



**Mixed-Use Development,
Boucher Street & Fuller Street,
Meaford, ON
Transportation Impact
and Parking Study**

Paradigm Transportation Solutions Limited

August 2021
200616



Project Summary



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Mixed-Use Development, Boucher Street & Fuller Street, Meaford, ON Transportation Impact and Parking Study

A handwritten signature in blue ink, appearing to read "Erica Bayley", with a period at the end.

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Executive Summary

Content

Paradigm Transportation Solutions Limited (Paradigm) was retained to carry out this Transportation Impact Study (TIS) and Parking Study (PS) for a proposed mixed-use development at Boucher Street and Fuller Street in the Municipality of Meaford, Ontario.

This TIS includes an analysis of existing traffic conditions, a description of the proposed development traffic, traffic forecasts for a five-year horizon from assumed full build-out (Year 2028), estimates of the parking demand generated by the subject site and establish the number of on-site parking spaces, and any recommended required to improve future traffic conditions. This report evaluates off-season AM and PM analysis periods and peak-season Saturday analysis period.

Development Concept

The subject site is located on the north-east corner of Boucher Street East and Fuller Street. The property owner is proposing a mixed-used development with 109 townhouses, 60 apartment units, and a 78-room hotel.

Vehicle access is proposed via two all-moves accesses to Fuller Street and one all-moves access to Boucher Street East. 13 of the townhouses will have direct driveway access onto Fuller Street and eight of the townhouses will have direct driveway access onto Boucher Street East.

Conclusions

Based on the investigations carried out, it is concluded that:

Transportation Impact Assessment

- ▶ **Existing Traffic Conditions:** The study area intersections are currently operating within acceptable levels of service with no critical movements during the AM, PM, and Saturday peak hours.
- ▶ **Development Trip Generation:** the residential development is forecast to generate approximately 107, 123, and 174 trips during the AM, PM, and Saturday peak hours, respectively.
- ▶ **2028 Background Traffic Conditions:** the study area intersections are forecast to operate within acceptable levels of service with no specific problem movements.



- ▶ **2028 Total Traffic Conditions:** the study area intersections are forecast to continue to operate within acceptable levels of service with no specific problem movements.
- ▶ The new driveway connections to Fuller Street and Boucher Street are forecast to operate within acceptable level of services during the AM, PM, and Saturday peak hours.
- ▶ The addition of the site generated traffic increases the overall delay at the study area intersections by five (5) seconds or less during the AM and PM peak hours.
- ▶ **Turn Lane Analysis:** left-turn lanes on Fuller Street and Boucher Street at the site accesses are not warranted during 2028 total traffic conditions.
- ▶ Any speeding concerns can be addressed by Town staff through traffic calming measures with public engagement to determine the most appropriate measures to implement to reduce vehicle speeds and improve safety for all users.

Parking Study

- ▶ The proposed parking supply for the development is 335 spaces. This includes 75 spaces for the apartment building, 134 spaces for the stacked townhouses, 42 spaces for the street townhouses and 70 spaces for the hotel. There are -161 underground parking spaces split between the apartments, stacked townhouses, and hotel. The street townhouses have one driveway and garage per unit.
- ▶ The Municipality's Zoning By-law requires 1.5 parking spaces per unit for residential multiple dwelling buildings and 1.0 parking spaces per room for a hotel, for a total parking requirement of 347 parking spaces. The proposed development parking supply of 335 can be considered adequate.
- ▶ Parking surveys conducted at similar sites indicate a peak parking demand rate of 0.9 spaces per unit for residential townhouse and apartment buildings and a peak rate of 0.75 spaces per hotel room.
- ▶ Auto-ownership rates for townhouses in small municipalities with none or limited public transit indicates an average rate of 1.33 vehicles per townhouse which is less than the zoning requirement of 1.5 spaces per townhouse. The average auto-ownership rates for apartments is 0.82 vehicles per apartment which is less than the zoning requirement of 1.5 spaces per apartment.



- ▶ Providing additional parking is not recommended, but rather supporting the reduction through a Transportation Demand Management (TDM) program that includes the following key measures:
 - Limited parking supply.
 - Provision of short-term and long-term bicycle parking; and
 - Consider parking to be unbundled from the cost of a unit.

Recommendations

Based on the findings of this study, it is recommended that the development be approved with no requirement for off-site transportation improvements.



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1 Introduction

1.1 Overview

Paradigm Transportation Solutions Limited (Paradigm) was retained to conduct this Transportation Impact and Parking Study for a proposed mixed-use development located in the north-east corner of the Boucher Street East and Fuller Street intersection in Meaford, Ontario. **Figure 1.1** illustrates the subject development location.

1.2 Purpose and Scope

The purpose of this report is to identify and assess the potential traffic impact resulting from the proposed development. The scope of the study, developed in consultation with the Municipality of Meaford in December 2020 includes:

- ▶ Assessment of the current traffic and site conditions within the study area;
- ▶ AM and PM off-season and Saturday peak-season analysis periods;
- ▶ Estimates of background traffic growth for five years beyond the expected year of completion (2028);
- ▶ Estimates of additional traffic generated by the subject site;
- ▶ Analyses of the impact of the future traffic on the surrounding road network;
- ▶ Recommendations necessary to mitigate the site generated traffic in a satisfactory manner; and
- ▶ Estimate the parking demand generated by the subject site and establish the number of required on-site parking spaces.

The pre-study consultation identified the following study area intersections:

- ▶ North Sykes Street (Highway 26) and Trowbridge Street (signalized);
- ▶ South Sykes Street (Highway 26) and Boucher Street (unsignalized);
- ▶ St. Vincent Street and Bridge Street (unsignalized);
- ▶ St. Vincent Street and Boucher Street East (unsignalized);
- ▶ Bridge Street and Fuller Street (unsignalized);
- ▶ Boucher Street East and Fuller Street (unsignalized); and



- ▶ Up to six new driveway connections to Boucher Street East and Fuller Street.

Appendix A contains the pre-study consultation material and responses from the Municipality of Meaford.





Development Location

Figure 1.1

2 Existing Conditions

2.1 Existing Roadways

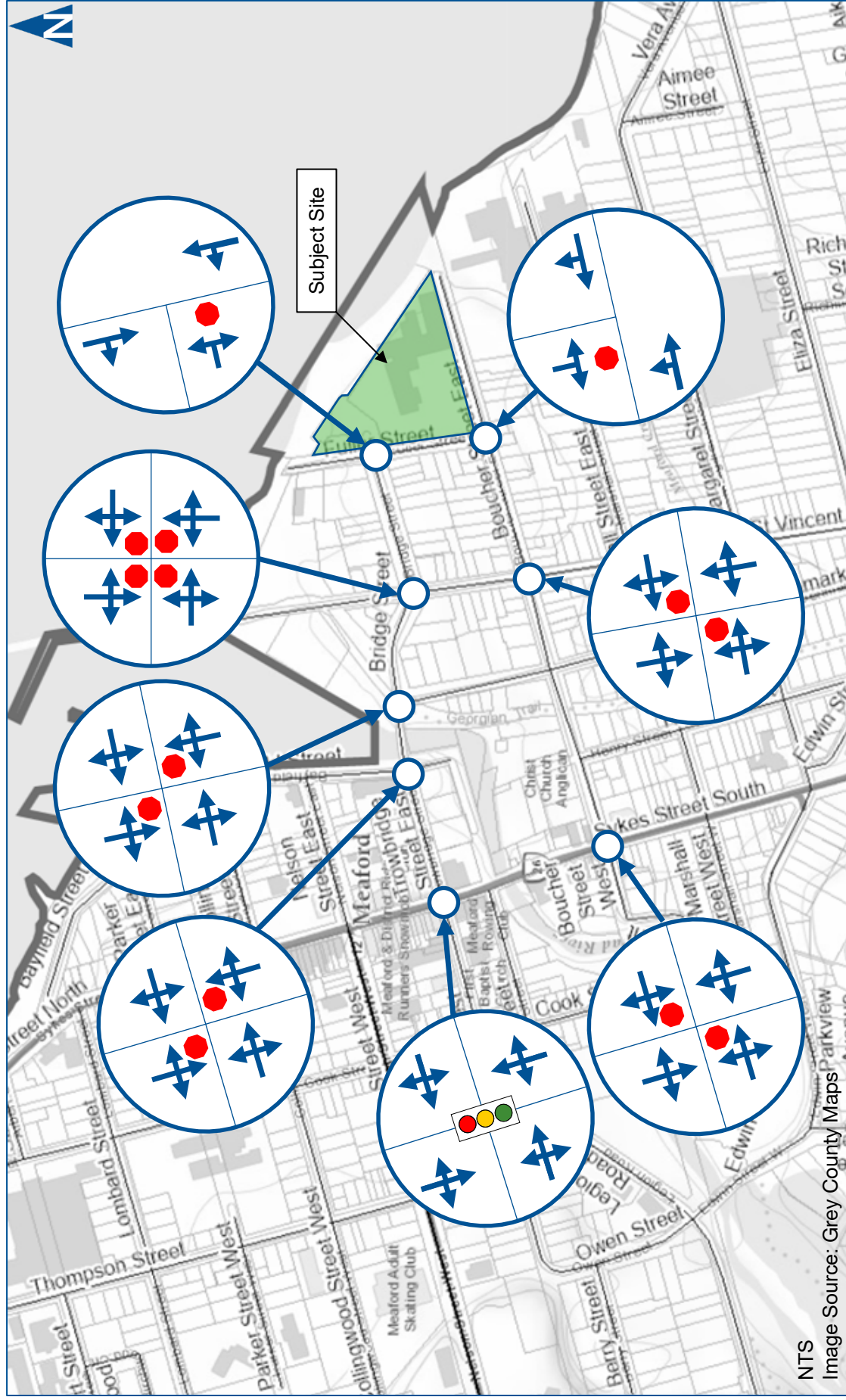
The main roadways under the jurisdiction of the Municipality of Meaford¹ near the subject site include:

- ▶ **Sykes Street** is part of the Provincial highway network, however, through Meaford the highway is part of the Connecting Links program which falls under the jurisdiction of the Municipality. In the study area the road runs north-south with a posted speed limit of 50 km/h. Sykes Street has a two-lane urban cross-section with sidewalks provided on both sides of the roadway.
- ▶ **Trowbridge Street/Bridge Street** is an east-west local road with a speed limit of 50 km/h. It transitions from Trowbridge Street to Bridge Street at Bayfield Street. It has a two-lane cross-section with sidewalks provided on both sides of the roadway from North Sykes Street to Bayfield Street. East of Bayfield Street the sidewalk is located on the south side of the roadway.
- ▶ **Boucher Street** is an east-west local road with a speed limit of 50 km/h. It has a two-lane cross-section with sidewalks provided on both sides of the roadway for most of its length. East of Fuller Street, Boucher Street terminates in a dead end with no further outlets.
- ▶ **Fuller Street** is a north-south local road with a speed limit of 50 km/h. It has a two-lane cross-section with a sidewalk provided on the west side of the roadway between Boucher Street and Bridge Street. Fuller Street officially terminates north of Bridge Street, however, access to Meaford Harbour and David Johnston Park is provided.

