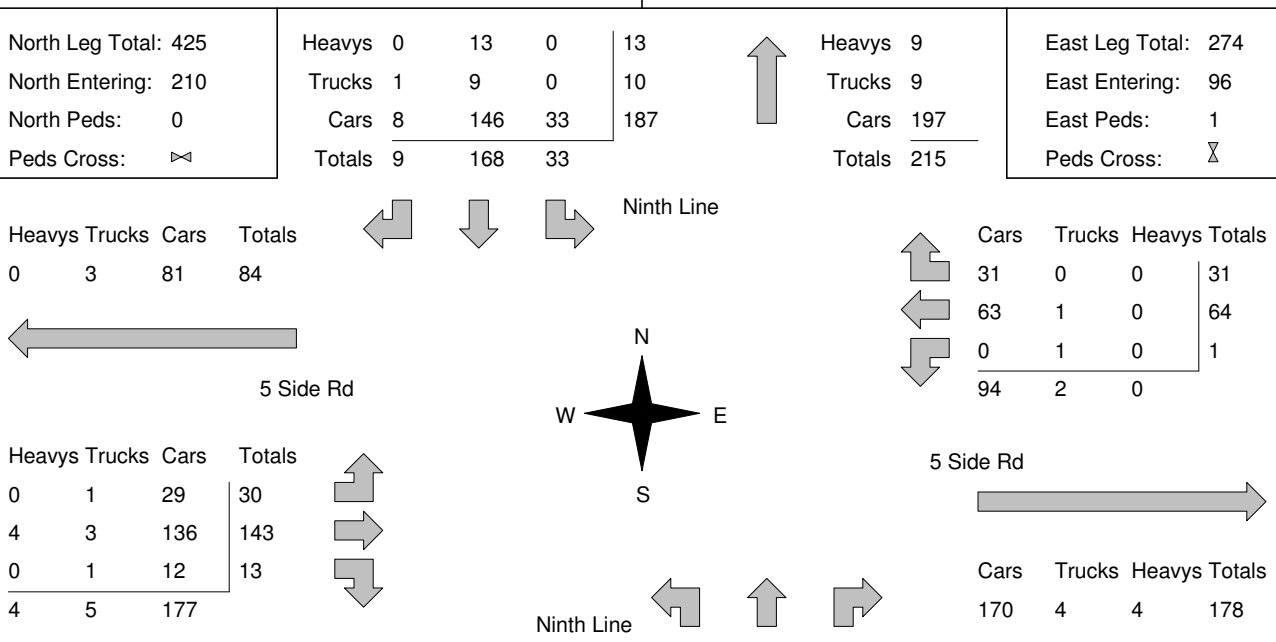
Municipality: Halton Region
Site #: 0000002592
Intersection: Ninth Line & 5 Side Rd
TFR File #: 3
Count date: 26-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S



Comments

Ninth Line @ 5 Side Rd

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

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

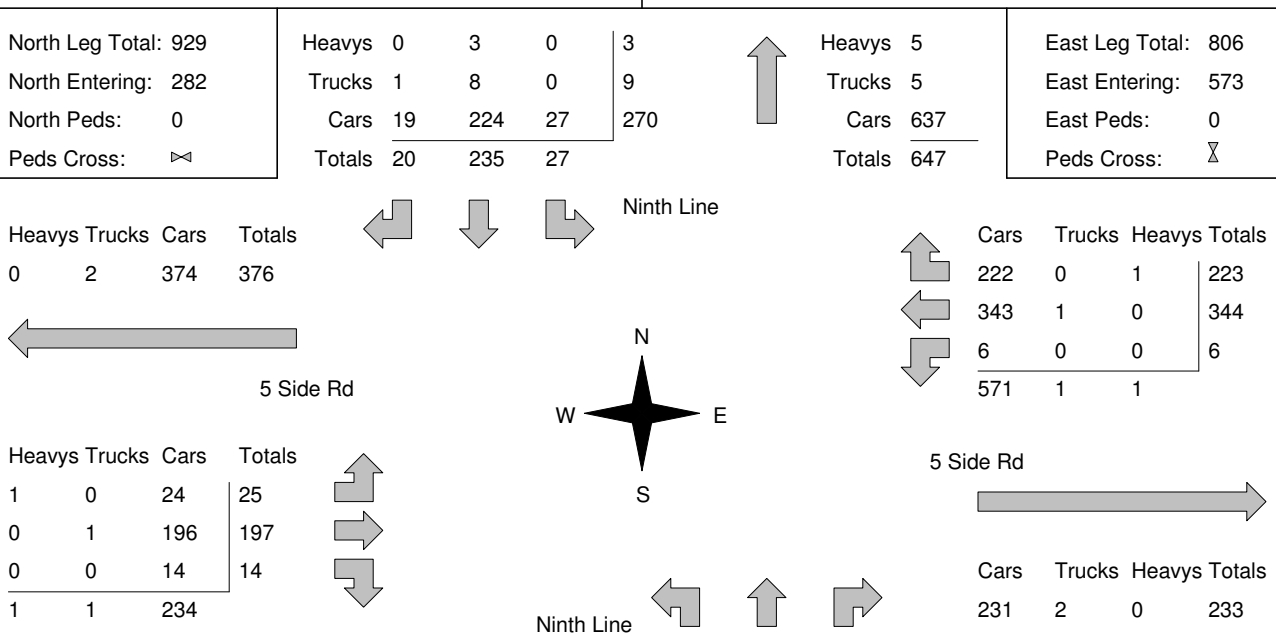
Municipality: Halton Region
Site #: 0000002592
Intersection: Ninth Line & 5 Side Rd
TFR File #: 3
Count date: 26-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S



Comments

Ninth Line @ 5 Side Rd

Total Count Diagram

Municipality: Halton Region
Site #: 0000002592
Intersection: Ninth Line & 5 Side Rd
TFR File #: 3
Count date: 26-May-2015

Weather conditions:
Cloudy/Dry

Person(s) who counted:
Les

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S

North Leg Total:	5334			
North Entering:	2660			
North Peds:	5			
Peds Cross:	⋈			
Heavys	4	93	1	98
Trucks	4	57	1	62
Cars	128	1717	655	2500
Totals	136	1867	657	
Heavys	81			
Trucks	67			
Cars	2526			
Totals	2674			
East Leg Total:	3786			
East Entering:	1760			
East Peds:	2			
Peds Cross:	⧖			

Ninth Line

Heavys	Trucks	Cars	Totals
12	20	1305	1337

5 Side Rd

Cars	Trucks	Heavys	Totals
593	5	3	601
1119	10	5	1134
22	2	1	25
1734	17	9	

N
W E
S

Heavys	Trucks	Cars	Totals
4	7	133	144
17	19	1290	1326
4	2	67	73
25	28	1490	

5 Side Rd

Cars	Trucks	Heavys	Totals
1986	22	18	2026

Ninth Line

Peds Cross:	⧖			
West Peds:	0			
West Entering:	1543			
West Leg Total:	2880			
Cars	1806			
Trucks	61			
Heavys	98			
Totals	1965			
Cars	58	1800	41	1899
Trucks	6	55	2	63
Heavys	3	74	0	77
Totals	67	1929	43	
Peds Cross:	⋈			
South Peds:	3			
South Entering:	2039			
South Leg Total:	4004			

Comments

Ontario Traffic Inc

Mid-day Peak Diagram

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

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

Municipality: Milton
Site #: 1711400011
Intersection: Winston Churchill Blvd & Hwy 401 I
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total: 1708
North Entering: 790
North Peds: 0
Peds Cross: ⋈

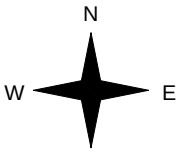
Heavys	0	0	0
Trucks	23	0	23
Cars	767	0	767
Totals	790	0	

Heavys	0
Trucks	46
Cars	872
Totals	918

East Leg Total: 903
East Entering: 903
East Peds: 2
Peds Cross: ⋈

Winston Churchill Blvd

	Cars	Trucks	Heavys	Totals
	240	30	0	270
	617	16	0	633
	857	46	0	



Hwy 401 North Ramp Termin

Cars	Trucks	Heavys	Totals
0	0	0	0

Winston Churchill Blvd

Cars	1384	Cars	632	0	632
Trucks	39	Trucks	16	0	16
Heavys	0	Heavys	0	0	0
Totals	1423	Totals	648	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 648
South Leg Total: 2071

Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 1711400011
Intersection: Winston Churchill Blvd & Hwy 401 I
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total: 6657
North Entering: 3028
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	87	0	87
Cars	2941	0	2941
Totals	3028	0	

Heavys	0
Trucks	153
Cars	3476
Totals	3629

East Leg Total: 3058
East Entering: 3058
East Peds: 2
Peds Cross: ⋈

Winston Churchill Blvd

Cars	Trucks	Heavys	Totals
997	94	0	1091
1932	35	0	1967
2929	129	0	

N
W E
S

Hwy 401 North Ramp Termin

Cars	Trucks	Heavys	Totals
0	0	0	0

Winston Churchill Blvd

Cars	4873		
Trucks	122		
Heavys	0		
Totals	4995		

Cars	2479	0	2479
Trucks	59	0	59
Heavys	0	0	0
Totals	2538	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 2538
South Leg Total: 7533

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Winston Churchill Blvd & Hwy 401 | **Count Date:** 6-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	757	0	757	0	1339
13:00:00	0	790	0	790	0	1438
14:00:00	0	669	0	669	0	1324
15:00:00	0	812	0	812	0	1465
Totals:	0	3028	0	3028	0	5566

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	582	0	582	0
13:00:00	0	648	0	648	0
14:00:00	0	655	0	655	0
15:00:00	0	653	0	653	0
Totals:	0	2538	0	2538	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	385	0	232	617	0	617
13:00:00	633	0	270	903	2	903
14:00:00	508	0	331	839	0	839
15:00:00	441	0	258	699	0	699
Totals:	1967	0	1091	3058	2	3058

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	0	0	0	0
13:00:00	0	0	0	0	0
14:00:00	0	0	0	0	0
15:00:00	0	0	0	0	0
Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	11:00	12:00	13:00	13:00	14:00	14:00	15:00	15:00
Crossing Values:	0	385	633	633	508	508	441	441

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400011

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North App			
	Left		Thru		Right		Left		Thru		Right		Left		Thru	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15:00	0	0	192	192	0	0	0	0	3	3	0	0	0	0	0	
11:30:00	0	0	365	173	0	0	0	0	10	7	0	0	0	0	0	
11:45:00	0	0	529	164	0	0	0	0	14	4	0	0	0	0	0	
12:00:00	0	0	733	204	0	0	0	0	24	10	0	0	0	0	0	
12:15:00	0	0	945	212	0	0	0	0	27	3	0	0	0	0	0	
12:30:00	0	0	1141	196	0	0	0	0	36	9	0	0	0	0	0	
12:45:00	0	0	1315	174	0	0	0	0	42	6	0	0	0	0	0	
13:00:00	0	0	1500	185	0	0	0	0	47	5	0	0	0	0	0	
13:15:00	0	0	1662	162	0	0	0	0	49	2	0	0	0	0	0	
13:30:00	0	0	1858	196	0	0	0	0	53	4	0	0	0	0	0	
13:45:00	0	0	2019	161	0	0	0	0	58	5	0	0	0	0	0	
14:00:00	0	0	2155	136	0	0	0	0	61	3	0	0	0	0	0	
14:15:00	0	0	2334	179	0	0	0	0	64	3	0	0	0	0	0	
14:30:00	0	0	2508	174	0	0	0	0	72	8	0	0	0	0	0	
14:45:00	0	0	2738	230	0	0	0	0	80	8	0	0	0	0	0	
15:00:00	0	0	2941	203	0	0	0	0	87	7	0	0	0	0	0	
15:15:00	0	0	2941	0	0	0	0	0	87	0	0	0	0	0	0	
15:16:22	0	0	2941	0	0	0	0	0	87	0	0	0	0	0	0	

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400011

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Appr			
	Left		Thru		Right		Left		Thru		Right		Left		Thru	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15:00	72	72	0	0	47	47	2	2	0	0	7	7	0	0	0	
11:30:00	186	114	0	0	101	54	3	1	0	0	17	10	0	0	0	
11:45:00	277	91	0	0	152	51	5	2	0	0	20	3	0	0	0	
12:00:00	377	100	0	0	209	57	8	3	0	0	23	3	0	0	0	
12:15:00	521	144	0	0	268	59	10	2	0	0	33	10	0	0	0	
12:30:00	679	158	0	0	319	51	13	3	0	0	42	9	0	0	0	
12:45:00	848	169	0	0	382	63	21	8	0	0	47	5	0	0	0	
13:00:00	994	146	0	0	449	67	24	3	0	0	53	6	0	0	0	
13:15:00	1099	105	0	0	533	84	24	0	0	0	62	9	0	0	0	
13:30:00	1233	134	0	0	620	87	28	4	0	0	68	6	0	0	0	
13:45:00	1390	157	0	0	696	76	29	1	0	0	73	5	0	0	0	
14:00:00	1494	104	0	0	752	56	32	3	0	0	81	8	0	0	0	
14:15:00	1614	120	0	0	824	72	33	1	0	0	87	6	0	0	0	
14:30:00	1723	109	0	0	888	64	33	0	0	0	89	2	0	0	0	
14:45:00	1827	104	0	0	935	47	34	1	0	0	91	2	0	0	0	
15:00:00	1932	105	0	0	997	62	35	1	0	0	94	3	0	0	0	
15:15:00	1932	0	0	0	997	0	35	0	0	0	94	0	0	0	0	
15:16:22	1932	0	0	0	997	0	35	0	0	0	94	0	0	0	0	

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400011

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South App			
	Left		Thru		Right		Left		Thru		Right		Left		Thru	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15:00	0	0	113	113	0	0	0	0	8	8	0	0	0	0	0	
11:30:00	0	0	261	148	0	0	0	0	12	4	0	0	0	0	0	
11:45:00	0	0	413	152	0	0	0	0	14	2	0	0	0	0	0	
12:00:00	0	0	565	152	0	0	0	0	17	3	0	0	0	0	0	
12:15:00	0	0	724	159	0	0	0	0	19	2	0	0	0	0	0	
12:30:00	0	0	882	158	0	0	0	0	22	3	0	0	0	0	0	
12:45:00	0	0	1051	169	0	0	0	0	30	8	0	0	0	0	0	
13:00:00	0	0	1197	146	0	0	0	0	33	3	0	0	0	0	0	
13:15:00	0	0	1360	163	0	0	0	0	38	5	0	0	0	0	0	
13:30:00	0	0	1521	161	0	0	0	0	44	6	0	0	0	0	0	
13:45:00	0	0	1663	142	0	0	0	0	49	5	0	0	0	0	0	
14:00:00	0	0	1835	172	0	0	0	0	50	1	0	0	0	0	0	
14:15:00	0	0	1991	156	0	0	0	0	53	3	0	0	0	0	0	
14:30:00	0	0	2131	140	0	0	0	0	54	1	0	0	0	0	0	
14:45:00	0	0	2310	179	0	0	0	0	56	2	0	0	0	0	0	
15:00:00	0	0	2479	169	0	0	0	0	59	3	0	0	0	0	0	
15:15:00	0	0	2479	0	0	0	0	0	59	0	0	0	0	0	0	
15:16:22	0	0	2479	0	0	0	0	0	59	0	0	0	0	0	0	

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400011

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West App			
	Left		Thru		Right		Left		Thru		Right		Left		Thru	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15:00	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	
11:45:00	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	
12:15:00	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	
12:45:00	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	
13:15:00	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	
13:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:16:22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Ontario Traffic Inc

Mid-day Peak Diagram

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

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

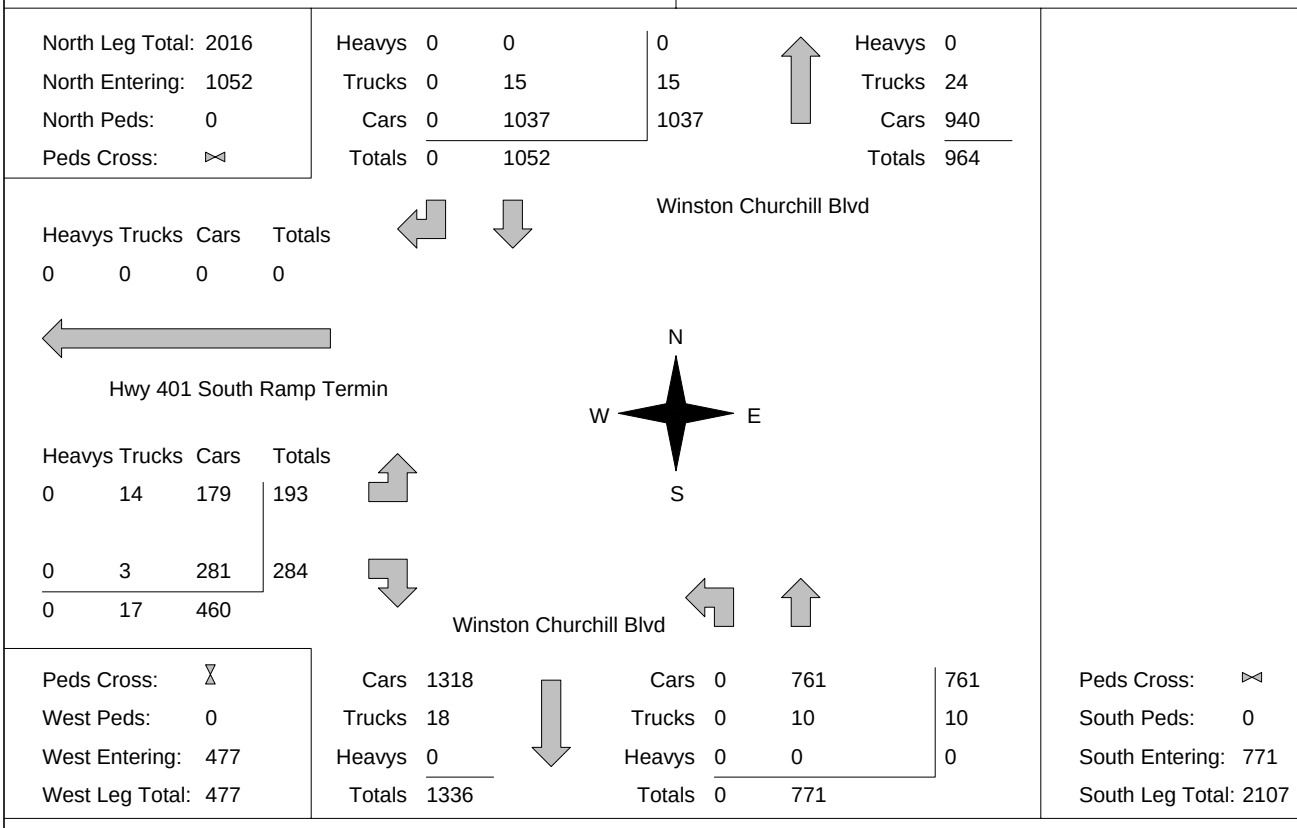
Municipality: Milton
Site #: 1711400012
Intersection: Winston Churchill Blvd & Hwy 401 S
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Ontario Traffic Inc

Total Count Diagram

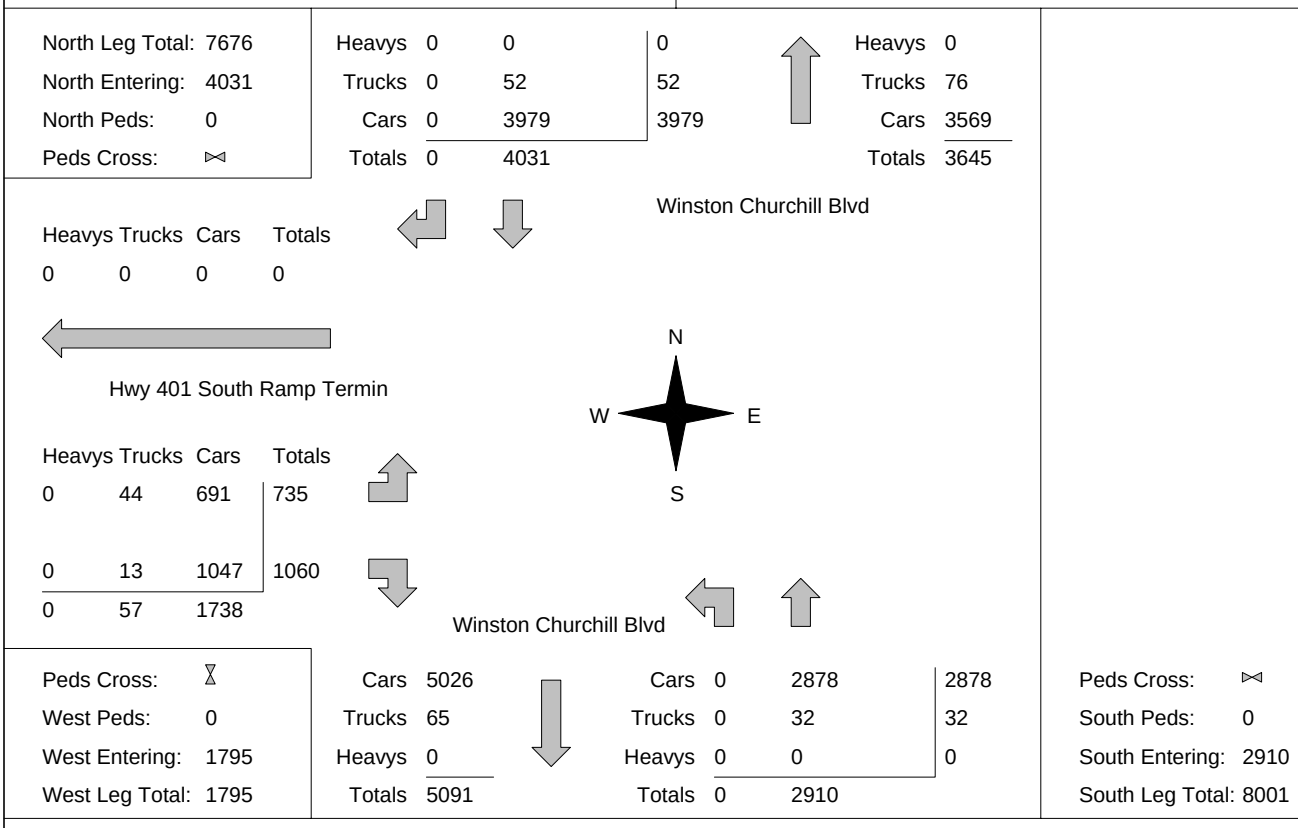
Municipality: Milton
Site #: 1711400012
Intersection: Winston Churchill Blvd & Hwy 401 S
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Winston Churchill Blvd & Hwy 401 | **Count Date:** 6-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	924	0	924	0	1562
13:00:00	0	1057	0	1057	0	1795
14:00:00	0	1053	0	1053	0	1800
15:00:00	0	997	0	997	0	1784
Totals:	0	4031	0	4031	0	6941

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	638	0	638	0
13:00:00	0	738	0	738	0
14:00:00	0	747	0	747	0
15:00:00	0	787	0	787	0
Totals:	0	2910	0	2910	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	0	0	0	0	435
13:00:00	0	0	0	0	0	476
14:00:00	0	0	0	0	0	478
15:00:00	0	0	0	0	0	406
Totals:	0	0	0	0	0	1795

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	173	0	262	435	0
13:00:00	200	0	276	476	0
14:00:00	190	0	288	478	0
15:00:00	172	0	234	406	0
Totals:	735	0	1060	1795	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	0:00	0:00	0:00	11:00	12:00	13:00	14:00	15:00
Crossing Values:	0	0	0	0	173	200	190	172

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400012

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	226	226	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	442	216	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	655	213	0	0	0	0	8	3	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	912	257	0	0	0	0	12	4	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	1166	254	0	0	0	0	14	2	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	1450	284	0	0	0	0	16	2	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1713	263	0	0	0	0	21	5	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1956	243	0	0	0	0	25	4	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	2201	245	0	0	0	0	26	1	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	2449	248	0	0	0	0	27	1	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	2732	283	0	0	0	0	34	7	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	2996	264	0	0	0	0	38	4	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	3238	242	0	0	0	0	41	3	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	3494	256	0	0	0	0	44	3	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	3743	249	0	0	0	0	46	2	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	3979	236	0	0	0	0	52	6	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3979	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0
15:16:49	0	0	3979	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400012

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	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
13:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:16:49	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: 6-May-17 Site #: 1711400012

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	126	126	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	301	175	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	459	158	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	636	177	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	799	163	0	0	0	0	7	5	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	983	184	0	0	0	0	10	3	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1162	179	0	0	0	0	12	2	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1359	197	0	0	0	0	17	5	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	1541	182	0	0	0	0	20	3	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1714	173	0	0	0	0	22	2	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1903	189	0	0	0	0	24	2	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	2095	192	0	0	0	0	28	4	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	2302	207	0	0	0	0	30	2	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	2473	171	0	0	0	0	31	1	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	2665	192	0	0	0	0	32	1	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2878	213	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2878	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0
15:16:49	0	0	2878	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400012

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	34	34	0	0	73	73	7	7	0	0	1	1	0	0	0	0	0	0	0	0
11:30:00	77	43	0	0	138	65	11	4	0	0	3	2	0	0	0	0	0	0	0	0
11:45:00	118	41	0	0	203	65	14	3	0	0	3	0	0	0	0	0	0	0	0	0
12:00:00	156	38	0	0	258	55	17	3	0	0	4	1	0	0	0	0	0	0	0	0
12:15:00	208	52	0	0	320	62	18	1	0	0	5	1	0	0	0	0	0	0	0	0
12:30:00	252	44	0	0	401	81	18	0	0	0	9	4	0	0	0	0	0	0	0	0
12:45:00	309	57	0	0	451	50	23	5	0	0	9	0	0	0	0	0	0	0	0	0
13:00:00	349	40	0	0	529	78	24	1	0	0	9	0	0	0	0	0	0	0	0	0
13:15:00	393	44	0	0	600	71	26	2	0	0	9	0	0	0	0	0	0	0	0	0
13:30:00	440	47	0	0	685	85	31	5	0	0	10	1	0	0	0	0	0	0	0	0
13:45:00	479	39	0	0	756	71	35	4	0	0	11	1	0	0	0	0	0	0	0	0
14:00:00	526	47	0	0	814	58	37	2	0	0	12	1	0	0	0	0	0	0	0	0
14:15:00	572	46	0	0	881	67	40	3	0	0	12	0	0	0	0	0	0	0	0	0
14:30:00	612	40	0	0	933	52	41	1	0	0	12	0	0	0	0	0	0	0	0	0
14:45:00	658	46	0	0	982	49	42	1	0	0	12	0	0	0	0	0	0	0	0	0
15:00:00	691	33	0	0	1047	65	44	2	0	0	13	1	0	0	0	0	0	0	0	0
15:15:00	691	0	0	0	1047	0	44	0	0	0	13	0	0	0	0	0	0	0	0	0
15:16:49	691	0	0	0	1047	0	44	0	0	0	13	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Morning Peak Diagram

Specified Period
From: 6:00:00
To: 10:00:00

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

Municipality: Milton
Site #: 1711400002
Intersection: Trafalgar Rd & Hwy 401 South Ran
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 2138
North Entering: 834
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	85	85
Cars	0	749	749
Totals	0	834	

Heavys	0
Trucks	68
Cars	1236
Totals	1304

Trafalgar Rd

Heavys	Trucks	Cars	Totals
0	0	0	0

Hwy 401 South Ramp Terminal

N
W E
S

Heavys	Trucks	Cars	Totals
0	4	41	45
0	10	175	185
0	14	216	

Trafalgar Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 230
West Leg Total: 230

Cars	924		
Trucks	95		
Heavys	0		
Totals	1019		

Cars	0	1195	1195
Trucks	0	64	64
Heavys	0	0	0
Totals	0	1259	

Peds Cross: ⋈
South Peds: 0
South Entering: 1259
South Leg Total: 2278

Comments

Ontario Traffic Inc

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 19:00:00

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

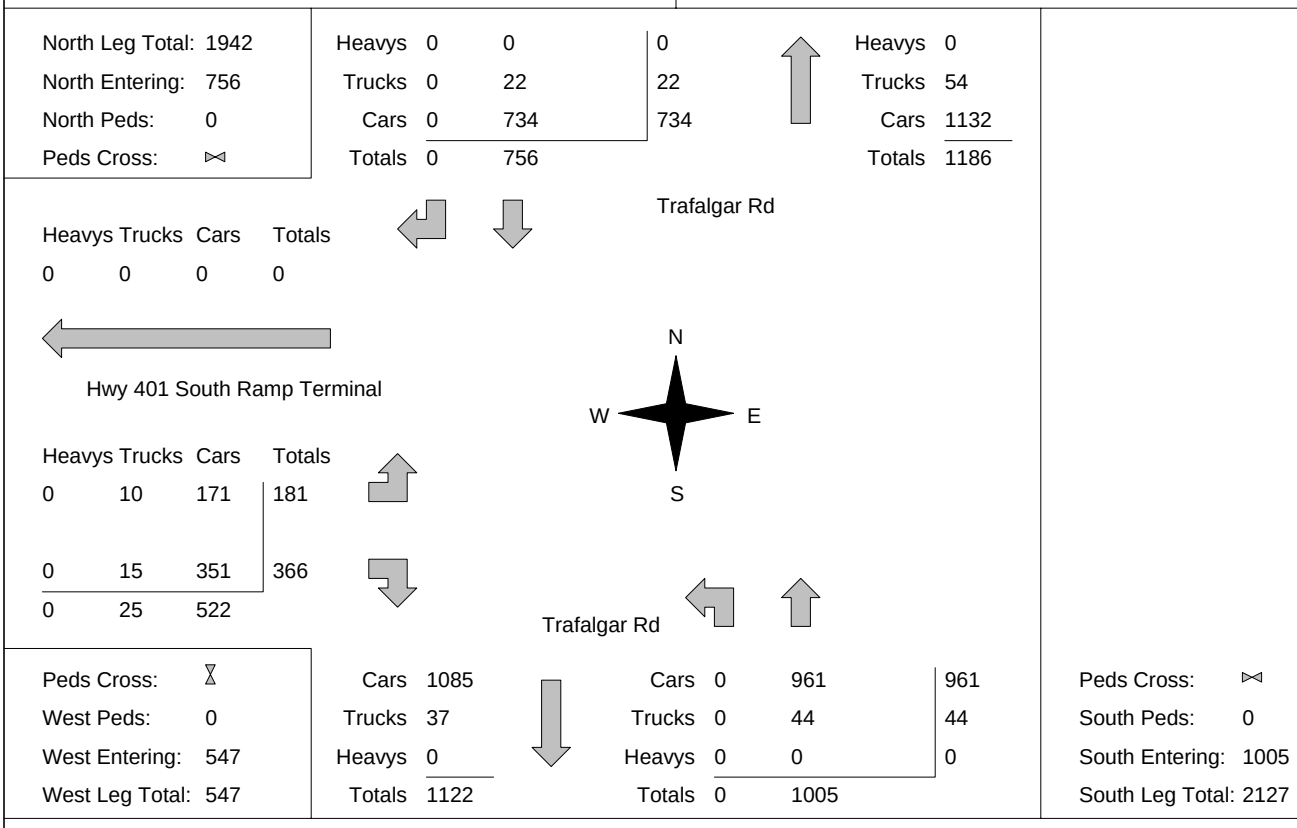
Municipality: Milton
Site #: 1711400002
Intersection: Trafalgar Rd & Hwy 401 South Ran
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

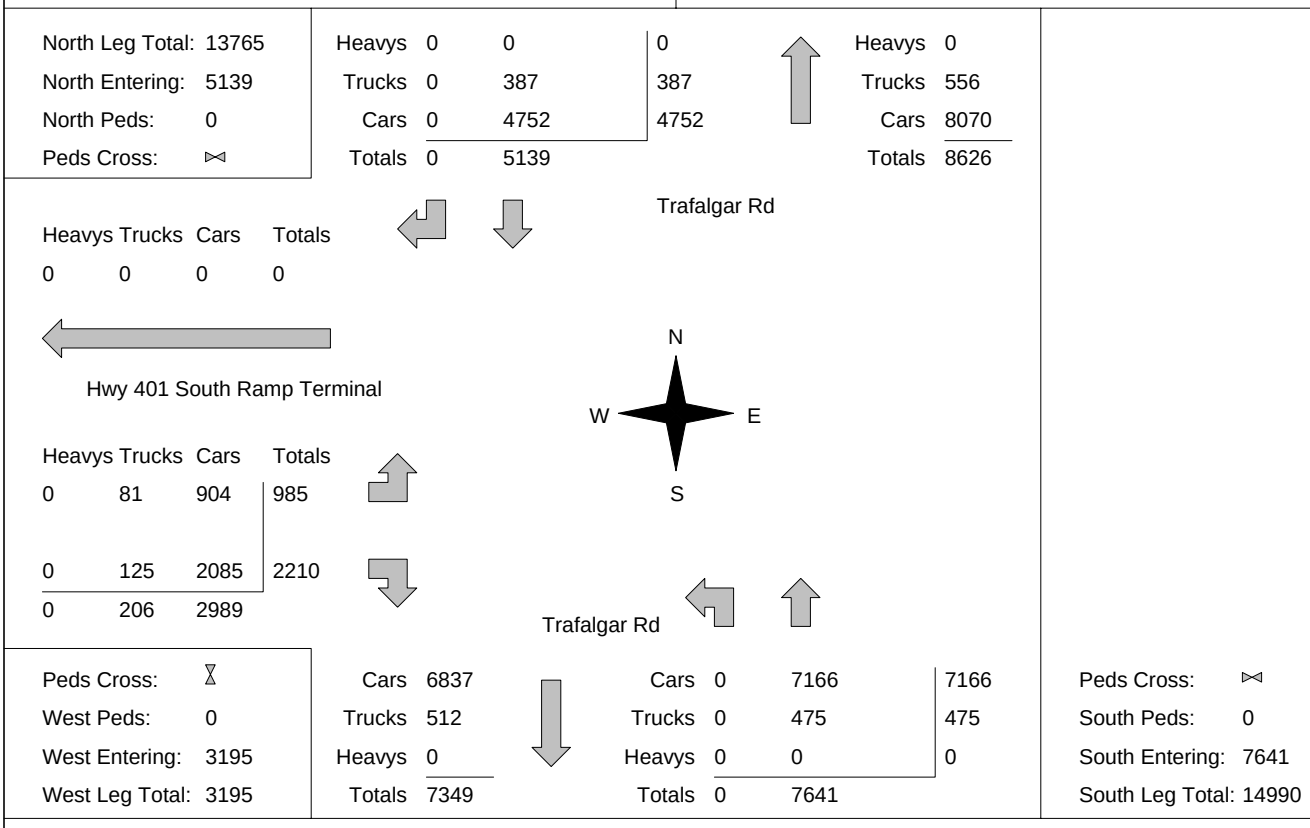


Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton	**Weather conditions:**
Site #: 1711400002	
Intersection: Trafalgar Rd & Hwy 401 South Ran	**Person(s) who counted:**
TFR File #: 1	
Count date: 4-May-17	
**** Signalized Intersection ****	**Major Road:** Trafalgar Rd runs N/S



Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Trafalgar Rd & Hwy 401 South Ra | **Count Date:** 4-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	569	0	569	0	1248
8:00:00	0	786	0	786	0	1868
9:00:00	0	707	0	707	0	1903
10:00:00	0	479	0	479	0	1275
15:00:00	0	0	0	0	0	0
16:00:00	0	587	0	587	0	1538
17:00:00	0	641	0	641	0	1739
18:00:00	0	756	0	756	0	1761
19:00:00	0	614	0	614	0	1448
Totals:	0	5139	0	5139	0	12780

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	0	679	0	679	0
8:00:00	0	1082	0	1082	0
9:00:00	0	1196	0	1196	0
10:00:00	0	796	0	796	0
15:00:00	0	0	0	0	0
16:00:00	0	951	0	951	0
17:00:00	0	1098	0	1098	0
18:00:00	0	1005	0	1005	0
19:00:00	0	834	0	834	0
Totals:	0	7641	0	7641	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	0	0	0	0	444
8:00:00	0	0	0	0	0	385
9:00:00	0	0	0	0	0	239
10:00:00	0	0	0	0	0	301
15:00:00	0	0	0	0	0	0
16:00:00	0	0	0	0	0	437
17:00:00	0	0	0	0	0	477
18:00:00	0	0	0	0	0	547
19:00:00	0	0	0	0	0	365
Totals:	0	0	0	0	0	3195

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	102	0	342	444	0
8:00:00	71	0	314	385	0
9:00:00	55	0	184	239	0
10:00:00	101	0	200	301	0
15:00:00	0	0	0	0	0
16:00:00	171	0	266	437	0
17:00:00	161	0	316	477	0
18:00:00	181	0	366	547	0
19:00:00	143	0	222	365	0
Totals:	985	0	2210	3195	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00
Crossing Values:	102	71	55	101	171	161	181	143

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400002

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	79	79	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	200	121	0	0	0	0	24	15	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	364	164	0	0	0	0	44	20	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	517	153	0	0	0	0	52	8	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	661	144	0	0	0	0	70	18	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	832	171	0	0	0	0	86	16	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1039	207	0	0	0	0	112	26	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1228	189	0	0	0	0	127	15	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	1384	156	0	0	0	0	150	23	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1581	197	0	0	0	0	171	21	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	1739	158	0	0	0	0	192	21	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	1855	116	0	0	0	0	207	15	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	1972	117	0	0	0	0	220	13	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	2080	108	0	0	0	0	236	16	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	2183	103	0	0	0	0	255	19	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	2267	84	0	0	0	0	274	19	0	0	0	0	0	0	0	0	0	0
10:00:52	0	0	2267	0	0	0	0	0	274	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2267	0	0	0	0	0	274	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2401	134	0	0	0	0	285	11	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	2534	133	0	0	0	0	294	9	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	2654	120	0	0	0	0	306	12	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	2804	150	0	0	0	0	324	18	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	2963	159	0	0	0	0	335	11	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	3112	149	0	0	0	0	337	2	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	3266	154	0	0	0	0	345	8	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	3417	151	0	0	0	0	352	7	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	3603	186	0	0	0	0	358	6	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	3781	178	0	0	0	0	360	2	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	3967	186	0	0	0	0	361	1	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	4151	184	0	0	0	0	374	13	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	4307	156	0	0	0	0	375	1	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	4477	170	0	0	0	0	380	5	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	4618	141	0	0	0	0	383	3	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	4752	134	0	0	0	0	387	4	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	4752	0	0	0	0	0	387	0	0	0	0	0	0	0	0	0	0	0
19:16:56	0	0	4752	0	0	0	0	0	387	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400002

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10:00:52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	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
19:16:56	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: 4-May-17 Site #: 1711400002

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	134	134	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	274	140	0	0	0	0	32	17	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	448	174	0	0	0	0	44	12	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	624	176	0	0	0	0	55	11	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	812	188	0	0	0	0	63	8	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	1070	258	0	0	0	0	78	15	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1359	289	0	0	0	0	89	11	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1653	294	0	0	0	0	108	19	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	1957	304	0	0	0	0	125	17	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	2265	308	0	0	0	0	142	17	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	2550	285	0	0	0	0	166	24	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	2767	217	0	0	0	0	190	24	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	2981	214	0	0	0	0	214	24	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	3159	178	0	0	0	0	232	18	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	3342	183	0	0	0	0	248	16	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	3487	145	0	0	0	0	266	18	0	0	0	0	0	0	0	0	0	0
10:00:52	0	0	3487	0	0	0	0	0	266	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	3487	0	0	0	0	0	266	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3665	178	0	0	0	0	281	15	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	3912	247	0	0	0	0	299	18	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	4146	234	0	0	0	0	317	18	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	4367	221	0	0	0	0	337	20	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	4644	277	0	0	0	0	350	13	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	4900	256	0	0	0	0	364	14	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	5163	263	0	0	0	0	377	13	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	5410	247	0	0	0	0	392	15	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	5682	272	0	0	0	0	402	10	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	5896	214	0	0	0	0	412	10	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	6123	227	0	0	0	0	424	12	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	6371	248	0	0	0	0	436	12	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	6576	205	0	0	0	0	445	9	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	6796	220	0	0	0	0	457	12	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	6984	188	0	0	0	0	466	9	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	7166	182	0	0	0	0	475	9	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	7166	0	0	0	0	0	475	0	0	0	0	0	0	0	0	0	0	0
19:16:56	0	0	7166	0	0	0	0	0	475	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400002

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	24	24	0	0	52	52	3	3	0	0	2	2	0	0	0	0	0	0	0	0
6:30:00	52	28	0	0	139	87	3	0	0	0	5	3	0	0	0	0	0	0	0	0
6:45:00	71	19	0	0	236	97	3	0	0	0	9	4	0	0	0	0	0	0	0	0
7:00:00	96	25	0	0	327	91	6	3	0	0	15	6	0	0	0	0	0	0	0	0
7:15:00	120	24	0	0	442	115	7	1	0	0	16	1	0	0	0	0	0	0	0	0
7:30:00	137	17	0	0	529	87	10	3	0	0	20	4	0	0	0	0	0	0	0	0
7:45:00	152	15	0	0	592	63	11	1	0	0	24	4	0	0	0	0	0	0	0	0
8:00:00	161	9	0	0	629	37	12	1	0	0	27	3	0	0	0	0	0	0	0	0
8:15:00	171	10	0	0	661	32	13	1	0	0	27	0	0	0	0	0	0	0	0	0
8:30:00	178	7	0	0	704	43	14	1	0	0	30	3	0	0	0	0	0	0	0	0
8:45:00	194	16	0	0	740	36	16	2	0	0	40	10	0	0	0	0	0	0	0	0
9:00:00	210	16	0	0	793	53	18	2	0	0	47	7	0	0	0	0	0	0	0	0
9:15:00	228	18	0	0	833	40	20	2	0	0	48	1	0	0	0	0	0	0	0	0
9:30:00	252	24	0	0	882	49	23	3	0	0	51	3	0	0	0	0	0	0	0	0
9:45:00	280	28	0	0	938	56	27	4	0	0	61	10	0	0	0	0	0	0	0	0
10:00:00	300	20	0	0	975	37	29	2	0	0	65	4	0	0	0	0	0	0	0	0
10:00:52	300	0	0	0	975	0	29	0	0	0	65	0	0	0	0	0	0	0	0	0
15:00:00	300	0	0	0	975	0	29	0	0	0	65	0	0	0	0	0	0	0	0	0
15:15:00	339	39	0	0	1036	61	37	8	0	0	72	7	0	0	0	0	0	0	0	0
15:30:00	366	27	0	0	1096	60	42	5	0	0	76	4	0	0	0	0	0	0	0	0
15:45:00	405	39	0	0	1158	62	46	4	0	0	79	3	0	0	0	0	0	0	0	0
16:00:00	446	41	0	0	1221	63	54	8	0	0	85	6	0	0	0	0	0	0	0	0
16:15:00	467	21	0	0	1287	66	57	3	0	0	88	3	0	0	0	0	0	0	0	0
16:30:00	498	31	0	0	1357	70	61	4	0	0	92	4	0	0	0	0	0	0	0	0
16:45:00	545	47	0	0	1437	80	62	1	0	0	98	6	0	0	0	0	0	0	0	0
17:00:00	597	52	0	0	1521	84	64	2	0	0	101	3	0	0	0	0	0	0	0	0
17:15:00	648	51	0	0	1607	86	69	5	0	0	105	4	0	0	0	0	0	0	0	0
17:30:00	693	45	0	0	1700	93	74	5	0	0	106	1	0	0	0	0	0	0	0	0
17:45:00	728	35	0	0	1784	84	74	0	0	0	112	6	0	0	0	0	0	0	0	0
18:00:00	768	40	0	0	1872	88	74	0	0	0	116	4	0	0	0	0	0	0	0	0
18:15:00	819	51	0	0	1926	54	77	3	0	0	116	0	0	0	0	0	0	0	0	0
18:30:00	851	32	0	0	1991	65	78	1	0	0	117	1	0	0	0	0	0	0	0	0
18:45:00	882	31	0	0	2047	56	79	1	0	0	122	5	0	0	0	0	0	0	0	0
19:00:00	904	22	0	0	2085	38	81	2	0	0	125	3	0	0	0	0	0	0	0	0
19:15:00	904	0	0	0	2085	0	81	0	0	0	125	0	0	0	0	0	0	0	0	0
19:16:56	904	0	0	0	2085	0	81	0	0	0	125	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Morning Peak Diagram

Specified Period
From: 6:00:00
To: 10:00:00

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

Municipality: Milton
Site #: 1711400003
Intersection: James Snow Pkwy & Hwy 401 Nort
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

North Leg Total: 1383
North Entering: 495
North Peds: 0
Peds Cross: ⋈

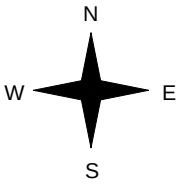
Heavys	0	0	0
Trucks	30	0	30
Cars	465	0	465
Totals	495	0	

Heavys	0
Trucks	96
Cars	792
Totals	888

East Leg Total: 702
East Entering: 702
East Peds: 0
Peds Cross: ⋈

James Snow Pkwy

Cars	Trucks	Heavys	Totals
319	35	0	354
340	8	0	348
659	43	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

James Snow Pkwy

Cars	805
Trucks	38
Heavys	0
Totals	843

Cars	473	0	473
Trucks	61	0	61
Heavys	0	0	0
Totals	534	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 534
South Leg Total: 1377

Comments

Ontario Traffic Inc

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 19:00:00

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

Municipality: Milton
Site #: 1711400003
Intersection: James Snow Pkwy & Hwy 401 Nort
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

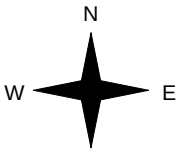
North Leg Total: 1576
North Entering: 888
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	26	0	26
Cars	862	0	862
Totals	888	0	

Heavys	0
Trucks	45
Cars	643
Totals	688

East Leg Total: 944
East Entering: 944
East Peds: 0
Peds Cross: ⋈

	Cars	Trucks	Heavys	Totals
	253	15	0	268
	674	2	0	676
	927	17	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

James Snow Pkwy

Cars	1536
Trucks	28
Heavys	0
Totals	1564

Cars	390	0	390
Trucks	30	0	30
Heavys	0	0	0
Totals	420	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 420
South Leg Total: 1984

Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 1711400003
Intersection: James Snow Pkwy & Hwy 401 Nort
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

North Leg Total: 9585
North Entering: 4417
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	241	0	241
Cars	4176	0	4176
Totals	4417	0	

Heavys	0
Trucks	536
Cars	4632
Totals	5168

East Leg Total: 5685
East Entering: 5685
East Peds: 0
Peds Cross: ⋈

James Snow Pkwy

Cars	Trucks	Heavys	Totals
1920	215	0	2135
3501	49	0	3550
5421	264	0	

N
W E
S

Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

James Snow Pkwy

Cars	7677		
Trucks	290		
Heavys	0		
Totals	7967		

Cars	2712	0	2712
Trucks	321	0	321
Heavys	0	0	0
Totals	3033	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 3033
South Leg Total: 11000

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: James Snow Pkwy & Hwy 401 No | **Count Date:** 4-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	262	0	262	0	482
8:00:00	0	480	0	480	0	941
9:00:00	0	456	0	456	0	957
10:00:00	0	396	0	396	0	692
15:00:00	0	0	0	0	0	0
16:00:00	0	590	0	590	0	981
17:00:00	0	825	0	825	0	1212
18:00:00	0	842	0	842	0	1251
19:00:00	0	566	0	566	0	934
Totals:	0	4417	0	4417	0	7450

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	0	220	0	220	0
8:00:00	0	461	0	461	0
9:00:00	0	501	0	501	0
10:00:00	0	296	0	296	0
15:00:00	0	0	0	0	0
16:00:00	0	391	0	391	0
17:00:00	0	387	0	387	0
18:00:00	0	409	0	409	0
19:00:00	0	368	0	368	0
Totals:	0	3033	0	3033	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	281	0	192	473	0	473
8:00:00	353	0	331	684	0	684
9:00:00	300	0	335	635	0	635
10:00:00	301	0	251	552	0	552
15:00:00	0	0	0	0	0	0
16:00:00	448	0	259	707	0	707
17:00:00	489	0	205	694	0	694
18:00:00	716	0	281	997	0	997
19:00:00	662	0	281	943	0	943
Totals:	3550	0	2135	5685	0	5685

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
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
15:00:00	0	0	0	0	0
16:00:00	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:	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00
Crossing Values:	281	353	300	301	448	489	716	662

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400003

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	51	51	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	118	67	0	0	0	0	14	5	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	169	51	0	0	0	0	22	8	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	235	66	0	0	0	0	27	5	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	324	89	0	0	0	0	35	8	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	448	124	0	0	0	0	47	12	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	562	114	0	0	0	0	55	8	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	682	120	0	0	0	0	60	5	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	804	122	0	0	0	0	70	10	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	913	109	0	0	0	0	77	7	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	1007	94	0	0	0	0	91	14	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	1098	91	0	0	0	0	100	9	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	1188	90	0	0	0	0	108	8	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	1284	96	0	0	0	0	115	7	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	1372	88	0	0	0	0	128	13	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	1460	88	0	0	0	0	134	6	0	0	0	0	0	0	0	0	0	0
10:02:10	0	0	1460	0	0	0	0	0	134	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1460	0	0	0	0	0	134	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1619	159	0	0	0	0	142	8	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	1749	130	0	0	0	0	149	7	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	1882	133	0	0	0	0	158	9	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	2018	136	0	0	0	0	166	8	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	2188	170	0	0	0	0	173	7	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	2389	201	0	0	0	0	181	8	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	2599	210	0	0	0	0	187	6	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	2812	213	0	0	0	0	197	10	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	3063	251	0	0	0	0	203	6	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	3268	205	0	0	0	0	211	8	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	3461	193	0	0	0	0	213	2	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	3633	172	0	0	0	0	218	5	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	3812	179	0	0	0	0	221	3	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	3950	138	0	0	0	0	228	7	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	4068	118	0	0	0	0	235	7	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	4176	108	0	0	0	0	241	6	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	4176	0	0	0	0	0	241	0	0	0	0	0	0	0	0	0	0	0
19:15:57	0	0	4176	0	0	0	0	0	241	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400003

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	40	40	0	0	32	32	0	0	0	0	6	6	0	0	0	0	0	0	0	0
6:30:00	104	64	0	0	78	46	1	1	0	0	12	6	0	0	0	0	0	0	0	0
6:45:00	183	79	0	0	129	51	5	4	0	0	17	5	0	0	0	0	0	0	0	0
7:00:00	271	88	0	0	163	34	10	5	0	0	29	12	0	0	0	0	0	0	0	0
7:15:00	361	90	0	0	224	61	11	1	0	0	38	9	0	0	0	0	0	0	0	0
7:30:00	437	76	0	0	296	72	12	1	0	0	45	7	0	0	0	0	0	0	0	0
7:45:00	535	98	0	0	367	71	14	2	0	0	55	10	0	0	0	0	0	0	0	0
8:00:00	618	83	0	0	464	97	16	2	0	0	59	4	0	0	0	0	0	0	0	0
8:15:00	704	86	0	0	533	69	18	2	0	0	66	7	0	0	0	0	0	0	0	0
8:30:00	777	73	0	0	615	82	20	2	0	0	80	14	0	0	0	0	0	0	0	0
8:45:00	844	67	0	0	693	78	21	1	0	0	84	4	0	0	0	0	0	0	0	0
9:00:00	911	67	0	0	767	74	23	2	0	0	91	7	0	0	0	0	0	0	0	0
9:15:00	989	78	0	0	831	64	28	5	0	0	97	6	0	0	0	0	0	0	0	0
9:30:00	1054	65	0	0	884	53	30	2	0	0	104	7	0	0	0	0	0	0	0	0
9:45:00	1127	73	0	0	947	63	31	1	0	0	106	2	0	0	0	0	0	0	0	0
10:00:00	1197	70	0	0	989	42	38	7	0	0	120	14	0	0	0	0	0	0	0	0
10:02:10	1197	0	0	0	989	0	38	0	0	0	120	0	0	0	0	0	0	0	0	0
15:00:00	1197	0	0	0	989	0	38	0	0	0	120	0	0	0	0	0	0	0	0	0
15:15:00	1317	120	0	0	1048	59	38	0	0	0	136	16	0	0	0	0	0	0	0	0
15:30:00	1421	104	0	0	1106	58	39	1	0	0	142	6	0	0	0	0	0	0	0	0
15:45:00	1540	119	0	0	1154	48	40	1	0	0	152	10	0	0	0	0	0	0	0	0
16:00:00	1643	103	0	0	1207	53	40	0	0	0	161	9	0	0	0	0	0	0	0	0
16:15:00	1747	104	0	0	1248	41	40	0	0	0	166	5	0	0	0	0	0	0	0	0
16:30:00	1858	111	0	0	1297	49	40	0	0	0	172	6	0	0	0	0	0	0	0	0
16:45:00	1993	135	0	0	1339	42	43	3	0	0	174	2	0	0	0	0	0	0	0	0
17:00:00	2129	136	0	0	1392	53	43	0	0	0	181	7	0	0	0	0	0	0	0	0
17:15:00	2289	160	0	0	1455	63	44	1	0	0	184	3	0	0	0	0	0	0	0	0
17:30:00	2487	198	0	0	1523	68	44	0	0	0	185	1	0	0	0	0	0	0	0	0
17:45:00	2667	180	0	0	1592	69	45	1	0	0	189	4	0	0	0	0	0	0	0	0
18:00:00	2842	175	0	0	1658	66	46	1	0	0	196	7	0	0	0	0	0	0	0	0
18:15:00	3006	164	0	0	1733	75	46	0	0	0	198	2	0	0	0	0	0	0	0	0
18:30:00	3180	174	0	0	1805	72	47	1	0	0	202	4	0	0	0	0	0	0	0	0
18:45:00	3331	151	0	0	1857	52	48	1	0	0	209	7	0	0	0	0	0	0	0	0
19:00:00	3501	170	0	0	1920	63	49	1	0	0	215	6	0	0	0	0	0	0	0	0
19:15:00	3501	0	0	0	1920	0	49	0	0	0	215	0	0	0	0	0	0	0	0	0
19:15:57	3501	0	0	0	1920	0	49	0	0	0	215	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400003

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	22	22	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	60	38	0	0	0	0	10	3	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	130	70	0	0	0	0	14	4	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	199	69	0	0	0	0	21	7	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	272	73	0	0	0	0	25	4	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	392	120	0	0	0	0	31	6	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	494	102	0	0	0	0	35	4	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	630	136	0	0	0	0	51	16	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	741	111	0	0	0	0	67	16	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	865	124	0	0	0	0	92	25	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	965	100	0	0	0	0	106	14	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	1062	97	0	0	0	0	120	14	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	1129	67	0	0	0	0	137	17	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	1200	71	0	0	0	0	149	12	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	1256	56	0	0	0	0	156	7	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	1308	52	0	0	0	0	170	14	0	0	0	0	0	0	0	0	0	0
10:02:10	0	0	1308	0	0	0	0	0	170	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1308	0	0	0	0	0	170	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1382	74	0	0	0	0	188	18	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	1466	84	0	0	0	0	201	13	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	1553	87	0	0	0	0	214	13	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	1647	94	0	0	0	0	222	8	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	1732	85	0	0	0	0	237	15	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	1820	88	0	0	0	0	250	13	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	1903	83	0	0	0	0	259	9	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	1990	87	0	0	0	0	266	7	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	2096	106	0	0	0	0	272	6	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	2194	98	0	0	0	0	283	11	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	2293	99	0	0	0	0	289	6	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	2369	76	0	0	0	0	296	7	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	2454	85	0	0	0	0	302	6	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	2542	88	0	0	0	0	306	4	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	2625	83	0	0	0	0	312	6	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	2712	87	0	0	0	0	321	9	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	2712	0	0	0	0	0	321	0	0	0	0	0	0	0	0	0	0	0
19:15:57	0	0	2712	0	0	0	0	0	321	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400003

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10:02:10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	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
19:15:57	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: 6:00:00
To: 10:00:00

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

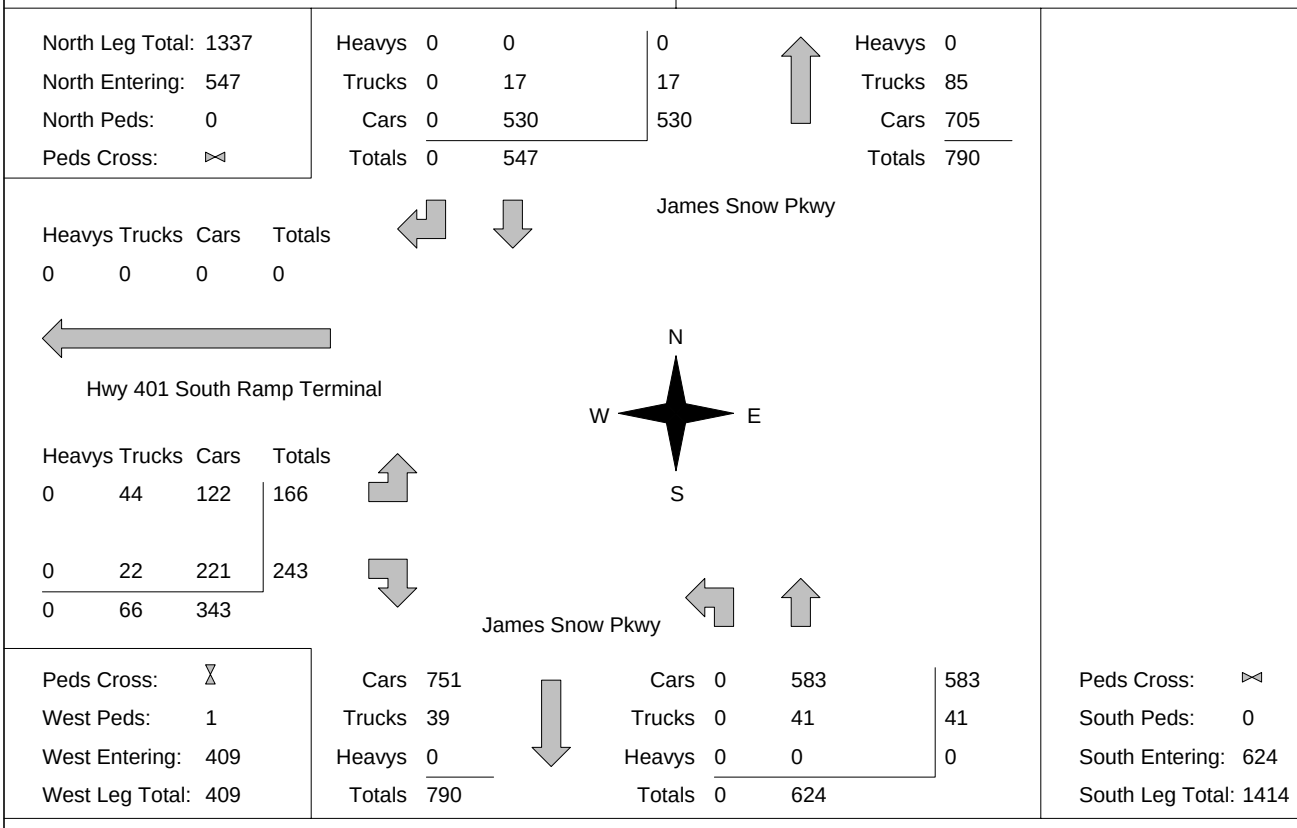
Municipality: Milton
Site #: 1711400004
Intersection: James Snow Pkwy & Hwy 401 Sou
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S



Comments

Ontario Traffic Inc

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 19:00:00

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

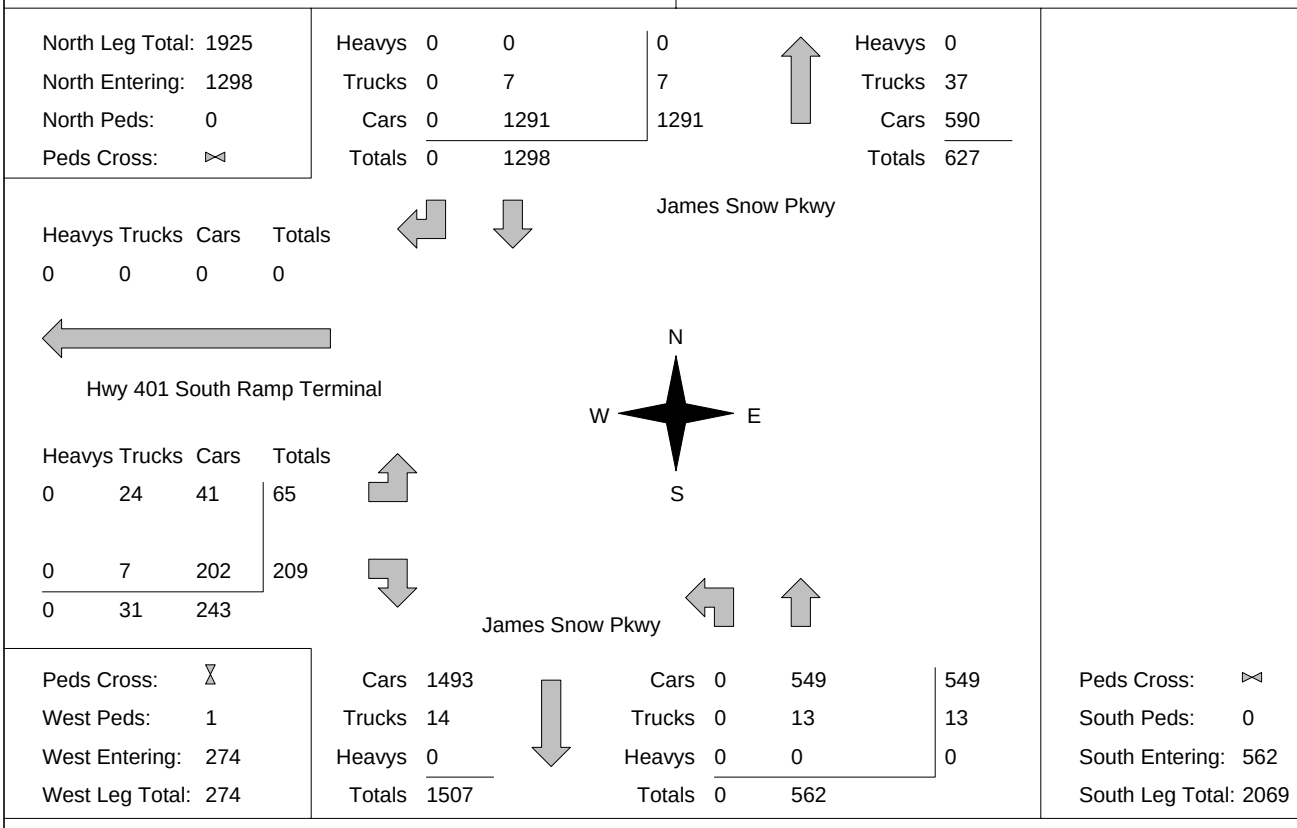
Municipality: Milton
Site #: 1711400004
Intersection: James Snow Pkwy & Hwy 401 Sou
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S



Comments

Ontario Traffic Inc

Total Count Diagram

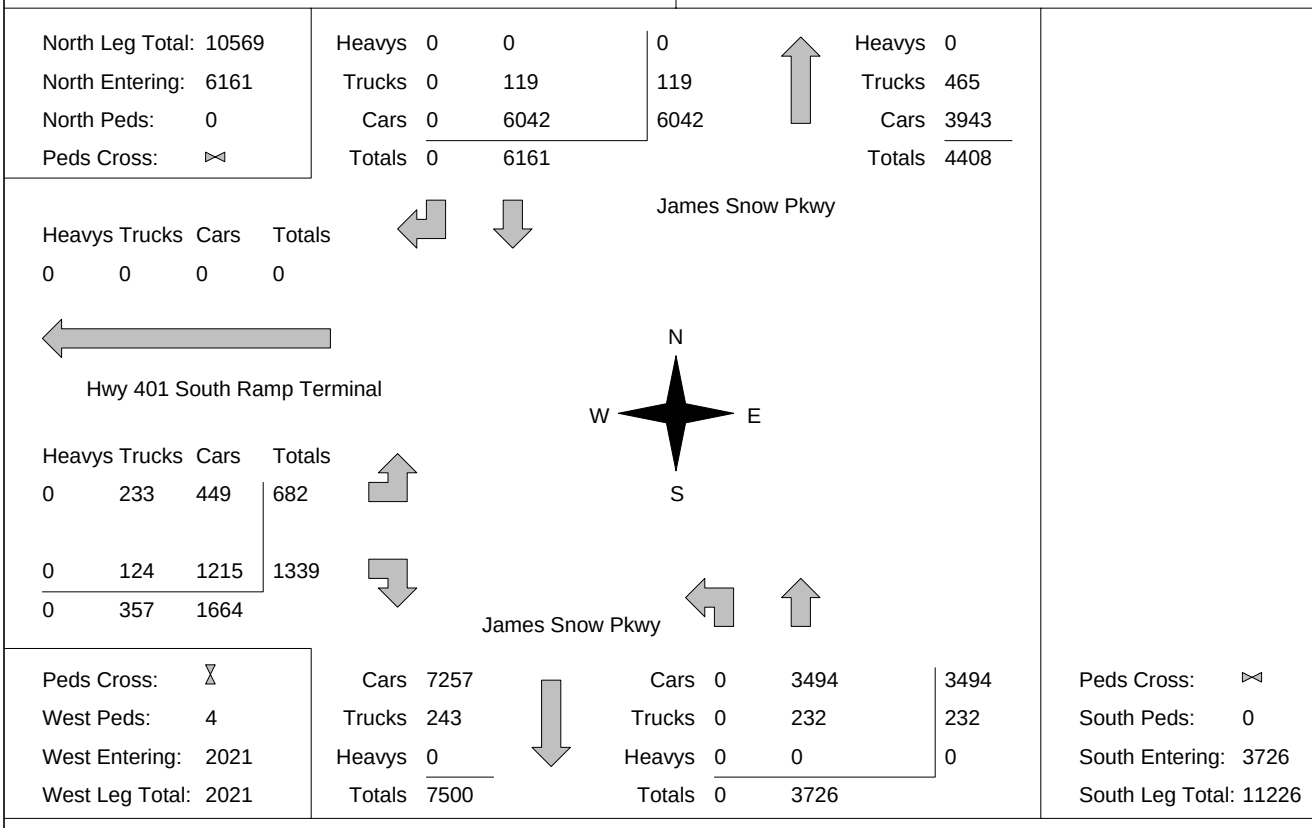
Municipality: Milton
Site #: 1711400004
Intersection: James Snow Pkwy & Hwy 401 Sou
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S



Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: James Snow Pkwy & Hwy 401 So | **Count Date:** 4-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	353	0	353	0	650
8:00:00	0	549	0	549	0	1125
9:00:00	0	522	0	522	0	1080
10:00:00	0	518	0	518	0	864
15:00:00	0	0	0	0	0	0
16:00:00	0	827	0	827	0	1285
17:00:00	0	1035	0	1035	0	1542
18:00:00	0	1298	0	1298	0	1860
19:00:00	0	1059	0	1059	0	1481
Totals:	0	6161	0	6161	0	9887

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	0	297	0	297	0
8:00:00	0	576	0	576	0
9:00:00	0	558	0	558	0
10:00:00	0	346	0	346	0
15:00:00	0	0	0	0	0
16:00:00	0	458	0	458	0
17:00:00	0	507	0	507	0
18:00:00	0	562	0	562	0
19:00:00	0	422	0	422	0
Totals:	0	3726	0	3726	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	0	0	0	0	215
8:00:00	0	0	0	0	0	309
9:00:00	0	0	0	0	0	389
10:00:00	0	0	0	0	0	164
15:00:00	0	0	0	0	0	0
16:00:00	0	0	0	0	0	236
17:00:00	0	0	0	0	0	224
18:00:00	0	0	0	0	0	274
19:00:00	0	0	0	0	0	210
Totals:	0	0	0	0	0	2021

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	69	0	146	215	0
8:00:00	112	0	197	309	2
9:00:00	169	0	220	389	1
10:00:00	64	0	100	164	0
15:00:00	0	0	0	0	0
16:00:00	96	0	140	236	0
17:00:00	55	0	169	224	0
18:00:00	65	0	209	274	1
19:00:00	52	0	158	210	0
Totals:	682	0	1339	2021	4

Calculated Values for Traffic Crossing Major Street

Hours Ending:	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00
Crossing Values:	69	112	169	64	96	55	65	52

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400004

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	49	49	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	132	83	0	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	223	91	0	0	0	0	12	7	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	336	113	0	0	0	0	17	5	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	458	122	0	0	0	0	23	6	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	593	135	0	0	0	0	28	5	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	721	128	0	0	0	0	34	6	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	863	142	0	0	0	0	39	5	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	996	133	0	0	0	0	42	3	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1123	127	0	0	0	0	45	3	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	1242	119	0	0	0	0	56	11	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	1363	121	0	0	0	0	61	5	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	1491	128	0	0	0	0	68	7	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	1617	126	0	0	0	0	74	6	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	1738	121	0	0	0	0	81	7	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	1851	113	0	0	0	0	91	10	0	0	0	0	0	0	0	0	0	0
10:02:21	0	0	1851	0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1851	0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2079	228	0	0	0	0	93	2	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	2275	196	0	0	0	0	95	2	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	2471	196	0	0	0	0	101	6	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	2667	196	0	0	0	0	102	1	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	2898	231	0	0	0	0	103	1	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	3153	255	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	3411	258	0	0	0	0	106	3	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	3697	286	0	0	0	0	107	1	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	3997	300	0	0	0	0	110	3	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	4346	349	0	0	0	0	113	3	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	4685	339	0	0	0	0	113	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	4988	303	0	0	0	0	114	1	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	5283	295	0	0	0	0	114	0	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	5555	272	0	0	0	0	117	3	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	5782	227	0	0	0	0	118	1	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	6042	260	0	0	0	0	119	1	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	6042	0	0	0	0	0	119	0	0	0	0	0	0	0	0	0	0	0
19:17:01	0	0	6042	0	0	0	0	0	119	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400004

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10:02:21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	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
19:17:01	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: 4-May-17 Site #: 1711400004

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	41	41	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	105	64	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	189	84	0	0	0	0	10	4	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	275	86	0	0	0	0	22	12	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	385	110	0	0	0	0	30	8	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	522	137	0	0	0	0	36	6	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	673	151	0	0	0	0	40	4	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	826	153	0	0	0	0	47	7	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	961	135	0	0	0	0	64	17	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1105	144	0	0	0	0	77	13	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	1211	106	0	0	0	0	89	12	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	1326	115	0	0	0	0	105	16	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	1417	91	0	0	0	0	117	12	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	1494	77	0	0	0	0	128	11	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	1549	55	0	0	0	0	142	14	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	1624	75	0	0	0	0	153	11	0	0	0	0	0	0	0	0	0	0
10:02:21	0	0	1624	0	0	0	0	0	153	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1624	0	0	0	0	0	153	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1715	91	0	0	0	0	163	10	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	1814	99	0	0	0	0	167	4	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	1930	116	0	0	0	0	175	8	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	2054	124	0	0	0	0	181	6	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	2170	116	0	0	0	0	193	12	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	2290	120	0	0	0	0	202	9	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	2398	108	0	0	0	0	205	3	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	2536	138	0	0	0	0	206	1	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	2667	131	0	0	0	0	211	5	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	2809	142	0	0	0	0	217	6	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	2953	144	0	0	0	0	218	1	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	3085	132	0	0	0	0	219	1	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	3201	116	0	0	0	0	223	4	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	3316	115	0	0	0	0	225	2	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	3397	81	0	0	0	0	227	2	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	3494	97	0	0	0	0	232	5	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	3494	0	0	0	0	0	232	0	0	0	0	0	0	0	0	0	0	0
19:17:01	0	0	3494	0	0	0	0	0	232	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400004

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	6	6	0	0	18	18	6	6	0	0	2	2	0	0	0	0	0	0	0	0
6:30:00	12	6	0	0	54	36	9	3	0	0	3	1	0	0	0	0	0	0	0	0
6:45:00	30	18	0	0	82	28	13	4	0	0	9	6	0	0	0	0	0	0	0	0
7:00:00	49	19	0	0	132	50	20	7	0	0	14	5	0	0	0	0	0	0	0	0
7:15:00	61	12	0	0	163	31	22	2	0	0	18	4	0	0	0	0	0	0	2	2
7:30:00	85	24	0	0	212	49	26	4	0	0	18	0	0	0	0	0	0	0	2	0
7:45:00	107	22	0	0	259	47	30	4	0	0	24	6	0	0	0	0	0	0	2	0
8:00:00	141	34	0	0	315	56	40	10	0	0	28	4	0	0	0	0	0	0	2	0
8:15:00	175	34	0	0	369	54	49	9	0	0	34	6	0	0	0	0	0	0	3	1
8:30:00	207	32	0	0	433	64	70	21	0	0	40	6	0	0	0	0	0	0	3	0
8:45:00	246	39	0	0	482	49	82	12	0	0	46	6	0	0	0	0	0	0	3	0
9:00:00	259	13	0	0	509	27	91	9	0	0	54	8	0	0	0	0	0	0	3	0
9:15:00	269	10	0	0	528	19	101	10	0	0	60	6	0	0	0	0	0	0	3	0
9:30:00	276	7	0	0	545	17	107	6	0	0	65	5	0	0	0	0	0	0	3	0
9:45:00	287	11	0	0	563	18	113	6	0	0	68	3	0	0	0	0	0	0	3	0
10:00:00	291	4	0	0	587	24	123	10	0	0	76	8	0	0	0	0	0	0	3	0
10:02:21	291	0	0	0	587	0	123	0	0	0	76	0	0	0	0	0	0	0	3	0
15:00:00	291	0	0	0	587	0	123	0	0	0	76	0	0	0	0	0	0	0	3	0
15:15:00	305	14	0	0	616	29	134	11	0	0	79	3	0	0	0	0	0	0	3	0
15:30:00	320	15	0	0	654	38	147	13	0	0	85	6	0	0	0	0	0	0	3	0
15:45:00	340	20	0	0	685	31	156	9	0	0	91	6	0	0	0	0	0	0	3	0
16:00:00	349	9	0	0	709	24	161	5	0	0	94	3	0	0	0	0	0	0	3	0
16:15:00	358	9	0	0	742	33	170	9	0	0	98	4	0	0	0	0	0	0	3	0
16:30:00	364	6	0	0	788	46	177	7	0	0	104	6	0	0	0	0	0	0	3	0
16:45:00	369	5	0	0	835	47	184	7	0	0	107	3	0	0	0	0	0	0	3	0
17:00:00	374	5	0	0	863	28	191	7	0	0	109	2	0	0	0	0	0	0	3	0
17:15:00	388	14	0	0	905	42	195	4	0	0	113	4	0	0	0	0	0	0	3	0
17:30:00	397	9	0	0	954	49	202	7	0	0	113	0	0	0	0	0	0	0	3	0
17:45:00	409	12	0	0	1010	56	209	7	0	0	116	3	0	0	0	0	0	0	3	0
18:00:00	415	6	0	0	1065	55	215	6	0	0	116	0	0	0	0	0	0	0	4	1
18:15:00	425	10	0	0	1103	38	218	3	0	0	120	4	0	0	0	0	0	0	4	0
18:30:00	434	9	0	0	1146	43	221	3	0	0	121	1	0	0	0	0	0	0	4	0
18:45:00	442	8	0	0	1192	46	226	5	0	0	122	1	0	0	0	0	0	0	4	0
19:00:00	449	7	0	0	1215	23	233	7	0	0	124	2	0	0	0	0	0	0	4	0
19:15:00	449	0	0	0	1215	0	233	0	0	0	124	0	0	0	0	0	0	0	4	0
19:17:01	449	0	0	0	1215	0	233	0	0	0	124	0	0	0	0	0	0	0	4	0

Eighth Line @ 5 Side Road

Total Count Diagram

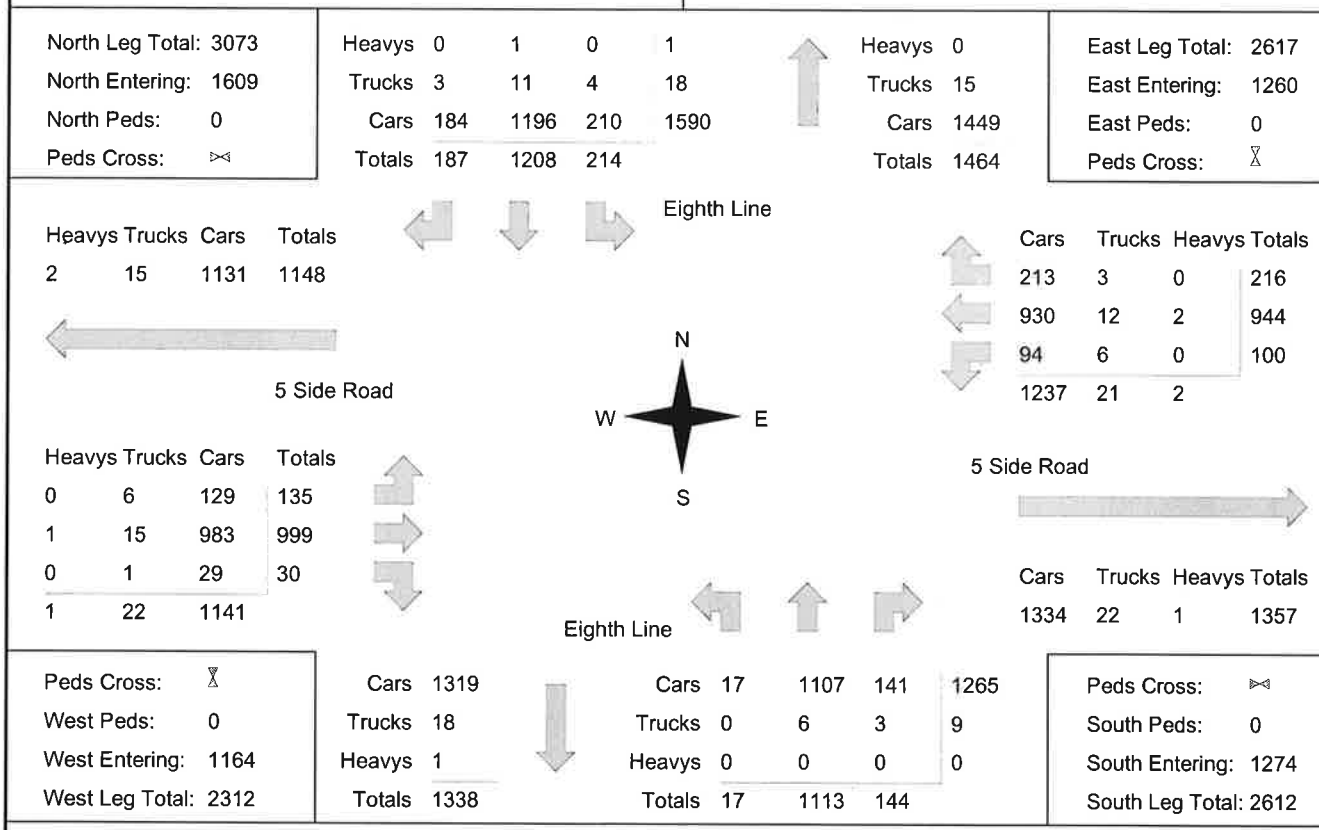
Municipality: Town of Halton Hills
Site #: 0000000177
Intersection: Eighth Line & 5 Side Road
TFR File #: 16
Count date: 23-Sep-14

Weather conditions:
Sunny / Dry

Person(s) who counted:
Roumen Kotev

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

Major Road: Eighth Line runs N/S



Comments

Eighth Line @ 5 Side Road

Morning Peak Diagram

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

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

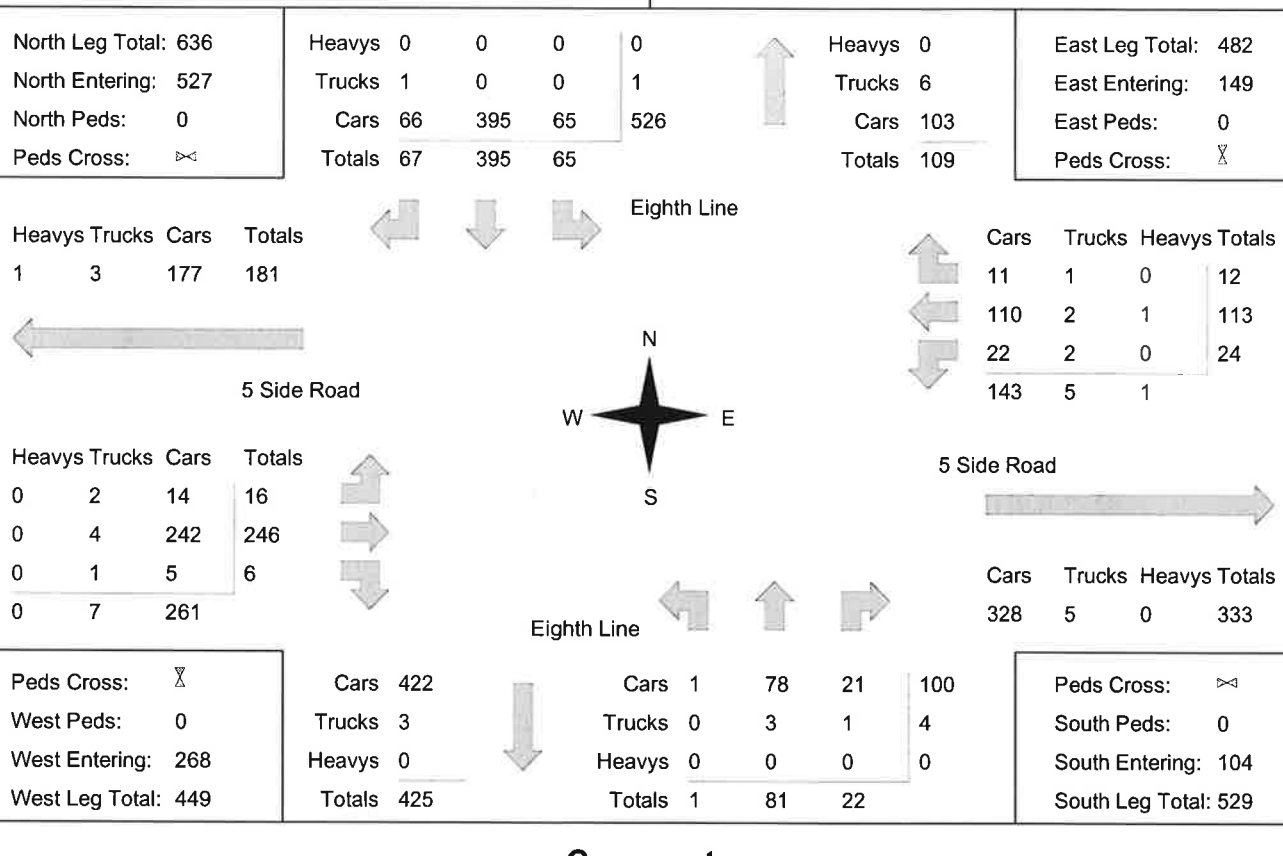
Municipality: Town of Halton Hills
Site #: 0000000177
Intersection: Eighth Line & 5 Side Road
TFR File #: 16
Count date: 23-Sep-14