Figure 2.1 details the existing traffic control and lane configuration at the study area intersections.

¹ Municipality of Meaford Official Plan Schedule C-1 Transportation





Existing Lane Configuration & Traffic Control

2.2 Traffic Volumes

Due to the 2020 Covid-19 pandemic and the actions of the Federal and Provincial governments enacting such measures as school closures, travel bans and implementing many other physical distancing strategies, there has been a significant impact on travel demands and typical travel patterns.

Paradigm undertook weekday AM and PM peak hour turning movement counts at the study area intersections on Thursday 28 January 2021. The observed counts were compared to midblock count data collected by the Municipality in 2019 and 2020. **Table 2.1** compares the AM and PM peak hours between the two sources. It indicates that for most of the road segments, the counts in January 2021 are higher than the previous traffic counts. Where the previous counts are higher, they are only higher by less than 10 vehicles (with a couple of exceptions). Therefore, it was determined that the traffic volumes collected in January 2021 would be used in the analysis as it presents the most conservative approach. This method was supported by the Municipality during pre-consultation.

Paradigm undertook summer weekend peak hour turning movement counts at the study area intersections on Saturday 10 July 2021. This date was confirmed with the City as representative of peak summer weekend conditions.

Figure 2.2A and **Figure 2.2B** displays the existing January 2021 AM and PM weekday peak hour turning movement traffic volumes. **Figure 2.2C** displays the existing July 2021 Summer Saturday peak hour turning movement traffic volumes. Raw count data were balanced to ensure consistent flows between intersections.

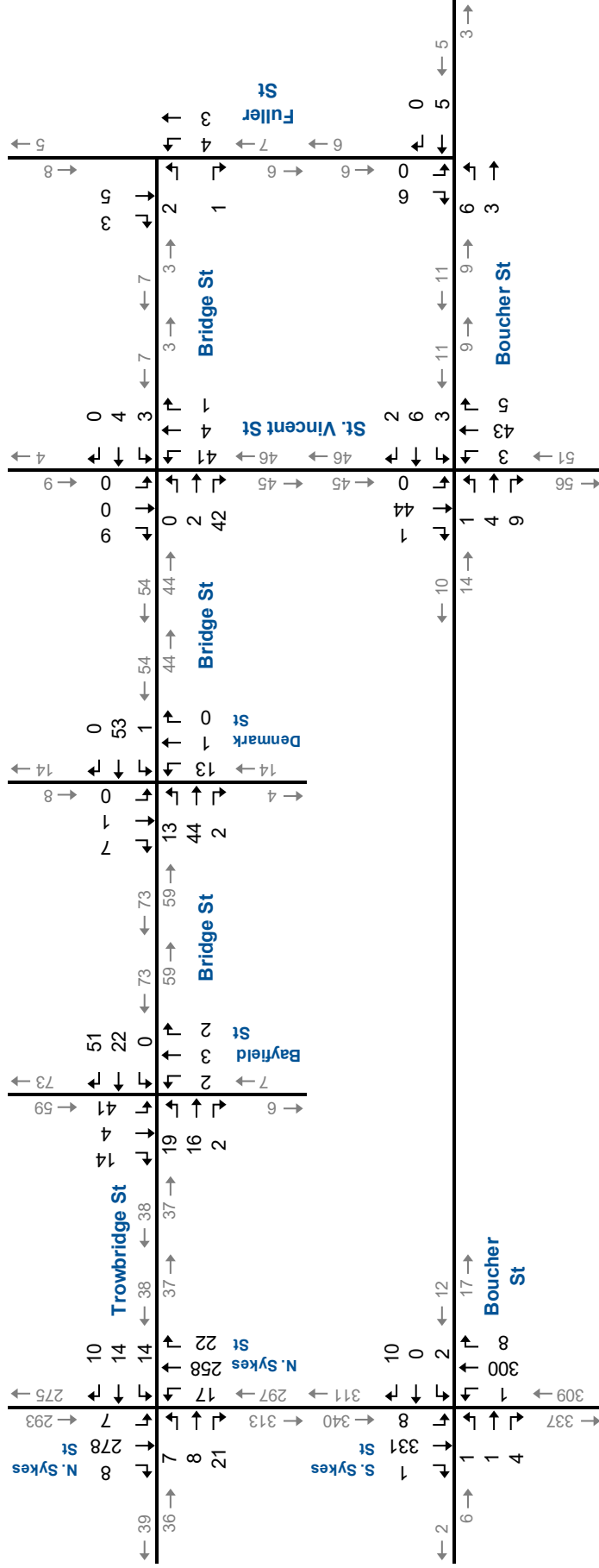
Appendix B contains the detailed traffic counts for the study area intersections.



TABLE 2.1: TRAFFIC VOLUME COMPARISON

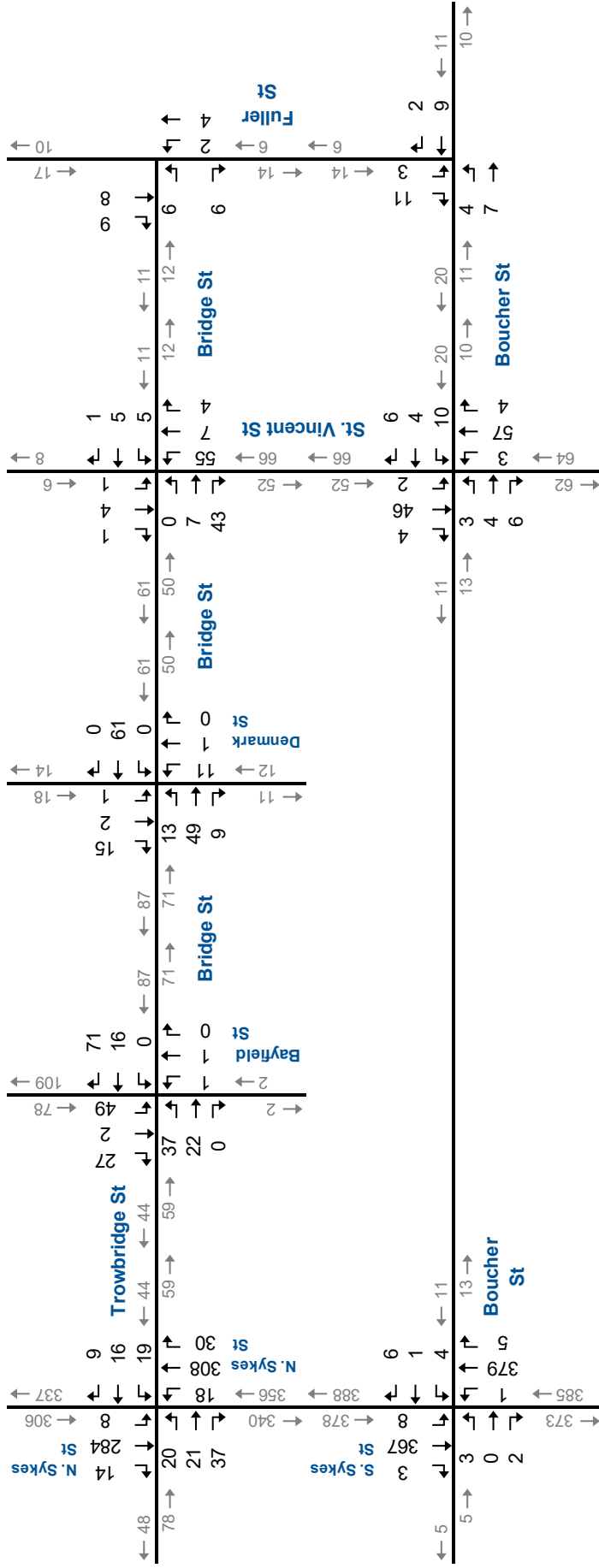
	Road	From	To	AM Peak Hour				PM Peak Hour			
				NB	SB	EB	WB	NB	SB	EB	WB
ADT provided by Meaford	Bayfield St	Nelson St	Trowbridge St	24	30			28	28		
	Bayfield St	Trowbridge St	End	3	5			6	5		
	Trowbridge St	Sykes St	Bayfield St			27	32			37	35
	Sykes St	Nelson St	Trowbridge St	197	219			224	225		
	Sykes St	Trowbridge St	Berry S	244	256			269	270		
	Sykes St	Berry St	Boucher St	294	302			355	354		
	Bridge St	Denmark St	St. Vincent St			2	6			5	10
	Bridge St	St. Vincent St	Fuller St			8	6			13	6
	Boucher St	St. Vincent St	Fuller St			11	16			14	13
	Boucher St	Fuller St	END			3	6			5	4
	Denmark St	Trowbridge St	Boucher St	11	21			10	18		
	Fuller St	END	Bridge St	6	4			7	6		
	Fuller St	Bridge St	Boucher St	6	9			6	9		
Peak Hour TMC - 28 Jan 2021	Bayfield St	Nelson St	Trowbridge St	68	59			107	74		
	Bayfield St	Trowbridge St	End	7	6			2	2		
	Trowbridge St	Sykes St	Bayfield St			37	38			59	44
	Sykes St	Nelson St	Trowbridge St	275	293			337	306		
	Sykes St	Trowbridge St	Berry S	297	312			356	340		
	Sykes St	Berry St	Boucher St	311	340			388	378		
	Bridge St	Denmark St	St. Vincent St			23	47			51	61
	Bridge St	St. Vincent St	Fuller St			3	7			12	11
	Boucher St	St. Vincent St	Fuller St			8	11			17	21
	Boucher St	Fuller St	END			1	3			9	10
	Denmark St	Trowbridge St	Boucher St	12	3			12	11		
	Fuller St	END	Bridge St	3	6			7	11		
	Fuller St	Bridge St	Boucher St	5	6			6	14		
Difference (TMC - ADT)	Bayfield St	Nelson St	Trowbridge St	44	29			79	46		
	Bayfield St	Trowbridge St	End	4	1			-4	-3		
	Trowbridge St	Sykes St	Bayfield St			10	6			22	9
	Sykes St	Nelson St	Trowbridge St	78	74			113	81		
	Sykes St	Trowbridge St	Berry S	53	56			87	70		
	Sykes St	Berry St	Boucher St	17	38			33	24		
	Bridge St	Denmark St	St. Vincent St			21	41			46	51
	Bridge St	St. Vincent St	Fuller St			-5	1			-1	5
	Boucher St	St. Vincent St	Fuller St			-3	-5			3	8
	Boucher St	Fuller St	END			-2	-3			4	6
	Denmark St	Trowbridge St	Boucher St	1	-18			2	-7		
	Fuller St	END	Bridge St	-3	2			0	5		
	Fuller St	Bridge St	Boucher St	-1	-3			0	5		





2021 Existing Traffic Volumes AM Peak Hour

Figure 2.2A



2021 Existing Traffic Volumes PM Peak Hour



Boucher Street & Fuller Street, Meaford TIS & PS
200616

This map illustrates the downtown area of St. John's, Newfoundland, with a focus on the streets of Boucher St, Bridge St, and Trowbridge St. The map includes various bus routes and stops, indicated by numbers and arrows. Key streets shown include Boucher St, Bridge St, Trowbridge St, and several smaller streets like Denmark St, Bayfield St, and N. Sykes St. The map also shows the locations of various bus stops, such as 'Boucher St' and 'Bridge St' stops, and the 'Trowbridge St' stop. The map is oriented with North at the top, and the streets are labeled in blue text. The bus routes are indicated by numbers and arrows, showing the direction of travel. The map is a detailed representation of the downtown area, showing the layout of the streets and the locations of the bus stops.

2.3 Transit Network

Figure 2.3 illustrates the existing Grey Transit Route (GTR)² that currently operate in Meaford:

- ▶ **Route 3** operates between Owen Sound and Meaford from Wednesday to Sunday. There are five eastbound departures and four westbound departures throughout the day between 6:30 AM and 7:35 PM.
- ▶ **Route 4** operates between Meaford and the Town of Blue Mountains from Wednesday to Sunday. There are four eastbound and westbound departures between 7:04 AM and 8:58 PM.

The bus stop is located at the North Sykes Street (Highway 26) and Nelson Street intersection which is approximately 750 metres (a 9-minute walk) to the Bridge Street and Fuller Street intersection.

2.4 Active Transportation

2.4.1 Pedestrian

Sidewalks are provided on at least one side of all roadways in the study area. There are pedestrian signals and painted crosswalks at the North Sykes Street and Trowbridge intersection.

The subject site is located approximately 600 metres (8 minute walk) to the Downtown area.

2.3.2 Cycling

No cycling infrastructure is noted along the roadways within the study area. Travel by bicycle to/from the subject site is not restricted by any access-controlled roadways. Cyclists are permitted to ride on all roadways in the study area.

The Georgian Trail offers off-road cycling and walking connections from the intersection of Bridge Street and Denmark Street southwards.

² [Grey Transit Route | County of Grey - Colour It Your Way](#)





Existing Transit Network

Fuller Street, Meaford TIS & PS

Figure 2.3

2.5 Traffic Operations

2.5.1 Midblock Analysis

Table 2.2 shows the existing 2021 peak hour midblock volume to capacity (v/c) ratios for the study area roads based on the traffic volumes shown in **Figure 2.2**.

During the AM peak hour, the highest v/c ratio on Trowbridge Street/Bridge Street occur between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.10. The highest v/c ratio on Boucher Street occur between South Sykes Street and St. Vincent Street in both the eastbound and westbound directions with v/c ratios of 0.02. The highest v/c ratio on Fuller Street is 0.01 which occurs in all segments in both directions. The v/c ratio indicates that there is significant capacity available on the study area roads during the AM peak hour.

In the PM peak hour, the highest v/c ratio of Trowbridge Street/Bridge Street occur between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.12. The highest v/c ratio on Boucher Street occur between Fuller Street and St. Vincent Street in the westbound direction with a v/c ratio of 0.03. The highest v/c ratio of Fuller Street occurs in the southbound direction for all segments with a v/c ratio of 0.02. The v/c ratio indicates that there is significant capacity available on the study area roads during the PM peak hour.

In the Summer Saturday peak hour, the highest v/c ratio of Trowbridge Street/Bridge Street occurs between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.20. The v/c ratios indicate that there is significant peak hour capacity available on the study area roads during the Summer Saturday peak hour.

Transportation Association of Canada (TAC)³ identifies 1,000 or less vehicles per day for local residential roads and 8,000 or less for residential collector roads. Typical Traffic Engineering standards to calculate daily traffic volumes assume PM peak hour volumes to be 10 per cent of total daily traffic. Based on the existing PM peak hour traffic volumes, Bridge Street between Fuller Street and St. Vincent Street is currently experiencing 230 vehicles per day, Fuller Street between Boucher Street and Bridge Street at 200 vehicles per day, and Boucher Street between Fuller Street and St. Vincent Street at 310-vehicles per day. The daily volumes are less than the 1,000 vehicles per day threshold for local residential streets.

³ Transportation Association of Canada, Geometric Design Guide for Canadian Roads, Table 2.6.5: Characteristics of Urban Roads, June 2017



TABLE 2.2: 2021 EXISTING MIDBLOCK CAPACITY ANALYSIS

Road Section		Capacity	2021 Existing Traffic					
			AM Peak Hour		PM Peak Hour		SAT Peak Hour	
From	To		Volume	v/c Ratio	Volume	v/c Ratio	Volume	v/c Ratio
Trowbridge Street/Bridge Street - Eastbound								
North Sykes Street	Bayfield Street	700	37	0.05	59	0.08	88	0.13
Bayfield Street	Denmark Street	700	59	0.08	71	0.10	121	0.17
Denmark Street	St.Vincent Street	700	44	0.06	50	0.07	57	0.08
St. Vincent Street	Fuller Street	700	3	0.00	12	0.02	18	0.03
Trowbridge Street/Bridge Street - Westbound								
Fuller Street	St.Vincent Street	700	7	0.01	11	0.02	5	0.01
St. Vincent Street	Denmark Street	700	54	0.08	61	0.09	58	0.08
Denmark Street	Bayfield Street	700	73	0.10	87	0.12	138	0.20
Bayfield Street	North Sykes Street	700	38	0.05	44	0.06	73	0.10
Boucher Street - Eastbound								
South Sykes Street	St.Vincent Street	700	17	0.02	13	0.02	23	0.03
St. Vincent Street	Fuller Street	700	9	0.01	11	0.02	23	0.03
Fuller Street	End	700	3	0.00	10	0.01	11	0.02
Boucher Street - Westbound								
End	Fuller Street	700	5	0.01	11	0.02	11	0.02
Fuller Street	St.Vincent Street	700	11	0.02	20	0.03	22	0.03
St. Vincent Street	South Sykes Street	700	12	0.02	11	0.02	15	0.02
Fuller Street - Northbound								
Boucher Street	Bridge Street	700	7	0.01	6	0.01	8	0.01
Bridge Street	End	700	5	0.01	10	0.01	13	0.02
Fuller Street - Southbound								
End	Bridge Street	700	8	0.01	17	0.02	12	0.02
Bridge Street	Boucher Street	700	6	0.01	14	0.02	21	0.03



2.5.2 Intersection Analysis

Intersection level of service (LOS) is a recognized method of quantifying the average delay experienced by drivers at intersections. It is based on the delay experienced by individual vehicles executing the various movements. The delay is related to the number of vehicles intending to make a particular movement, compared to the estimated capacity for that movement. The capacity is based on a number of criteria related to the opposing traffic flows and intersection geometry.

The highest possible rating is LOS A, under which the average total delay is equal or less than 10.0 seconds per vehicle. When the average delay exceeds 80 seconds for signalized intersections, 50 seconds for unsignalized intersections or when the volume to capacity ratio is greater than 1.0, the movement is classed as LOS F and remedial measures are usually implemented if they are feasible. LOS E is usually used as a guideline for the determination of road improvement needs on through lanes, while LOS F may be acceptable for left-turn movements at peak times, depending on delays.

The operations of the study intersections were evaluated using the existing lane configurations, traffic controls and the existing traffic peak volumes.

The level of service conditions on the existing road network have been assessed using Synchro 10. Movements are typically considered critical under the following conditions:

- ▶ Volume/capacity (V/C) ratios for overall intersection operations, through movements or shared through/turning movements increased to 0.85 or above;
- ▶ V/C ratios for dedicated turning movements that will exceed 0.90;
- ▶ LOS E for dedicated turning movements at unsignalized intersections; and
- ▶ 95th percentile queue lengths for individual movements exceeds available lane storage.

Table 2.2 summarizes the existing intersection operations. The entries in the table indicating the weekday AM, PM, and Summer Saturday peak hour level of service (LOS), volume to capacity ratios (V/C), and 95th percentile queues experienced.

All intersections are currently operating within acceptable levels under existing conditions with no critical movements noted.



Appendix C contains the detailed Synchro 10 reports.