Weather conditions:
Sunny / Dry

Person(s) who counted:
Roumen Kotev

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

Major Road: Eighth Line runs N/S



Comments

Eighth Line @ 5 Side Road

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

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

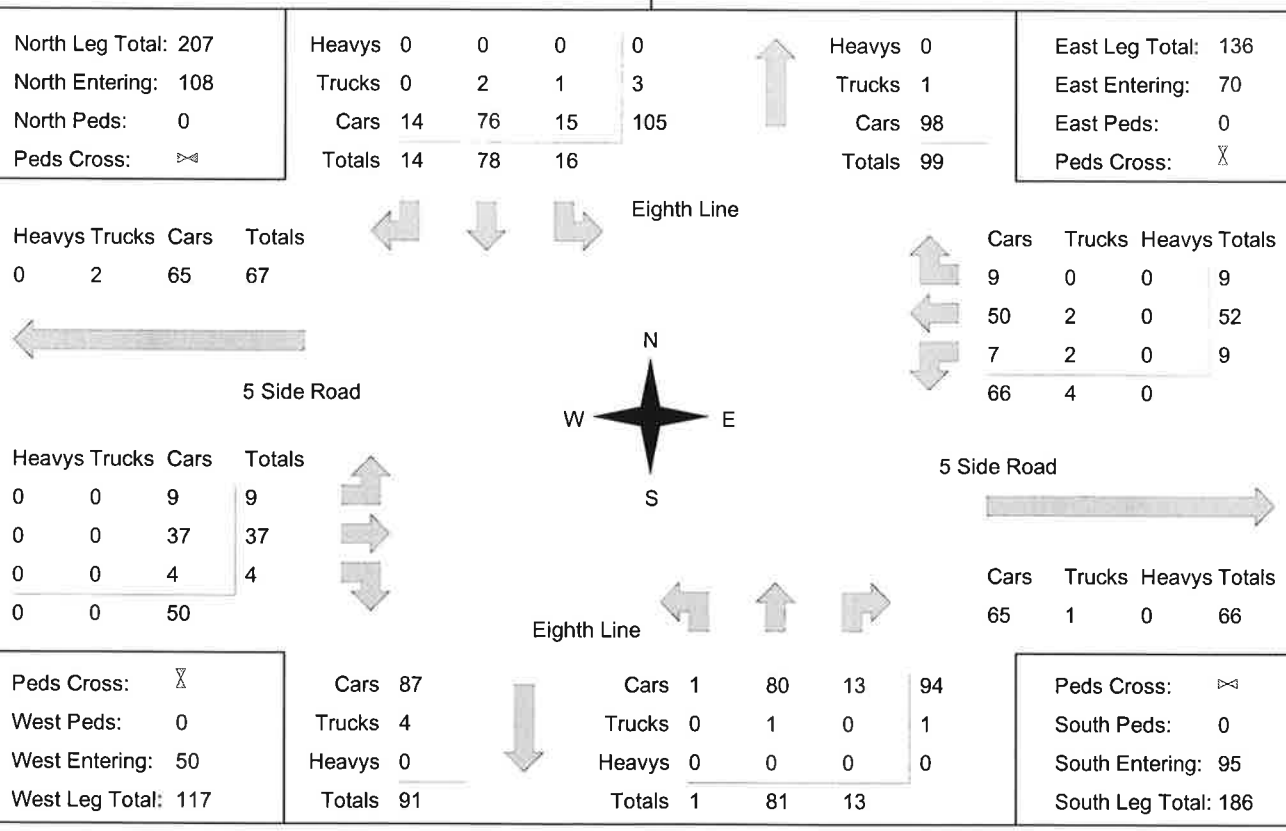
Municipality: Town of Halton Hills
Site #: 0000000177
Intersection: Eighth Line & 5 Side Road
TFR File #: 16
Count date: 23-Sep-14

Weather conditions:
Sunny / Dry

Person(s) who counted:
Roumen Kotev

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

Major Road: Eighth Line runs N/S



Comments

Eighth Line @ 5 Side Road

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

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

Municipality: Town of Halton Hills
Site #: 0000000177
Intersection: Eighth Line & 5 Side Road
TFR File #: 16
Count date: 23-Sep-14

Weather conditions:
Sunny / Dry

Person(s) who counted:
Roumen Kotev

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

Major Road: Eighth Line runs N/S

North Leg Total: 569
North Entering: 147
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	20	111	16	147
Totals	20	111	16	

Heavys	0
Trucks	2
Cars	420
Totals	422

East Leg Total: 566
East Entering: 309
East Peds: 0
Peds Cross: ⋈

Eighth Line

Heavys	Trucks	Cars	Totals
0	1	253	254

5 Side Road

Cars	Trucks	Heavys	Totals
61	0	0	61
231	1	0	232
16	0	0	16
308	1	0	

N
W E
S

Heavys	Trucks	Cars	Totals
0	1	37	38
0	1	205	206
0	0	4	4
0	2	246	

5 Side Road

Cars	Trucks	Heavys	Totals
255	2	0	257

Eighth Line

Peds Cross: ⋈
West Peds: 0
West Entering: 248
West Leg Total: 502

Cars	131			
Trucks	0			
Heavys	0			
Totals	131			

Cars	2	322	34	358
Trucks	0	1	1	2
Heavys	0	0	0	0
Totals	2	323	35	

Peds Cross: ⋈
South Peds: 0
South Entering: 360
South Leg Total: 491

Comments

Eighth Line @ 5 Side Road
Traffic Count Summary

Intersection: Eighth Line & 5 Side Road | **Count Date:** 23-Sep-14 | **Municipality:** Town of Halton Hills

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
8:00:00	79	389	55	523	0	599
9:00:00	49	289	40	378	0	472
11:00:00	0	0	0	0	0	0
12:00:00	13	80	13	106	0	175
13:00:00	15	78	12	105	0	190
14:00:00	13	70	10	93	0	191
15:00:00	0	0	0	0	0	0
16:00:00	15	98	22	135	0	329
17:00:00	15	106	17	138	0	413
18:00:00	15	98	18	131	0	514
Totals:	214	1208	187	1609	0	2883

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
8:00:00	1	60	15	76	0
9:00:00	4	73	17	94	0
11:00:00	0	0	0	0	0
12:00:00	1	58	10	69	0
13:00:00	1	74	10	85	0
14:00:00	0	93	5	98	0
15:00:00	0	0	0	0	0
16:00:00	2	172	20	194	0
17:00:00	6	239	30	275	0
18:00:00	2	344	37	383	0
Totals:	17	1113	144	1274	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
8:00:00	22	96	7	125	0	355
9:00:00	14	97	8	119	0	347
11:00:00	0	0	0	0	0	0
12:00:00	9	49	20	78	0	115
13:00:00	6	53	8	67	0	115
14:00:00	9	45	12	66	0	123
15:00:00	0	0	0	0	0	0
16:00:00	10	153	41	204	0	340
17:00:00	11	205	61	277	0	487
18:00:00	19	246	59	324	0	542
Totals:	100	944	216	1260	0	2424

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
8:00:00	11	218	1	230	0
9:00:00	13	205	10	228	0
11:00:00	0	0	0	0	0
12:00:00	6	26	5	37	0
13:00:00	8	37	3	48	0
14:00:00	6	50	1	57	0
15:00:00	0	0	0	0	0
16:00:00	21	111	4	136	0
17:00:00	31	176	3	210	0
18:00:00	39	176	3	218	0
Totals:	135	999	30	1164	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00
Crossing Values:	251	232	64	67	65	184	247	304

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016

Turning Movement Data

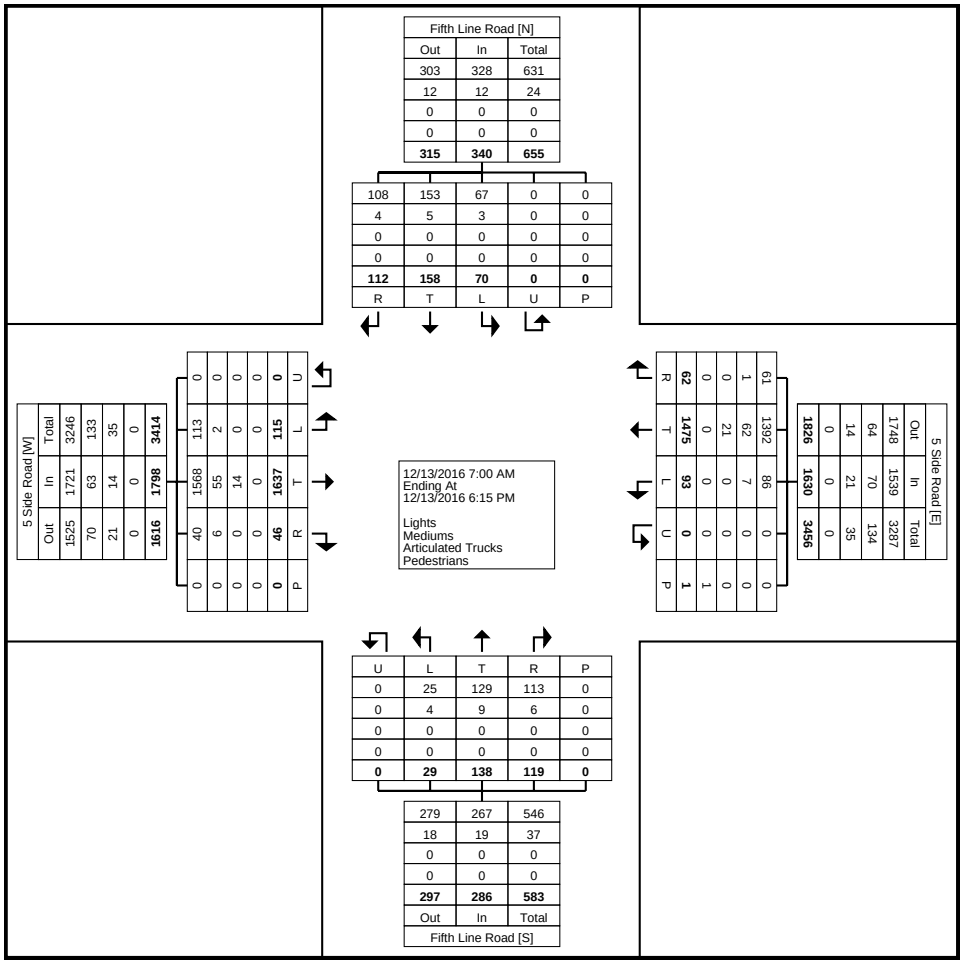
Start Time	5 Side Road Eastbound						5 Side Road Westbound						Fifth Line Road Northbound						Fifth Line Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	2	60	3	0	0	65	4	33	0	0	0	37	0	2	3	0	0	5	7	8	2	0	0	17	124
7:15 AM	1	106	4	0	0	111	4	40	0	0	0	44	1	4	5	0	0	10	5	10	7	0	0	22	187
7:30 AM	1	129	1	0	0	131	7	46	0	0	0	53	0	6	3	0	0	9	13	10	10	0	0	33	226
7:45 AM	5	129	4	0	0	138	9	45	1	0	0	55	1	1	4	0	0	6	8	14	8	0	0	30	229
Hourly Total	9	424	12	0	0	445	24	164	1	0	0	189	2	13	15	0	0	30	33	42	27	0	0	102	766
8:00 AM	1	165	3	0	0	169	2	27	1	0	0	30	2	8	5	0	0	15	12	15	2	0	0	29	243
8:15 AM	3	140	3	0	0	146	4	42	1	0	0	47	1	5	7	0	0	13	3	7	5	0	0	15	221
8:30 AM	4	104	2	0	0	110	8	29	2	0	0	39	2	2	7	0	0	11	2	4	8	0	0	14	174
8:45 AM	2	69	2	0	0	73	3	26	1	0	0	30	1	2	4	0	0	7	2	6	4	0	0	12	122
Hourly Total	10	478	10	0	0	498	17	124	5	0	0	146	6	17	23	0	0	46	19	32	19	0	0	70	760
9:00 AM	5	39	1	0	0	45	1	26	2	0	0	29	0	1	3	0	0	4	1	2	2	0	0	5	83
9:15 AM	1	34	0	0	0	35	2	15	1	0	0	18	0	1	4	0	0	5	4	2	2	0	0	8	66
9:30 AM	0	21	0	0	0	21	0	21	0	0	0	21	2	4	1	0	0	7	3	1	6	0	0	10	59
9:45 AM	1	18	0	0	0	19	0	11	0	0	0	11	1	0	1	0	0	2	0	2	2	0	0	4	36
Hourly Total	7	112	1	0	0	120	3	73	3	0	0	79	3	6	9	0	0	18	8	7	12	0	0	27	244
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	2	19	1	0	0	22	1	28	0	0	0	29	0	1	2	0	0	3	3	1	1	0	0	5	59
11:15 AM	1	14	0	0	0	15	3	14	0	0	0	17	1	1	2	0	0	4	1	3	3	0	0	7	43
11:30 AM	1	9	0	0	0	10	1	25	0	0	0	26	0	2	4	0	0	6	0	3	3	0	0	6	48
11:45 AM	1	14	0	0	0	15	1	19	0	0	0	20	0	5	2	0	0	7	1	1	2	0	0	4	46
Hourly Total	5	56	1	0	0	62	6	86	0	0	0	92	1	9	10	0	0	20	5	8	9	0	0	22	196
12:00 PM	1	13	1	0	0	15	3	10	0	0	0	13	1	1	2	0	0	4	0	4	4	0	0	8	40
12:15 PM	1	17	3	0	0	21	0	23	0	0	0	23	0	1	2	0	0	3	1	2	3	0	0	6	53
12:30 PM	3	17	4	0	0	24	1	23	1	0	0	25	1	2	5	0	0	8	0	4	1	0	0	5	62
12:45 PM	1	16	1	0	0	18	0	19	1	0	0	20	0	3	2	0	0	5	0	3	1	0	0	4	47
Hourly Total	6	63	9	0	0	78	4	75	2	0	0	81	2	7	11	0	0	20	1	13	9	0	0	23	202
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	7	42	3	0	0	52	3	28	3	0	0	34	0	3	7	0	0	10	0	2	2	0	0	4	100
3:15 PM	2	28	1	0	0	31	3	49	2	0	0	54	1	3	3	0	0	7	0	2	6	0	0	8	100
3:30 PM	3	33	2	0	0	38	3	43	3	0	0	49	1	2	3	0	0	6	0	5	1	0	0	6	99
3:45 PM	2	51	2	0	0	55	1	69	5	0	0	75	0	4	3	0	0	7	1	5	2	0	0	8	145
Hourly Total	14	154	8	0	0	176	10	189	13	0	0	212	2	12	16	0	0	30	1	14	11	0	0	26	444
4:00 PM	10	49	0	0	0	59	3	83	4	0	0	90	3	15	7	0	0	25	0	8	5	0	0	13	187
4:15 PM	9	43	1	0	0	53	7	79	5	0	0	91	1	8	3	0	0	12	1	1	1	0	0	3	159
4:30 PM	8	59	0	0	0	67	4	84	1	0	0	89	3	18	2	0	0	23	0	8	5	0	0	13	192

4:45 PM	8	37	1	0	0	46	6	84	7	0	0	97	1	7	9	0	0	17	0	6	2	0	0	8	168
Hourly Total	35	188	2	0	0	225	20	330	17	0	0	367	8	48	21	0	0	77	1	23	13	0	0	37	706
5:00 PM	9	60	1	0	0	70	2	112	8	0	0	122	1	6	5	0	0	12	0	5	4	0	0	9	213
5:15 PM	9	35	2	0	0	46	2	125	3	0	0	130	1	7	5	0	0	13	1	7	1	0	0	9	198
5:30 PM	8	38	0	0	0	46	2	122	5	0	0	129	1	8	0	0	0	9	0	3	3	0	0	6	190
5:45 PM	3	29	0	0	0	32	3	75	5	0	1	83	2	5	4	0	0	11	1	4	4	0	0	9	135
Hourly Total	29	162	3	0	0	194	9	434	21	0	1	464	5	26	14	0	0	45	2	19	12	0	0	33	736
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	115	1637	46	0	0	1798	93	1475	62	0	1	1630	29	138	119	0	0	286	70	158	112	0	0	340	4054
Approach %	6.4	91.0	2.6	0.0	-	-	5.7	90.5	3.8	0.0	-	-	10.1	48.3	41.6	0.0	-	-	20.6	46.5	32.9	0.0	-	-	-
Total %	2.8	40.4	1.1	0.0	-	44.4	2.3	36.4	1.5	0.0	-	40.2	0.7	3.4	2.9	0.0	-	7.1	1.7	3.9	2.8	0.0	-	8.4	-
Lights	113	1568	40	0	-	1721	86	1392	61	0	-	1539	25	129	113	0	-	267	67	153	108	0	-	328	3855
% Lights	98.3	95.8	87.0	-	-	95.7	92.5	94.4	98.4	-	-	94.4	86.2	93.5	95.0	-	-	93.4	95.7	96.8	96.4	-	-	96.5	95.1
Mediums	2	55	6	0	-	63	7	62	1	0	-	70	4	9	6	0	-	19	3	5	4	0	-	12	164
% Mediums	1.7	3.4	13.0	-	-	3.5	7.5	4.2	1.6	-	-	4.3	13.8	6.5	5.0	-	-	6.6	4.3	3.2	3.6	-	-	3.5	4.0
Articulated Trucks	0	14	0	0	-	14	0	21	0	0	-	21	0	0	0	0	-	0	0	0	0	0	-	0	35
% Articulated Trucks	0.0	0.9	0.0	-	-	0.8	0.0	1.4	0.0	-	-	1.3	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.9
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016

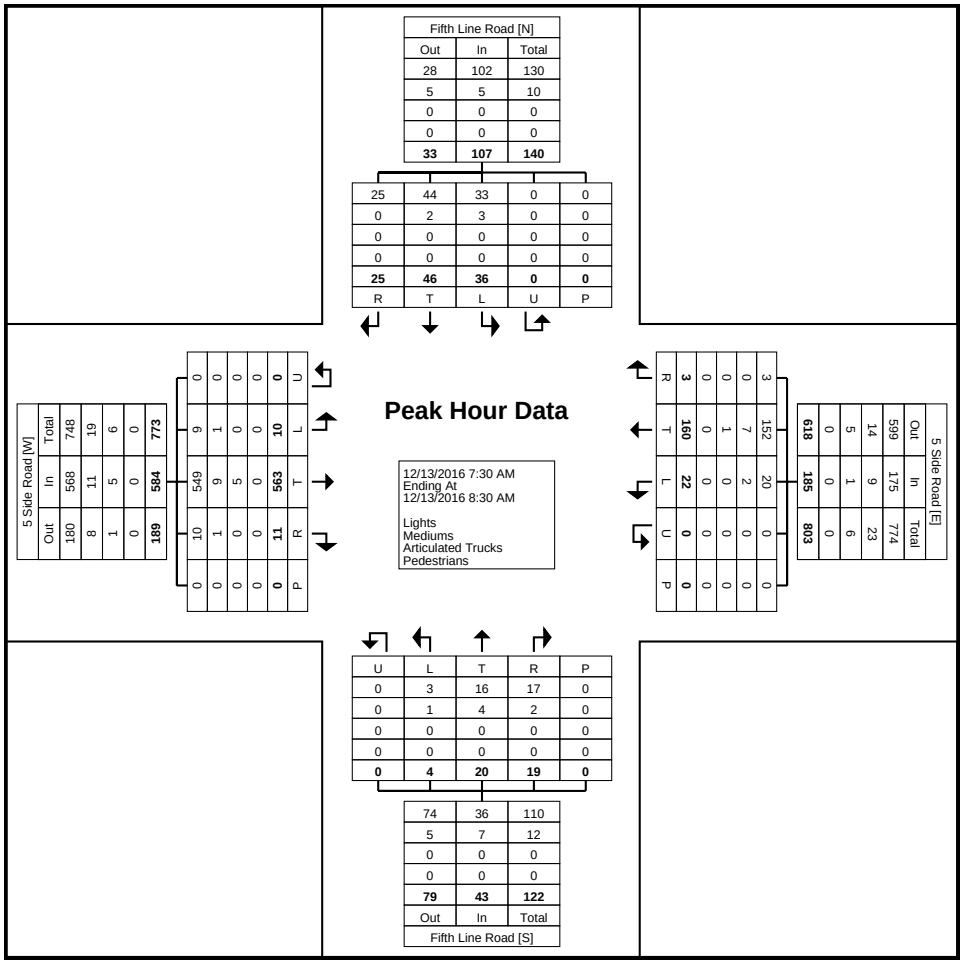
Turning Movement Peak Hour Data (7:30 AM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Fifth Line Road Northbound						Fifth Line Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	1	129	1	0	0	131	7	46	0	0	0	53	0	6	3	0	0	9	13	10	10	0	0	33	226
7:45 AM	5	129	4	0	0	138	9	45	1	0	0	55	1	1	4	0	0	6	8	14	8	0	0	30	229
8:00 AM	1	165	3	0	0	169	2	27	1	0	0	30	2	8	5	0	0	15	12	15	2	0	0	29	243
8:15 AM	3	140	3	0	0	146	4	42	1	0	0	47	1	5	7	0	0	13	3	7	5	0	0	15	221
Total	10	563	11	0	0	584	22	160	3	0	0	185	4	20	19	0	0	43	36	46	25	0	0	107	919
Approach %	1.7	96.4	1.9	0.0	-	-	11.9	86.5	1.6	0.0	-	-	9.3	46.5	44.2	0.0	-	-	33.6	43.0	23.4	0.0	-	-	-
Total %	1.1	61.3	1.2	0.0	-	63.5	2.4	17.4	0.3	0.0	-	20.1	0.4	2.2	2.1	0.0	-	4.7	3.9	5.0	2.7	0.0	-	11.6	-
PHF	0.500	0.853	0.688	0.000	-	0.864	0.611	0.870	0.750	0.000	-	0.841	0.500	0.625	0.679	0.000	-	0.717	0.692	0.767	0.625	0.000	-	0.811	0.945
Lights	9	549	10	0	-	568	20	152	3	0	-	175	3	16	17	0	-	36	33	44	25	0	-	102	881
% Lights	90.0	97.5	90.9	-	-	97.3	90.9	95.0	100.0	-	-	94.6	75.0	80.0	89.5	-	-	83.7	91.7	95.7	100.0	-	-	95.3	95.9
Mediums	1	9	1	0	-	11	2	7	0	0	-	9	1	4	2	0	-	7	3	2	0	0	-	5	32
% Mediums	10.0	1.6	9.1	-	-	1.9	9.1	4.4	0.0	-	-	4.9	25.0	20.0	10.5	-	-	16.3	8.3	4.3	0.0	-	-	4.7	3.5
Articulated Trucks	0	5	0	0	-	5	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	6
% Articulated Trucks	0.0	0.9	0.0	-	-	0.9	0.0	0.6	0.0	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.7
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016

Turning Movement Peak Hour Data (11:00 AM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Fifth Line Road Northbound						Fifth Line Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	2	19	1	0	0	22	1	28	0	0	0	29	0	1	2	0	0	3	3	1	1	0	0	5	59
11:15 AM	1	14	0	0	0	15	3	14	0	0	0	17	1	1	2	0	0	4	1	3	3	0	0	7	43
11:30 AM	1	9	0	0	0	10	1	25	0	0	0	26	0	2	4	0	0	6	0	3	3	0	0	6	48
11:45 AM	1	14	0	0	0	15	1	19	0	0	0	20	0	5	2	0	0	7	1	1	2	0	0	4	46
Total	5	56	1	0	0	62	6	86	0	0	0	92	1	9	10	0	0	20	5	8	9	0	0	22	196
Approach %	8.1	90.3	1.6	0.0	-	-	6.5	93.5	0.0	0.0	-	-	5.0	45.0	50.0	0.0	-	-	22.7	36.4	40.9	0.0	-	-	-
Total %	2.6	28.6	0.5	0.0	-	31.6	3.1	43.9	0.0	0.0	-	46.9	0.5	4.6	5.1	0.0	-	10.2	2.6	4.1	4.6	0.0	-	11.2	-
PHF	0.625	0.737	0.250	0.000	-	0.705	0.500	0.768	0.000	0.000	-	0.793	0.250	0.450	0.625	0.000	-	0.714	0.417	0.667	0.750	0.000	-	0.786	0.831
Lights	5	50	1	0	-	56	5	74	0	0	-	79	1	8	10	0	-	19	5	8	9	0	-	22	176
% Lights	100.0	89.3	100.0	-	-	90.3	83.3	86.0	-	-	-	85.9	100.0	88.9	100.0	-	-	95.0	100.0	100.0	100.0	-	-	100.0	89.8
Mediums	0	5	0	0	-	5	1	7	0	0	-	8	0	1	0	0	-	1	0	0	0	0	-	0	14
% Mediums	0.0	8.9	0.0	-	-	8.1	16.7	8.1	-	-	-	8.7	0.0	11.1	0.0	-	-	5.0	0.0	0.0	0.0	-	-	0.0	7.1
Articulated Trucks	0	1	0	0	-	1	0	5	0	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	6
% Articulated Trucks	0.0	1.8	0.0	-	-	1.6	0.0	5.8	-	-	-	5.4	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	3.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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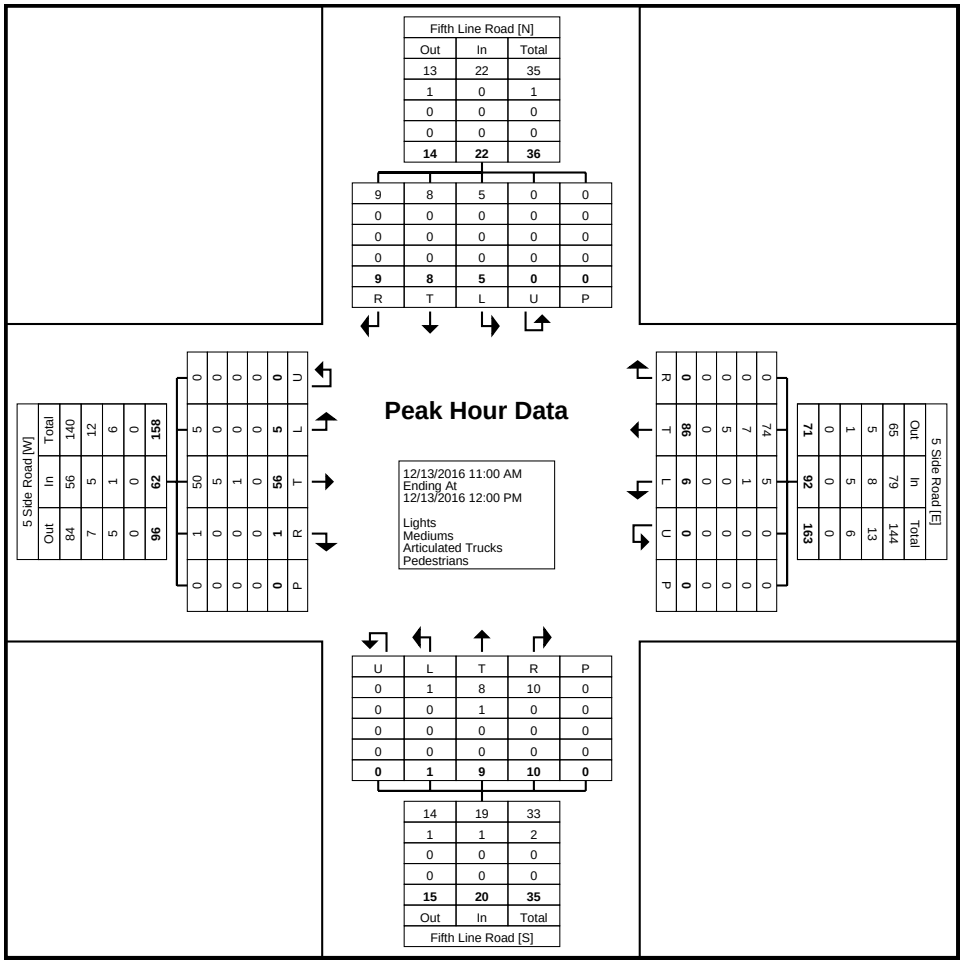
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Peak Hour Data Plot (11:00 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016

Turning Movement Peak Hour Data (12:00 PM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Fifth Line Road Northbound						Fifth Line Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:00 PM	1	13	1	0	0	15	3	10	0	0	0	13	1	1	2	0	0	4	0	4	4	0	0	8	40
12:15 PM	1	17	3	0	0	21	0	23	0	0	0	23	0	1	2	0	0	3	1	2	3	0	0	6	53
12:30 PM	3	17	4	0	0	24	1	23	1	0	0	25	1	2	5	0	0	8	0	4	1	0	0	5	62
12:45 PM	1	16	1	0	0	18	0	19	1	0	0	20	0	3	2	0	0	5	0	3	1	0	0	4	47
Total	6	63	9	0	0	78	4	75	2	0	0	81	2	7	11	0	0	20	1	13	9	0	0	23	202
Approach %	7.7	80.8	11.5	0.0	-	-	4.9	92.6	2.5	0.0	-	-	10.0	35.0	55.0	0.0	-	-	4.3	56.5	39.1	0.0	-	-	-
Total %	3.0	31.2	4.5	0.0	-	38.6	2.0	37.1	1.0	0.0	-	40.1	1.0	3.5	5.4	0.0	-	9.9	0.5	6.4	4.5	0.0	-	11.4	-
PHF	0.500	0.926	0.563	0.000	-	0.813	0.333	0.815	0.500	0.000	-	0.810	0.500	0.583	0.550	0.000	-	0.625	0.250	0.813	0.563	0.000	-	0.719	0.815
Lights	5	57	8	0	-	70	4	59	2	0	-	65	2	7	10	0	-	19	1	13	9	0	-	23	177
% Lights	83.3	90.5	88.9	-	-	89.7	100.0	78.7	100.0	-	-	80.2	100.0	100.0	90.9	-	-	95.0	100.0	100.0	100.0	-	-	100.0	87.6
Mediums	1	6	1	0	-	8	0	14	0	0	-	14	0	0	1	0	-	1	0	0	0	0	-	0	23
% Mediums	16.7	9.5	11.1	-	-	10.3	0.0	18.7	0.0	-	-	17.3	0.0	0.0	9.1	-	-	5.0	0.0	0.0	0.0	-	-	0.0	11.4
Articulated Trucks	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	2.7	0.0	-	-	2.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	1.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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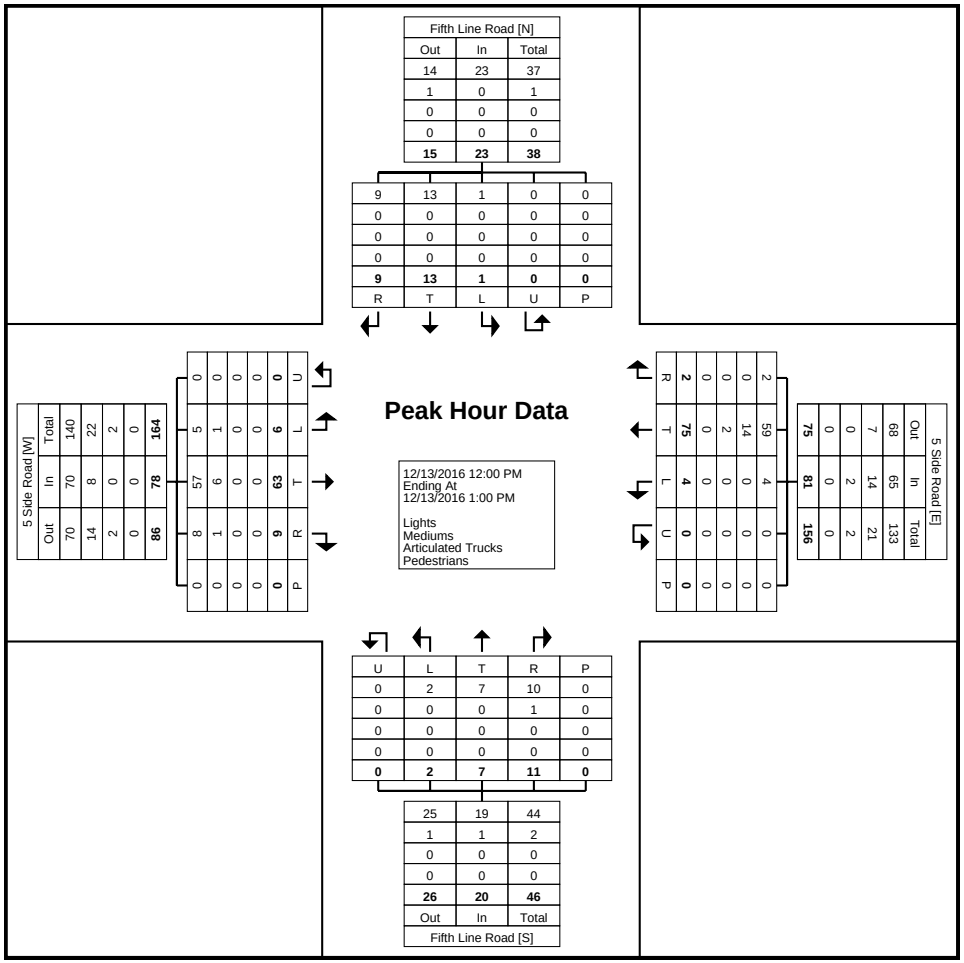
Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Peak Hour Data Plot (12:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016

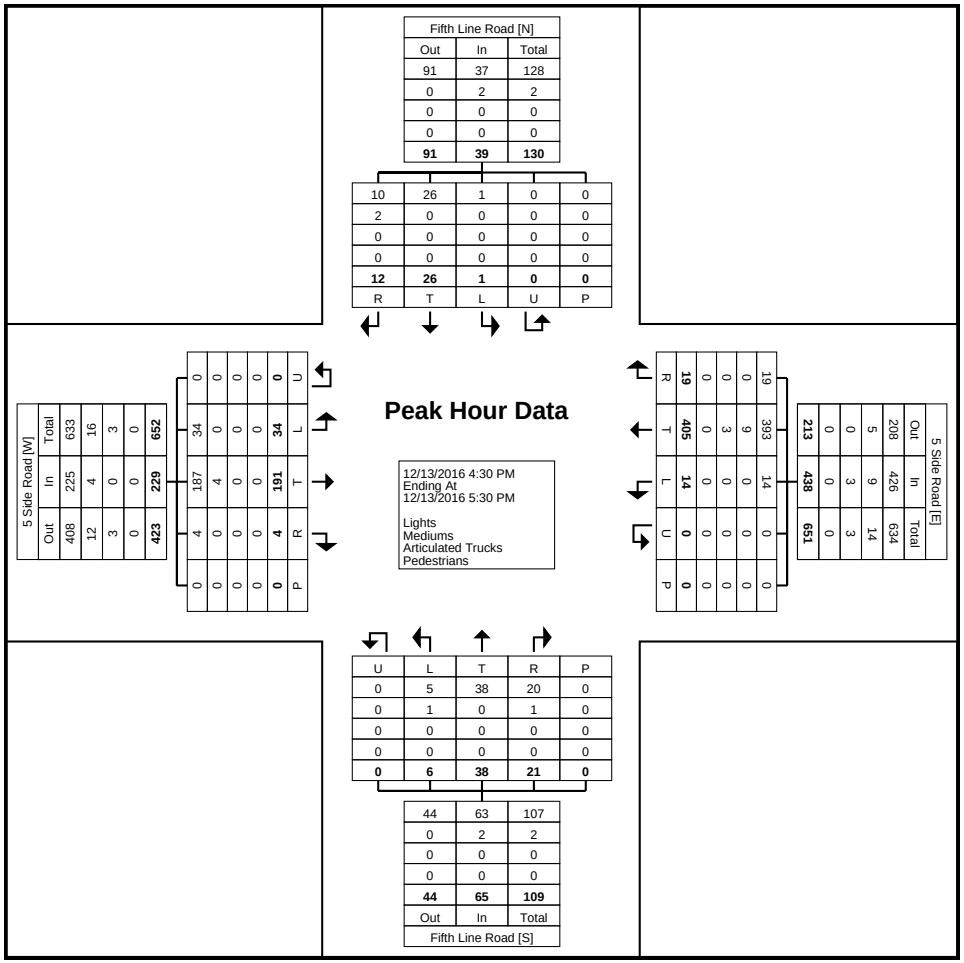
Turning Movement Peak Hour Data (4:30 PM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Fifth Line Road Northbound						Fifth Line Road Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	8	59	0	0	0	67	4	84	1	0	0	89	3	18	2	0	0	23	0	8	5	0	0	13	192
4:45 PM	8	37	1	0	0	46	6	84	7	0	0	97	1	7	9	0	0	17	0	6	2	0	0	8	168
5:00 PM	9	60	1	0	0	70	2	112	8	0	0	122	1	6	5	0	0	12	0	5	4	0	0	9	213
5:15 PM	9	35	2	0	0	46	2	125	3	0	0	130	1	7	5	0	0	13	1	7	1	0	0	9	198
Total	34	191	4	0	0	229	14	405	19	0	0	438	6	38	21	0	0	65	1	26	12	0	0	39	771
Approach %	14.8	83.4	1.7	0.0	-	-	3.2	92.5	4.3	0.0	-	-	9.2	58.5	32.3	0.0	-	-	2.6	66.7	30.8	0.0	-	-	-
Total %	4.4	24.8	0.5	0.0	-	29.7	1.8	52.5	2.5	0.0	-	56.8	0.8	4.9	2.7	0.0	-	8.4	0.1	3.4	1.6	0.0	-	5.1	-
PHF	0.944	0.796	0.500	0.000	-	0.818	0.583	0.810	0.594	0.000	-	0.842	0.500	0.528	0.583	0.000	-	0.707	0.250	0.813	0.600	0.000	-	0.750	0.905
Lights	34	187	4	0	-	225	14	393	19	0	-	426	5	38	20	0	-	63	1	26	10	0	-	37	751
% Lights	100.0	97.9	100.0	-	-	98.3	100.0	97.0	100.0	-	-	97.3	83.3	100.0	95.2	-	-	96.9	100.0	100.0	83.3	-	-	94.9	97.4
Mediums	0	4	0	0	-	4	0	9	0	0	-	9	1	0	1	0	-	2	0	0	2	0	-	2	17
% Mediums	0.0	2.1	0.0	-	-	1.7	0.0	2.2	0.0	-	-	2.1	16.7	0.0	4.8	-	-	3.1	0.0	0.0	16.7	-	-	5.1	2.2
Articulated Trucks	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	3
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	-	-	0.7	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.4
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Peak Hour Data Plot (4:30 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Fifth Line
Site Code:
Start Date: 12/13/2016

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Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016

Turning Movement Data

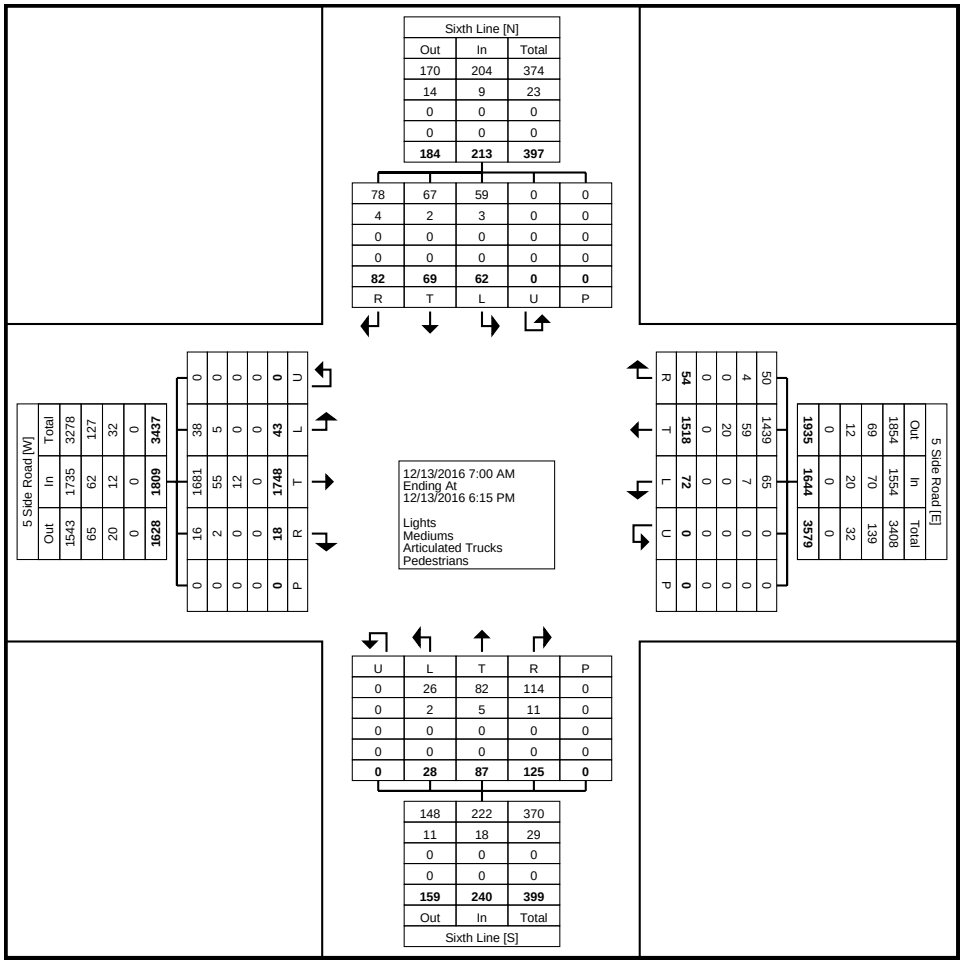
Start Time	5 Side Road Eastbound						5 Side Road Westbound						Sixth Line Northbound						Sixth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	1	66	1	0	0	68	4	34	0	0	0	38	0	1	2	0	0	3	4	0	3	0	0	7	116
7:15 AM	1	106	0	0	0	107	0	36	0	0	0	36	0	5	5	0	0	10	2	0	4	0	0	6	159
7:30 AM	1	128	0	0	0	129	0	49	1	0	0	50	0	3	5	0	0	8	4	2	5	0	0	11	198
7:45 AM	4	130	0	0	0	134	0	50	0	0	0	50	1	4	6	0	0	11	6	7	6	0	0	19	214
Hourly Total	7	430	1	0	0	438	4	169	1	0	0	174	1	13	18	0	0	32	16	9	18	0	0	43	687
8:00 AM	2	172	0	0	0	174	2	32	1	0	0	35	0	0	11	0	0	11	6	3	1	0	0	10	230
8:15 AM	0	165	1	0	0	166	6	40	1	0	0	47	0	2	8	0	0	10	4	5	4	0	0	13	236
8:30 AM	2	117	1	0	0	120	4	29	0	0	0	33	1	1	7	0	0	9	5	3	5	0	0	13	175
8:45 AM	2	81	1	0	0	84	3	27	0	0	0	30	0	0	2	0	0	2	4	3	1	0	0	8	124
Hourly Total	6	535	3	0	0	544	15	128	2	0	0	145	1	3	28	0	0	32	19	14	11	0	0	44	765
9:00 AM	3	35	0	0	0	38	2	27	1	0	0	30	2	1	3	0	0	6	0	1	0	0	0	1	75
9:15 AM	1	47	0	0	0	48	1	17	0	0	0	18	1	0	4	0	0	5	0	2	0	0	0	2	73
9:30 AM	1	22	0	0	0	23	3	21	3	0	0	27	0	0	1	0	0	1	2	0	0	0	0	2	53
9:45 AM	2	15	0	0	0	17	0	12	1	0	0	13	0	1	2	0	0	3	1	1	0	0	0	2	35
Hourly Total	7	119	0	0	0	126	6	77	5	0	0	88	3	2	10	0	0	15	3	4	0	0	0	7	236
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	3	19	0	0	0	22	0	22	1	0	0	23	2	1	1	0	0	4	4	1	2	0	0	7	56
11:15 AM	3	21	0	0	0	24	2	20	1	0	0	23	0	2	5	0	0	7	1	0	0	0	0	1	55
11:30 AM	1	8	0	0	0	9	0	22	0	0	0	22	1	3	3	0	0	7	3	0	7	0	0	10	48
11:45 AM	0	17	1	0	0	18	0	16	1	0	0	17	0	4	0	0	0	4	2	0	0	0	0	2	41
Hourly Total	7	65	1	0	0	73	2	80	3	0	0	85	3	10	9	0	0	22	10	1	9	0	0	20	200
12:00 PM	1	11	1	0	0	13	2	14	1	0	0	17	0	2	6	0	0	8	0	2	3	0	0	5	43
12:15 PM	1	16	0	0	0	17	3	19	2	0	0	24	1	2	3	0	0	6	2	1	2	0	0	5	52
12:30 PM	1	16	0	0	0	17	0	20	0	0	0	20	1	1	1	0	0	3	0	0	4	0	0	4	44
12:45 PM	0	19	0	0	0	19	1	23	2	0	0	26	1	2	2	0	0	5	0	1	0	0	0	1	51
Hourly Total	3	62	1	0	0	66	6	76	5	0	0	87	3	7	12	0	0	22	2	4	9	0	0	15	190
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	2	47	1	0	0	50	5	31	2	0	0	38	1	0	4	0	0	5	0	1	2	0	0	3	96
3:15 PM	1	30	2	0	0	33	8	43	1	0	0	52	0	7	2	0	0	9	1	6	8	0	0	15	109
3:30 PM	3	32	0	0	0	35	2	46	4	0	0	52	1	5	8	0	0	14	1	2	2	0	0	5	106
3:45 PM	0	61	1	0	0	62	3	65	1	0	0	69	5	3	2	0	0	10	1	3	3	0	0	7	148
Hourly Total	6	170	4	0	0	180	18	185	8	0	0	211	7	15	16	0	0	38	3	12	15	0	0	30	459
4:00 PM	1	46	2	0	0	49	1	83	2	0	0	86	1	2	5	0	0	8	0	4	4	0	0	8	151

4:15 PM	0	46	2	0	0	48	3	84	5	0	0	92	0	1	5	0	0	6	2	3	4	0	0	9	155
4:30 PM	1	54	2	0	0	57	5	86	6	0	0	97	2	6	4	0	0	12	1	3	3	0	0	7	173
4:45 PM	1	41	0	0	0	42	3	88	6	0	0	97	4	7	1	0	0	12	2	5	2	0	0	9	160
Hourly Total	3	187	6	0	0	196	12	341	19	0	0	372	7	16	15	0	0	38	5	15	13	0	0	33	639
5:00 PM	0	60	1	0	0	61	2	107	6	0	0	115	0	5	7	0	0	12	3	3	1	0	0	7	195
5:15 PM	0	50	1	0	0	51	3	141	3	0	0	147	1	5	5	0	0	11	0	3	2	0	0	5	214
5:30 PM	2	39	0	0	0	41	3	120	1	0	0	124	2	9	1	0	0	12	1	2	1	0	0	4	181
5:45 PM	2	31	0	0	0	33	1	94	1	0	0	96	0	2	4	0	0	6	0	2	3	0	0	5	140
Hourly Total	4	180	2	0	0	186	9	462	11	0	0	482	3	21	17	0	0	41	4	10	7	0	0	21	730
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	43	1748	18	0	0	1809	72	1518	54	0	0	1644	28	87	125	0	0	240	62	69	82	0	0	213	3906
Approach %	2.4	96.6	1.0	0.0	-	-	4.4	92.3	3.3	0.0	-	-	11.7	36.3	52.1	0.0	-	-	29.1	32.4	38.5	0.0	-	-	-
Total %	1.1	44.8	0.5	0.0	-	46.3	1.8	38.9	1.4	0.0	-	42.1	0.7	2.2	3.2	0.0	-	6.1	1.6	1.8	2.1	0.0	-	5.5	-
Lights	38	1681	16	0	-	1735	65	1439	50	0	-	1554	26	82	114	0	-	222	59	67	78	0	-	204	3715
% Lights	88.4	96.2	88.9	-	-	95.9	90.3	94.8	92.6	-	-	94.5	92.9	94.3	91.2	-	-	92.5	95.2	97.1	95.1	-	-	95.8	95.1
Mediums	5	55	2	0	-	62	7	59	4	0	-	70	2	5	11	0	-	18	3	2	4	0	-	9	159
% Mediums	11.6	3.1	11.1	-	-	3.4	9.7	3.9	7.4	-	-	4.3	7.1	5.7	8.8	-	-	7.5	4.8	2.9	4.9	-	-	4.2	4.1
Articulated Trucks	0	12	0	0	-	12	0	20	0	0	-	20	0	0	0	0	-	0	0	0	0	0	-	0	32
% Articulated Trucks	0.0	0.7	0.0	-	-	0.7	0.0	1.3	0.0	-	-	1.2	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.8
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016

Turning Movement Peak Hour Data (7:30 AM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Sixth Line Northbound						Sixth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	1	128	0	0	0	129	0	49	1	0	0	50	0	3	5	0	0	8	4	2	5	0	0	11	198
7:45 AM	4	130	0	0	0	134	0	50	0	0	0	50	1	4	6	0	0	11	6	7	6	0	0	19	214
8:00 AM	2	172	0	0	0	174	2	32	1	0	0	35	0	0	11	0	0	11	6	3	1	0	0	10	230
8:15 AM	0	165	1	0	0	166	6	40	1	0	0	47	0	2	8	0	0	10	4	5	4	0	0	13	236
Total	7	595	1	0	0	603	8	171	3	0	0	182	1	9	30	0	0	40	20	17	16	0	0	53	878
Approach %	1.2	98.7	0.2	0.0	-	-	4.4	94.0	1.6	0.0	-	-	2.5	22.5	75.0	0.0	-	-	37.7	32.1	30.2	0.0	-	-	-
Total %	0.8	67.8	0.1	0.0	-	68.7	0.9	19.5	0.3	0.0	-	20.7	0.1	1.0	3.4	0.0	-	4.6	2.3	1.9	1.8	0.0	-	6.0	-
PHF	0.438	0.865	0.250	0.000	-	0.866	0.333	0.855	0.750	0.000	-	0.910	0.250	0.563	0.682	0.000	-	0.909	0.833	0.607	0.667	0.000	-	0.697	0.930
Lights	6	580	0	0	-	586	8	162	2	0	-	172	1	9	25	0	-	35	18	17	16	0	-	51	844
% Lights	85.7	97.5	0.0	-	-	97.2	100.0	94.7	66.7	-	-	94.5	100.0	100.0	83.3	-	-	87.5	90.0	100.0	100.0	-	-	96.2	96.1
Mediums	1	11	1	0	-	13	0	8	1	0	-	9	0	0	5	0	-	5	2	0	0	0	-	2	29
% Mediums	14.3	1.8	100.0	-	-	2.2	0.0	4.7	33.3	-	-	4.9	0.0	0.0	16.7	-	-	12.5	10.0	0.0	0.0	-	-	3.8	3.3
Articulated Trucks	0	4	0	0	-	4	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	5
% Articulated Trucks	0.0	0.7	0.0	-	-	0.7	0.0	0.6	0.0	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.6
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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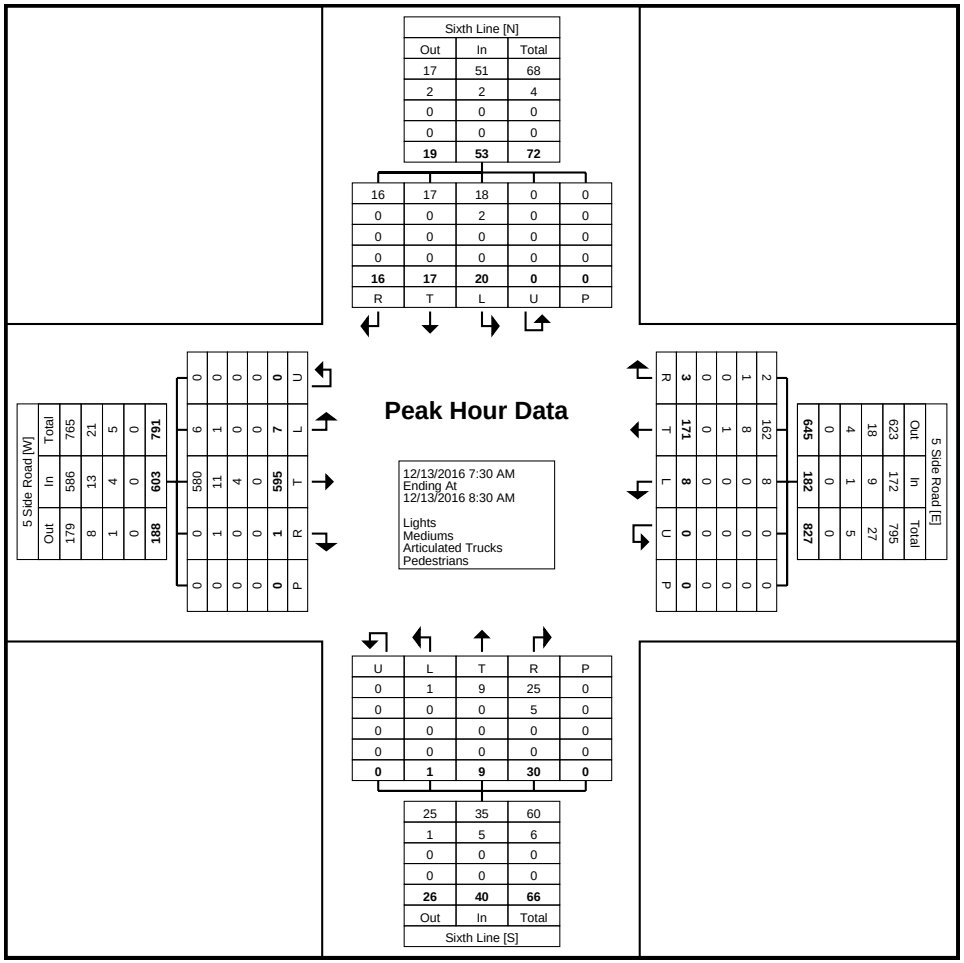

Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016

Turning Movement Peak Hour Data (11:00 AM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Sixth Line Northbound						Sixth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	3	19	0	0	0	22	0	22	1	0	0	23	2	1	1	0	0	4	4	1	2	0	0	7	56
11:15 AM	3	21	0	0	0	24	2	20	1	0	0	23	0	2	5	0	0	7	1	0	0	0	0	1	55
11:30 AM	1	8	0	0	0	9	0	22	0	0	0	22	1	3	3	0	0	7	3	0	7	0	0	10	48
11:45 AM	0	17	1	0	0	18	0	16	1	0	0	17	0	4	0	0	0	4	2	0	0	0	0	2	41
Total	7	65	1	0	0	73	2	80	3	0	0	85	3	10	9	0	0	22	10	1	9	0	0	20	200
Approach %	9.6	89.0	1.4	0.0	-	-	2.4	94.1	3.5	0.0	-	-	13.6	45.5	40.9	0.0	-	-	50.0	5.0	45.0	0.0	-	-	-
Total %	3.5	32.5	0.5	0.0	-	36.5	1.0	40.0	1.5	0.0	-	42.5	1.5	5.0	4.5	0.0	-	11.0	5.0	0.5	4.5	0.0	-	10.0	-
PHF	0.583	0.774	0.250	0.000	-	0.760	0.250	0.909	0.750	0.000	-	0.924	0.375	0.625	0.450	0.000	-	0.786	0.625	0.250	0.321	0.000	-	0.500	0.893
Lights	6	61	1	0	-	68	2	69	3	0	-	74	3	10	8	0	-	21	9	1	9	0	-	19	182
% Lights	85.7	93.8	100.0	-	-	93.2	100.0	86.3	100.0	-	-	87.1	100.0	100.0	88.9	-	-	95.5	90.0	100.0	100.0	-	-	95.0	91.0
Mediums	1	2	0	0	-	3	0	8	0	0	-	8	0	0	1	0	-	1	1	0	0	0	-	1	13
% Mediums	14.3	3.1	0.0	-	-	4.1	0.0	10.0	0.0	-	-	9.4	0.0	0.0	11.1	-	-	4.5	10.0	0.0	0.0	-	-	5.0	6.5
Articulated Trucks	0	2	0	0	-	2	0	3	0	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	5
% Articulated Trucks	0.0	3.1	0.0	-	-	2.7	0.0	3.8	0.0	-	-	3.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	2.5
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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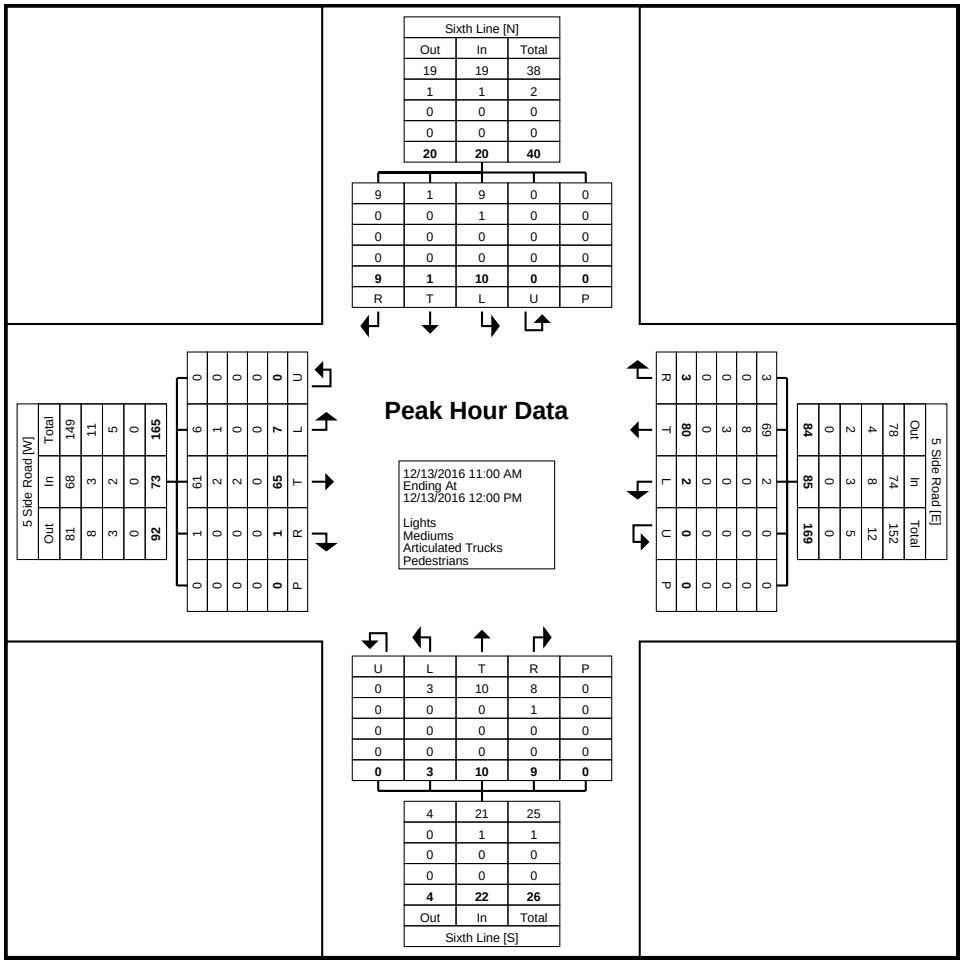


Turning Movement Peak Hour Data Plot (11:00 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016

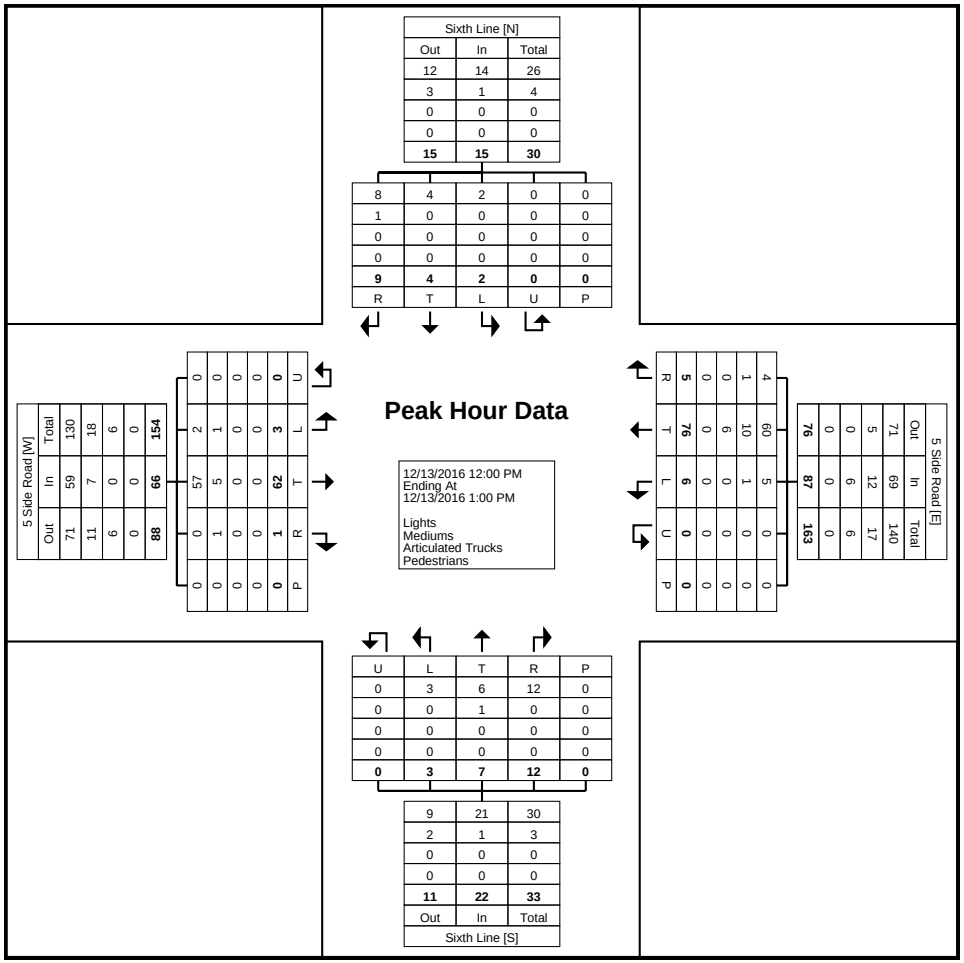
Turning Movement Peak Hour Data (12:00 PM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Sixth Line Northbound						Sixth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:00 PM	1	11	1	0	0	13	2	14	1	0	0	17	0	2	6	0	0	8	0	2	3	0	0	5	43
12:15 PM	1	16	0	0	0	17	3	19	2	0	0	24	1	2	3	0	0	6	2	1	2	0	0	5	52
12:30 PM	1	16	0	0	0	17	0	20	0	0	0	20	1	1	1	0	0	3	0	0	4	0	0	4	44
12:45 PM	0	19	0	0	0	19	1	23	2	0	0	26	1	2	2	0	0	5	0	1	0	0	0	1	51
Total	3	62	1	0	0	66	6	76	5	0	0	87	3	7	12	0	0	22	2	4	9	0	0	15	190
Approach %	4.5	93.9	1.5	0.0	-	-	6.9	87.4	5.7	0.0	-	-	13.6	31.8	54.5	0.0	-	-	13.3	26.7	60.0	0.0	-	-	-
Total %	1.6	32.6	0.5	0.0	-	34.7	3.2	40.0	2.6	0.0	-	45.8	1.6	3.7	6.3	0.0	-	11.6	1.1	2.1	4.7	0.0	-	7.9	-
PHF	0.750	0.816	0.250	0.000	-	0.868	0.500	0.826	0.625	0.000	-	0.837	0.750	0.875	0.500	0.000	-	0.688	0.250	0.500	0.563	0.000	-	0.750	0.913
Lights	2	57	0	0	-	59	5	60	4	0	-	69	3	6	12	0	-	21	2	4	8	0	-	14	163
% Lights	66.7	91.9	0.0	-	-	89.4	83.3	78.9	80.0	-	-	79.3	100.0	85.7	100.0	-	-	95.5	100.0	100.0	88.9	-	-	93.3	85.8
Mediums	1	5	1	0	-	7	1	10	1	0	-	12	0	1	0	0	-	1	0	0	1	0	-	1	21
% Mediums	33.3	8.1	100.0	-	-	10.6	16.7	13.2	20.0	-	-	13.8	0.0	14.3	0.0	-	-	4.5	0.0	0.0	11.1	-	-	6.7	11.1
Articulated Trucks	0	0	0	0	-	0	0	6	0	0	-	6	0	0	0	0	-	0	0	0	0	0	-	0	6
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	7.9	0.0	-	-	6.9	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	3.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Peak Hour Data Plot (12:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016

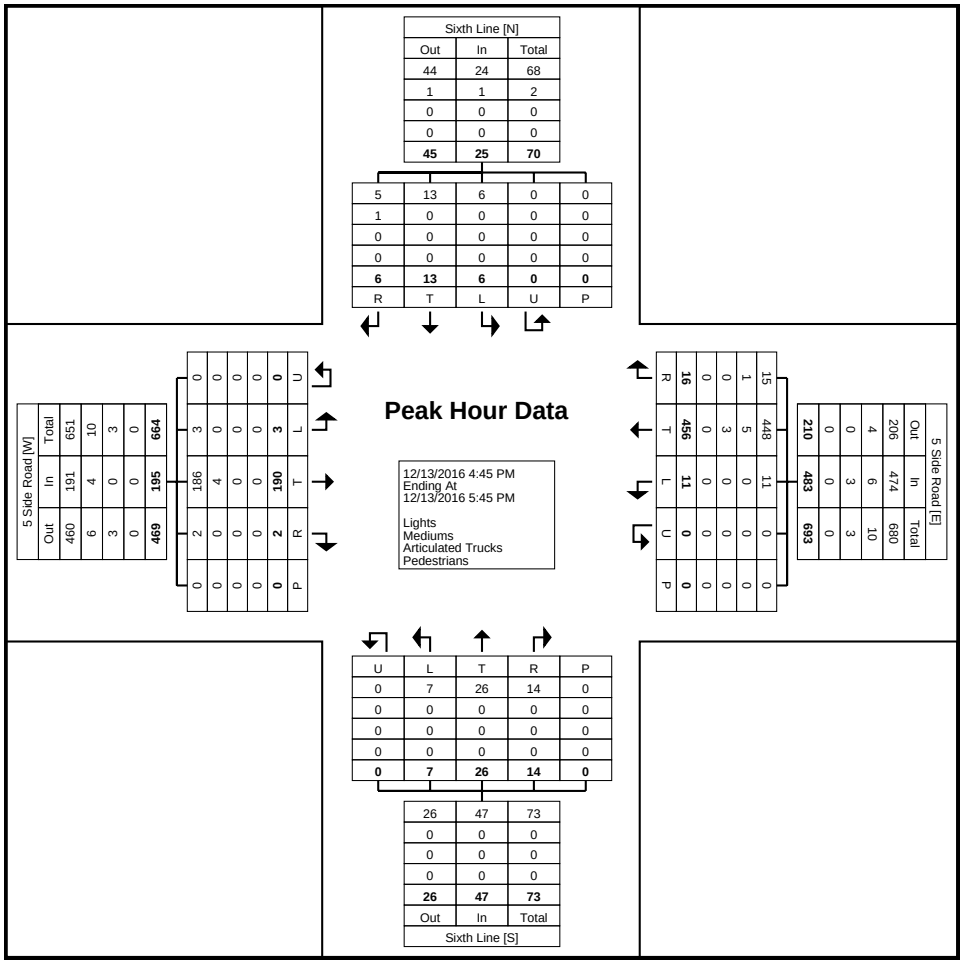
Turning Movement Peak Hour Data (4:45 PM)

Start Time	5 Side Road Eastbound						5 Side Road Westbound						Sixth Line Northbound						Sixth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	1	41	0	0	0	42	3	88	6	0	0	97	4	7	1	0	0	12	2	5	2	0	0	9	160
5:00 PM	0	60	1	0	0	61	2	107	6	0	0	115	0	5	7	0	0	12	3	3	1	0	0	7	195
5:15 PM	0	50	1	0	0	51	3	141	3	0	0	147	1	5	5	0	0	11	0	3	2	0	0	5	214
5:30 PM	2	39	0	0	0	41	3	120	1	0	0	124	2	9	1	0	0	12	1	2	1	0	0	4	181
Total	3	190	2	0	0	195	11	456	16	0	0	483	7	26	14	0	0	47	6	13	6	0	0	25	750
Approach %	1.5	97.4	1.0	0.0	-	-	2.3	94.4	3.3	0.0	-	-	14.9	55.3	29.8	0.0	-	-	24.0	52.0	24.0	0.0	-	-	-
Total %	0.4	25.3	0.3	0.0	-	26.0	1.5	60.8	2.1	0.0	-	64.4	0.9	3.5	1.9	0.0	-	6.3	0.8	1.7	0.8	0.0	-	3.3	-
PHF	0.375	0.792	0.500	0.000	-	0.799	0.917	0.809	0.667	0.000	-	0.821	0.438	0.722	0.500	0.000	-	0.979	0.500	0.650	0.750	0.000	-	0.694	0.876
Lights	3	186	2	0	-	191	11	448	15	0	-	474	7	26	14	0	-	47	6	13	5	0	-	24	736
% Lights	100.0	97.9	100.0	-	-	97.9	100.0	98.2	93.8	-	-	98.1	100.0	100.0	100.0	-	-	100.0	100.0	100.0	83.3	-	-	96.0	98.1
Mediums	0	4	0	0	-	4	0	5	1	0	-	6	0	0	0	0	-	0	0	0	1	0	-	1	11
% Mediums	0.0	2.1	0.0	-	-	2.1	0.0	1.1	6.3	-	-	1.2	0.0	0.0	0.0	-	-	0.0	0.0	0.0	16.7	-	-	4.0	1.5
Articulated Trucks	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	3
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	-	-	0.6	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.4
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016



Turning Movement Peak Hour Data Plot (4:45 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: 5 Side Road & Sixth Line
Site Code:
Start Date: 12/13/2016

Ontario Traffic Inc

Morning Peak Diagram

Specified Period
From: 6:00:00
To: 10:00:00

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

Municipality: Milton
Site #: 1711400005
Intersection: Winston Churchill Blvd & Hwy 401 N
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total: 2609
North Entering: 1051
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	46	0	46
Cars	1005	0	1005
Totals	1051	0	

Heavys	0
Trucks	93
Cars	1465
Totals	1558

East Leg Total: 618
East Entering: 618
East Peds: 0
Peds Cross: ⋈

Winston Churchill Blvd

	Cars	Trucks	Heavys	Totals
	323	47	0	370
	228	20	0	248
	551	67	0	

N
W E
S

Hwy 401 North Ramp Termin

Cars	Trucks	Heavys	Totals
0	0	0	0

Winston Churchill Blvd

Cars	1233	Cars	1142	0	1142
Trucks	66	Trucks	46	0	46
Heavys	0	Heavys	0	0	0
Totals	1299	Totals	1188	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 1188
South Leg Total: 2487

Comments

Ontario Traffic Inc

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 19:00:00

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

Municipality: Milton
Site #: 1711400005
Intersection: Winston Churchill Blvd & Hwy 401 N
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

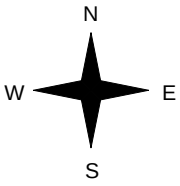
North Leg Total: 2787
North Entering: 1087
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	36	0	36
Cars	1051	0	1051
Totals	1087	0	

Heavys	0
Trucks	89
Cars	1611
Totals	1700

East Leg Total: 895
East Entering: 895
East Peds: 0
Peds Cross: ⋈

Cars	Trucks	Heavys	Totals
466	26	0	492
392	11	0	403
858	37	0	



Hwy 401 North Ramp Termin

Cars	Trucks	Heavys	Totals
0	0	0	0

Winston Churchill Blvd

Cars	1443
Trucks	47
Heavys	0
Totals	1490

Cars	1145	0	1145
Trucks	63	0	63
Heavys	0	0	0
Totals	1208	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 1208
South Leg Total: 2698

Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 1711400005
Intersection: Winston Churchill Blvd & Hwy 401 N
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

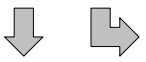
Major Road: Winston Churchill Blvd runs N/S

North Leg Total: 17648
North Entering: 6767
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	378	0	378
Cars	6389	0	6389
Totals	6767	0	

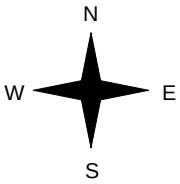
Heavys	0
Trucks	754
Cars	10127
Totals	10881

East Leg Total: 5613
East Entering: 5613
East Peds: 0
Peds Cross: ⋈



Winston Churchill Blvd

	Cars	Trucks	Heavys	Totals
	2832	314	0	3146
	2357	110	0	2467
	5189	424	0	



Hwy 401 North Ramp Termin

Cars	Trucks	Heavys	Totals
0	0	0	0

Winston Churchill Blvd

Cars	8746
Trucks	488
Heavys	0
Totals	9234

Cars	7295	0	7295
Trucks	440	0	440
Heavys	0	0	0
Totals	7735	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 7735
South Leg Total: 16969

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Winston Churchill Blvd & Hwy 401 | **Count Date:** 4-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	583	0	583	0	1363
8:00:00	0	914	0	914	0	1942
9:00:00	0	972	0	972	0	2218
10:00:00	0	672	0	672	0	1422
15:00:00	0	0	0	0	0	0
16:00:00	0	816	0	816	0	1717
17:00:00	0	997	0	997	0	2084
18:00:00	0	1040	0	1040	0	2203
19:00:00	0	773	0	773	0	1553
Totals:	0	6767	0	6767	0	14502

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	0	780	0	780	0
8:00:00	0	1028	0	1028	0
9:00:00	0	1246	0	1246	0
10:00:00	0	750	0	750	0
15:00:00	0	0	0	0	0
16:00:00	0	901	0	901	0
17:00:00	0	1087	0	1087	0
18:00:00	0	1163	0	1163	0
19:00:00	0	780	0	780	0
Totals:	0	7735	0	7735	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	128	0	320	448	0	448
8:00:00	228	0	378	606	0	606
9:00:00	215	0	311	526	0	526
10:00:00	244	0	217	461	0	461
15:00:00	0	0	0	0	0	0
16:00:00	315	0	429	744	0	744
17:00:00	391	0	534	925	0	925
18:00:00	455	0	512	967	0	967
19:00:00	491	0	445	936	0	936
Totals:	2467	0	3146	5613	0	5613

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
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
15:00:00	0	0	0	0	0
16:00:00	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:	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00
Crossing Values:	128	228	215	244	315	391	455	491

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400005

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	132	132	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	234	102	0	0	0	0	20	7	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	363	129	0	0	0	0	43	23	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	522	159	0	0	0	0	61	18	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	682	160	0	0	0	0	74	13	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	884	202	0	0	0	0	89	15	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1112	228	0	0	0	0	99	10	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1390	278	0	0	0	0	107	8	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	1630	240	0	0	0	0	124	17	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1889	259	0	0	0	0	135	11	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	2101	212	0	0	0	0	148	13	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	2304	203	0	0	0	0	165	17	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	2453	149	0	0	0	0	177	12	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	2629	176	0	0	0	0	186	9	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	2819	190	0	0	0	0	205	19	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	2928	109	0	0	0	0	213	8	0	0	0	0	0	0	0	0	0	0
10:01:07	0	0	2928	0	0	0	0	0	213	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2928	0	0	0	0	0	213	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3111	183	0	0	0	0	224	11	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	3303	192	0	0	0	0	230	6	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	3474	171	0	0	0	0	245	15	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	3702	228	0	0	0	0	255	10	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	3941	239	0	0	0	0	265	10	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	4158	217	0	0	0	0	274	9	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	4401	243	0	0	0	0	293	19	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	4649	248	0	0	0	0	305	12	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	4932	283	0	0	0	0	316	11	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	5190	258	0	0	0	0	324	8	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	5452	262	0	0	0	0	329	5	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	5658	206	0	0	0	0	336	7	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	5880	222	0	0	0	0	351	15	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	6071	191	0	0	0	0	363	12	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	6224	153	0	0	0	0	368	5	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	6389	165	0	0	0	0	378	10	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	6389	0	0	0	0	0	378	0	0	0	0	0	0	0	0	0	0	0
19:17:26	0	0	6389	0	0	0	0	0	378	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400005

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	21	21	0	0	32	32	2	2	0	0	15	15	0	0	0	0	0	0	0	0
6:30:00	49	28	0	0	95	63	7	5	0	0	25	10	0	0	0	0	0	0	0	0
6:45:00	74	25	0	0	203	108	13	6	0	0	33	8	0	0	0	0	0	0	0	0
7:00:00	108	34	0	0	277	74	20	7	0	0	43	10	0	0	0	0	0	0	0	0
7:15:00	146	38	0	0	354	77	25	5	0	0	48	5	0	0	0	0	0	0	0	0
7:30:00	195	49	0	0	430	76	28	3	0	0	57	9	0	0	0	0	0	0	0	0
7:45:00	259	64	0	0	521	91	31	3	0	0	74	17	0	0	0	0	0	0	0	0
8:00:00	320	61	0	0	614	93	36	5	0	0	84	10	0	0	0	0	0	0	0	0
8:15:00	379	59	0	0	684	70	41	5	0	0	94	10	0	0	0	0	0	0	0	0
8:30:00	423	44	0	0	753	69	48	7	0	0	104	10	0	0	0	0	0	0	0	0
8:45:00	468	45	0	0	816	63	54	6	0	0	115	11	0	0	0	0	0	0	0	0
9:00:00	516	48	0	0	883	67	55	1	0	0	126	11	0	0	0	0	0	0	0	0
9:15:00	562	46	0	0	919	36	62	7	0	0	144	18	0	0	0	0	0	0	0	0
9:30:00	612	50	0	0	959	40	70	8	0	0	160	16	0	0	0	0	0	0	0	0
9:45:00	674	62	0	0	1008	49	72	2	0	0	175	15	0	0	0	0	0	0	0	0
10:00:00	730	56	0	0	1042	34	85	13	0	0	184	9	0	0	0	0	0	0	0	0
10:01:07	730	0	0	0	1042	0	85	0	0	0	184	0	0	0	0	0	0	0	0	0
15:00:00	730	0	0	0	1042	0	85	0	0	0	184	0	0	0	0	0	0	0	0	0
15:15:00	802	72	0	0	1136	94	86	1	0	0	198	14	0	0	0	0	0	0	0	0
15:30:00	880	78	0	0	1227	91	87	1	0	0	208	10	0	0	0	0	0	0	0	0
15:45:00	951	71	0	0	1337	110	89	2	0	0	217	9	0	0	0	0	0	0	0	0
16:00:00	1040	89	0	0	1429	92	90	1	0	0	226	9	0	0	0	0	0	0	0	0
16:15:00	1118	78	0	0	1549	120	91	1	0	0	244	18	0	0	0	0	0	0	0	0
16:30:00	1216	98	0	0	1678	129	92	1	0	0	246	2	0	0	0	0	0	0	0	0
16:45:00	1323	107	0	0	1801	123	93	1	0	0	251	5	0	0	0	0	0	0	0	0
17:00:00	1424	101	0	0	1931	130	97	4	0	0	258	7	0	0	0	0	0	0	0	0
17:15:00	1524	100	0	0	2023	92	100	3	0	0	267	9	0	0	0	0	0	0	0	0
17:30:00	1617	93	0	0	2139	116	100	0	0	0	270	3	0	0	0	0	0	0	0	0
17:45:00	1715	98	0	0	2267	128	104	4	0	0	277	7	0	0	0	0	0	0	0	0
18:00:00	1871	156	0	0	2407	140	105	1	0	0	294	17	0	0	0	0	0	0	0	0
18:15:00	1992	121	0	0	2537	130	107	2	0	0	303	9	0	0	0	0	0	0	0	0
18:30:00	2121	129	0	0	2655	118	107	0	0	0	307	4	0	0	0	0	0	0	0	0
18:45:00	2256	135	0	0	2746	91	109	2	0	0	309	2	0	0	0	0	0	0	0	0
19:00:00	2357	101	0	0	2832	86	110	1	0	0	314	5	0	0	0	0	0	0	0	0
19:15:00	2357	0	0	0	2832	0	110	0	0	0	314	0	0	0	0	0	0	0	0	0
19:17:26	2357	0	0	0	2832	0	110	0	0	0	314	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400005

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	118	118	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	254	136	0	0	0	0	22	12	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	467	213	0	0	0	0	34	12	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	731	264	0	0	0	0	49	15	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	917	186	0	0	0	0	60	11	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	1200	283	0	0	0	0	68	8	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1434	234	0	0	0	0	78	10	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1718	284	0	0	0	0	90	12	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	2012	294	0	0	0	0	101	11	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	2342	330	0	0	0	0	114	13	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	2635	293	0	0	0	0	124	10	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	2919	284	0	0	0	0	135	11	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	3141	222	0	0	0	0	152	17	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	3335	194	0	0	0	0	162	10	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	3492	157	0	0	0	0	176	14	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	3604	112	0	0	0	0	200	24	0	0	0	0	0	0	0	0	0	0
10:01:07	0	0	3604	0	0	0	0	0	200	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	3604	0	0	0	0	0	200	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3804	200	0	0	0	0	218	18	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	4012	208	0	0	0	0	236	18	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	4234	222	0	0	0	0	254	18	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	4435	201	0	0	0	0	270	16	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	4661	226	0	0	0	0	293	23	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	4927	266	0	0	0	0	313	20	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	5172	245	0	0	0	0	327	14	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	5448	276	0	0	0	0	344	17	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	5746	298	0	0	0	0	357	13	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	6043	297	0	0	0	0	373	16	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	6317	274	0	0	0	0	390	17	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	6554	237	0	0	0	0	401	11	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	6788	234	0	0	0	0	411	10	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	6988	200	0	0	0	0	425	14	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	7137	149	0	0	0	0	432	7	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	7295	158	0	0	0	0	440	8	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	7295	0	0	0	0	0	440	0	0	0	0	0	0	0	0	0	0	0
19:17:26	0	0	7295	0	0	0	0	0	440	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400005

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10:01:07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	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
19:17:26	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: 6:00:00
To: 10:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