TABLE 2.2A: 2021 EXISTING OPERATIONS – AM PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																	
				Eastbound				Westbound				Northbound				Southbound				Overall	
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach		
AM Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< < <	C 26 0.12 9	> > >	C 26	< < <	C 26 0.19 10	> > >	C 26	< < <	A 3 0.25 20	> > >	A 3	< < <	A 3 0.24 20	> > >	A 3	A 5 0.24	
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< < <	B 12 0.01 0	> > >	B 12	< < <	B 11 0.02 1	> > >	B 11	< < <	A 0 0.00 0	> > >	A 0	< < <	A 0 0.01 0	> > >	A 0	A 0	
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< < <	A 7 0.05 -	> > >	A 7	< < <	A 7 0.01 -	> > >	A 7	< < <	A 8 0.06 -	> > >	A 8	< < <	A 7 0.01 -	> > >	A 7	A 7	
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< < <	A 9 0.02 0	> > >	A 9	< < <	A 9 0.01 0	> > >	A 9	< < <	A 0 0.00 0	> > >	A 0	< < <	A 0 0.00 0	> > >	A 0	A 2	
	Bridge Street & Fuller Street	TWSC	LOS Delay V/C Q	< < <	A 9 0.00 0	> > >	A 9					< < <	A 4 0.00 0		A 4		A 0 0.00 0	> > >	A 0	A 3	
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< < <	A 5 0.00 0		A 5		A 0 0.00 0	> > >	A 0					A 8 0.01 0		A 8 > > >		A 8	A 5
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< < <	A 4 0.01 0	> > >	A 4	< < <	A 0 0.00 0	> > >	A 0	< < <	A 9 0.01 0	> > >	A 9	< < <	A 10 0.07 2	> > >	A 10	A 4	
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< < <	A 2 0.01 0	> > >	A 2	< < <	A 0 0.00 0	> > >	A 0	< < <	A 10 0.02 1	> > >	A 10	< < <	A 9 0.01 0	> > >	A 9	A 2	

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



TABLE 2.2B: 2021 EXISTING OPERATIONS – PM PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
PM Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< < < <	C 24 0.23 15	> > > >	C 24	< < < <	C 24 0.17 12	> > > >	C 24	< < < <	A 4 0.31 27	> > > >	A 4	< < < <	A 3 0.26 23	> > > >	A 3	A 7 0.29
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< < < <	C 15 0.01 0	> > > >	C 15	< < < <	B 14 0.03 1	> > > >	B 14	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 0 0.01 0	> > > >	A 0	A 0
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< < < <	A 7 0.06 -	> > > >	A 7	< < < <	A 7 0.01 -	> > > >	A 7	< < < <	A 8 0.08 -	> > > >	A 8	< < < <	A 7 0.01 -	> > > >	A 7	A 7
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< < < <	A 9 0.02 0	> > > >	A 9	< < < <	A 10 0.03 1	> > > >	A 10	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 0 0.00 0	> > > >	A 0	A 2
	Bridge Street & Fuller Street	TWSC	LOS Delay V/C Q	< < < <	A 9 0.01 0	> > > >	A 9					< < < <	A 2 0.00 0		A 2		A 0 0.01 0	> > > >	A 0	A 3
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< < < <	A 2 0.00 0		A 2		A 0 0.01 0	> > > >	A 0					A 9 0.01 0		> > > >	A 9	A 4
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< < < <	A 5 0.03 1	> > > >	A 5	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	B 10 0.00 0	> > > >	B 10	< < < <	A 10 0.10 3	> > > >	A 10	A 5
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< < < <	A 1 0.01 0	> > > >	A 1	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	B 10 0.02 0	> > > >	B 10	< < < <	A 9 0.02 1	> > > >	A 9	A 2

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LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



TABLE 2.2C: 2021 EXISTING OPERATIONS – SATURDAY PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
Saturday Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< < <	C 24 0.18 13	> > >	C 24	< < <	C 25 0.32 17	> > >	C 25	< < <	A 4 0.39 42	> > >	A 4	< < <	A 4 0.34 36	> > >	A 4	A 7 0.38
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< < <	C 18 0.03 1	> > >	C 18	< < <	C 16 0.04 1	> > >	C 16	< < <	A 0 0.01 0	> > >	A 0	< < <	A 0 0.01 0	> > >	A 0	A 1
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< < <	A 7 0.07 -	> > >	A 7	< < <	A 7 0.01 -	> > >	A 7	< < <	A 8 0.11 -	> > >	A 8	< < <	A 7 0.03 -	> > >	A 7	A 8
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< < <	A 10 0.03 1	> > >	A 10	< < <	A 10 0.03 1	> > >	A 10	< < <	A 1 0.00 0	> > >	A 1	< < <	A 0 0.00 0	> > >	A 0	A 2
	Bridge Street & Fuller Street	TWSC	LOS Delay V/C Q	< < <	A 9 0.02 1	> > >	A 9					< < <	A 3 0.00 0		A 3		A 0 0.01 0	> > >	A 0	A 5
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< < <	A 5 0.00 0		A 5		A 0 0.00 0	> > >	A 0					A 9 0.02 1		> > >	A 9	A 5
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< < <	A 4 0.03 1	> > >	A 4	< < <	A 0 0.00 0	> > >	A 0	< < <	B 11 0.05 1	> > >	B 11	< < <	B 11 0.16 5	> > >	B 11	A 5
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< < <	A 4 0.04 1	> > >	A 4	< < <	A 0 0.00 0	> > >	A 0	< < <	B 12 0.05 1	> > >	B 12	< < <	A 10 0.09 2	> > >	A 10	A 5

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



3 Development Concept

3.1 Development Description

The subject site is located on the north-east corner of Boucher Street East and Fuller Street. The property owner is proposing a mixed-used development with 109 townhouses, 60 apartment units in one building, and a 76-room hotel.

Vehicle access is proposed via two all-moves accesses to Fuller Street and one all-moves access to Boucher Street East. 13 of the townhouses will have direct driveway access onto Fuller Street and eight of the townhouses will have direct driveway access onto Boucher Street East.

A total parking supply of 310 spaces is proposed. This supply does not meet Municipality of Meaford zoning requirements as currently planned (ZBL 60-2009).

Figure 3.1 illustrates the site plan.



3.2 Sight Access Review

3.2.1 Access Locations

Vehicle access is proposed via three all-moves accesses; two to Fuller Street and one to Boucher Street. The location of the site accesses are described as follows:

- ▶ Site A is located approximately 75 metres (CL to CL) north of Bridge Street and will mainly service the proposed hotel.
- ▶ Site B is located opposite of Bridge Street and will form the 4th leg of the Bridge Street and Fuller Street intersection. It provides access to the proposed hotel and surface parking area; and
- ▶ Site F is located approximately 170 metres (CL to CL) east of Fuller Street and will provide access to the proposed underground parking garage for the townhouses and apartment building.

Transportation Association of Canada (TAC)⁴ recommends a minimum of 11 metre corner clearance for residential driveways. All site driveways exceed the minimum requirement.

3.2.2 Sight Distance

It is industry standard practice to design at 10 km/h over the posted speed limit. A 60 km/h design speed requires:

- ▶ Minimum stopping sight distance⁵ – 85 metres
- ▶ Intersection sight distance:
 - Left-turn from stop⁶ – 130 metres; and
 - Right-turn from stop⁷. – 110 metres.

Fuller Street and Boucher Street are relatively straight and flat at the proposed site driveway locations. Sightlines from the driveway locations are unimpeded in all directions with clear sightlines in excess of 130 metres which exceeds the minimum sight distance requirements for a design speed of 60 km/h. Sight distances are not expected to be a concern.

⁴ TAC Figure 8.9.2: Driveway Spacing Guidelines – Locals and Collectors

⁵ TAC Table 2.5.2. Stopping Sight Distance on level roadways for Automobiles

⁶ TAC Table 9.9.4. Design Intersection Sight Distance – Case B1, Left-Turn from Stop

⁷ TAC Table 9.9.6. Design Intersection Sight Distance – Case B2, Right-Turn from Stop



3.3 Site Trip Generation

The Institute of Transportation Engineers (ITE) Trip Generation⁸ provides methods to estimate site trip generation. The following Land Use Codes (LUC) were used to estimate the site trip generation:

- ▶ LUC 220 (Multifamily Housing, Low-Rise);
- ▶ LUC 221 (Multifamily Housing, Mid-Rise); and
- ▶ LUC 310 (Hotel).

The equation rates were used to calculate the trips generated by all three land uses as they were equal or higher than the average trip rates.

Table 3.1 summarizes the estimated trip generation. The site's trip generation is estimated to be approximately 107 AM peak hour trips, 123 PM peak hour trips, and 174 Saturday peak hour trips. No reductions of alternative modes of transportation were utilized.

The trip distribution used for this study was based on the existing distribution at the Sykes Street intersections with Trowbridge Street and Boucher Street as well as St. Vincent Street at Boucher Street as it captures the peak traffic patterns which would capture the primary routes to/from the subject site. The trip distribution is shown in **Table 3.2**.

Figure 3.2A and Figure 3.2B contains the weekday AM and PM peak hour trip assignment to the adjacent road network. **Figure 3.2C** contains the Summer Saturday peak hour trip assignment.

⁸ *Trip Generation Tenth Edition*, Institute of Transportation Engineers, Washington D.C., 2017



TABLE 3.1: TRIP GENERATION

ITE Land Use	Units	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
220 - Multifamily Housing, Low-Rise (Dwelling Units)	109	12	40	52	40	24	64	45	39	84
221 - Multifamily Housing, Mid-Rise (Dwelling Units)	60	5	16	21	16	11	27	16	16	32
310 - Hotel (Rooms)	78	20	14	34	16	16	32	32	26	58
Total Trip Generation	247	37	70	107	72	51	123	93	81	174

220: $AM Ln(T) = 0.95 Ln(X) - 0.51$ | $PM Ln(T) = 0.89 Ln(X) - 0.02$ | $SAT T = 1.08(X) - 33.24$

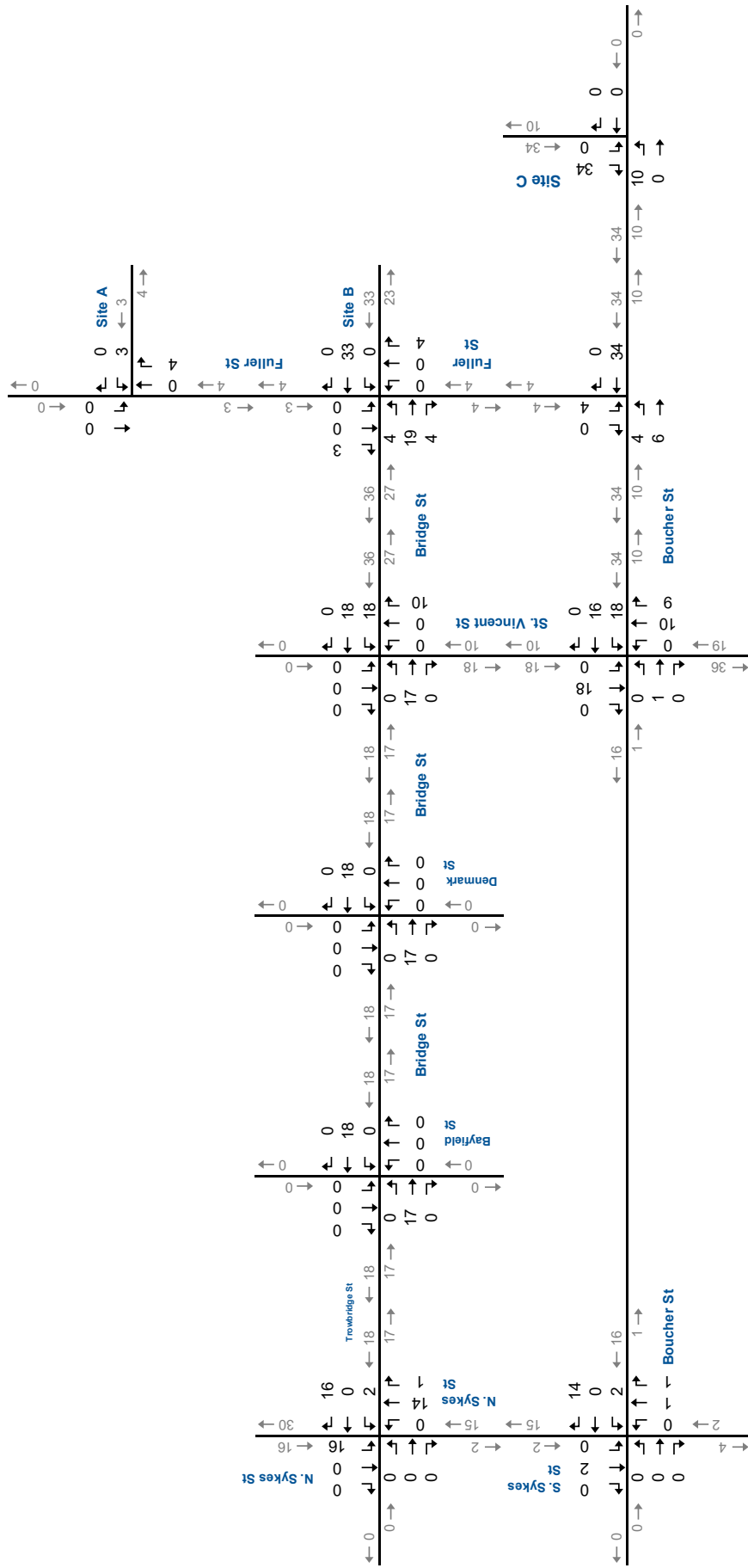
221: $AM Ln(T) = 0.98 Ln(X) - 0.98$ | $PM Ln(T) = 0.96 Ln(X) - 0.63$ | $SAT T = 0.42(X) + 6.73$

310: $AM T = 0.50(X) - 5.34$ | $PM T = 0.75(X) - 26.02$ | $SAT T = 0.69(X) + 4.32$

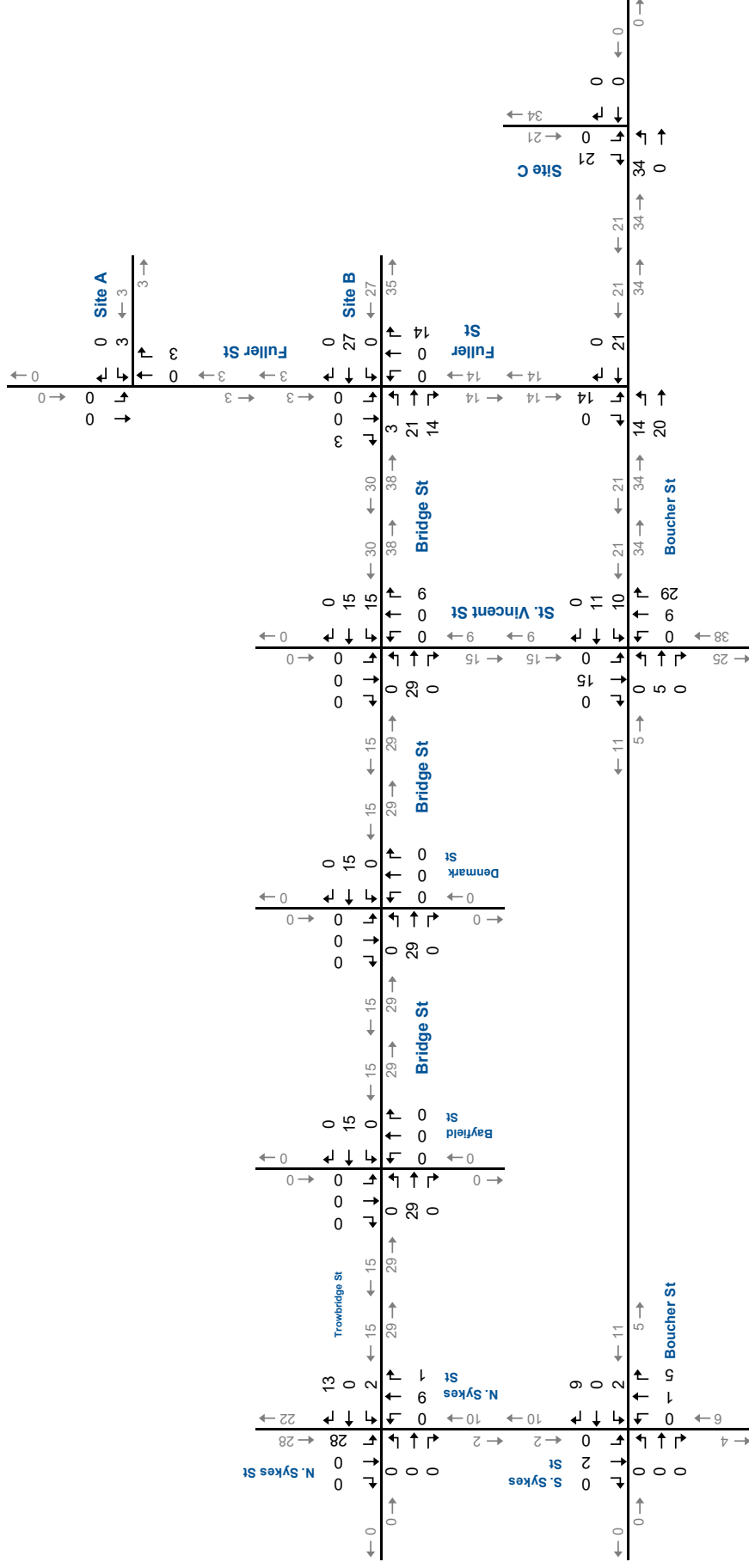
TABLE 3.2: TRIP DISTRIBUTION

Direction	Route	AM Peak Hour		PM Peak Hour	
		Inbound	Outbound	Inbound	Outbound
North	North Sykes Street	45%	42%	40%	44%
South	South Skyes Street	7%	6%	9%	8%
	St. Vincent Street	48%	52%	51%	48%
Total		100%	100%	100%	100%