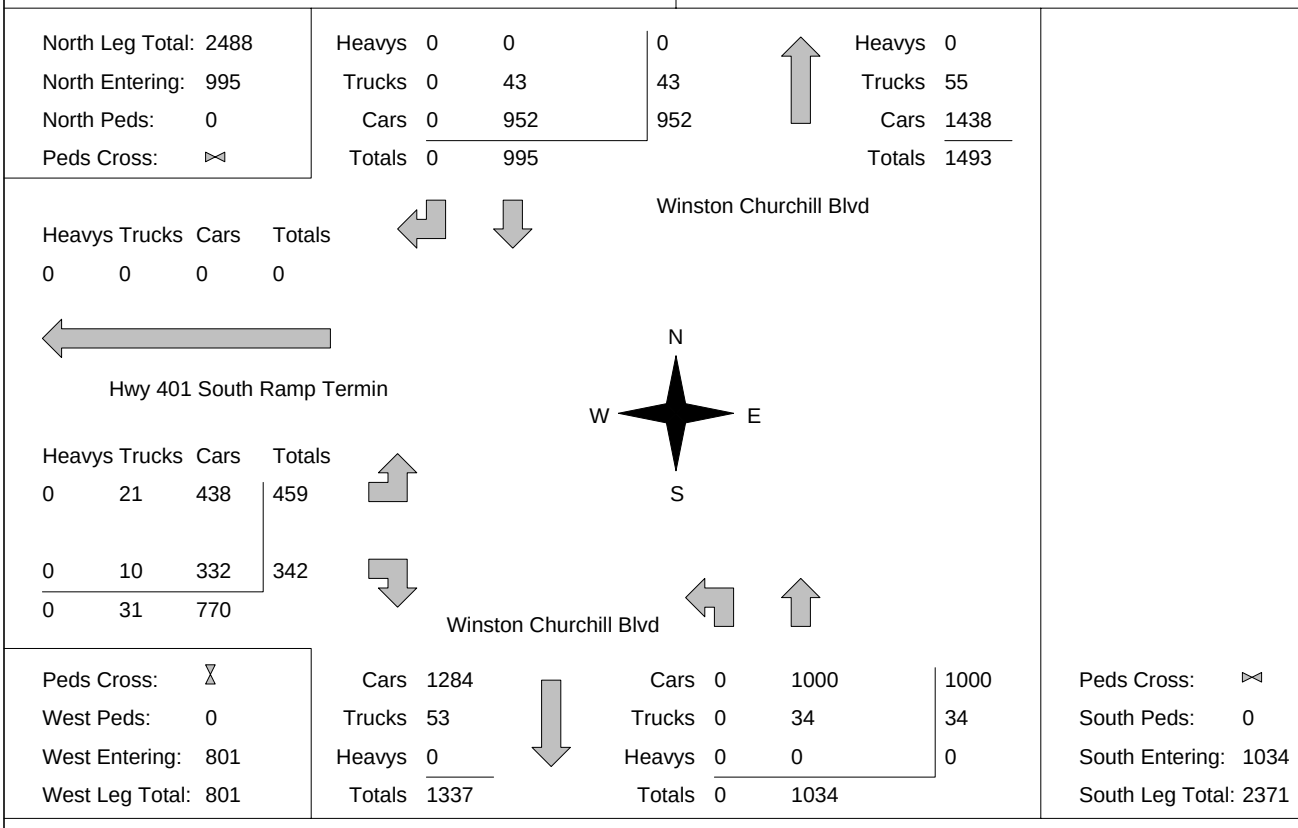
Municipality: Milton
Site #: 1711400006
Intersection: Winston Churchill Blvd & Hwy 401 S
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Ontario Traffic Inc

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 19:00:00

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

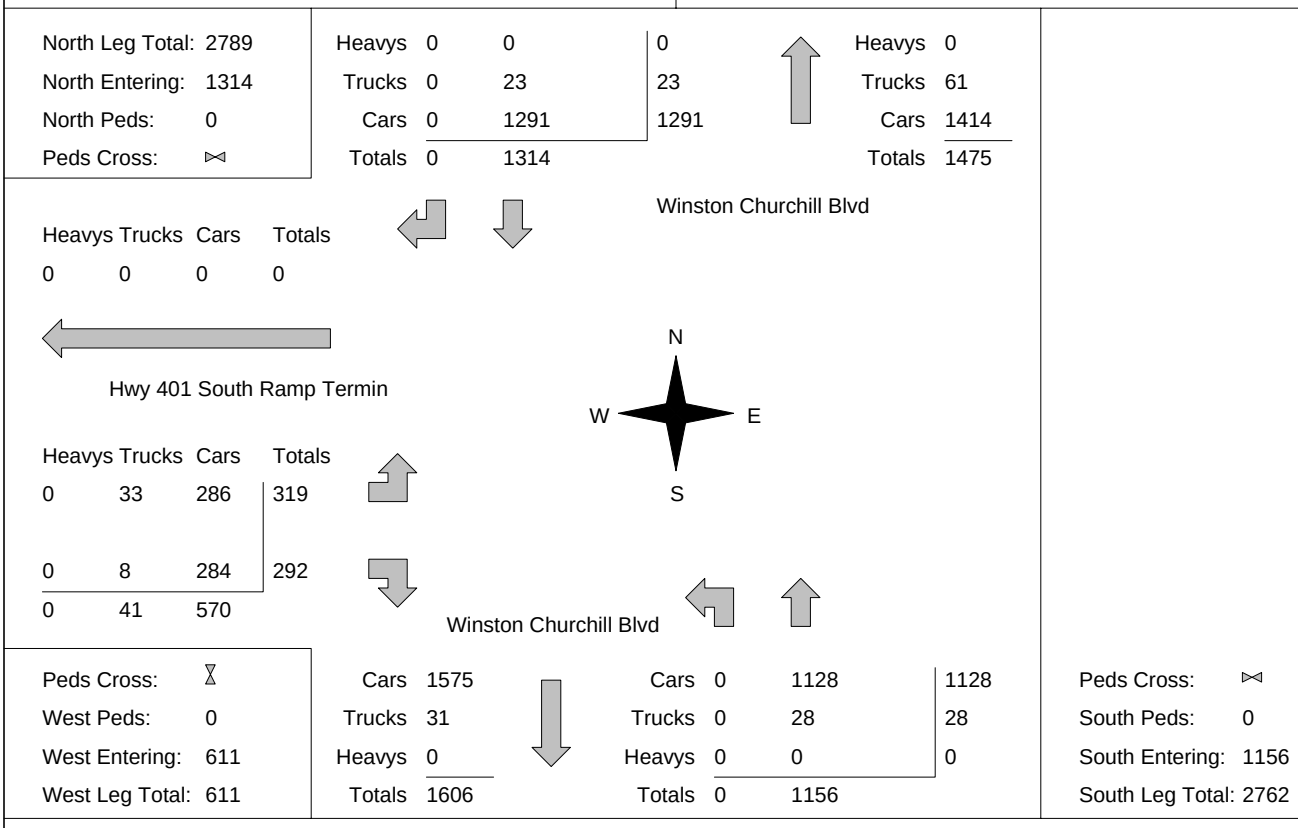
Municipality: Milton
Site #: 1711400006
Intersection: Winston Churchill Blvd & Hwy 401 S
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Ontario Traffic Inc

Total Count Diagram

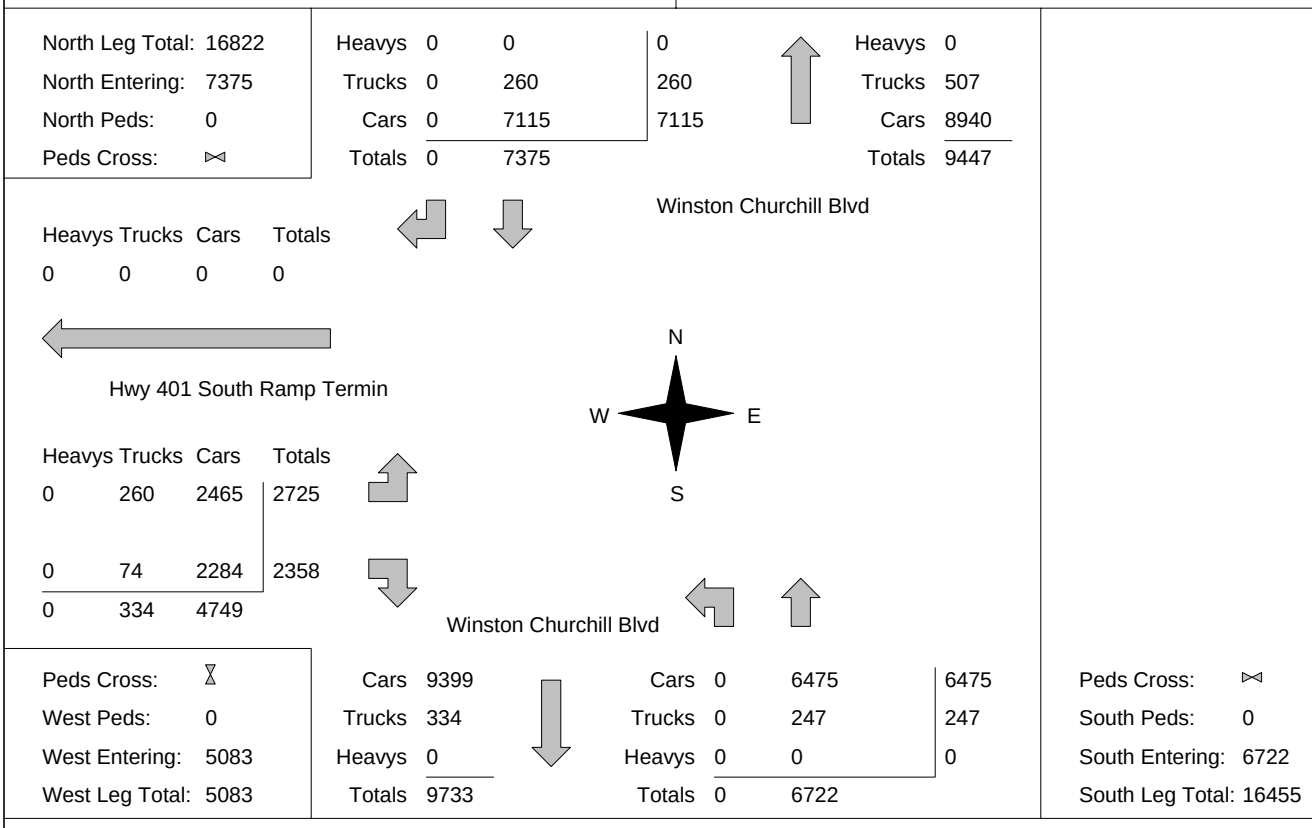
Municipality: Milton
Site #: 1711400006
Intersection: Winston Churchill Blvd & Hwy 401 S
TFR File #: 1
Count date: 4-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Winston Churchill Blvd & Hwy 401 | **Count Date:** 4-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	450	0	450	0	969
8:00:00	0	876	0	876	0	1737
9:00:00	0	923	0	923	0	1936
10:00:00	0	680	0	680	0	1268
15:00:00	0	0	0	0	0	0
16:00:00	0	901	0	901	0	1702
17:00:00	0	1128	0	1128	0	2168
18:00:00	0	1314	0	1314	0	2470
19:00:00	0	1103	0	1103	0	1847
Totals:	0	7375	0	7375	0	14097

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	0	519	0	519	0
8:00:00	0	861	0	861	0
9:00:00	0	1013	0	1013	0
10:00:00	0	588	0	588	0
15:00:00	0	0	0	0	0
16:00:00	0	801	0	801	0
17:00:00	0	1040	0	1040	0
18:00:00	0	1156	0	1156	0
19:00:00	0	744	0	744	0
Totals:	0	6722	0	6722	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
6:00:00	0	0	0	0	0	0
7:00:00	0	0	0	0	0	741
8:00:00	0	0	0	0	0	729
9:00:00	0	0	0	0	0	821
10:00:00	0	0	0	0	0	636
15:00:00	0	0	0	0	0	0
16:00:00	0	0	0	0	0	597
17:00:00	0	0	0	0	0	523
18:00:00	0	0	0	0	0	611
19:00:00	0	0	0	0	0	425
Totals:	0	0	0	0	0	5083

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
6:00:00	0	0	0	0	0
7:00:00	403	0	338	741	0
8:00:00	397	0	332	729	0
9:00:00	470	0	351	821	0
10:00:00	323	0	313	636	0
15:00:00	0	0	0	0	0
16:00:00	293	0	304	597	0
17:00:00	294	0	229	523	0
18:00:00	319	0	292	611	0
19:00:00	226	0	199	425	0
Totals:	2725	0	2358	5083	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	7:00	8:00	9:00	10:00	16:00	17:00	18:00	19:00
Crossing Values:	403	397	470	323	293	294	319	226

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400006

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	74	74	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	153	79	0	0	0	0	11	7	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	271	118	0	0	0	0	28	17	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	411	140	0	0	0	0	39	11	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	562	151	0	0	0	0	51	12	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	757	195	0	0	0	0	63	12	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	979	222	0	0	0	0	74	11	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1245	266	0	0	0	0	81	7	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	1504	259	0	0	0	0	93	12	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1723	219	0	0	0	0	108	15	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	1931	208	0	0	0	0	117	9	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	2126	195	0	0	0	0	123	6	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	2243	117	0	0	0	0	133	10	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	2415	172	0	0	0	0	148	15	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	2596	181	0	0	0	0	156	8	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	2758	162	0	0	0	0	171	15	0	0	0	0	0	0	0	0	0	0
10:00:31	0	0	2758	0	0	0	0	0	171	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2758	0	0	0	0	0	171	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2964	206	0	0	0	0	175	4	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	3205	241	0	0	0	0	180	5	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	3393	188	0	0	0	0	190	10	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	3634	241	0	0	0	0	196	6	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	3910	276	0	0	0	0	202	6	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	4140	230	0	0	0	0	207	5	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	4454	314	0	0	0	0	214	7	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	4739	285	0	0	0	0	219	5	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	5064	325	0	0	0	0	228	9	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	5381	317	0	0	0	0	232	4	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	5708	327	0	0	0	0	239	7	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	6030	322	0	0	0	0	242	3	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	6344	314	0	0	0	0	250	8	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	6635	291	0	0	0	0	252	2	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	6880	245	0	0	0	0	257	5	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	7115	235	0	0	0	0	260	3	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	7115	0	0	0	0	0	260	0	0	0	0	0	0	0	0	0	0	0
19:16:36	0	0	7115	0	0	0	0	0	260	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400006

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
10:00:31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	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
19:16:36	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: 4-May-17 Site #: 1711400006

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	0	0	81	81	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
6:30:00	0	0	180	99	0	0	0	0	7	4	0	0	0	0	0	0	0	0	0	0
6:45:00	0	0	337	157	0	0	0	0	14	7	0	0	0	0	0	0	0	0	0	0
7:00:00	0	0	500	163	0	0	0	0	19	5	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	666	166	0	0	0	0	21	2	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	889	223	0	0	0	0	28	7	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1086	197	0	0	0	0	34	6	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1340	254	0	0	0	0	40	6	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	1577	237	0	0	0	0	51	11	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1856	279	0	0	0	0	60	9	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	2086	230	0	0	0	0	68	8	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	2317	231	0	0	0	0	76	8	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	2484	167	0	0	0	0	92	16	0	0	0	0	0	0	0	0	0	0
9:30:00	0	0	2618	134	0	0	0	0	100	8	0	0	0	0	0	0	0	0	0	0
9:45:00	0	0	2756	138	0	0	0	0	112	12	0	0	0	0	0	0	0	0	0	0
10:00:00	0	0	2854	98	0	0	0	0	127	15	0	0	0	0	0	0	0	0	0	0
10:00:31	0	0	2854	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2854	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3033	179	0	0	0	0	137	10	0	0	0	0	0	0	0	0	0	0
15:30:00	0	0	3244	211	0	0	0	0	146	9	0	0	0	0	0	0	0	0	0	0
15:45:00	0	0	3450	206	0	0	0	0	153	7	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	3622	172	0	0	0	0	160	7	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	3858	236	0	0	0	0	171	11	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	4106	248	0	0	0	0	181	10	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	4357	251	0	0	0	0	193	12	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	4624	267	0	0	0	0	198	5	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	4948	324	0	0	0	0	202	4	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	5247	299	0	0	0	0	214	12	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	5517	270	0	0	0	0	219	5	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	5752	235	0	0	0	0	226	7	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	5948	196	0	0	0	0	229	3	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	6140	192	0	0	0	0	238	9	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	6305	165	0	0	0	0	241	3	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	6475	170	0	0	0	0	247	6	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	6475	0	0	0	0	0	247	0	0	0	0	0	0	0	0	0	0	0
19:16:36	0	0	6475	0	0	0	0	0	247	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 4-May-17 Site #: 1711400006

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
6:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15:00	68	68	0	0	86	86	8	8	0	0	1	1	0	0	0	0	0	0	0	0
6:30:00	145	77	0	0	174	88	18	10	0	0	2	1	0	0	0	0	0	0	0	0
6:45:00	249	104	0	0	242	68	26	8	0	0	6	4	0	0	0	0	0	0	0	0
7:00:00	366	117	0	0	331	89	37	11	0	0	7	1	0	0	0	0	0	0	0	0
7:15:00	454	88	0	0	412	81	46	9	0	0	11	4	0	0	0	0	0	0	0	0
7:30:00	559	105	0	0	497	85	49	3	0	0	13	2	0	0	0	0	0	0	0	0
7:45:00	646	87	0	0	583	86	53	4	0	0	14	1	0	0	0	0	0	0	0	0
8:00:00	738	92	0	0	655	72	62	9	0	0	15	1	0	0	0	0	0	0	0	0
8:15:00	849	111	0	0	747	92	65	3	0	0	19	4	0	0	0	0	0	0	0	0
8:30:00	968	119	0	0	837	90	70	5	0	0	20	1	0	0	0	0	0	0	0	0
8:45:00	1084	116	0	0	915	78	74	4	0	0	24	4	0	0	0	0	0	0	0	0
9:00:00	1191	107	0	0	995	80	79	5	0	0	26	2	0	0	0	0	0	0	0	0
9:15:00	1278	87	0	0	1096	101	87	8	0	0	31	5	0	0	0	0	0	0	0	0
9:30:00	1362	84	0	0	1190	94	96	9	0	0	33	2	0	0	0	0	0	0	0	0
9:45:00	1417	55	0	0	1245	55	105	9	0	0	37	4	0	0	0	0	0	0	0	0
10:00:00	1474	57	0	0	1294	49	119	14	0	0	40	3	0	0	0	0	0	0	0	0
10:00:31	1474	0	0	0	1294	0	119	0	0	0	40	0	0	0	0	0	0	0	0	0
15:00:00	1474	0	0	0	1294	0	119	0	0	0	40	0	0	0	0	0	0	0	0	0
15:15:00	1545	71	0	0	1368	74	132	13	0	0	47	7	0	0	0	0	0	0	0	0
15:30:00	1591	46	0	0	1466	98	144	12	0	0	52	5	0	0	0	0	0	0	0	0
15:45:00	1668	77	0	0	1525	59	157	13	0	0	55	3	0	0	0	0	0	0	0	0
16:00:00	1722	54	0	0	1582	57	164	7	0	0	56	1	0	0	0	0	0	0	0	0
16:15:00	1779	57	0	0	1619	37	179	15	0	0	59	3	0	0	0	0	0	0	0	0
16:30:00	1853	74	0	0	1682	63	192	13	0	0	59	0	0	0	0	0	0	0	0	0
16:45:00	1910	57	0	0	1738	56	197	5	0	0	61	2	0	0	0	0	0	0	0	0
17:00:00	1974	64	0	0	1805	67	206	9	0	0	62	1	0	0	0	0	0	0	0	0
17:15:00	2056	82	0	0	1873	68	215	9	0	0	63	1	0	0	0	0	0	0	0	0
17:30:00	2123	67	0	0	1953	80	221	6	0	0	66	3	0	0	0	0	0	0	0	0
17:45:00	2190	67	0	0	2019	66	233	12	0	0	70	4	0	0	0	0	0	0	0	0
18:00:00	2260	70	0	0	2089	70	239	6	0	0	70	0	0	0	0	0	0	0	0	0
18:15:00	2319	59	0	0	2142	53	246	7	0	0	72	2	0	0	0	0	0	0	0	0
18:30:00	2378	59	0	0	2188	46	253	7	0	0	72	0	0	0	0	0	0	0	0	0
18:45:00	2420	42	0	0	2242	54	257	4	0	0	73	1	0	0	0	0	0	0	0	0
19:00:00	2465	45	0	0	2284	42	260	3	0	0	74	1	0	0	0	0	0	0	0	0
19:15:00	2465	0	0	0	2284	0	260	0	0	0	74	0	0	0	0	0	0	0	0	0
19:16:36	2465	0	0	0	2284	0	260	0	0	0	74	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Mid-day Peak Diagram

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

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

Municipality: Milton
Site #: 0711400007
Intersection: Trafalgar Rd & Hwy 401 North Ram
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

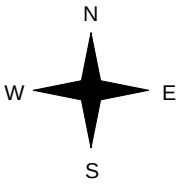
North Leg Total: 2154
North Entering: 866
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	27	0	27
Cars	839	0	839
Totals	866	0	

Heavys	0
Trucks	26
Cars	1262
Totals	1288

East Leg Total: 725
East Entering: 725
East Peds: 0
Peds Cross: ⋈

	Cars	Trucks	Heavys	Totals
	578	12	0	590
	129	6	0	135
	707	18	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

Cars	968
Trucks	33
Heavys	0
Totals	1001

Cars	684	0	684
Trucks	14	0	14
Heavys	0	0	0
Totals	698	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 698
South Leg Total: 1699

Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 0711400007
Intersection: Trafalgar Rd & Hwy 401 North Ram
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 7997
North Entering: 2997
North Peds: 0
Peds Cross: ⋈

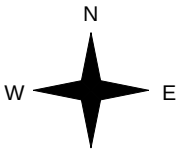
Heavys	0	0	0
Trucks	104	0	104
Cars	2893	0	2893
Totals	2997	0	

Heavys	0
Trucks	109
Cars	4891
Totals	5000

East Leg Total: 2831
East Entering: 2831
East Peds: 0
Peds Cross: ⋈

Trafalgar Rd

Cars	Trucks	Heavys	Totals
2276	68	0	2344
441	46	0	487
2717	114	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

Trafalgar Rd

Cars	3334
Trucks	150
Heavys	0
Totals	3484

Cars	2615	0	2615
Trucks	41	0	41
Heavys	0	0	0
Totals	2656	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 2656
South Leg Total: 6140

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Trafalgar Rd & Hwy 401 North Ra | **Count Date:** 6-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	716	0	716	0	1303
13:00:00	0	676	0	676	0	1377
14:00:00	0	745	0	745	0	1429
15:00:00	0	860	0	860	0	1544
Totals:	0	2997	0	2997	0	5653

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	587	0	587	0
13:00:00	0	701	0	701	0
14:00:00	0	684	0	684	0
15:00:00	0	684	0	684	0
Totals:	0	2656	0	2656	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	118	0	526	644	0	644
13:00:00	130	0	584	714	0	714
14:00:00	122	0	657	779	0	779
15:00:00	117	0	577	694	0	694
Totals:	487	0	2344	2831	0	2831

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	0	0	0	0
13:00:00	0	0	0	0	0
14:00:00	0	0	0	0	0
15:00:00	0	0	0	0	0
Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	11:00	12:00	13:00	13:00	14:00	14:00	15:00	15:00
Crossing Values:	0	118	130	130	122	122	117	117

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 0711400007

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	166	166	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	292	126	0	0	0	0	14	8	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	494	202	0	0	0	0	25	11	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	683	189	0	0	0	0	33	8	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	838	155	0	0	0	0	38	5	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	1013	175	0	0	0	0	45	7	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1170	157	0	0	0	0	52	7	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1333	163	0	0	0	0	59	7	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	1502	169	0	0	0	0	65	6	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1689	187	0	0	0	0	73	8	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1862	173	0	0	0	0	77	4	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	2053	191	0	0	0	0	84	7	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	2275	222	0	0	0	0	90	6	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	2483	208	0	0	0	0	96	6	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	2701	218	0	0	0	0	104	8	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2893	192	0	0	0	0	104	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2893	0	0	0	0	0	104	0	0	0	0	0	0	0	0	0	0	0
15:16:20	0	0	2893	0	0	0	0	0	104	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 0711400007

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	26	26	0	0	109	109	3	3	0	0	3	3	0	0	0	0	0	0	0	0
11:30:00	51	25	0	0	244	135	7	4	0	0	13	10	0	0	0	0	0	0	0	0
11:45:00	68	17	0	0	378	134	10	3	0	0	21	8	0	0	0	0	0	0	0	0
12:00:00	103	35	0	0	499	121	15	5	0	0	27	6	0	0	0	0	0	0	0	0
12:15:00	129	26	0	0	616	117	20	5	0	0	29	2	0	0	0	0	0	0	0	0
12:30:00	147	18	0	0	741	125	23	3	0	0	33	4	0	0	0	0	0	0	0	0
12:45:00	179	32	0	0	893	152	28	5	0	0	35	2	0	0	0	0	0	0	0	0
13:00:00	216	37	0	0	1073	180	32	4	0	0	37	2	0	0	0	0	0	0	0	0
13:15:00	236	20	0	0	1226	153	33	1	0	0	46	9	0	0	0	0	0	0	0	0
13:30:00	270	34	0	0	1399	173	35	2	0	0	47	1	0	0	0	0	0	0	0	0
13:45:00	294	24	0	0	1550	151	37	2	0	0	51	4	0	0	0	0	0	0	0	0
14:00:00	330	36	0	0	1710	160	40	3	0	0	57	6	0	0	0	0	0	0	0	0
14:15:00	357	27	0	0	1837	127	41	1	0	0	60	3	0	0	0	0	0	0	0	0
14:30:00	395	38	0	0	1975	138	42	1	0	0	63	3	0	0	0	0	0	0	0	0
14:45:00	423	28	0	0	2128	153	43	1	0	0	63	0	0	0	0	0	0	0	0	0
15:00:00	441	18	0	0	2276	148	46	3	0	0	68	5	0	0	0	0	0	0	0	0
15:15:00	441	0	0	0	2276	0	46	0	0	0	68	0	0	0	0	0	0	0	0	0
15:16:20	441	0	0	0	2276	0	46	0	0	0	68	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 0711400007

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	117	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	278	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	415	137	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	585	170	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	731	146	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	901	170	0	0	0	0	7	4	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1058	157	0	0	0	0	14	7	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1273	215	0	0	0	0	15	1	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	1477	204	0	0	0	0	19	4	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1608	131	0	0	0	0	22	3	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1780	172	0	0	0	0	27	5	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	1943	163	0	0	0	0	29	2	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	2126	183	0	0	0	0	32	3	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	2294	168	0	0	0	0	37	5	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	2464	170	0	0	0	0	41	4	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2615	151	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2615	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0
15:16:20	0	0	2615	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 0711400007

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	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
13:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:16:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Mid-day Peak Diagram

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

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

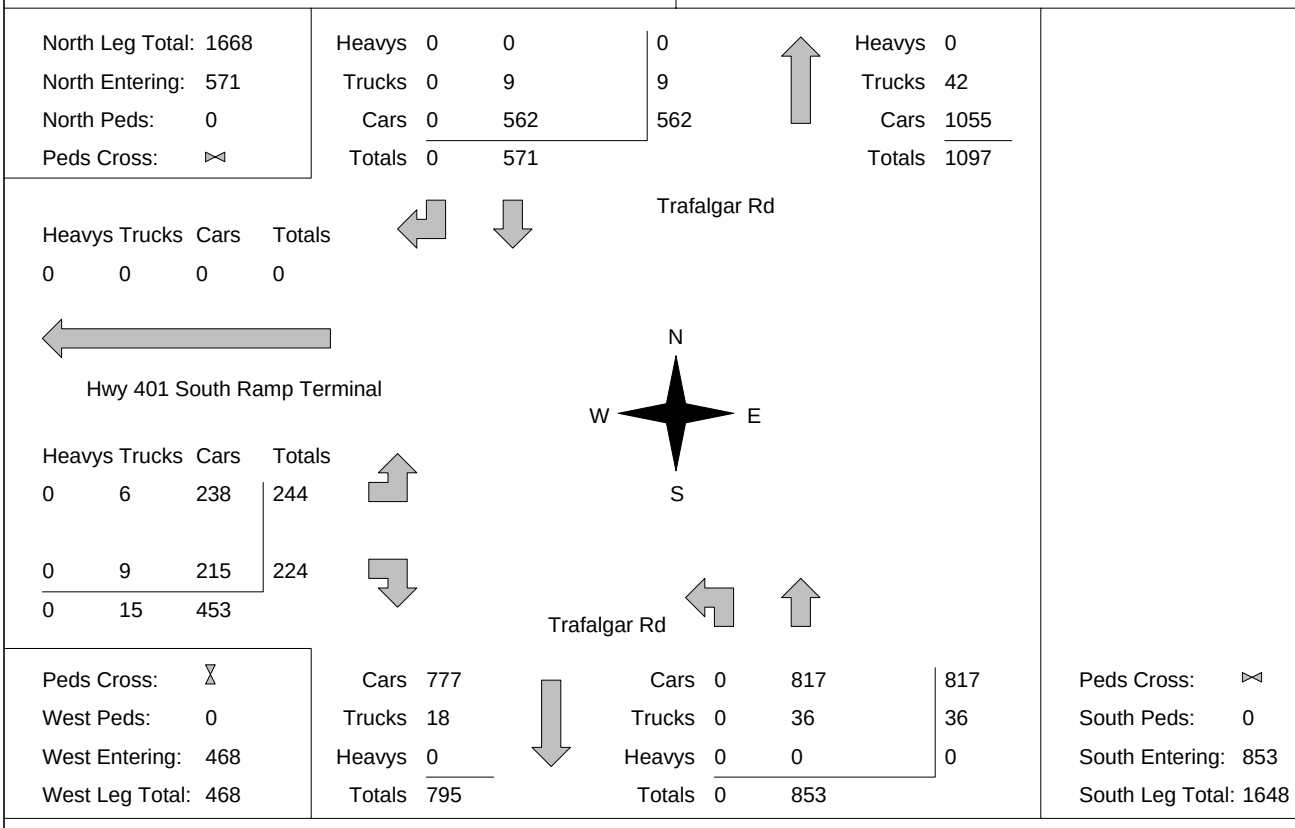
Municipality: Milton
Site #: 1711400008
Intersection: Trafalgar Rd & Hwy 401 South Ram
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 1711400008
Intersection: Trafalgar Rd & Hwy 401 South Ram
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 6161
North Entering: 1976
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	62	62
Cars	0	1914	1914
Totals	0	1976	

Heavys	0
Trucks	130
Cars	4055
Totals	4185

Trafalgar Rd

Heavys	Trucks	Cars	Totals
0	0	0	0

Hwy 401 South Ramp Terminal

N
W E
S

Heavys	Trucks	Cars	Totals
0	22	881	903
0	33	838	871
0	55	1719	

Trafalgar Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 1774
West Leg Total: 1774

Cars	2752		
Trucks	95		
Heavys	0		
Totals	2847		

Cars	0	3174	3174
Trucks	0	108	108
Heavys	0	0	0
Totals	0	3282	

Peds Cross: ⋈
South Peds: 0
South Entering: 3282
South Leg Total: 6129

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: Trafalgar Rd & Hwy 401 South Ran | **Count Date:** 6-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	476	0	476	0	1234
13:00:00	0	455	0	455	0	1282
14:00:00	0	494	0	494	0	1365
15:00:00	0	551	0	551	0	1377
Totals:	0	1976	0	1976	0	5258

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	758	0	758	0
13:00:00	0	827	0	827	0
14:00:00	0	871	0	871	0
15:00:00	0	826	0	826	0
Totals:	0	3282	0	3282	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	0	0	0	0	412
13:00:00	0	0	0	0	0	452
14:00:00	0	0	0	0	0	424
15:00:00	0	0	0	0	0	486
Totals:	0	0	0	0	0	1774

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys: Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	195	0	217	412	0
13:00:00	236	0	216	452	0
14:00:00	226	0	198	424	0
15:00:00	246	0	240	486	0
Totals:	903	0	871	1774	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	0:00	0:00	0:00	11:00	12:00	13:00	14:00	15:00
Crossing Values:	0	0	0	0	195	236	226	246

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400008

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	109	109	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	197	88	0	0	0	0	8	4	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	326	129	0	0	0	0	12	4	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	457	131	0	0	0	0	19	7	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	557	100	0	0	0	0	25	6	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	664	107	0	0	0	0	28	3	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	779	115	0	0	0	0	33	5	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	893	114	0	0	0	0	38	5	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	995	102	0	0	0	0	41	3	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1130	135	0	0	0	0	46	5	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1228	98	0	0	0	0	50	4	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	1371	143	0	0	0	0	54	4	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	1523	152	0	0	0	0	57	3	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	1659	136	0	0	0	0	58	1	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	1790	131	0	0	0	0	59	1	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1914	124	0	0	0	0	62	3	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1914	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0	0
15:15:30	0	0	1914	0	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400008

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	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
13:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:30	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: 6-May-17 Site #: 1711400008

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	166	166	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	367	201	0	0	0	0	12	5	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	545	178	0	0	0	0	15	3	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	735	190	0	0	0	0	23	8	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	906	171	0	0	0	0	30	7	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	1088	182	0	0	0	0	36	6	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1293	205	0	0	0	0	45	9	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1537	244	0	0	0	0	48	3	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	1783	246	0	0	0	0	53	5	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1969	186	0	0	0	0	62	9	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	2176	207	0	0	0	0	68	6	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	2381	205	0	0	0	0	75	7	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	2603	222	0	0	0	0	86	11	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	2796	193	0	0	0	0	95	9	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	2993	197	0	0	0	0	104	9	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	3174	181	0	0	0	0	108	4	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	3174	0	0	0	0	0	108	0	0	0	0	0	0	0	0	0	0	0
15:15:30	0	0	3174	0	0	0	0	0	108	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400008

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	31	31	0	0	56	56	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11:30:00	75	44	0	0	102	46	0	0	0	0	3	2	0	0	0	0	0	0	0	0
11:45:00	126	51	0	0	157	55	1	1	0	0	4	1	0	0	0	0	0	0	0	0
12:00:00	193	67	0	0	208	51	2	1	0	0	9	5	0	0	0	0	0	0	0	0
12:15:00	247	54	0	0	257	49	2	0	0	0	11	2	0	0	0	0	0	0	0	0
12:30:00	301	54	0	0	306	49	4	2	0	0	16	5	0	0	0	0	0	0	0	0
12:45:00	358	57	0	0	368	62	8	4	0	0	16	0	0	0	0	0	0	0	0	0
13:00:00	421	63	0	0	417	49	10	2	0	0	16	0	0	0	0	0	0	0	0	0
13:15:00	476	55	0	0	468	51	11	1	0	0	16	0	0	0	0	0	0	0	0	0
13:30:00	517	41	0	0	515	47	13	2	0	0	19	3	0	0	0	0	0	0	0	0
13:45:00	583	66	0	0	557	42	16	3	0	0	22	3	0	0	0	0	0	0	0	0
14:00:00	639	56	0	0	607	50	18	2	0	0	24	2	0	0	0	0	0	0	0	0
14:15:00	704	65	0	0	653	46	20	2	0	0	26	2	0	0	0	0	0	0	0	0
14:30:00	759	55	0	0	715	62	20	0	0	0	28	2	0	0	0	0	0	0	0	0
14:45:00	821	62	0	0	772	57	22	2	0	0	31	3	0	0	0	0	0	0	0	0
15:00:00	881	60	0	0	838	66	22	0	0	0	33	2	0	0	0	0	0	0	0	0
15:15:00	881	0	0	0	838	0	22	0	0	0	33	0	0	0	0	0	0	0	0	0
15:15:30	881	0	0	0	838	0	22	0	0	0	33	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Mid-day Peak Diagram

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

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

Municipality: Milton
Site #: 1711400009
Intersection: James Snow Pkwy & Hwy 401 Nortl
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

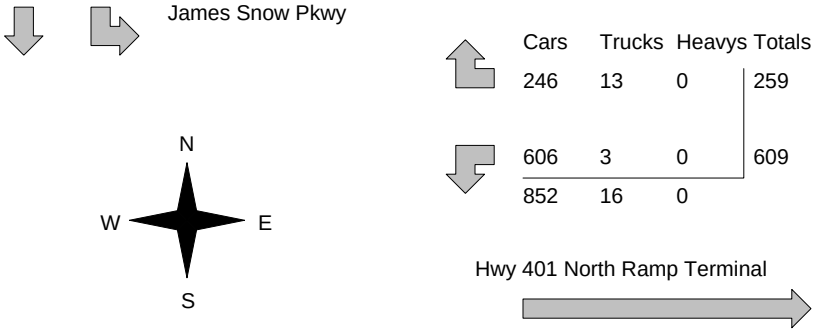
Major Road: James Snow Pkwy runs N/S

North Leg Total: 1359
North Entering: 683
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	14	0	14
Cars	669	0	669
Totals	683	0	

Heavys	0
Trucks	34
Cars	642
Totals	676

East Leg Total: 868
East Entering: 868
East Peds: 0
Peds Cross: ⋈



Cars	1275
Trucks	17
Heavys	0
Totals	1292

Cars	396	0	396
Trucks	21	0	21
Heavys	0	0	0
Totals	417	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 417
South Leg Total: 1709

Comments

Ontario Traffic Inc

Total Count Diagram

Municipality: Milton
Site #: 1711400009
Intersection: James Snow Pkwy & Hwy 401 Nortl
TFR File #: 1
Count date: 6-May-17

Weather conditions:

Person(s) who counted:

**** Signalized Intersection ****

Major Road: James Snow Pkwy runs N/S

North Leg Total: 5146
North Entering: 2617
North Peds: 0
Peds Cross: ⋈

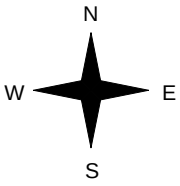
Heavys	0	0	0
Trucks	66	0	66
Cars	2551	0	2551
Totals	2617	0	

Heavys	0	
Trucks	128	
Cars	2401	
Totals	2529	

East Leg Total: 3154
East Entering: 3154
East Peds: 0
Peds Cross: ⋈

James Snow Pkwy

	Cars	Trucks	Heavys	Totals
	917	48	0	965
	2174	15	0	2189
	3091	63	0	



Hwy 401 North Ramp Terminal

Cars	Trucks	Heavys	Totals
0	0	0	0

James Snow Pkwy

Cars	4725		
Trucks	81		
Heavys	0		
Totals	4806		

Cars	1484	0	1484
Trucks	80	0	80
Heavys	0	0	0
Totals	1564	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 1564
South Leg Total: 6370

Comments

Ontario Traffic Inc
Traffic Count Summary

Intersection: James Snow Pkwy & Hwy 401 Nor | **Count Date:** 6-May-17 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	0	634	0	634	0	1010
13:00:00	0	608	0	608	0	990
14:00:00	0	682	0	682	0	1088
15:00:00	0	693	0	693	0	1093
Totals:	0	2617	0	2617	0	4181

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	376	0	376	0
13:00:00	0	382	0	382	0
14:00:00	0	406	0	406	0
15:00:00	0	400	0	400	0
	0	1564	0	1564	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
11:00:00	0	0	0	0	0	0
12:00:00	499	0	203	702	0	702
13:00:00	545	0	242	787	0	787
14:00:00	589	0	270	859	0	859
15:00:00	556	0	250	806	0	806
Totals:	2189	0	965	3154	0	3154

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys Left	Thru	Right	Grand Total	Total Peds
11:00:00	0	0	0	0	0
12:00:00	0	0	0	0	0
13:00:00	0	0	0	0	0
14:00:00	0	0	0	0	0
15:00:00	0	0	0	0	0
	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	11:00	12:00	13:00	13:00	14:00	14:00	15:00	15:00
Crossing Values:	0	499	545	545	589	589	556	556

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400009

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	129	129	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	274	145	0	0	0	0	10	5	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	444	170	0	0	0	0	12	2	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	617	173	0	0	0	0	17	5	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	771	154	0	0	0	0	21	4	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	914	143	0	0	0	0	24	3	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	1072	158	0	0	0	0	30	6	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	1208	136	0	0	0	0	34	4	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	1372	164	0	0	0	0	41	7	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	1545	173	0	0	0	0	44	3	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1713	168	0	0	0	0	47	3	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	1874	161	0	0	0	0	50	3	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	2041	167	0	0	0	0	55	5	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	2198	157	0	0	0	0	59	4	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	2357	159	0	0	0	0	64	5	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	2551	194	0	0	0	0	66	2	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	2551	0	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0
15:15:51	0	0	2551	0	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400009

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	115	115	0	0	51	51	2	2	0	0	1	1	0	0	0	0	0	0	0	0
11:30:00	219	104	0	0	100	49	2	0	0	0	4	3	0	0	0	0	0	0	0	0
11:45:00	353	134	0	0	148	48	3	1	0	0	10	6	0	0	0	0	0	0	0	0
12:00:00	495	142	0	0	190	42	4	1	0	0	13	3	0	0	0	0	0	0	0	0
12:15:00	623	128	0	0	249	59	4	0	0	0	16	3	0	0	0	0	0	0	0	0
12:30:00	746	123	0	0	299	50	5	1	0	0	18	2	0	0	0	0	0	0	0	0
12:45:00	880	134	0	0	359	60	7	2	0	0	23	5	0	0	0	0	0	0	0	0
13:00:00	1037	157	0	0	419	60	7	0	0	0	26	3	0	0	0	0	0	0	0	0
13:15:00	1177	140	0	0	486	67	8	1	0	0	28	2	0	0	0	0	0	0	0	0
13:30:00	1331	154	0	0	536	50	9	1	0	0	31	3	0	0	0	0	0	0	0	0
13:45:00	1480	149	0	0	603	67	10	1	0	0	32	1	0	0	0	0	0	0	0	0
14:00:00	1623	143	0	0	677	74	10	0	0	0	38	6	0	0	0	0	0	0	0	0
14:15:00	1783	160	0	0	732	55	11	1	0	0	41	3	0	0	0	0	0	0	0	0
14:30:00	1924	141	0	0	799	67	11	0	0	0	45	4	0	0	0	0	0	0	0	0
14:45:00	2036	112	0	0	860	61	11	0	0	0	47	2	0	0	0	0	0	0	0	0
15:00:00	2174	138	0	0	917	57	15	4	0	0	48	1	0	0	0	0	0	0	0	0
15:15:00	2174	0	0	0	917	0	15	0	0	0	48	0	0	0	0	0	0	0	0	0
15:15:51	2174	0	0	0	917	0	15	0	0	0	48	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400009

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	0	0	91	91	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0
11:30:00	0	0	181	90	0	0	0	0	15	11	0	0	0	0	0	0	0	0	0	0
11:45:00	0	0	272	91	0	0	0	0	17	2	0	0	0	0	0	0	0	0	0	0
12:00:00	0	0	355	83	0	0	0	0	21	4	0	0	0	0	0	0	0	0	0	0
12:15:00	0	0	426	71	0	0	0	0	25	4	0	0	0	0	0	0	0	0	0	0
12:30:00	0	0	530	104	0	0	0	0	29	4	0	0	0	0	0	0	0	0	0	0
12:45:00	0	0	635	105	0	0	0	0	32	3	0	0	0	0	0	0	0	0	0	0
13:00:00	0	0	723	88	0	0	0	0	35	3	0	0	0	0	0	0	0	0	0	0
13:15:00	0	0	814	91	0	0	0	0	41	6	0	0	0	0	0	0	0	0	0	0
13:30:00	0	0	899	85	0	0	0	0	49	8	0	0	0	0	0	0	0	0	0	0
13:45:00	0	0	1001	102	0	0	0	0	54	5	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	1107	106	0	0	0	0	57	3	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	1210	103	0	0	0	0	62	5	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	1306	96	0	0	0	0	69	7	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	1398	92	0	0	0	0	75	6	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	1484	86	0	0	0	0	80	5	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	1484	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0
15:15:51	0	0	1484	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0

Ontario Traffic Inc

Count Date: 6-May-17 Site #: 1711400009

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
11:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15:00	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
13:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15:51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

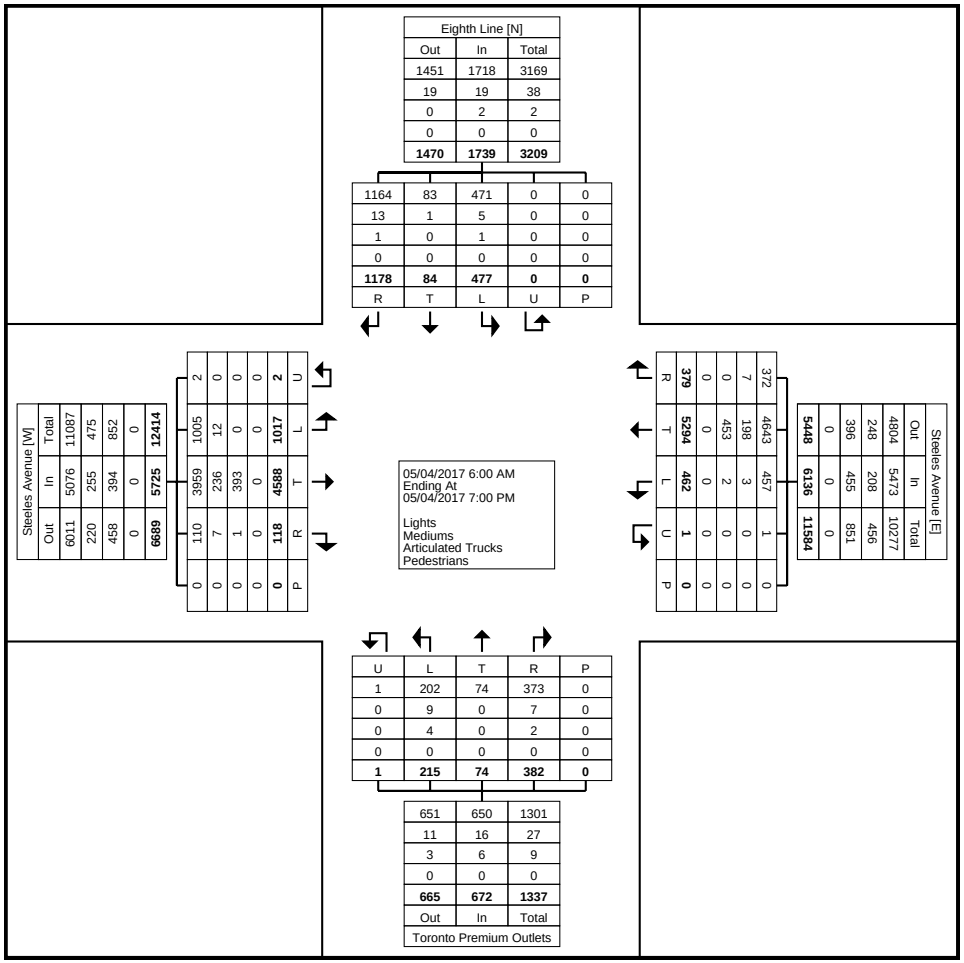
Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Toronto Premium Outlets Northbound						Eighth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	10	87	0	0	0	97	2	90	2	0	0	94	0	0	0	0	0	0	9	0	37	0	0	46	237
6:15 AM	6	100	2	0	0	108	0	89	1	0	0	90	0	0	1	0	0	1	9	0	38	0	0	47	246
6:30 AM	5	113	2	0	0	120	2	112	1	0	0	115	0	0	1	0	0	1	24	1	55	0	0	80	316
6:45 AM	16	137	8	0	0	161	9	86	2	0	0	97	0	0	0	0	0	0	15	1	55	0	0	71	329
Hourly Total	37	437	12	0	0	486	13	377	6	0	0	396	0	0	2	0	0	2	57	2	185	0	0	244	1128
7:00 AM	11	178	4	0	0	193	3	123	3	0	0	129	3	0	4	0	0	7	21	1	56	0	0	78	407
7:15 AM	14	198	2	0	0	214	4	98	2	0	0	104	1	0	2	0	0	3	39	2	87	0	0	128	449
7:30 AM	17	217	3	0	0	237	4	117	6	0	0	127	0	0	4	0	0	4	43	0	86	0	0	129	497
7:45 AM	20	223	6	0	0	249	13	106	5	0	0	124	1	1	1	0	0	3	51	3	98	0	0	152	528
Hourly Total	62	816	15	0	0	893	24	444	16	0	0	484	5	1	11	0	0	17	154	6	327	0	0	487	1881
8:00 AM	20	212	2	0	0	234	6	103	6	0	0	115	1	0	2	0	0	3	42	1	74	0	0	117	469
8:15 AM	17	215	2	0	0	234	6	116	5	0	0	127	1	0	1	0	0	2	41	1	96	0	0	138	501
8:30 AM	16	171	1	0	0	188	11	129	4	0	0	144	0	1	2	1	0	4	30	2	66	0	0	98	434
8:45 AM	16	160	6	0	0	182	8	90	5	0	0	103	3	0	8	0	0	11	20	3	42	0	0	65	361
Hourly Total	69	758	11	0	0	838	31	438	20	0	0	489	5	1	13	1	0	20	133	7	278	0	0	418	1765
9:00 AM	10	127	3	0	0	140	11	95	1	0	0	107	2	0	2	0	0	4	10	1	35	0	0	46	297
9:15 AM	19	113	6	0	0	138	6	93	2	0	0	101	4	0	3	0	0	7	12	2	35	0	0	49	295
9:30 AM	13	98	10	0	0	121	14	80	3	0	0	97	0	0	2	0	0	2	12	2	37	0	0	51	271
9:45 AM	12	93	10	0	0	115	36	90	4	0	0	130	4	0	3	0	0	7	6	11	17	0	0	34	286
Hourly Total	54	431	29	0	0	514	67	358	10	0	0	435	10	0	10	0	0	20	40	16	124	0	0	180	1149
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	37	128	5	0	0	170	8	116	9	0	0	133	15	5	19	0	0	39	3	4	17	0	0	24	366
3:15 PM	42	143	3	0	0	188	7	169	17	0	0	193	18	0	21	0	0	39	2	2	11	0	0	15	435
3:30 PM	66	132	4	0	0	202	16	169	14	0	0	199	18	5	17	0	0	40	8	6	19	0	0	33	474
3:45 PM	41	145	2	0	0	188	28	266	12	0	0	306	8	5	20	0	0	33	3	3	22	0	0	28	555
Hourly Total	186	548	14	0	0	748	59	720	52	0	0	831	59	15	77	0	0	151	16	15	69	0	0	100	1830
4:00 PM	34	158	2	0	0	194	16	261	19	0	0	296	20	6	28	0	0	54	6	5	29	0	0	40	584
4:15 PM	38	131	3	1	0	173	20	290	31	1	0	342	11	3	20	0	0	34	8	7	21	0	0	36	585
4:30 PM	38	147	3	0	0	188	24	321	29	0	0	374	10	6	17	0	0	33	6	8	17	0	0	31	626
4:45 PM	56	137	7	0	0	200	45	296	24	0	0	365	18	10	21	0	0	49	6	6	19	0	0	31	645
Hourly Total	166	573	15	1	0	755	105	1168	103	1	0	1377	59	25	86	0	0	170	26	26	86	0	0	138	2440
5:00 PM	66	166	3	0	0	235	28	261	25	0	0	314	18	7	39	0	0	64	11	0	11	0	0	22	635
5:15 PM	57	182	2	0	0	241	17	297	35	0	0	349	6	4	22	0	0	32	10	5	11	0	0	26	648
5:30 PM	61	130	1	1	0	193	27	283	26	0	0	336	16	7	20	0	0	43	6	4	21	0	0	31	603
5:45 PM	65	121	4	0	0	190	23	280	28	0	0	331	7	3	24	0	0	34	7	1	10	0	0	18	573
Hourly Total	249	599	10	1	0	859	95	1121	114	0	0	1330	47	21	105	0	0	173	34	10	53	0	0	97	2459
6:00 PM	57	120	6	0	0	183	18	198	20	0	0	236	8	3	29	0	0	40	3	2	10	0	0	15	474

6:15 PM	57	117	0	0	0	174	14	191	14	0	0	219	10	1	12	0	0	23	6	0	17	0	0	23	439
6:30 PM	43	111	2	0	0	156	23	149	13	0	0	185	3	4	17	0	0	24	3	0	11	0	0	14	379
6:45 PM	37	78	4	0	0	119	13	130	11	0	0	154	9	3	20	0	0	32	5	0	18	0	0	23	328
Hourly Total	194	426	12	0	0	632	68	668	58	0	0	794	30	11	78	0	0	119	17	2	56	0	0	75	1620
Grand Total	1017	4588	118	2	0	5725	462	5294	379	1	0	6136	215	74	382	1	0	672	477	84	1178	0	0	1739	14272
Approach %	17.8	80.1	2.1	0.0	-	-	7.5	86.3	6.2	0.0	-	-	32.0	11.0	56.8	0.1	-	-	27.4	4.8	67.7	0.0	-	-	-
Total %	7.1	32.1	0.8	0.0	-	40.1	3.2	37.1	2.7	0.0	-	43.0	1.5	0.5	2.7	0.0	-	4.7	3.3	0.6	8.3	0.0	-	12.2	-
Lights	1005	3959	110	2	-	5076	457	4643	372	1	-	5473	202	74	373	1	-	650	471	83	1164	0	-	1718	12917
% Lights	98.8	86.3	93.2	100.0	-	88.7	98.9	87.7	98.2	100.0	-	89.2	94.0	100.0	97.6	100.0	-	96.7	98.7	98.8	98.8	-	-	98.8	90.5
Mediums	12	236	7	0	-	255	3	198	7	0	-	208	9	0	7	0	-	16	5	1	13	0	-	19	498
% Mediums	1.2	5.1	5.9	0.0	-	4.5	0.6	3.7	1.8	0.0	-	3.4	4.2	0.0	1.8	0.0	-	2.4	1.0	1.2	1.1	-	-	1.1	3.5
Articulated Trucks	0	393	1	0	-	394	2	453	0	0	-	455	4	0	2	0	-	6	1	0	1	0	-	2	857
% Articulated Trucks	0.0	8.6	0.8	0.0	-	6.9	0.4	8.6	0.0	0.0	-	7.4	1.9	0.0	0.5	0.0	-	0.9	0.2	0.0	0.1	-	-	0.1	6.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Toronto Premium Outlets Northbound						Eighth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	17	217	3	0	0	237	4	117	6	0	0	127	0	0	4	0	0	4	43	0	86	0	0	129	497
7:45 AM	20	223	6	0	0	249	13	106	5	0	0	124	1	1	1	0	0	3	51	3	98	0	0	152	528
8:00 AM	20	212	2	0	0	234	6	103	6	0	0	115	1	0	2	0	0	3	42	1	74	0	0	117	469
8:15 AM	17	215	2	0	0	234	6	116	5	0	0	127	1	0	1	0	0	2	41	1	96	0	0	138	501
Total	74	867	13	0	0	954	29	442	22	0	0	493	3	1	8	0	0	12	177	5	354	0	0	536	1995
Approach %	7.8	90.9	1.4	0.0	-	-	5.9	89.7	4.5	0.0	-	-	25.0	8.3	66.7	0.0	-	-	33.0	0.9	66.0	0.0	-	-	-
Total %	3.7	43.5	0.7	0.0	-	47.8	1.5	22.2	1.1	0.0	-	24.7	0.2	0.1	0.4	0.0	-	0.6	8.9	0.3	17.7	0.0	-	26.9	-
PHF	0.925	0.972	0.542	0.000	-	0.958	0.558	0.944	0.917	0.000	-	0.970	0.750	0.250	0.500	0.000	-	0.750	0.868	0.417	0.903	0.000	-	0.882	0.945
Lights	70	768	11	0	-	849	28	350	20	0	-	398	2	1	7	0	-	10	175	5	352	0	-	532	1789
% Lights	94.6	88.6	84.6	-	-	89.0	96.6	79.2	90.9	-	-	80.7	66.7	100.0	87.5	-	-	83.3	98.9	100.0	99.4	-	-	99.3	89.7
Mediums	4	45	2	0	-	51	1	39	2	0	-	42	1	0	1	0	-	2	2	0	2	0	-	4	99
% Mediums	5.4	5.2	15.4	-	-	5.3	3.4	8.8	9.1	-	-	8.5	33.3	0.0	12.5	-	-	16.7	1.1	0.0	0.6	-	-	0.7	5.0
Articulated Trucks	0	54	0	0	-	54	0	53	0	0	-	53	0	0	0	0	-	0	0	0	0	0	-	0	107
% Articulated Trucks	0.0	6.2	0.0	-	-	5.7	0.0	12.0	0.0	-	-	10.8	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	5.4
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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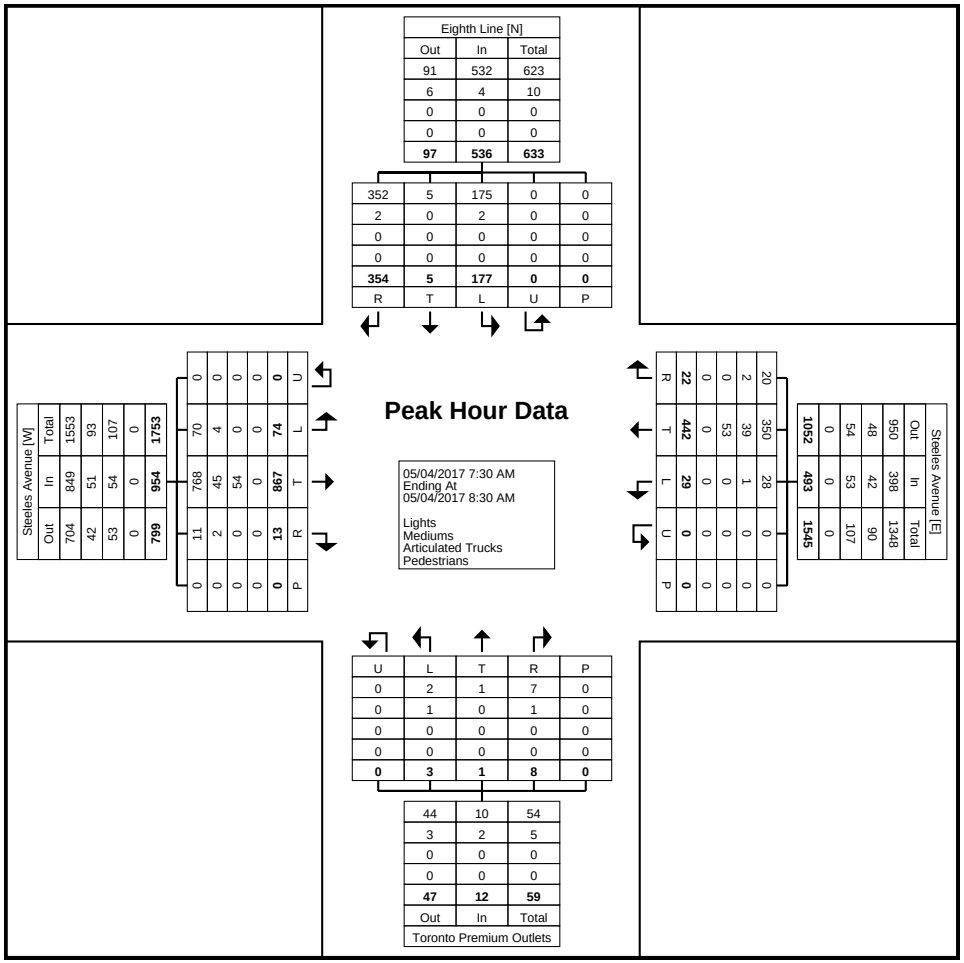
Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Toronto Premium Outlets Northbound						Eighth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:30 PM	38	147	3	0	0	188	24	321	29	0	0	374	10	6	17	0	0	33	6	8	17	0	0	31	626
4:45 PM	56	137	7	0	0	200	45	296	24	0	0	365	18	10	21	0	0	49	6	6	19	0	0	31	645
5:00 PM	66	166	3	0	0	235	28	261	25	0	0	314	18	7	39	0	0	64	11	0	11	0	0	22	635
5:15 PM	57	182	2	0	0	241	17	297	35	0	0	349	6	4	22	0	0	32	10	5	11	0	0	26	648
Total	217	632	15	0	0	864	114	1175	113	0	0	1402	52	27	99	0	0	178	33	19	58	0	0	110	2554
Approach %	25.1	73.1	1.7	0.0	-	-	8.1	83.8	8.1	0.0	-	-	29.2	15.2	55.6	0.0	-	-	30.0	17.3	52.7	0.0	-	-	-
Total %	8.5	24.7	0.6	0.0	-	33.8	4.5	46.0	4.4	0.0	-	54.9	2.0	1.1	3.9	0.0	-	7.0	1.3	0.7	2.3	0.0	-	4.3	-
PHF	0.822	0.868	0.536	0.000	-	0.896	0.633	0.915	0.807	0.000	-	0.937	0.722	0.675	0.635	0.000	-	0.695	0.750	0.594	0.763	0.000	-	0.887	0.985
Lights	216	558	15	0	-	789	112	1095	112	0	-	1319	50	27	97	0	-	174	32	19	57	0	-	108	2390
% Lights	99.5	88.3	100.0	-	-	91.3	98.2	93.2	99.1	-	-	94.1	96.2	100.0	98.0	-	-	97.8	97.0	100.0	98.3	-	-	98.2	93.6
Mediums	1	22	0	0	-	23	1	28	1	0	-	30	0	0	2	0	-	2	1	0	1	0	-	2	57
% Mediums	0.5	3.5	0.0	-	-	2.7	0.9	2.4	0.9	-	-	2.1	0.0	0.0	2.0	-	-	1.1	3.0	0.0	1.7	-	-	1.8	2.2
Articulated Trucks	0	52	0	0	-	52	1	52	0	0	-	53	2	0	0	0	-	2	0	0	0	0	-	0	107
% Articulated Trucks	0.0	8.2	0.0	-	-	6.0	0.9	4.4	0.0	-	-	3.8	3.8	0.0	0.0	-	-	1.1	0.0	0.0	0.0	-	-	0.0	4.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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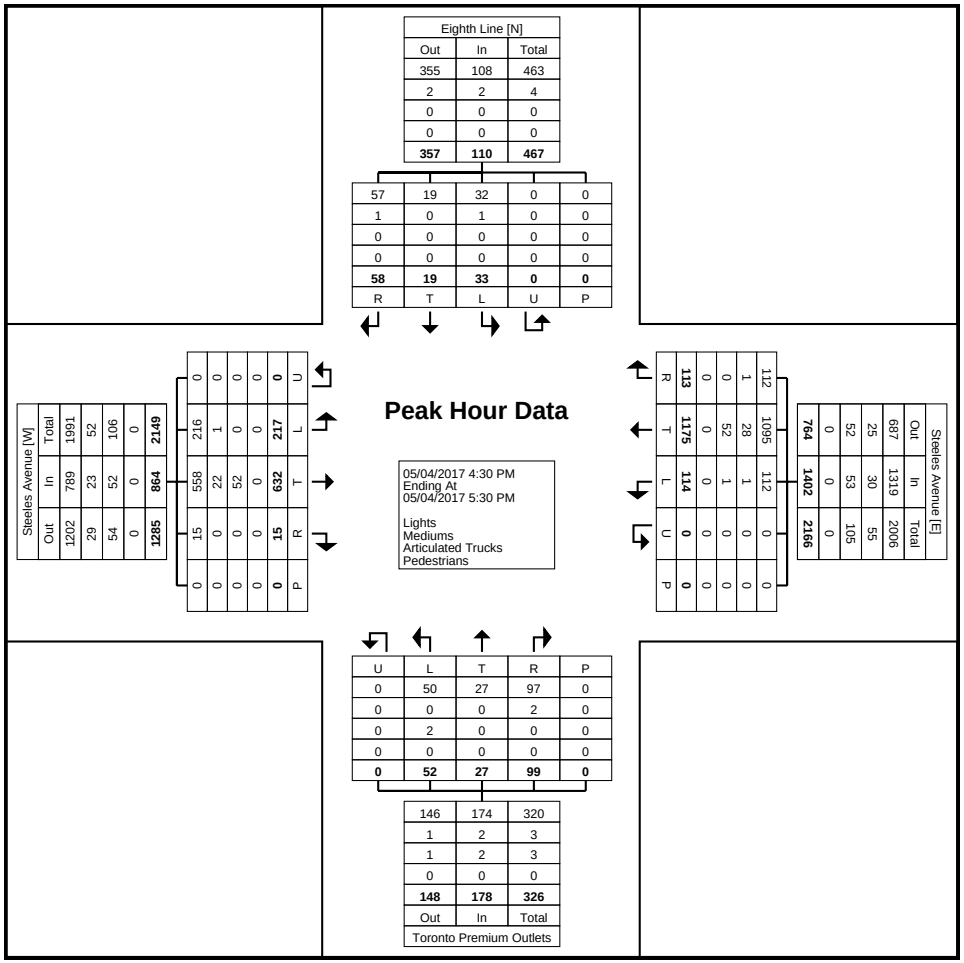
Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (4:30 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
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Count Name: Steeles Avenue & Eight Line/Toronto Outlets - Weekday
Site Code:
Start Date: 05/04/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

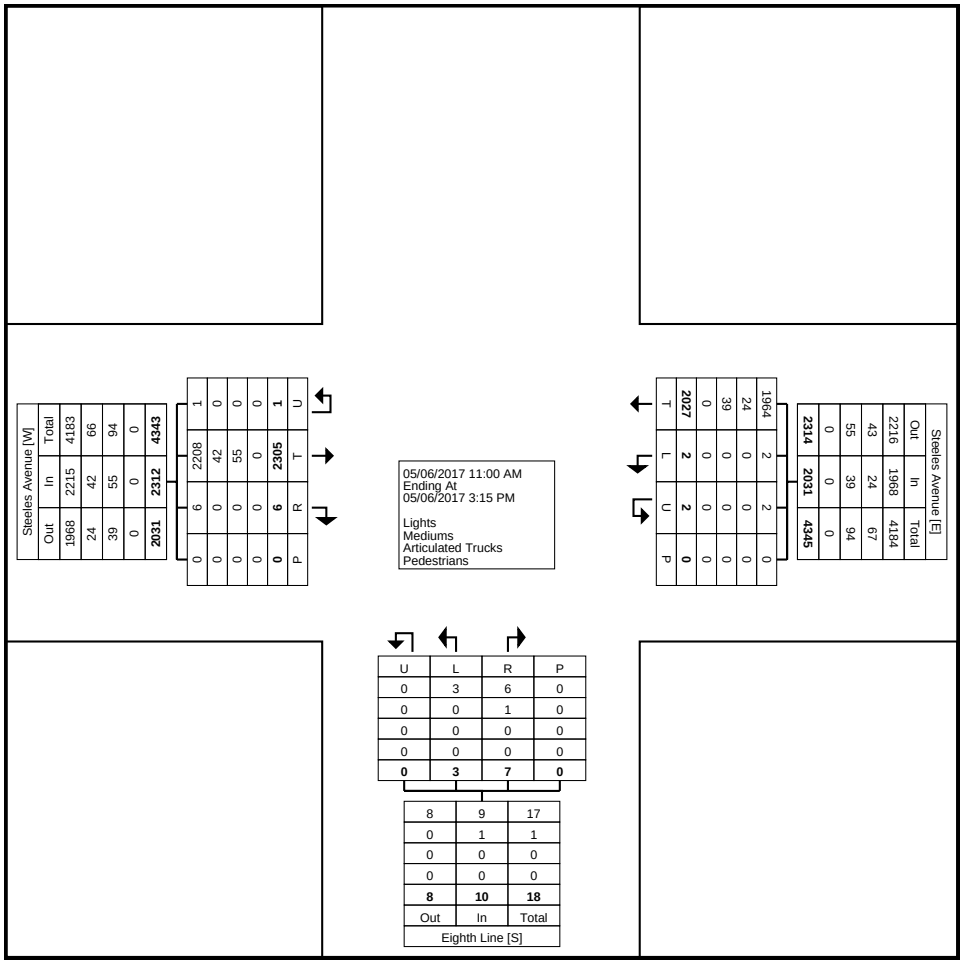
Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Eighth Line Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
11:00 AM	94	0	0	0	94	0	88	0	0	88	0	1	0	0	1	183
11:15 AM	117	0	0	0	117	0	91	0	0	91	0	0	0	0	0	208
11:30 AM	129	0	0	0	129	0	130	0	0	130	0	0	0	0	0	259
11:45 AM	107	0	0	0	107	0	121	1	0	122	0	0	0	0	0	229
Hourly Total	447	0	0	0	447	0	430	1	0	431	0	1	0	0	1	879
12:00 PM	133	1	0	0	134	0	94	0	0	94	1	0	0	0	1	229
12:15 PM	117	0	0	0	117	0	143	0	0	143	0	0	0	0	0	260
12:30 PM	139	0	0	0	139	0	109	0	0	109	0	1	0	0	1	249
12:45 PM	155	1	1	0	157	0	119	0	0	119	0	1	0	0	1	277
Hourly Total	544	2	1	0	547	0	465	0	0	465	1	2	0	0	3	1015
1:00 PM	168	2	0	0	170	1	132	0	0	133	0	1	0	0	1	304
1:15 PM	144	0	0	0	144	0	122	0	0	122	0	3	0	0	3	269
1:30 PM	167	0	0	0	167	0	131	0	0	131	0	0	0	0	0	298
1:45 PM	145	0	0	0	145	0	157	0	0	157	0	0	0	0	0	302
Hourly Total	624	2	0	0	626	1	542	0	0	543	0	4	0	0	4	1173
2:00 PM	171	2	0	0	173	0	140	1	0	141	1	0	0	0	1	315
2:15 PM	160	0	0	0	160	0	143	0	0	143	0	0	0	0	0	303
2:30 PM	182	0	0	0	182	0	163	0	0	163	0	0	0	0	0	345
2:45 PM	176	0	0	0	176	1	144	0	0	145	1	0	0	0	1	322
Hourly Total	689	2	0	0	691	1	590	1	0	592	2	0	0	0	2	1285
3:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	2305	6	1	0	2312	2	2027	2	0	2031	3	7	0	0	10	4353
Approach %	99.7	0.3	0.0	-	-	0.1	99.8	0.1	-	-	30.0	70.0	0.0	-	-	-
Total %	53.0	0.1	0.0	-	53.1	0.0	46.6	0.0	-	46.7	0.1	0.2	0.0	-	0.2	-
Lights	2208	6	1	-	2215	2	1964	2	-	1968	3	6	0	-	9	4192
% Lights	95.8	100.0	100.0	-	95.8	100.0	96.9	100.0	-	96.9	100.0	85.7	-	-	90.0	96.3
Mediums	42	0	0	-	42	0	24	0	-	24	0	1	0	-	1	67
% Mediums	1.8	0.0	0.0	-	1.8	0.0	1.2	0.0	-	1.2	0.0	14.3	-	-	10.0	1.5
Articulated Trucks	55	0	0	-	55	0	39	0	-	39	0	0	0	-	0	94
% Articulated Trucks	2.4	0.0	0.0	-	2.4	0.0	1.9	0.0	-	1.9	0.0	0.0	-	-	0.0	2.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

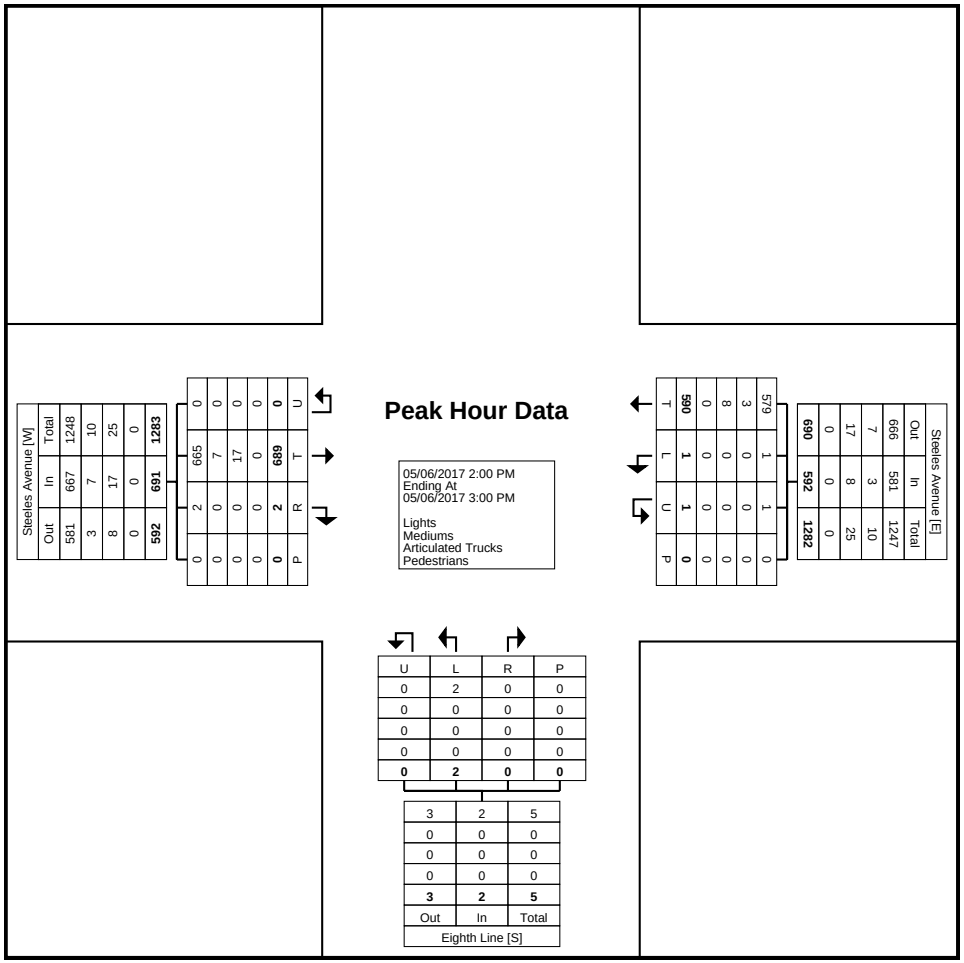
Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Eighth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
2:00 PM	171	2	0	0	173	0	140	1	0	141	1	0	0	0	1	315
2:15 PM	160	0	0	0	160	0	143	0	0	143	0	0	0	0	0	303
2:30 PM	182	0	0	0	182	0	163	0	0	163	0	0	0	0	0	345
2:45 PM	176	0	0	0	176	1	144	0	0	145	1	0	0	0	1	322
Total	689	2	0	0	691	1	590	1	0	592	2	0	0	0	2	1285
Approach %	99.7	0.3	0.0	-	-	0.2	99.7	0.2	-	-	100.0	0.0	0.0	-	-	-
Total %	53.6	0.2	0.0	-	53.8	0.1	45.9	0.1	-	46.1	0.2	0.0	0.0	-	0.2	-
PHF	0.946	0.250	0.000	-	0.949	0.250	0.905	0.250	-	0.908	0.500	0.000	0.000	-	0.500	0.931
Lights	665	2	0	-	667	1	579	1	-	581	2	0	0	-	2	1250
% Lights	96.5	100.0	-	-	96.5	100.0	98.1	100.0	-	98.1	100.0	-	-	-	100.0	97.3
Mediums	7	0	0	-	7	0	3	0	-	3	0	0	0	-	0	10
% Mediums	1.0	0.0	-	-	1.0	0.0	0.5	0.0	-	0.5	0.0	-	-	-	0.0	0.8
Articulated Trucks	17	0	0	-	17	0	8	0	-	8	0	0	0	-	0	25
% Articulated Trucks	2.5	0.0	-	-	2.5	0.0	1.4	0.0	-	1.4	0.0	-	-	-	0.0	1.9
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (2:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

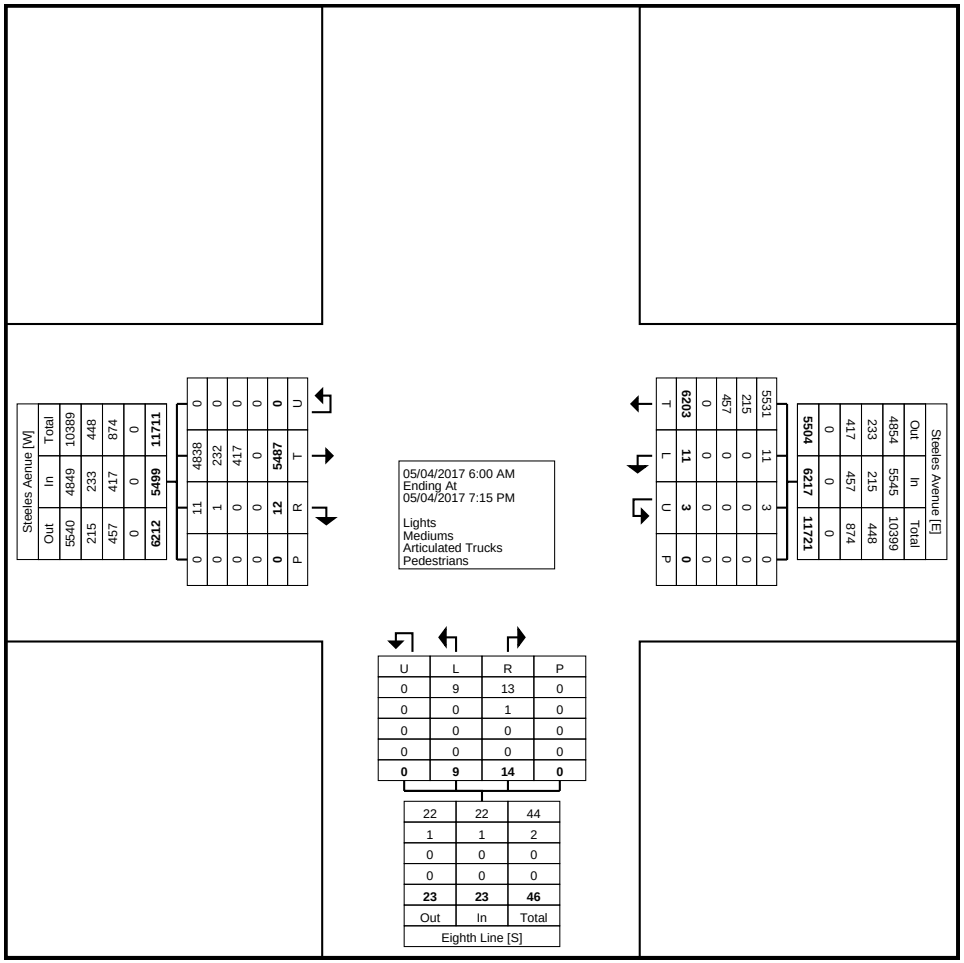
Start Time	Steeles Aenue Eastbound					Steeles Avenue Westbound					Eighth Line Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
6:00 AM	94	0	0	0	94	0	95	0	0	95	0	0	0	0	0	189
6:15 AM	109	0	0	0	109	0	89	0	0	89	0	0	0	0	0	198
6:30 AM	143	0	0	0	143	0	115	0	0	115	0	0	0	0	0	258
6:45 AM	155	0	0	0	155	2	99	0	0	101	1	0	0	0	1	257
Hourly Total	501	0	0	0	501	2	398	0	0	400	1	0	0	0	1	902
7:00 AM	199	0	0	0	199	1	119	0	0	120	0	1	0	0	1	320
7:15 AM	242	1	0	0	243	1	108	0	0	109	0	1	0	0	1	353
7:30 AM	251	0	0	0	251	1	126	0	0	127	0	0	0	0	0	378
7:45 AM	279	0	0	0	279	0	122	1	0	123	0	0	0	0	0	402
Hourly Total	971	1	0	0	972	3	475	1	0	479	0	2	0	0	2	1453
8:00 AM	262	0	0	0	262	0	116	0	0	116	0	0	0	0	0	378
8:15 AM	261	1	0	0	262	0	129	0	0	129	1	0	0	0	1	392
8:30 AM	197	0	0	0	197	0	142	0	0	142	0	0	0	0	0	339
8:45 AM	192	1	0	0	193	0	103	0	0	103	0	0	0	0	0	296
Hourly Total	912	2	0	0	914	0	490	0	0	490	1	0	0	0	1	1405
9:00 AM	139	0	0	0	139	1	109	1	0	111	0	0	0	0	0	250
9:15 AM	124	0	0	0	124	1	101	0	0	102	1	0	0	0	1	227
9:30 AM	119	1	0	0	120	0	105	0	0	105	0	0	0	0	0	225
9:45 AM	101	1	0	0	102	0	129	0	0	129	0	1	0	0	1	232
Hourly Total	483	2	0	0	485	2	444	1	0	447	1	1	0	0	2	934
10:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
3:00 PM	144	0	0	0	144	0	135	0	0	135	0	0	0	0	0	279
3:15 PM	180	0	0	0	180	0	184	0	0	184	0	0	0	0	0	364
3:30 PM	160	0	0	0	160	0	227	0	0	227	1	0	0	0	1	388
3:45 PM	181	1	0	0	182	0	314	0	0	314	0	0	0	0	0	496
Hourly Total	665	1	0	0	666	0	860	0	0	860	1	0	0	0	1	1527
4:00 PM	197	1	0	0	198	0	316	0	0	316	0	2	0	0	2	516
4:15 PM	163	0	0	0	163	1	373	0	0	374	1	0	0	0	1	538
4:30 PM	167	0	0	0	167	0	370	0	0	370	0	0	0	0	0	537
4:45 PM	164	2	0	0	166	0	360	0	0	360	0	1	0	0	1	527
Hourly Total	691	3	0	0	694	1	1419	0	0	1420	1	3	0	0	4	2118
5:00 PM	196	0	0	0	196	0	316	0	0	316	1	2	0	0	3	515
5:15 PM	207	0	0	0	207	0	365	0	0	365	0	2	0	0	2	574
5:30 PM	169	0	0	0	169	1	346	0	0	347	1	0	0	0	1	517
5:45 PM	156	1	0	0	157	1	291	0	0	292	1	1	0	0	2	451
Hourly Total	728	1	0	0	729	2	1318	0	0	1320	3	5	0	0	8	2057

6:00 PM	140	1	0	0	141	0	241	0	0	241	0	0	0	0	0	382
6:15 PM	141	1	0	0	142	0	216	1	0	217	0	0	0	0	0	359
6:30 PM	143	0	0	0	143	1	179	0	0	180	1	1	0	0	2	325
6:45 PM	112	0	0	0	112	0	162	0	0	162	0	2	0	0	2	276
Hourly Total	536	2	0	0	538	1	798	1	0	800	1	3	0	0	4	1342
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	5487	12	0	0	5499	11	6203	3	0	6217	9	14	0	0	23	11739
Approach %	99.8	0.2	0.0	-	-	0.2	99.8	0.0	-	-	39.1	60.9	0.0	-	-	-
Total %	46.7	0.1	0.0	-	46.8	0.1	52.8	0.0	-	53.0	0.1	0.1	0.0	-	0.2	-
Lights	4838	11	0	-	4849	11	5531	3	-	5545	9	13	0	-	22	10416
% Lights	88.2	91.7	-	-	88.2	100.0	89.2	100.0	-	89.2	100.0	92.9	-	-	95.7	88.7
Mediums	232	1	0	-	233	0	215	0	-	215	0	1	0	-	1	449
% Mediums	4.2	8.3	-	-	4.2	0.0	3.5	0.0	-	3.5	0.0	7.1	-	-	4.3	3.8
Articulated Trucks	417	0	0	-	417	0	457	0	-	457	0	0	0	-	0	874
% Articulated Trucks	7.6	0.0	-	-	7.6	0.0	7.4	0.0	-	7.4	0.0	0.0	-	-	0.0	7.4
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

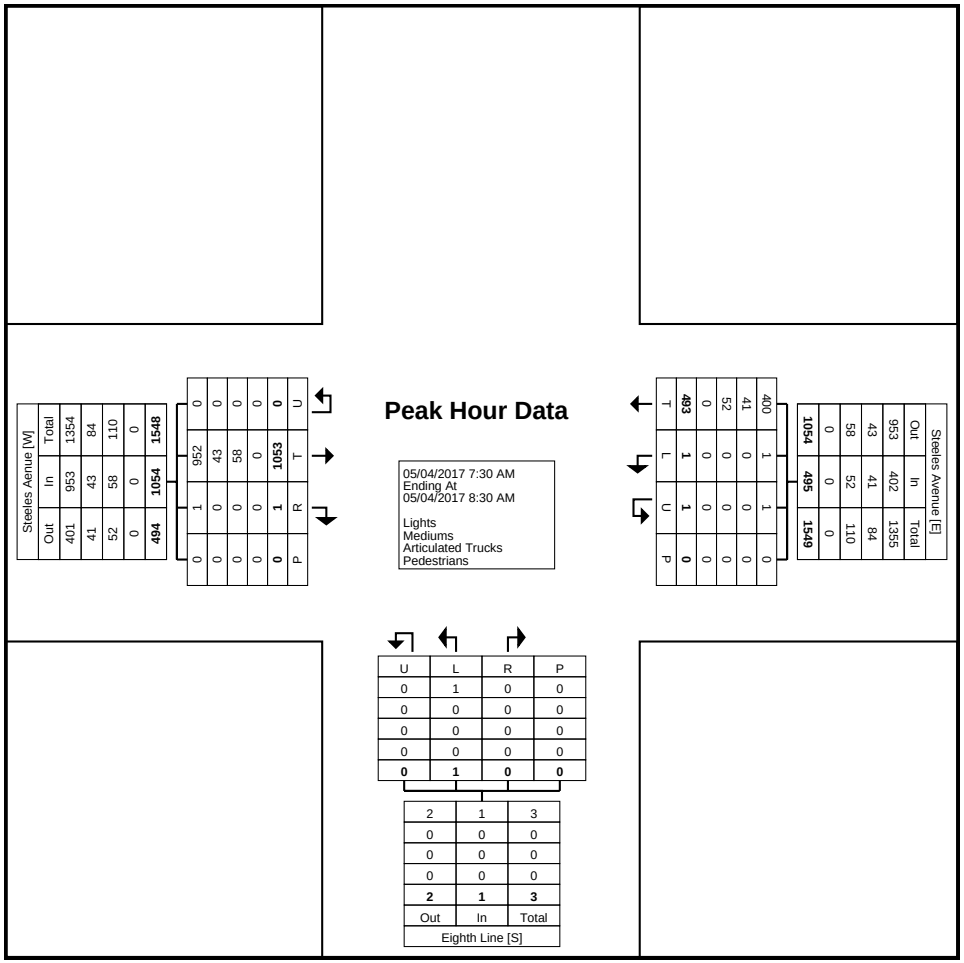
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Aenue Eastbound					Steeles Avenue Westbound					Eighth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	251	0	0	0	251	1	126	0	0	127	0	0	0	0	0	378
7:45 AM	279	0	0	0	279	0	122	1	0	123	0	0	0	0	0	402
8:00 AM	262	0	0	0	262	0	116	0	0	116	0	0	0	0	0	378
8:15 AM	261	1	0	0	262	0	129	0	0	129	1	0	0	0	1	392
Total	1053	1	0	0	1054	1	493	1	0	495	1	0	0	0	1	1550
Approach %	99.9	0.1	0.0	-	-	0.2	99.6	0.2	-	-	100.0	0.0	0.0	-	-	-
Total %	67.9	0.1	0.0	-	68.0	0.1	31.8	0.1	-	31.9	0.1	0.0	0.0	-	0.1	-
PHF	0.944	0.250	0.000	-	0.944	0.250	0.955	0.250	-	0.959	0.250	0.000	0.000	-	0.250	0.964
Lights	952	1	0	-	953	1	400	1	-	402	1	0	0	-	1	1356
% Lights	90.4	100.0	-	-	90.4	100.0	81.1	100.0	-	81.2	100.0	-	-	-	100.0	87.5
Mediums	43	0	0	-	43	0	41	0	-	41	0	0	0	-	0	84
% Mediums	4.1	0.0	-	-	4.1	0.0	8.3	0.0	-	8.3	0.0	-	-	-	0.0	5.4
Articulated Trucks	58	0	0	-	58	0	52	0	-	52	0	0	0	-	0	110
% Articulated Trucks	5.5	0.0	-	-	5.5	0.0	10.5	0.0	-	10.5	0.0	-	-	-	0.0	7.1
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Aenue Eastbound					Steeles Avenue Westbound					Eighth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	167	0	0	0	167	0	370	0	0	370	0	0	0	0	0	537
4:45 PM	164	2	0	0	166	0	360	0	0	360	0	1	0	0	1	527
5:00 PM	196	0	0	0	196	0	316	0	0	316	1	2	0	0	3	515
5:15 PM	207	0	0	0	207	0	365	0	0	365	0	2	0	0	2	574
Total	734	2	0	0	736	0	1411	0	0	1411	1	5	0	0	6	2153
Approach %	99.7	0.3	0.0	-	-	0.0	100.0	0.0	-	-	16.7	83.3	0.0	-	-	-
Total %	34.1	0.1	0.0	-	34.2	0.0	65.5	0.0	-	65.5	0.0	0.2	0.0	-	0.3	-
PHF	0.886	0.250	0.000	-	0.889	0.000	0.953	0.000	-	0.953	0.250	0.625	0.000	-	0.500	0.938
Lights	659	1	0	-	660	0	1330	0	-	1330	1	4	0	-	5	1995
% Lights	89.8	50.0	-	-	89.7	-	94.3	-	-	94.3	100.0	80.0	-	-	83.3	92.7
Mediums	22	1	0	-	23	0	27	0	-	27	0	1	0	-	1	51
% Mediums	3.0	50.0	-	-	3.1	-	1.9	-	-	1.9	0.0	20.0	-	-	16.7	2.4
Articulated Trucks	53	0	0	-	53	0	54	0	-	54	0	0	0	-	0	107
% Articulated Trucks	7.2	0.0	-	-	7.2	-	3.8	-	-	3.8	0.0	0.0	-	-	0.0	5.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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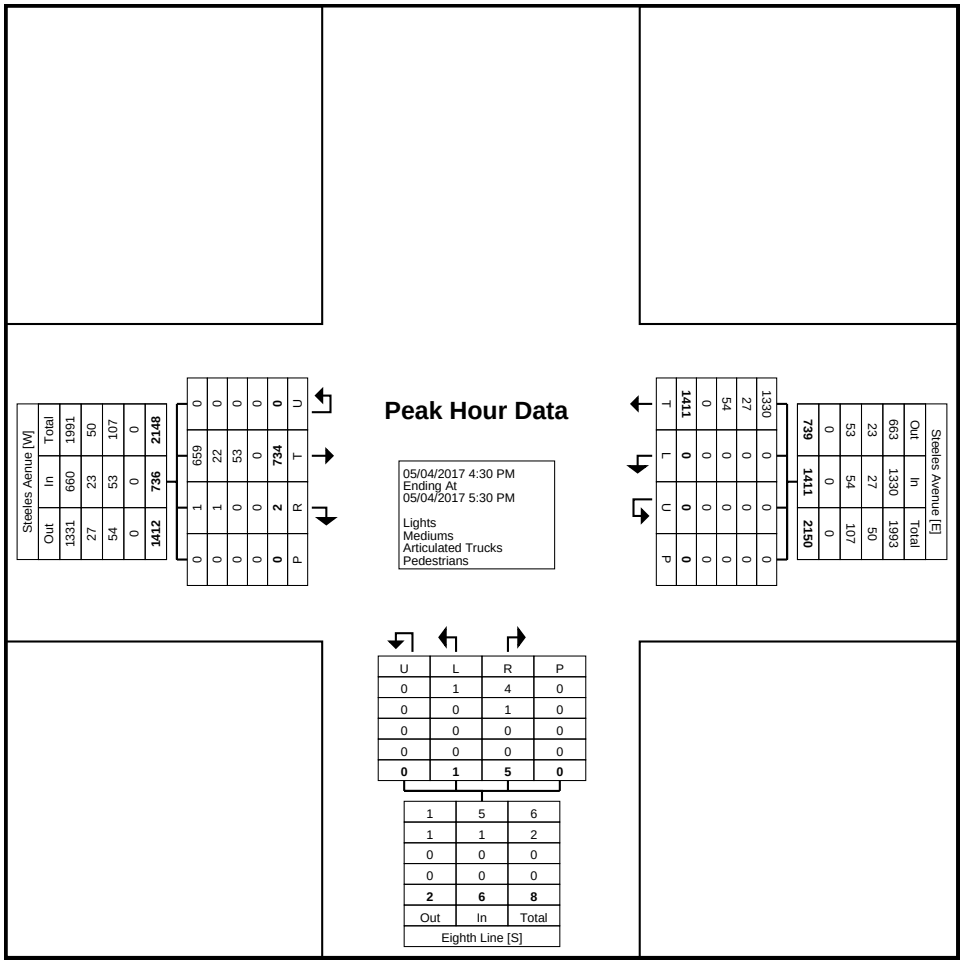
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (4:30 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line/Toronto Outlets - Saturday
Site Code:
Start Date: 05/06/2017

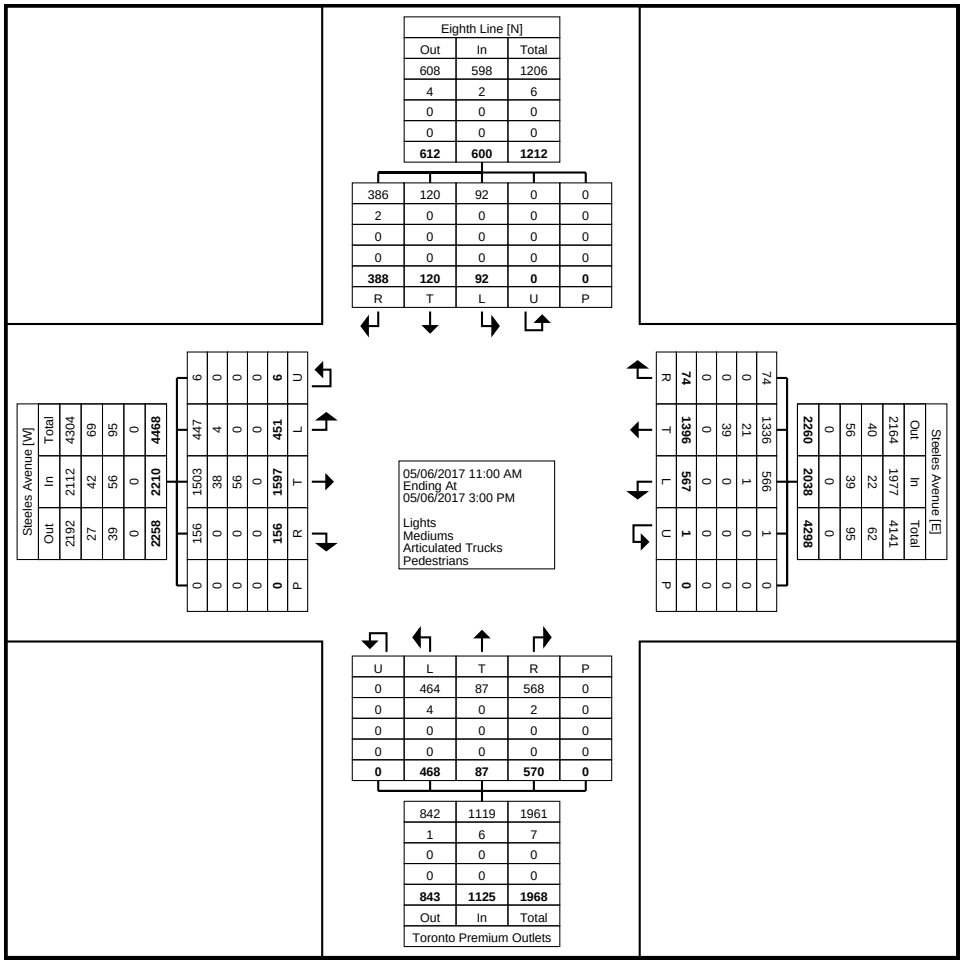
Turning Movement Data

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Toronto Premium Outlets Northbound						Eighth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	26	54	8	0	0	88	22	54	4	0	0	80	12	6	19	0	0	37	9	7	25	0	0	41	246
11:15 AM	21	93	8	0	0	122	29	68	5	0	0	102	13	4	26	0	0	43	4	4	22	0	0	30	297
11:30 AM	29	72	5	0	0	106	30	83	6	0	0	119	15	2	34	0	0	51	9	7	31	0	0	47	323
11:45 AM	27	93	17	0	0	137	33	96	3	0	0	132	20	6	23	0	0	49	1	7	22	0	0	30	348
Hourly Total	103	312	38	0	0	453	114	301	18	0	0	433	60	18	102	0	0	180	23	25	100	0	0	148	1214
12:00 PM	15	85	5	0	0	105	23	68	4	0	0	95	25	8	34	0	0	67	8	5	19	0	0	32	299
12:15 PM	36	94	12	1	0	143	48	103	1	0	0	152	21	2	26	0	0	49	2	5	28	0	0	35	379
12:30 PM	29	87	13	0	0	129	33	74	4	0	0	111	21	3	36	0	0	60	7	7	29	0	0	43	343
12:45 PM	31	111	23	0	0	165	40	72	6	0	0	118	37	9	47	0	0	93	3	16	26	0	0	45	421
Hourly Total	111	377	53	1	0	542	144	317	15	0	0	476	104	22	143	0	0	269	20	33	102	0	0	155	1442
1:00 PM	19	95	13	1	0	128	31	84	1	1	0	117	34	3	49	0	0	86	10	6	27	0	0	43	374
1:15 PM	34	121	9	1	0	165	27	101	8	0	0	136	28	5	19	0	0	52	11	7	22	0	0	40	393
1:30 PM	23	103	9	1	0	136	38	79	9	0	0	126	31	4	39	0	0	74	8	14	26	0	0	48	384
1:45 PM	33	95	6	0	0	134	55	107	4	0	0	166	47	6	45	0	0	98	4	8	23	0	0	35	433
Hourly Total	109	414	37	3	0	563	151	371	22	1	0	545	140	18	152	0	0	310	33	35	98	0	0	166	1584
2:00 PM	34	114	11	0	0	159	31	95	3	0	0	129	46	13	49	0	0	108	5	6	17	0	0	28	424
2:15 PM	33	125	4	2	0	164	40	106	7	0	0	153	35	7	34	0	0	76	5	7	27	0	0	39	432
2:30 PM	29	120	1	0	0	150	41	110	6	0	0	157	44	6	46	0	0	96	3	6	23	0	0	32	435
2:45 PM	32	135	12	0	0	179	46	96	3	0	0	145	39	3	44	0	0	86	3	8	21	0	0	32	442
Hourly Total	128	494	28	2	0	652	158	407	19	0	0	584	164	29	173	0	0	366	16	27	88	0	0	131	1733
Grand Total	451	1597	156	6	0	2210	567	1396	74	1	0	2038	468	87	570	0	0	1125	92	120	388	0	0	600	5973
Approach %	20.4	72.3	7.1	0.3	-	-	27.8	68.5	3.6	0.0	-	-	41.6	7.7	50.7	0.0	-	-	15.3	20.0	64.7	0.0	-	-	-
Total %	7.6	26.7	2.6	0.1	-	37.0	9.5	23.4	1.2	0.0	-	34.1	7.8	1.5	9.5	0.0	-	18.8	1.5	2.0	6.5	0.0	-	10.0	-
Lights	447	1503	156	6	-	2112	566	1336	74	1	-	1977	464	87	568	0	-	1119	92	120	386	0	-	598	5806
% Lights	99.1	94.1	100.0	100.0	-	95.6	99.8	95.7	100.0	100.0	-	97.0	99.1	100.0	99.6	-	-	99.5	100.0	100.0	99.5	-	-	99.7	97.2
Mediums	4	38	0	0	-	42	1	21	0	0	-	22	4	0	2	0	-	6	0	0	2	0	-	2	72
% Mediums	0.9	2.4	0.0	0.0	-	1.9	0.2	1.5	0.0	0.0	-	1.1	0.9	0.0	0.4	-	-	0.5	0.0	0.0	0.5	-	-	0.3	1.2
Articulated Trucks	0	56	0	0	-	56	0	39	0	0	-	39	0	0	0	0	-	0	0	0	0	0	-	0	95
% Articulated Trucks	0.0	3.5	0.0	0.0	-	2.5	0.0	2.8	0.0	0.0	-	1.9	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	1.6
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line/Toronto Outlets - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line/Toronto Outlets - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Toronto Premium Outlets Northbound						Eighth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
2:00 PM	34	114	11	0	0	159	31	95	3	0	0	129	46	13	49	0	0	108	5	6	17	0	0	28	424
2:15 PM	33	125	4	2	0	164	40	106	7	0	0	153	35	7	34	0	0	76	5	7	27	0	0	39	432
2:30 PM	29	120	1	0	0	150	41	110	6	0	0	157	44	6	46	0	0	96	3	6	23	0	0	32	435
2:45 PM	32	135	12	0	0	179	46	96	3	0	0	145	39	3	44	0	0	86	3	8	21	0	0	32	442
Total	128	494	28	2	0	652	158	407	19	0	0	584	164	29	173	0	0	366	16	27	88	0	0	131	1733
Approach %	19.6	75.8	4.3	0.3	-	-	27.1	69.7	3.3	0.0	-	-	44.8	7.9	47.3	0.0	-	-	12.2	20.6	67.2	0.0	-	-	-
Total %	7.4	28.5	1.6	0.1	-	37.6	9.1	23.5	1.1	0.0	-	33.7	9.5	1.7	10.0	0.0	-	21.1	0.9	1.6	5.1	0.0	-	7.6	-
PHF	0.941	0.915	0.583	0.250	-	0.911	0.859	0.925	0.679	0.000	-	0.930	0.891	0.558	0.883	0.000	-	0.847	0.800	0.844	0.815	0.000	-	0.840	0.980
Lights	126	468	28	2	-	624	158	397	19	0	-	574	164	29	173	0	-	366	16	27	88	0	-	131	1695
% Lights	98.4	94.7	100.0	100.0	-	95.7	100.0	97.5	100.0	-	-	98.3	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	97.8
Mediums	2	8	0	0	-	10	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	11
% Mediums	1.6	1.6	0.0	0.0	-	1.5	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.6
Articulated Trucks	0	18	0	0	-	18	0	9	0	0	-	9	0	0	0	0	-	0	0	0	0	0	-	0	27
% Articulated Trucks	0.0	3.6	0.0	0.0	-	2.8	0.0	2.2	0.0	-	-	1.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	1.6
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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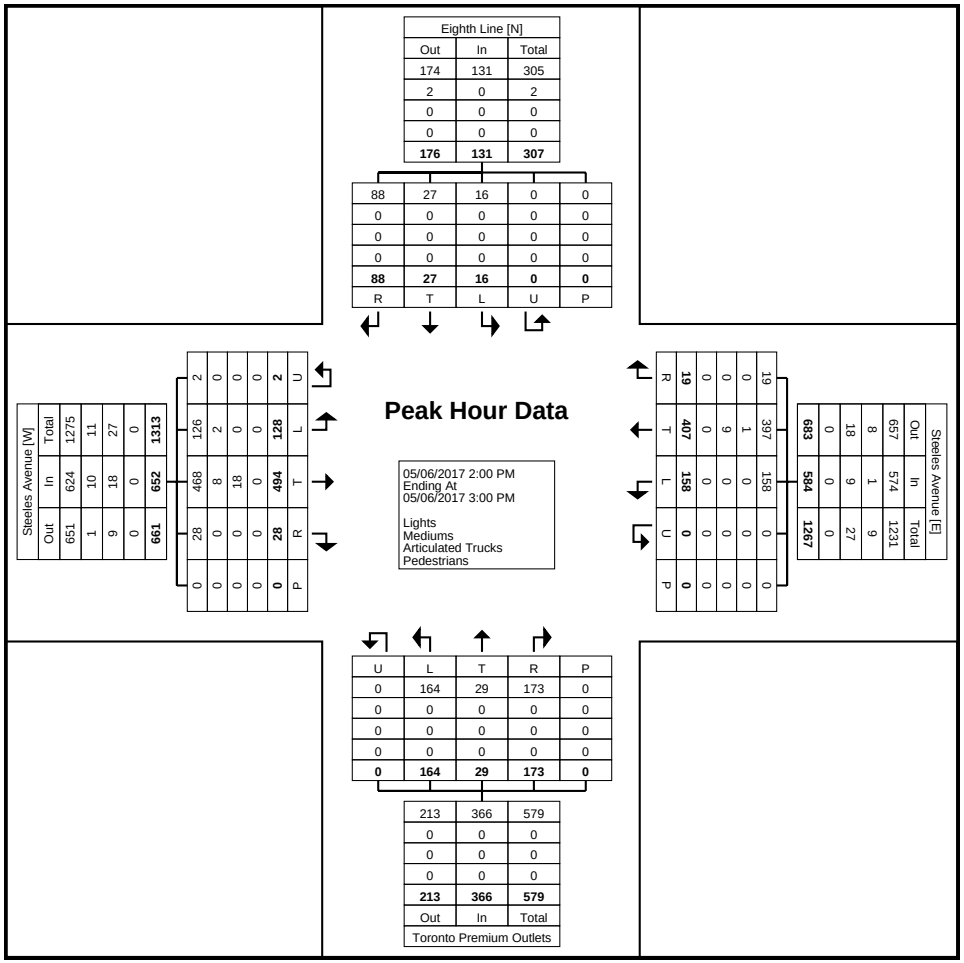
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Eighth Line/Toronto Outlets - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (2:00 PM)

Paradigm Transportation Solutions Limited
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Count Name: Steeles Avenue & Eighth Line/Toronto Outlets - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Fifth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
11:00 AM	72	1	0	0	73	0	77	0	0	77	2	0	0	0	2	152
11:15 AM	69	3	0	0	72	0	82	0	0	82	0	1	0	0	1	155
11:30 AM	83	0	0	0	83	0	93	0	0	93	0	0	0	0	0	176
11:45 AM	85	0	0	0	85	0	93	0	0	93	1	0	0	0	1	179
Hourly Total	309	4	0	0	313	0	345	0	0	345	3	1	0	0	4	662
12:00 PM	82	0	0	0	82	2	68	0	0	70	3	0	0	0	3	155
12:15 PM	84	1	0	0	85	0	91	1	0	92	0	2	0	0	2	179
12:30 PM	91	0	0	0	91	0	79	0	0	79	0	0	0	0	0	170
12:45 PM	77	0	0	0	77	1	107	0	0	108	1	0	0	0	1	186
Hourly Total	334	1	0	0	335	3	345	1	0	349	4	2	0	0	6	690
1:00 PM	85	0	0	0	85	0	115	1	0	116	0	0	0	0	0	201
1:15 PM	95	1	0	0	96	0	107	0	0	107	0	0	0	0	0	203
1:30 PM	89	2	0	0	91	3	84	0	0	87	4	2	0	0	6	184
1:45 PM	90	0	0	0	90	0	102	0	0	102	0	0	0	0	0	192
Hourly Total	359	3	0	0	362	3	408	1	0	412	4	2	0	0	6	780
2:00 PM	109	0	0	0	109	0	103	0	0	103	0	0	0	0	0	212
2:15 PM	87	0	0	0	87	0	94	0	0	94	0	0	0	0	0	181
2:30 PM	93	2	1	0	96	0	117	0	0	117	1	0	0	0	1	214
2:45 PM	92	1	0	0	93	0	110	0	0	110	1	0	0	0	1	204
Hourly Total	381	3	1	0	385	0	424	0	0	424	2	0	0	0	2	811
3:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Grand Total	1383	11	1	0	1395	6	1523	2	0	1531	13	5	0	0	18	2944
Approach %	99.1	0.8	0.1	-	-	0.4	99.5	0.1	-	-	72.2	27.8	0.0	-	-	-
Total %	47.0	0.4	0.0	-	47.4	0.2	51.7	0.1	-	52.0	0.4	0.2	0.0	-	0.6	-
Lights	1238	11	1	-	1250	6	1417	2	-	1425	13	5	0	-	18	2693
% Lights	89.5	100.0	100.0	-	89.6	100.0	93.0	100.0	-	93.1	100.0	100.0	-	-	100.0	91.5
Mediums	56	0	0	-	56	0	43	0	-	43	0	0	0	-	0	99
% Mediums	4.0	0.0	0.0	-	4.0	0.0	2.8	0.0	-	2.8	0.0	0.0	-	-	0.0	3.4
Articulated Trucks	89	0	0	-	89	0	63	0	-	63	0	0	0	-	0	152
% Articulated Trucks	6.4	0.0	0.0	-	6.4	0.0	4.1	0.0	-	4.1	0.0	0.0	-	-	0.0	5.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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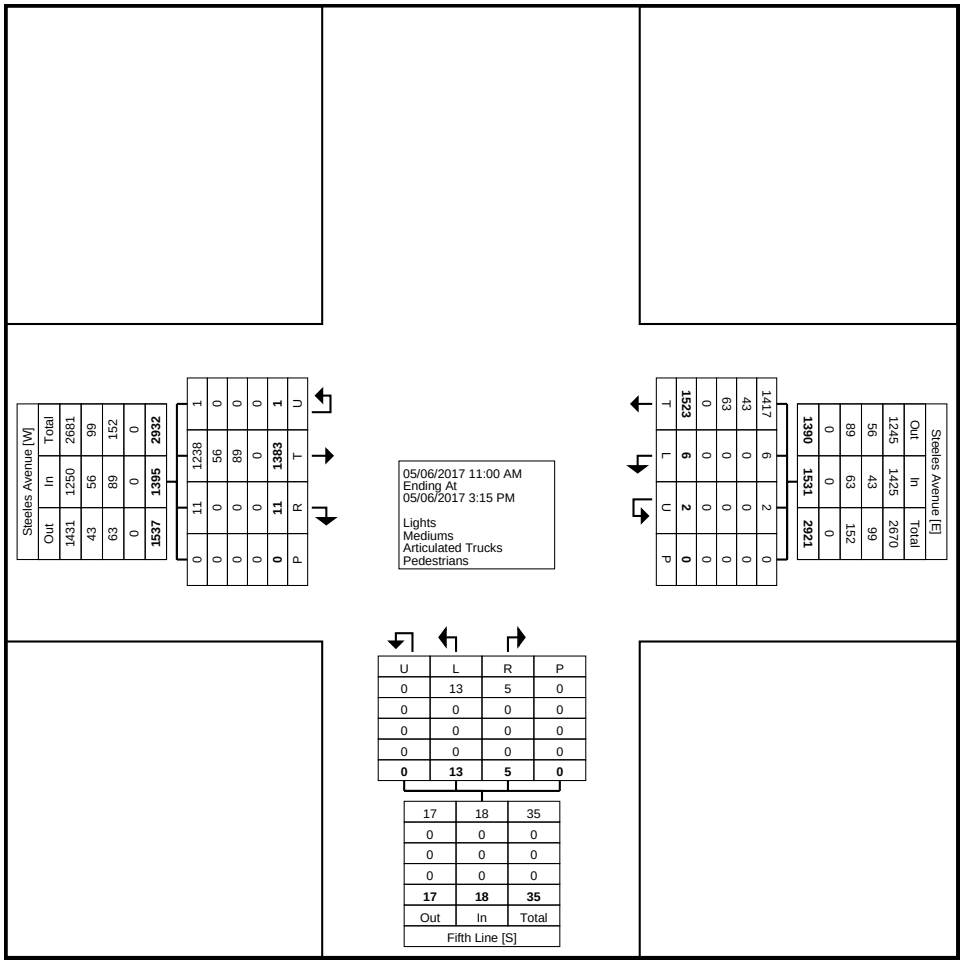
Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Fifth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
2:00 PM	109	0	0	0	109	0	103	0	0	103	0	0	0	0	0	212
2:15 PM	87	0	0	0	87	0	94	0	0	94	0	0	0	0	0	181
2:30 PM	93	2	1	0	96	0	117	0	0	117	1	0	0	0	1	214
2:45 PM	92	1	0	0	93	0	110	0	0	110	1	0	0	0	1	204
Total	381	3	1	0	385	0	424	0	0	424	2	0	0	0	2	811
Approach %	99.0	0.8	0.3	-	-	0.0	100.0	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	47.0	0.4	0.1	-	47.5	0.0	52.3	0.0	-	52.3	0.2	0.0	0.0	-	0.2	-
PHF	0.874	0.375	0.250	-	0.883	0.000	0.906	0.000	-	0.906	0.500	0.000	0.000	-	0.500	0.947
Lights	344	3	1	-	348	0	403	0	-	403	2	0	0	-	2	753
% Lights	90.3	100.0	100.0	-	90.4	-	95.0	-	-	95.0	100.0	-	-	-	100.0	92.8
Mediums	13	0	0	-	13	0	7	0	-	7	0	0	0	-	0	20
% Mediums	3.4	0.0	0.0	-	3.4	-	1.7	-	-	1.7	0.0	-	-	-	0.0	2.5
Articulated Trucks	24	0	0	-	24	0	14	0	-	14	0	0	0	-	0	38
% Articulated Trucks	6.3	0.0	0.0	-	6.2	-	3.3	-	-	3.3	0.0	-	-	-	0.0	4.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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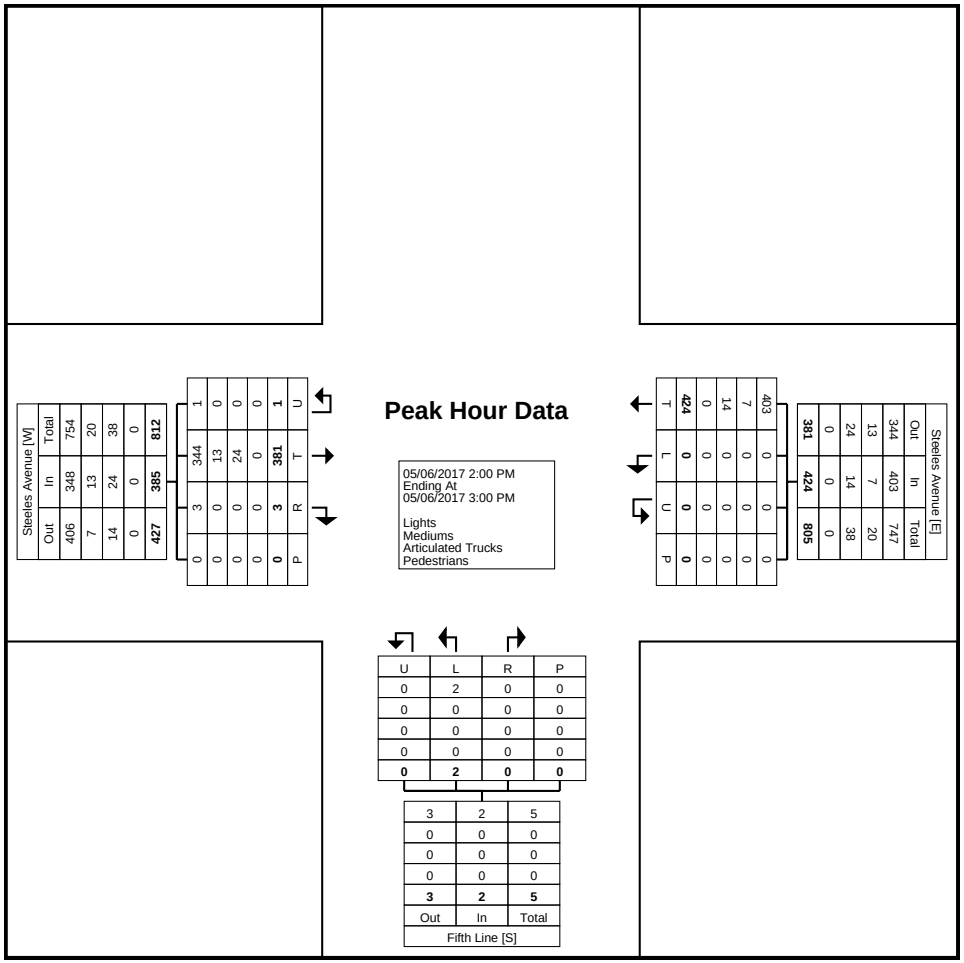
Count Name: Steeles Avenue & Fifth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (2:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Fifth Line Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
6:00 AM	52	2	0	0	54	0	54	0	0	54	0	0	0	0	0	108
6:15 AM	62	2	0	0	64	1	82	0	0	83	0	0	0	0	0	147
6:30 AM	92	3	0	0	95	2	76	0	0	78	1	0	0	0	1	174
6:45 AM	97	10	0	0	107	3	78	0	0	81	0	0	0	0	0	188
Hourly Total	303	17	0	0	320	6	290	0	0	296	1	0	0	0	1	617
7:00 AM	149	3	0	0	152	1	89	0	0	90	0	0	0	0	0	242
7:15 AM	153	1	0	0	154	0	90	0	0	90	4	1	0	0	5	249
7:30 AM	209	1	0	0	210	1	126	0	0	127	0	0	0	0	0	337
7:45 AM	174	7	0	0	181	0	113	0	0	113	0	2	0	0	2	296
Hourly Total	685	12	0	0	697	2	418	0	0	420	4	3	0	0	7	1124
8:00 AM	190	4	0	0	194	3	111	0	0	114	2	1	0	0	3	311
8:15 AM	186	9	0	0	195	2	124	0	0	126	4	0	0	0	4	325
8:30 AM	164	3	0	0	167	6	114	0	0	120	2	2	0	0	4	291
8:45 AM	114	4	0	0	118	1	98	0	0	99	3	4	0	0	7	224
Hourly Total	654	20	0	0	674	12	447	0	0	459	11	7	0	0	18	1151
9:00 AM	102	3	0	0	105	0	105	0	0	105	1	1	0	0	2	212
9:15 AM	95	1	0	0	96	0	101	0	0	101	0	2	0	0	2	199
9:30 AM	73	3	0	0	76	0	83	1	0	84	1	0	0	0	1	161
9:45 AM	77	2	0	0	79	4	96	0	0	100	2	1	0	0	3	182
Hourly Total	347	9	0	0	356	4	385	1	0	390	4	4	0	0	8	754
10:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
3:00 PM	134	3	0	0	137	0	156	0	0	156	1	3	0	0	4	297
3:15 PM	124	0	0	0	124	1	137	1	0	139	0	1	0	0	1	264
3:30 PM	125	1	0	0	126	1	158	0	0	159	3	0	0	0	3	288
3:45 PM	129	0	0	0	129	0	176	0	0	176	3	0	0	0	3	308
Hourly Total	512	4	0	0	516	2	627	1	0	630	7	4	0	0	11	1157
4:00 PM	127	3	0	0	130	0	214	0	0	214	7	2	0	0	9	353
4:15 PM	105	1	0	0	106	1	236	0	0	237	5	5	0	0	10	353
4:30 PM	138	0	0	0	138	1	227	0	0	228	7	3	0	0	10	376
4:45 PM	119	1	0	0	120	0	232	2	0	234	1	1	0	0	2	356
Hourly Total	489	5	0	0	494	2	909	2	0	913	20	11	0	0	31	1438
5:00 PM	142	0	0	0	142	1	222	0	0	223	6	2	0	0	8	373
5:15 PM	128	0	0	0	128	0	259	0	0	259	0	0	0	0	0	387
5:30 PM	95	0	0	0	95	0	232	1	0	233	0	1	0	0	1	329
5:45 PM	71	0	0	0	71	0	278	0	0	278	1	0	0	0	1	350
Hourly Total	436	0	0	0	436	1	991	1	0	993	7	3	0	0	10	1439

6:00 PM	98	1	0	0	99	0	225	0	0	225	1	0	0	0	1	325
6:15 PM	90	0	0	0	90	0	205	0	0	205	0	0	0	0	0	295
6:30 PM	64	0	0	0	64	0	141	0	0	141	0	1	0	0	1	206
6:45 PM	73	0	0	0	73	0	148	0	0	148	0	0	0	0	0	221
Hourly Total	325	1	0	0	326	0	719	0	0	719	1	1	0	0	2	1047
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3751	68	0	0	3819	29	4788	5	0	4822	55	33	0	0	88	8729
Approach %	98.2	1.8	0.0	-	-	0.6	99.3	0.1	-	-	62.5	37.5	0.0	-	-	-
Total %	43.0	0.8	0.0	-	43.8	0.3	54.9	0.1	-	55.2	0.6	0.4	0.0	-	1.0	-
Lights	2838	62	0	-	2900	24	3841	5	-	3870	47	30	0	-	77	6847
% Lights	75.7	91.2	-	-	75.9	82.8	80.2	100.0	-	80.3	85.5	90.9	-	-	87.5	78.4
Mediums	355	5	0	-	360	4	361	0	-	365	8	1	0	-	9	734
% Mediums	9.5	7.4	-	-	9.4	13.8	7.5	0.0	-	7.6	14.5	3.0	-	-	10.2	8.4
Articulated Trucks	558	1	0	-	559	1	586	0	-	587	0	2	0	-	2	1148
% Articulated Trucks	14.9	1.5	-	-	14.6	3.4	12.2	0.0	-	12.2	0.0	6.1	-	-	2.3	13.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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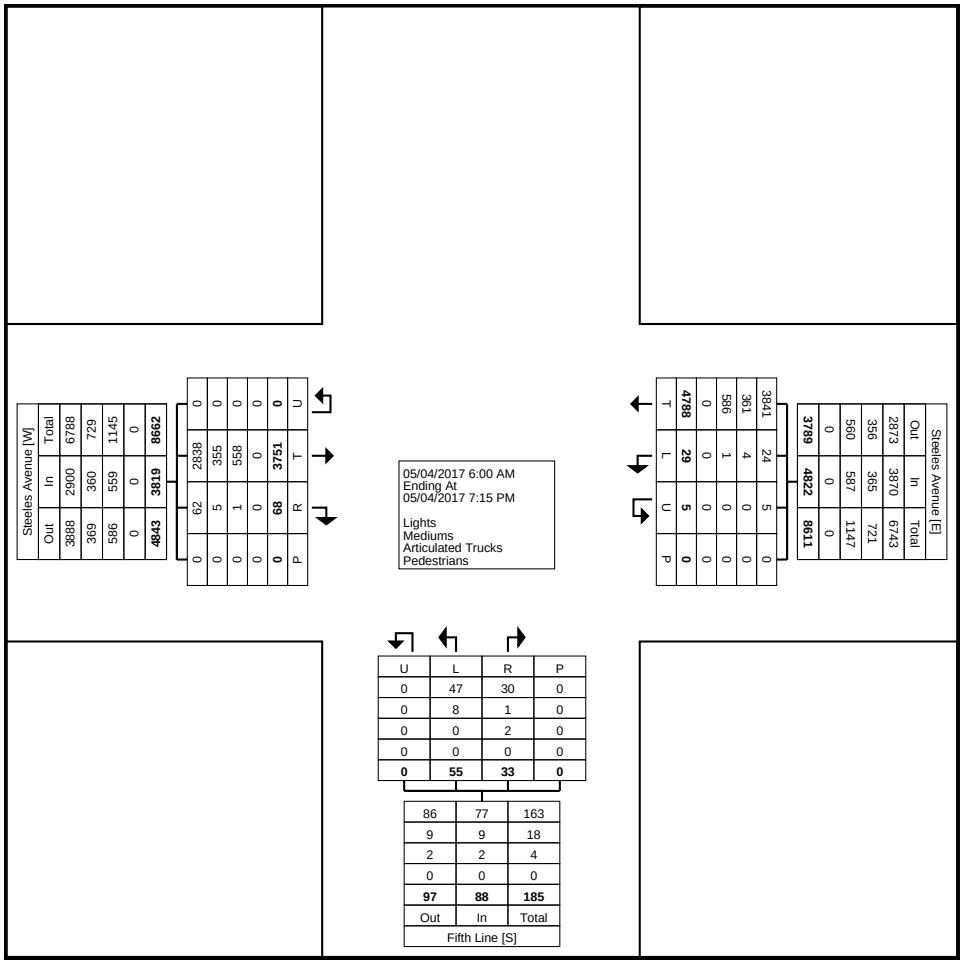
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Steeles Avenue [W]							
	Total	6788	729	1145	0	**8662**
In	2900	360	559	0	**3819**
Out	3888	369	586	0	**4843**

0	0	0	0	**0**	U
2838	355	558	0	**3751**	T
62	5	1	0	**68**	R
0	0	0	**0**	**0**	P

3841	361	586	**4788**	T
24	4	1	**29**	L
5	0	0	**5**	U
0	0	0	**0**	P

Steeles Avenue [E]					
Out	2873	356	560	**3789**
In	3870	365	587	**4822**
Total	6743	721	1147	**8611**

U	L	R	P
0	47	30	0
0	8	1	0
0	0	2	0
0	0	0	0
0	**55**	**33**	**0**

86	77	163
9	9	18
2	2	4
0	0	0
97	**88**	**185**
Out	In	Total
Fifth Line [S]		

Turning Movement Data Plot

Paradigm Transportation Solutions Limited
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Count Name: Steeles Avenue & Fifth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Fifth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	209	1	0	0	210	1	126	0	0	127	0	0	0	0	0	337
7:45 AM	174	7	0	0	181	0	113	0	0	113	0	2	0	0	2	296
8:00 AM	190	4	0	0	194	3	111	0	0	114	2	1	0	0	3	311
8:15 AM	186	9	0	0	195	2	124	0	0	126	4	0	0	0	4	325
Total	759	21	0	0	780	6	474	0	0	480	6	3	0	0	9	1269
Approach %	97.3	2.7	0.0	-	-	1.3	98.8	0.0	-	-	66.7	33.3	0.0	-	-	-
Total %	59.8	1.7	0.0	-	61.5	0.5	37.4	0.0	-	37.8	0.5	0.2	0.0	-	0.7	-
PHF	0.908	0.583	0.000	-	0.929	0.500	0.940	0.000	-	0.945	0.375	0.375	0.000	-	0.563	0.941
Lights	588	20	0	-	608	5	299	0	-	304	5	3	0	-	8	920
% Lights	77.5	95.2	-	-	77.9	83.3	63.1	-	-	63.3	83.3	100.0	-	-	88.9	72.5
Mediums	75	1	0	-	76	1	83	0	-	84	1	0	0	-	1	161
% Mediums	9.9	4.8	-	-	9.7	16.7	17.5	-	-	17.5	16.7	0.0	-	-	11.1	12.7
Articulated Trucks	96	0	0	-	96	0	92	0	-	92	0	0	0	-	0	188
% Articulated Trucks	12.6	0.0	-	-	12.3	0.0	19.4	-	-	19.2	0.0	0.0	-	-	0.0	14.8
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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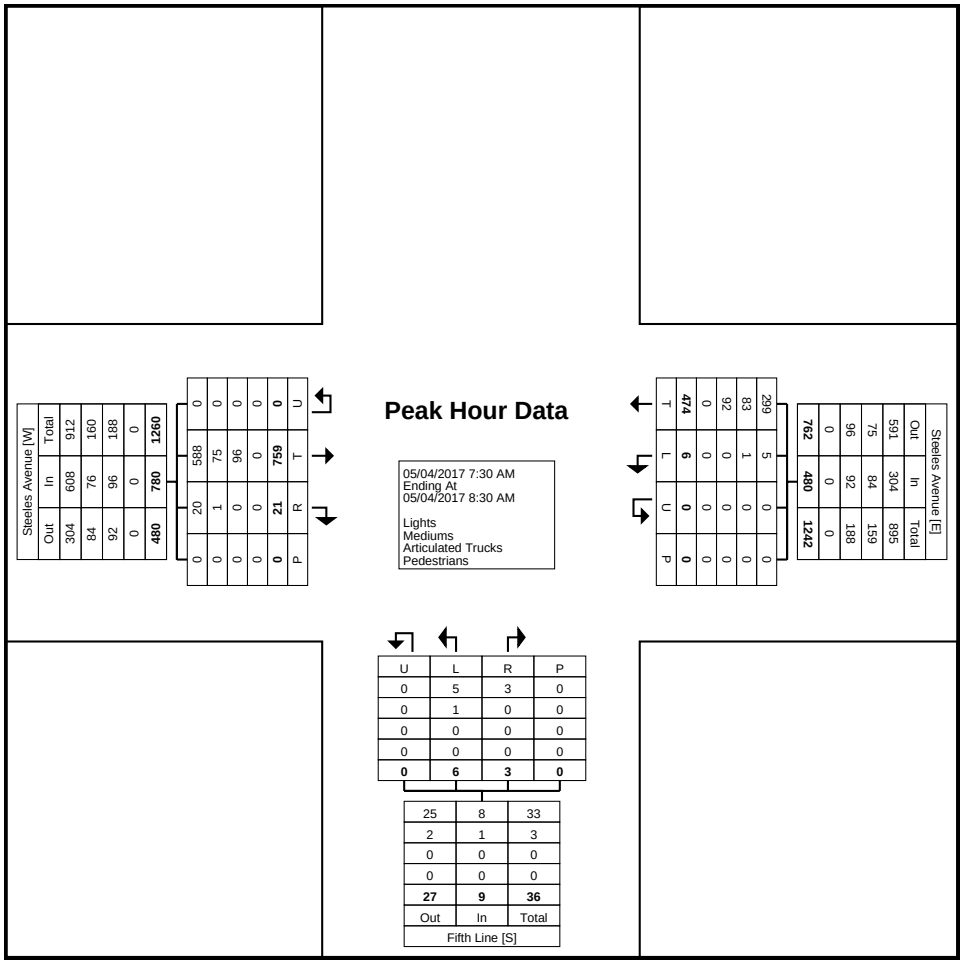

Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Fifth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	138	0	0	0	138	1	227	0	0	228	7	3	0	0	10	376
4:45 PM	119	1	0	0	120	0	232	2	0	234	1	1	0	0	2	356
5:00 PM	142	0	0	0	142	1	222	0	0	223	6	2	0	0	8	373
5:15 PM	128	0	0	0	128	0	259	0	0	259	0	0	0	0	0	387
Total	527	1	0	0	528	2	940	2	0	944	14	6	0	0	20	1492
Approach %	99.8	0.2	0.0	-	-	0.2	99.6	0.2	-	-	70.0	30.0	0.0	-	-	-
Total %	35.3	0.1	0.0	-	35.4	0.1	63.0	0.1	-	63.3	0.9	0.4	0.0	-	1.3	-
PHF	0.928	0.250	0.000	-	0.930	0.500	0.907	0.250	-	0.911	0.500	0.500	0.000	-	0.500	0.964
Lights	437	1	0	-	438	1	851	2	-	854	13	5	0	-	18	1310
% Lights	82.9	100.0	-	-	83.0	50.0	90.5	100.0	-	90.5	92.9	83.3	-	-	90.0	87.8
Mediums	27	0	0	-	27	1	35	0	-	36	1	0	0	-	1	64
% Mediums	5.1	0.0	-	-	5.1	50.0	3.7	0.0	-	3.8	7.1	0.0	-	-	5.0	4.3
Articulated Trucks	63	0	0	-	63	0	54	0	-	54	0	1	0	-	1	118
% Articulated Trucks	12.0	0.0	-	-	11.9	0.0	5.7	0.0	-	5.7	0.0	16.7	-	-	5.0	7.9
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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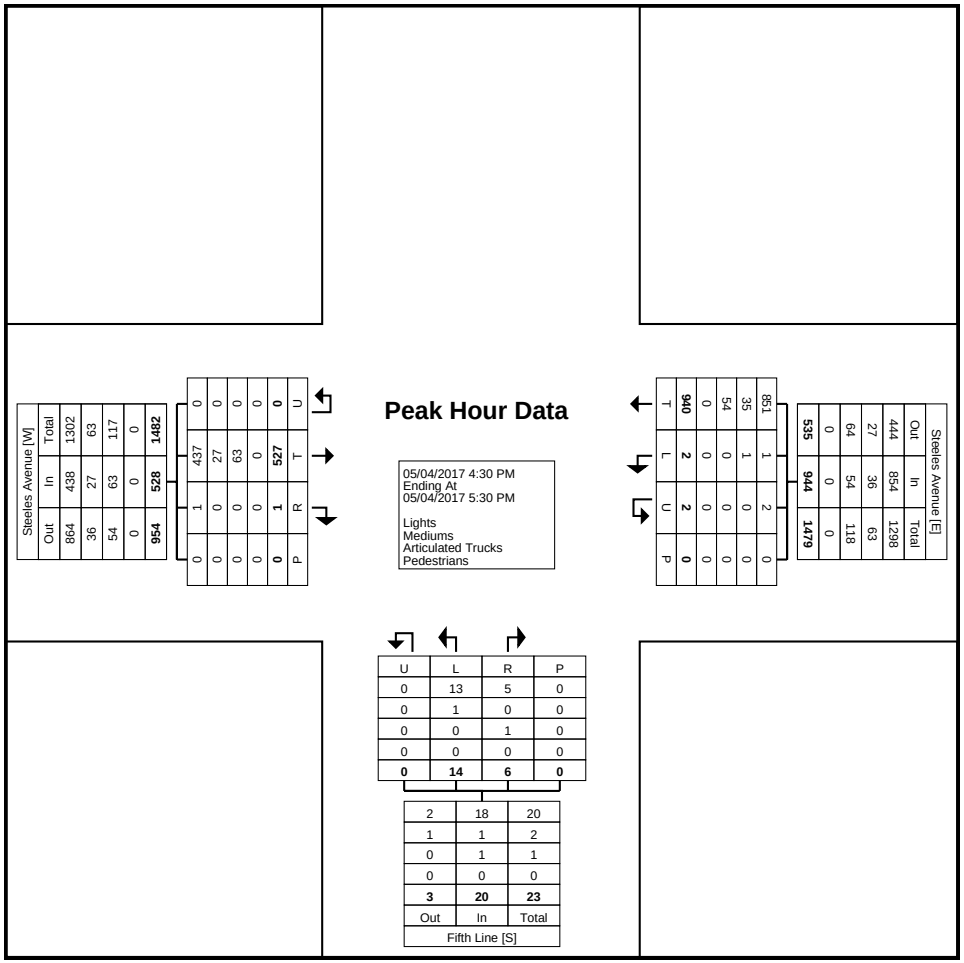

Turning Movement Peak Hour Data Plot (4:30 PM)

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Count Name: Steeles Avenue & Fifth Line/Brownridge - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Brownridge Road Northbound						Fifth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	4	70	1	0	0	75	1	80	1	0	0	82	1	0	0	0	0	1	2	0	13	0	0	15	173
11:15 AM	10	57	2	0	0	69	2	79	1	0	0	82	3	0	1	0	0	4	4	0	6	0	0	10	165
11:30 AM	8	81	2	0	0	91	3	86	1	1	0	91	4	0	1	0	0	5	1	0	10	0	0	11	198
11:45 AM	7	74	1	0	0	82	0	87	1	0	0	88	2	0	1	0	0	3	0	0	6	0	0	6	179
Hourly Total	29	282	6	0	0	317	6	332	4	1	0	343	10	0	3	0	0	13	7	0	35	0	0	42	715
12:00 PM	4	76	4	0	0	84	0	72	1	0	0	73	4	0	0	0	0	4	2	1	4	0	0	7	168
12:15 PM	10	86	3	0	0	99	0	87	1	0	0	88	2	0	0	0	0	2	2	0	13	0	0	15	204
12:30 PM	7	86	1	0	0	94	0	77	1	0	0	78	1	0	1	0	0	2	1	0	6	0	0	7	181
12:45 PM	8	68	2	0	0	78	2	103	1	0	0	106	2	0	1	0	0	3	1	0	5	0	0	6	193
Hourly Total	29	316	10	0	0	355	2	339	4	0	0	345	9	0	2	0	0	11	6	1	28	0	0	35	746
1:00 PM	7	85	2	0	0	94	0	114	1	0	0	115	4	0	1	0	0	5	3	0	7	0	0	10	224
1:15 PM	8	91	0	0	0	99	1	103	5	0	0	109	1	0	1	0	0	2	1	0	10	0	0	11	221
1:30 PM	2	80	4	0	0	86	1	86	2	0	0	89	2	0	3	0	0	5	0	1	7	0	0	8	188
1:45 PM	9	87	3	0	0	99	0	102	1	0	0	103	2	0	1	0	0	3	1	0	8	0	0	9	214
Hourly Total	26	343	9	0	0	378	2	405	9	0	0	416	9	0	6	0	0	15	5	1	32	0	0	38	847
2:00 PM	7	100	1	0	0	108	0	108	1	0	0	109	5	1	2	0	0	8	2	1	6	0	0	9	234
2:15 PM	5	86	3	0	0	94	1	89	1	0	0	91	1	0	1	0	0	2	4	1	9	0	0	14	201
2:30 PM	5	91	0	0	0	96	1	125	0	0	0	126	3	0	0	0	0	3	2	0	8	0	0	10	235
2:45 PM	10	87	0	0	0	97	0	113	1	0	0	114	1	0	2	0	0	3	4	0	11	0	0	15	229
Hourly Total	27	364	4	0	0	395	2	435	3	0	0	440	10	1	5	0	0	16	12	2	34	0	0	48	899
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	111	1305	29	0	0	1445	12	1511	20	1	0	1544	38	1	16	0	0	55	30	4	129	0	0	163	3207
Approach %	7.7	90.3	2.0	0.0	-	-	0.8	97.9	1.3	0.1	-	-	69.1	1.8	29.1	0.0	-	-	18.4	2.5	79.1	0.0	-	-	-
Total %	3.5	40.7	0.9	0.0	-	45.1	0.4	47.1	0.6	0.0	-	48.1	1.2	0.0	0.5	0.0	-	1.7	0.9	0.1	4.0	0.0	-	5.1	-
Lights	108	1186	25	0	-	1319	11	1424	10	1	-	1446	33	1	14	0	-	48	18	4	126	0	-	148	2961
% Lights	97.3	90.9	86.2	-	-	91.3	91.7	94.2	50.0	100.0	-	93.7	86.8	100.0	87.5	-	-	87.3	60.0	100.0	97.7	-	-	90.8	92.3
Mediums	0	51	1	0	-	52	0	35	3	0	-	38	1	0	0	0	-	1	1	0	3	0	-	4	95
% Mediums	0.0	3.9	3.4	-	-	3.6	0.0	2.3	15.0	0.0	-	2.5	2.6	0.0	0.0	-	-	1.8	3.3	0.0	2.3	-	-	2.5	3.0
Articulated Trucks	3	68	3	0	-	74	1	52	7	0	-	60	4	0	2	0	-	6	11	0	0	0	-	11	151
% Articulated Trucks	2.7	5.2	10.3	-	-	5.1	8.3	3.4	35.0	0.0	-	3.9	10.5	0.0	12.5	-	-	10.9	36.7	0.0	0.0	-	-	6.7	4.7
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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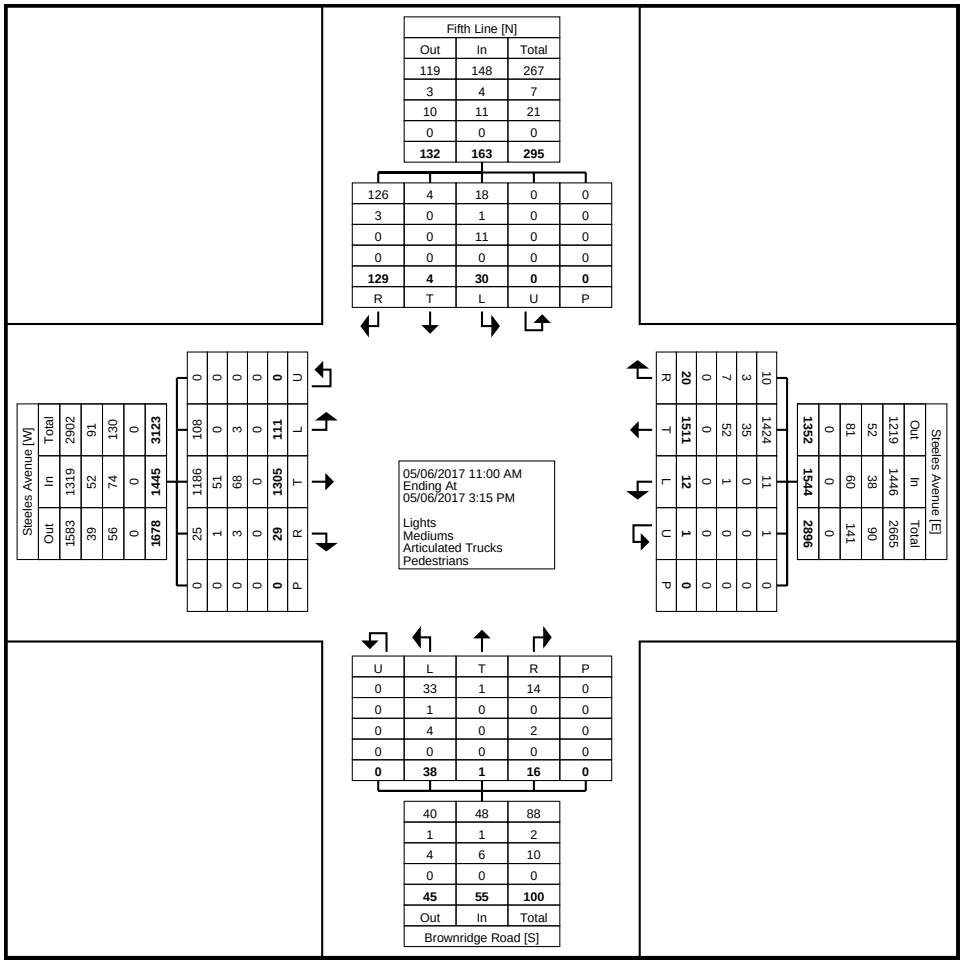
Count Name: Steeles Avenue & Fifth Line/Brownridge - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

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Count Name: Steeles Avenue & Fifth Line/Brownridge - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Brownridge Road Northbound						Fifth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
2:00 PM	7	100	1	0	0	108	0	108	1	0	0	109	5	1	2	0	0	8	2	1	6	0	0	9	234
2:15 PM	5	86	3	0	0	94	1	89	1	0	0	91	1	0	1	0	0	2	4	1	9	0	0	14	201
2:30 PM	5	91	0	0	0	96	1	125	0	0	0	126	3	0	0	0	0	3	2	0	8	0	0	10	235
2:45 PM	10	87	0	0	0	97	0	113	1	0	0	114	1	0	2	0	0	3	4	0	11	0	0	15	229
Total	27	364	4	0	0	395	2	435	3	0	0	440	10	1	5	0	0	16	12	2	34	0	0	48	899
Approach %	6.8	92.2	1.0	0.0	-	-	0.5	98.9	0.7	0.0	-	-	62.5	6.3	31.3	0.0	-	-	25.0	4.2	70.8	0.0	-	-	-
Total %	3.0	40.5	0.4	0.0	-	43.9	0.2	48.4	0.3	0.0	-	48.9	1.1	0.1	0.6	0.0	-	1.8	1.3	0.2	3.8	0.0	-	5.3	-
PHF	0.675	0.910	0.333	0.000	-	0.914	0.500	0.870	0.750	0.000	-	0.873	0.500	0.250	0.625	0.000	-	0.500	0.750	0.500	0.773	0.000	-	0.800	0.956
Lights	25	335	4	0	-	364	2	416	1	0	-	419	9	1	5	0	-	15	7	2	34	0	-	43	841
% Lights	92.6	92.0	100.0	-	-	92.2	100.0	95.6	33.3	-	-	95.2	90.0	100.0	100.0	-	-	93.8	58.3	100.0	100.0	-	-	89.6	93.5
Mediums	0	11	0	0	-	11	0	7	0	0	-	7	0	0	0	0	-	0	1	0	0	0	-	1	19
% Mediums	0.0	3.0	0.0	-	-	2.8	0.0	1.6	0.0	-	-	1.6	0.0	0.0	0.0	-	-	0.0	8.3	0.0	0.0	-	-	2.1	2.1
Articulated Trucks	2	18	0	0	-	20	0	12	2	0	-	14	1	0	0	0	-	1	4	0	0	0	-	4	39
% Articulated Trucks	7.4	4.9	0.0	-	-	5.1	0.0	2.8	66.7	-	-	3.2	10.0	0.0	0.0	-	-	6.3	33.3	0.0	0.0	-	-	8.3	4.3
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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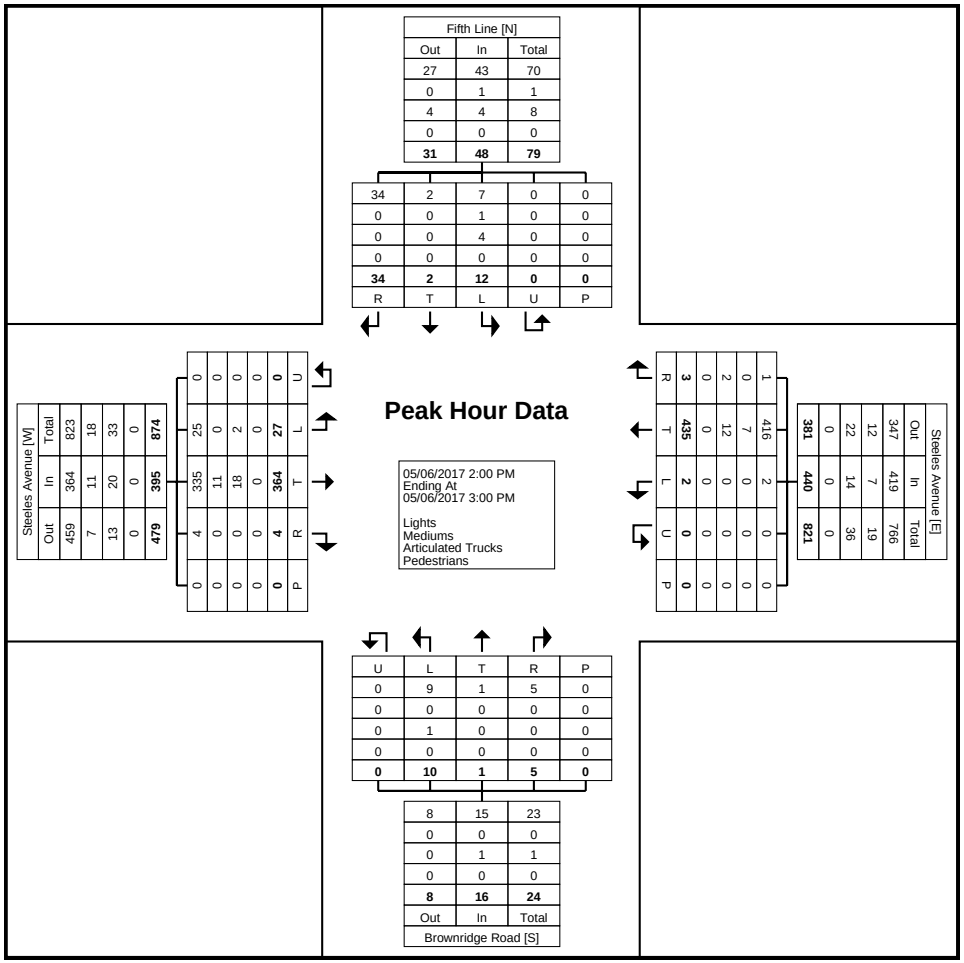

Turning Movement Peak Hour Data Plot (2:00 PM)

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Count Name: Steeles Avenue & Fifth Line/Brownridge - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

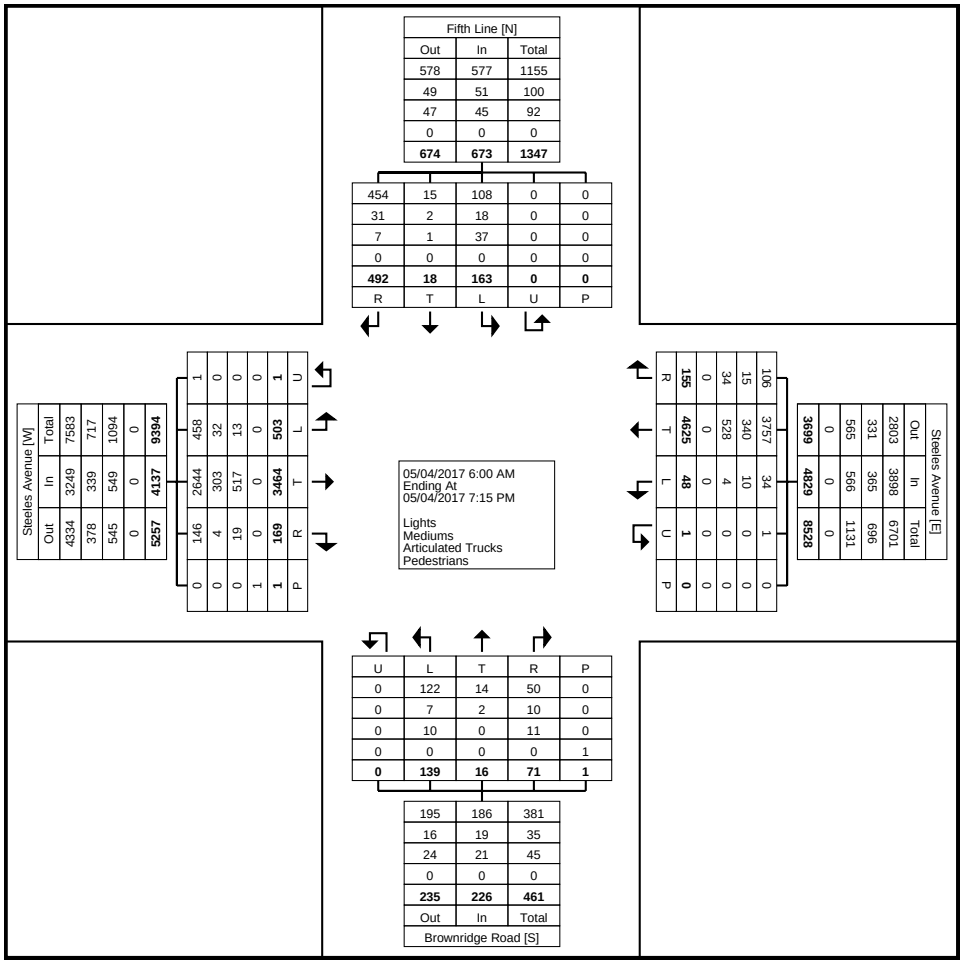
Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Brownridge Road Northbound						Fifth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	7	45	2	0	0	54	0	56	5	0	0	61	1	0	1	0	0	2	2	0	2	0	0	4	121
6:15 AM	11	58	2	0	0	71	3	74	5	0	0	82	0	0	0	0	0	0	3	0	9	0	0	12	165
6:30 AM	12	87	7	0	0	106	1	63	6	0	0	70	0	0	0	0	0	0	2	0	4	0	0	6	182
6:45 AM	13	107	6	0	0	126	1	72	8	0	0	81	1	0	0	0	0	1	4	0	7	0	0	11	219
Hourly Total	43	297	17	0	0	357	5	265	24	0	0	294	2	0	1	0	0	3	11	0	22	0	0	33	687
7:00 AM	22	149	6	0	1	177	1	78	9	0	0	88	3	0	2	0	0	5	4	0	9	0	0	13	283
7:15 AM	36	148	9	0	0	193	2	87	6	0	0	95	1	0	0	0	0	1	4	1	18	0	0	23	312
7:30 AM	25	189	12	0	0	226	3	105	7	0	0	115	2	0	3	0	0	5	6	0	14	0	0	20	366
7:45 AM	41	183	18	0	0	242	8	109	5	0	0	122	2	0	1	0	1	3	4	3	16	0	0	23	390
Hourly Total	124	669	45	0	1	838	14	379	27	0	0	420	8	0	6	0	1	14	18	4	57	0	0	79	1351
8:00 AM	33	185	6	0	0	224	2	98	9	1	0	110	5	0	1	0	0	6	4	2	15	0	0	21	361
8:15 AM	36	170	15	1	0	222	3	108	16	0	0	127	0	0	0	0	0	0	6	1	18	0	0	25	374
8:30 AM	28	146	11	0	0	185	2	101	7	0	0	110	4	0	3	0	0	7	5	0	16	0	0	21	323
8:45 AM	11	106	8	0	0	125	4	90	4	0	0	98	3	0	0	0	0	3	7	2	13	0	0	22	248
Hourly Total	108	607	40	1	0	756	11	397	36	1	0	445	12	0	4	0	0	16	22	5	62	0	0	89	1306
9:00 AM	10	90	10	0	0	110	1	101	3	0	0	105	1	0	2	0	0	3	5	0	13	0	0	18	236
9:15 AM	9	95	11	0	0	115	0	87	7	0	0	94	4	0	2	0	0	6	6	0	9	0	0	15	230
9:30 AM	9	76	5	0	0	90	0	91	3	0	0	94	3	0	0	0	0	3	3	1	17	0	0	21	208
9:45 AM	12	67	8	0	0	87	5	90	3	0	0	98	9	1	1	0	0	11	3	1	9	0	0	13	209
Hourly Total	40	328	34	0	0	402	6	369	16	0	0	391	17	1	5	0	0	23	17	2	48	0	0	67	883
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	18	110	5	0	0	133	3	132	5	0	0	140	5	1	3	0	0	9	13	1	22	0	0	36	318
3:15 PM	19	113	6	0	0	138	2	152	2	0	0	156	11	1	4	0	0	16	4	0	17	0	0	21	331
3:30 PM	17	120	3	0	0	140	0	156	5	0	0	161	5	1	2	0	0	8	3	1	10	0	0	14	323
3:45 PM	11	107	7	0	0	125	4	166	3	0	0	173	7	1	7	0	0	15	5	2	15	0	0	22	335
Hourly Total	65	450	21	0	0	536	9	606	15	0	0	630	28	4	16	0	0	48	25	4	64	0	0	93	1307
4:00 PM	7	115	5	0	0	127	0	228	7	0	0	235	6	2	5	0	0	13	8	0	36	0	0	44	419
4:15 PM	12	97	3	0	0	112	0	239	2	0	0	241	3	1	6	0	0	10	4	0	26	0	0	30	393
4:30 PM	12	114	1	0	0	127	0	232	3	0	0	235	7	1	4	0	0	12	14	2	39	0	0	55	429
4:45 PM	12	108	1	0	0	121	2	214	3	0	0	219	6	1	6	0	0	13	9	0	22	0	0	31	384
Hourly Total	43	434	10	0	0	487	2	913	15	0	0	930	22	5	21	0	0	48	35	2	123	0	0	160	1625
5:00 PM	14	114	1	0	0	129	0	228	4	0	0	232	16	3	10	0	0	29	13	1	19	0	0	33	423
5:15 PM	9	111	0	0	0	120	0	247	1	0	0	248	14	2	3	0	0	19	6	0	21	0	0	27	414
5:30 PM	14	80	0	0	0	94	0	225	3	0	0	228	7	0	2	0	0	9	2	0	13	0	0	15	346
5:45 PM	7	63	1	0	0	71	0	268	3	0	0	271	3	0	3	0	0	6	2	0	21	0	0	23	371

Hourly Total	44	368	2	0	0	414	0	968	11	0	0	979	40	5	18	0	0	63	23	1	74	0	0	98	1554
6:00 PM	10	97	0	0	0	107	1	228	3	0	0	232	7	0	0	0	0	7	5	0	12	0	0	17	363
6:15 PM	9	84	0	0	0	93	0	203	2	0	0	205	0	1	0	0	0	1	2	0	14	0	0	16	315
6:30 PM	7	54	0	0	0	61	0	145	2	0	0	147	3	0	0	0	0	3	4	0	11	0	0	15	226
6:45 PM	10	76	0	0	0	86	0	152	4	0	0	156	0	0	0	0	0	0	1	0	5	0	0	6	248
Hourly Total	36	311	0	0	0	347	1	728	11	0	0	740	10	1	0	0	0	11	12	0	42	0	0	54	1152
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	503	3464	169	1	1	4137	48	4625	155	1	0	4829	139	16	71	0	1	226	163	18	492	0	0	673	9865
Approach %	12.2	83.7	4.1	0.0	-	-	1.0	95.8	3.2	0.0	-	-	61.5	7.1	31.4	0.0	-	-	24.2	2.7	73.1	0.0	-	-	-
Total %	5.1	35.1	1.7	0.0	-	41.9	0.5	46.9	1.6	0.0	-	49.0	1.4	0.2	0.7	0.0	-	2.3	1.7	0.2	5.0	0.0	-	6.8	-
Lights	458	2644	146	1	-	3249	34	3757	106	1	-	3898	122	14	50	0	-	186	108	15	454	0	-	577	7910
% Lights	91.1	76.3	86.4	100.0	-	78.5	70.8	81.2	68.4	100.0	-	80.7	87.8	87.5	70.4	-	-	82.3	66.3	83.3	92.3	-	-	85.7	80.2
Mediums	32	303	4	0	-	339	10	340	15	0	-	365	7	2	10	0	-	19	18	2	31	0	-	51	774
% Mediums	6.4	8.7	2.4	0.0	-	8.2	20.8	7.4	9.7	0.0	-	7.6	5.0	12.5	14.1	-	-	8.4	11.0	11.1	6.3	-	-	7.6	7.8
Articulated Trucks	13	517	19	0	-	549	4	528	34	0	-	566	10	0	11	0	-	21	37	1	7	0	-	45	1181
% Articulated Trucks	2.6	14.9	11.2	0.0	-	13.3	8.3	11.4	21.9	0.0	-	11.7	7.2	0.0	15.5	-	-	9.3	22.7	5.6	1.4	-	-	6.7	12.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line/Brownridge - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line/Brownridge - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Brownridge Road Northbound						Fifth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	25	189	12	0	0	226	3	105	7	0	0	115	2	0	3	0	0	5	6	0	14	0	0	20	366
7:45 AM	41	183	18	0	0	242	8	109	5	0	0	122	2	0	1	0	1	3	4	3	16	0	0	23	390
8:00 AM	33	185	6	0	0	224	2	98	9	1	0	110	5	0	1	0	0	6	4	2	15	0	0	21	361
8:15 AM	36	170	15	1	0	222	3	108	16	0	0	127	0	0	0	0	0	0	6	1	18	0	0	25	374
Total	135	727	51	1	0	914	16	420	37	1	0	474	9	0	5	0	1	14	20	6	63	0	0	89	1491
Approach %	14.8	79.5	5.6	0.1	-	-	3.4	88.6	7.8	0.2	-	-	64.3	0.0	35.7	0.0	-	-	22.5	6.7	70.8	0.0	-	-	-
Total %	9.1	48.8	3.4	0.1	-	61.3	1.1	28.2	2.5	0.1	-	31.8	0.6	0.0	0.3	0.0	-	0.9	1.3	0.4	4.2	0.0	-	6.0	-
PHF	0.823	0.962	0.708	0.250	-	0.944	0.500	0.963	0.578	0.250	-	0.933	0.450	0.000	0.417	0.000	-	0.583	0.833	0.500	0.875	0.000	-	0.890	0.956
Lights	125	569	48	1	-	743	12	261	28	1	-	302	7	0	3	0	-	10	12	6	57	0	-	75	1130
% Lights	92.6	78.3	94.1	100.0	-	81.3	75.0	62.1	75.7	100.0	-	63.7	77.8	-	60.0	-	-	71.4	60.0	100.0	90.5	-	-	84.3	75.8
Mediums	10	60	1	0	-	71	3	85	1	0	-	89	1	0	2	0	-	3	6	0	6	0	-	12	175
% Mediums	7.4	8.3	2.0	0.0	-	7.8	18.8	20.2	2.7	0.0	-	18.8	11.1	-	40.0	-	-	21.4	30.0	0.0	9.5	-	-	13.5	11.7
Articulated Trucks	0	98	2	0	-	100	1	74	8	0	-	83	1	0	0	0	-	1	2	0	0	0	-	2	186
% Articulated Trucks	0.0	13.5	3.9	0.0	-	10.9	6.3	17.6	21.6	0.0	-	17.5	11.1	-	0.0	-	-	7.1	10.0	0.0	0.0	-	-	2.2	12.5
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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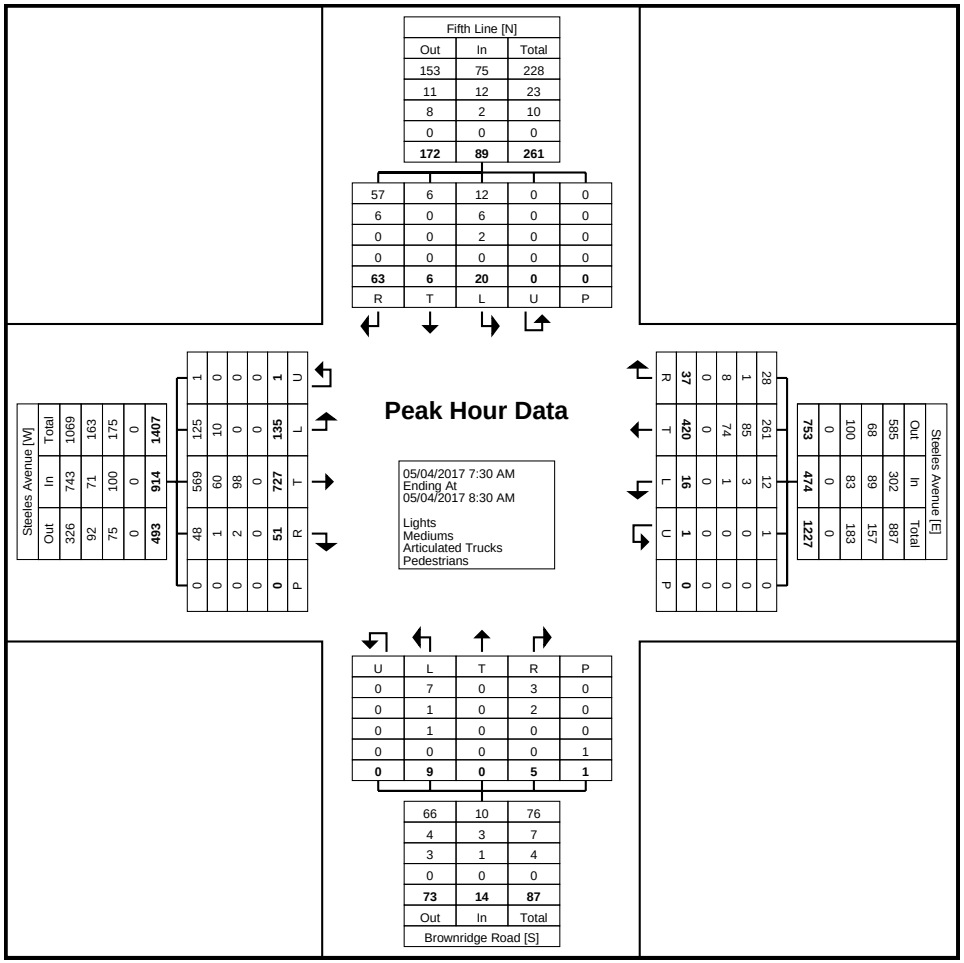

Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line/Brownridge - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Brownridge Road Northbound						Fifth Line Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:30 PM	12	114	1	0	0	127	0	232	3	0	0	235	7	1	4	0	0	12	14	2	39	0	0	55	429
4:45 PM	12	108	1	0	0	121	2	214	3	0	0	219	6	1	6	0	0	13	9	0	22	0	0	31	384
5:00 PM	14	114	1	0	0	129	0	228	4	0	0	232	16	3	10	0	0	29	13	1	19	0	0	33	423
5:15 PM	9	111	0	0	0	120	0	247	1	0	0	248	14	2	3	0	0	19	6	0	21	0	0	27	414
Total	47	447	3	0	0	497	2	921	11	0	0	934	43	7	23	0	0	73	42	3	101	0	0	146	1650
Approach %	9.5	89.9	0.6	0.0	-	-	0.2	98.6	1.2	0.0	-	-	58.9	9.6	31.5	0.0	-	-	28.8	2.1	69.2	0.0	-	-	-
Total %	2.8	27.1	0.2	0.0	-	30.1	0.1	55.8	0.7	0.0	-	56.6	2.6	0.4	1.4	0.0	-	4.4	2.5	0.2	6.1	0.0	-	8.8	-
PHF	0.839	0.980	0.750	0.000	-	0.963	0.250	0.932	0.688	0.000	-	0.942	0.672	0.583	0.575	0.000	-	0.629	0.750	0.375	0.647	0.000	-	0.664	0.962
Lights	44	370	2	0	-	416	0	841	8	0	-	849	40	7	19	0	-	66	36	2	98	0	-	136	1467
% Lights	93.6	82.8	66.7	-	-	83.7	0.0	91.3	72.7	-	-	90.9	93.0	100.0	82.6	-	-	90.4	85.7	66.7	97.0	-	-	93.2	88.9
Mediums	3	24	0	0	-	27	1	32	1	0	-	34	2	0	0	0	-	2	1	1	2	0	-	4	67
% Mediums	6.4	5.4	0.0	-	-	5.4	50.0	3.5	9.1	-	-	3.6	4.7	0.0	0.0	-	-	2.7	2.4	33.3	2.0	-	-	2.7	4.1
Articulated Trucks	0	53	1	0	-	54	1	48	2	0	-	51	1	0	4	0	-	5	5	0	1	0	-	6	116
% Articulated Trucks	0.0	11.9	33.3	-	-	10.9	50.0	5.2	18.2	-	-	5.5	2.3	0.0	17.4	-	-	6.8	11.9	0.0	1.0	-	-	4.1	7.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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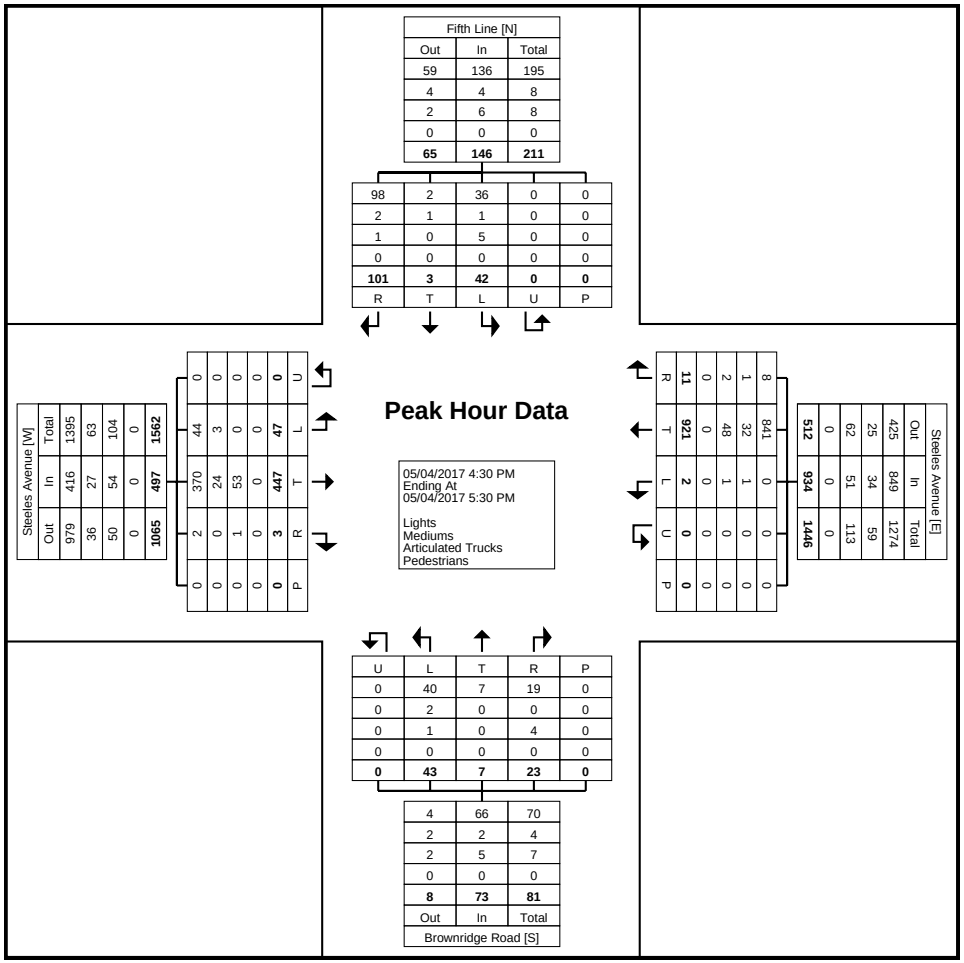