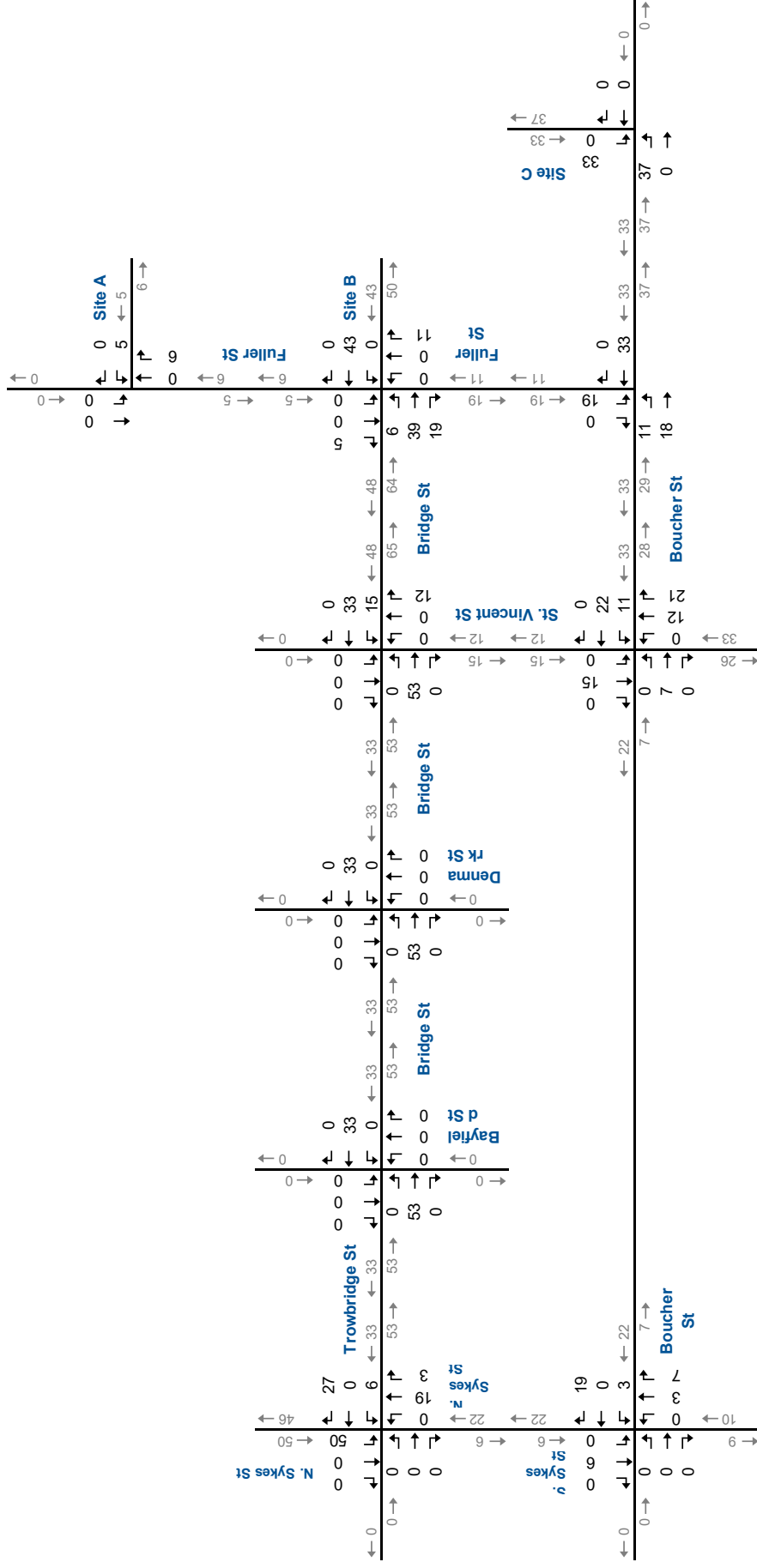




Site Generated Traffic Volumes AM Peak Hour



Site Generated Traffic Volumes PM Peak Hour



Site Generated Traffic Volumes Saturday Peak Hour

Figure 3.2C

4 Evaluation of Future Traffic Conditions

The assessment of future conditions in this section includes the following components necessary to assess the traffic implications on the adjacent road network:

- ▶ Future background traffic estimates;
- ▶ Level of service analysis for background traffic (pre-development);
- ▶ Future total traffic estimates; and
- ▶ Level of service analysis for total traffic (post-development).

4.1 Forecast Traffic Volumes

The likely future traffic volumes five years from the date of study (2028) are estimated to consist of:

- ▶ Increased non-site traffic (generalized background traffic growth) estimated to be 2.00 percent per annum as approved by the Municipality;
- ▶ The following background developments:
 - 25-39 Nelson Street East and 35-47 Sykes Street – mixed use residential and commercial development with 97 residential units and approximately 14,500ft² of commercial space;
 - 74 Bayfield Street – proposed residential condominium with 70 units;
 - 1 Legion Road⁹ – proposed residential condominium with 125 units;
 - Collingwood Street¹⁰ – proposed residential townhouses with 76 units;
 - 186 Cook Street¹¹ – proposed residential development with 146 units and nursing home with 128 beds; and

⁹ Traffic Impact Study Update Proposed Residential Development 1 Legion Road, Trans-Plan, August 2020

¹⁰ Traffic Opinion Letter Residential Condominium Collingwood Street East, Crozier & Associates, June 24, 2016

¹¹ Transportation Assessment “PeopleCare” Development, 186 Cook Street, Salvini Consulting, February 5, 2020



- 337 Sykes Street¹² – proposed mixed-use development with 20 residential units and approximately 10,000ft² of commercial space.
- ▶ Traffic generated by the subject site.

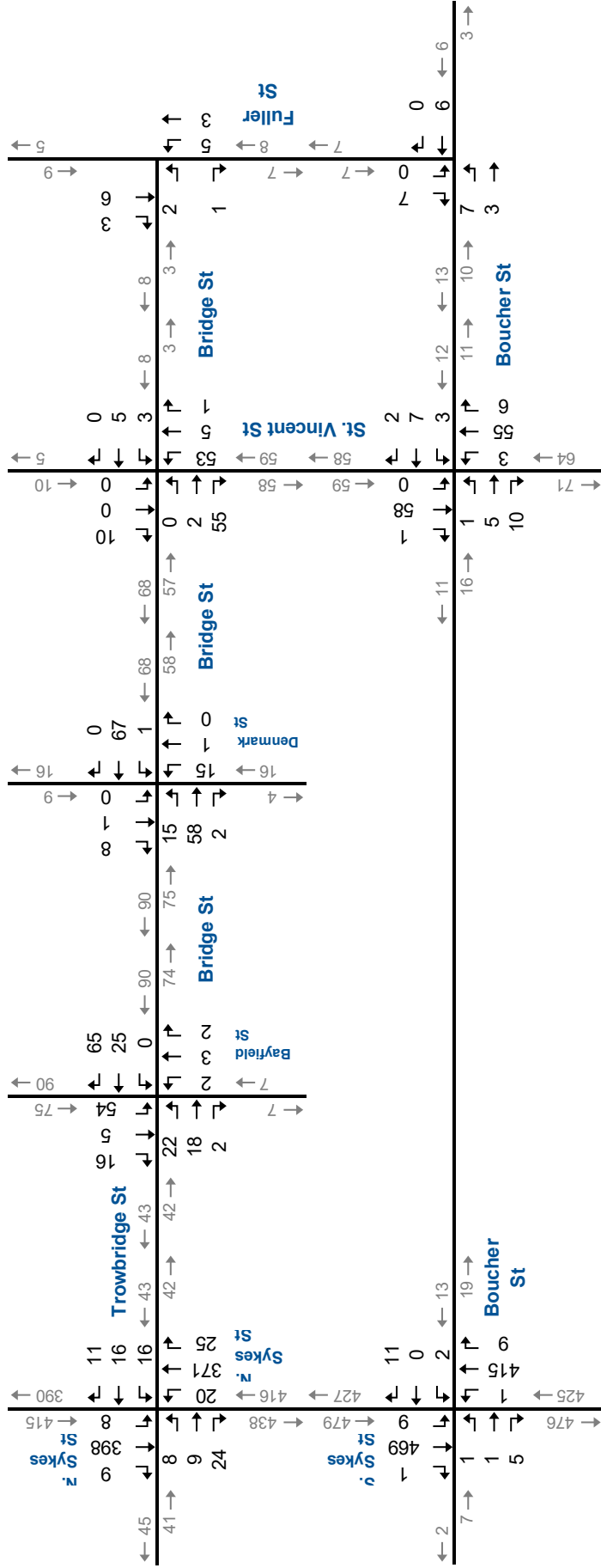
Appendix D contains the background development trip assignment.

Figure 4.1 details the forecast 2028 background traffic volumes.

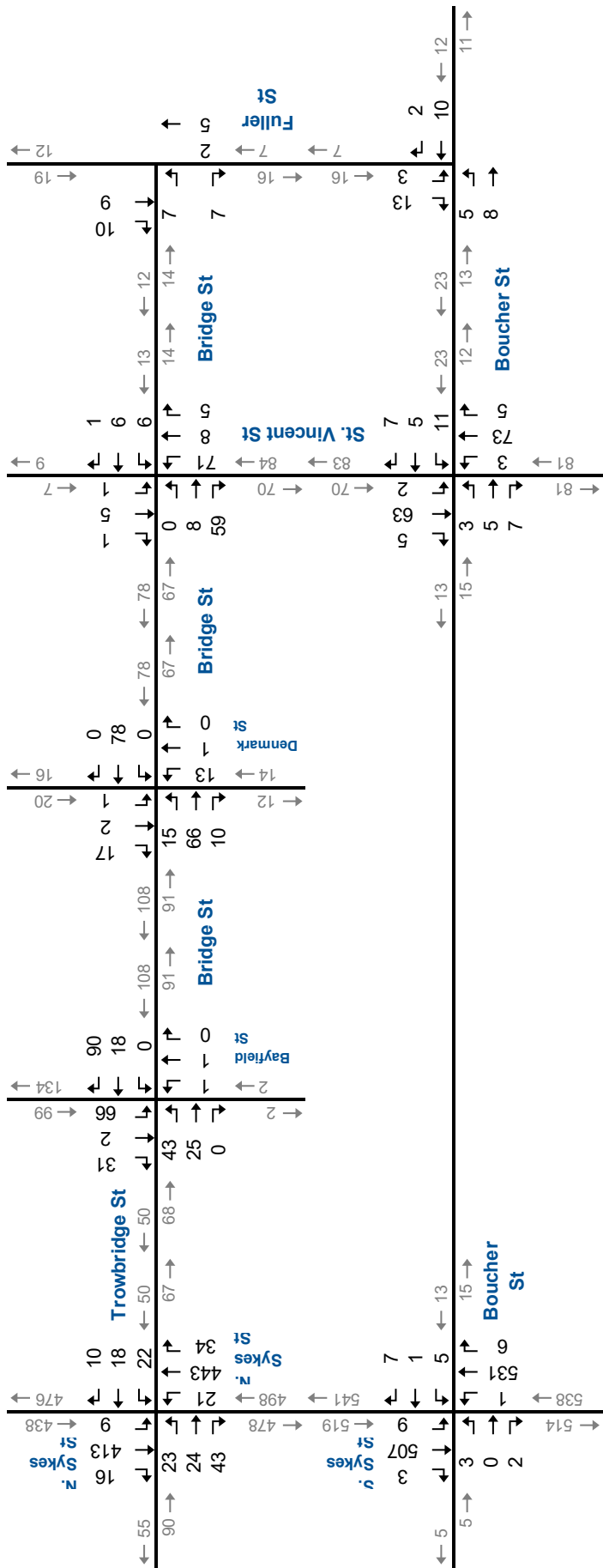
Figure 4.2 details the forecast 2028 total traffic volumes.