Turning Movement Peak Hour Data Plot (4:30 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Fifth Line/Brownridge - Weekday
Site Code:
Start Date: 05/04/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Hornby Road Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
11:00 AM	3	64	0	0	67	57	0	0	0	57	2	20	0	0	22	146
11:15 AM	6	58	0	0	64	66	4	0	0	70	3	15	0	0	18	152
11:30 AM	9	74	0	0	83	76	2	0	0	78	4	20	0	0	24	185
11:45 AM	10	76	0	0	86	63	3	0	0	66	0	13	0	0	13	165
Hourly Total	28	272	0	0	300	262	9	0	0	271	9	68	0	0	77	648
12:00 PM	6	75	0	0	81	56	0	0	0	56	1	10	0	0	11	148
12:15 PM	9	69	0	0	78	73	0	0	0	73	1	10	0	0	11	162
12:30 PM	8	68	0	0	76	77	2	0	0	79	0	10	0	0	10	165
12:45 PM	14	72	0	0	86	84	2	0	0	86	2	17	0	0	19	191
Hourly Total	37	284	0	0	321	290	4	0	0	294	4	47	0	0	51	666
1:00 PM	8	62	0	0	70	91	2	0	0	93	1	20	0	0	21	184
1:15 PM	4	81	0	0	85	80	5	0	0	85	4	19	0	0	23	193
1:30 PM	11	80	0	0	91	68	0	0	0	68	1	14	0	0	15	174
1:45 PM	7	70	0	0	77	85	1	0	0	86	2	13	0	0	15	178
Hourly Total	30	293	0	0	323	324	8	0	0	332	8	66	0	0	74	729
2:00 PM	15	90	0	0	105	91	2	0	0	93	2	20	0	0	22	220
2:15 PM	6	78	0	0	84	79	3	0	0	82	3	27	0	0	30	196
2:30 PM	6	88	0	0	94	99	1	0	0	100	1	12	0	0	13	207
2:45 PM	4	94	0	0	98	83	3	0	0	86	1	13	0	0	14	198
Hourly Total	31	350	0	0	381	352	9	0	0	361	7	72	0	0	79	821
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	126	1199	0	0	1325	1228	30	0	0	1258	28	253	0	0	281	2864
Approach %	9.5	90.5	0.0	-	-	97.6	2.4	0.0	-	-	10.0	90.0	0.0	-	-	-
Total %	4.4	41.9	0.0	-	46.3	42.9	1.0	0.0	-	43.9	1.0	8.8	0.0	-	9.8	-
Lights	125	1059	0	-	1184	1125	30	0	-	1155	28	251	0	-	279	2618
% Lights	99.2	88.3	-	-	89.4	91.6	100.0	-	-	91.8	100.0	99.2	-	-	99.3	91.4
Mediums	1	53	0	-	54	39	0	0	-	39	0	1	0	-	1	94
% Mediums	0.8	4.4	-	-	4.1	3.2	0.0	-	-	3.1	0.0	0.4	-	-	0.4	3.3
Articulated Trucks	0	87	0	-	87	64	0	0	-	64	0	1	0	-	1	152
% Articulated Trucks	0.0	7.3	-	-	6.6	5.2	0.0	-	-	5.1	0.0	0.4	-	-	0.4	5.3
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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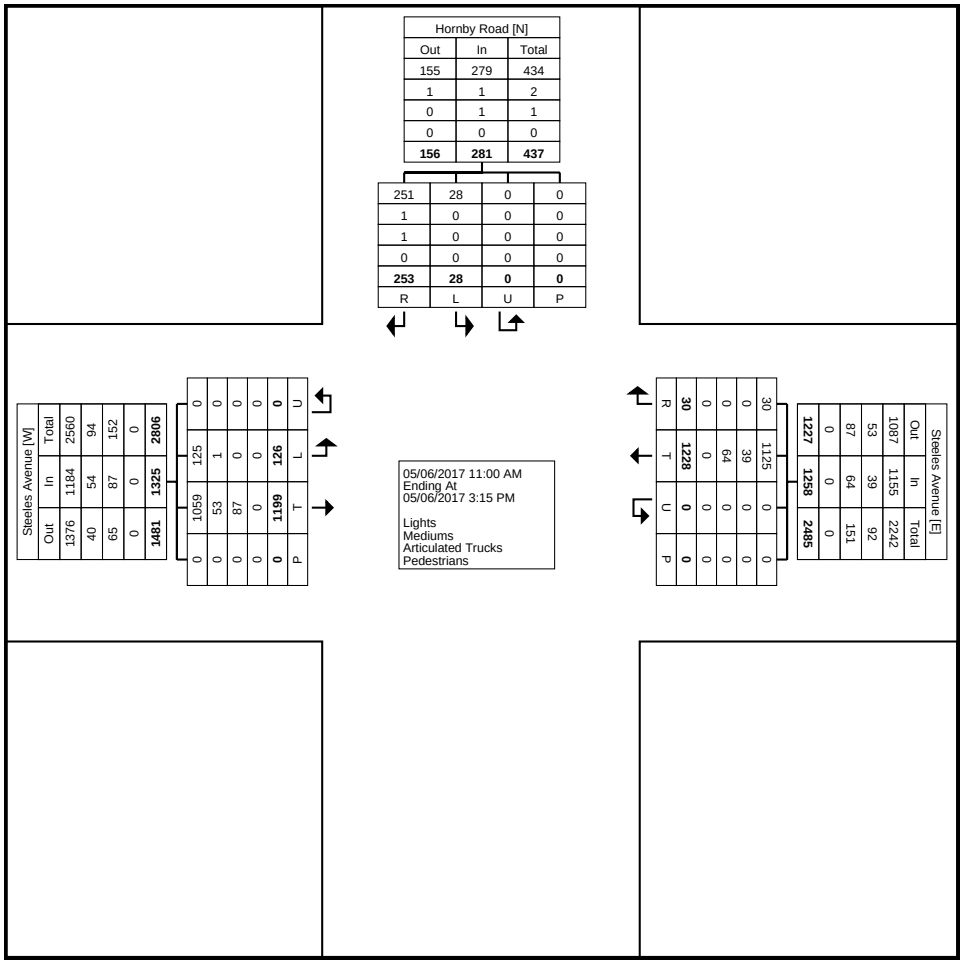
Count Name: Steeles Avenue & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Hornby Road Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
2:00 PM	15	90	0	0	105	91	2	0	0	93	2	20	0	0	22	220
2:15 PM	6	78	0	0	84	79	3	0	0	82	3	27	0	0	30	196
2:30 PM	6	88	0	0	94	99	1	0	0	100	1	12	0	0	13	207
2:45 PM	4	94	0	0	98	83	3	0	0	86	1	13	0	0	14	198
Total	31	350	0	0	381	352	9	0	0	361	7	72	0	0	79	821
Approach %	8.1	91.9	0.0	-	-	97.5	2.5	0.0	-	-	8.9	91.1	0.0	-	-	-
Total %	3.8	42.6	0.0	-	46.4	42.9	1.1	0.0	-	44.0	0.9	8.8	0.0	-	9.6	-
PHF	0.517	0.931	0.000	-	0.907	0.889	0.750	0.000	-	0.903	0.583	0.667	0.000	-	0.658	0.933
Lights	31	314	0	-	345	333	9	0	-	342	7	71	0	-	78	765
% Lights	100.0	89.7	-	-	90.6	94.6	100.0	-	-	94.7	100.0	98.6	-	-	98.7	93.2
Mediums	0	12	0	-	12	6	0	0	-	6	0	0	0	-	0	18
% Mediums	0.0	3.4	-	-	3.1	1.7	0.0	-	-	1.7	0.0	0.0	-	-	0.0	2.2
Articulated Trucks	0	24	0	-	24	13	0	0	-	13	0	1	0	-	1	38
% Articulated Trucks	0.0	6.9	-	-	6.3	3.7	0.0	-	-	3.6	0.0	1.4	-	-	1.3	4.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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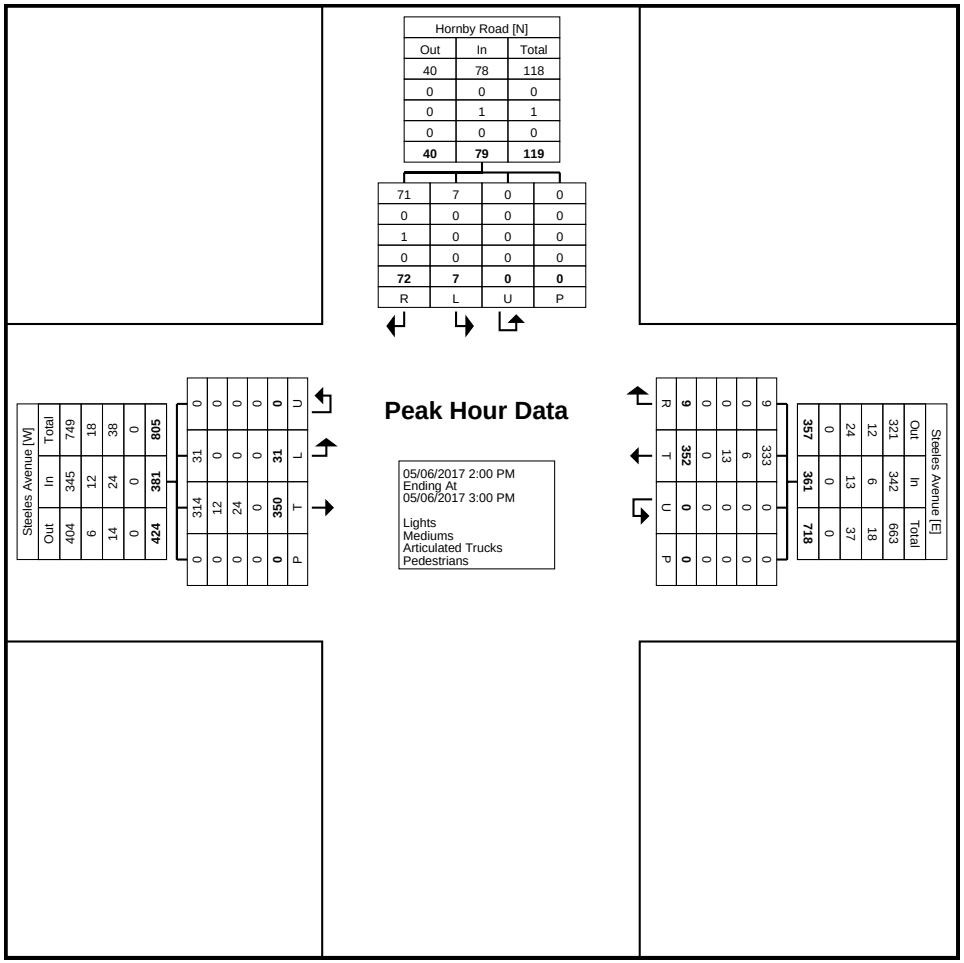
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (2:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Hornby Road Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	2	51	0	0	53	54	1	0	0	55	2	4	0	0	6	114
6:15 AM	4	58	0	0	62	81	6	0	0	87	0	6	0	0	6	155
6:30 AM	6	74	0	0	80	81	0	0	0	81	1	3	0	0	4	165
6:45 AM	3	102	0	0	105	84	1	0	0	85	3	6	0	0	9	199
Hourly Total	15	285	0	0	300	300	8	0	0	308	6	19	0	0	25	633
7:00 AM	0	114	0	0	114	82	4	0	0	86	1	9	0	0	10	210
7:15 AM	7	161	0	0	168	87	3	0	0	90	4	7	0	0	11	269
7:30 AM	2	191	0	0	193	110	1	0	0	111	4	5	0	0	9	313
7:45 AM	4	174	0	0	178	113	1	0	0	114	2	7	0	0	9	301
Hourly Total	13	640	0	0	653	392	9	0	0	401	11	28	0	0	39	1093
8:00 AM	1	179	0	0	180	100	4	0	0	104	3	5	0	0	8	292
8:15 AM	2	178	0	0	180	113	5	0	0	118	1	4	0	0	5	303
8:30 AM	7	188	0	0	195	100	5	0	0	105	0	14	0	0	14	314
8:45 AM	9	116	0	0	125	88	7	0	0	95	1	9	0	0	10	230
Hourly Total	19	661	0	0	680	401	21	0	0	422	5	32	0	0	37	1139
9:00 AM	5	96	0	0	101	94	1	0	0	95	4	8	0	0	12	208
9:15 AM	2	79	0	0	81	87	0	0	0	87	3	10	0	0	13	181
9:30 AM	4	87	0	0	91	74	7	0	0	81	2	8	0	0	10	182
9:45 AM	1	71	0	0	72	92	0	0	0	92	7	9	0	0	16	180
Hourly Total	12	333	0	0	345	347	8	0	0	355	16	35	0	0	51	751
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	6	124	0	0	130	133	4	0	0	137	1	12	0	0	13	280
3:15 PM	7	116	0	0	123	142	2	0	0	144	5	6	0	0	11	278
3:30 PM	3	119	0	0	122	140	3	0	0	143	2	11	0	0	13	278
3:45 PM	4	115	0	0	119	183	3	0	0	186	1	13	0	0	14	319
Hourly Total	20	474	0	0	494	598	12	0	0	610	9	42	0	0	51	1155
4:00 PM	7	110	0	0	117	205	2	0	0	207	1	11	0	0	12	336
4:15 PM	7	101	0	0	108	208	3	0	0	211	1	20	0	0	21	340
4:30 PM	5	135	0	0	140	220	4	0	0	224	1	10	0	0	11	375
4:45 PM	9	105	0	0	114	212	4	0	0	216	1	16	0	0	17	347
Hourly Total	28	451	0	0	479	845	13	0	0	858	4	57	0	0	61	1398
5:00 PM	12	114	0	0	126	224	2	0	0	226	1	10	0	0	11	363
5:15 PM	4	123	0	0	127	245	4	0	0	249	0	14	0	0	14	390
5:30 PM	6	88	0	0	94	225	1	0	0	226	1	12	0	0	13	333
5:45 PM	4	72	0	0	76	250	2	0	0	252	1	19	0	0	20	348
Hourly Total	26	397	0	0	423	944	9	0	0	953	3	55	0	0	58	1434

6:00 PM	7	75	0	0	82	196	1	0	0	197	0	18	0	0	18	297
6:15 PM	9	82	0	0	91	190	2	0	0	192	2	17	0	0	19	302
6:30 PM	3	68	0	0	71	135	4	0	0	139	1	8	0	0	9	219
6:45 PM	4	63	0	0	67	131	2	0	0	133	3	7	0	0	10	210
Hourly Total	23	288	0	0	311	652	9	0	0	661	6	50	0	0	56	1028
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	156	3529	0	0	3685	4479	89	0	0	4568	60	318	0	0	378	8631
Approach %	4.2	95.8	0.0	-	-	98.1	1.9	0.0	-	-	15.9	84.1	0.0	-	-	-
Total %	1.8	40.9	0.0	-	42.7	51.9	1.0	0.0	-	52.9	0.7	3.7	0.0	-	4.4	-
Lights	153	2627	0	-	2780	3540	83	0	-	3623	53	303	0	-	356	6759
% Lights	98.1	74.4	-	-	75.4	79.0	93.3	-	-	79.3	88.3	95.3	-	-	94.2	78.3
Mediums	3	328	0	-	331	336	6	0	-	342	7	12	0	-	19	692
% Mediums	1.9	9.3	-	-	9.0	7.5	6.7	-	-	7.5	11.7	3.8	-	-	5.0	8.0
Articulated Trucks	0	574	0	-	574	603	0	0	-	603	0	3	0	-	3	1180
% Articulated Trucks	0.0	16.3	-	-	15.6	13.5	0.0	-	-	13.2	0.0	0.9	-	-	0.8	13.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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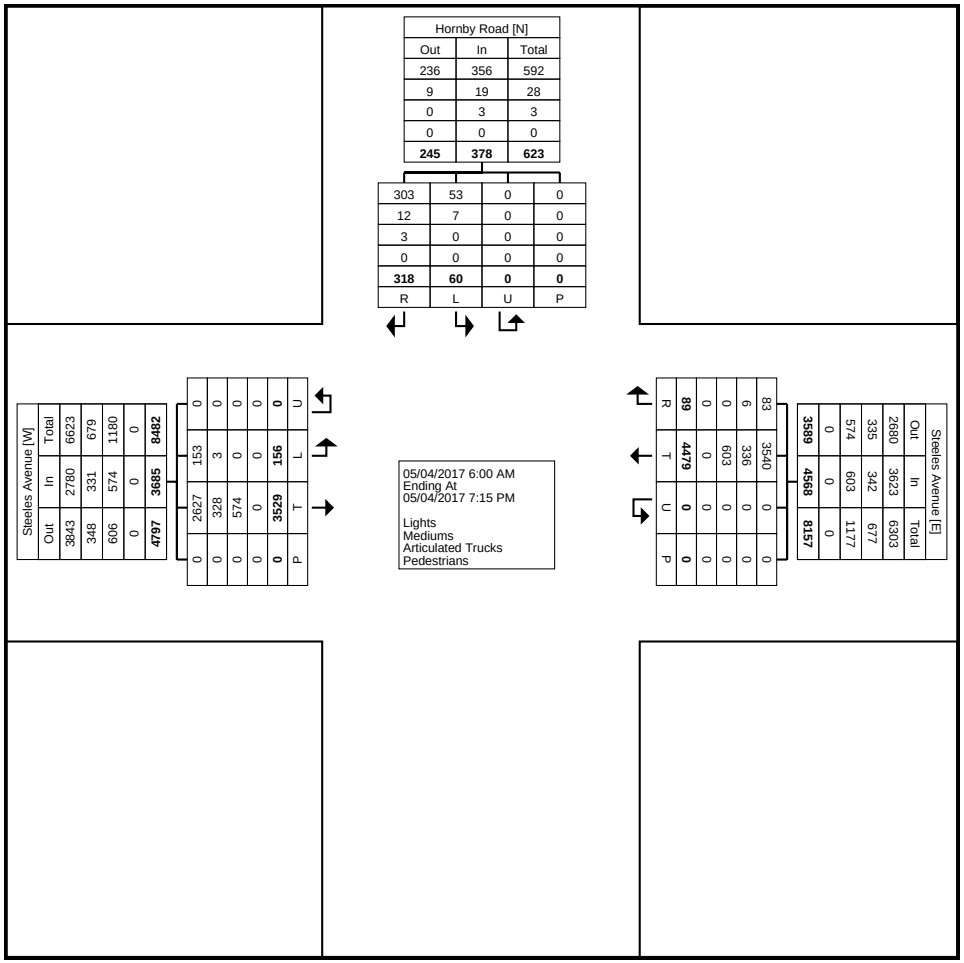
Site Code:
Start Date: 05/04/2017



Turning Movement Data Plot

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Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Hornby Road Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:45 AM	4	174	0	0	178	113	1	0	0	114	2	7	0	0	9	301
8:00 AM	1	179	0	0	180	100	4	0	0	104	3	5	0	0	8	292
8:15 AM	2	178	0	0	180	113	5	0	0	118	1	4	0	0	5	303
8:30 AM	7	188	0	0	195	100	5	0	0	105	0	14	0	0	14	314
Total	14	719	0	0	733	426	15	0	0	441	6	30	0	0	36	1210
Approach %	1.9	98.1	0.0	-	-	96.6	3.4	0.0	-	-	16.7	83.3	0.0	-	-	-
Total %	1.2	59.4	0.0	-	60.6	35.2	1.2	0.0	-	36.4	0.5	2.5	0.0	-	3.0	-
PHF	0.500	0.956	0.000	-	0.940	0.942	0.750	0.000	-	0.934	0.500	0.536	0.000	-	0.643	0.963
Lights	13	543	0	-	556	261	14	0	-	275	5	28	0	-	33	864
% Lights	92.9	75.5	-	-	75.9	61.3	93.3	-	-	62.4	83.3	93.3	-	-	91.7	71.4
Mediums	1	62	0	-	63	77	1	0	-	78	1	2	0	-	3	144
% Mediums	7.1	8.6	-	-	8.6	18.1	6.7	-	-	17.7	16.7	6.7	-	-	8.3	11.9
Articulated Trucks	0	114	0	-	114	88	0	0	-	88	0	0	0	-	0	202
% Articulated Trucks	0.0	15.9	-	-	15.6	20.7	0.0	-	-	20.0	0.0	0.0	-	-	0.0	16.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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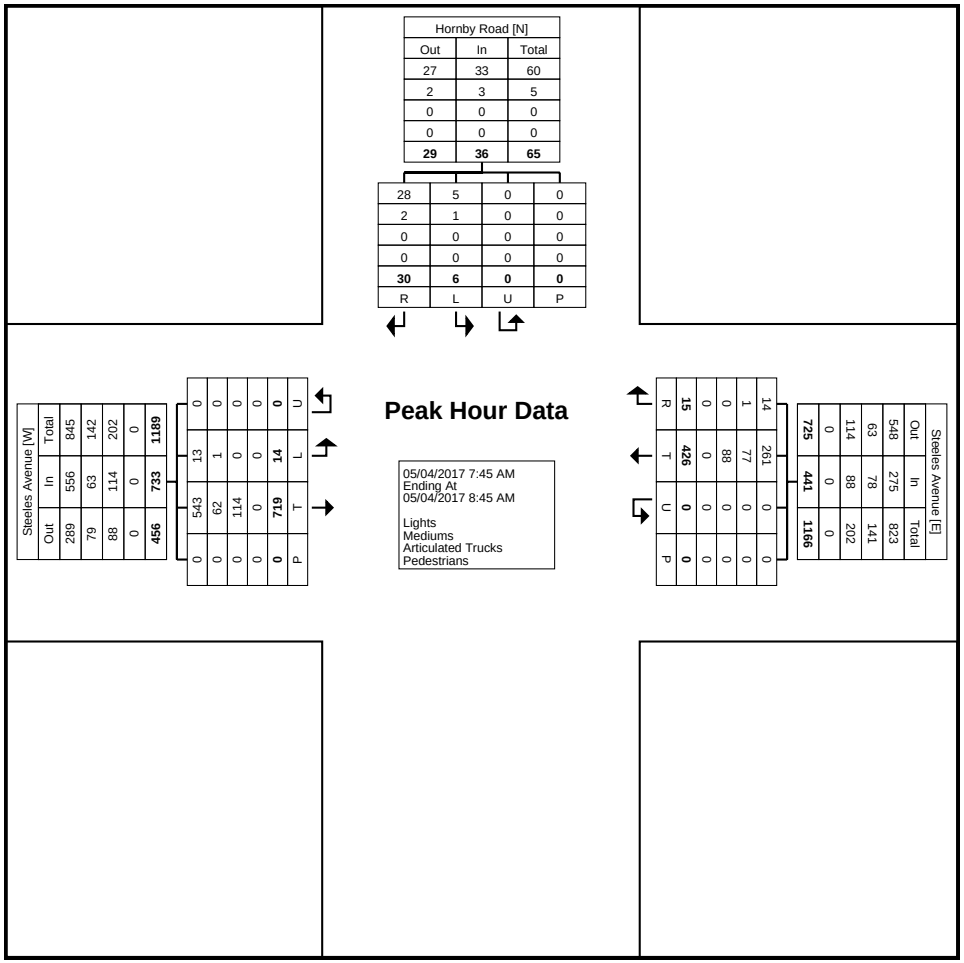

Turning Movement Peak Hour Data Plot (7:45 AM)

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Waterloo, Ontario, Canada N2J 1N8
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Count Name: Steeles Avenue & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Hornby Road Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	5	135	0	0	140	220	4	0	0	224	1	10	0	0	11	375
4:45 PM	9	105	0	0	114	212	4	0	0	216	1	16	0	0	17	347
5:00 PM	12	114	0	0	126	224	2	0	0	226	1	10	0	0	11	363
5:15 PM	4	123	0	0	127	245	4	0	0	249	0	14	0	0	14	390
Total	30	477	0	0	507	901	14	0	0	915	3	50	0	0	53	1475
Approach %	5.9	94.1	0.0	-	-	98.5	1.5	0.0	-	-	5.7	94.3	0.0	-	-	-
Total %	2.0	32.3	0.0	-	34.4	61.1	0.9	0.0	-	62.0	0.2	3.4	0.0	-	3.6	-
PHF	0.625	0.883	0.000	-	0.905	0.919	0.875	0.000	-	0.919	0.750	0.781	0.000	-	0.779	0.946
Lights	30	387	0	-	417	809	14	0	-	823	2	50	0	-	52	1292
% Lights	100.0	81.1	-	-	82.2	89.8	100.0	-	-	89.9	66.7	100.0	-	-	98.1	87.6
Mediums	0	25	0	-	25	35	0	0	-	35	1	0	0	-	1	61
% Mediums	0.0	5.2	-	-	4.9	3.9	0.0	-	-	3.8	33.3	0.0	-	-	1.9	4.1
Articulated Trucks	0	65	0	-	65	57	0	0	-	57	0	0	0	-	0	122
% Articulated Trucks	0.0	13.6	-	-	12.8	6.3	0.0	-	-	6.2	0.0	0.0	-	-	0.0	8.3
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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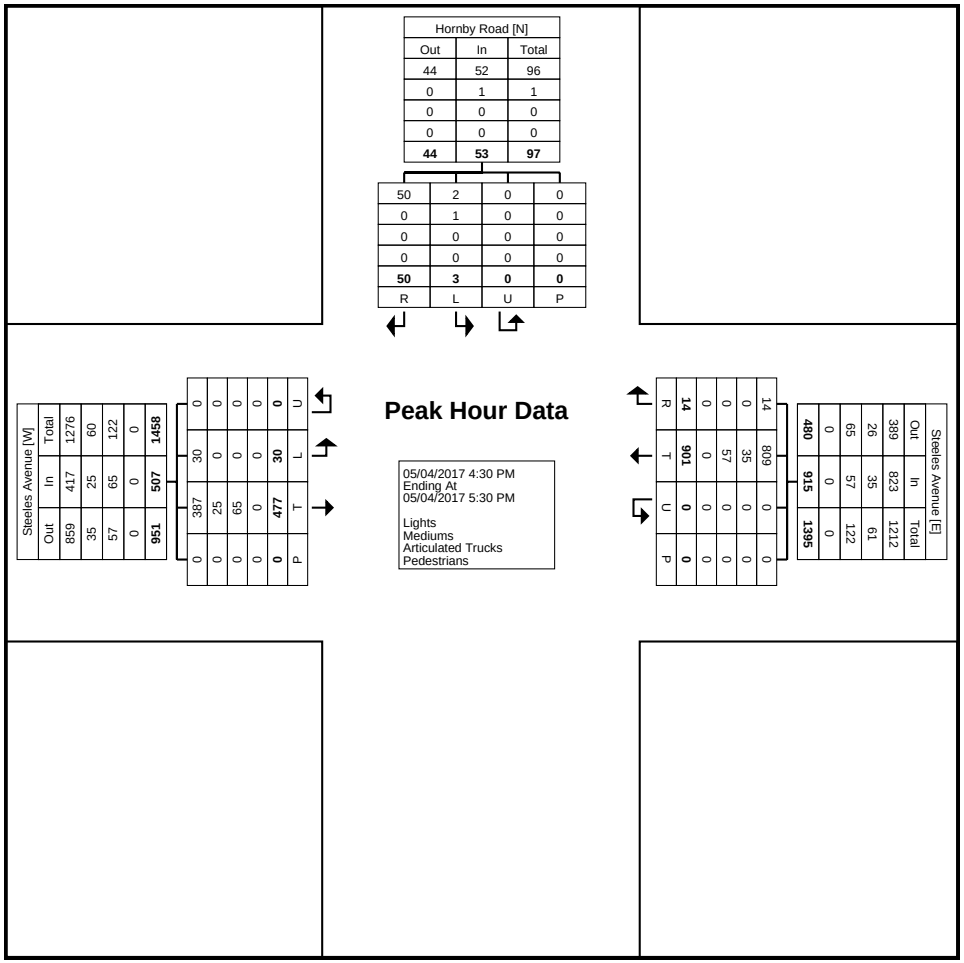

Turning Movement Peak Hour Data Plot (4:30 PM)

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Count Name: Steeles Avenue & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

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22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (North) - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Southbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
11:00 AM	11	73	0	0	84	75	55	0	0	130	69	16	0	0	85	299
11:15 AM	36	85	0	0	121	82	41	0	0	123	79	17	0	0	96	340
11:30 AM	14	105	0	0	119	96	46	0	0	142	72	28	0	0	100	361
11:45 AM	23	94	0	0	117	105	52	0	0	157	63	22	0	0	85	359
Hourly Total	84	357	0	0	441	358	194	0	0	552	283	83	0	0	366	1359
12:00 PM	21	102	0	0	123	85	60	0	0	145	95	13	0	0	108	376
12:15 PM	21	101	0	0	122	118	55	0	0	173	81	26	0	0	107	402
12:30 PM	26	101	0	0	127	91	70	0	0	161	77	23	0	0	100	388
12:45 PM	29	138	0	0	167	96	63	0	0	159	67	18	0	0	85	411
Hourly Total	97	442	0	0	539	390	248	0	0	638	320	80	0	0	400	1577
1:00 PM	25	129	0	0	154	109	78	0	0	187	75	28	0	0	103	444
1:15 PM	28	129	1	0	158	105	73	0	0	178	75	19	0	0	94	430
1:30 PM	29	127	0	0	156	97	97	0	0	194	72	29	0	0	101	451
1:45 PM	25	128	0	0	153	133	69	0	0	202	61	30	0	0	91	446
Hourly Total	107	513	1	0	621	444	317	0	0	761	283	106	0	0	389	1771
2:00 PM	25	142	0	0	167	113	83	0	0	196	83	19	0	0	102	465
2:15 PM	20	150	0	0	170	128	56	0	0	184	70	20	0	0	90	444
2:30 PM	18	156	0	0	174	149	63	0	0	212	64	27	0	0	91	477
2:45 PM	28	156	0	0	184	114	71	0	0	185	67	16	0	0	83	452
Hourly Total	91	604	0	0	695	504	273	0	0	777	284	82	0	0	366	1838
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	379	1916	1	0	2296	1696	1032	0	0	2728	1170	351	0	0	1521	6545
Approach %	16.5	83.4	0.0	-	-	62.2	37.8	0.0	-	-	76.9	23.1	0.0	-	-	-
Total %	5.8	29.3	0.0	-	35.1	25.9	15.8	0.0	-	41.7	17.9	5.4	0.0	-	23.2	-
Lights	358	1837	1	-	2196	1643	1008	0	-	2651	1163	343	0	-	1506	6353
% Lights	94.5	95.9	100.0	-	95.6	96.9	97.7	-	-	97.2	99.4	97.7	-	-	99.0	97.1
Mediums	7	38	0	-	45	18	6	0	-	24	5	4	0	-	9	78
% Mediums	1.8	2.0	0.0	-	2.0	1.1	0.6	-	-	0.9	0.4	1.1	-	-	0.6	1.2
Articulated Trucks	14	41	0	-	55	35	18	0	-	53	2	4	0	-	6	114
% Articulated Trucks	3.7	2.1	0.0	-	2.4	2.1	1.7	-	-	1.9	0.2	1.1	-	-	0.4	1.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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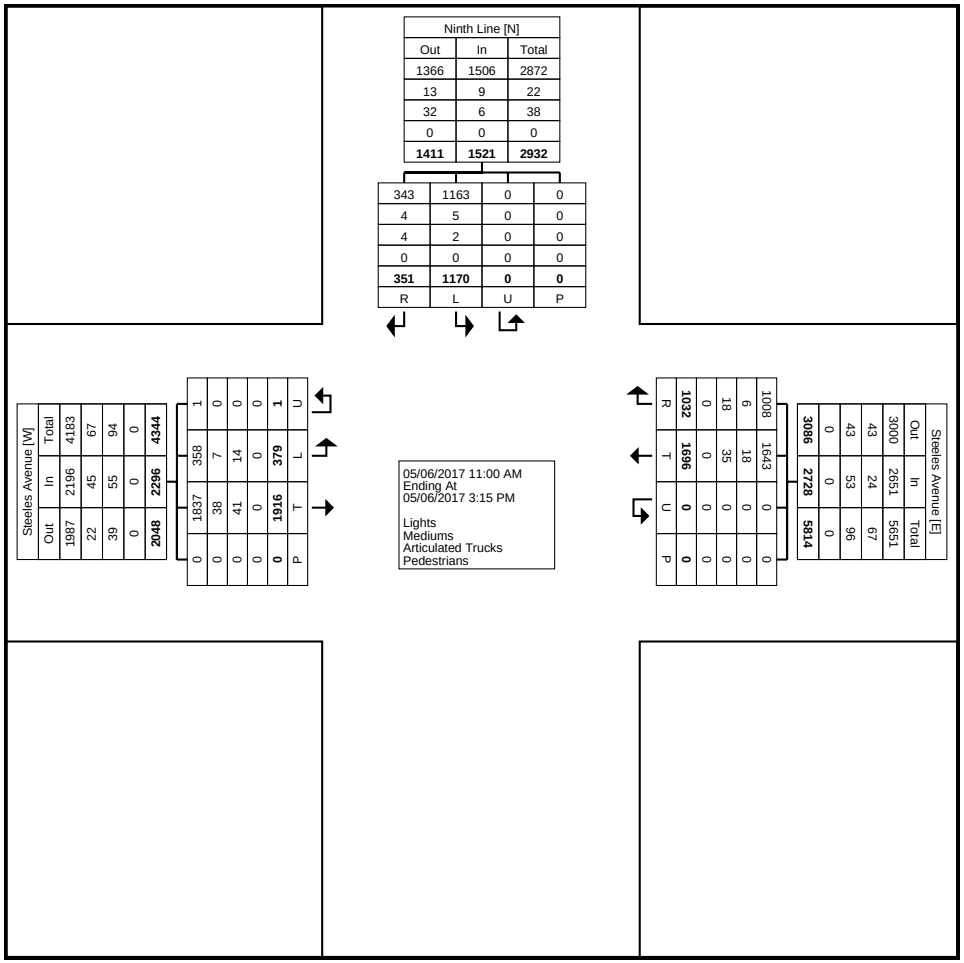

Turning Movement Data Plot

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Count Name: Steeles Avenue & Ninth Line (North) - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
2:00 PM	25	142	0	0	167	113	83	0	0	196	83	19	0	0	102	465
2:15 PM	20	150	0	0	170	128	56	0	0	184	70	20	0	0	90	444
2:30 PM	18	156	0	0	174	149	63	0	0	212	64	27	0	0	91	477
2:45 PM	28	156	0	0	184	114	71	0	0	185	67	16	0	0	83	452
Total	91	604	0	0	695	504	273	0	0	777	284	82	0	0	366	1838
Approach %	13.1	86.9	0.0	-	-	64.9	35.1	0.0	-	-	77.6	22.4	0.0	-	-	-
Total %	5.0	32.9	0.0	-	37.8	27.4	14.9	0.0	-	42.3	15.5	4.5	0.0	-	19.9	-
PHF	0.813	0.968	0.000	-	0.944	0.846	0.822	0.000	-	0.916	0.855	0.759	0.000	-	0.897	0.963
Lights	86	582	0	-	668	495	269	0	-	764	283	81	0	-	364	1796
% Lights	94.5	96.4	-	-	96.1	98.2	98.5	-	-	98.3	99.6	98.8	-	-	99.5	97.7
Mediums	0	9	0	-	9	2	1	0	-	3	0	1	0	-	1	13
% Mediums	0.0	1.5	-	-	1.3	0.4	0.4	-	-	0.4	0.0	1.2	-	-	0.3	0.7
Articulated Trucks	5	13	0	-	18	7	3	0	-	10	1	0	0	-	1	29
% Articulated Trucks	5.5	2.2	-	-	2.6	1.4	1.1	-	-	1.3	0.4	0.0	-	-	0.3	1.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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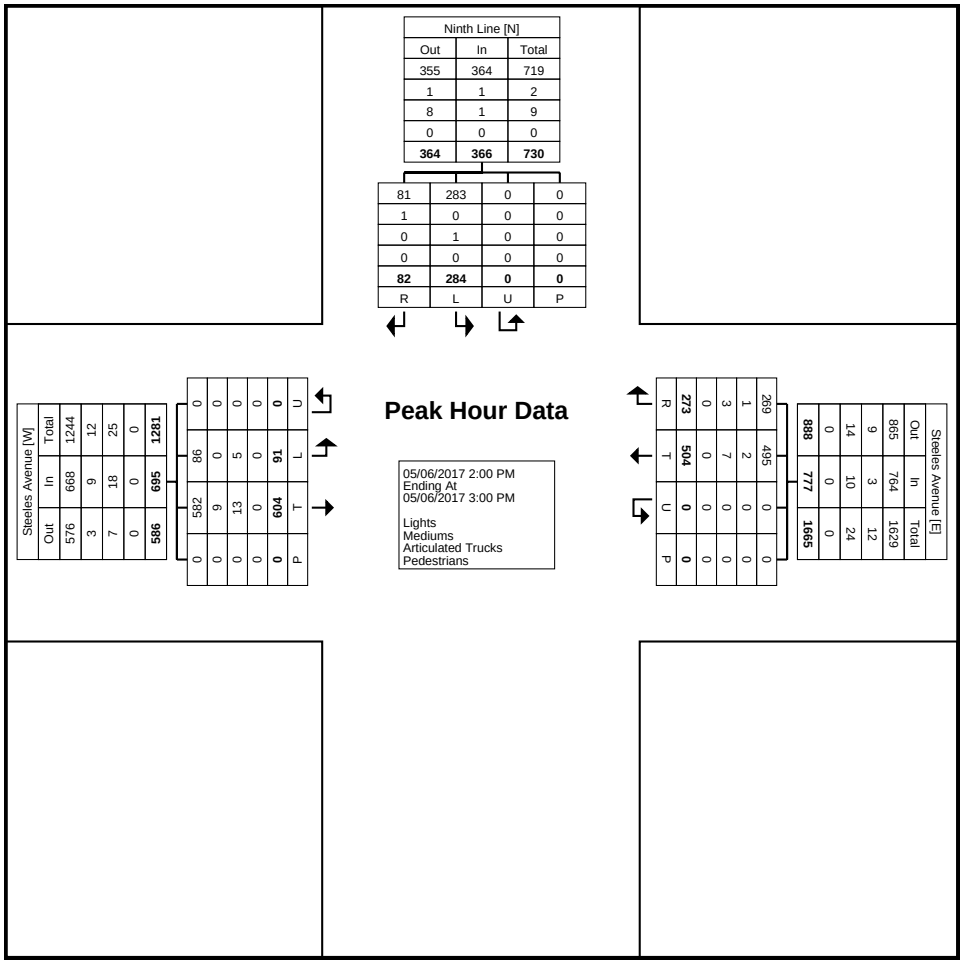

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Start Date: 05/04/2017

Turning Movement Data

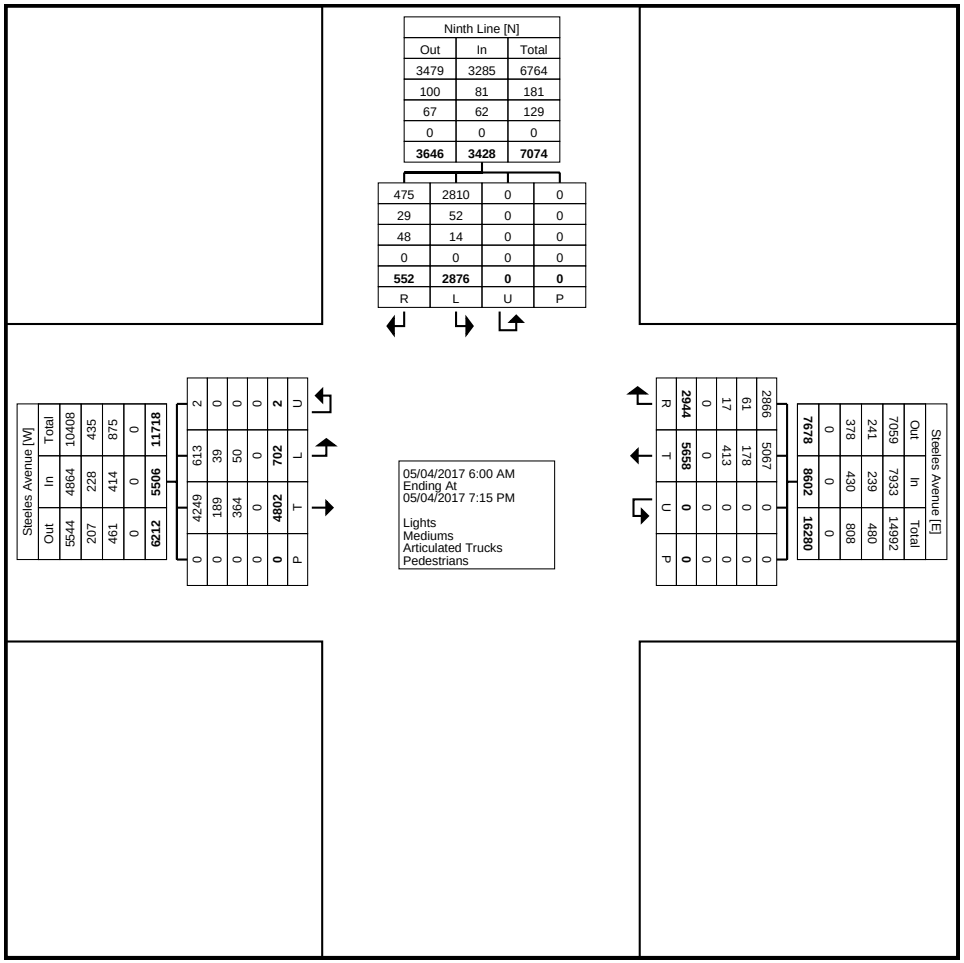
Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	15	85	0	0	100	72	12	0	0	84	79	20	0	0	99	283
6:15 AM	13	89	0	0	102	79	14	0	0	93	117	14	0	0	131	326
6:30 AM	13	134	0	0	147	99	31	0	0	130	117	18	0	0	135	412
6:45 AM	17	135	0	0	152	88	35	0	0	123	127	13	0	0	140	415
Hourly Total	58	443	0	0	501	338	92	0	0	430	440	65	0	0	505	1436
7:00 AM	20	183	0	0	203	109	22	0	0	131	160	16	0	0	176	510
7:15 AM	16	218	0	0	234	93	39	0	0	132	161	20	0	0	181	547
7:30 AM	13	249	0	0	262	112	41	0	0	153	142	18	0	0	160	575
7:45 AM	24	256	0	0	280	106	52	0	0	158	160	24	0	0	184	622
Hourly Total	73	906	0	0	979	420	154	0	0	574	623	78	0	0	701	2254
8:00 AM	21	247	0	0	268	106	62	0	0	168	125	12	0	0	137	573
8:15 AM	17	249	0	0	266	121	58	0	0	179	141	19	0	0	160	605
8:30 AM	19	191	0	0	210	118	52	0	0	170	135	15	0	0	150	530
8:45 AM	26	159	0	0	185	100	40	0	0	140	102	14	0	0	116	441
Hourly Total	83	846	0	0	929	445	212	0	0	657	503	60	0	0	563	2149
9:00 AM	21	115	0	0	136	89	38	0	0	127	110	21	0	0	131	394
9:15 AM	20	108	0	0	128	71	35	0	0	106	94	20	0	0	114	348
9:30 AM	25	90	0	0	115	97	35	0	0	132	88	17	0	0	105	352
9:45 AM	28	72	0	0	100	93	29	0	0	122	71	25	0	0	96	318
Hourly Total	94	385	0	0	479	350	137	0	0	487	363	83	0	0	446	1412
10:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
3:00 PM	18	121	0	0	139	128	97	0	0	225	51	17	0	0	68	432
3:15 PM	28	152	0	0	180	161	110	0	0	271	46	19	0	0	65	516
3:30 PM	20	143	1	0	164	217	123	0	0	340	63	20	0	0	83	587
3:45 PM	25	142	0	0	167	291	139	0	0	430	69	28	0	0	97	694
Hourly Total	91	558	1	0	650	797	469	0	0	1266	229	84	0	0	313	2229
4:00 PM	37	160	1	0	198	294	163	0	0	457	52	11	0	0	63	718
4:15 PM	21	134	0	0	155	335	134	0	0	469	81	15	0	0	96	720
4:30 PM	28	147	0	0	175	360	156	0	0	516	80	17	0	0	97	788
4:45 PM	25	143	0	0	168	328	186	0	0	514	61	20	0	0	81	763
Hourly Total	111	584	1	0	696	1317	639	0	0	1956	274	63	0	0	337	2989
5:00 PM	26	191	0	0	217	298	188	0	0	486	59	13	0	0	72	775
5:15 PM	21	183	0	0	204	331	169	0	0	500	66	17	0	0	83	787
5:30 PM	14	151	0	0	165	335	169	0	0	504	63	18	0	0	81	750
5:45 PM	27	123	0	0	150	276	187	0	0	463	55	14	0	0	69	682
Hourly Total	88	648	0	0	736	1240	713	0	0	1953	243	62	0	0	305	2994

6:00 PM	32	115	0	0	147	243	175	0	0	418	51	15	0	0	66	631
6:15 PM	16	115	0	0	131	190	139	0	0	329	61	17	0	0	78	538
6:30 PM	36	112	0	0	148	180	110	0	0	290	42	11	0	0	53	491
6:45 PM	20	90	0	0	110	137	104	0	0	241	47	14	0	0	61	412
Hourly Total	104	432	0	0	536	750	528	0	0	1278	201	57	0	0	258	2072
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	702	4802	2	0	5506	5658	2944	0	0	8602	2876	552	0	0	3428	17536
Approach %	12.7	87.2	0.0	-	-	65.8	34.2	0.0	-	-	83.9	16.1	0.0	-	-	-
Total %	4.0	27.4	0.0	-	31.4	32.3	16.8	0.0	-	49.1	16.4	3.1	0.0	-	19.5	-
Lights	613	4249	2	-	4864	5067	2866	0	-	7933	2810	475	0	-	3285	16082
% Lights	87.3	88.5	100.0	-	88.3	89.6	97.4	-	-	92.2	97.7	86.1	-	-	95.8	91.7
Mediums	39	189	0	-	228	178	61	0	-	239	52	29	0	-	81	548
% Mediums	5.6	3.9	0.0	-	4.1	3.1	2.1	-	-	2.8	1.8	5.3	-	-	2.4	3.1
Articulated Trucks	50	364	0	-	414	413	17	0	-	430	14	48	0	-	62	906
% Articulated Trucks	7.1	7.6	0.0	-	7.5	7.3	0.6	-	-	5.0	0.5	8.7	-	-	1.8	5.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (North) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (North) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	13	249	0	0	262	112	41	0	0	153	142	18	0	0	160	575
7:45 AM	24	256	0	0	280	106	52	0	0	158	160	24	0	0	184	622
8:00 AM	21	247	0	0	268	106	62	0	0	168	125	12	0	0	137	573
8:15 AM	17	249	0	0	266	121	58	0	0	179	141	19	0	0	160	605
Total	75	1001	0	0	1076	445	213	0	0	658	568	73	0	0	641	2375
Approach %	7.0	93.0	0.0	-	-	67.6	32.4	0.0	-	-	88.6	11.4	0.0	-	-	-
Total %	3.2	42.1	0.0	-	45.3	18.7	9.0	0.0	-	27.7	23.9	3.1	0.0	-	27.0	-
PHF	0.781	0.978	0.000	-	0.961	0.919	0.859	0.000	-	0.919	0.888	0.760	0.000	-	0.871	0.955
Lights	63	912	0	-	975	363	199	0	-	562	555	57	0	-	612	2149
% Lights	84.0	91.1	-	-	90.6	81.6	93.4	-	-	85.4	97.7	78.1	-	-	95.5	90.5
Mediums	7	36	0	-	43	36	12	0	-	48	11	9	0	-	20	111
% Mediums	9.3	3.6	-	-	4.0	8.1	5.6	-	-	7.3	1.9	12.3	-	-	3.1	4.7
Articulated Trucks	5	53	0	-	58	46	2	0	-	48	2	7	0	-	9	115
% Articulated Trucks	6.7	5.3	-	-	5.4	10.3	0.9	-	-	7.3	0.4	9.6	-	-	1.4	4.8
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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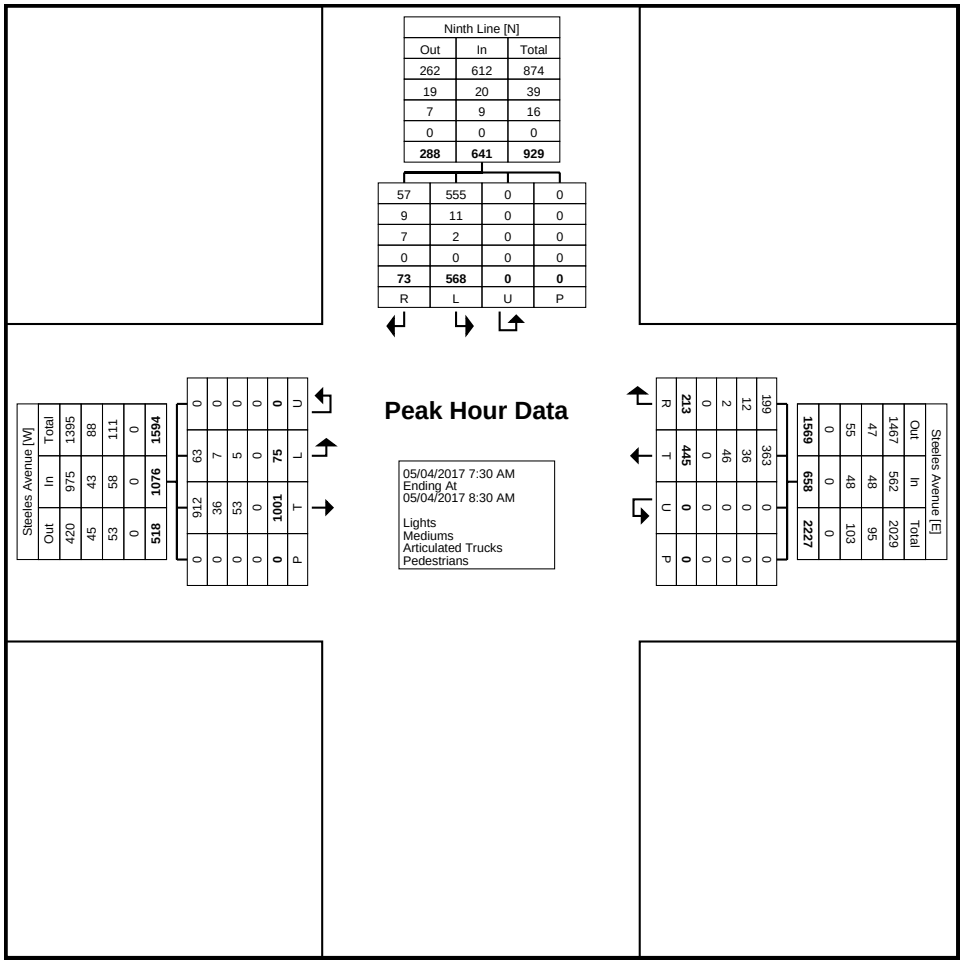
Count Name: Steeles Avenue & Ninth Line (North) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (North) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	28	147	0	0	175	360	156	0	0	516	80	17	0	0	97	788
4:45 PM	25	143	0	0	168	328	186	0	0	514	61	20	0	0	81	763
5:00 PM	26	191	0	0	217	298	188	0	0	486	59	13	0	0	72	775
5:15 PM	21	183	0	0	204	331	169	0	0	500	66	17	0	0	83	787
Total	100	664	0	0	764	1317	699	0	0	2016	266	67	0	0	333	3113
Approach %	13.1	86.9	0.0	-	-	65.3	34.7	0.0	-	-	79.9	20.1	0.0	-	-	-
Total %	3.2	21.3	0.0	-	24.5	42.3	22.5	0.0	-	64.8	8.5	2.2	0.0	-	10.7	-
PHF	0.893	0.869	0.000	-	0.880	0.915	0.930	0.000	-	0.977	0.831	0.838	0.000	-	0.858	0.988
Lights	95	594	0	-	689	1243	690	0	-	1933	256	63	0	-	319	2941
% Lights	95.0	89.5	-	-	90.2	94.4	98.7	-	-	95.9	96.2	94.0	-	-	95.8	94.5
Mediums	1	21	0	-	22	22	9	0	-	31	5	1	0	-	6	59
% Mediums	1.0	3.2	-	-	2.9	1.7	1.3	-	-	1.5	1.9	1.5	-	-	1.8	1.9
Articulated Trucks	4	49	0	-	53	52	0	0	-	52	5	3	0	-	8	113
% Articulated Trucks	4.0	7.4	-	-	6.9	3.9	0.0	-	-	2.6	1.9	4.5	-	-	2.4	3.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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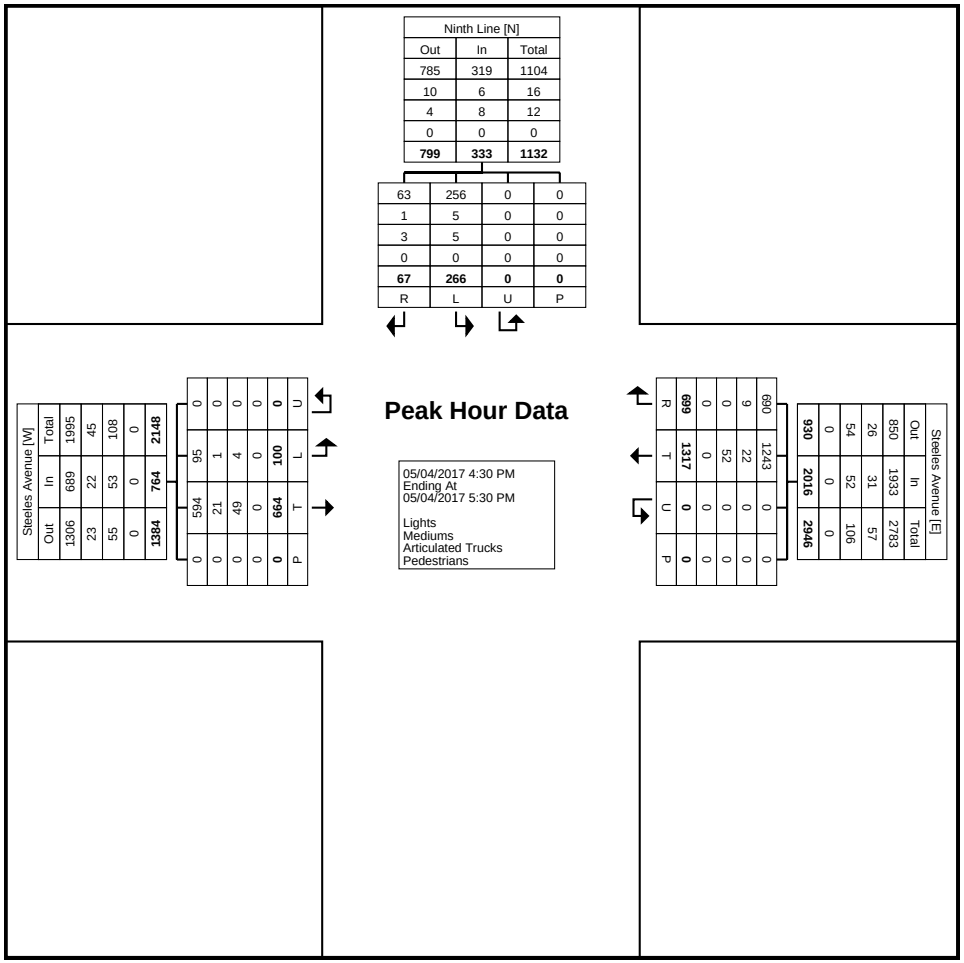
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (4:30 PM)

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Count Name: Steeles Avenue & Ninth Line (North) - Weekday
Site Code:
Start Date: 05/04/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
11:00 AM	113	31	0	0	144	15	106	0	0	121	29	26	0	0	55	320
11:15 AM	112	46	0	0	158	28	86	0	0	114	26	20	0	0	46	318
11:30 AM	139	45	0	0	184	32	114	0	0	146	38	24	0	0	62	392
11:45 AM	101	39	0	0	140	23	103	0	0	126	46	30	0	0	76	342
Hourly Total	465	161	0	0	626	98	409	0	0	507	139	100	0	0	239	1372
12:00 PM	153	59	0	0	212	31	126	0	0	157	30	14	0	0	44	413
12:15 PM	126	49	0	0	175	20	120	0	0	140	40	20	0	0	60	375
12:30 PM	138	43	0	0	181	35	126	0	0	161	40	35	0	0	75	417
12:45 PM	146	45	0	0	191	31	106	0	0	137	48	30	0	0	78	406
Hourly Total	563	196	0	0	759	117	478	0	0	595	158	99	0	0	257	1611
1:00 PM	157	59	0	0	216	20	139	0	0	159	50	34	0	0	84	459
1:15 PM	136	51	0	0	187	24	138	0	0	162	41	28	0	0	69	418
1:30 PM	163	57	0	0	220	26	136	0	0	162	64	34	0	0	98	480
1:45 PM	149	44	0	0	193	30	145	0	0	175	54	23	0	0	77	445
Hourly Total	605	211	0	0	816	100	558	0	0	658	209	119	0	0	328	1802
2:00 PM	175	42	0	0	217	25	154	0	0	179	46	35	0	0	81	477
2:15 PM	174	36	0	0	210	24	130	1	0	155	48	29	0	0	77	442
2:30 PM	176	58	0	0	234	20	166	0	0	186	41	41	0	0	82	502
2:45 PM	168	46	0	0	214	24	134	0	0	158	48	29	0	0	77	449
Hourly Total	693	182	0	0	875	93	584	1	0	678	183	134	0	0	317	1870
Grand Total	2326	750	0	0	3076	408	2029	1	0	2438	689	452	0	0	1141	6655
Approach %	75.6	24.4	0.0	-	-	16.7	83.2	0.0	-	-	60.4	39.6	0.0	-	-	-
Total %	35.0	11.3	0.0	-	46.2	6.1	30.5	0.0	-	36.6	10.4	6.8	0.0	-	17.1	-
Lights	2240	747	0	-	2987	403	1953	1	-	2357	686	447	0	-	1133	6477
% Lights	96.3	99.6	-	-	97.1	98.8	96.3	100.0	-	96.7	99.6	98.9	-	-	99.3	97.3
Mediums	46	3	0	-	49	5	22	0	-	27	3	5	0	-	8	84
% Mediums	2.0	0.4	-	-	1.6	1.2	1.1	0.0	-	1.1	0.4	1.1	-	-	0.7	1.3
Articulated Trucks	40	0	0	-	40	0	54	0	-	54	0	0	0	-	0	94
% Articulated Trucks	1.7	0.0	-	-	1.3	0.0	2.7	0.0	-	2.2	0.0	0.0	-	-	0.0	1.4
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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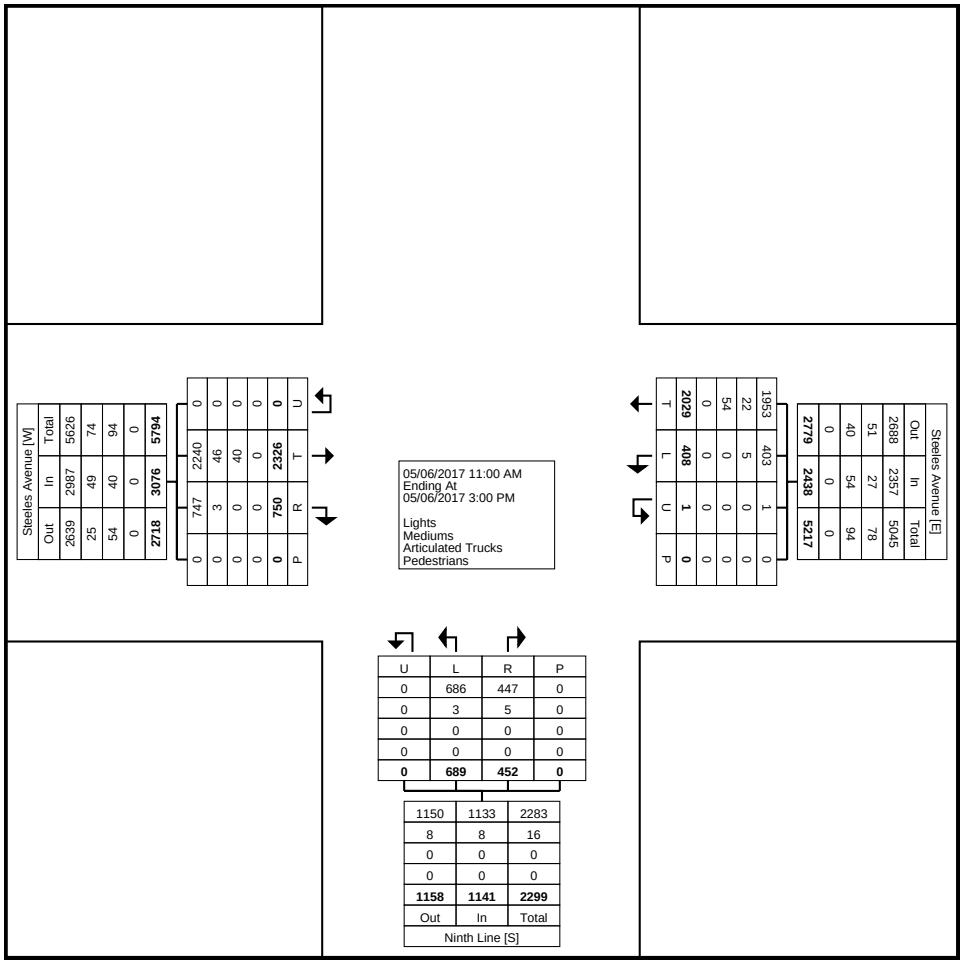
Count Name: Steeles Avenue & Ninth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (2:00 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
2:00 PM	175	42	0	0	217	25	154	0	0	179	46	35	0	0	81	477
2:15 PM	174	36	0	0	210	24	130	1	0	155	48	29	0	0	77	442
2:30 PM	176	58	0	0	234	20	166	0	0	186	41	41	0	0	82	502
2:45 PM	168	46	0	0	214	24	134	0	0	158	48	29	0	0	77	449
Total	693	182	0	0	875	93	584	1	0	678	183	134	0	0	317	1870
Approach %	79.2	20.8	0.0	-	-	13.7	86.1	0.1	-	-	57.7	42.3	0.0	-	-	-
Total %	37.1	9.7	0.0	-	46.8	5.0	31.2	0.1	-	36.3	9.8	7.2	0.0	-	17.0	-
PHF	0.984	0.784	0.000	-	0.935	0.930	0.880	0.250	-	0.911	0.953	0.817	0.000	-	0.966	0.931
Lights	671	182	0	-	853	92	571	1	-	664	182	134	0	-	316	1833
% Lights	96.8	100.0	-	-	97.5	98.9	97.8	100.0	-	97.9	99.5	100.0	-	-	99.7	98.0
Mediums	9	0	0	-	9	1	2	0	-	3	1	0	0	-	1	13
% Mediums	1.3	0.0	-	-	1.0	1.1	0.3	0.0	-	0.4	0.5	0.0	-	-	0.3	0.7
Articulated Trucks	13	0	0	-	13	0	11	0	-	11	0	0	0	-	0	24
% Articulated Trucks	1.9	0.0	-	-	1.5	0.0	1.9	0.0	-	1.6	0.0	0.0	-	-	0.0	1.3
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Steeles Avenue & Ninth Line (South) - Saturday
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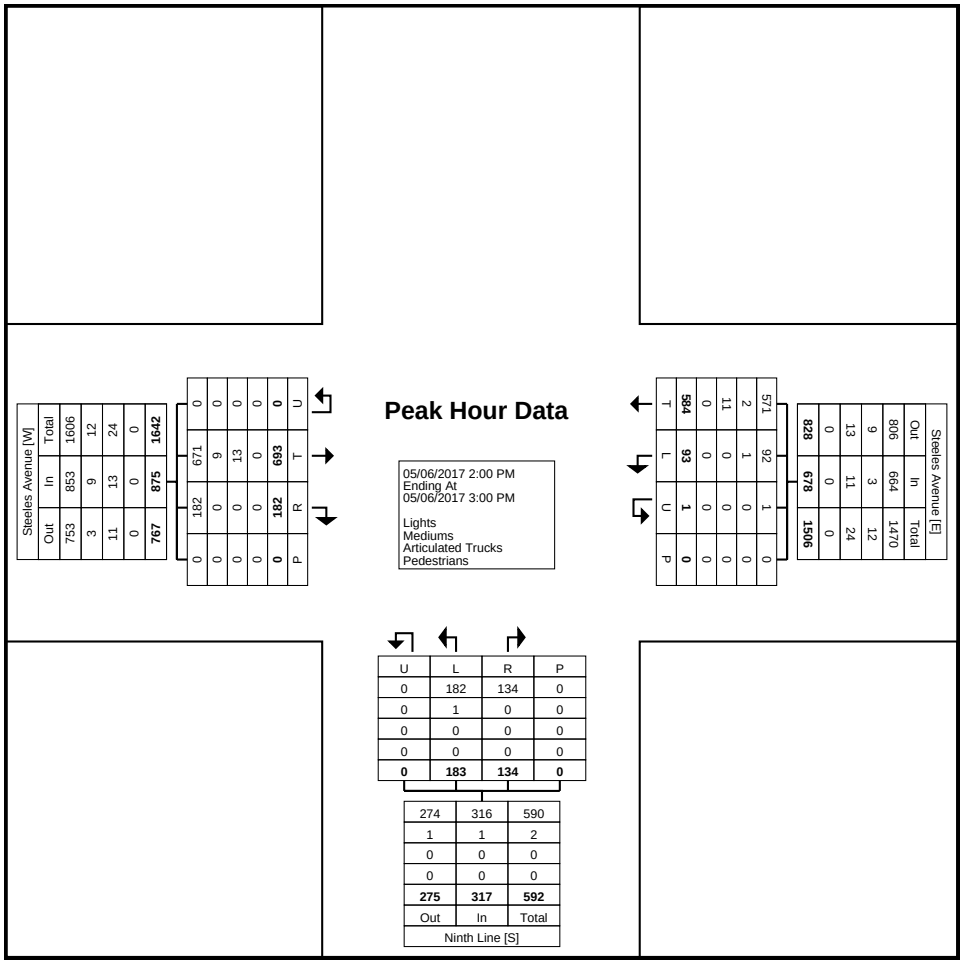
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (2:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

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Count Name: Steeles Avenue & Ninth Line (South) - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
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519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

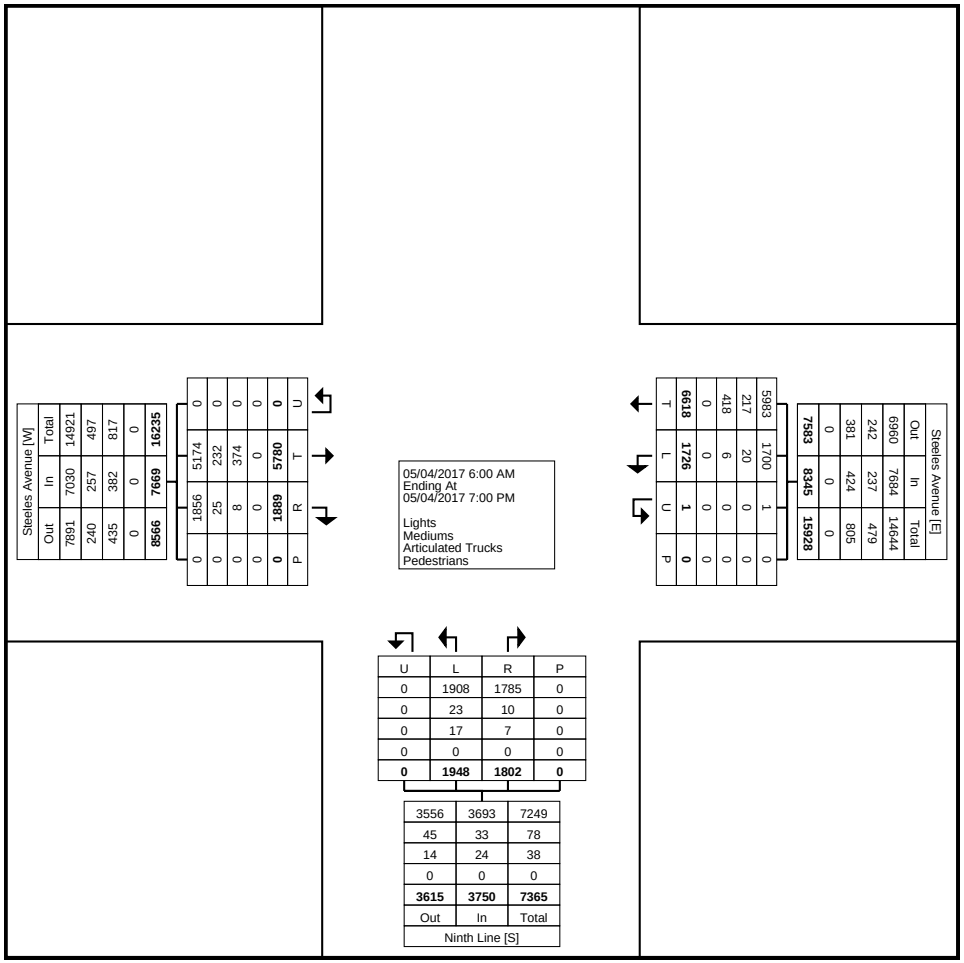
Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	140	20	0	0	160	10	77	0	0	87	9	16	0	0	25	272
6:15 AM	164	42	0	0	206	35	78	0	0	113	10	27	0	0	37	356
6:30 AM	178	55	0	0	233	50	102	0	0	152	20	39	0	0	59	444
6:45 AM	207	73	0	0	280	34	98	0	0	132	23	47	0	0	70	482
Hourly Total	689	190	0	0	879	129	355	0	0	484	62	129	0	0	191	1554
7:00 AM	250	85	0	0	335	58	116	0	0	174	15	30	0	0	45	554
7:15 AM	270	89	0	0	359	68	106	0	0	174	30	48	0	0	78	611
7:30 AM	278	113	0	0	391	72	132	0	0	204	24	75	0	0	99	694
7:45 AM	276	128	0	0	404	73	117	0	0	190	42	79	0	0	121	715
Hourly Total	1074	415	0	0	1489	271	471	0	0	742	111	232	0	0	343	2574
8:00 AM	260	92	0	0	352	82	109	0	0	191	50	55	0	0	105	648
8:15 AM	314	98	0	0	412	84	138	0	0	222	41	74	0	0	115	749
8:30 AM	245	73	0	0	318	75	131	0	0	206	37	70	0	0	107	631
8:45 AM	201	73	0	0	274	57	109	0	0	166	29	61	0	0	90	530
Hourly Total	1020	336	0	0	1356	298	487	0	0	785	157	260	0	0	417	2558
9:00 AM	163	60	0	0	223	39	93	1	0	133	35	37	0	0	72	428
9:15 AM	154	55	0	0	209	39	79	0	0	118	27	29	0	0	56	383
9:30 AM	133	49	0	0	182	25	117	0	0	142	21	24	0	0	45	369
9:45 AM	108	32	0	0	140	24	94	0	0	118	32	29	0	0	61	319
Hourly Total	558	196	0	0	754	127	383	1	0	511	115	119	0	0	234	1499
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	146	39	0	0	185	46	176	0	0	222	54	35	0	0	89	496
3:15 PM	158	38	0	0	196	50	216	0	0	266	58	54	0	0	112	574
3:30 PM	144	55	0	0	199	60	259	0	0	319	77	49	0	0	126	644
3:45 PM	173	43	0	0	216	57	342	0	0	399	89	57	0	0	146	761
Hourly Total	621	175	0	0	796	213	993	0	0	1206	278	195	0	0	473	2475
4:00 PM	166	36	0	0	202	58	350	0	0	408	102	61	0	0	163	773
4:15 PM	153	61	0	0	214	77	370	0	0	447	100	78	0	0	178	839
4:30 PM	168	55	0	0	223	66	407	0	0	473	116	77	0	0	193	889
4:45 PM	148	56	0	0	204	78	381	0	0	459	121	80	0	0	201	864
Hourly Total	635	208	0	0	843	279	1508	0	0	1787	439	296	0	0	735	3365
5:00 PM	170	59	0	0	229	64	367	0	0	431	127	83	0	0	210	870
5:15 PM	193	62	0	0	255	80	395	0	0	475	123	78	0	0	201	931
5:30 PM	176	59	0	0	235	44	367	0	0	411	126	73	0	0	199	845
5:45 PM	125	39	0	0	164	56	343	0	0	399	123	93	0	0	216	779
Hourly Total	664	219	0	0	883	244	1472	0	0	1716	499	327	0	0	826	3425

6:00 PM	148	34	0	0	182	42	286	0	0	328	112	82	0	0	194	704
6:15 PM	142	50	0	0	192	42	252	0	0	294	63	66	0	0	129	615
6:30 PM	125	34	0	0	159	30	228	0	0	258	59	45	0	0	104	521
6:45 PM	104	32	0	0	136	51	183	0	0	234	53	51	0	0	104	474
Hourly Total	519	150	0	0	669	165	949	0	0	1114	287	244	0	0	531	2314
Grand Total	5780	1889	0	0	7669	1726	6618	1	0	8345	1948	1802	0	0	3750	19764
Approach %	75.4	24.6	0.0	-	-	20.7	79.3	0.0	-	-	51.9	48.1	0.0	-	-	-
Total %	29.2	9.6	0.0	-	38.8	8.7	33.5	0.0	-	42.2	9.9	9.1	0.0	-	19.0	-
Lights	5174	1856	0	-	7030	1700	5983	1	-	7684	1908	1785	0	-	3693	18407
% Lights	89.5	98.3	-	-	91.7	98.5	90.4	100.0	-	92.1	97.9	99.1	-	-	98.5	93.1
Mediums	232	25	0	-	257	20	217	0	-	237	23	10	0	-	33	527
% Mediums	4.0	1.3	-	-	3.4	1.2	3.3	0.0	-	2.8	1.2	0.6	-	-	0.9	2.7
Articulated Trucks	374	8	0	-	382	6	418	0	-	424	17	7	0	-	24	830
% Articulated Trucks	6.5	0.4	-	-	5.0	0.3	6.3	0.0	-	5.1	0.9	0.4	-	-	0.6	4.2
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	278	113	0	0	391	72	132	0	0	204	24	75	0	0	99	694
7:45 AM	276	128	0	0	404	73	117	0	0	190	42	79	0	0	121	715
8:00 AM	260	92	0	0	352	82	109	0	0	191	50	55	0	0	105	648
8:15 AM	314	98	0	0	412	84	138	0	0	222	41	74	0	0	115	749
Total	1128	431	0	0	1559	311	496	0	0	807	157	283	0	0	440	2806
Approach %	72.4	27.6	0.0	-	-	38.5	61.5	0.0	-	-	35.7	64.3	0.0	-	-	-
Total %	40.2	15.4	0.0	-	55.6	11.1	17.7	0.0	-	28.8	5.6	10.1	0.0	-	15.7	-
PHF	0.898	0.842	0.000	-	0.946	0.926	0.899	0.000	-	0.909	0.785	0.896	0.000	-	0.909	0.937
Lights	1032	423	0	-	1455	309	403	0	-	712	153	282	0	-	435	2602
% Lights	91.5	98.1	-	-	93.3	99.4	81.3	-	-	88.2	97.5	99.6	-	-	98.9	92.7
Mediums	43	6	0	-	49	2	47	0	-	49	2	0	0	-	2	100
% Mediums	3.8	1.4	-	-	3.1	0.6	9.5	-	-	6.1	1.3	0.0	-	-	0.5	3.6
Articulated Trucks	53	2	0	-	55	0	46	0	-	46	2	1	0	-	3	104
% Articulated Trucks	4.7	0.5	-	-	3.5	0.0	9.3	-	-	5.7	1.3	0.4	-	-	0.7	3.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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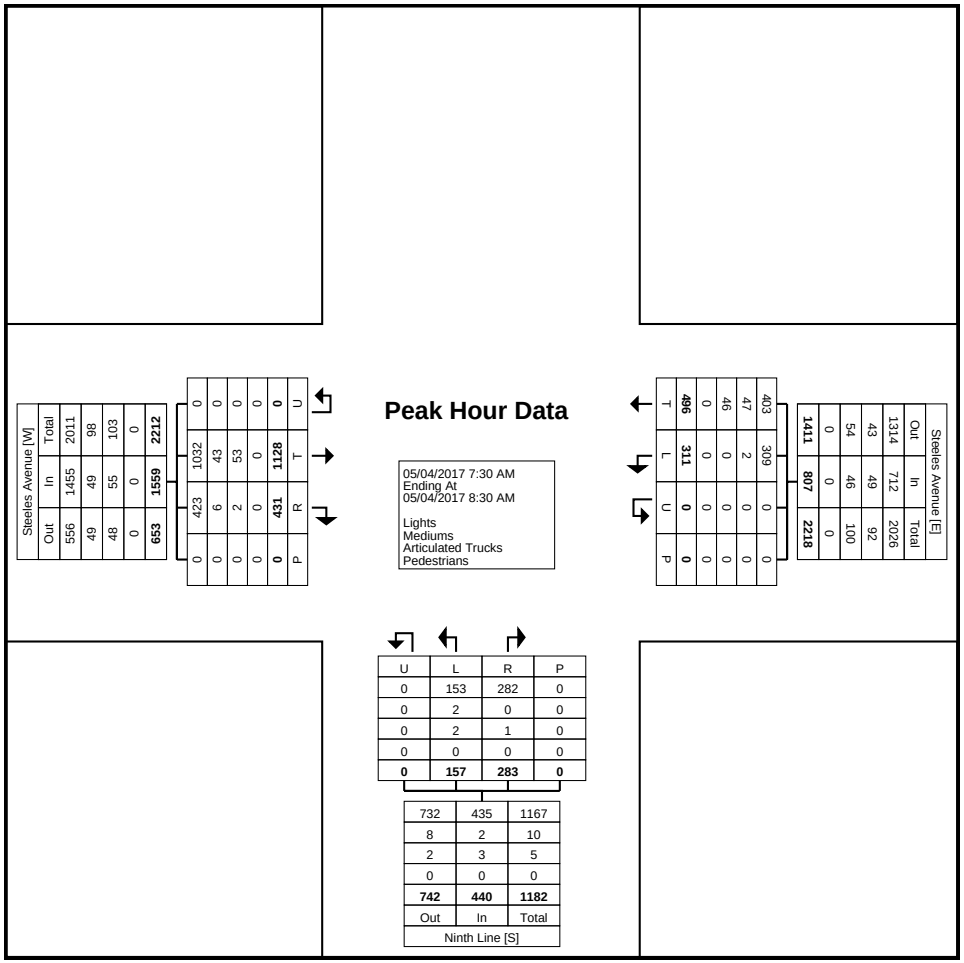
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Ninth Line Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	168	55	0	0	223	66	407	0	0	473	116	77	0	0	193	889
4:45 PM	148	56	0	0	204	78	381	0	0	459	121	80	0	0	201	864
5:00 PM	170	59	0	0	229	64	367	0	0	431	127	83	0	0	210	870
5:15 PM	193	62	0	0	255	80	395	0	0	475	123	78	0	0	201	931
Total	679	232	0	0	911	288	1550	0	0	1838	487	318	0	0	805	3554
Approach %	74.5	25.5	0.0	-	-	15.7	84.3	0.0	-	-	60.5	39.5	0.0	-	-	-
Total %	19.1	6.5	0.0	-	25.6	8.1	43.6	0.0	-	51.7	13.7	8.9	0.0	-	22.7	-
PHF	0.880	0.935	0.000	-	0.893	0.900	0.952	0.000	-	0.967	0.959	0.958	0.000	-	0.958	0.954
Lights	603	229	0	-	832	286	1473	0	-	1759	480	317	0	-	797	3388
% Lights	88.8	98.7	-	-	91.3	99.3	95.0	-	-	95.7	98.6	99.7	-	-	99.0	95.3
Mediums	23	3	0	-	26	1	23	0	-	24	7	0	0	-	7	57
% Mediums	3.4	1.3	-	-	2.9	0.3	1.5	-	-	1.3	1.4	0.0	-	-	0.9	1.6
Articulated Trucks	53	0	0	-	53	1	54	0	-	55	0	1	0	-	1	109
% Articulated Trucks	7.8	0.0	-	-	5.8	0.3	3.5	-	-	3.0	0.0	0.3	-	-	0.1	3.1
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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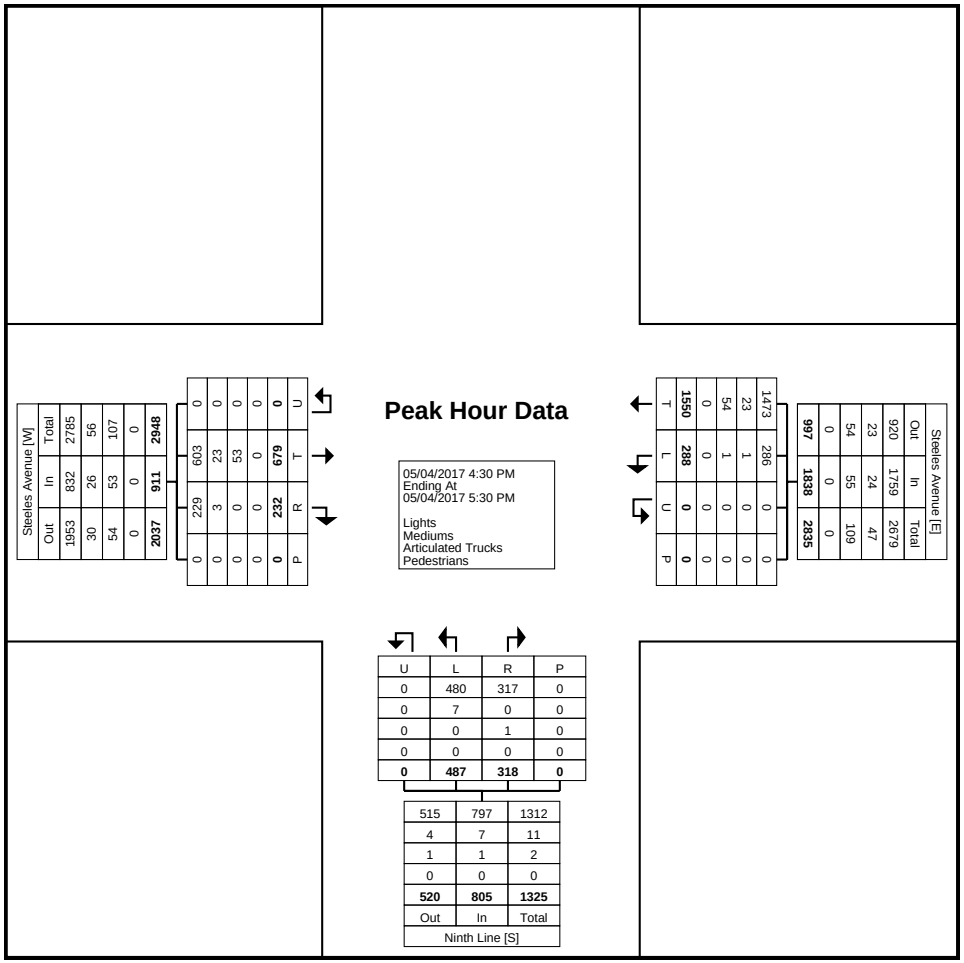
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (4:30 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Ninth Line (South) - Weekday
Site Code:
Start Date: 05/04/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Saturday
Site Code:
Start Date: 05/13/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Sixth Line North Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
11:00 AM	6	73	0	0	79	78	0	0	0	78	2	5	0	0	7	164
11:15 AM	5	96	0	0	101	100	3	0	0	103	0	7	0	0	7	211
11:30 AM	3	91	0	0	94	85	2	0	0	87	0	8	0	0	8	189
11:45 AM	7	104	1	0	112	89	1	0	0	90	3	7	0	0	10	212
Hourly Total	21	364	1	0	386	352	6	0	0	358	5	27	0	0	32	776
12:00 PM	8	131	0	0	139	98	4	0	0	102	2	3	0	0	5	246
12:15 PM	12	136	0	0	148	96	2	0	0	98	2	3	0	0	5	251
12:30 PM	6	125	0	0	131	95	0	0	0	95	0	6	0	0	6	232
12:45 PM	6	104	0	0	110	97	0	0	0	97	3	4	0	0	7	214
Hourly Total	32	496	0	0	528	386	6	0	0	392	7	16	0	0	23	943
1:00 PM	5	122	0	0	127	102	3	0	0	105	0	3	0	0	3	235
1:15 PM	9	115	0	0	124	84	1	0	0	85	0	6	0	0	6	215
1:30 PM	3	98	0	0	101	90	1	0	0	91	1	6	0	0	7	199
1:45 PM	7	89	0	0	96	109	2	0	0	111	2	3	0	0	5	212
Hourly Total	24	424	0	0	448	385	7	0	0	392	3	18	0	0	21	861
2:00 PM	8	90	0	0	98	109	0	0	0	109	0	2	0	0	2	209
2:15 PM	6	94	0	0	100	101	1	0	0	102	1	2	0	0	3	205
2:30 PM	7	97	0	0	104	98	2	0	0	100	0	7	0	0	7	211
2:45 PM	3	92	0	0	95	91	1	0	0	92	0	5	0	0	5	192
Hourly Total	24	373	0	0	397	399	4	0	0	403	1	16	0	0	17	817
Grand Total	101	1657	1	0	1759	1522	23	0	0	1545	16	77	0	0	93	3397
Approach %	5.7	94.2	0.1	-	-	98.5	1.5	0.0	-	-	17.2	82.8	0.0	-	-	-
Total %	3.0	48.8	0.0	-	51.8	44.8	0.7	0.0	-	45.5	0.5	2.3	0.0	-	2.7	-
Lights	100	1399	1	-	1500	1334	23	0	-	1357	16	76	0	-	92	2949
% Lights	99.0	84.4	100.0	-	85.3	87.6	100.0	-	-	87.8	100.0	98.7	-	-	98.9	86.8
Mediums	1	96	0	-	97	93	0	0	-	93	0	1	0	-	1	191
% Mediums	1.0	5.8	0.0	-	5.5	6.1	0.0	-	-	6.0	0.0	1.3	-	-	1.1	5.6
Articulated Trucks	0	162	0	-	162	95	0	0	-	95	0	0	0	-	0	257
% Articulated Trucks	0.0	9.8	0.0	-	9.2	6.2	0.0	-	-	6.1	0.0	0.0	-	-	0.0	7.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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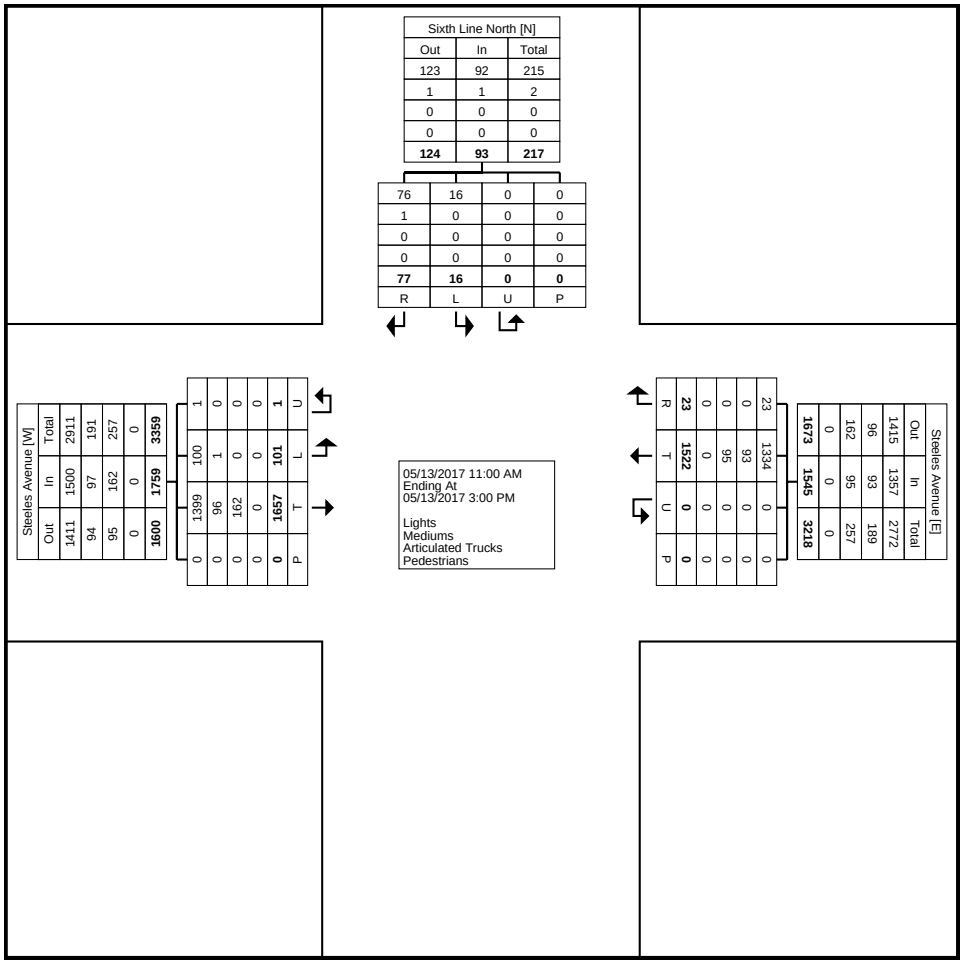
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Saturday
Site Code:
Start Date: 05/13/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Saturday
Site Code:
Start Date: 05/13/2017

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Sixth Line North Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
12:00 PM	8	131	0	0	139	98	4	0	0	102	2	3	0	0	5	246
12:15 PM	12	136	0	0	148	96	2	0	0	98	2	3	0	0	5	251
12:30 PM	6	125	0	0	131	95	0	0	0	95	0	6	0	0	6	232
12:45 PM	6	104	0	0	110	97	0	0	0	97	3	4	0	0	7	214
Total	32	496	0	0	528	386	6	0	0	392	7	16	0	0	23	943
Approach %	6.1	93.9	0.0	-	-	98.5	1.5	0.0	-	-	30.4	69.6	0.0	-	-	-
Total %	3.4	52.6	0.0	-	56.0	40.9	0.6	0.0	-	41.6	0.7	1.7	0.0	-	2.4	-
PHF	0.667	0.912	0.000	-	0.892	0.985	0.375	0.000	-	0.961	0.583	0.667	0.000	-	0.821	0.939
Lights	31	432	0	-	463	343	6	0	-	349	7	16	0	-	23	835
% Lights	96.9	87.1	-	-	87.7	88.9	100.0	-	-	89.0	100.0	100.0	-	-	100.0	88.5
Mediums	1	22	0	-	23	25	0	0	-	25	0	0	0	-	0	48
% Mediums	3.1	4.4	-	-	4.4	6.5	0.0	-	-	6.4	0.0	0.0	-	-	0.0	5.1
Articulated Trucks	0	42	0	-	42	18	0	0	-	18	0	0	0	-	0	60
% Articulated Trucks	0.0	8.5	-	-	8.0	4.7	0.0	-	-	4.6	0.0	0.0	-	-	0.0	6.4
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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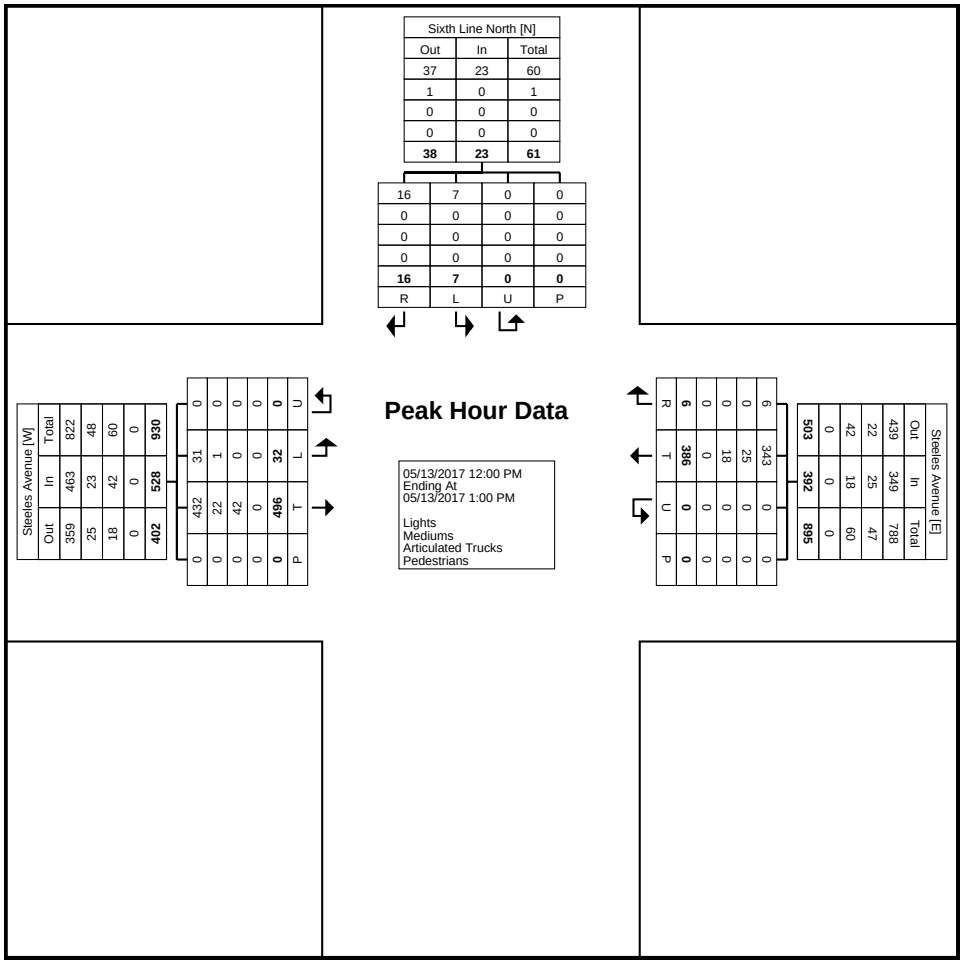
Count Name: Steeles Avenue & Sixth Line (North) - Saturday
Site Code:
Start Date: 05/13/2017



Turning Movement Peak Hour Data Plot (12:00 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
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Count Name: Steeles Avenue & Sixth Line (North) - Saturday
Site Code:
Start Date: 05/13/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Weekday
Site Code:
Start Date: 05/16/2017

Turning Movement Data

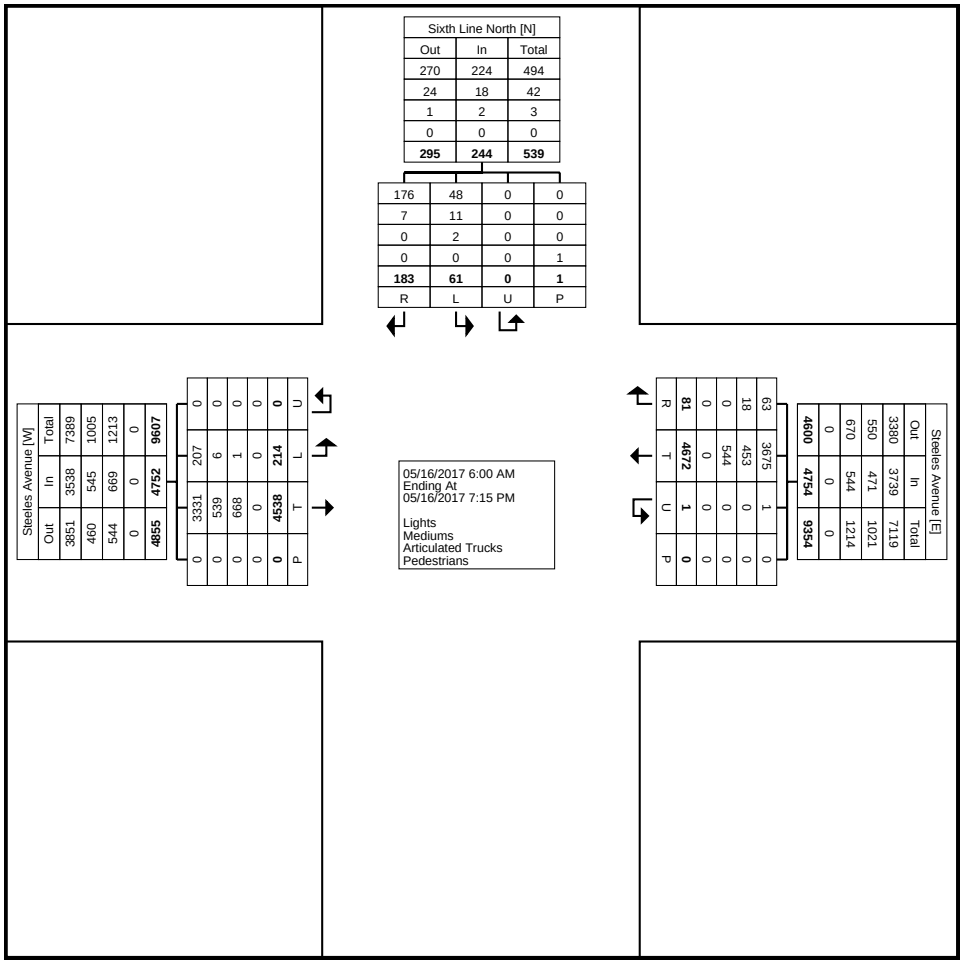
Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Sixth Line North Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	3	77	0	0	80	56	1	0	0	57	3	1	0	0	4	141
6:15 AM	3	77	0	0	80	69	0	0	0	69	2	1	0	0	3	152
6:30 AM	3	77	0	0	80	89	1	0	0	90	0	6	0	0	6	176
6:45 AM	3	115	0	0	118	73	3	0	0	76	2	0	0	0	2	196
Hourly Total	12	346	0	0	358	287	5	0	0	292	7	8	0	0	15	665
7:00 AM	7	156	0	0	163	78	0	1	0	79	4	6	0	0	10	252
7:15 AM	8	197	0	0	205	82	0	0	0	82	4	6	0	0	10	297
7:30 AM	3	182	0	0	185	134	0	0	0	134	5	4	0	0	9	328
7:45 AM	10	212	0	0	222	120	1	0	0	121	0	11	0	0	11	354
Hourly Total	28	747	0	0	775	414	1	1	0	416	13	27	0	0	40	1231
8:00 AM	6	220	0	0	226	99	1	0	0	100	2	9	0	0	11	337
8:15 AM	15	187	0	0	202	101	0	0	0	101	1	9	0	0	10	313
8:30 AM	9	189	0	0	198	94	6	0	0	100	2	8	0	0	10	308
8:45 AM	5	137	0	0	142	108	2	0	0	110	4	8	0	0	12	264
Hourly Total	35	733	0	0	768	402	9	0	0	411	9	34	0	0	43	1222
9:00 AM	6	124	0	0	130	91	2	0	0	93	2	3	0	0	5	228
9:15 AM	4	112	0	0	116	106	1	0	0	107	1	5	0	0	6	229
9:30 AM	0	95	0	0	95	90	4	0	0	94	2	2	0	0	4	193
9:45 AM	4	120	0	0	124	96	2	0	0	98	1	4	0	0	5	227
Hourly Total	14	451	0	0	465	383	9	0	0	392	6	14	0	0	20	877
10:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	8	109	0	0	117	109	0	0	0	109	2	6	0	0	8	234
3:15 PM	6	115	0	0	121	126	8	0	0	134	4	7	0	0	11	266
3:30 PM	3	117	0	0	120	158	6	0	0	164	2	5	0	0	7	291
3:45 PM	5	120	0	0	125	161	5	0	0	166	0	4	0	0	4	295
Hourly Total	22	461	0	0	483	554	19	0	0	573	8	22	0	0	30	1086
4:00 PM	12	143	0	0	155	214	4	0	0	218	3	9	0	0	12	385
4:15 PM	8	123	0	0	131	234	3	0	0	237	1	2	0	0	3	371
4:30 PM	12	176	0	0	188	226	6	0	0	232	2	4	0	1	6	426
4:45 PM	18	187	0	0	205	212	5	0	0	217	1	12	0	0	13	435
Hourly Total	50	629	0	0	679	886	18	0	0	904	7	27	0	1	34	1617
5:00 PM	10	193	0	0	203	259	3	0	0	262	2	9	0	0	11	476
5:15 PM	10	194	0	0	204	238	6	0	0	244	2	4	0	0	6	454
5:30 PM	6	179	0	0	185	263	4	0	0	267	0	6	0	0	6	458
5:45 PM	8	157	0	0	165	225	2	0	0	227	0	6	0	0	6	398
Hourly Total	34	723	0	0	757	985	15	0	0	1000	4	25	0	0	29	1786

6:00 PM	4	138	0	0	142	220	0	0	0	220	1	7	0	0	8	370
6:15 PM	3	138	0	0	141	212	2	0	0	214	1	7	0	0	8	363
6:30 PM	6	98	0	0	104	167	2	0	0	169	2	9	0	0	11	284
6:45 PM	6	73	0	0	79	162	1	0	0	163	3	3	0	0	6	248
Hourly Total	19	447	0	0	466	761	5	0	0	766	7	26	0	0	33	1265
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	214	4538	0	0	4752	4672	81	1	0	4754	61	183	0	1	244	9750
Approach %	4.5	95.5	0.0	-	-	98.3	1.7	0.0	-	-	25.0	75.0	0.0	-	-	-
Total %	2.2	46.5	0.0	-	48.7	47.9	0.8	0.0	-	48.8	0.6	1.9	0.0	-	2.5	-
Lights	207	3331	0	-	3538	3675	63	1	-	3739	48	176	0	-	224	7501
% Lights	96.7	73.4	-	-	74.5	78.7	77.8	100.0	-	78.6	78.7	96.2	-	-	91.8	76.9
Mediums	6	539	0	-	545	453	18	0	-	471	11	7	0	-	18	1034
% Mediums	2.8	11.9	-	-	11.5	9.7	22.2	0.0	-	9.9	18.0	3.8	-	-	7.4	10.6
Articulated Trucks	1	668	0	-	669	544	0	0	-	544	2	0	0	-	2	1215
% Articulated Trucks	0.5	14.7	-	-	14.1	11.6	0.0	0.0	-	11.4	3.3	0.0	-	-	0.8	12.5
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Weekday
Site Code:
Start Date: 05/16/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Weekday
Site Code:
Start Date: 05/16/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Sixth Line North Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	3	182	0	0	185	134	0	0	0	134	5	4	0	0	9	328
7:45 AM	10	212	0	0	222	120	1	0	0	121	0	11	0	0	11	354
8:00 AM	6	220	0	0	226	99	1	0	0	100	2	9	0	0	11	337
8:15 AM	15	187	0	0	202	101	0	0	0	101	1	9	0	0	10	313
Total	34	801	0	0	835	454	2	0	0	456	8	33	0	0	41	1332
Approach %	4.1	95.9	0.0	-	-	99.6	0.4	0.0	-	-	19.5	80.5	0.0	-	-	-
Total %	2.6	60.1	0.0	-	62.7	34.1	0.2	0.0	-	34.2	0.6	2.5	0.0	-	3.1	-
PHF	0.567	0.910	0.000	-	0.924	0.847	0.500	0.000	-	0.851	0.400	0.750	0.000	-	0.932	0.941
Lights	33	615	0	-	648	296	1	0	-	297	2	32	0	-	34	979
% Lights	97.1	76.8	-	-	77.6	65.2	50.0	-	-	65.1	25.0	97.0	-	-	82.9	73.5
Mediums	1	92	0	-	93	93	1	0	-	94	5	1	0	-	6	193
% Mediums	2.9	11.5	-	-	11.1	20.5	50.0	-	-	20.6	62.5	3.0	-	-	14.6	14.5
Articulated Trucks	0	94	0	-	94	65	0	0	-	65	1	0	0	-	1	160
% Articulated Trucks	0.0	11.7	-	-	11.3	14.3	0.0	-	-	14.3	12.5	0.0	-	-	2.4	12.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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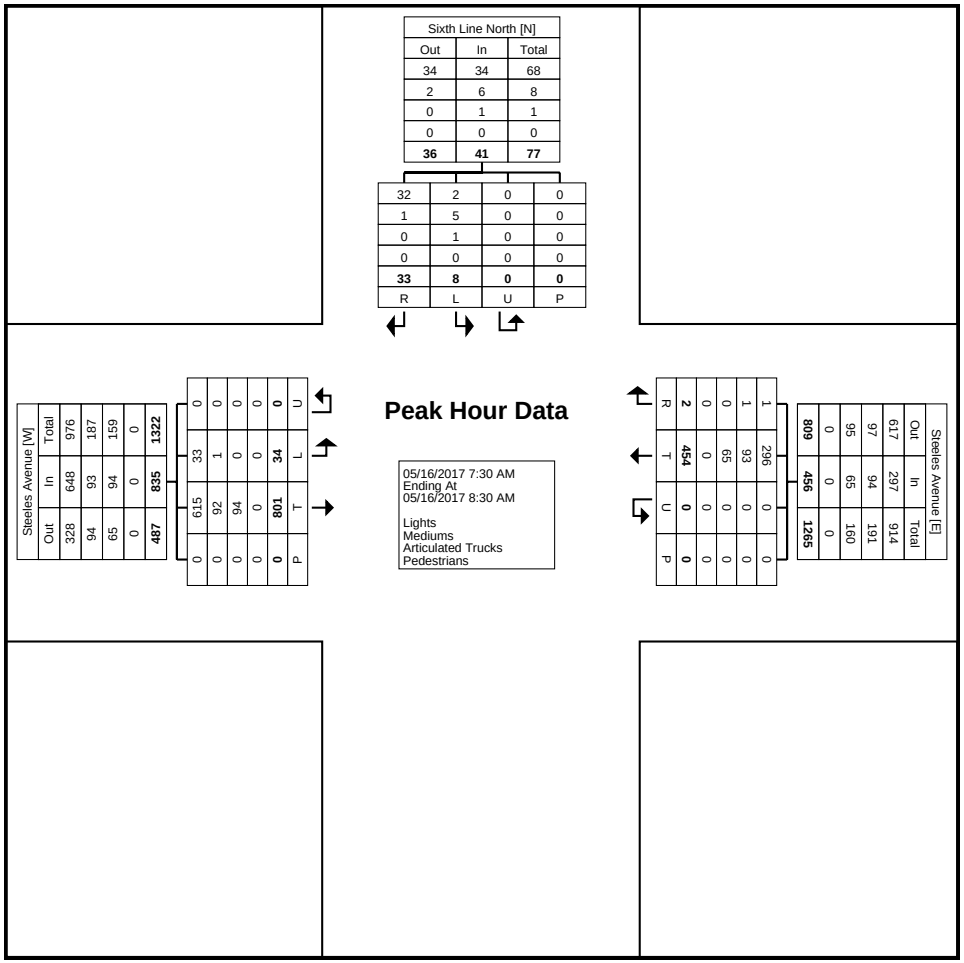
Count Name: Steeles Avenue & Sixth Line (North) - Weekday
Site Code:
Start Date: 05/16/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Sixth Line (North) - Weekday
Site Code:
Start Date: 05/16/2017

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Steeles Avenue Eastbound					Steeles Avenue Westbound					Sixth Line North Southbound					
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
4:45 PM	18	187	0	0	205	212	5	0	0	217	1	12	0	0	13	435
5:00 PM	10	193	0	0	203	259	3	0	0	262	2	9	0	0	11	476
5:15 PM	10	194	0	0	204	238	6	0	0	244	2	4	0	0	6	454
5:30 PM	6	179	0	0	185	263	4	0	0	267	0	6	0	0	6	458
Total	44	753	0	0	797	972	18	0	0	990	5	31	0	0	36	1823
Approach %	5.5	94.5	0.0	-	-	98.2	1.8	0.0	-	-	13.9	86.1	0.0	-	-	-
Total %	2.4	41.3	0.0	-	43.7	53.3	1.0	0.0	-	54.3	0.3	1.7	0.0	-	2.0	-
PHF	0.611	0.970	0.000	-	0.972	0.924	0.750	0.000	-	0.927	0.625	0.646	0.000	-	0.692	0.957
Lights	43	598	0	-	641	873	17	0	-	890	5	31	0	-	36	1567
% Lights	97.7	79.4	-	-	80.4	89.8	94.4	-	-	89.9	100.0	100.0	-	-	100.0	86.0
Mediums	1	57	0	-	58	32	1	0	-	33	0	0	0	-	0	91
% Mediums	2.3	7.6	-	-	7.3	3.3	5.6	-	-	3.3	0.0	0.0	-	-	0.0	5.0
Articulated Trucks	0	98	0	-	98	67	0	0	-	67	0	0	0	-	0	165
% Articulated Trucks	0.0	13.0	-	-	12.3	6.9	0.0	-	-	6.8	0.0	0.0	-	-	0.0	9.1
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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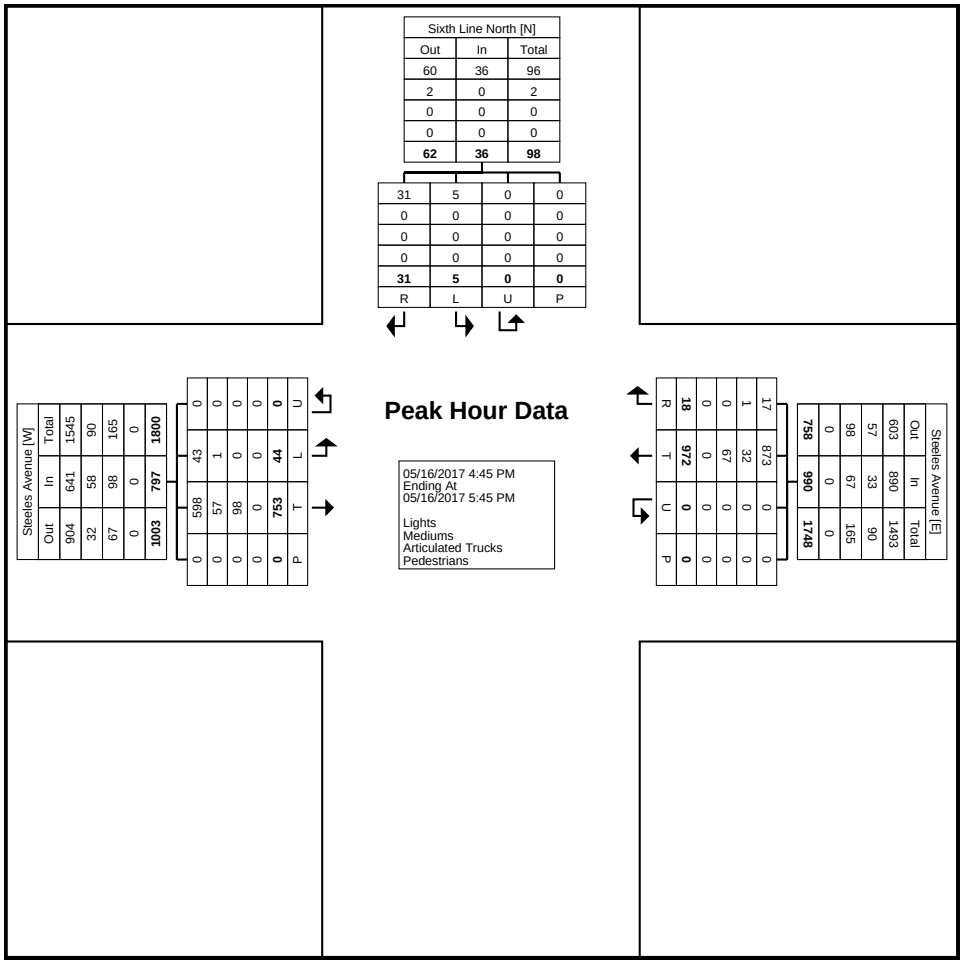
Site Code:
Start Date: 05/16/2017



Turning Movement Peak Hour Data Plot (4:45 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

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Count Name: Steeles Avenue & Sixth Line (North) - Weekday
Site Code:
Start Date: 05/16/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	3	45	12	0	0	60	70	52	6	0	0	128	6	44	171	1	0	222	43	105	0	0	0	148	558
11:15 AM	6	46	11	0	0	63	81	45	9	0	0	135	23	85	177	0	0	285	22	70	1	0	0	93	576
11:30 AM	3	48	18	0	0	69	109	51	10	0	0	170	11	77	197	0	0	285	11	133	6	0	0	150	674
11:45 AM	7	58	13	0	0	78	106	60	7	0	0	173	14	72	207	0	0	293	16	109	5	0	0	130	674
Hourly Total	19	197	54	0	0	270	366	208	32	0	0	606	54	278	752	1	0	1085	92	417	12	0	0	521	2482
12:00 PM	7	51	12	0	1	70	108	47	8	0	0	163	14	75	176	0	1	265	18	93	3	0	1	114	612
12:15 PM	11	53	21	0	0	85	124	75	18	0	0	217	13	79	189	2	0	283	19	88	0	0	0	107	692
12:30 PM	6	44	16	0	0	66	112	55	14	0	0	181	22	87	221	0	0	330	20	113	0	0	0	133	710
12:45 PM	3	66	11	0	0	80	129	58	10	0	0	197	32	105	244	0	3	381	17	73	0	0	0	90	748
Hourly Total	27	214	60	0	1	301	473	235	50	0	0	758	81	346	830	2	4	1259	74	367	3	0	1	444	2762
1:00 PM	5	45	12	0	0	62	139	71	10	0	0	220	13	104	231	0	3	348	16	79	3	0	0	98	728
1:15 PM	4	69	13	0	0	86	138	70	11	0	0	219	19	97	204	0	4	320	17	94	7	0	0	118	743
1:30 PM	8	57	15	0	0	80	132	51	12	0	0	195	16	110	206	0	2	332	13	80	4	0	0	97	704
1:45 PM	11	51	19	0	0	81	174	84	6	0	0	264	21	104	196	0	5	321	20	80	4	0	0	104	770
Hourly Total	28	222	59	0	0	309	583	276	39	0	0	898	69	415	837	0	14	1321	66	333	18	0	0	417	2945
2:00 PM	7	63	17	0	0	87	157	86	16	0	0	259	8	73	201	1	4	283	19	110	0	0	0	129	758
2:15 PM	10	62	22	0	0	94	166	65	14	0	0	245	16	78	212	0	5	306	20	101	4	0	0	125	770
2:30 PM	3	61	15	0	0	79	178	85	16	0	0	279	16	84	224	0	3	324	17	94	1	0	0	112	794
2:45 PM	11	79	18	0	0	108	144	69	13	0	1	226	13	82	201	0	3	296	13	91	1	0	0	105	735
Hourly Total	31	265	72	0	0	368	645	305	59	0	1	1009	53	317	838	1	15	1209	69	396	6	0	0	471	3057
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
Grand Total	105	898	245	0	1	1248	2067	1024	180	0	1	3271	257	1356	3258	4	33	4875	301	1513	39	0	1	1853	11247
Approach %	8.4	72.0	19.6	0.0	-	-	63.2	31.3	5.5	0.0	-	-	5.3	27.8	66.8	0.1	-	-	16.2	81.7	2.1	0.0	-	-	-
Total %	0.9	8.0	2.2	0.0	-	11.1	18.4	9.1	1.6	0.0	-	29.1	2.3	12.1	29.0	0.0	-	43.3	2.7	13.5	0.3	0.0	-	16.5	-
Lights	96	835	174	0	-	1105	2050	971	180	0	-	3201	211	1323	3226	4	-	4764	294	1481	34	0	-	1809	10879
% Lights	91.4	93.0	71.0	-	-	88.5	99.2	94.8	100.0	-	-	97.9	82.1	97.6	99.0	100.0	-	97.7	97.7	97.9	87.2	-	-	97.6	96.7
Mediums	6	28	20	0	-	54	8	22	0	0	-	30	16	22	14	0	-	52	5	25	2	0	-	32	168
% Mediums	5.7	3.1	8.2	-	-	4.3	0.4	2.1	0.0	-	-	0.9	6.2	1.6	0.4	0.0	-	1.1	1.7	1.7	5.1	-	-	1.7	1.5
Articulated Trucks	3	35	51	0	-	89	9	31	0	0	-	40	30	11	18	0	-	59	2	7	3	0	-	12	200
% Articulated Trucks	2.9	3.9	20.8	-	-	7.1	0.4	3.0	0.0	-	-	1.2	11.7	0.8	0.6	0.0	-	1.2	0.7	0.5	7.7	-	-	0.6	1.8
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	33	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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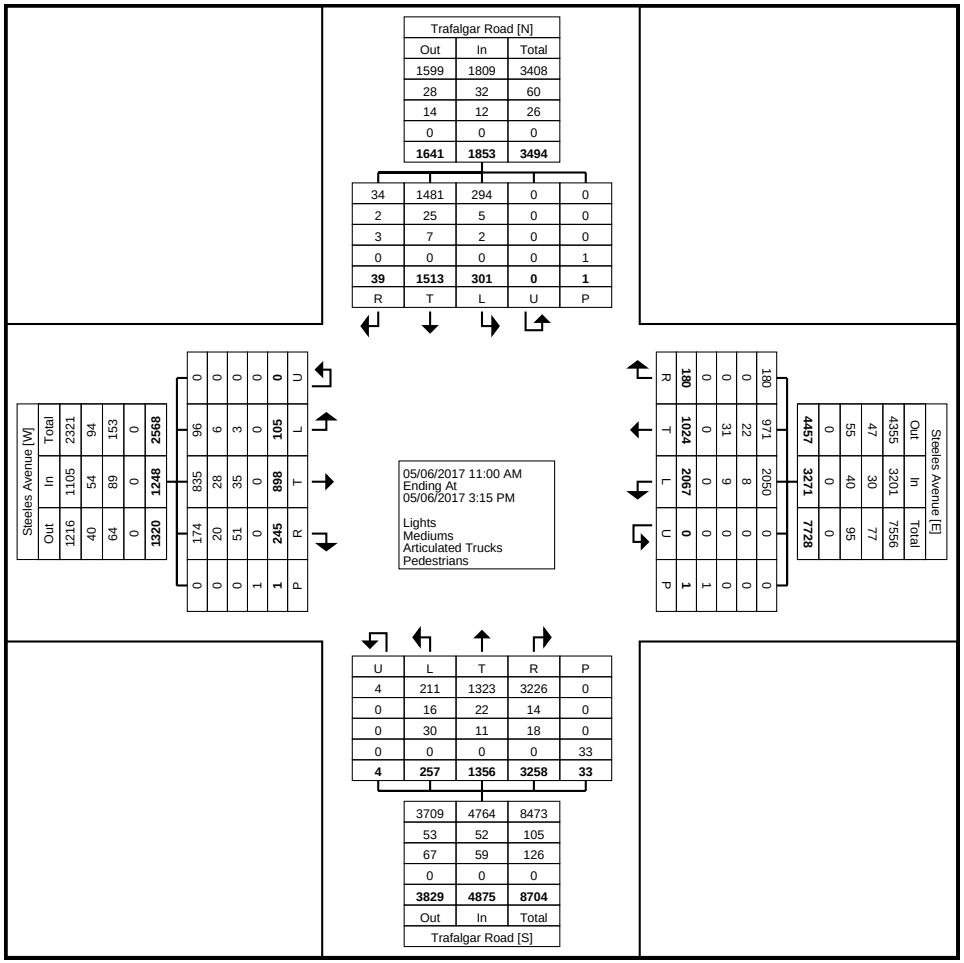
Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

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Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (1:45 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
1:45 PM	11	51	19	0	0	81	174	84	6	0	0	264	21	104	196	0	5	321	20	80	4	0	0	104	770
2:00 PM	7	63	17	0	0	87	157	86	16	0	0	259	8	73	201	1	4	283	19	110	0	0	0	129	758
2:15 PM	10	62	22	0	0	94	166	65	14	0	0	245	16	78	212	0	5	306	20	101	4	0	0	125	770
2:30 PM	3	61	15	0	0	79	178	85	16	0	0	279	16	84	224	0	3	324	17	94	1	0	0	112	794
Total	31	237	73	0	0	341	675	320	52	0	0	1047	61	339	833	1	17	1234	76	385	9	0	0	470	3092
Approach %	9.1	69.5	21.4	0.0	-	-	64.5	30.6	5.0	0.0	-	-	4.9	27.5	67.5	0.1	-	-	16.2	81.9	1.9	0.0	-	-	-
Total %	1.0	7.7	2.4	0.0	-	11.0	21.8	10.3	1.7	0.0	-	33.9	2.0	11.0	26.9	0.0	-	39.9	2.5	12.5	0.3	0.0	-	15.2	-
PHF	0.705	0.940	0.830	0.000	-	0.907	0.948	0.930	0.813	0.000	-	0.938	0.726	0.815	0.930	0.250	-	0.952	0.950	0.875	0.563	0.000	-	0.911	0.974
Lights	28	228	54	0	-	310	672	313	52	0	-	1037	49	336	822	1	-	1208	75	378	9	0	-	462	3017
% Lights	90.3	96.2	74.0	-	-	90.9	99.6	97.8	100.0	-	-	99.0	80.3	99.1	98.7	100.0	-	97.9	98.7	98.2	100.0	-	-	98.3	97.6
Mediums	2	5	5	0	-	12	2	1	0	0	-	3	5	1	3	0	-	9	1	6	0	0	-	7	31
% Mediums	6.5	2.1	6.8	-	-	3.5	0.3	0.3	0.0	-	-	0.3	8.2	0.3	0.4	0.0	-	0.7	1.3	1.6	0.0	-	-	1.5	1.0
Articulated Trucks	1	4	14	0	-	19	1	6	0	0	-	7	7	2	8	0	-	17	0	1	0	0	-	1	44
% Articulated Trucks	3.2	1.7	19.2	-	-	5.6	0.1	1.9	0.0	-	-	0.7	11.5	0.6	1.0	0.0	-	1.4	0.0	0.3	0.0	-	-	0.2	1.4
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	17	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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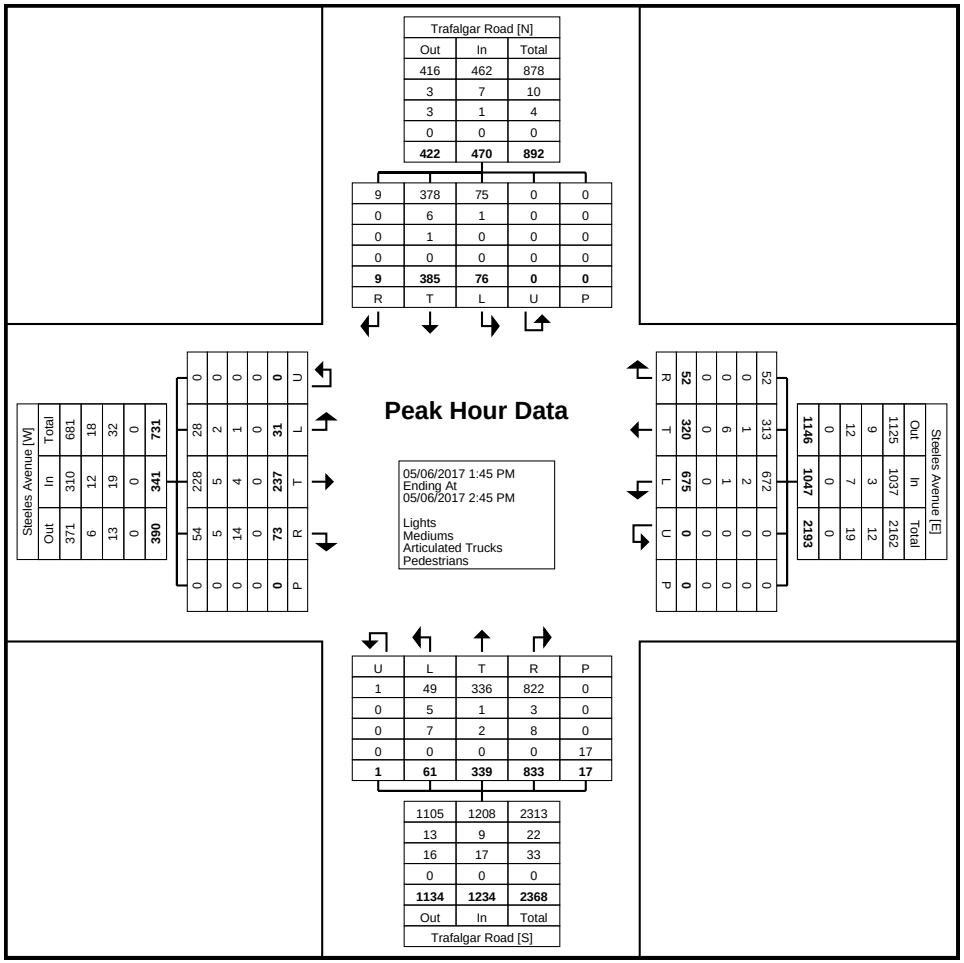
Site Code:
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (1:45 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/13/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	7	45	18	0	0	70	110	47	12	0	0	169	14	113	237	0	3	364	17	107	0	0	0	124	727
11:15 AM	6	47	22	0	0	75	115	73	15	0	1	203	25	74	182	0	0	281	17	120	4	0	1	141	700
11:30 AM	9	56	22	0	0	87	130	54	11	0	1	195	19	109	196	0	0	324	17	104	1	0	1	122	728
11:45 AM	6	73	18	0	0	97	130	70	18	0	1	218	20	90	212	0	3	322	17	112	2	0	0	131	768
Hourly Total	28	221	80	0	0	329	485	244	56	0	3	785	78	386	827	0	6	1291	68	443	7	0	2	518	2923
12:00 PM	9	79	28	0	0	116	154	75	18	0	0	247	20	96	215	0	2	331	15	97	3	0	0	115	809
12:15 PM	11	90	24	0	0	125	128	81	12	0	0	221	18	93	193	4	2	308	18	121	3	0	0	142	796
12:30 PM	7	86	24	0	1	117	142	62	15	0	0	219	19	116	206	2	11	343	22	117	2	0	0	141	820
12:45 PM	8	81	22	0	0	111	128	83	20	1	0	232	24	100	231	1	9	356	23	120	5	0	0	148	847
Hourly Total	35	336	98	0	1	469	552	301	65	1	0	919	81	405	845	7	24	1338	78	455	13	0	0	546	3272
1:00 PM	9	72	30	0	0	111	141	68	9	0	1	218	32	93	209	1	9	335	24	120	0	0	1	144	808
1:15 PM	9	71	26	0	2	106	144	63	17	0	0	224	22	107	208	0	13	337	25	113	4	0	0	142	809
1:30 PM	9	60	20	1	0	90	186	69	21	0	0	276	20	148	215	1	22	384	19	107	3	0	0	129	879
1:45 PM	11	62	18	0	4	91	137	101	8	0	0	246	22	122	233	1	16	378	16	109	3	0	0	128	843
Hourly Total	38	265	94	1	6	398	608	301	55	0	1	964	96	470	865	3	60	1434	84	449	10	0	1	543	3339
2:00 PM	7	59	24	0	0	90	161	74	8	0	0	243	20	123	230	1	20	374	21	112	2	0	0	135	842
2:15 PM	8	61	30	0	0	99	144	90	17	0	0	251	25	104	220	1	29	350	13	112	3	0	2	128	828
2:30 PM	9	66	17	0	0	92	162	74	9	0	0	245	18	139	222	1	52	380	17	92	2	0	0	111	828
2:45 PM	6	65	20	0	0	91	150	84	14	0	2	248	31	135	216	4	65	386	31	126	1	0	2	158	883
Hourly Total	30	251	91	0	0	372	617	322	48	0	2	987	94	501	888	7	166	1490	82	442	8	0	4	532	3381
Grand Total	131	1073	363	1	7	1568	2262	1168	224	1	6	3655	349	1762	3425	17	256	5553	312	1789	38	0	7	2139	12915
Approach %	8.4	68.4	23.2	0.1	-	-	61.9	32.0	6.1	0.0	-	-	6.3	31.7	61.7	0.3	-	-	14.6	83.6	1.8	0.0	-	-	-
Total %	1.0	8.3	2.8	0.0	-	12.1	17.5	9.0	1.7	0.0	-	28.3	2.7	13.6	26.5	0.1	-	43.0	2.4	13.9	0.3	0.0	-	16.6	-
Lights	104	951	260	1	-	1316	2240	1087	223	1	-	3551	257	1698	3390	17	-	5362	299	1720	36	0	-	2055	12284
% Lights	79.4	88.6	71.6	100.0	-	83.9	99.0	93.1	99.6	100.0	-	97.2	73.6	96.4	99.0	100.0	-	96.6	95.8	96.1	94.7	-	-	96.1	95.1
Mediums	21	49	25	0	-	95	10	30	0	0	-	40	52	50	18	0	-	120	9	63	1	0	-	73	328
% Mediums	16.0	4.6	6.9	0.0	-	6.1	0.4	2.6	0.0	0.0	-	1.1	14.9	2.8	0.5	0.0	-	2.2	2.9	3.5	2.6	-	-	3.4	2.5
Articulated Trucks	6	73	78	0	-	157	12	51	1	0	-	64	40	14	17	0	-	71	4	6	1	0	-	11	303
% Articulated Trucks	4.6	6.8	21.5	0.0	-	10.0	0.5	4.4	0.4	0.0	-	1.8	11.5	0.8	0.5	0.0	-	1.3	1.3	0.3	2.6	-	-	0.5	2.3
Pedestrians	-	-	-	-	7	-	-	-	-	-	6	-	-	-	-	-	256	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Paradigm Transportation Solutions Limited
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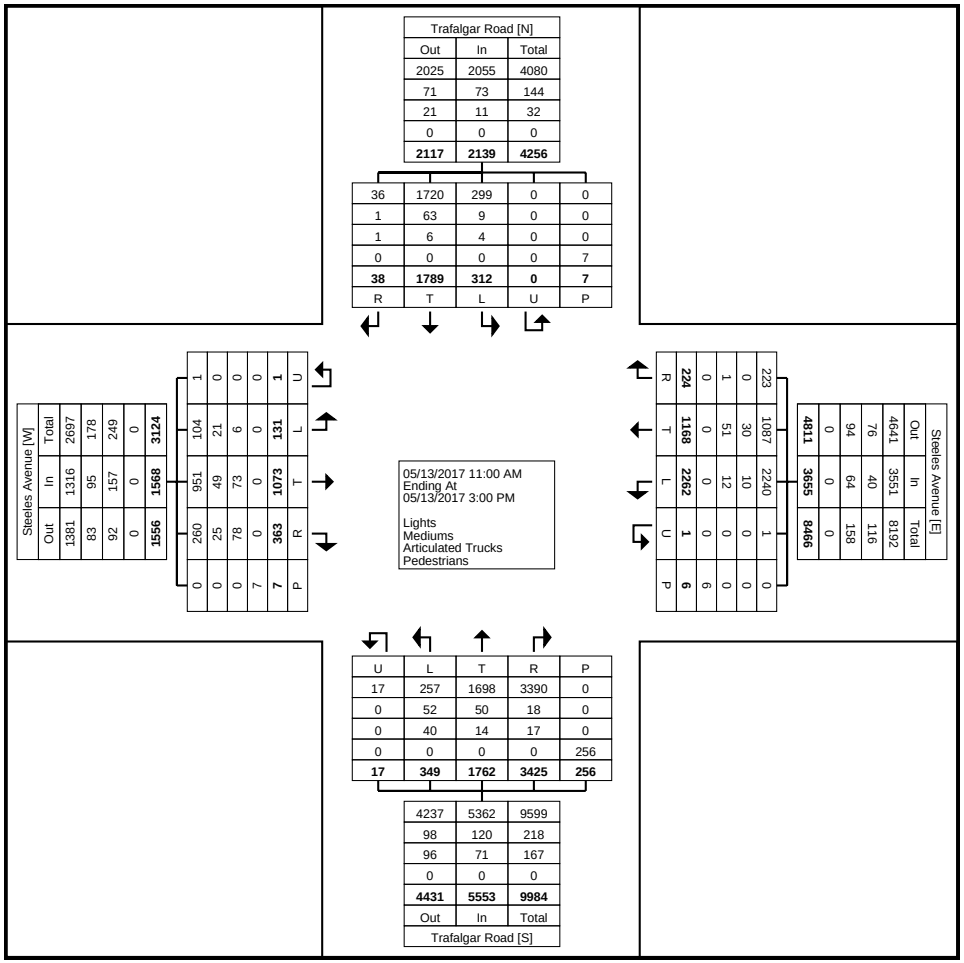
Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/13/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/13/2017

Turning Movement Peak Hour Data (1:30 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
1:30 PM	9	60	20	1	0	90	186	69	21	0	0	276	20	148	215	1	22	384	19	107	3	0	0	129	879
1:45 PM	11	62	18	0	4	91	137	101	8	0	0	246	22	122	233	1	16	378	16	109	3	0	0	128	843
2:00 PM	7	59	24	0	0	90	161	74	8	0	0	243	20	123	230	1	20	374	21	112	2	0	0	135	842
2:15 PM	8	61	30	0	0	99	144	90	17	0	0	251	25	104	220	1	29	350	13	112	3	0	2	128	828
Total	35	242	92	1	4	370	628	334	54	0	0	1016	87	497	898	4	87	1486	69	440	11	0	2	520	3392
Approach %	9.5	65.4	24.9	0.3	-	-	61.8	32.9	5.3	0.0	-	-	5.9	33.4	60.4	0.3	-	-	13.3	84.6	2.1	0.0	-	-	-
Total %	1.0	7.1	2.7	0.0	-	10.9	18.5	9.8	1.6	0.0	-	30.0	2.6	14.7	26.5	0.1	-	43.8	2.0	13.0	0.3	0.0	-	15.3	-
PHF	0.795	0.976	0.767	0.250	-	0.934	0.844	0.827	0.643	0.000	-	0.920	0.870	0.840	0.964	1.000	-	0.967	0.821	0.982	0.917	0.000	-	0.963	0.965
Lights	25	215	66	1	-	307	625	317	54	0	-	996	62	482	888	4	-	1436	66	423	10	0	-	499	3238
% Lights	71.4	88.8	71.7	100.0	-	83.0	99.5	94.9	100.0	-	-	98.0	71.3	97.0	98.9	100.0	-	96.6	95.7	96.1	90.9	-	-	96.0	95.5
Mediums	7	7	6	0	-	20	1	6	0	0	-	7	17	12	7	0	-	36	2	14	0	0	-	16	79
% Mediums	20.0	2.9	6.5	0.0	-	5.4	0.2	1.8	0.0	-	-	0.7	19.5	2.4	0.8	0.0	-	2.4	2.9	3.2	0.0	-	-	3.1	2.3
Articulated Trucks	3	20	20	0	-	43	2	11	0	0	-	13	8	3	3	0	-	14	1	3	1	0	-	5	75
% Articulated Trucks	8.6	8.3	21.7	0.0	-	11.6	0.3	3.3	0.0	-	-	1.3	9.2	0.6	0.3	0.0	-	0.9	1.4	0.7	9.1	-	-	1.0	2.2
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	87	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Paradigm Transportation Solutions Limited
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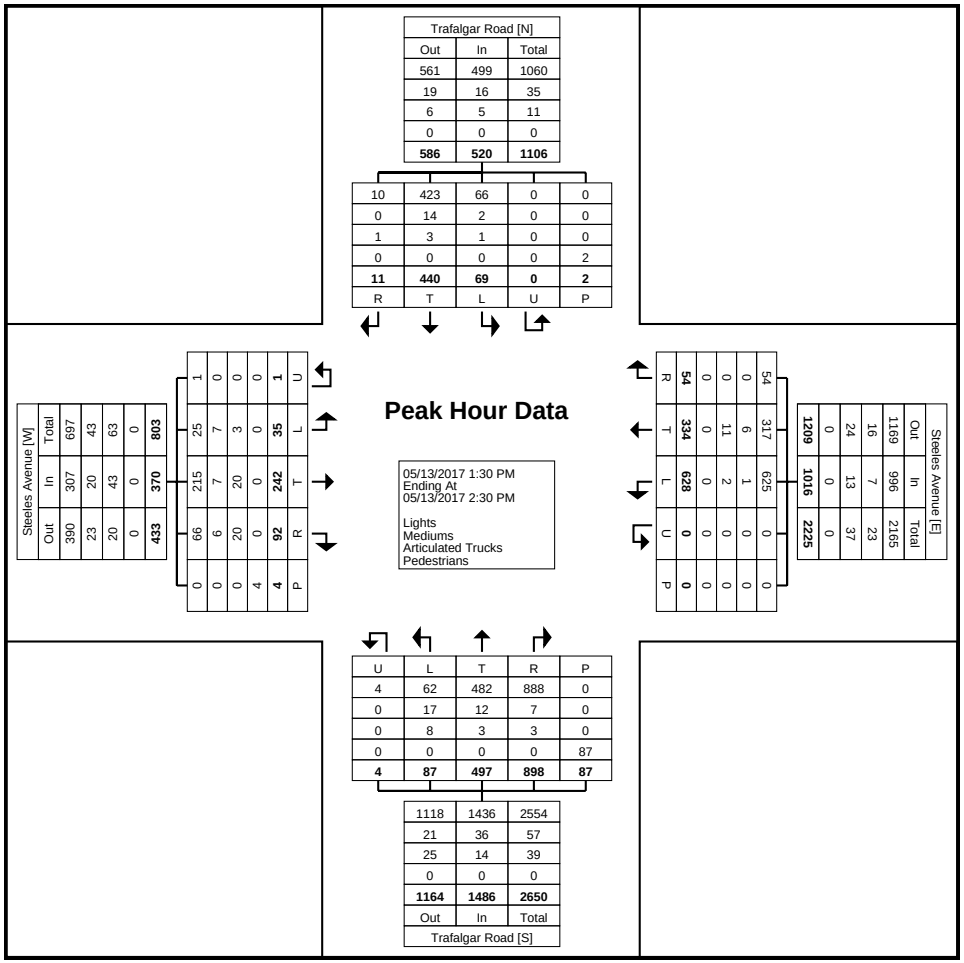
Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/13/2017



Turning Movement Peak Hour Data Plot (1:30 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
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Count Name: Steeles Avenue & Trafalgar Road - Saturday
Site Code:
Start Date: 05/13/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	6	41	16	0	0	63	70	50	6	0	0	126	12	25	58	0	0	95	19	116	1	0	0	136	420
6:15 AM	2	36	14	0	0	52	75	60	7	0	0	142	24	42	76	1	0	143	18	151	6	0	0	175	512
6:30 AM	5	53	18	0	0	76	92	66	6	0	0	164	23	41	67	0	0	131	21	187	1	0	0	209	580
6:45 AM	5	64	17	0	0	86	90	54	2	0	0	146	20	62	82	0	1	164	34	179	3	0	0	216	612
Hourly Total	18	194	65	0	0	277	327	230	21	0	0	578	79	170	283	1	1	533	92	633	11	0	0	736	2124
7:00 AM	8	84	25	0	1	117	98	59	13	0	0	170	27	44	97	0	0	168	26	165	0	0	0	191	646
7:15 AM	7	103	37	1	0	148	132	59	9	0	0	200	23	59	91	0	0	173	24	208	4	0	1	236	757
7:30 AM	7	127	45	0	0	179	119	75	14	0	0	208	29	64	80	0	0	173	31	256	1	0	0	288	848
7:45 AM	9	129	43	0	1	181	106	73	6	0	1	185	29	62	90	0	1	181	43	265	5	0	2	313	860
Hourly Total	31	443	150	1	2	625	455	266	42	0	1	763	108	229	358	0	1	695	124	894	10	0	3	1028	3111
8:00 AM	5	121	52	0	0	178	100	63	7	1	0	171	39	58	90	0	0	187	40	240	3	0	1	283	819
8:15 AM	6	126	41	0	0	173	124	94	8	0	0	226	21	80	76	0	0	177	31	234	1	0	0	266	842
8:30 AM	10	110	46	0	0	166	106	73	12	0	0	191	32	69	89	0	0	190	22	185	0	0	0	207	754
8:45 AM	11	82	34	0	0	127	69	73	5	0	0	147	25	46	89	0	0	160	16	154	3	0	0	173	607
Hourly Total	32	439	173	0	0	644	399	303	32	1	0	735	117	253	344	0	0	714	109	813	7	0	1	929	3022
9:00 AM	10	50	35	0	0	95	68	62	15	0	0	145	33	58	75	0	0	166	23	141	8	0	0	172	578
9:15 AM	4	49	28	0	0	81	77	59	17	0	0	153	26	59	83	0	0	168	25	135	4	0	1	164	566
9:30 AM	5	47	30	0	0	82	66	51	11	0	0	128	27	62	79	0	0	168	20	113	5	0	0	138	516
9:45 AM	5	49	23	0	0	77	51	54	8	0	0	113	33	61	97	0	0	191	16	96	3	0	1	115	496
Hourly Total	24	195	116	0	0	335	262	226	51	0	0	539	119	240	334	0	0	693	84	485	20	0	2	589	2156
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
3:00 PM	8	73	23	0	0	104	91	81	13	0	0	185	49	117	112	0	0	278	15	88	8	0	0	111	678
3:15 PM	13	89	27	0	0	129	128	100	26	0	0	254	38	129	130	0	0	297	16	82	0	0	0	98	778
3:30 PM	5	73	24	1	0	103	118	111	22	0	0	251	49	135	129	0	0	313	9	64	1	0	0	74	741
3:45 PM	10	72	14	0	0	96	136	156	21	0	0	313	25	126	128	0	0	279	12	58	5	0	0	75	763
Hourly Total	36	307	88	1	0	432	473	448	82	0	0	1003	161	507	499	0	0	1167	52	292	14	0	0	358	2960
4:00 PM	9	61	35	0	0	105	152	164	39	0	0	355	44	125	126	0	0	295	12	69	2	0	0	83	838
4:15 PM	6	69	22	0	0	97	145	187	44	0	0	376	33	116	115	0	0	264	4	74	5	0	0	83	820
4:30 PM	9	90	32	0	0	131	150	196	36	0	0	382	32	141	115	1	0	289	9	73	2	0	0	84	886
4:45 PM	4	79	27	0	0	110	140	176	36	0	0	352	37	158	139	0	0	334	9	66	5	0	0	80	876
Hourly Total	28	299	116	0	0	443	587	723	155	0	0	1465	146	540	495	1	0	1182	34	282	14	0	0	330	3420
5:00 PM	7	81	31	0	0	119	153	174	43	0	0	370	37	163	157	0	0	357	7	74	3	0	0	84	930
5:15 PM	5	96	18	0	0	119	127	200	35	0	0	362	49	146	128	1	0	324	13	67	4	0	0	84	889
5:30 PM	6	62	9	0	0	77	132	186	41	0	0	359	36	154	119	1	0	310	15	79	3	0	0	97	843
5:45 PM	6	51	19	0	0	76	124	195	29	0	0	348	47	161	135	0	0	343	10	71	3	0	0	84	851

Hourly Total	24	290	77	0	0	391	536	755	148	0	0	1439	169	624	539	2	0	1334	45	291	13	0	0	349	3513
6:00 PM	6	62	10	0	0	78	115	163	28	0	0	306	36	149	129	0	0	314	6	69	4	0	0	79	777
6:15 PM	9	62	14	0	0	85	111	143	19	0	0	273	51	137	131	0	0	319	11	84	3	0	0	98	775
6:30 PM	9	45	8	0	0	62	88	96	21	0	0	205	37	160	125	0	0	322	8	68	4	0	0	80	669
6:45 PM	6	33	12	0	0	51	87	94	23	0	0	204	35	123	107	1	0	266	7	56	2	0	0	65	586
Hourly Total	30	202	44	0	0	276	401	496	91	0	0	988	159	569	492	1	0	1221	32	277	13	0	0	322	2807
Grand Total	223	2369	829	2	2	3423	3440	3447	622	1	1	7510	1058	3133	3344	5	2	7540	572	3967	102	0	6	4641	23114
Approach %	6.5	69.2	24.2	0.1	-	-	45.8	45.9	8.3	0.0	-	-	14.0	41.6	44.4	0.1	-	-	12.3	85.5	2.2	0.0	-	-	-
Total %	1.0	10.2	3.6	0.0	-	14.8	14.9	14.9	2.7	0.0	-	32.5	4.6	13.6	14.5	0.0	-	32.6	2.5	17.2	0.4	0.0	-	20.1	-
Lights	169	1890	467	2	-	2528	3314	2911	591	1	-	6817	695	2873	3208	5	-	6781	531	3719	53	0	-	4303	20429
% Lights	75.8	79.8	56.3	100.0	-	73.9	96.3	84.5	95.0	100.0	-	90.8	65.7	91.7	95.9	100.0	-	89.9	92.8	93.7	52.0	-	-	92.7	88.4
Mediums	26	164	134	0	-	324	49	154	22	0	-	225	159	144	67	0	-	370	19	142	27	0	-	188	1107
% Mediums	11.7	6.9	16.2	0.0	-	9.5	1.4	4.5	3.5	0.0	-	3.0	15.0	4.6	2.0	0.0	-	4.9	3.3	3.6	26.5	-	-	4.1	4.8
Articulated Trucks	28	315	228	0	-	571	77	382	9	0	-	468	204	116	69	0	-	389	22	106	22	0	-	150	1578
% Articulated Trucks	12.6	13.3	27.5	0.0	-	16.7	2.2	11.1	1.4	0.0	-	6.2	19.3	3.7	2.1	0.0	-	5.2	3.8	2.7	21.6	-	-	3.2	6.8
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Count Name: Steeles Avenue & Trafalgar Road - Weekday
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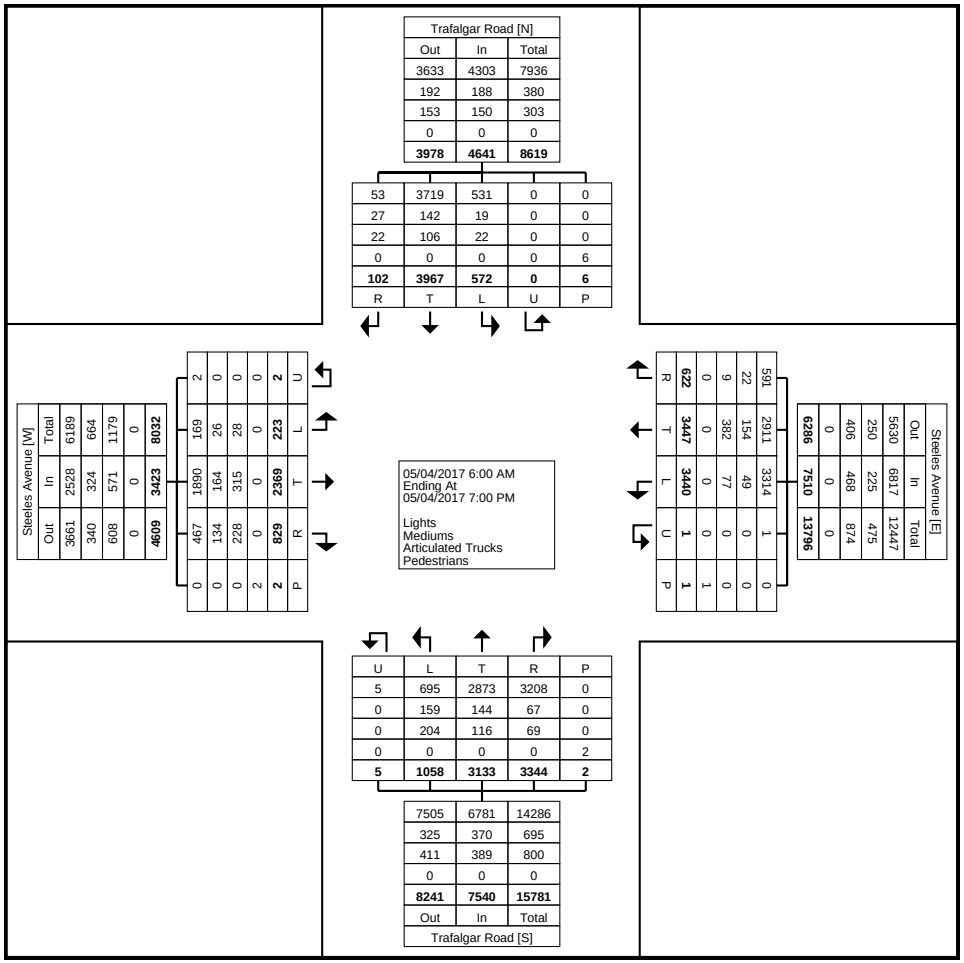
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/04/2017

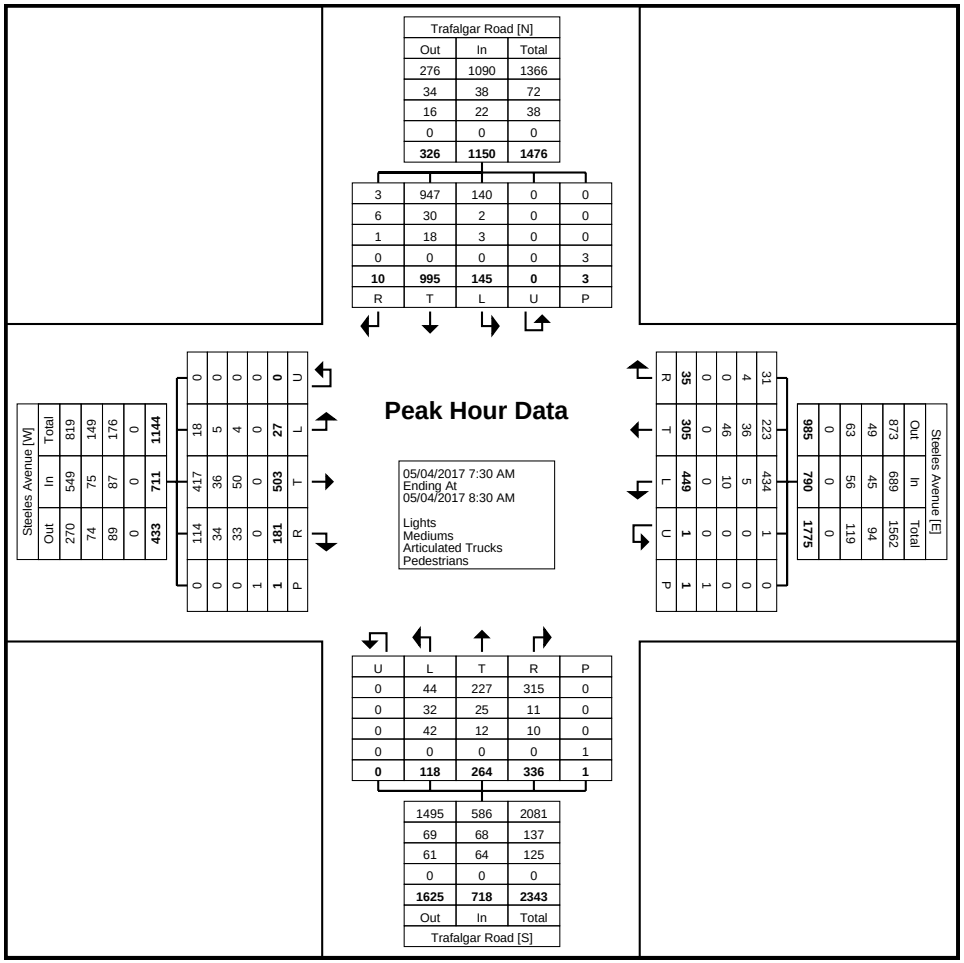
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	7	127	45	0	0	179	119	75	14	0	0	208	29	64	80	0	0	173	31	256	1	0	0	288	848
7:45 AM	9	129	43	0	1	181	106	73	6	0	1	185	29	62	90	0	1	181	43	265	5	0	2	313	860
8:00 AM	5	121	52	0	0	178	100	63	7	1	0	171	39	58	90	0	0	187	40	240	3	0	1	283	819
8:15 AM	6	126	41	0	0	173	124	94	8	0	0	226	21	80	76	0	0	177	31	234	1	0	0	266	842
Total	27	503	181	0	1	711	449	305	35	1	1	790	118	264	336	0	1	718	145	995	10	0	3	1150	3369
Approach %	3.8	70.7	25.5	0.0	-	-	56.8	38.6	4.4	0.1	-	-	16.4	36.8	46.8	0.0	-	-	12.6	86.5	0.9	0.0	-	-	-
Total %	0.8	14.9	5.4	0.0	-	21.1	13.3	9.1	1.0	0.0	-	23.4	3.5	7.8	10.0	0.0	-	21.3	4.3	29.5	0.3	0.0	-	34.1	-
PHF	0.750	0.975	0.870	0.000	-	0.982	0.905	0.811	0.625	0.250	-	0.874	0.756	0.825	0.933	0.000	-	0.960	0.843	0.939	0.500	0.000	-	0.919	0.979
Lights	18	417	114	0	-	549	434	223	31	1	-	689	44	227	315	0	-	586	140	947	3	0	-	1090	2914
% Lights	66.7	82.9	63.0	-	-	77.2	96.7	73.1	88.6	100.0	-	87.2	37.3	86.0	93.8	-	-	81.6	96.6	95.2	30.0	-	-	94.8	86.5
Mediums	5	36	34	0	-	75	5	36	4	0	-	45	32	25	11	0	-	68	2	30	6	0	-	38	226
% Mediums	18.5	7.2	18.8	-	-	10.5	1.1	11.8	11.4	0.0	-	5.7	27.1	9.5	3.3	-	-	9.5	1.4	3.0	60.0	-	-	3.3	6.7
Articulated Trucks	4	50	33	0	-	87	10	46	0	0	-	56	42	12	10	0	-	64	3	18	1	0	-	22	229
% Articulated Trucks	14.8	9.9	18.2	-	-	12.2	2.2	15.1	0.0	0.0	-	7.1	35.6	4.5	3.0	-	-	8.9	2.1	1.8	10.0	-	-	1.9	6.8
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
4:30 PM	9	90	32	0	0	131	150	196	36	0	0	382	32	141	115	1	0	289	9	73	2	0	0	84	886
4:45 PM	4	79	27	0	0	110	140	176	36	0	0	352	37	158	139	0	0	334	9	66	5	0	0	80	876
5:00 PM	7	81	31	0	0	119	153	174	43	0	0	370	37	163	157	0	0	357	7	74	3	0	0	84	930
5:15 PM	5	96	18	0	0	119	127	200	35	0	0	362	49	146	128	1	0	324	13	67	4	0	0	84	889
Total	25	346	108	0	0	479	570	746	150	0	0	1466	155	608	539	2	0	1304	38	280	14	0	0	332	3581
Approach %	5.2	72.2	22.5	0.0	-	-	38.9	50.9	10.2	0.0	-	-	11.9	46.6	41.3	0.2	-	-	11.4	84.3	4.2	0.0	-	-	-
Total %	0.7	9.7	3.0	0.0	-	13.4	15.9	20.8	4.2	0.0	-	40.9	4.3	17.0	15.1	0.1	-	36.4	1.1	7.8	0.4	0.0	-	9.3	-
PHF	0.694	0.901	0.844	0.000	-	0.914	0.931	0.933	0.872	0.000	-	0.959	0.791	0.933	0.858	0.500	-	0.913	0.731	0.946	0.700	0.000	-	0.988	0.963
Lights	17	295	78	0	-	390	559	681	147	0	-	1387	135	588	522	2	-	1247	38	270	8	0	-	316	3340
% Lights	68.0	85.3	72.2	-	-	81.4	98.1	91.3	98.0	-	-	94.6	87.1	96.7	96.8	100.0	-	95.6	100.0	96.4	57.1	-	-	95.2	93.3
Mediums	4	14	6	0	-	24	4	19	2	0	-	25	9	11	4	0	-	24	0	5	3	0	-	8	81
% Mediums	16.0	4.0	5.6	-	-	5.0	0.7	2.5	1.3	-	-	1.7	5.8	1.8	0.7	0.0	-	1.8	0.0	1.8	21.4	-	-	2.4	2.3
Articulated Trucks	4	37	24	0	-	65	7	46	1	0	-	54	11	9	13	0	-	33	0	5	3	0	-	8	160
% Articulated Trucks	16.0	10.7	22.2	-	-	13.6	1.2	6.2	0.7	-	-	3.7	7.1	1.5	2.4	0.0	-	2.5	0.0	1.8	21.4	-	-	2.4	4.5
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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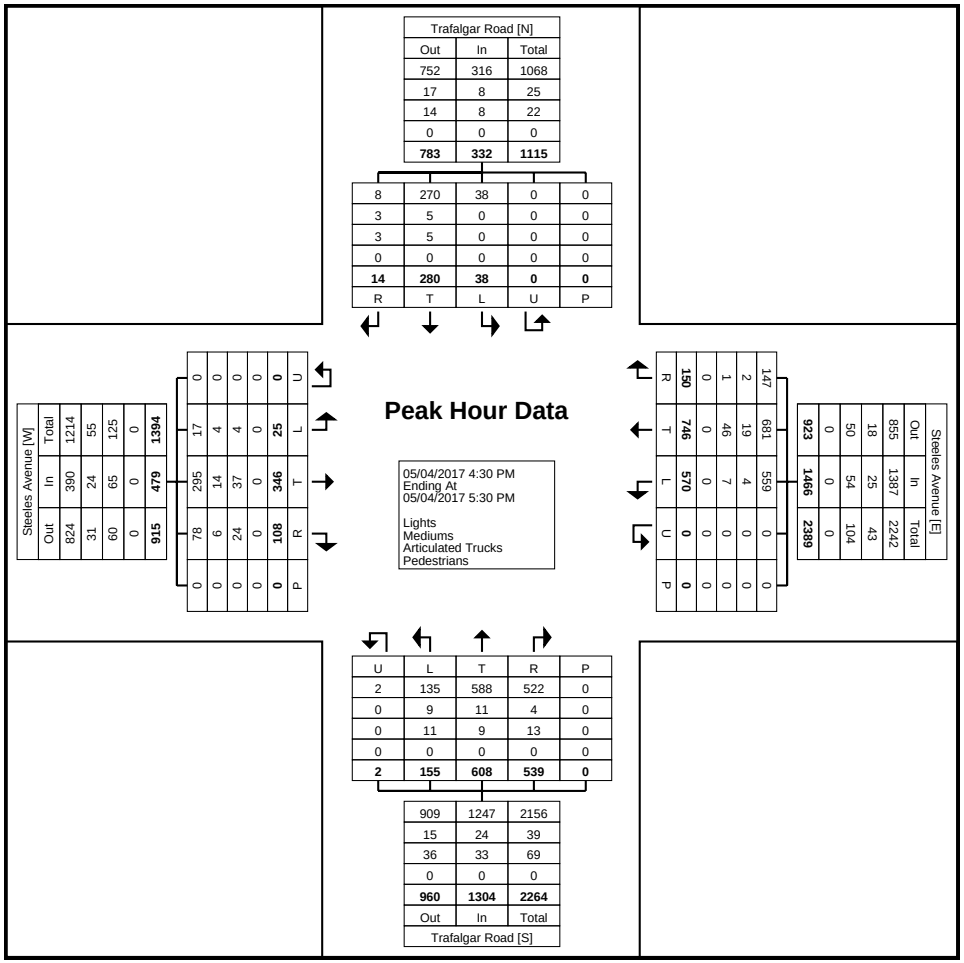

Turning Movement Peak Hour Data Plot (4:30 PM)

Paradigm Transportation Solutions Limited
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Waterloo, Ontario, Canada N2J 1N8
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Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/04/2017

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519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/16/2017

Turning Movement Data

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	3	56	25	0	0	84	66	38	7	0	0	111	24	30	59	1	0	114	18	127	3	0	1	148	457
6:15 AM	1	47	19	0	0	67	85	47	11	0	0	143	23	49	95	0	0	167	31	156	2	0	1	189	566
6:30 AM	6	55	15	0	0	76	97	52	12	0	0	161	32	47	97	2	1	178	32	183	1	0	0	216	631
6:45 AM	10	72	27	0	0	109	93	46	16	0	0	155	23	55	116	0	0	194	27	168	3	0	0	198	656
Hourly Total	20	230	86	0	0	336	341	183	46	0	0	570	102	181	367	3	1	653	108	634	9	0	2	751	2310
7:00 AM	5	99	26	0	1	130	102	44	9	0	0	155	24	60	94	0	1	178	27	213	1	0	0	241	704
7:15 AM	10	115	37	0	0	162	116	62	11	0	0	189	32	71	84	0	1	187	29	198	0	0	0	227	765
7:30 AM	6	124	42	0	0	172	112	80	7	0	0	199	41	87	77	1	0	206	37	272	3	0	0	312	889
7:45 AM	8	119	59	2	1	188	133	92	5	0	0	230	28	61	84	0	2	173	43	228	4	0	1	275	866
Hourly Total	29	457	164	2	2	652	463	278	32	0	0	773	125	279	339	1	4	744	136	911	8	0	1	1055	3224
8:00 AM	11	127	51	0	0	189	135	74	16	0	0	225	36	60	101	0	0	197	40	270	1	0	0	311	922
8:15 AM	6	129	46	0	0	181	120	72	12	0	1	204	33	61	74	0	0	168	32	271	0	0	1	303	856
8:30 AM	9	116	56	0	0	181	101	72	12	0	0	185	33	65	78	0	0	176	34	184	1	0	0	219	761
8:45 AM	12	120	48	0	0	180	84	79	11	0	0	174	21	63	100	0	0	184	30	172	4	0	0	206	744
Hourly Total	38	492	201	0	0	731	440	297	51	0	1	788	123	249	353	0	0	725	136	897	6	0	1	1039	3283
9:00 AM	10	71	25	0	1	106	80	59	9	0	0	148	38	58	86	0	0	182	17	136	5	0	2	158	594
9:15 AM	11	61	33	0	0	105	74	56	8	0	3	138	22	61	85	0	1	168	21	129	5	0	2	155	566
9:30 AM	11	76	29	0	2	116	63	48	13	0	0	124	30	68	86	0	3	184	23	113	7	0	0	143	567
9:45 AM	8	66	34	0	0	108	57	61	10	1	0	129	30	60	92	1	0	183	11	94	4	0	0	109	529
Hourly Total	40	274	121	0	3	435	274	224	40	1	3	539	120	247	349	1	4	717	72	472	21	0	4	565	2256
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	5	61	36	1	0	103	109	81	14	1	0	205	25	103	121	0	0	249	10	79	5	0	0	94	651
3:15 PM	6	55	35	0	0	96	110	89	24	0	0	223	38	150	141	0	0	329	20	80	2	0	0	102	750
3:30 PM	15	64	37	0	0	116	123	103	19	0	0	245	52	148	131	1	0	332	14	55	1	0	1	70	763
3:45 PM	10	77	33	0	0	120	125	122	22	0	0	269	40	121	150	0	0	311	11	80	7	0	0	98	798
Hourly Total	36	257	141	1	0	435	467	395	79	1	0	942	155	522	543	1	0	1221	55	294	15	0	1	364	2962
4:00 PM	5	77	49	0	0	131	132	156	30	1	0	319	57	154	150	0	0	361	12	101	2	0	0	115	926
4:15 PM	15	62	31	0	0	108	130	180	31	0	0	341	36	145	137	0	0	318	16	102	5	0	0	123	890
4:30 PM	8	94	36	0	0	138	107	171	28	0	0	306	49	180	118	0	0	347	9	87	2	0	0	98	889
4:45 PM	11	110	31	0	0	152	148	217	35	0	0	400	38	156	156	0	1	350	18	66	5	0	0	89	991
Hourly Total	39	343	147	0	0	529	517	724	124	1	0	1366	180	635	561	0	1	1376	55	356	14	0	0	425	3696
5:00 PM	16	133	65	0	1	214	153	145	37	0	0	335	52	157	167	0	1	376	19	99	5	0	0	123	1048
5:15 PM	19	131	46	0	0	196	160	180	30	0	0	370	42	158	142	0	0	342	14	91	4	0	0	109	1017
5:30 PM	9	123	43	0	0	175	150	186	43	0	0	379	60	196	150	0	0	406	19	99	2	0	0	120	1080
5:45 PM	10	104	31	0	0	145	147	144	47	0	0	338	45	182	147	0	0	374	18	88	4	0	1	110	967