¹² 337 Sykes Street Traffic Impact Study, Tatham Engineering Limited, February 2020



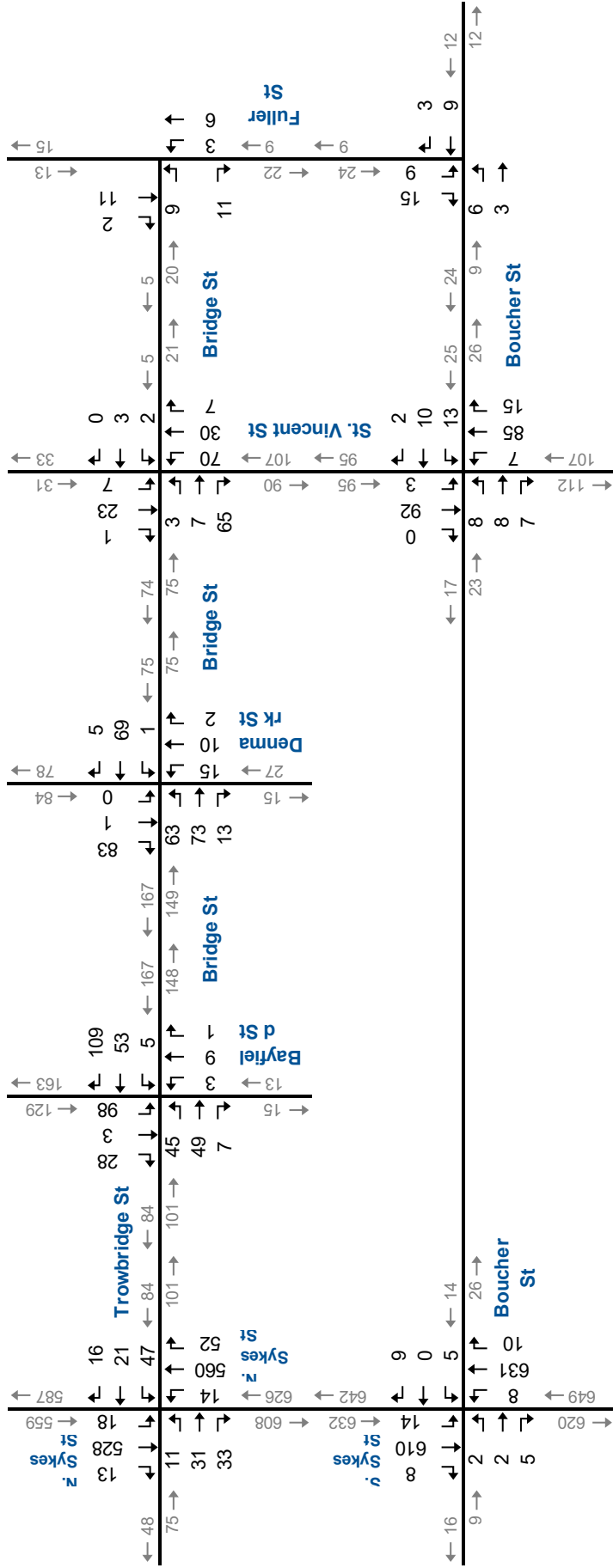


2028 Background Traffic Volumes AM Peak Hour



2028 Background Traffic Volumes PM Peak Hour

Figure 4.1B

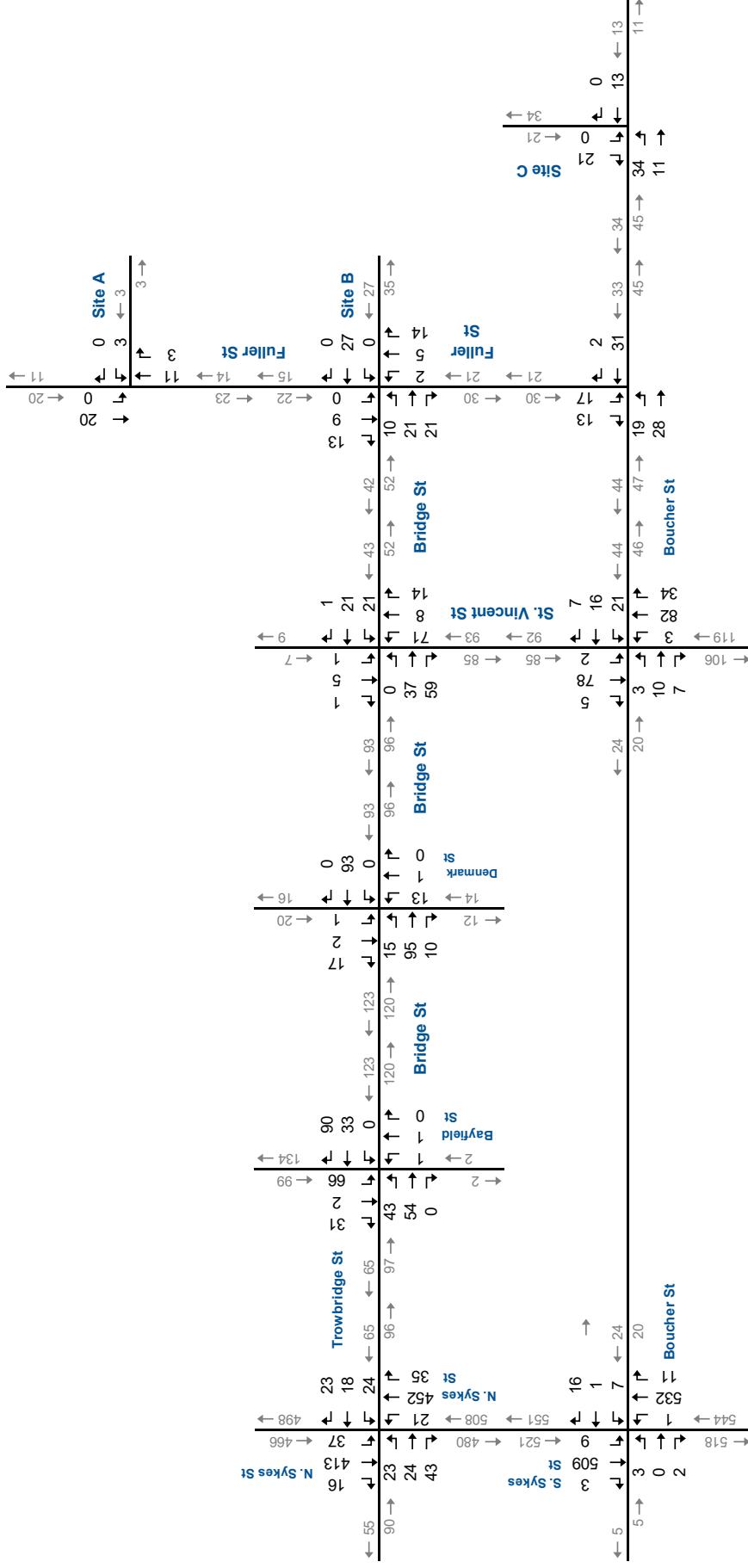


2028 Background Traffic Volumes Saturday Peak Hour



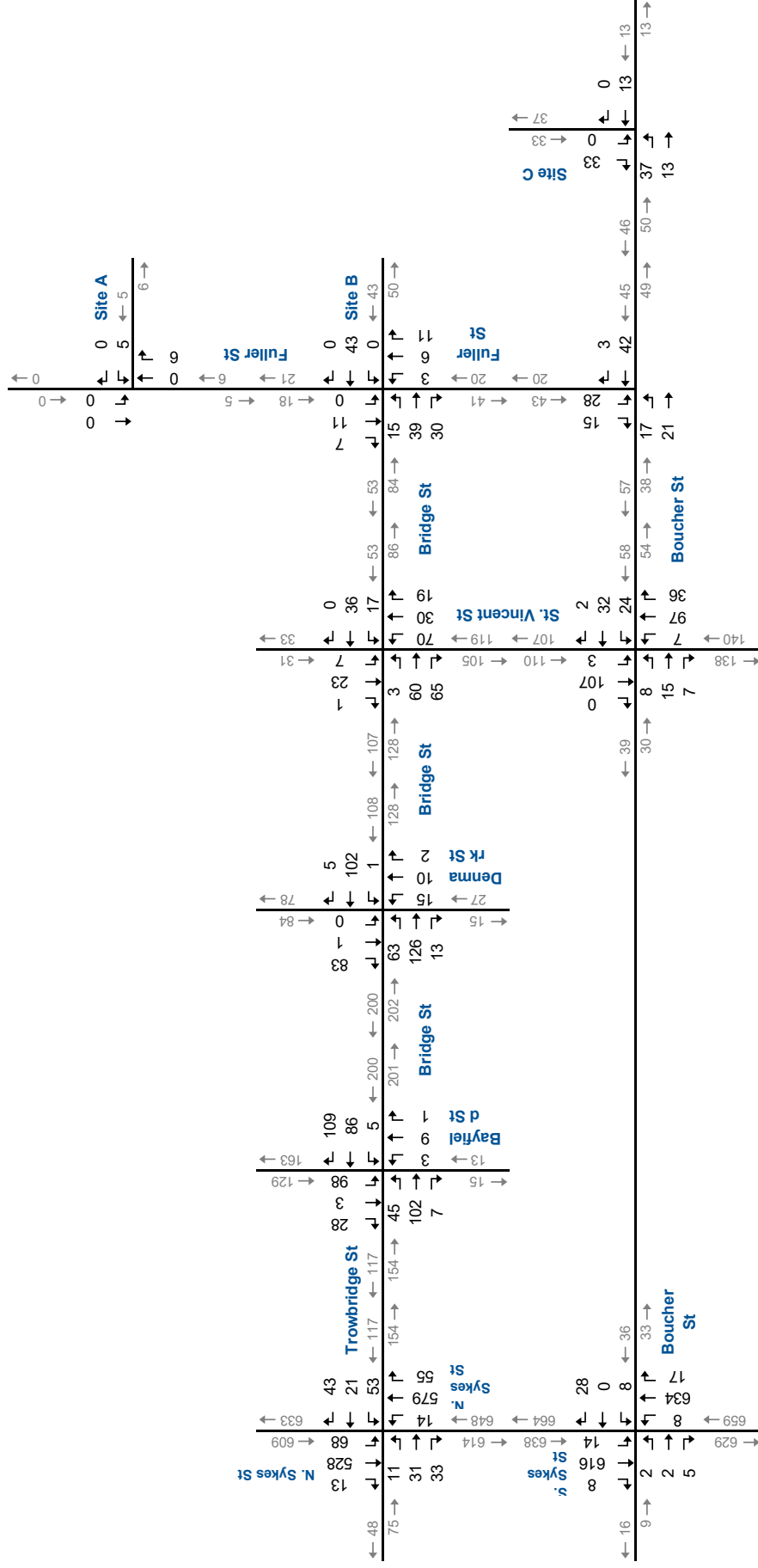
Boucher Street & Fuller Street, Meaford TIS & PS
200616





2028 Total Traffic Volumes PM Peak Hour

Figure 4.2B



2028 Total Traffic Volumes Saturday Peak Hour

Figure 4.2C

4.2 Forecast 2028 Background Traffic Operations

4.2.1 Midblock Analysis

Table 4.1 shows the forecast 2028 background peak hour midblock volume to capacity (v/c) ratios for the study area roads based on the traffic volumes shown in **Figure 4.1**.