Hourly Total	54	491	185	0	1	730	610	655	157	0	0	1422	199	693	606	0	1	1498	70	377	15	0	1	462	4112
6:00 PM	10	66	47	0	0	123	144	171	28	0	0	343	37	169	155	0	0	361	7	81	4	0	0	92	919
6:15 PM	8	65	67	0	0	140	122	150	27	0	0	299	47	142	163	0	0	352	19	84	1	0	1	104	895
6:30 PM	5	52	35	0	0	92	112	114	29	0	0	255	31	140	114	0	0	285	10	66	2	0	1	78	710
6:45 PM	4	60	18	0	0	82	122	119	13	0	0	254	29	110	139	0	0	278	7	89	4	0	0	100	714
Hourly Total	27	243	167	0	0	437	500	554	97	0	0	1151	144	561	571	0	0	1276	43	320	11	0	2	374	3238
Grand Total	283	2787	1212	3	6	4285	3612	3310	626	3	4	7551	1148	3367	3689	6	11	8210	675	4261	99	0	12	5035	25081
Approach %	6.6	65.0	28.3	0.1	-	-	47.8	43.8	8.3	0.0	-	-	14.0	41.0	44.9	0.1	-	-	13.4	84.6	2.0	0.0	-	-	-
Total %	1.1	11.1	4.8	0.0	-	17.1	14.4	13.2	2.5	0.0	-	30.1	4.6	13.4	14.7	0.0	-	32.7	2.7	17.0	0.4	0.0	-	20.1	-
Lights	194	2179	721	3	-	3097	3443	2751	591	3	-	6788	750	3059	3520	6	-	7335	602	3890	53	0	-	4545	21765
% Lights	68.6	78.2	59.5	100.0	-	72.3	95.3	83.1	94.4	100.0	-	89.9	65.3	90.9	95.4	100.0	-	89.3	89.2	91.3	53.5	-	-	90.3	86.8
Mediums	57	246	218	0	-	521	78	219	21	0	-	318	215	213	92	0	-	520	37	246	33	0	-	316	1675
% Mediums	20.1	8.8	18.0	0.0	-	12.2	2.2	6.6	3.4	0.0	-	4.2	18.7	6.3	2.5	0.0	-	6.3	5.5	5.8	33.3	-	-	6.3	6.7
Articulated Trucks	32	362	273	0	-	667	91	340	14	0	-	445	183	95	77	0	-	355	36	125	13	0	-	174	1641
% Articulated Trucks	11.3	13.0	22.5	0.0	-	15.6	2.5	10.3	2.2	0.0	-	5.9	15.9	2.8	2.1	0.0	-	4.3	5.3	2.9	13.1	-	-	3.5	6.5
Pedestrians	-	-	-	-	6	-	-	-	-	-	4	-	-	-	-	-	11	-	-	-	-	-	12	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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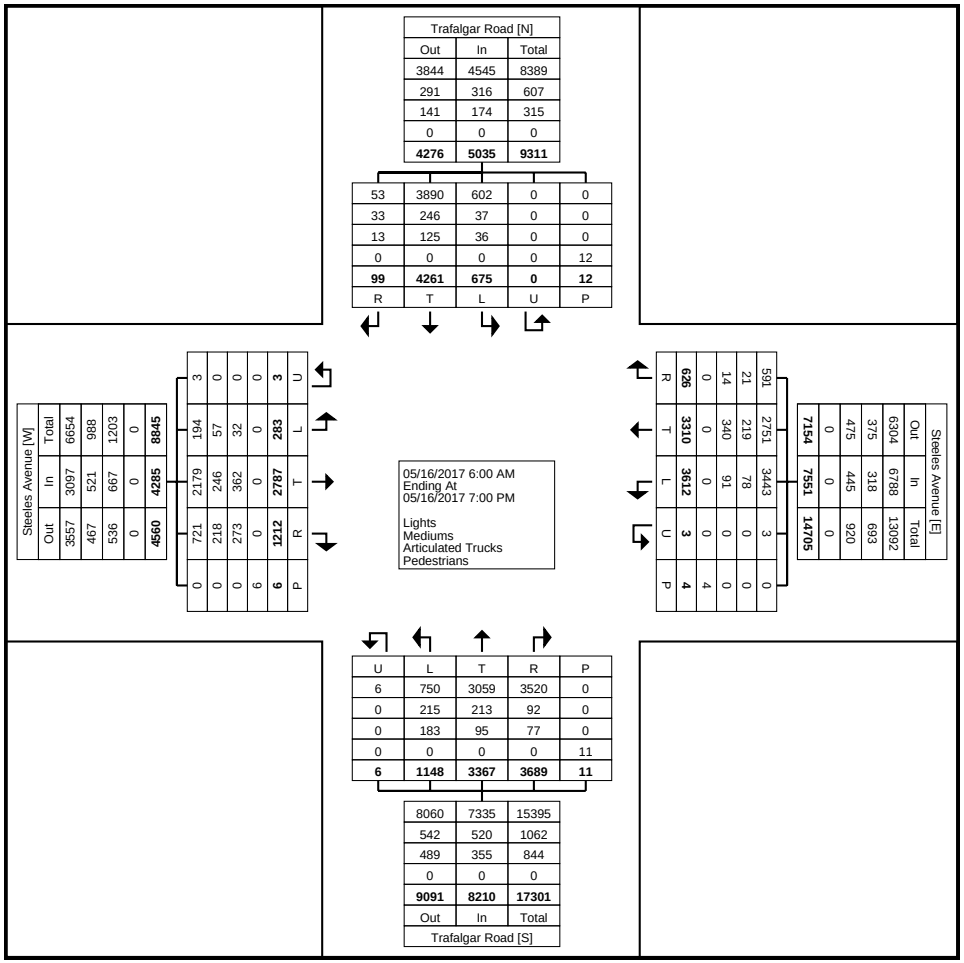

Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
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Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/16/2017

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	6	124	42	0	0	172	112	80	7	0	0	199	41	87	77	1	0	206	37	272	3	0	0	312	889
7:45 AM	8	119	59	2	1	188	133	92	5	0	0	230	28	61	84	0	2	173	43	228	4	0	1	275	866
8:00 AM	11	127	51	0	0	189	135	74	16	0	0	225	36	60	101	0	0	197	40	270	1	0	0	311	922
8:15 AM	6	129	46	0	0	181	120	72	12	0	1	204	33	61	74	0	0	168	32	271	0	0	1	303	856
Total	31	499	198	2	1	730	500	318	40	0	1	858	138	269	336	1	2	744	152	1041	8	0	2	1201	3533
Approach %	4.2	68.4	27.1	0.3	-	-	58.3	37.1	4.7	0.0	-	-	18.5	36.2	45.2	0.1	-	-	12.7	86.7	0.7	0.0	-	-	-
Total %	0.9	14.1	5.6	0.1	-	20.7	14.2	9.0	1.1	0.0	-	24.3	3.9	7.6	9.5	0.0	-	21.1	4.3	29.5	0.2	0.0	-	34.0	-
PHF	0.705	0.967	0.839	0.250	-	0.966	0.926	0.864	0.625	0.000	-	0.933	0.841	0.773	0.832	0.250	-	0.903	0.884	0.957	0.500	0.000	-	0.962	0.958
Lights	14	414	129	2	-	559	476	240	32	0	-	748	70	225	314	1	-	610	143	974	2	0	-	1119	3036
% Lights	45.2	83.0	65.2	100.0	-	76.6	95.2	75.5	80.0	-	-	87.2	50.7	83.6	93.5	100.0	-	82.0	94.1	93.6	25.0	-	-	93.2	85.9
Mediums	13	37	35	0	-	85	12	36	5	0	-	53	46	34	15	0	-	95	5	53	6	0	-	64	297
% Mediums	41.9	7.4	17.7	0.0	-	11.6	2.4	11.3	12.5	-	-	6.2	33.3	12.6	4.5	0.0	-	12.8	3.3	5.1	75.0	-	-	5.3	8.4
Articulated Trucks	4	48	34	0	-	86	12	42	3	0	-	57	22	10	7	0	-	39	4	14	0	0	-	18	200
% Articulated Trucks	12.9	9.6	17.2	0.0	-	11.8	2.4	13.2	7.5	-	-	6.6	15.9	3.7	2.1	0.0	-	5.2	2.6	1.3	0.0	-	-	1.5	5.7
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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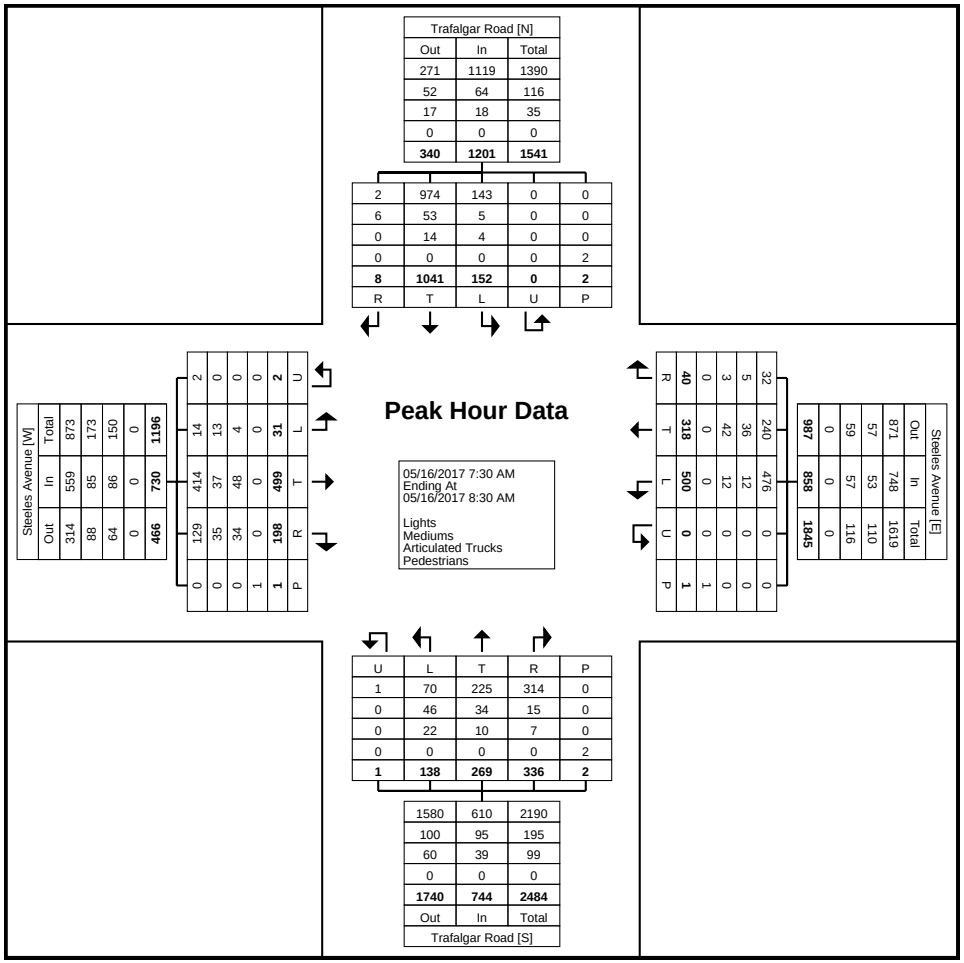
Site Code:
Start Date: 05/16/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/16/2017

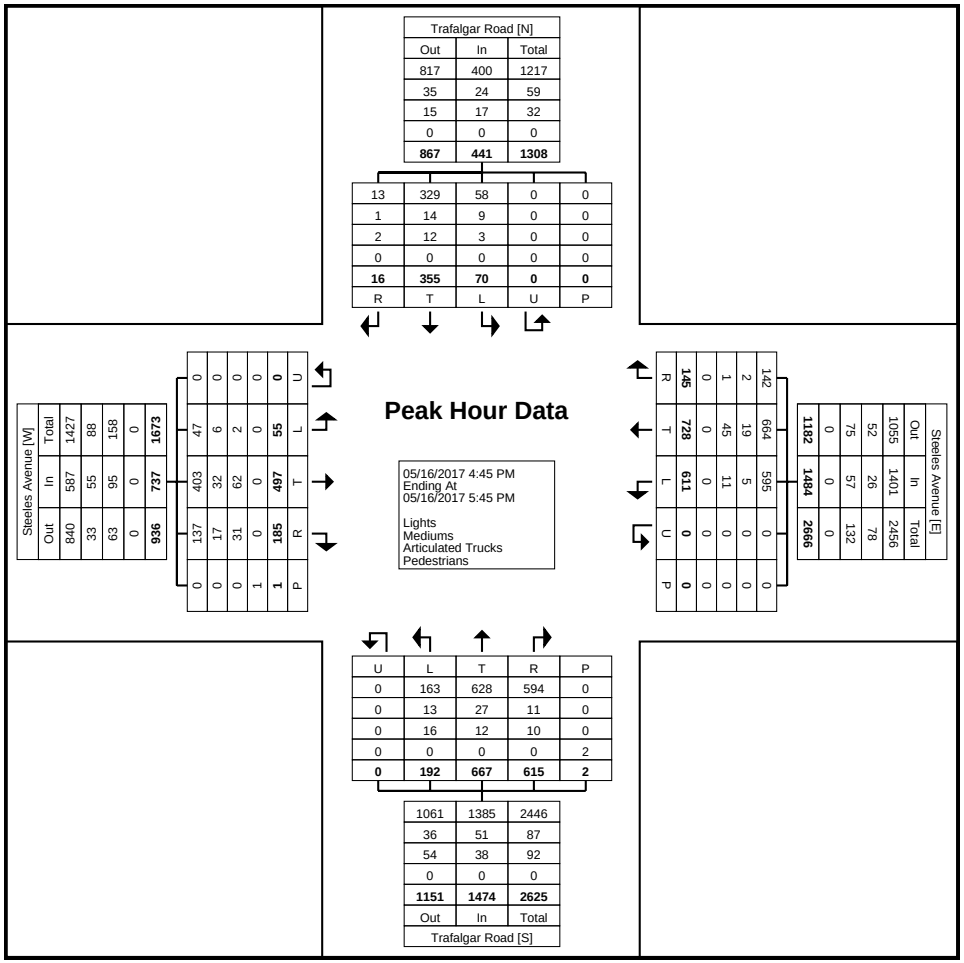
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Steeles Avenue Eastbound						Steeles Avenue Westbound						Trafalgar Road Northbound						Trafalgar Road Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	11	110	31	0	0	152	148	217	35	0	0	400	38	156	156	0	1	350	18	66	5	0	0	89	991
5:00 PM	16	133	65	0	1	214	153	145	37	0	0	335	52	157	167	0	1	376	19	99	5	0	0	123	1048
5:15 PM	19	131	46	0	0	196	160	180	30	0	0	370	42	158	142	0	0	342	14	91	4	0	0	109	1017
5:30 PM	9	123	43	0	0	175	150	186	43	0	0	379	60	196	150	0	0	406	19	99	2	0	0	120	1080
Total	55	497	185	0	1	737	611	728	145	0	0	1484	192	667	615	0	2	1474	70	355	16	0	0	441	4136
Approach %	7.5	67.4	25.1	0.0	-	-	41.2	49.1	9.8	0.0	-	-	13.0	45.3	41.7	0.0	-	-	15.9	80.5	3.6	0.0	-	-	-
Total %	1.3	12.0	4.5	0.0	-	17.8	14.8	17.6	3.5	0.0	-	35.9	4.6	16.1	14.9	0.0	-	35.6	1.7	8.6	0.4	0.0	-	10.7	-
PHF	0.724	0.934	0.712	0.000	-	0.861	0.955	0.839	0.843	0.000	-	0.928	0.800	0.851	0.921	0.000	-	0.908	0.921	0.896	0.800	0.000	-	0.896	0.957
Lights	47	403	137	0	-	587	595	664	142	0	-	1401	163	628	594	0	-	1385	58	329	13	0	-	400	3773
% Lights	85.5	81.1	74.1	-	-	79.6	97.4	91.2	97.9	-	-	94.4	84.9	94.2	96.6	-	-	94.0	82.9	92.7	81.3	-	-	90.7	91.2
Mediums	6	32	17	0	-	55	5	19	2	0	-	26	13	27	11	0	-	51	9	14	1	0	-	24	156
% Mediums	10.9	6.4	9.2	-	-	7.5	0.8	2.6	1.4	-	-	1.8	6.8	4.0	1.8	-	-	3.5	12.9	3.9	6.3	-	-	5.4	3.8
Articulated Trucks	2	62	31	0	-	95	11	45	1	0	-	57	16	12	10	0	-	38	3	12	2	0	-	17	207
% Articulated Trucks	3.6	12.5	16.8	-	-	12.9	1.8	6.2	0.7	-	-	3.8	8.3	1.8	1.6	-	-	2.6	4.3	3.4	12.5	-	-	3.9	5.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/16/2017



Turning Movement Peak Hour Data Plot (4:45 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Steeles Avenue & Trafalgar Road - Weekday
Site Code:
Start Date: 05/16/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017

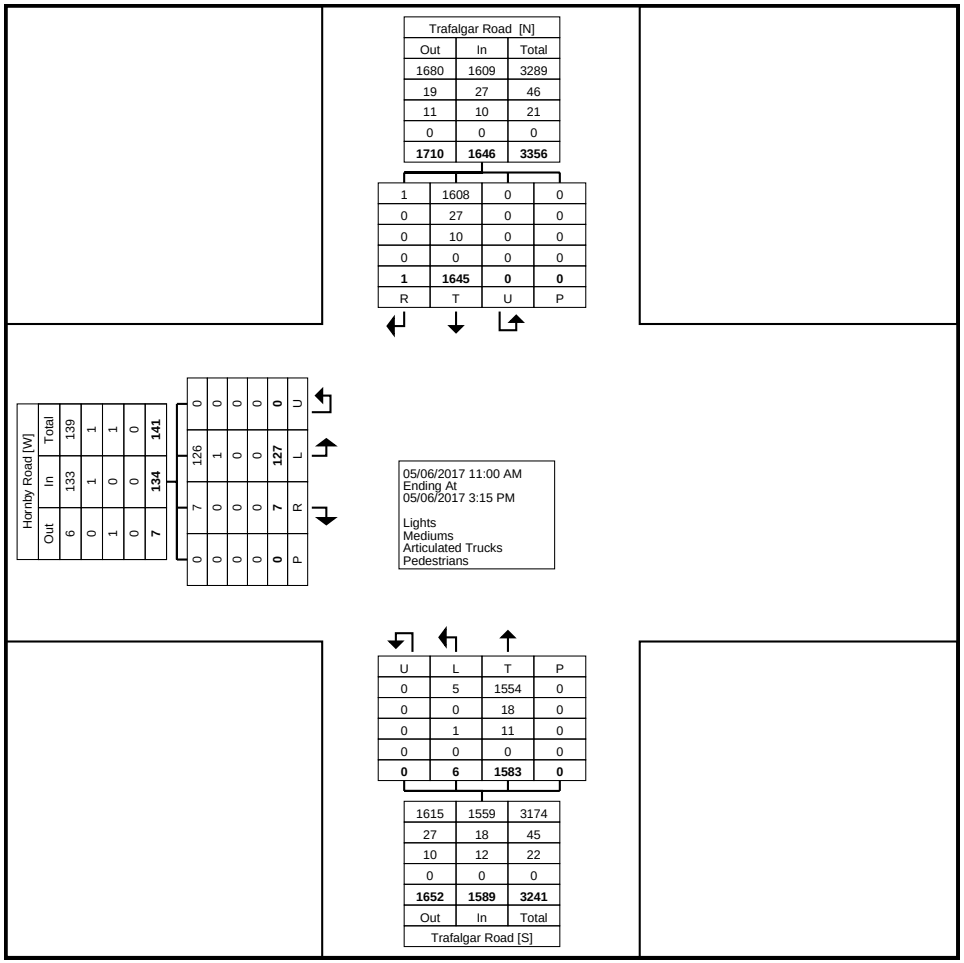
Turning Movement Data

Start Time	Hornby Road Eastbound					Trafalgar Road Northbound					Trafalgar Road Southbound					
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
11:00 AM	3	0	0	0	3	0	57	0	0	57	104	0	0	0	104	164
11:15 AM	7	1	0	0	8	2	96	0	0	98	115	0	0	0	115	221
11:30 AM	8	0	0	0	8	0	90	0	0	90	129	0	0	0	129	227
11:45 AM	7	1	0	0	8	0	94	0	0	94	109	0	0	0	109	211
Hourly Total	25	2	0	0	27	2	337	0	0	339	457	0	0	0	457	823
12:00 PM	8	0	0	0	8	0	89	0	0	89	101	0	0	0	101	198
12:15 PM	9	0	0	0	9	0	96	0	0	96	101	0	0	0	101	206
12:30 PM	8	0	0	0	8	0	99	0	0	99	110	0	0	0	110	217
12:45 PM	15	0	0	0	15	1	105	0	0	106	82	0	0	0	82	203
Hourly Total	40	0	0	0	40	1	389	0	0	390	394	0	0	0	394	824
1:00 PM	9	2	0	0	11	0	110	0	0	110	86	0	0	0	86	207
1:15 PM	7	0	0	0	7	0	105	0	0	105	117	1	0	0	118	230
1:30 PM	9	1	0	0	10	0	126	0	0	126	91	0	0	0	91	227
1:45 PM	4	0	0	0	4	0	113	0	0	113	90	0	0	0	90	207
Hourly Total	29	3	0	0	32	0	454	0	0	454	384	1	0	0	385	871
2:00 PM	13	0	0	0	13	2	106	0	0	108	111	0	0	0	111	232
2:15 PM	7	0	0	0	7	1	104	0	0	105	118	0	0	0	118	230
2:30 PM	5	1	0	0	6	0	95	0	0	95	82	0	0	0	82	183
2:45 PM	8	1	0	0	9	0	98	0	0	98	99	0	0	0	99	206
Hourly Total	33	2	0	0	35	3	403	0	0	406	410	0	0	0	410	851
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	127	7	0	0	134	6	1583	0	0	1589	1645	1	0	0	1646	3369
Approach %	94.8	5.2	0.0	-	-	0.4	99.6	0.0	-	-	99.9	0.1	0.0	-	-	-
Total %	3.8	0.2	0.0	-	4.0	0.2	47.0	0.0	-	47.2	48.8	0.0	0.0	-	48.9	-
Lights	126	7	0	-	133	5	1554	0	-	1559	1608	1	0	-	1609	3301
% Lights	99.2	100.0	-	-	99.3	83.3	98.2	-	-	98.1	97.8	100.0	-	-	97.8	98.0
Mediums	1	0	0	-	1	0	18	0	-	18	27	0	0	-	27	46
% Mediums	0.8	0.0	-	-	0.7	0.0	1.1	-	-	1.1	1.6	0.0	-	-	1.6	1.4
Articulated Trucks	0	0	0	-	0	1	11	0	-	12	10	0	0	-	10	22
% Articulated Trucks	0.0	0.0	-	-	0.0	16.7	0.7	-	-	0.8	0.6	0.0	-	-	0.6	0.7
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017

Turning Movement Peak Hour Data (1:15 PM)

Start Time	Hornby Road Eastbound					Trafalgar Road Northbound					Trafalgar Road Southbound					
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
1:15 PM	7	0	0	0	7	0	105	0	0	105	117	1	0	0	118	230
1:30 PM	9	1	0	0	10	0	126	0	0	126	91	0	0	0	91	227
1:45 PM	4	0	0	0	4	0	113	0	0	113	90	0	0	0	90	207
2:00 PM	13	0	0	0	13	2	106	0	0	108	111	0	0	0	111	232
Total	33	1	0	0	34	2	450	0	0	452	409	1	0	0	410	896
Approach %	97.1	2.9	0.0	-	-	0.4	99.6	0.0	-	-	99.8	0.2	0.0	-	-	-
Total %	3.7	0.1	0.0	-	3.8	0.2	50.2	0.0	-	50.4	45.6	0.1	0.0	-	45.8	-
PHF	0.635	0.250	0.000	-	0.654	0.250	0.893	0.000	-	0.897	0.874	0.250	0.000	-	0.869	0.966
Lights	33	1	0	-	34	2	442	0	-	444	401	1	0	-	402	880
% Lights	100.0	100.0	-	-	100.0	100.0	98.2	-	-	98.2	98.0	100.0	-	-	98.0	98.2
Mediums	0	0	0	-	0	0	4	0	-	4	7	0	0	-	7	11
% Mediums	0.0	0.0	-	-	0.0	0.0	0.9	-	-	0.9	1.7	0.0	-	-	1.7	1.2
Articulated Trucks	0	0	0	-	0	0	4	0	-	4	1	0	0	-	1	5
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.9	-	-	0.9	0.2	0.0	-	-	0.2	0.6
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Trafalgar Road & Hornby Road - Saturday
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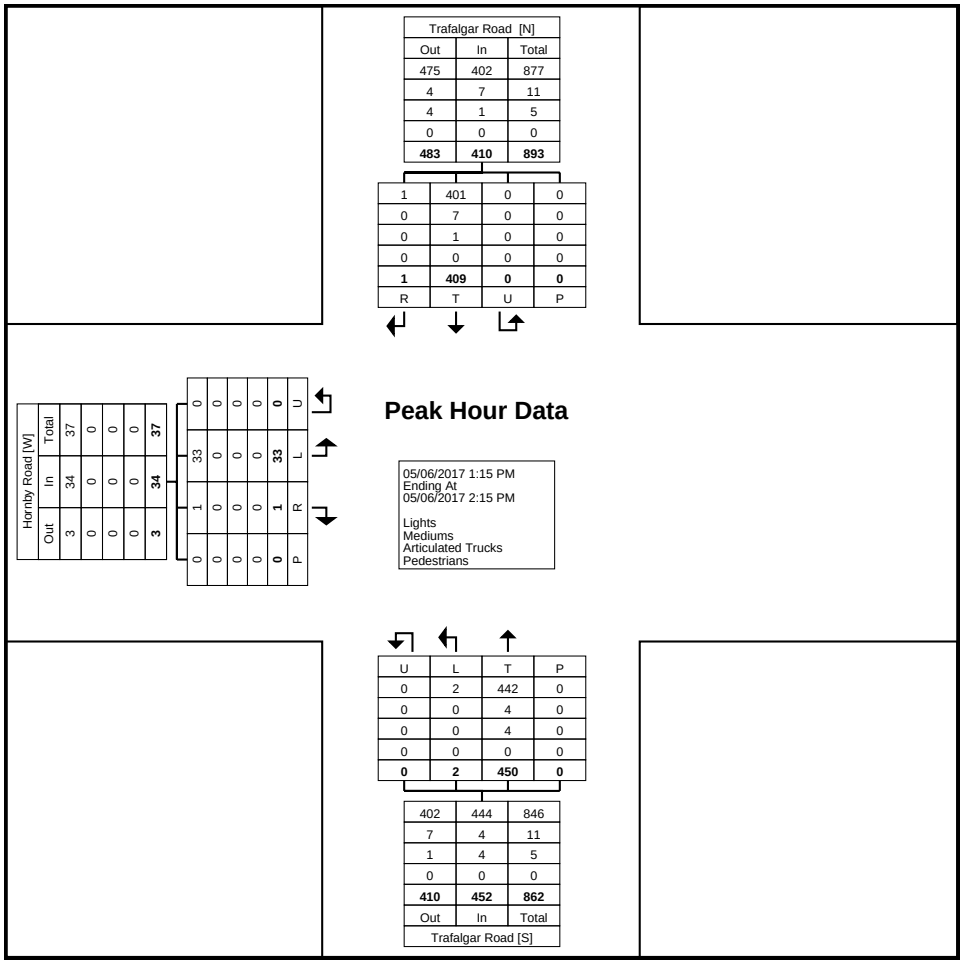
Start Date: 05/06/2017



Turning Movement Peak Hour Data Plot (1:15 PM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Saturday
Site Code:
Start Date: 05/06/2017

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Data

Start Time	Hornby Road Eastbound					Trafalgar Road Northbound					Trafalgar Road Southbound					
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	1	1	0	0	2	0	20	0	0	20	127	0	0	0	127	149
6:15 AM	2	0	0	0	2	1	42	0	0	43	167	0	0	0	167	212
6:30 AM	5	2	0	0	7	0	49	0	0	49	240	0	0	0	240	296
6:45 AM	3	0	0	0	3	0	65	0	0	65	183	0	0	0	183	251
Hourly Total	11	3	0	0	14	1	176	0	0	177	717	0	0	0	717	908
7:00 AM	0	3	0	2	3	4	49	0	0	53	216	0	0	2	216	272
7:15 AM	8	1	0	1	9	0	69	0	0	69	249	0	0	0	249	327
7:30 AM	2	1	0	0	3	0	72	0	0	72	263	1	0	1	264	339
7:45 AM	4	3	0	0	7	0	61	0	0	61	283	0	0	1	283	351
Hourly Total	14	8	0	3	22	4	251	0	0	255	1011	1	0	4	1012	1289
8:00 AM	3	2	0	0	5	1	73	0	0	74	277	0	0	0	277	356
8:15 AM	3	0	0	0	3	1	86	0	0	87	265	0	0	0	265	355
8:30 AM	6	2	0	0	8	0	74	0	0	74	183	1	0	0	184	266
8:45 AM	12	0	0	0	12	2	63	0	1	65	188	0	0	0	188	265
Hourly Total	24	4	0	0	28	4	296	0	1	300	913	1	0	0	914	1242
9:00 AM	4	2	0	0	6	0	61	0	0	61	162	1	0	0	163	230
9:15 AM	4	1	0	0	5	0	69	0	0	69	134	0	0	2	134	208
9:30 AM	7	3	0	0	10	0	77	0	0	77	132	0	0	0	132	219
9:45 AM	2	1	0	0	3	0	70	0	0	70	103	0	0	0	103	176
Hourly Total	17	7	0	0	24	0	277	0	0	277	531	1	0	2	532	833
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	5	2	0	2	7	1	132	0	0	133	86	0	0	1	86	226
3:15 PM	10	0	0	0	10	1	154	0	0	155	76	0	0	0	76	241
3:30 PM	4	0	0	0	4	0	161	0	0	161	62	0	0	0	62	227
3:45 PM	4	0	0	0	4	0	143	0	0	143	58	0	0	0	58	205
Hourly Total	23	2	0	2	25	2	590	0	0	592	282	0	0	1	282	899
4:00 PM	9	2	0	0	11	1	181	0	0	182	75	0	0	0	75	268
4:15 PM	7	0	0	0	7	1	151	0	0	152	54	0	0	0	54	213
4:30 PM	9	0	0	0	9	0	190	0	0	190	73	0	0	0	73	272
4:45 PM	8	2	0	0	10	0	190	0	0	190	69	0	0	0	69	269
Hourly Total	33	4	0	0	37	2	712	0	0	714	271	0	0	0	271	1022
5:00 PM	14	1	0	0	15	0	202	0	0	202	64	0	0	0	64	281
5:15 PM	5	1	0	0	6	2	185	0	0	187	74	0	0	0	74	267
5:30 PM	6	2	0	0	8	1	199	0	0	200	82	0	0	0	82	290
5:45 PM	6	1	0	0	7	0	190	0	0	190	73	0	0	0	73	270
Hourly Total	31	5	0	0	36	3	776	0	0	779	293	0	0	0	293	1108

6:00 PM	5	1	0	0	6	1	188	0	0	189	73	0	0	0	73	268
6:15 PM	10	1	0	0	11	1	143	0	0	144	83	0	0	0	83	238
6:30 PM	5	0	0	0	5	0	193	0	0	193	64	0	0	0	64	262
6:45 PM	2	0	0	0	2	0	142	0	0	142	66	0	0	0	66	210
Hourly Total	22	2	0	0	24	2	666	0	0	668	286	0	0	0	286	978
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	175	35	0	5	210	18	3744	0	1	3762	4304	3	0	7	4307	8279
Approach %	83.3	16.7	0.0	-	-	0.5	99.5	0.0	-	-	99.9	0.1	0.0	-	-	-
Total %	2.1	0.4	0.0	-	2.5	0.2	45.2	0.0	-	45.4	52.0	0.0	0.0	-	52.0	-
Lights	168	32	0	-	200	12	3464	0	-	3476	4041	3	0	-	4044	7720
% Lights	96.0	91.4	-	-	95.2	66.7	92.5	-	-	92.4	93.9	100.0	-	-	93.9	93.2
Mediums	7	3	0	-	10	5	178	0	-	183	168	0	0	-	168	361
% Mediums	4.0	8.6	-	-	4.8	27.8	4.8	-	-	4.9	3.9	0.0	-	-	3.9	4.4
Articulated Trucks	0	0	0	-	0	1	102	0	-	103	95	0	0	-	95	198
% Articulated Trucks	0.0	0.0	-	-	0.0	5.6	2.7	-	-	2.7	2.2	0.0	-	-	2.2	2.4
Pedestrians	-	-	-	5	-	-	-	-	1	-	-	-	-	7	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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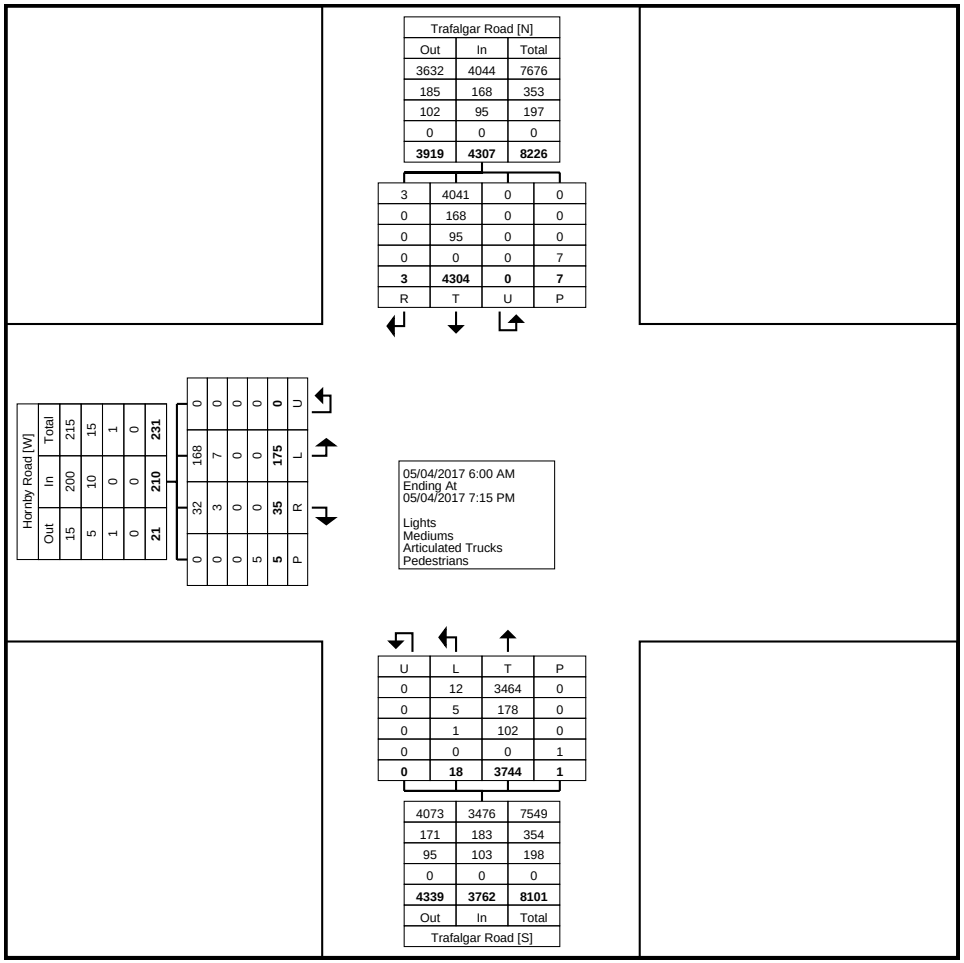
Start Date: 05/04/2017



Turning Movement Data Plot

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

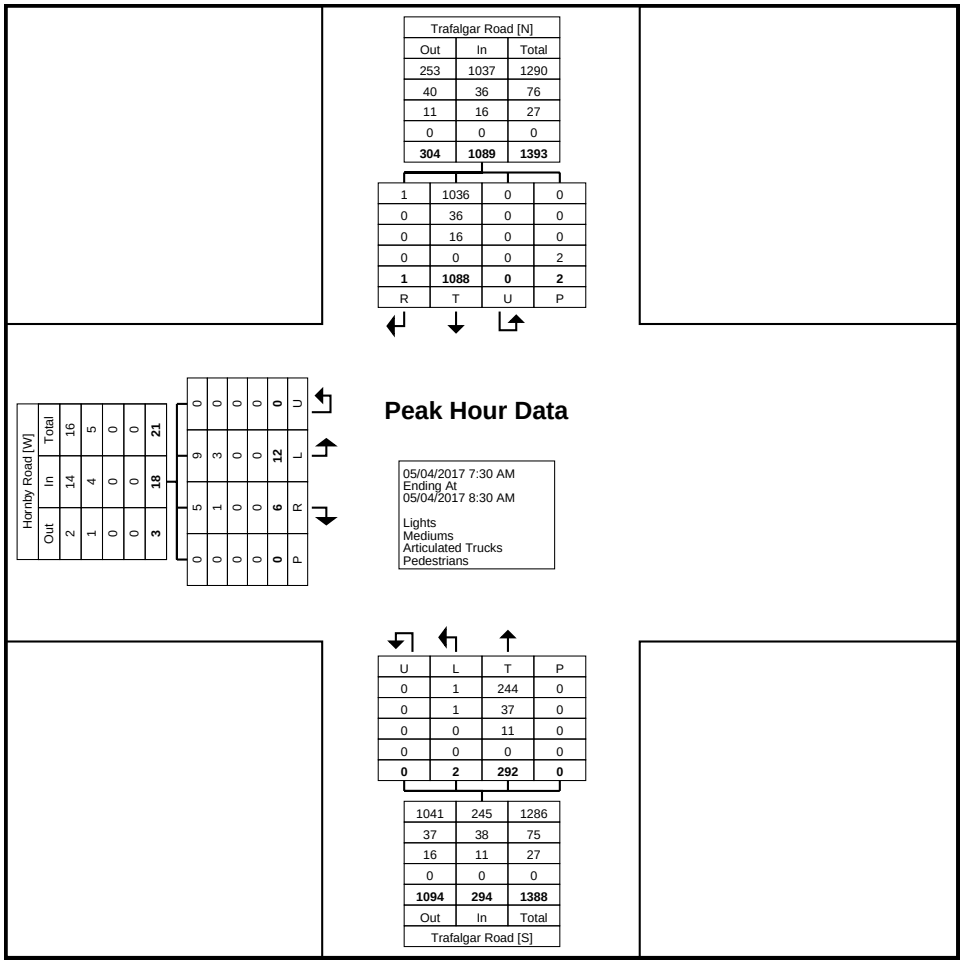
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Hornby Road Eastbound					Trafalgar Road Northbound					Trafalgar Road Southbound					
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
7:30 AM	2	1	0	0	3	0	72	0	0	72	263	1	0	1	264	339
7:45 AM	4	3	0	0	7	0	61	0	0	61	283	0	0	1	283	351
8:00 AM	3	2	0	0	5	1	73	0	0	74	277	0	0	0	277	356
8:15 AM	3	0	0	0	3	1	86	0	0	87	265	0	0	0	265	355
Total	12	6	0	0	18	2	292	0	0	294	1088	1	0	2	1089	1401
Approach %	66.7	33.3	0.0	-	-	0.7	99.3	0.0	-	-	99.9	0.1	0.0	-	-	-
Total %	0.9	0.4	0.0	-	1.3	0.1	20.8	0.0	-	21.0	77.7	0.1	0.0	-	77.7	-
PHF	0.750	0.500	0.000	-	0.643	0.500	0.849	0.000	-	0.845	0.961	0.250	0.000	-	0.962	0.984
Lights	9	5	0	-	14	1	244	0	-	245	1036	1	0	-	1037	1296
% Lights	75.0	83.3	-	-	77.8	50.0	83.6	-	-	83.3	95.2	100.0	-	-	95.2	92.5
Mediums	3	1	0	-	4	1	37	0	-	38	36	0	0	-	36	78
% Mediums	25.0	16.7	-	-	22.2	50.0	12.7	-	-	12.9	3.3	0.0	-	-	3.3	5.6
Articulated Trucks	0	0	0	-	0	0	11	0	-	11	16	0	0	-	16	27
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	3.8	-	-	3.7	1.5	0.0	-	-	1.5	1.9
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (7:30 AM)

Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Hornby Road Eastbound					Trafalgar Road Northbound					Trafalgar Road Southbound					
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
5:00 PM	14	1	0	0	15	0	202	0	0	202	64	0	0	0	64	281
5:15 PM	5	1	0	0	6	2	185	0	0	187	74	0	0	0	74	267
5:30 PM	6	2	0	0	8	1	199	0	0	200	82	0	0	0	82	290
5:45 PM	6	1	0	0	7	0	190	0	0	190	73	0	0	0	73	270
Total	31	5	0	0	36	3	776	0	0	779	293	0	0	0	293	1108
Approach %	86.1	13.9	0.0	-	-	0.4	99.6	0.0	-	-	100.0	0.0	0.0	-	-	-
Total %	2.8	0.5	0.0	-	3.2	0.3	70.0	0.0	-	70.3	26.4	0.0	0.0	-	26.4	-
PHF	0.554	0.625	0.000	-	0.600	0.375	0.960	0.000	-	0.964	0.893	0.000	0.000	-	0.893	0.955
Lights	31	5	0	-	36	3	759	0	-	762	286	0	0	-	286	1084
% Lights	100.0	100.0	-	-	100.0	100.0	97.8	-	-	97.8	97.6	-	-	-	97.6	97.8
Mediums	0	0	0	-	0	0	11	0	-	11	3	0	0	-	3	14
% Mediums	0.0	0.0	-	-	0.0	0.0	1.4	-	-	1.4	1.0	-	-	-	1.0	1.3
Articulated Trucks	0	0	0	-	0	0	6	0	-	6	4	0	0	-	4	10
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.8	-	-	0.8	1.4	-	-	-	1.4	0.9
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Paradigm Transportation Solutions Limited
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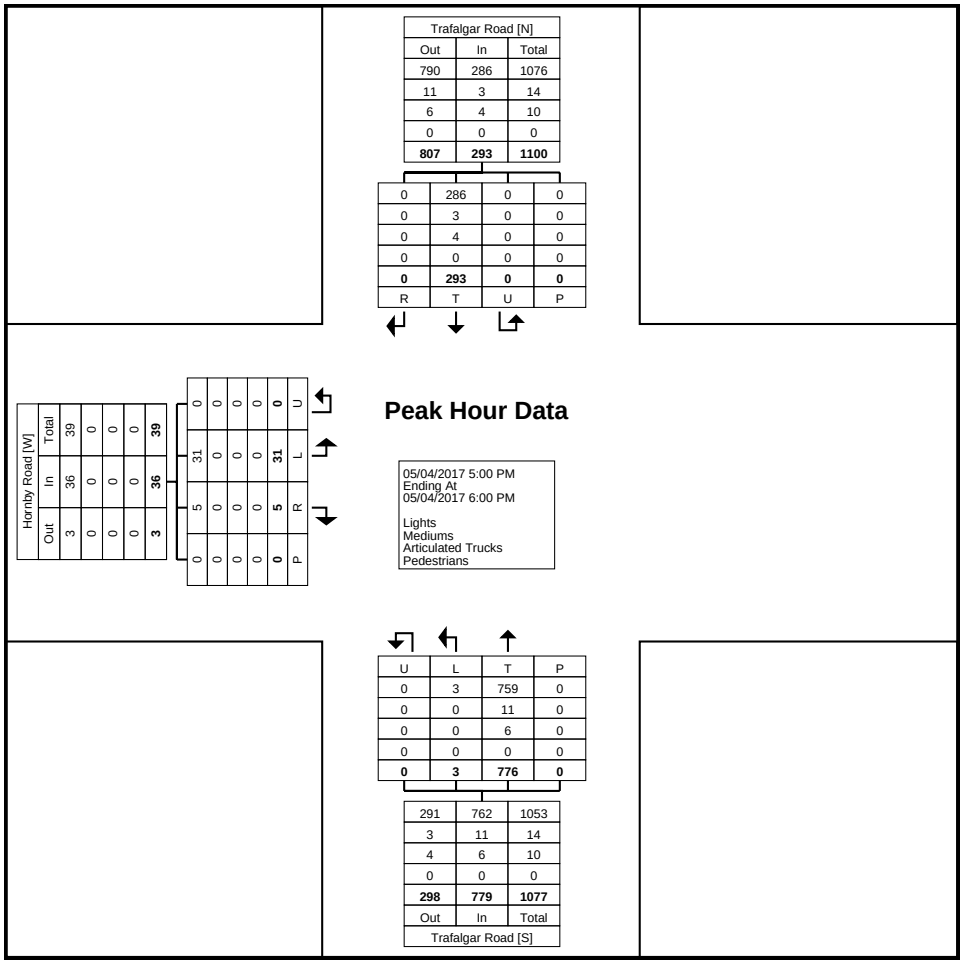
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017



Turning Movement Peak Hour Data Plot (5:00 PM)

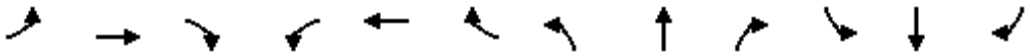
Paradigm Transportation Solutions Limited
22 King Street South, Suite 300

Waterloo, Ontario, Canada N2J 1N8
519-896-3163 cbowness@ptsl.com

Count Name: Trafalgar Road & Hornby Road - Weekday
Site Code:
Start Date: 05/04/2017

Appendix C

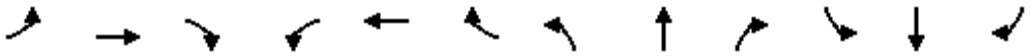
Existing Traffic Operations Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	563	11	22	160	3	4	20	19	36	46	25
Future Volume (Veh/h)	10	563	11	22	160	3	4	20	19	36	46	25
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	586	11	23	167	3	4	21	20	38	48	26
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	170			597			876	828	592	856	832	168
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	170			597			876	828	592	856	832	168
tC, single (s)	4.2			4.2			7.3	6.7	6.3	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.3			3.7	4.2	3.4	3.6	4.0	3.3
p0 queue free %	99			98			98	92	96	84	84	97
cM capacity (veh/h)	1366			946			204	279	492	239	293	881

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	607	193	45	112
Volume Left	10	23	4	38
Volume Right	11	3	20	26
cSH	1366	946	332	318
Volume to Capacity	0.01	0.02	0.14	0.35
Queue Length 95th (m)	0.2	0.6	3.7	12.3
Control Delay (s)	0.2	1.3	17.5	22.3
Lane LOS	A	A	C	C
Approach Delay (s)	0.2	1.3	17.5	22.3
Approach LOS			C	C

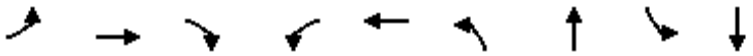
Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	51.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	595	1	8	171	3	1	9	30	20	17	16
Future Volume (Veh/h)	7	595	1	8	171	3	1	9	30	20	17	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	7	620	1	8	178	3	1	9	31	21	18	17
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	181			621			856	832	620	866	830	180
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	181			621			856	832	620	866	830	180
tC, single (s)	4.2			4.1			7.1	6.5	6.4	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.2			3.5	4.0	3.4	3.6	4.0	3.3
p0 queue free %	99			99			100	97	93	91	94	98
cM capacity (veh/h)	1331			969			259	303	463	239	304	869

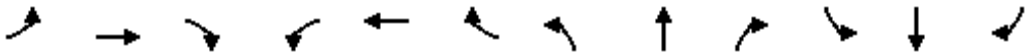
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	628	189	41	56
Volume Left	7	8	1	21
Volume Right	1	3	31	17
cSH	1331	969	408	336
Volume to Capacity	0.01	0.01	0.10	0.17
Queue Length 95th (m)	0.1	0.2	2.7	4.7
Control Delay (s)	0.1	0.4	14.8	17.8
Lane LOS	A	A	B	C
Approach Delay (s)	0.1	0.4	14.8	17.8
Approach LOS			B	C

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		



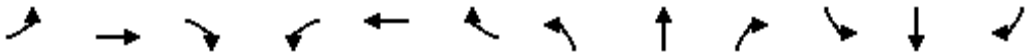
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	50	350	253	59	135	16	377	28	986
v/c Ratio	0.16	0.73	0.46	0.44	0.29	0.05	0.24	0.06	0.53
Control Delay	28.6	41.5	9.9	40.9	29.1	8.0	12.8	7.9	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.6	41.5	9.9	40.9	29.1	8.0	12.8	7.9	15.5
Queue Length 50th (m)	7.7	63.6	6.9	9.8	21.0	1.1	21.1	2.0	54.2
Queue Length 95th (m)	17.3	95.6	27.5	23.2	37.2	3.8	31.9	5.6	96.2
Internal Link Dist (m)		593.5			641.2		240.1		238.0
Turn Bay Length (m)	40.0		40.0	40.0		40.0		50.0	
Base Capacity (vph)	379	587	623	166	571	300	1579	506	1866
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	0.13	0.60	0.41	0.36	0.24	0.05	0.24	0.06	0.53

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	343	248	58	124	8	16	328	41	27	924	42
Future Volume (vph)	49	343	248	58	124	8	16	328	41	27	924	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		4.0	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	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1703	1863	1524	1656	1806		1456	2907		1378	3314	
Flt Permitted	0.67	1.00	1.00	0.30	1.00		0.23	1.00		0.51	1.00	
Satd. Flow (perm)	1202	1863	1524	528	1806		358	2907		747	3314	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	50	350	253	59	127	8	16	335	42	28	943	43
RTOR Reduction (vph)	0	0	156	0	2	0	0	9	0	0	3	0
Lane Group Flow (vph)	50	350	97	59	133	0	16	368	0	28	983	0
Heavy Vehicles (%)	6%	2%	6%	9%	1%	56%	24%	23%	15%	31%	8%	13%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	23.6	23.6	23.6	23.6	23.6		52.9	50.4		55.5	51.7	
Effective Green, g (s)	23.6	23.6	23.6	23.6	23.6		52.9	50.4		55.5	51.7	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25		0.56	0.54		0.59	0.55	
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)	301	466	381	132	452		230	1555		465	1818	
v/s Ratio Prot		c0.19			0.07		0.00	0.13		c0.00	c0.30	
v/s Ratio Perm	0.04		0.06	0.11			0.04			0.03		
v/c Ratio	0.17	0.75	0.25	0.45	0.29		0.07	0.24		0.06	0.54	
Uniform Delay, d1	27.6	32.6	28.3	29.8	28.6		9.7	11.7		8.1	13.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	7.9	0.7	5.0	0.8		0.1	0.4		0.1	1.2	
Delay (s)	28.2	40.5	29.0	34.8	29.3		9.8	12.0		8.2	14.8	
Level of Service	C	D	C	C	C		A	B		A	B	
Approach Delay (s)		35.1			31.0			11.9			14.6	
Approach LOS		D			C			B			B	

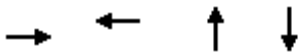
Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	94.2	Sum of lost time (s)	16.4
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	24	365	9	24	113	12	1	81	22	65	395	67
Future Volume (vph)	24	365	9	24	113	12	1	81	22	65	395	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	25	380	9	25	118	13	1	84	23	68	411	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	414	156	108	549
Volume Left (vph)	25	25	1	68
Volume Right (vph)	9	13	23	70
Hadj (s)	0.04	0.08	-0.03	-0.02
Departure Headway (s)	6.5	7.2	7.1	6.1
Degree Utilization, x	0.74	0.31	0.21	0.93
Capacity (veh/h)	541	471	450	585
Control Delay (s)	26.0	13.4	12.1	45.4
Approach Delay (s)	26.0	13.4	12.1	45.4
Approach LOS	D	B	B	E

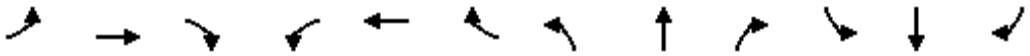
Intersection Summary				
Delay	31.8			
Level of Service	D			
Intersection Capacity Utilization	65.1%	ICU Level of Service	C	
Analysis Period (min)	15			



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	462	130	209	706
v/c Ratio	0.82	0.23	0.24	0.93
Control Delay	36.8	18.2	11.4	39.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.8	18.2	11.4	39.3
Queue Length 50th (m)	62.0	13.1	15.8	93.5
Queue Length 95th (m)	97.0	25.4	31.6	#185.5
Internal Link Dist (m)	556.9	434.3	3096.2	305.9
Turn Bay Length (m)				
Base Capacity (vph)	688	691	874	762
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.67	0.19	0.24	0.93

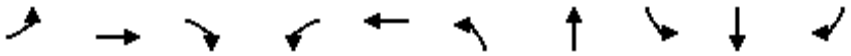
Intersection Summary

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



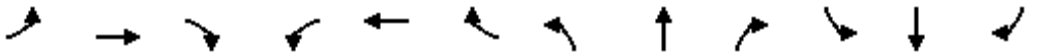
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	396	19	1	110	12	5	181	12	259	386	26
Future Volume (vph)	24	396	19	1	110	12	5	181	12	259	386	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			0.99			0.99	
Flt Protected		1.00			1.00			1.00			0.98	
Satd. Flow (prot)		1807			1778			1681			1790	
Flt Permitted		0.98			1.00			0.99			0.79	
Satd. Flow (perm)		1774			1774			1660			1450	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	25	417	20	1	116	13	5	191	13	273	406	27
RTOR Reduction (vph)	0	2	0	0	5	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	460	0	0	125	0	0	206	0	0	705	0
Heavy Vehicles (%)	8%	4%	5%	0%	6%	0%	40%	12%	0%	0%	6%	4%
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)		23.7			23.7			39.5			39.5	
Effective Green, g (s)		23.7			23.7			39.5			39.5	
Actuated g/C Ratio		0.32			0.32			0.53			0.53	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.5			3.5			5.5			5.5	
Lane Grp Cap (vph)		559			559			871			761	
v/s Ratio Prot												
v/s Ratio Perm		c0.26			0.07			0.12			c0.49	
v/c Ratio		0.82			0.22			0.24			0.93	
Uniform Delay, d1		23.8			19.0			9.7			16.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		9.8			0.2			0.6			18.9	
Delay (s)		33.6			19.2			10.3			35.4	
Level of Service		C			B			B			D	
Approach Delay (s)		33.6			19.2			10.3			35.4	
Approach LOS		C			B			B			D	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	53	786	141	17	515	9	5	21	6	66
v/c Ratio	0.09	0.35	0.12	0.04	0.26	0.06	0.01	0.16	0.02	0.26
Control Delay	4.5	5.0	1.1	4.3	4.3	29.2	0.0	32.5	28.3	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	5.0	1.1	4.3	4.3	29.2	0.0	32.5	28.3	10.8
Queue Length 50th (m)	2.3	22.5	0.0	0.7	12.8	1.4	0.0	3.2	0.9	0.0
Queue Length 95th (m)	5.8	31.8	4.7	2.7	19.3	5.3	0.0	9.1	4.0	10.2
Internal Link Dist (m)		462.3			679.6		261.2		67.4	
Turn Bay Length (m)	145.0		65.0	30.0		20.0		25.0		25.0
Base Capacity (vph)	615	2239	1198	410	1988	268	513	220	417	378
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	0.09	0.35	0.12	0.04	0.26	0.03	0.01	0.10	0.01	0.17

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	755	135	16	454	40	9	0	5	20	6	63
Future Volume (vph)	51	755	135	16	454	40	9	0	5	20	6	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1671	2959	1538	1456	2622		1543	1615		1262	1900	1482
Flt Permitted	0.46	1.00	1.00	0.35	1.00		0.75	1.00		0.75	1.00	1.00
Satd. Flow (perm)	813	2959	1538	543	2622		1224	1615		1002	1900	1482
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	53	786	141	17	473	42	9	0	5	21	6	66
RTOR Reduction (vph)	0	0	39	0	6	0	0	5	0	0	0	59
Lane Group Flow (vph)	53	786	102	17	509	0	9	0	0	21	6	7
Heavy Vehicles (%)	8%	22%	5%	24%	37%	25%	17%	0%	0%	43%	0%	9%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	57.2	57.2	57.2	57.2	57.2		7.9	7.9		7.9	7.9	7.9
Effective Green, g (s)	57.2	57.2	57.2	57.2	57.2		7.9	7.9		7.9	7.9	7.9
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.72		0.10	0.10		0.10	0.10	0.10
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		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	3.0	3.0
Lane Grp Cap (vph)	587	2139	1112	392	1896		122	161		100	189	148
v/s Ratio Prot		c0.27			0.19			0.00			0.00	
v/s Ratio Perm	0.07		0.07	0.03			0.01			c0.02		0.00
v/c Ratio	0.09	0.37	0.09	0.04	0.27		0.07	0.00		0.21	0.03	0.04
Uniform Delay, d1	3.2	4.1	3.2	3.1	3.8		32.3	32.1		32.7	32.1	32.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.5	0.2	0.2	0.3		0.3	0.0		1.0	0.1	0.1
Delay (s)	3.5	4.6	3.4	3.3	4.1		32.5	32.1		33.8	32.2	32.3
Level of Service	A	A	A	A	A		C	C		C	C	C
Approach Delay (s)		4.4			4.1			32.4			32.6	
Approach LOS		A			A			C			C	

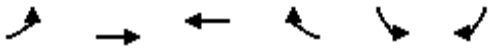
Intersection Summary			
HCM 2000 Control Delay	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	807	22	6	536	6	3
v/c Ratio	0.29	0.01	0.01	0.21	0.03	0.01
Control Delay	1.5	1.0	1.8	1.4	33.2	23.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.5	1.0	1.8	1.4	33.2	23.7
Queue Length 50th (m)	0.0	0.0	0.0	0.0	0.8	0.0
Queue Length 95th (m)	31.5	1.7	1.2	19.9	4.8	2.7
Internal Link Dist (m)	679.6			455.7	532.9	
Turn Bay Length (m)		30.0	60.0		15.0	
Base Capacity (vph)	2780	1472	624	2514	278	293
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	0.29	0.01	0.01	0.21	0.02	0.01

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	759	21	6	504	6	3
Future Volume (vph)	759	21	6	504	6	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	2935	1553	1805	2654	1543	1615
Flt Permitted	1.00	1.00	0.35	1.00	0.95	1.00
Satd. Flow (perm)	2935	1553	659	2654	1543	1615
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	807	22	6	536	6	3
RTOR Reduction (vph)	0	4	0	0	0	3
Lane Group Flow (vph)	807	18	6	536	6	0
Heavy Vehicles (%)	23%	4%	0%	36%	17%	0%
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Actuated Green, G (s)	67.4	67.4	67.4	67.4	1.7	1.7
Effective Green, g (s)	67.4	67.4	67.4	67.4	1.7	1.7
Actuated g/C Ratio	0.81	0.81	0.81	0.81	0.02	0.02
Clearance Time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2380	1259	534	2152	31	33
v/s Ratio Prot	c0.27			0.20		
v/s Ratio Perm		0.01	0.01		c0.00	0.00
v/c Ratio	0.34	0.01	0.01	0.25	0.19	0.00
Uniform Delay, d1	2.0	1.5	1.5	1.9	40.0	39.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.0	0.0	0.3	3.0	0.0
Delay (s)	2.4	1.5	1.5	2.1	43.1	39.9
Level of Service	A	A	A	A	D	D
Approach Delay (s)	2.4			2.1	42.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	2.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	83.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	728	477	2	8	33
Future Volume (Veh/h)	34	728	477	2	8	33
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	36	774	507	2	9	35
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	509				966	254
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	509				966	254
tC, single (s)	4.2				8.1	7.0
tC, 2 stage (s)						
tF (s)	2.2				4.2	3.3
p0 queue free %	97				94	95
cM capacity (veh/h)	1045				156	743

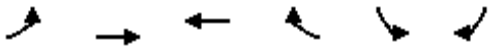
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	36	387	387	254	254	2	9	35
Volume Left	36	0	0	0	0	0	9	0
Volume Right	0	0	0	0	0	2	0	35
cSH	1045	1700	1700	1700	1700	1700	156	743
Volume to Capacity	0.03	0.23	0.23	0.15	0.15	0.00	0.06	0.05
Queue Length 95th (m)	0.9	0.0	0.0	0.0	0.0	0.0	1.5	1.2
Control Delay (s)	8.6	0.0	0.0	0.0	0.0	0.0	29.5	10.1
Lane LOS	A						D	B
Approach Delay (s)	0.4			0.0			14.1	
Approach LOS							B	

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	733	3	2	477	2	0
Future Volume (Veh/h)	733	3	2	477	2	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	772	3	2	502	2	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			775		1027	386
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			775		1027	386
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			850		233	618

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	386	386	3	2	251	251	2
Volume Left	0	0	0	2	0	0	2
Volume Right	0	0	3	0	0	0	0
cSH	1700	1700	1700	850	1700	1700	233
Volume to Capacity	0.23	0.23	0.00	0.00	0.15	0.15	0.01
Queue Length 95th (m)	0.0	0.0	0.0	0.1	0.0	0.0	0.2
Control Delay (s)	0.0	0.0	0.0	9.2	0.0	0.0	20.6
Lane LOS				A			C
Approach Delay (s)	0.0			0.0			20.6
Approach LOS							C

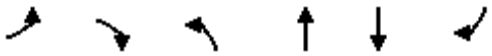
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	719	449	15	6	30
Future Volume (Veh/h)	14	719	449	15	6	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	15	749	468	16	6	31
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	484				872	234
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	484				872	234
tC, single (s)	4.2				7.1	7.0
tC, 2 stage (s)						
tF (s)	2.3				3.7	3.4
p0 queue free %	99				98	96
cM capacity (veh/h)	1041				259	756

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	15	374	374	234	234	16	6	31
Volume Left	15	0	0	0	0	0	6	0
Volume Right	0	0	0	0	0	16	0	31
cSH	1041	1700	1700	1700	1700	1700	259	756
Volume to Capacity	0.01	0.22	0.22	0.14	0.14	0.01	0.02	0.04
Queue Length 95th (m)	0.4	0.0	0.0	0.0	0.0	0.0	0.6	1.0
Control Delay (s)	8.5	0.0	0.0	0.0	0.0	0.0	19.2	10.0
Lane LOS	A						C	A
Approach Delay (s)	0.2			0.0			11.5	
Approach LOS							B	

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	29.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	6	2	338	1195	34
Future Volume (Veh/h)	23	6	2	338	1195	34
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	23	6	2	345	1219	35
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1413	627	1219			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1413	627	1219			
tC, single (s)	7.1	7.2	5.1			
tC, 2 stage (s)						
tF (s)	3.6	3.5	2.7			
p0 queue free %	80	98	99			
cM capacity (veh/h)	116	392	362			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	29	117	230	813	441
Volume Left	23	2	0	0	0
Volume Right	6	0	0	0	35
cSH	136	362	1700	1700	1700
Volume to Capacity	0.21	0.01	0.14	0.48	0.26
Queue Length 95th (m)	6.2	0.1	0.0	0.0	0.0
Control Delay (s)	38.6	0.3	0.0	0.0	0.0
Lane LOS	E	A			
Approach Delay (s)	38.6	0.1		0.0	
Approach LOS	E				

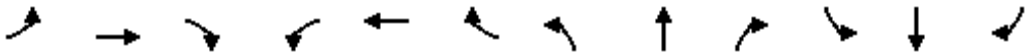
Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	44.1%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	32	520	206	521	331	42	144	280	350	158	1092
v/c Ratio	0.14	0.78	0.50	1.30	0.36	0.08	0.55	0.24	0.44	0.28	0.90
Control Delay	23.1	54.5	11.6	196.4	34.7	0.3	61.4	28.9	5.2	17.6	49.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	54.5	11.6	196.4	34.7	0.3	61.4	28.9	5.2	17.6	49.7
Queue Length 50th (m)	5.0	67.1	3.9	~89.0	36.4	0.0	18.4	25.8	0.0	20.3	141.4
Queue Length 95th (m)	10.9	81.6	25.1	#125.0	48.2	0.0	29.6	42.2	23.3	37.0	#213.1
Internal Link Dist (m)		443.0			287.3			749.5			265.5
Turn Bay Length (m)	115.0		40.0	130.0		70.0	100.0		65.0		
Base Capacity (vph)	265	937	499	400	997	537	263	1155	791	576	1213
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.55	0.41	1.30	0.33	0.08	0.55	0.24	0.44	0.27	0.90

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)	31	499	198	500	318	40	138	269	336	152	1041	8
Future Volume (vph)	31	499	198	500	318	40	138	269	336	152	1041	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1165	3085	1214	3335	2888	1324	2556	3034	1509	1703	3356	
Flt Permitted	0.55	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.58	1.00	
Satd. Flow (perm)	677	3085	1214	3335	2888	1324	2556	3034	1509	1039	3356	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	32	520	206	521	331	42	144	280	350	158	1084	8
RTOR Reduction (vph)	0	0	144	0	0	29	0	0	221	0	1	0
Lane Group Flow (vph)	32	520	62	521	331	13	144	280	129	158	1091	0
Heavy Vehicles (%)	55%	17%	33%	5%	25%	22%	37%	19%	7%	6%	7%	67%
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8			2	6		
Actuated Green, G (s)	33.8	28.6	28.6	15.0	39.4	39.4	12.8	46.0	46.0	55.0	43.6	
Effective Green, g (s)	33.8	28.6	28.6	15.0	39.4	39.4	12.8	46.0	46.0	55.0	43.6	
Actuated g/C Ratio	0.27	0.23	0.23	0.12	0.32	0.32	0.10	0.37	0.37	0.44	0.35	
Clearance Time (s)	4.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	203	705	277	400	910	417	261	1116	555	517	1170	
v/s Ratio Prot	0.01	c0.17		c0.16	0.11		c0.06	0.09		0.03	c0.33	
v/s Ratio Perm	0.04		0.05			0.01			0.09	0.11		
v/c Ratio	0.16	0.74	0.22	1.30	0.36	0.03	0.55	0.25	0.23	0.31	0.93	
Uniform Delay, d1	34.2	44.7	39.2	55.0	33.1	29.6	53.4	27.5	27.3	21.6	39.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	4.0	0.4	153.3	0.2	0.0	3.1	0.5	1.0	0.3	14.4	
Delay (s)	34.6	48.8	39.6	208.3	33.4	29.6	56.5	28.0	28.3	21.9	53.7	
Level of Service	C	D	D	F	C	C	E	C	C	C	D	
Approach Delay (s)		45.7			135.1			33.4			49.7	
Approach LOS		D			F			C			D	

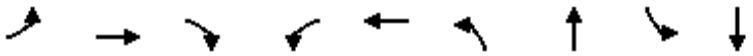
Intersection Summary			
HCM 2000 Control Delay	66.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Group Flow (vph)	983	42	855	39	10
v/c Ratio	0.55	0.05	0.49	0.03	0.02
Control Delay	16.6	3.6	15.5	22.2	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	3.6	15.5	22.2	11.8
Queue Length 50th (m)	65.5	0.0	54.3	2.7	0.0
Queue Length 95th (m)	84.4	4.9	70.5	6.4	3.7
Internal Link Dist (m)	287.3		176.7	95.1	
Turn Bay Length (m)		130.0			40.0
Base Capacity (vph)	1772	849	1756	1133	472
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	0.55	0.05	0.49	0.03	0.02

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	944	40	0	821	37	10
Future Volume (vph)	944	40	0	821	37	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	0.95	1.00		0.95	0.97	1.00
Frt	1.00	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	3282	1538		3252	3335	1369
Flt Permitted	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	3282	1538		3252	3335	1369
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	983	42	0	855	39	10
RTOR Reduction (vph)	0	19	0	0	0	7
Lane Group Flow (vph)	983	23	0	855	39	3
Heavy Vehicles (%)	10%	5%	0%	11%	5%	18%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	54.0	54.0		54.0	34.0	34.0
Effective Green, g (s)	54.0	54.0		54.0	34.0	34.0
Actuated g/C Ratio	0.54	0.54		0.54	0.34	0.34
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	0.2	0.2		0.2	4.0	4.0
Lane Grp Cap (vph)	1772	830		1756	1133	465
v/s Ratio Prot	c0.30			0.26	c0.01	
v/s Ratio Perm		0.01				0.00
v/c Ratio	0.55	0.03		0.49	0.03	0.01
Uniform Delay, d1	15.1	10.7		14.4	22.0	21.8
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	0.1		1.0	0.1	0.0
Delay (s)	16.4	10.8		15.3	22.1	21.9
Level of Service	B	B		B	C	C
Approach Delay (s)	16.1			15.3	22.0	
Approach LOS	B			B	C	

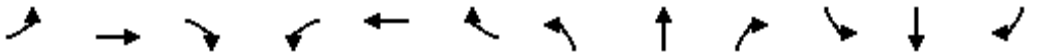
Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	922	14	33	518	3	10	188	382
v/c Ratio	0.14	0.50	0.02	0.08	0.34	0.01	0.03	0.79	0.66
Control Delay	6.8	13.2	0.0	6.8	13.8	34.3	14.3	58.9	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	13.2	0.0	6.8	13.8	34.3	14.3	58.9	10.4
Queue Length 50th (m)	3.3	30.1	0.0	1.4	22.6	0.2	0.1	27.7	0.6
Queue Length 95th (m)	13.0	94.5	0.0	6.7	51.0	1.7	3.9	#80.8	29.3
Internal Link Dist (m)		176.7			846.8		194.1		472.6
Turn Bay Length (m)	105.0		55.0	30.0				20.0	
Base Capacity (vph)	602	1861	869	497	1514	1134	1037	237	582
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	0.13	0.50	0.02	0.07	0.34	0.00	0.01	0.79	0.66

Intersection Summary

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



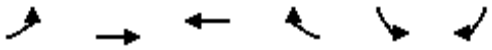
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	867	13	31	464	23	3	1	8	177	5	354
Future Volume (vph)	74	867	13	31	464	23	3	1	8	177	5	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86		1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	3252	1417	1752	2971		2633	1495		1770	1587	
Flt Permitted	0.41	1.00	1.00	0.26	1.00		0.95	1.00		0.75	1.00	
Satd. Flow (perm)	714	3252	1417	488	2971		2633	1495		1399	1587	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	79	922	14	33	494	24	3	1	9	188	5	377
RTOR Reduction (vph)	0	0	7	0	2	0	0	7	0	0	319	0
Lane Group Flow (vph)	79	922	7	33	516	0	3	3	0	188	63	0
Heavy Vehicles (%)	8%	11%	14%	3%	21%	14%	33%	0%	11%	2%	0%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases	4		4	8						6		
Actuated Green, G (s)	50.4	44.5	44.5	43.8	41.2		1.6	21.8		13.2	13.2	
Effective Green, g (s)	50.4	44.5	44.5	43.8	41.2		1.6	21.8		13.2	13.2	
Actuated g/C Ratio	0.59	0.52	0.52	0.51	0.48		0.02	0.25		0.15	0.15	
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2		4.0	4.0		3.0	3.0	
Lane Grp Cap (vph)	484	1684	734	287	1424		49	379		214	243	
v/s Ratio Prot	c0.01	c0.28		0.00	0.17		c0.00	0.00			0.04	
v/s Ratio Perm	0.08		0.01	0.06						c0.13		
v/c Ratio	0.16	0.55	0.01	0.11	0.36		0.06	0.01		0.88	0.26	
Uniform Delay, d1	7.9	13.9	10.0	10.7	14.1		41.4	24.0		35.6	32.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.3	0.0	0.2	0.7		0.7	0.0		36.5	2.6	
Delay (s)	8.0	15.2	10.1	10.9	14.8		42.1	24.0		72.0	34.6	
Level of Service	A	B	B	B	B		D	C		E	C	
Approach Delay (s)		14.6			14.6			28.2			47.0	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	85.9	Sum of lost time (s)	24.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1051	1	1	517	1	0
Future Volume (Veh/h)	1051	1	1	517	1	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1095	1	1	539	1	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			1096		1367	548
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1096		1367	548
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			644		140	485

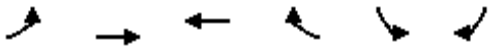
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	730	366	1	270	270	1	0
Volume Left	0	0	1	0	0	1	0
Volume Right	0	1	0	0	0	0	0
cSH	1700	1700	644	1700	1700	140	1700
Volume to Capacity	0.43	0.22	0.00	0.16	0.16	0.01	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Control Delay (s)	0.0	0.0	10.6	0.0	0.0	30.8	0.0
Lane LOS			B			D	A
Approach Delay (s)	0.0		0.0			30.8	
Approach LOS						D	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	79	1027	468	224	598	77
v/c Ratio	0.25	0.80	0.51	0.37	0.72	0.12
Control Delay	19.9	32.6	32.0	5.7	27.3	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	32.6	32.0	5.7	27.3	4.0
Queue Length 50th (m)	9.6	95.7	42.7	0.0	94.4	0.0
Queue Length 95th (m)	19.2	122.5	59.4	17.6	137.7	7.8
Internal Link Dist (m)		501.4	674.5		3096.2	
Turn Bay Length (m)	65.0			75.0	90.0	
Base Capacity (vph)	319	1291	916	611	831	663
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	0.25	0.80	0.51	0.37	0.72	0.12

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	976	445	213	568	73
Future Volume (vph)	75	976	445	213	568	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1556	3312	3034	1509	1770	1324
Flt Permitted	0.37	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	602	3312	3034	1509	1770	1324
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	1027	468	224	598	77
RTOR Reduction (vph)	0	0	0	157	0	41
Lane Group Flow (vph)	79	1027	468	67	598	36
Heavy Vehicles (%)	16%	9%	19%	7%	2%	22%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	39.8	39.8	30.2	30.2	47.0	47.0
Effective Green, g (s)	39.8	39.8	30.2	30.2	47.0	47.0
Actuated g/C Ratio	0.39	0.39	0.30	0.30	0.47	0.47
Clearance Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Lane Grp Cap (vph)	290	1307	908	452	825	617
v/s Ratio Prot	0.02	c0.31	0.15		c0.34	
v/s Ratio Perm	0.09			0.04		0.03
v/c Ratio	0.27	0.79	0.52	0.15	0.72	0.06
Uniform Delay, d1	19.8	26.8	29.2	25.9	21.7	14.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	4.8	2.1	0.7	5.5	0.2
Delay (s)	20.3	31.6	31.3	26.6	27.2	14.9
Level of Service	C	C	C	C	C	B
Approach Delay (s)		30.8	29.8		25.8	
Approach LOS		C	C		C	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1188	454	331	533	167	301
v/c Ratio	0.86	0.49	0.83	0.28	0.46	0.53
Control Delay	31.0	3.7	38.4	7.2	39.4	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	3.7	38.4	7.2	39.4	8.2
Queue Length 50th (m)	102.0	0.0	40.6	19.6	29.0	0.0
Queue Length 95th (m)	137.5	17.6	#77.1	26.9	53.0	23.0
Internal Link Dist (m)	674.5			410.9	143.5	
Turn Bay Length (m)		75.0	145.0		60.0	
Base Capacity (vph)	1649	1016	485	2334	360	568
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	0.72	0.45	0.68	0.23	0.46	0.53

Intersection Summary

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1117	427	311	501	157	283
Future Volume (vph)	1117	427	311	501	157	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	4.0	7.0	7.0	7.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3312	1583	1787	3034	1770	1615
Flt Permitted	1.00	1.00	0.10	1.00	0.95	1.00
Satd. Flow (perm)	3312	1583	183	3034	1770	1615
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1188	454	331	533	167	301
RTOR Reduction (vph)	0	263	0	0	0	240
Lane Group Flow (vph)	1188	191	331	533	167	61
Heavy Vehicles (%)	9%	2%	1%	19%	2%	0%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	37.7	37.7	57.3	57.3	18.3	18.3
Effective Green, g (s)	37.7	37.7	57.3	57.3	18.3	18.3
Actuated g/C Ratio	0.42	0.42	0.64	0.64	0.20	0.20
Clearance Time (s)	7.0	7.0	4.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1393	666	396	1940	361	329
v/s Ratio Prot	0.36		c0.15	0.18	c0.09	
v/s Ratio Perm		0.12	c0.39			0.04
v/c Ratio	0.85	0.29	0.84	0.27	0.46	0.19
Uniform Delay, d1	23.4	17.1	23.3	7.1	31.3	29.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	0.2	14.1	0.1	4.2	1.3
Delay (s)	28.7	17.3	37.5	7.1	35.5	30.7
Level of Service	C	B	D	A	D	C
Approach Delay (s)	25.6			18.8	32.5	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	89.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	504	235	562	521
v/c Ratio	0.61	0.58	0.38	0.33
Control Delay	18.8	15.6	11.6	11.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	18.8	15.6	11.6	11.1
Queue Length 50th (m)	20.0	10.8	18.8	17.0
Queue Length 95th (m)	32.6	30.6	35.4	32.0
Internal Link Dist (m)	390.4		415.8	504.8
Turn Bay Length (m)				
Base Capacity (vph)	1893	810	1460	1557
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.29	0.38	0.33

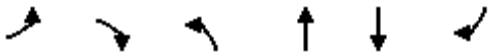
Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	348	354	534	0	0	495
Future Volume (vph)	348	354	534	0	0	495
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.2	8.2	9.3			9.3
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.96	0.85	1.00			1.00
Flt Protected	0.96	1.00	1.00			1.00
Satd. Flow (prot)	3274	1336	3195			3406
Flt Permitted	0.96	1.00	1.00			1.00
Satd. Flow (perm)	3274	1336	3195			3406
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	366	373	562	0	0	521
RTOR Reduction (vph)	72	96	0	0	0	0
Lane Group Flow (vph)	432	139	562	0	0	521
Heavy Vehicles (%)	2%	10%	13%	0%	0%	6%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	13.0	13.0	25.8			25.8
Effective Green, g (s)	13.0	13.0	25.8			25.8
Actuated g/C Ratio	0.23	0.23	0.46			0.46
Clearance Time (s)	8.2	8.2	9.3			9.3
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	755	308	1464			1560
v/s Ratio Prot	c0.13		c0.18			0.15
v/s Ratio Perm		0.10				
v/c Ratio	0.57	0.45	0.38			0.33
Uniform Delay, d1	19.2	18.6	10.0			9.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	1.1	1.1	0.8			0.6
Delay (s)	20.2	19.6	10.8			10.3
Level of Service	C	B	B			B
Approach Delay (s)	20.0		10.8			10.3
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	56.3	Sum of lost time (s)	17.5
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	283	134	622	672
v/c Ratio	0.49	0.39	0.30	0.31
Control Delay	16.7	8.7	6.3	6.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.7	8.7	6.3	6.4
Queue Length 50th (m)	9.2	0.0	15.5	16.9
Queue Length 95th (m)	19.1	13.8	26.1	28.2
Internal Link Dist (m)	305.5		1282.4	415.8
Turn Bay Length (m)				
Base Capacity (vph)	1163	604	2067	2148
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.24	0.22	0.30	0.31

Intersection Summary

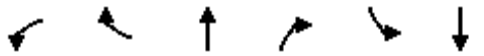


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	166	243	0	610	659	0
Future Volume (vph)	166	243	0	610	659	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		7.4	7.4	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.94	0.85		1.00	1.00	
Flt Protected	0.97	1.00		1.00	1.00	
Satd. Flow (prot)	2822	1348		3374	3505	
Flt Permitted	0.97	1.00		1.00	1.00	
Satd. Flow (perm)	2822	1348		3374	3505	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	169	248	0	622	672	0
RTOR Reduction (vph)	95	111	0	0	0	0
Lane Group Flow (vph)	188	23	0	622	672	0
Heavy Vehicles (%)	26%	9%	0%	7%	3%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	10.6	10.6		38.0	38.0	
Effective Green, g (s)	10.6	10.6		38.0	38.0	
Actuated g/C Ratio	0.17	0.17		0.61	0.61	
Clearance Time (s)	6.0	6.0		7.4	7.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	482	230		2067	2148	
v/s Ratio Prot	c0.07			0.18	c0.19	
v/s Ratio Perm		0.02				
v/c Ratio	0.39	0.10		0.30	0.31	
Uniform Delay, d1	22.8	21.7		5.7	5.7	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.2		0.4	0.4	
Delay (s)	23.4	21.9		6.1	6.1	
Level of Service	C	C		A	A	
Approach Delay (s)	22.9			6.1	6.1	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	62.0	Sum of lost time (s)	13.4
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	261	145	468	1686
v/c Ratio	0.70	0.61	0.18	0.64
Control Delay	31.2	18.9	3.3	6.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.2	18.9	3.3	6.7
Queue Length 50th (m)	13.0	0.0	10.7	67.5
Queue Length 95th (m)	26.9	22.0	19.7	111.8
Internal Link Dist (m)	383.1		312.7	749.5
Turn Bay Length (m)				
Base Capacity (vph)	553	313	2572	2644
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.47	0.46	0.18	0.64

Intersection Summary

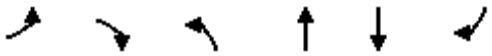


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	112	282	454	0	0	1635
Future Volume (vph)	112	282	454	0	0	1635
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0			6.0
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.92	0.85	1.00			1.00
Flt Protected	0.98	1.00	1.00			1.00
Satd. Flow (prot)	2414	1081	3252			3343
Flt Permitted	0.98	1.00	1.00			1.00
Satd. Flow (perm)	2414	1081	3252			3343
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	115	291	468	0	0	1686
RTOR Reduction (vph)	131	130	0	0	0	0
Lane Group Flow (vph)	130	15	468	0	0	1686
Heavy Vehicles (%)	38%	36%	11%	0%	0%	8%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	11.3	11.3	88.1			88.1
Effective Green, g (s)	11.3	11.3	88.1			88.1
Actuated g/C Ratio	0.10	0.10	0.79			0.79
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	244	109	2571			2643
v/s Ratio Prot	c0.05		0.14			c0.50
v/s Ratio Perm		0.01				
v/c Ratio	0.53	0.13	0.18			0.64
Uniform Delay, d1	47.5	45.6	2.8			4.9
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	2.2	0.6	0.2			1.2
Delay (s)	49.8	46.2	3.0			6.1
Level of Service	D	D	A			A
Approach Delay (s)	48.5		3.0			6.1
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	111.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	141	94	1046	1287
v/c Ratio	0.47	0.50	0.38	0.48
Control Delay	23.3	19.3	3.2	3.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.3	19.3	3.2	3.8
Queue Length 50th (m)	5.1	0.0	23.3	32.5
Queue Length 95th (m)	15.0	17.5	38.2	53.0
Internal Link Dist (m)	204.3		1138.2	312.7
Turn Bay Length (m)				
Base Capacity (vph)	582	313	2764	2689
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.24	0.30	0.38	0.48

Intersection Summary

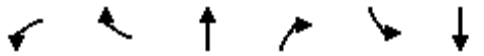


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	185	0	1025	1261	0
Future Volume (vph)	45	185	0	1025	1261	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2957	1386		3374	3282	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2957	1386		3374	3282	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	46	189	0	1046	1287	0
RTOR Reduction (vph)	88	87	0	0	0	0
Lane Group Flow (vph)	53	7	0	1046	1287	0
Heavy Vehicles (%)	19%	6%	0%	7%	10%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	8.2	8.2		91.6	91.6	
Effective Green, g (s)	8.2	8.2		91.6	91.6	
Actuated g/C Ratio	0.07	0.07		0.82	0.82	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	216	101		2764	2689	
v/s Ratio Prot	c0.02			0.31	c0.39	
v/s Ratio Perm		0.00				
v/c Ratio	0.25	0.07		0.38	0.48	
Uniform Delay, d1	48.9	48.2		2.6	3.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.3		0.4	0.6	
Delay (s)	49.5	48.5		3.0	3.6	
Level of Service	D	D		A	A	
Approach Delay (s)	49.1			3.0	3.6	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	111.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	444	206	1251	1048
v/c Ratio	0.78	0.72	0.50	0.42
Control Delay	51.7	42.4	9.1	8.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	51.7	42.4	9.1	8.1
Queue Length 50th (m)	48.0	32.1	67.8	51.8
Queue Length 95th (m)	66.8	63.5	104.5	81.2
Internal Link Dist (m)	284.7		32.1	320.2
Turn Bay Length (m)				
Base Capacity (vph)	771	370	2518	2518
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.58	0.56	0.50	0.42

Intersection Summary

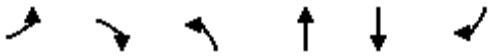


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	248	370	1188	0	0	996
Future Volume (vph)	248	370	1188	0	0	996
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	8.0			8.0
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.94	0.85	1.00			1.00
Flt Protected	0.97	1.00	1.00			1.00
Satd. Flow (prot)	3052	1301	3471			3471
Flt Permitted	0.97	1.00	1.00			1.00
Satd. Flow (perm)	3052	1301	3471			3471
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	261	389	1251	0	0	1048
RTOR Reduction (vph)	79	79	0	0	0	0
Lane Group Flow (vph)	365	127	1251	0	0	1048
Heavy Vehicles (%)	8%	13%	4%	0%	0%	4%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	21.0	21.0	95.1			95.1
Effective Green, g (s)	21.0	21.0	95.1			95.1
Actuated g/C Ratio	0.16	0.16	0.73			0.73
Clearance Time (s)	7.0	7.0	8.0			8.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	488	208	2517			2517
v/s Ratio Prot	c0.12		c0.36			0.30
v/s Ratio Perm		0.10				
v/c Ratio	0.75	0.61	0.50			0.42
Uniform Delay, d1	52.5	51.2	7.7			7.1
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	6.2	5.2	0.7			0.5
Delay (s)	58.7	56.5	8.4			7.6
Level of Service	E	E	A			A
Approach Delay (s)	58.0		8.4			7.6
Approach LOS	E		A			A

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	15.0
Intersection Capacity Utilization	179.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

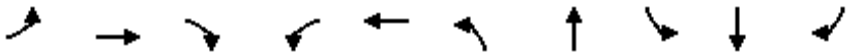
Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	580	263	1034	1047
v/c Ratio	0.81	0.66	0.44	0.45
Control Delay	56.5	33.7	11.3	11.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	56.5	33.7	11.3	11.4
Queue Length 50th (m)	75.0	39.8	63.6	65.2
Queue Length 95th (m)	95.9	73.5	92.7	94.7
Internal Link Dist (m)	152.5		433.2	198.3
Turn Bay Length (m)				
Base Capacity (vph)	977	500	2351	2328
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.59	0.53	0.44	0.45

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	459	342	0	982	995	0
Future Volume (vph)	459	342	0	982	995	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.97	0.85		1.00	1.00	
Flt Protected	0.96	1.00		1.00	1.00	
Satd. Flow (prot)	3296	1427		3505	3471	
Flt Permitted	0.96	1.00		1.00	1.00	
Satd. Flow (perm)	3296	1427		3505	3471	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	483	360	0	1034	1047	0
RTOR Reduction (vph)	13	92	0	0	0	0
Lane Group Flow (vph)	567	171	0	1034	1047	0
Heavy Vehicles (%)	5%	3%	0%	3%	4%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	27.7	27.7		87.2	87.2	
Effective Green, g (s)	27.7	27.7		87.2	87.2	
Actuated g/C Ratio	0.21	0.21		0.67	0.67	
Clearance Time (s)	8.0	8.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	702	304		2352	2330	
v/s Ratio Prot	c0.17			0.30	c0.30	
v/s Ratio Perm		0.12				
v/c Ratio	0.81	0.56		0.44	0.45	
Uniform Delay, d1	48.6	45.7		10.0	10.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.8	2.4		0.6	0.6	
Delay (s)	55.3	48.1		10.6	10.7	
Level of Service	E	D		B	B	
Approach Delay (s)	53.1			10.6	10.7	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	129.9	Sum of lost time (s)	15.0
Intersection Capacity Utilization	179.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



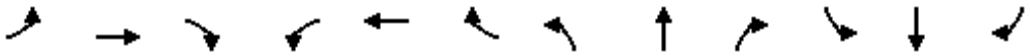
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	793	226	427	78	96	209	883	126	579	245
v/c Ratio	0.87	0.28	0.52	0.51	0.22	0.60	0.83	0.62	0.66	0.43
Control Delay	41.0	15.3	8.7	45.0	18.4	25.4	35.6	33.6	32.9	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	15.3	8.7	45.0	18.4	25.4	35.6	33.6	32.9	6.6
Queue Length 50th (m)	64.7	22.5	17.8	12.3	3.5	22.2	71.9	12.7	46.5	0.0
Queue Length 95th (m)	#107.2	36.9	40.4	26.1	10.3	#44.9	#119.0	#32.6	70.5	18.7
Internal Link Dist (m)		274.7			467.9		430.6		1282.4	
Turn Bay Length (m)	70.0		50.0	105.0		100.0		135.0		135.0
Base Capacity (vph)	967	1080	1016	261	719	352	1065	204	873	576
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	0.82	0.21	0.42	0.30	0.13	0.59	0.83	0.62	0.66	0.43

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)	753	215	406	74	43	48	199	730	109	120	550	233
Future Volume (vph)	753	215	406	74	43	48	199	730	109	120	550	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	6.0	6.0		4.5	6.0		4.5	6.0	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.92		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1900	1599	1752	2964		1752	3470		1687	3374	1524
Flt Permitted	0.95	1.00	1.00	0.62	1.00		0.26	1.00		0.19	1.00	1.00
Satd. Flow (perm)	3433	1900	1599	1139	2964		477	3470		343	3374	1524
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	793	226	427	78	45	51	209	768	115	126	579	245
RTOR Reduction (vph)	0	0	140	0	45	0	0	13	0	0	0	182
Lane Group Flow (vph)	793	226	287	78	51	0	209	870	0	126	579	63
Heavy Vehicles (%)	2%	0%	1%	3%	2%	21%	3%	2%	2%	7%	7%	6%
Turn Type	Prot	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	21.2	35.0	35.0	9.3	9.3		32.9	24.2		25.9	20.7	20.7
Effective Green, g (s)	21.2	35.0	35.0	9.3	9.3		32.9	24.2		25.9	20.7	20.7
Actuated g/C Ratio	0.26	0.43	0.43	0.11	0.11		0.41	0.30		0.32	0.26	0.26
Clearance Time (s)	4.5	6.0	6.0	6.0	6.0		4.5	6.0		4.5	6.0	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)	899	822	691	130	340		331	1037		196	863	389
v/s Ratio Prot	c0.23	0.12			0.02		c0.07	c0.25		0.04	0.17	
v/s Ratio Perm			0.18	c0.07			0.19			0.16		0.04
v/c Ratio	0.88	0.27	0.42	0.60	0.15		0.63	0.84		0.64	0.67	0.16
Uniform Delay, d1	28.7	14.8	15.9	34.0	32.2		17.0	26.5		21.0	27.0	23.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	10.2	0.2	0.4	7.3	0.2		3.9	8.1		7.0	4.1	0.9
Delay (s)	38.8	15.0	16.3	41.3	32.4		20.9	34.7		28.0	31.2	24.2
Level of Service	D	B	B	D	C		C	C		C	C	C
Approach Delay (s)		28.4			36.4			32.0			29.0	
Approach LOS		C			D			C			C	

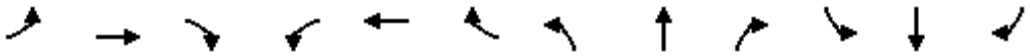
Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	80.9	Sum of lost time (s)	21.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	191	4	19	455	24	6	38	21	1	26	12
Future Volume (Veh/h)	34	191	4	19	455	24	6	38	21	1	26	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	35	199	4	20	474	25	6	40	22	1	27	13
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	499			203			824	810	201	840	800	486
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	499			203			824	810	201	840	800	486
tC, single (s)	4.1			4.1			7.2	6.5	6.2	7.1	6.5	6.4
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.5
p0 queue free %	97			99			98	87	97	100	91	98
cM capacity (veh/h)	1075			1381			246	301	835	243	306	546

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	238	519	68	41
Volume Left	35	20	6	1
Volume Right	4	25	22	13
cSH	1075	1381	371	353
Volume to Capacity	0.03	0.01	0.18	0.12
Queue Length 95th (m)	0.8	0.4	5.3	3.1
Control Delay (s)	1.5	0.4	16.9	16.5
Lane LOS	A	A	C	C
Approach Delay (s)	1.5	0.4	16.9	16.5
Approach LOS			C	C

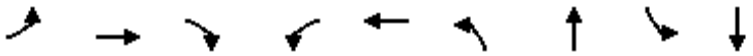
Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	205	2	16	506	21	7	26	14	6	13	6
Future Volume (Veh/h)	3	205	2	16	506	21	7	26	14	6	13	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	3	214	2	17	527	22	7	27	15	6	14	6
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	549			216			806	804	215	822	794	538
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	549			216			806	804	215	822	794	538
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.3
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.4
p0 queue free %	100			99			98	91	98	98	96	99
cM capacity (veh/h)	1031			1366			286	314	830	268	318	522

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	219	566	49	26
Volume Left	3	17	7	6
Volume Right	2	22	15	6
cSH	1031	1366	381	334
Volume to Capacity	0.00	0.01	0.13	0.08
Queue Length 95th (m)	0.1	0.3	3.5	2.0
Control Delay (s)	0.1	0.4	15.8	16.7
Lane LOS	A	A	C	C
Approach Delay (s)	0.1	0.4	15.8	16.7
Approach LOS			C	C

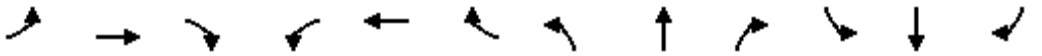
Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	47.1%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	48	147	36	40	501	88	890	7	470
v/c Ratio	0.68	0.28	0.08	0.12	0.93	0.17	0.46	0.02	0.28
Control Delay	78.0	29.7	1.1	28.1	60.7	8.8	13.9	7.9	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.0	29.7	1.1	28.1	60.7	8.8	13.9	7.9	15.3
Queue Length 50th (m)	8.8	23.6	0.0	6.1	100.0	6.8	48.7	0.5	29.2
Queue Length 95th (m)	#29.5	40.5	1.5	14.7	#164.9	13.2	82.5	2.2	40.3
Internal Link Dist (m)		593.5			641.2		240.1		238.0
Turn Bay Length (m)	40.0		40.0	40.0		40.0		50.0	
Base Capacity (vph)	73	544	487	355	551	520	1933	360	1691
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	0.66	0.27	0.07	0.11	0.91	0.17	0.46	0.02	0.28

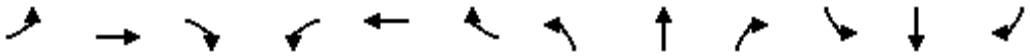
Intersection Summary

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)	47	144	35	39	456	35	86	821	51	7	455	6
Future Volume (vph)	47	144	35	39	456	35	86	821	51	7	455	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		4.0	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	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1671	1863	1482	1752	1880		1671	3408		1626	3376	
Flt Permitted	0.14	1.00	1.00	0.66	1.00		0.43	1.00		0.28	1.00	
Satd. Flow (perm)	251	1863	1482	1218	1880		758	3408		482	3376	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	48	147	36	40	465	36	88	838	52	7	464	6
RTOR Reduction (vph)	0	0	26	0	3	0	0	4	0	0	1	0
Lane Group Flow (vph)	48	147	10	40	498	0	88	886	0	7	469	0
Heavy Vehicles (%)	8%	2%	9%	3%	0%	0%	8%	5%	5%	11%	6%	63%
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	28.0	28.0	28.0	28.0	28.0		61.0	55.6		53.0	51.6	
Effective Green, g (s)	28.0	28.0	28.0	28.0	28.0		61.0	55.6		53.0	51.6	
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28		0.60	0.55		0.52	0.51	
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)	69	514	409	336	519		504	1868		267	1717	
v/s Ratio Prot		0.08			c0.27		c0.01	c0.26		0.00	0.14	
v/s Ratio Perm	0.19		0.01	0.03			0.10			0.01		
v/c Ratio	0.70	0.29	0.02	0.12	0.96		0.17	0.47		0.03	0.27	
Uniform Delay, d1	32.9	28.8	26.7	27.5	36.1		8.7	14.0		11.8	14.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	32.2	0.6	0.1	0.3	29.7		0.2	0.9		0.0	0.4	
Delay (s)	65.1	29.5	26.8	27.8	65.9		8.9	14.8		11.8	14.6	
Level of Service	E	C	C	C	E		A	B		B	B	
Approach Delay (s)		36.5			63.1			14.3			14.6	
Approach LOS		D			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	101.4	Sum of lost time (s)	16.4
Intersection Capacity Utilization	82.9%	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												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	47	144	35	18	489	70	4	325	40	18	99	38
Future Volume (vph)	47	144	35	18	489	70	4	325	40	18	99	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	49	150	36	19	509	73	4	339	42	19	103	40

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	235	601	385	162
Volume Left (vph)	49	19	4	19
Volume Right (vph)	36	73	42	40
Hadj (s)	0.03	-0.04	0.01	-0.08
Departure Headway (s)	7.3	6.5	7.0	7.7
Degree Utilization, x	0.48	1.09	0.75	0.34
Capacity (veh/h)	462	541	501	425
Control Delay (s)	16.8	90.9	28.0	14.6
Approach Delay (s)	16.8	90.9	28.0	14.6
Approach LOS	C	F	D	B

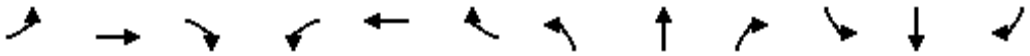
Intersection Summary				
Delay	51.9			
Level of Service	F			
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	259	803	816	375
v/c Ratio	0.61	1.19	0.89	0.45
Control Delay	27.9	126.9	33.1	15.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.9	126.9	33.1	15.3
Queue Length 50th (m)	33.0	~155.5	112.3	36.5
Queue Length 95th (m)	58.8	#225.2	#190.3	58.8
Internal Link Dist (m)	556.9	434.3	3096.2	305.9
Turn Bay Length (m)				
Base Capacity (vph)	428	673	914	841
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.61	1.19	0.89	0.45

Intersection Summary

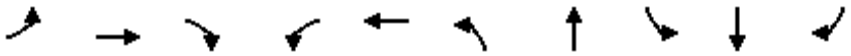
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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)	44	198	5	6	534	223	17	750	9	27	305	25
Future Volume (vph)	44	198	5	6	534	223	17	750	9	27	305	25
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	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		1.00			0.96			1.00			0.99	
Flt Protected		0.99			1.00			1.00			1.00	
Satd. Flow (prot)		1814			1812			1895			1859	
Flt Permitted		0.64			1.00			0.99			0.92	
Satd. Flow (perm)		1180			1808			1875			1717	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	208	5	6	562	235	18	789	9	28	321	26
RTOR Reduction (vph)	0	1	0	0	18	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	258	0	0	785	0	0	815	0	0	371	0
Heavy Vehicles (%)	2%	4%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%
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)		29.0			29.0			39.0			39.0	
Effective Green, g (s)		29.0			29.0			39.0			39.0	
Actuated g/C Ratio		0.36			0.36			0.49			0.49	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.5			3.5			5.5			5.5	
Lane Grp Cap (vph)		427			655			914			837	
v/s Ratio Prot												
v/s Ratio Perm		0.22			c0.43			c0.44			0.22	
v/c Ratio		0.61			1.20			0.89			0.44	
Uniform Delay, d1		20.8			25.5			18.6			13.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		2.5			103.3			12.9			1.7	
Delay (s)		23.4			128.8			31.5			15.1	
Level of Service		C			F			C			B	
Approach Delay (s)		23.4			128.8			31.5			15.1	
Approach LOS		C			F			C			B	

Intersection Summary			
HCM 2000 Control Delay	62.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	49	718	3	2	1056	45	43	68	3	105
v/c Ratio	0.15	0.32	0.00	0.01	0.44	0.23	0.18	0.38	0.01	0.33
Control Delay	6.5	5.5	0.0	5.0	6.3	30.8	13.6	35.3	26.7	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.5	5.5	0.0	5.0	6.3	30.8	13.6	35.3	26.7	9.4
Queue Length 50th (m)	2.2	19.6	0.0	0.1	32.5	5.9	0.9	9.1	0.4	0.0
Queue Length 95th (m)	7.5	33.4	0.0	0.8	53.7	14.9	9.2	20.9	2.6	12.5
Internal Link Dist (m)		462.3			679.6		261.2		67.4	
Turn Bay Length (m)	145.0		65.0	30.0		20.0		25.0		25.0
Base Capacity (vph)	336	2274	955	395	2410	306	359	274	346	439
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	0.15	0.32	0.00	0.01	0.44	0.15	0.12	0.25	0.01	0.24

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	689	3	2	1001	12	43	7	35	65	3	101
Future Volume (vph)	47	689	3	2	1001	12	43	7	35	65	3	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.87		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1687	3112	1292	1357	3298		1687	1454		1570	1520	1568
Flt Permitted	0.26	1.00	1.00	0.38	1.00		0.76	1.00		0.73	1.00	1.00
Satd. Flow (perm)	461	3112	1292	541	3298		1342	1454		1204	1520	1568
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	49	718	3	2	1043	12	45	7	36	68	3	105
RTOR Reduction (vph)	0	0	1	0	1	0	0	32	0	0	0	93
Lane Group Flow (vph)	49	718	2	2	1055	0	45	11	0	68	3	12
Heavy Vehicles (%)	7%	16%	25%	33%	9%	29%	7%	0%	17%	15%	25%	3%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	52.8	52.8	52.8	52.8	52.8		9.0	9.0		9.0	9.0	9.0
Effective Green, g (s)	52.8	52.8	52.8	52.8	52.8		9.0	9.0		9.0	9.0	9.0
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.70		0.12	0.12		0.12	0.12	0.12
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		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	3.0	3.0
Lane Grp Cap (vph)	321	2167	899	376	2297		159	172		142	180	186
v/s Ratio Prot		0.23			c0.32			0.01			0.00	
v/s Ratio Perm	0.11		0.00	0.00			0.03			c0.06		0.01
v/c Ratio	0.15	0.33	0.00	0.01	0.46		0.28	0.07		0.48	0.02	0.07
Uniform Delay, d1	3.9	4.5	3.5	3.5	5.1		30.5	29.7		31.2	29.5	29.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.4	0.0	0.0	0.7		1.0	0.2		2.5	0.0	0.2
Delay (s)	4.9	4.9	3.5	3.5	5.8		31.4	29.8		33.7	29.5	29.8
Level of Service	A	A	A	A	A		C	C		C	C	C
Approach Delay (s)		4.9			5.8			30.7			31.3	
Approach LOS		A			A			C			C	

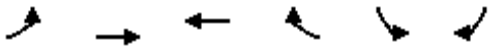
Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	75.8	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	838	1	2	1065	15	10
v/c Ratio	0.30	0.00	0.00	0.36	0.07	0.05
Control Delay	2.5	2.0	3.0	2.7	36.5	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.5	2.0	3.0	2.7	36.5	20.6
Queue Length 50th (m)	0.0	0.0	0.0	0.0	2.0	0.0
Queue Length 95th (m)	32.1	0.4	0.6	43.1	8.7	5.0
Internal Link Dist (m)	679.6			455.7	532.9	
Turn Bay Length (m)		30.0	60.0		15.0	
Base Capacity (vph)	2787	1446	573	2939	271	235
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	0.30	0.00	0.00	0.36	0.06	0.04

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	788	1	2	1001	14	9
Future Volume (vph)	788	1	2	1001	14	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3112	1615	1805	3282	1703	1429
Flt Permitted	1.00	1.00	0.34	1.00	0.95	1.00
Satd. Flow (perm)	3112	1615	639	3282	1703	1429
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	838	1	2	1065	15	10
RTOR Reduction (vph)	0	0	0	0	0	10
Lane Group Flow (vph)	838	1	2	1065	15	0
Heavy Vehicles (%)	16%	0%	0%	10%	6%	13%
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Actuated Green, G (s)	68.6	68.6	68.6	68.6	3.6	3.6
Effective Green, g (s)	68.6	68.6	68.6	68.6	3.6	3.6
Actuated g/C Ratio	0.80	0.80	0.80	0.80	0.04	0.04
Clearance Time (s)	8.0	8.0	8.0	8.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2476	1285	508	2611	71	59
v/s Ratio Prot	0.27			c0.32		
v/s Ratio Perm		0.00	0.00		c0.01	0.00
v/c Ratio	0.34	0.00	0.00	0.41	0.21	0.01
Uniform Delay, d1	2.5	1.8	1.8	2.7	39.9	39.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.0	0.0	0.5	1.5	0.0
Delay (s)	2.8	1.8	1.8	3.1	41.4	39.6
Level of Service	A	A	A	A	D	D
Approach Delay (s)	2.8			3.1	40.7	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	86.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	753	972	18	5	31
Future Volume (Veh/h)	44	753	972	18	5	31
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	47	801	1034	19	5	33
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1053				1528	517
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1053				1528	517
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				95	94
cM capacity (veh/h)	657				102	509

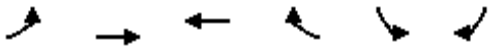
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	47	400	400	517	517	19	5	33
Volume Left	47	0	0	0	0	0	5	0
Volume Right	0	0	0	0	0	19	0	33
cSH	657	1700	1700	1700	1700	1700	102	509
Volume to Capacity	0.07	0.24	0.24	0.30	0.30	0.01	0.05	0.06
Queue Length 95th (m)	1.8	0.0	0.0	0.0	0.0	0.0	1.2	1.7
Control Delay (s)	10.9	0.0	0.0	0.0	0.0	0.0	42.0	12.6
Lane LOS	B						E	B
Approach Delay (s)	0.6			0.0			16.4	
Approach LOS							C	

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	758	0	0	983	7	2
Future Volume (Veh/h)	758	0	0	983	7	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	798	0	0	1035	7	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			798		1316	399
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			798		1316	399
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	100
cM capacity (veh/h)			833		152	606

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	399	399	0	0	518	518	9
Volume Left	0	0	0	0	0	0	7
Volume Right	0	0	0	0	0	0	2
cSH	1700	1700	1700	1700	1700	1700	182
Volume to Capacity	0.23	0.23	0.00	0.00	0.30	0.30	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	25.8
Lane LOS							D
Approach Delay (s)	0.0			0.0			25.8
Approach LOS							D

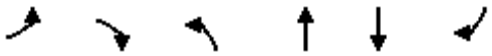
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	730	922	14	7	61
Future Volume (Veh/h)	30	730	922	14	7	61
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	31	760	960	15	7	64
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	975				1402	480
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	975				1402	480
tC, single (s)	4.3				7.2	7.1
tC, 2 stage (s)						
tF (s)	2.3				3.7	3.4
p0 queue free %	95				93	87
cM capacity (veh/h)	656				106	511

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	31	380	380	480	480	15	7	64
Volume Left	31	0	0	0	0	0	7	0
Volume Right	0	0	0	0	0	15	0	64
cSH	656	1700	1700	1700	1700	1700	106	511
Volume to Capacity	0.05	0.22	0.22	0.28	0.28	0.01	0.07	0.13
Queue Length 95th (m)	1.2	0.0	0.0	0.0	0.0	0.0	1.7	3.4
Control Delay (s)	10.8	0.0	0.0	0.0	0.0	0.0	41.4	13.1
Lane LOS	B						E	B
Approach Delay (s)	0.4			0.0			15.8	
Approach LOS							C	

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	6	3	864	435	65
Future Volume (Veh/h)	38	6	3	864	435	65
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	39	6	3	882	444	66
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	924	255	444			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	924	255	444			
tC, single (s)	7.0	7.1	4.3			
tC, 2 stage (s)						
tF (s)	3.6	3.4	2.3			
p0 queue free %	85	99	100			
cM capacity (veh/h)	257	721	1058			

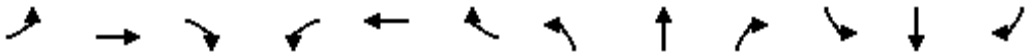
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	45	297	588	296	214
Volume Left	39	3	0	0	0
Volume Right	6	0	0	0	66
cSH	281	1058	1700	1700	1700
Volume to Capacity	0.16	0.00	0.35	0.17	0.13
Queue Length 95th (m)	4.5	0.1	0.0	0.0	0.0
Control Delay (s)	20.2	0.1	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	20.2	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	36.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	57	518	193	636	758	151	200	695	641	73	387
v/c Ratio	0.25	0.79	0.42	0.88	0.58	0.21	0.61	0.60	0.74	0.28	0.44
Control Delay	20.9	55.3	7.3	62.5	31.7	3.8	61.6	39.2	15.2	25.4	40.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	55.3	7.3	62.5	31.7	3.8	61.6	39.2	15.2	25.4	40.9
Queue Length 50th (m)	7.5	67.0	0.0	82.2	81.6	0.0	25.6	82.4	31.0	10.9	44.4
Queue Length 95th (m)	13.7	82.3	16.9	#111.5	94.1	11.5	39.2	109.6	90.7	22.6	63.8
Internal Link Dist (m)		443.0			287.3			749.5			265.5
Turn Bay Length (m)	115.0		40.0	130.0		70.0	100.0		65.0		
Base Capacity (vph)	232	814	522	741	1430	773	342	1158	861	260	888
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.64	0.37	0.86	0.53	0.20	0.58	0.60	0.74	0.28	0.44

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)	55	497	185	611	728	145	192	667	615	70	355	16
Future Volume (vph)	55	497	185	611	728	145	192	667	615	70	355	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3085	1417	3433	3312	1583	3099	3438	1568	1570	3277	
Flt Permitted	0.36	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.32	1.00	
Satd. Flow (perm)	607	3085	1417	3433	3312	1583	3099	3438	1568	525	3277	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	57	518	193	636	758	151	200	695	641	73	370	17
RTOR Reduction (vph)	0	0	151	0	0	92	0	0	339	0	2	0
Lane Group Flow (vph)	57	518	42	636	758	59	200	695	302	73	385	0
Heavy Vehicles (%)	14%	17%	14%	2%	9%	2%	13%	5%	3%	15%	9%	19%
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8			2	6		
Actuated Green, G (s)	33.0	27.4	27.4	26.3	49.1	49.1	13.3	40.6	40.6	39.7	33.0	
Effective Green, g (s)	33.0	27.4	27.4	26.3	49.1	49.1	13.3	40.6	40.6	39.7	33.0	
Actuated g/C Ratio	0.26	0.22	0.22	0.21	0.39	0.39	0.11	0.32	0.32	0.32	0.26	
Clearance Time (s)	4.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	203	676	310	722	1300	621	329	1116	509	222	865	
v/s Ratio Prot	0.01	c0.17		c0.19	0.23		c0.06	c0.20		0.02	0.12	
v/s Ratio Perm	0.06		0.03			0.04			0.19	0.09		
v/c Ratio	0.28	0.77	0.14	0.88	0.58	0.10	0.61	0.62	0.59	0.33	0.44	
Uniform Delay, d1	35.1	45.8	39.3	47.8	29.9	23.9	53.4	35.7	35.3	30.7	38.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	5.2	0.2	12.4	0.7	0.1	3.7	2.6	5.0	0.9	1.7	
Delay (s)	35.9	51.0	39.5	60.3	30.6	24.0	57.0	38.3	40.3	31.6	40.0	
Level of Service	D	D	D	E	C	C	E	D	D	C	D	
Approach Delay (s)		47.0			42.2			41.6			38.7	
Approach LOS		D			D			D			D	

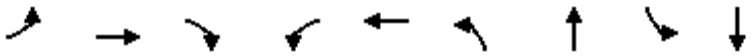
Intersection Summary			
HCM 2000 Control Delay	42.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	848	383	21	1315	231	52
v/c Ratio	0.52	0.39	0.06	0.71	0.20	0.10
Control Delay	19.4	3.1	10.2	19.8	23.9	7.0
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	19.4	3.1	10.2	20.2	23.9	7.0
Queue Length 50th (m)	53.5	0.0	1.8	99.5	17.0	0.0
Queue Length 95th (m)	88.3	16.7	5.2	125.5	26.1	8.2
Internal Link Dist (m)	287.3			176.7	95.1	
Turn Bay Length (m)		130.0	45.0			40.0
Base Capacity (vph)	1633	988	394	1856	1178	529
Starvation Cap Reductn	0	0	0	160	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.39	0.05	0.78	0.20	0.10

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	814	368	20	1262	222	50
Future Volume (vph)	814	368	20	1262	222	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3282	1599	1752	3438	3467	1455
Flt Permitted	1.00	1.00	0.24	1.00	0.95	1.00
Satd. Flow (perm)	3282	1599	448	3438	3467	1455
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	848	383	21	1315	231	52
RTOR Reduction (vph)	0	192	0	0	0	36
Lane Group Flow (vph)	848	191	21	1315	231	16
Heavy Vehicles (%)	10%	1%	3%	5%	1%	11%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	49.8	49.8	56.4	56.4	31.6	31.6
Effective Green, g (s)	49.8	49.8	56.4	56.4	31.6	31.6
Actuated g/C Ratio	0.50	0.50	0.56	0.56	0.32	0.32
Clearance Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Vehicle Extension (s)	0.2	0.2	3.0	0.2	4.0	4.0
Lane Grp Cap (vph)	1634	796	286	1939	1095	459
v/s Ratio Prot	0.26		0.00	c0.38	c0.07	
v/s Ratio Perm		0.12	0.04			0.01
v/c Ratio	0.52	0.24	0.07	0.68	0.21	0.04
Uniform Delay, d1	17.0	14.3	10.7	15.4	25.1	23.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.7	0.1	1.9	0.4	0.1
Delay (s)	18.2	15.0	10.8	17.3	25.5	23.8
Level of Service	B	B	B	B	C	C
Approach Delay (s)	17.2			17.2	25.2	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

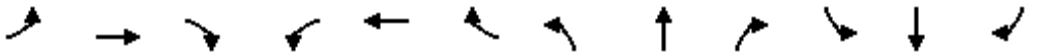


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	231	672	16	121	1367	55	134	35	82
v/c Ratio	0.80	0.47	0.02	0.27	0.97	0.15	0.25	0.21	0.29
Control Delay	41.8	20.7	0.1	10.9	46.8	40.8	9.1	41.2	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.8	20.7	0.1	10.9	46.8	40.8	9.1	41.2	17.7
Queue Length 50th (m)	27.6	49.1	0.0	10.1	~143.0	5.2	4.0	6.3	3.5
Queue Length 95th (m)	#70.3	68.4	0.0	18.3	#193.8	11.1	17.5	15.9	17.3
Internal Link Dist (m)		176.7			846.8		194.1		472.6
Turn Bay Length (m)	105.0		55.0	30.0				20.0	
Base Capacity (vph)	289	1436	794	496	1406	1229	992	166	281
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	0.80	0.47	0.02	0.24	0.97	0.04	0.14	0.21	0.29

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.



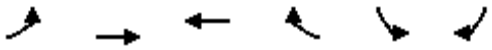
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	217	632	15	114	1172	113	52	27	99	33	19	58
Future Volume (vph)	217	632	15	114	1172	113	52	27	99	33	19	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.88		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3223	1615	1770	3343		3467	1664		1687	1635	
Flt Permitted	0.10	1.00	1.00	0.35	1.00		0.95	1.00		0.67	1.00	
Satd. Flow (perm)	177	3223	1615	652	3343		3467	1664		1192	1635	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	231	672	16	121	1247	120	55	29	105	35	20	62
RTOR Reduction (vph)	0	0	9	0	5	0	0	74	0	0	53	0
Lane Group Flow (vph)	231	672	7	121	1362	0	55	60	0	35	29	0
Heavy Vehicles (%)	3%	12%	0%	2%	7%	2%	1%	0%	1%	7%	0%	4%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases	4		4	8						6		
Actuated Green, G (s)	52.8	41.7	41.7	47.8	39.2		7.7	27.8		13.1	13.1	
Effective Green, g (s)	52.8	41.7	41.7	47.8	39.2		7.7	27.8		13.1	13.1	
Actuated g/C Ratio	0.56	0.44	0.44	0.50	0.41		0.08	0.29		0.14	0.14	
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2		4.0	4.0		3.0	3.0	
Lane Grp Cap (vph)	282	1413	708	428	1377		280	486		164	225	
v/s Ratio Prot	c0.10	0.21		0.03	c0.41		c0.02	0.04			0.02	
v/s Ratio Perm	0.36		0.00	0.12						c0.03		
v/c Ratio	0.82	0.48	0.01	0.28	0.99		0.20	0.12		0.21	0.13	
Uniform Delay, d1	23.7	18.9	15.1	12.8	27.7		40.8	24.7		36.4	36.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	16.7	1.1	0.0	0.4	21.7		0.5	0.2		3.0	1.2	
Delay (s)	40.4	20.1	15.1	13.1	49.5		41.3	24.9		39.4	37.1	
Level of Service	D	C	B	B	D		D	C		D	D	
Approach Delay (s)		25.1			46.5			29.6			37.8	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	95.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	762	2	0	1398	1	5
Future Volume (Veh/h)	762	2	0	1398	1	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	794	2	0	1456	1	5
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			796		1523	398
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			796		1523	398
tC, single (s)			4.1		6.8	7.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.5
p0 queue free %			100		99	99
cM capacity (veh/h)			835		111	561

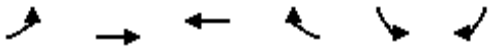
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	529	267	0	728	728	1	5
Volume Left	0	0	0	0	0	1	0
Volume Right	0	2	0	0	0	0	5
cSH	1700	1700	1700	1700	1700	111	561
Volume to Capacity	0.31	0.16	0.00	0.43	0.43	0.01	0.01
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	37.7	11.5
Lane LOS						E	B
Approach Delay (s)	0.0		0.0			15.8	
Approach LOS						C	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	108	699	1401	743	280	71
v/c Ratio	0.53	0.35	0.82	0.63	0.65	0.16
Control Delay	19.9	10.3	26.0	3.9	41.5	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	10.3	26.0	3.9	41.5	8.4
Queue Length 50th (m)	7.7	34.3	121.6	0.0	51.2	0.0
Queue Length 95th (m)	20.8	45.3	152.8	18.4	80.0	10.9
Internal Link Dist (m)		501.4	674.5		3096.2	
Turn Bay Length (m)	65.0			75.0	90.0	
Base Capacity (vph)	203	2002	1719	1171	434	437
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	0.53	0.35	0.82	0.63	0.65	0.16

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	103	664	1331	706	266	67
Future Volume (vph)	103	664	1331	706	266	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1736	3282	3438	1599	1736	1538
Flt Permitted	0.08	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	145	3282	3438	1599	1736	1538
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	108	699	1401	743	280	71
RTOR Reduction (vph)	0	0	0	372	0	53
Lane Group Flow (vph)	108	699	1401	372	280	18
Heavy Vehicles (%)	4%	10%	5%	1%	4%	5%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	61.0	61.0	50.0	50.0	25.0	25.0
Effective Green, g (s)	61.0	61.0	50.0	50.0	25.0	25.0
Actuated g/C Ratio	0.61	0.61	0.50	0.50	0.25	0.25
Clearance Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Lane Grp Cap (vph)	199	2002	1719	799	434	384
v/s Ratio Prot	c0.04	0.21	c0.41		c0.16	
v/s Ratio Perm	0.29			0.23		0.01
v/c Ratio	0.54	0.35	0.82	0.46	0.65	0.05
Uniform Delay, d1	15.4	9.7	21.1	16.3	33.5	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.5	4.4	1.9	7.2	0.2
Delay (s)	18.4	10.1	25.5	18.2	40.7	28.7
Level of Service	B	B	C	B	D	C
Approach Delay (s)		11.2	23.0		38.3	
Approach LOS		B	C		D	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	743	247	306	1649	518	338
v/c Ratio	0.69	0.36	0.74	0.94	0.84	0.43
Control Delay	33.0	4.9	24.6	34.4	43.9	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	4.9	24.6	34.4	43.9	4.6
Queue Length 50th (m)	68.3	0.0	32.0	155.7	97.3	0.0
Queue Length 95th (m)	91.4	17.1	52.5	#213.6	#155.9	18.7
Internal Link Dist (m)	674.5			487.1	143.5	
Turn Bay Length (m)		75.0	145.0		60.0	
Base Capacity (vph)	1098	699	444	1822	619	780
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.35	0.69	0.91	0.84	0.43

Intersection Summary

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	698	232	288	1550	487	318
Future Volume (vph)	698	232	288	1550	487	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	4.0	7.0	7.0	7.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3282	1599	1787	3438	1787	1615
Flt Permitted	1.00	1.00	0.21	1.00	0.95	1.00
Satd. Flow (perm)	3282	1599	402	3438	1787	1615
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	743	247	306	1649	518	338
RTOR Reduction (vph)	0	166	0	0	0	221
Lane Group Flow (vph)	743	81	306	1649	518	117
Heavy Vehicles (%)	10%	1%	1%	5%	1%	0%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	32.3	32.3	50.2	50.2	34.0	34.0
Effective Green, g (s)	32.3	32.3	50.2	50.2	34.0	34.0
Actuated g/C Ratio	0.33	0.33	0.51	0.51	0.35	0.35
Clearance Time (s)	7.0	7.0	4.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1079	525	401	1757	618	559
v/s Ratio Prot	0.23		0.11	c0.48	c0.29	
v/s Ratio Perm		0.05	0.28			0.07
v/c Ratio	0.69	0.15	0.76	0.94	0.84	0.21
Uniform Delay, d1	28.6	23.3	16.3	22.6	29.6	22.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	0.1	8.4	10.2	12.8	0.9
Delay (s)	30.4	23.4	24.6	32.7	42.4	23.5
Level of Service	C	C	C	C	D	C
Approach Delay (s)	28.7			31.4	34.9	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	98.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	740	254	442	935
v/c Ratio	0.74	0.44	0.28	0.57
Control Delay	27.4	5.4	12.9	16.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.4	5.4	12.9	16.2
Queue Length 50th (m)	47.1	0.0	19.0	47.7
Queue Length 95th (m)	65.2	16.5	32.0	73.1
Internal Link Dist (m)	390.4		415.8	504.8
Turn Bay Length (m)				
Base Capacity (vph)	1234	653	1555	1630
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.60	0.39	0.28	0.57

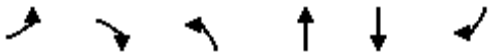
Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	676	268	420	0	0	888
Future Volume (vph)	676	268	420	0	0	888
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.2	8.2	9.3			9.3
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.99	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3489	1386	3343			3505
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3489	1386	3343			3505
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	712	282	442	0	0	935
RTOR Reduction (vph)	4	181	0	0	0	0
Lane Group Flow (vph)	736	73	442	0	0	935
Heavy Vehicles (%)	0%	6%	8%	0%	0%	3%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	20.2	20.2	32.8			32.8
Effective Green, g (s)	20.2	20.2	32.8			32.8
Actuated g/C Ratio	0.29	0.29	0.47			0.47
Clearance Time (s)	8.2	8.2	9.3			9.3
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	999	397	1555			1630
v/s Ratio Prot	c0.21		0.13			c0.27
v/s Ratio Perm		0.05				
v/c Ratio	0.74	0.18	0.28			0.57
Uniform Delay, d1	22.7	18.9	11.6			13.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	2.9	0.2	0.5			1.5
Delay (s)	25.6	19.2	12.1			15.2
Level of Service	C	B	B			B
Approach Delay (s)	24.0		12.1			15.2
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	70.5	Sum of lost time (s)	17.5
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	173	106	573	1324
v/c Ratio	0.37	0.41	0.24	0.54
Control Delay	19.0	17.1	4.9	7.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.0	17.1	4.9	7.2
Queue Length 50th (m)	6.7	4.9	14.0	42.8
Queue Length 95th (m)	15.3	19.7	22.1	63.8
Internal Link Dist (m)	305.5		1282.4	415.8
Turn Bay Length (m)				
Base Capacity (vph)	566	305	2414	2438
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.35	0.24	0.54

Intersection Summary

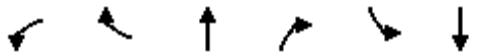


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	65	209	0	562	1298	0
Future Volume (vph)	65	209	0	562	1298	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		7.4	7.4	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.91	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2936	1427		3539	3574	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2936	1427		3539	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	66	213	0	573	1324	0
RTOR Reduction (vph)	61	61	0	0	0	0
Lane Group Flow (vph)	112	45	0	573	1324	0
Heavy Vehicles (%)	26%	3%	0%	2%	1%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	10.5	10.5		51.5	51.5	
Effective Green, g (s)	10.5	10.5		51.5	51.5	
Actuated g/C Ratio	0.14	0.14		0.68	0.68	
Clearance Time (s)	6.0	6.0		7.4	7.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	408	198		2417	2441	
v/s Ratio Prot	c0.04			0.16	c0.37	
v/s Ratio Perm		0.03				
v/c Ratio	0.27	0.23		0.24	0.54	
Uniform Delay, d1	29.0	28.8		4.5	6.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.6		0.2	0.9	
Delay (s)	29.4	29.4		4.8	6.9	
Level of Service	C	C		A	A	
Approach Delay (s)	29.4			4.8	6.9	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	75.4	Sum of lost time (s)	13.4
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	611	303	913	705
v/c Ratio	0.75	0.76	0.41	0.33
Control Delay	34.0	34.8	9.8	9.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	34.0	34.8	9.8	9.0
Queue Length 50th (m)	47.1	40.4	39.5	28.4
Queue Length 95th (m)	65.4	73.4	70.8	52.2
Internal Link Dist (m)	383.1		312.7	749.5
Turn Bay Length (m)				
Base Capacity (vph)	1686	771	2201	2141
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.36	0.39	0.41	0.33

Intersection Summary

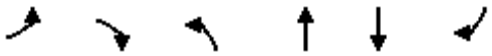


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	299	588	886	0	0	684
Future Volume (vph)	299	588	886	0	0	684
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0			6.0
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.93	0.85	1.00			1.00
Flt Protected	0.98	1.00	1.00			1.00
Satd. Flow (prot)	3200	1413	3438			3343
Flt Permitted	0.98	1.00	1.00			1.00
Satd. Flow (perm)	3200	1413	3438			3343
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	308	606	913	0	0	705
RTOR Reduction (vph)	75	75	0	0	0	0
Lane Group Flow (vph)	536	228	913	0	0	705
Heavy Vehicles (%)	4%	4%	5%	0%	0%	8%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	21.8	21.8	60.2			60.2
Effective Green, g (s)	21.8	21.8	60.2			60.2
Actuated g/C Ratio	0.23	0.23	0.64			0.64
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	742	327	2201			2140
v/s Ratio Prot	c0.17		c0.27			0.21
v/s Ratio Perm		0.16				
v/c Ratio	0.72	0.70	0.41			0.33
Uniform Delay, d1	33.3	33.1	8.3			7.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	3.5	6.4	0.6			0.4
Delay (s)	36.8	39.5	8.9			8.1
Level of Service	D	D	A			A
Approach Delay (s)	37.7		8.9			8.1
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	94.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	372	186	1113	771
v/c Ratio	0.71	0.57	0.43	0.31
Control Delay	28.7	13.4	5.0	4.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.7	13.4	5.0	4.3
Queue Length 50th (m)	18.7	0.0	34.3	20.8
Queue Length 95th (m)	34.1	21.8	55.4	34.8
Internal Link Dist (m)	204.3		1138.2	312.7
Turn Bay Length (m)				
Base Capacity (vph)	1082	559	2604	2509
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.33	0.43	0.31

Intersection Summary

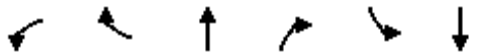


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	181	366	0	1091	756	0
Future Volume (vph)	181	366	0	1091	756	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.92	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	3094	1400		3406	3282	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	3094	1400		3406	3282	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	185	373	0	1113	771	0
RTOR Reduction (vph)	165	164	0	0	0	0
Lane Group Flow (vph)	207	22	0	1113	771	0
Heavy Vehicles (%)	10%	5%	0%	6%	10%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	11.7	11.7		77.1	77.1	
Effective Green, g (s)	11.7	11.7		77.1	77.1	
Actuated g/C Ratio	0.12	0.12		0.76	0.76	
Clearance Time (s)	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	359	162		2605	2510	
v/s Ratio Prot	c0.07			c0.33	0.23	
v/s Ratio Perm		0.02				
v/c Ratio	0.58	0.13		0.43	0.31	
Uniform Delay, d1	42.2	40.0		4.1	3.6	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.2	0.4		0.5	0.3	
Delay (s)	44.4	40.4		4.7	4.0	
Level of Service	D	D		A	A	
Approach Delay (s)	43.1			4.7	4.0	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	642	300	1272	1144
v/c Ratio	0.80	0.81	0.57	0.50
Control Delay	50.1	53.7	14.4	13.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	50.1	53.7	14.4	13.4
Queue Length 50th (m)	76.0	67.0	89.3	75.5
Queue Length 95th (m)	97.5	105.4	140.3	119.0
Internal Link Dist (m)	284.7		32.1	320.2
Turn Bay Length (m)				
Base Capacity (vph)	1085	490	2246	2268
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.59	0.61	0.57	0.50

Intersection Summary

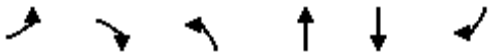


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	403	492	1208	0	0	1087
Future Volume (vph)	403	492	1208	0	0	1087
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	8.0			8.0
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.95	0.85	1.00			1.00
Flt Protected	0.97	1.00	1.00			1.00
Satd. Flow (prot)	3266	1400	3438			3471
Flt Permitted	0.97	1.00	1.00			1.00
Satd. Flow (perm)	3266	1400	3438			3471
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	424	518	1272	0	0	1144
RTOR Reduction (vph)	49	49	0	0	0	0
Lane Group Flow (vph)	593	251	1272	0	0	1144
Heavy Vehicles (%)	3%	5%	5%	0%	0%	4%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	29.6	29.6	84.2			84.2
Effective Green, g (s)	29.6	29.6	84.2			84.2
Actuated g/C Ratio	0.23	0.23	0.65			0.65
Clearance Time (s)	7.0	7.0	8.0			8.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	750	321	2247			2269
v/s Ratio Prot	c0.18		c0.37			0.33
v/s Ratio Perm		0.18				
v/c Ratio	0.79	0.78	0.57			0.50
Uniform Delay, d1	46.7	46.6	12.3			11.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	5.7	11.7	1.0			0.8
Delay (s)	52.4	58.2	13.3			12.3
Level of Service	D	E	B			B
Approach Delay (s)	54.2		13.3			12.3
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	128.8	Sum of lost time (s)	15.0
Intersection Capacity Utilization	182.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

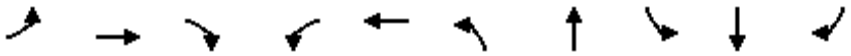
Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	440	203	1691	1383
v/c Ratio	0.81	0.67	0.66	0.54
Control Delay	64.3	43.4	11.7	9.7
Queue Delay	0.0	0.0	0.0	0.3
Total Delay	64.3	43.4	11.7	10.0
Queue Length 50th (m)	59.1	36.1	121.7	85.3
Queue Length 95th (m)	78.8	67.6	155.3	109.7
Internal Link Dist (m)	152.5		433.2	198.3
Turn Bay Length (m)				
Base Capacity (vph)	624	337	2569	2569
Starvation Cap Reductn	0	0	0	539
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.71	0.60	0.66	0.68

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	319	292	0	1606	1314	0
Future Volume (vph)	319	292	0	1606	1314	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.96	0.85		1.00	1.00	
Flt Protected	0.96	1.00		1.00	1.00	
Satd. Flow (prot)	3161	1427		3539	3539	
Flt Permitted	0.96	1.00		1.00	1.00	
Satd. Flow (perm)	3161	1427		3539	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	336	307	0	1691	1383	0
RTOR Reduction (vph)	23	68	0	0	0	0
Lane Group Flow (vph)	417	135	0	1691	1383	0
Heavy Vehicles (%)	10%	3%	0%	2%	2%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	22.3	22.3		99.1	99.1	
Effective Green, g (s)	22.3	22.3		99.1	99.1	
Actuated g/C Ratio	0.16	0.16		0.73	0.73	
Clearance Time (s)	8.0	8.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	516	233		2571	2571	
v/s Ratio Prot	c0.13			c0.48	0.39	
v/s Ratio Perm		0.09				
v/c Ratio	0.81	0.58		0.66	0.54	
Uniform Delay, d1	55.0	52.7		9.8	8.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.1	3.6		1.3	0.8	
Delay (s)	64.1	56.4		11.1	9.2	
Level of Service	E	E		B	A	
Approach Delay (s)	61.6			11.1	9.2	
Approach LOS	E			B	A	

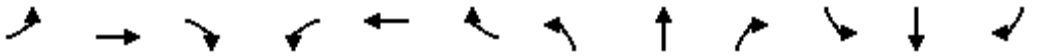
Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	136.4	Sum of lost time (s)	15.0
Intersection Capacity Utilization	182.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	362	74	262	83	161	374	636	91	746	749
v/c Ratio	0.81	0.13	0.39	0.49	0.34	0.81	0.41	0.24	0.64	0.83
Control Delay	51.6	20.8	4.6	43.4	27.0	28.8	16.6	11.8	27.4	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	20.8	4.6	43.4	27.0	28.8	16.6	11.8	27.4	16.5
Queue Length 50th (m)	30.4	8.8	0.0	13.0	10.0	31.3	35.3	6.4	54.6	23.8
Queue Length 95th (m)	#56.5	18.3	15.8	26.8	19.0	#84.5	55.0	14.9	80.3	#106.7
Internal Link Dist (m)		274.7			467.9		430.6		1282.4	
Turn Bay Length (m)	70.0		50.0	105.0		100.0		135.0		135.0
Base Capacity (vph)	446	761	804	294	786	460	1543	383	1165	900
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	0.81	0.10	0.33	0.28	0.20	0.81	0.41	0.24	0.64	0.83

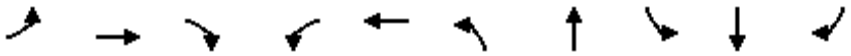
Intersection Summary

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



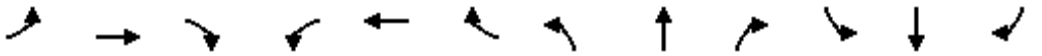
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	344	70	249	79	119	34	355	484	121	86	709	712
Future Volume (vph)	344	70	249	79	119	34	355	484	121	86	709	712
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0	6.0	6.0	6.0		4.5	6.0		4.5	6.0	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3502	1900	1615	1805	3473		1805	3406		1752	3610	1599
Flt Permitted	0.95	1.00	1.00	0.71	1.00		0.21	1.00		0.41	1.00	1.00
Satd. Flow (perm)	3502	1900	1615	1347	3473		394	3406		757	3610	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	362	74	262	83	125	36	374	509	127	91	746	749
RTOR Reduction (vph)	0	0	182	0	32	0	0	22	0	0	0	379
Lane Group Flow (vph)	362	74	80	83	129	0	374	614	0	91	746	370
Heavy Vehicles (%)	0%	0%	0%	0%	0%	2%	0%	3%	2%	3%	0%	1%
Turn Type	Prot	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	10.5	25.4	25.4	10.4	10.4		46.1	36.9		32.4	27.7	27.7
Effective Green, g (s)	10.5	25.4	25.4	10.4	10.4		46.1	36.9		32.4	27.7	27.7
Actuated g/C Ratio	0.13	0.30	0.30	0.12	0.12		0.55	0.44		0.39	0.33	0.33
Clearance Time (s)	4.5	6.0	6.0	6.0	6.0		4.5	6.0		4.5	6.0	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)	440	577	491	167	432		452	1505		349	1197	530
v/s Ratio Prot	c0.10	0.04			0.04		c0.14	0.18		0.01	0.21	
v/s Ratio Perm			0.05	c0.06			c0.32			0.09		0.23
v/c Ratio	0.82	0.13	0.16	0.50	0.30		0.83	0.41		0.26	0.62	0.70
Uniform Delay, d1	35.6	21.0	21.3	34.1	33.2		13.1	15.9		16.5	23.5	24.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.8	0.1	0.2	2.3	0.4		11.8	0.8		0.4	2.5	7.5
Delay (s)	47.4	21.1	21.4	36.4	33.6		24.9	16.7		16.9	26.0	31.7
Level of Service	D	C	C	D	C		C	B		B	C	C
Approach Delay (s)		34.8			34.6			19.7			28.2	
Approach LOS		C			C			B			C	

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)	83.5	Sum of lost time (s)	21.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	28	419	4	3	523	10	7	14	2	35
v/c Ratio	0.04	0.15	0.00	0.00	0.19	0.06	0.03	0.10	0.01	0.13
Control Delay	4.0	3.3	0.0	4.0	3.4	29.4	18.7	30.7	28.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	3.3	0.0	4.0	3.4	29.4	18.7	30.7	28.0	3.9
Queue Length 50th (m)	1.2	10.1	0.0	0.2	13.0	1.6	0.2	2.2	0.3	0.0
Queue Length 95th (m)	3.6	15.1	0.0	0.9	18.9	5.3	3.5	6.7	2.1	3.2
Internal Link Dist (m)		462.3			679.6		261.2		67.4	
Turn Bay Length (m)	145.0		65.0	30.0		20.0		25.0		25.0
Base Capacity (vph)	662	2748	1323	784	2815	337	427	264	485	462
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	0.04	0.15	0.00	0.00	0.19	0.03	0.02	0.05	0.00	0.08

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	402	4	3	499	3	10	1	6	13	2	34
Future Volume (vph)	27	402	4	3	499	3	10	1	6	13	2	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.87		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1687	3374	1615	1805	3456		1656	1656		1308	1900	1615
Flt Permitted	0.46	1.00	1.00	0.51	1.00		0.76	1.00		0.75	1.00	1.00
Satd. Flow (perm)	814	3374	1615	963	3456		1319	1656		1037	1900	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	28	419	4	3	520	3	10	1	6	14	2	35
RTOR Reduction (vph)	0	0	1	0	0	0	0	6	0	0	0	32
Lane Group Flow (vph)	28	419	3	3	523	0	10	1	0	14	2	3
Heavy Vehicles (%)	7%	7%	0%	0%	4%	67%	9%	0%	0%	38%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)	57.6	57.6	57.6	57.6	57.6		5.8	5.8		5.8	5.8	5.8
Effective Green, g (s)	57.6	57.6	57.6	57.6	57.6		5.8	5.8		5.8	5.8	5.8
Actuated g/C Ratio	0.74	0.74	0.74	0.74	0.74		0.07	0.07		0.07	0.07	0.07
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0		6.0	6.0		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	3.0	3.0
Lane Grp Cap (vph)	605	2510	1201	716	2571		98	124		77	142	121
v/s Ratio Prot		0.12			c0.15			0.00			0.00	
v/s Ratio Perm	0.03		0.00	0.00			0.01			c0.01		0.00
v/c Ratio	0.05	0.17	0.00	0.00	0.20		0.10	0.01		0.18	0.01	0.02
Uniform Delay, d1	2.6	2.9	2.5	2.5	3.0		33.4	33.1		33.6	33.2	33.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	0.0	0.0	0.2		0.5	0.0		1.1	0.0	0.1
Delay (s)	2.8	3.0	2.5	2.6	3.2		33.8	33.2		34.7	33.2	33.2
Level of Service	A	A	A	A	A		C	C		C	C	C
Approach Delay (s)		3.0			3.2			33.6			33.6	
Approach LOS		A			A			C			C	

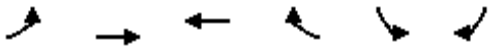
Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	NBL
Lane Group Flow (vph)	440	3	529	2
v/c Ratio	0.14	0.00	0.16	0.01
Control Delay	1.2	1.7	1.2	31.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	1.2	1.7	1.2	31.5
Queue Length 50th (m)	0.0	0.0	0.0	0.3
Queue Length 95th (m)	15.2	0.7	18.2	2.4
Internal Link Dist (m)	679.6		455.7	532.9
Turn Bay Length (m)		30.0		15.0
Base Capacity (vph)	3131	1527	3282	410
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.00	0.16	0.00

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	418	3	0	503	2	0
Future Volume (vph)	418	3	0	503	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0		8.0	6.0	
Lane Util. Factor	0.95	1.00		0.95	1.00	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	
Satd. Flow (prot)	3312	1615		3471	1805	
Flt Permitted	1.00	1.00		1.00	0.95	
Satd. Flow (perm)	3312	1615		3471	1805	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	440	3	0	529	2	0
RTOR Reduction (vph)	0	1	0	0	0	0
Lane Group Flow (vph)	440	2	0	529	2	0
Heavy Vehicles (%)	9%	0%	0%	4%	0%	0%
Turn Type	NA	Perm	Perm	NA	Perm	Perm
Protected Phases	4			8		
Permitted Phases		4	8		2	2
Actuated Green, G (s)	64.4	64.4		64.4	1.7	
Effective Green, g (s)	64.4	64.4		64.4	1.7	
Actuated g/C Ratio	0.80	0.80		0.80	0.02	
Clearance Time (s)	8.0	8.0		8.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	2662	1298		2790	38	
v/s Ratio Prot	0.13			c0.15		
v/s Ratio Perm		0.00			c0.00	
v/c Ratio	0.17	0.00		0.19	0.05	
Uniform Delay, d1	1.8	1.5		1.8	38.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.2	0.6	
Delay (s)	1.9	1.5		2.0	39.0	
Level of Service	A	A		A	D	
Approach Delay (s)	1.9			2.0	39.0	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	2.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	80.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	32	386	487	8	7	16
Future Volume (Veh/h)	32	386	487	8	7	16
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	34	411	518	9	7	17
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	527				792	259
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	527				792	259
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				98	98
cM capacity (veh/h)	1029				320	746

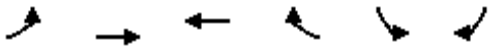
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	34	206	206	259	259	9	7	17
Volume Left	34	0	0	0	0	0	7	0
Volume Right	0	0	0	0	0	9	0	17
cSH	1029	1700	1700	1700	1700	1700	320	746
Volume to Capacity	0.03	0.12	0.12	0.15	0.15	0.01	0.02	0.02
Queue Length 95th (m)	0.8	0.0	0.0	0.0	0.0	0.0	0.5	0.6
Control Delay (s)	8.6	0.0	0.0	0.0	0.0	0.0	16.5	9.9
Lane LOS	A						C	A
Approach Delay (s)	0.7			0.0			11.9	
Approach LOS							B	

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	393	0	0	495	0	0
Future Volume (Veh/h)	393	0	0	495	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	423	0	0	532	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			423		689	212
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			423		689	212
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1147		384	800

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	212	212	0	0	266	266	0
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.12	0.12	0.00	0.00	0.16	0.16	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	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

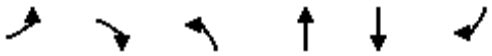
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	17.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	31	362	423	9	7	72
Future Volume (Veh/h)	31	362	423	9	7	72
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	33	389	455	10	8	77
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	465				716	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	465				716	228
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				98	90
cM capacity (veh/h)	1107				358	778

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1	SB 2
Volume Total	33	194	194	228	228	10	8	77
Volume Left	33	0	0	0	0	0	8	0
Volume Right	0	0	0	0	0	10	0	77
cSH	1107	1700	1700	1700	1700	1700	358	778
Volume to Capacity	0.03	0.11	0.11	0.13	0.13	0.01	0.02	0.10
Queue Length 95th (m)	0.7	0.0	0.0	0.0	0.0	0.0	0.5	2.6
Control Delay (s)	8.4	0.0	0.0	0.0	0.0	0.0	15.3	10.1
Lane LOS	A						C	B
Approach Delay (s)	0.7			0.0			10.6	
Approach LOS							B	

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	39	1	2	584	519	77
Future Volume (Veh/h)	39	1	2	584	519	77
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	40	1	2	602	535	79
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	880	307	535			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	880	307	535			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	86	100	100			
cM capacity (veh/h)	286	695	1043			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	203	401	357	257
Volume Left	40	2	0	0	0
Volume Right	1	0	0	0	79
cSH	290	1043	1700	1700	1700
Volume to Capacity	0.14	0.00	0.24	0.21	0.15
Queue Length 95th (m)	3.9	0.0	0.0	0.0	0.0
Control Delay (s)	19.4	0.1	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	19.4	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	36	252	96	654	348	56	91	518	935	72	469
v/c Ratio	0.16	0.48	0.27	1.02	0.31	0.10	0.39	0.36	0.92	0.16	0.36
Control Delay	26.2	51.4	2.5	89.8	33.1	0.3	58.6	26.8	26.7	15.7	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	51.4	2.5	89.8	33.1	0.3	58.6	26.8	26.7	15.7	29.7
Queue Length 50th (m)	5.6	31.6	0.0	~90.1	37.1	0.0	11.7	49.1	100.0	8.8	45.6
Queue Length 95th (m)	12.8	45.8	1.6	#130.3	51.2	0.0	20.2	66.1	#213.8	16.8	62.9
Internal Link Dist (m)		443.0			287.3			749.5			265.5
Turn Bay Length (m)	115.0		40.0	130.0		70.0	100.0		65.0		
Base Capacity (vph)	225	858	476	644	1375	683	235	1457	1021	448	1287
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.29	0.20	1.02	0.25	0.08	0.39	0.36	0.92	0.16	0.36

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)	35	242	92	628	334	54	87	497	898	69	440	11
Future Volume (vph)	35	242	92	628	334	54	87	497	898	69	440	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	
Frt	1.00	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	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1399	3252	1369	3502	3438	1538	2824	3505	1599	1736	3456	
Flt Permitted	0.54	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.45	1.00	
Satd. Flow (perm)	800	3252	1369	3502	3438	1538	2824	3505	1599	825	3456	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	36	252	96	654	348	56	91	518	935	72	458	11
RTOR Reduction (vph)	0	0	79	0	0	37	0	0	369	0	1	0
Lane Group Flow (vph)	36	252	17	654	348	19	91	518	566	72	468	0
Heavy Vehicles (%)	29%	11%	18%	0%	5%	5%	24%	3%	1%	4%	4%	8%
Turn Type	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4			8			2	6		
Actuated Green, G (s)	25.8	21.6	21.6	23.0	41.4	41.4	10.4	49.6	49.6	51.8	45.0	
Effective Green, g (s)	25.8	21.6	21.6	23.0	41.4	41.4	10.4	49.6	49.6	51.8	45.0	
Actuated g/C Ratio	0.21	0.17	0.17	0.18	0.33	0.33	0.08	0.40	0.40	0.41	0.36	
Clearance Time (s)	4.0	7.0	7.0	5.0	7.0	7.0	5.0	8.0	8.0	4.0	8.0	
Vehicle Extension (s)	3.0	3.0	3.0	4.0	3.0	3.0	4.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	185	561	236	644	1138	509	234	1390	634	391	1244	
v/s Ratio Prot	0.01	c0.08		c0.19	0.10		c0.03	0.15		0.01	0.14	
v/s Ratio Perm	0.03		0.01			0.01			c0.35	0.07		
v/c Ratio	0.19	0.45	0.07	1.02	0.31	0.04	0.39	0.37	0.89	0.18	0.38	
Uniform Delay, d1	40.4	46.4	43.3	51.0	31.1	28.3	54.3	26.7	35.2	22.4	29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.6	0.1	39.4	0.2	0.0	1.5	0.8	17.5	0.2	0.9	
Delay (s)	40.9	46.9	43.4	90.4	31.3	28.3	55.7	27.5	52.7	22.6	30.5	
Level of Service	D	D	D	F	C	C	E	C	D	C	C	
Approach Delay (s)		45.5			67.7			44.4			29.4	
Approach LOS		D			E			D			C	

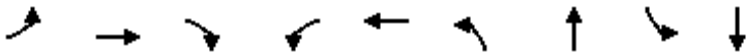
Intersection Summary			
HCM 2000 Control Delay	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	625	634	42	648	410	52
v/c Ratio	0.38	0.58	0.10	0.34	0.34	0.09
Control Delay	18.7	3.9	10.5	13.6	25.7	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	3.9	10.5	13.6	25.7	7.0
Queue Length 50th (m)	45.0	0.0	3.6	37.2	31.9	0.0
Queue Length 95th (m)	61.4	20.6	8.5	49.2	44.7	8.2
Internal Link Dist (m)	287.3			176.7	95.1	
Turn Bay Length (m)		130.0	45.0			40.0
Base Capacity (vph)	1643	1098	485	1892	1190	583
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	0.38	0.58	0.09	0.34	0.34	0.09

Intersection Summary

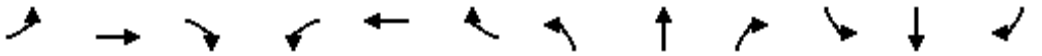
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	600	609	40	622	394	50
Future Volume (vph)	600	609	40	622	394	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3471	1615	1805	3505	3502	1615
Flt Permitted	1.00	1.00	0.34	1.00	0.95	1.00
Satd. Flow (perm)	3471	1615	638	3505	3502	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	625	634	42	648	410	52
RTOR Reduction (vph)	0	334	0	0	0	35
Lane Group Flow (vph)	625	300	42	648	410	17
Heavy Vehicles (%)	4%	0%	0%	3%	0%	0%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	47.3	47.3	55.6	55.6	32.4	32.4
Effective Green, g (s)	47.3	47.3	55.6	55.6	32.4	32.4
Actuated g/C Ratio	0.47	0.47	0.56	0.56	0.32	0.32
Clearance Time (s)	6.0	6.0	4.0	6.0	6.0	6.0
Vehicle Extension (s)	0.2	0.2	3.0	0.2	4.0	4.0
Lane Grp Cap (vph)	1641	763	404	1948	1134	523
v/s Ratio Prot	0.18		0.00	c0.18	c0.12	
v/s Ratio Perm		c0.19	0.05			0.01
v/c Ratio	0.38	0.39	0.10	0.33	0.36	0.03
Uniform Delay, d1	16.9	17.1	10.6	12.1	25.9	23.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	1.5	0.1	0.5	0.9	0.1
Delay (s)	17.6	18.6	10.7	12.6	26.8	23.2
Level of Service	B	B	B	B	C	C
Approach Delay (s)	18.1			12.4	26.4	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	131	504	29	161	437	167	214	17	118
v/c Ratio	0.27	0.40	0.04	0.34	0.33	0.45	0.29	0.07	0.28
Control Delay	15.8	27.8	0.1	16.6	25.9	51.9	6.3	38.2	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.8	27.8	0.1	16.6	25.9	51.9	6.3	38.2	14.4
Queue Length 50th (m)	15.0	44.5	0.0	18.7	36.8	19.1	4.4	3.2	5.2
Queue Length 95th (m)	27.3	65.3	0.0	32.6	54.4	31.0	20.5	10.1	21.9
Internal Link Dist (m)		176.7			846.8		194.1		472.6
Turn Bay Length (m)	105.0		55.0	30.0				20.0	
Base Capacity (vph)	535	1273	712	557	1341	496	796	252	428
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	0.24	0.40	0.04	0.29	0.33	0.34	0.27	0.07	0.28

Intersection Summary



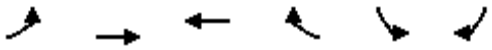
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	494	28	158	410	19	164	29	180	17	27	88
Future Volume (vph)	128	494	28	158	410	19	164	29	180	17	27	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0		7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.87		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3406	1615	1805	3519		3502	1655		1805	1683	
Flt Permitted	0.46	1.00	1.00	0.39	1.00		0.95	1.00		0.62	1.00	
Satd. Flow (perm)	853	3406	1615	743	3519		3502	1655		1186	1683	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	131	504	29	161	418	19	167	30	184	17	28	90
RTOR Reduction (vph)	0	0	18	0	2	0	0	114	0	0	71	0
Lane Group Flow (vph)	131	504	11	161	435	0	167	100	0	17	47	0
Heavy Vehicles (%)	2%	6%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases	4		4	8						6		
Actuated Green, G (s)	52.3	42.3	42.3	53.9	43.1		11.9	42.9		24.0	24.0	
Effective Green, g (s)	52.3	42.3	42.3	53.9	43.1		11.9	42.9		24.0	24.0	
Actuated g/C Ratio	0.46	0.37	0.37	0.48	0.38		0.11	0.38		0.21	0.21	
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0		7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	0.2	0.2	3.0	0.2		4.0	4.0		3.0	3.0	
Lane Grp Cap (vph)	475	1274	604	455	1342		368	628		251	357	
v/s Ratio Prot	0.02	c0.15		c0.03	0.12		c0.05	c0.06			0.03	
v/s Ratio Perm	0.10		0.01	0.13						0.01		
v/c Ratio	0.28	0.40	0.02	0.35	0.32		0.45	0.16		0.07	0.13	
Uniform Delay, d1	17.7	26.0	22.3	17.2	24.7		47.5	23.1		35.6	36.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.9	0.1	0.5	0.6		1.2	0.2		0.5	0.8	
Delay (s)	18.0	26.9	22.3	17.7	25.3		48.7	23.3		36.1	36.8	
Level of Service	B	C	C	B	C		D	C		D	D	
Approach Delay (s)		24.9			23.3			34.4			36.7	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	113.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	689	2	1	585	2	0
Future Volume (Veh/h)	689	2	1	585	2	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	741	2	1	629	2	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			743		1058	372
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			743		1058	372
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			873		223	632

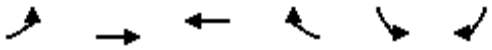
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	494	249	1	314	314	2	0
Volume Left	0	0	1	0	0	2	0
Volume Right	0	2	0	0	0	0	0
cSH	1700	1700	873	1700	1700	223	1700
Volume to Capacity	0.29	0.15	0.00	0.18	0.18	0.01	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Control Delay (s)	0.0	0.0	9.1	0.0	0.0	21.3	0.0
Lane LOS			A			C	A
Approach Delay (s)	0.0		0.0			21.3	
Approach LOS						C	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	29.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	95	629	525	284	296	85
v/c Ratio	0.23	0.39	0.41	0.37	0.42	0.13
Control Delay	14.7	18.0	25.8	4.6	24.6	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.7	18.0	25.8	4.6	24.6	4.9
Queue Length 50th (m)	9.9	42.2	42.8	0.0	43.3	0.0
Queue Length 95th (m)	18.7	56.1	60.5	18.0	66.7	9.4
Internal Link Dist (m)		501.4	674.5		3096.2	
Turn Bay Length (m)	65.0			75.0	90.0	
Base Capacity (vph)	442	1631	1294	765	703	675
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	0.21	0.39	0.41	0.37	0.42	0.13

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	91	604	504	273	284	82
Future Volume (vph)	91	604	504	273	284	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1719	3471	3539	1599	1805	1599
Flt Permitted	0.36	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	651	3471	3539	1599	1805	1599
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	95	629	525	284	296	85
RTOR Reduction (vph)	0	0	0	181	0	52
Lane Group Flow (vph)	95	629	525	103	296	33
Heavy Vehicles (%)	5%	4%	2%	1%	0%	1%
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	47.8	47.8	36.6	36.6	39.0	39.0
Effective Green, g (s)	47.8	47.8	36.6	36.6	39.0	39.0
Actuated g/C Ratio	0.47	0.47	0.36	0.36	0.39	0.39
Clearance Time (s)	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	0.2	0.2	0.2	3.0	3.0
Lane Grp Cap (vph)	384	1645	1284	580	698	618
v/s Ratio Prot	0.02	c0.18	c0.15		c0.16	
v/s Ratio Perm	0.10			0.06		0.02
v/c Ratio	0.25	0.38	0.41	0.18	0.42	0.05
Uniform Delay, d1	15.2	17.0	24.0	21.9	22.7	19.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.7	1.0	0.7	1.9	0.2
Delay (s)	15.5	17.7	25.0	22.5	24.5	19.5
Level of Service	B	B	C	C	C	B
Approach Delay (s)		17.4	24.1		23.4	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	756	199	100	639	197	144
v/c Ratio	0.70	0.31	0.31	0.42	0.29	0.20
Control Delay	27.7	4.7	13.0	15.4	20.1	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.7	4.7	13.0	15.4	20.1	4.7
Queue Length 50th (m)	55.0	0.0	8.0	33.7	20.7	0.0
Queue Length 95th (m)	76.4	13.9	15.6	45.7	44.1	12.4
Internal Link Dist (m)	674.5			176.7	143.5	
Turn Bay Length (m)		75.0	145.0		60.0	
Base Capacity (vph)	1990	1003	365	2663	684	707
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	0.38	0.20	0.27	0.24	0.29	0.20

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	703	185	93	594	183	134
Future Volume (vph)	703	185	93	594	183	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	4.0	7.0	7.0	7.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3505	1615	1787	3539	1787	1615
Flt Permitted	1.00	1.00	0.20	1.00	0.95	1.00
Satd. Flow (perm)	3505	1615	382	3539	1787	1615
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	756	199	100	639	197	144
RTOR Reduction (vph)	0	138	0	0	0	89
Lane Group Flow (vph)	756	61	100	639	197	55
Heavy Vehicles (%)	3%	0%	1%	2%	1%	0%
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Actuated Green, G (s)	23.7	23.7	34.1	34.1	29.4	29.4
Effective Green, g (s)	23.7	23.7	34.1	34.1	29.4	29.4
Actuated g/C Ratio	0.31	0.31	0.44	0.44	0.38	0.38
Clearance Time (s)	7.0	7.0	4.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1071	493	284	1557	677	612
v/s Ratio Prot	c0.22		0.03	c0.18	c0.11	
v/s Ratio Perm		0.04	0.13			0.03
v/c Ratio	0.71	0.12	0.35	0.41	0.29	0.09
Uniform Delay, d1	23.8	19.4	14.0	14.8	16.8	15.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.1	0.8	0.2	1.1	0.3
Delay (s)	26.0	19.5	14.8	15.0	17.9	15.7
Level of Service	C	B	B	B	B	B
Approach Delay (s)	24.6			15.0	17.0	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	77.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	655	240	430	704
v/c Ratio	0.69	0.43	0.27	0.43
Control Delay	25.5	5.5	12.2	13.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.5	5.5	12.2	13.6
Queue Length 50th (m)	38.5	0.0	17.0	30.4
Queue Length 95th (m)	54.4	15.7	30.7	51.6
Internal Link Dist (m)	390.4		415.8	504.8
Turn Bay Length (m)				
Base Capacity (vph)	1419	711	1599	1646
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.46	0.34	0.27	0.43

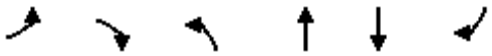
Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	609	259	417	0	0	683
Future Volume (vph)	609	259	417	0	0	683
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.2	8.2	9.3			9.3
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.99	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3488	1400	3438			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3488	1400	3438			3539
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	628	267	430	0	0	704
RTOR Reduction (vph)	4	175	0	0	0	0
Lane Group Flow (vph)	651	65	430	0	0	704
Heavy Vehicles (%)	0%	5%	5%	0%	0%	2%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	17.9	17.9	30.8			30.8
Effective Green, g (s)	17.9	17.9	30.8			30.8
Actuated g/C Ratio	0.27	0.27	0.47			0.47
Clearance Time (s)	8.2	8.2	9.3			9.3
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	943	378	1599			1646
v/s Ratio Prot	c0.19		0.13			c0.20
v/s Ratio Perm		0.05				
v/c Ratio	0.69	0.17	0.27			0.43
Uniform Delay, d1	21.7	18.5	10.8			11.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	2.1	0.2	0.4			0.8
Delay (s)	23.8	18.7	11.2			12.6
Level of Service	C	B	B			B
Approach Delay (s)	22.4		11.2			12.6
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	17.5
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	123	58	480	1095
v/c Ratio	0.27	0.23	0.18	0.41
Control Delay	17.7	10.9	4.1	5.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	17.7	10.9	4.1	5.3
Queue Length 50th (m)	4.2	0.0	11.3	32.2
Queue Length 95th (m)	11.3	10.4	16.5	43.4
Internal Link Dist (m)	305.5		1282.4	415.8
Turn Bay Length (m)				
Base Capacity (vph)	626	330	2633	2659
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.20	0.18	0.18	0.41

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	64	115	0	475	1084	0
Future Volume (vph)	64	115	0	475	1084	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		7.4	7.4	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.93	0.85		1.00	1.00	
Flt Protected	0.97	1.00		1.00	1.00	
Satd. Flow (prot)	3004	1470		3539	3574	
Flt Permitted	0.97	1.00		1.00	1.00	
Satd. Flow (perm)	3004	1470		3539	3574	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	65	116	0	480	1095	0
RTOR Reduction (vph)	52	52	0	0	0	0
Lane Group Flow (vph)	71	6	0	480	1095	0
Heavy Vehicles (%)	21%	0%	0%	2%	1%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	7.9	7.9		52.5	52.5	
Effective Green, g (s)	7.9	7.9		52.5	52.5	
Actuated g/C Ratio	0.11	0.11		0.71	0.71	
Clearance Time (s)	6.0	6.0		7.4	7.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	321	157		2517	2542	
v/s Ratio Prot	c0.02			0.14	c0.31	
v/s Ratio Perm		0.00				
v/c Ratio	0.22	0.04		0.19	0.43	
Uniform Delay, d1	30.1	29.5		3.6	4.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.1		0.2	0.5	
Delay (s)	30.5	29.7		3.7	5.0	
Level of Service	C	C		A	A	
Approach Delay (s)	30.2			3.7	5.0	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	73.8	Sum of lost time (s)	13.4
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	439	301	910	1166
v/c Ratio	0.62	0.80	0.37	0.48
Control Delay	29.0	37.4	7.9	9.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	29.0	37.4	7.9	9.0
Queue Length 50th (m)	29.2	36.8	34.3	48.8
Queue Length 95th (m)	44.4	70.8	65.2	91.7
Internal Link Dist (m)	383.1		312.7	749.5
Turn Bay Length (m)				
Base Capacity (vph)	1407	679	2430	2407
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.37	0.48

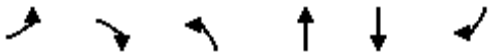
Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	135	590	892	0	0	1143
Future Volume (vph)	135	590	892	0	0	1143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0			6.0
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.90	0.85	1.00			1.00
Flt Protected	0.98	1.00	1.00			1.00
Satd. Flow (prot)	3172	1441	3539			3505
Flt Permitted	0.98	1.00	1.00			1.00
Satd. Flow (perm)	3172	1441	3539			3505
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	138	602	910	0	0	1166
RTOR Reduction (vph)	103	103	0	0	0	0
Lane Group Flow (vph)	336	198	910	0	0	1166
Heavy Vehicles (%)	4%	2%	2%	0%	0%	3%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	18.6	18.6	67.3			67.3
Effective Green, g (s)	18.6	18.6	67.3			67.3
Actuated g/C Ratio	0.19	0.19	0.69			0.69
Clearance Time (s)	6.0	6.0	6.0			6.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	602	273	2432			2409
v/s Ratio Prot	0.11		0.26			c0.33
v/s Ratio Perm		c0.14				
v/c Ratio	0.56	0.73	0.37			0.48
Uniform Delay, d1	35.9	37.3	6.4			7.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	1.1	9.2	0.4			0.7
Delay (s)	37.1	46.5	6.9			7.9
Level of Service	D	D	A			A
Approach Delay (s)	40.9		6.9			7.9
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	348	160	1355	621
v/c Ratio	0.69	0.47	0.51	0.23
Control Delay	48.4	11.4	6.4	4.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	48.4	11.4	6.4	4.4
Queue Length 50th (m)	35.6	0.0	53.7	18.2
Queue Length 95th (m)	51.1	20.4	81.7	29.4
Internal Link Dist (m)	204.3		1138.2	312.7
Turn Bay Length (m)				
Base Capacity (vph)	779	442	2633	2684
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.36	0.51	0.23

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	244	224	0	1247	571	0
Future Volume (vph)	244	224	0	1247	571	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.0	6.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.96	0.85		1.00	1.00	
Flt Protected	0.96	1.00		1.00	1.00	
Satd. Flow (prot)	3341	1413		3471	3539	
Flt Permitted	0.96	1.00		1.00	1.00	
Satd. Flow (perm)	3341	1413		3471	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	265	243	0	1355	621	0
RTOR Reduction (vph)	28	137	0	0	0	0
Lane Group Flow (vph)	320	23	0	1355	621	0
Heavy Vehicles (%)	2%	4%	0%	4%	2%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	15.7	15.7		84.1	84.1	
Effective Green, g (s)	15.7	15.7		84.1	84.1	
Actuated g/C Ratio	0.14	0.14		0.76	0.76	
Clearance Time (s)	5.0	5.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	473	200		2634	2686	
v/s Ratio Prot	c0.10			c0.39	0.18	
v/s Ratio Perm		0.02				
v/c Ratio	0.68	0.11		0.51	0.23	
Uniform Delay, d1	45.1	41.5		5.3	3.9	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.8	0.3		0.7	0.2	
Delay (s)	48.9	41.7		6.0	4.1	
Level of Service	D	D		A	A	
Approach Delay (s)	46.7			6.0	4.1	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	110.8	Sum of lost time (s)	11.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	681	250	668	814
v/c Ratio	0.83	0.49	0.30	0.37
Control Delay	50.2	7.7	10.8	11.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	50.2	7.7	10.8	11.5
Queue Length 50th (m)	78.6	0.0	36.5	47.0
Queue Length 95th (m)	100.5	22.8	51.6	65.3
Internal Link Dist (m)	284.7		32.1	320.2
Turn Bay Length (m)				
Base Capacity (vph)	974	558	2216	2195
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.70	0.45	0.30	0.37

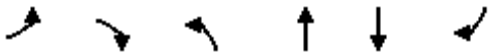
Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	633	270	648	0	0	790
Future Volume (vph)	633	270	648	0	0	790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	8.0			8.0
Lane Util. Factor	0.97	0.91	0.95			0.95
Frt	0.99	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3383	1324	3539			3505
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3383	1324	3539			3505
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	653	278	668	0	0	814
RTOR Reduction (vph)	3	189	0	0	0	0
Lane Group Flow (vph)	678	61	668	0	0	814
Heavy Vehicles (%)	3%	11%	2%	0%	0%	3%
Turn Type	Prot	Perm	NA			NA
Protected Phases	8		2			6
Permitted Phases		8				
Actuated Green, G (s)	28.0	28.0	72.1			72.1
Effective Green, g (s)	28.0	28.0	72.1			72.1
Actuated g/C Ratio	0.24	0.24	0.63			0.63
Clearance Time (s)	7.0	7.0	8.0			8.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	822	322	2216			2195
v/s Ratio Prot	c0.20		0.19			c0.23
v/s Ratio Perm		0.05				
v/c Ratio	0.82	0.19	0.30			0.37
Uniform Delay, d1	41.2	34.5	9.9			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	6.8	0.3	0.4			0.5
Delay (s)	48.0	34.8	10.3			10.9
Level of Service	D	C	B			B
Approach Delay (s)	44.5		10.3			10.9
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	115.1	Sum of lost time (s)	15.0
Intersection Capacity Utilization	157.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	330	157	787	1073
v/c Ratio	0.69	0.54	0.29	0.40
Control Delay	36.8	17.1	5.0	5.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.8	17.1	5.0	5.7
Queue Length 50th (m)	23.0	3.6	25.4	38.8
Queue Length 95th (m)	38.4	25.6	39.7	58.9
Internal Link Dist (m)	152.5		433.2	198.3
Turn Bay Length (m)				
Base Capacity (vph)	740	402	2682	2682
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.39	0.29	0.40

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	193	284	0	771	1052	0
Future Volume (vph)	193	284	0	771	1052	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.94	0.85		1.00	1.00	
Flt Protected	0.97	1.00		1.00	1.00	
Satd. Flow (prot)	3215	1455		3574	3574	
Flt Permitted	0.97	1.00		1.00	1.00	
Satd. Flow (perm)	3215	1455		3574	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	197	290	0	787	1073	0
RTOR Reduction (vph)	111	125	0	0	0	0
Lane Group Flow (vph)	219	32	0	787	1073	0
Heavy Vehicles (%)	7%	1%	0%	1%	1%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	12.6	12.6		83.1	83.1	
Effective Green, g (s)	12.6	12.6		83.1	83.1	
Actuated g/C Ratio	0.11	0.11		0.75	0.75	
Clearance Time (s)	8.0	8.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	365	165		2682	2682	
v/s Ratio Prot	c0.07			0.22	c0.30	
v/s Ratio Perm		0.02				
v/c Ratio	0.60	0.19		0.29	0.40	
Uniform Delay, d1	46.7	44.4		4.4	4.9	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	0.6		0.3	0.4	
Delay (s)	49.4	45.0		4.7	5.4	
Level of Service	D	D		A	A	
Approach Delay (s)	48.0			4.7	5.4	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	110.7	Sum of lost time (s)	15.0
Intersection Capacity Utilization	157.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			