During the AM peak hour, the highest v/c ratio on Trowbridge Street/Bridge Street occur between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.13. The highest v/c ratio on Boucher Street occur between South Sykes Street and St. Vincent Street in eastbound direction with a v/c ratio of 0.03. The highest v/c ratio on Fuller Street is 0.01 which occurs in all segments in both directions.

In the PM peak hour, the highest v/c ratio of Trowbridge Street/Bridge Street occur between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.15. The highest v/c ratio on Boucher Street occur between Fuller Street and St. Vincent Street in the westbound direction with a v/c ratio of 0.03. The highest v/c ratio on Fuller Street occur north of Bridge Street in the southbound direction with a v/c ratio of 0.03.

In the Summer Saturday peak hour, the highest v/c ratio continues to be the westbound direction on Bridge Street between Denmark Street and Bayfield Street.

The forecast v/c ratio indicates that there will be significant peak hour capacity available on the study area roads under future background traffic conditions.

Based on the forecast 2028 Background PM peak hour traffic volumes, Bridge Street between Fuller Street and St. Vincent Street is forecast to experience 270 vehicles per day, Fuller Street between Boucher Street and Bridge Street at 230 vehicles per day, and Boucher Street between Fuller Street and St. Vincent Street at 360-vehicles per day. The forecast daily volumes are anticipated to be less than the 1,000 vehicles per day threshold for local residential streets.



TABLE 4.1: 2028 BACKGROUND MIDBLOCK ANALYSIS

Road Section		Capacity	2028 Background Traffic					
			AM Peak Hour		PM Peak Hour		SAT Peak Hour	
			Volume	v/c Ratio	Volume	v/c Ratio	Volume	v/c Ratio
From	To							
Trowbridge Street/Bridge Street - Eastbound								
North Sykes Street	Bayfield Street	700	42	0.06	68	0.10	101	0.14
Bayfield Street	Denmark Street	700	75	0.11	91	0.13	149	0.21
Denmark Street	St.Vincent Street	700	58	0.08	67	0.10	75	0.11
St. Vincent Street	Fuller Street	700	3	0.00	14	0.02	21	0.03
Trowbridge Street/Bridge Street - Westbound								
Fuller Street	St.Vincent Street	700	8	0.01	13	0.02	5	0.01
St. Vincent Street	Denmark Street	700	68	0.10	78	0.11	75	0.11
Denmark Street	Bayfield Street	700	90	0.13	108	0.15	167	0.24
Bayfield Street	North Sykes Street	700	43	0.06	50	0.07	84	0.12
Boucher Street - Eastbound								
South Sykes Street	St.Vincent Street	700	19	0.03	15	0.02	26	0.04
St. Vincent Street	Fuller Street	700	11	0.02	13	0.02	26	0.04
Fuller Street	End	700	3	0.00	11	0.02	12	0.02
Boucher Street - Westbound								
End	Fuller Street	700	6	0.01	12	0.02	12	0.02
Fuller Street	St.Vincent Street	700	13	0.02	23	0.03	25	0.04
St. Vincent Street	South Sykes Street	700	13	0.02	13	0.02	17	0.02
Fuller Street - Northbound								
Boucher Street	Bridge Street	700	8	0.01	7	0.01	9	0.01
Bridge Street	End	700	5	0.01	12	0.02	15	0.02
Fuller Street - Southbound								
End	Bridge Street	700	9	0.01	19	0.03	13	0.02
Bridge Street	Boucher Street	700	7	0.01	16	0.02	24	0.03



4.2.2 Intersection Analysis

The study area intersection operations analysis for the background traffic scenario followed the same methodology used for the existing traffic conditions. **Table 4.2** details the level of service conditions for the weekday AM and PM peak hours.

All study area intersections are forecast to operate within acceptable levels of service during the AM, PM, and Saturday peak hours with no specific problem movements.

Appendix E contains the detailed Synchro 10 reports.



TABLE 4.2A: 2028 BACKGROUND OPERATIONS – AM PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< < < <	C 25 0.13 9	> > > >	C 25	< < < <	C 26 0.22 11	> > > >	C 26	< < < <	A 3 0.36 31	> > > >	A 3	< < < <	A 3 0.35 31	> > > >	A 3	A 5 0.34
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< < < <	B 14 0.02 0	> > > >	B 14	< < < <	B 13 0.03 1	> > > >	B 13	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 0 0.01 0	> > > >	A 0	A 0
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< < < <	A 7 0.06 -	> > > >	A 7	< < < <	A 7 0.01 -	> > > >	A 7	< < < <	A 8 0.08 -	> > > >	A 8	< < < <	A 7 0.01 -	> > > >	A 7	A 7
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< < < <	A 9 0.02 1	> > > >	A 9	< < < <	A 10 0.02 0	> > > >	A 10	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 0 0.00 0	> > > >	A 0	A 2
	Bridge Street & Fuller Street	TWSC	LOS Delay V/C Q	< < < <	A 9 0.00 0	> > > >	A 9					< < < <	A 5 0.00 0		A 5		A 0 0.00 0	> > > >	A 0	A 3
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< < < <	A 5 0.00 0		A 5		A 0 0.00 0	> > > >	A 0					A 8 0.01 0		> > > >	A 8	A 5
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< < < <	A 4 0.02 0	> > > >	A 4	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 10 0.01 0	> > > >	A 9	< < < <	A 10 0.10 3	> > > >	A 10	A 5
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< < < <	A 2 0.01 0	> > > >	A 2	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	B 10 0.02 1	> > > >	B 10	< < < <	A 9 0.01 0	> > > >	A 9	A 2

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



TABLE 4.2B: 2028 BACKGROUND OPERATIONS – PM PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
PM Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< < < <	C 23 0.25 15	> > > >	C 23	< < < <	C 23 0.20 12	> > > >	C 23	< < < <	A 5 0.44 44	> > > >	A 5	< < < <	A 4 0.38 36	> > > >	A 4	A 7 0.40
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< < < <	C 22 0.02 1	> > > >	C 22	< < < <	C 19 0.05 1	> > > >	C 19	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 0 0.01 0	> > > >	A 0	A 1
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< < < <	A 7 0.07 -	> > > >	A 7	< < < <	A 7 0.02 -	> > > >	A 7	< < < <	A 8 0.11 -	> > > >	A 8	< < < <	A 7 0.01 -	> > > >	A 7	A 7
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< < < <	A 9 0.02 1	> > > >	A 9	< < < <	A 10 0.03 1	> > > >	A 10	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	A 0 0.00 0	> > > >	A 0	A 2
	Bridge Street & Fuller Street	TWSC	LOS Delay V/C Q	< < < <	A 9 0.02 0	> > > >	A 9					< < < <	A 2 0.00 0		A 2		A 0 0.01 0	> > > >	A 0	A 3
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< < < <	A 3 0.00 0		A 3		A 0 0.01 0	> > > >	A 0					A 9 0.02 0		> > > >	A 9	A 4
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< < < <	A 5 0.03 1	> > > >	A 5	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	B 11 0.00 0	> > > >	B 11	< < < <	B 10 0.14 4	> > > >	B 10	A 5
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< < < <	A 1 0.01 0	> > > >	A 1	< < < <	A 0 0.00 0	> > > >	A 0	< < < <	B 10 0.02 1	> > > >	B 10	< < < <	A 9 0.02 1	> > > >	A 9	A 2

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



TABLE 4.2C: 2028 BACKGROUND OPERATIONS – SATURDAY PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
Saturday Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< < <	C 23 0.20 15	> > >	C 23	< < <	C 25 0.36 19	> > >	C 25	< < <	A 6 0.52 68	> > >	A 6	< < <	A 5 0.47 58	> > >	A 5	A 8 0.49
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< < <	D 27 0.05 1	> > >	D 27	< < <	C 25 0.08 2	> > >	C 25	< < <	A 0 0.01 0	> > >	A 0	< < <	A 0 0.02 0	> > >	A 0	A 1
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< < <	A 7 0.09 -	> > >	A 7	< < <	A 7 0.01 -	> > >	A 7	< < <	A 8 0.14 -	> > >	A 8	< < <	A 7 0.04 -	> > >	A 7	A 8
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< < <	A 10 0.03 1	> > >	A 10	< < <	B 10 0.04 1	> > >	B 10	< < <	A 1 0.01 0	> > >	A 1	< < <	A 0 0.00 0	> > >	A 0	A 2
	Bridge Street & Fuller Street	TWSC	LOS Delay V/C Q	< < <	A 9 0.02 1	> > >	A 9					< < <	A 2 0.00 0		A 2		A 0 0.01 0	> > >	A 0	A 5
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< < <	A 5 0.00 0	> > >	A 5		A 0 0.01 0	> > >	A 0					A 9 0.03 0	> > >	A 9	A 6	
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< < <	A 4 0.04 1	> > >	A 4	< < <	A 0 0.00 0	> > >	A 0	< < <	B 12 0.03 1	> > >	B 12	< < <	B 12 0.22 7	> > >	B 12	A 5
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< < <	A 4 0.05 1	> > >	A 4	< < <	A 0 0.00 0	> > >	A 0	< < <	B 13 0.06 1	> > >	B 13	< < <	A 10 0.11 3	> > >	A 10	A 5

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



4.3 Forecast 2028 Total Traffic Operations

4.3.1 Midblock Analysis

Table 4.3 shows the forecast 2028 total peak-hour midblock volume to capacity (v/c) ratios for the study area roads based on the traffic volumes shown in **Figure 4.2**.

During the AM peak hour, the highest v/c ratio on Trowbridge Street/Bridge Street occur between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.16 (an increase of 0.03). The highest v/c ratio on Boucher Street occur between Fuller Street and St. Vincent Street in the westbound direction with a v/c ratio of 0.07 (an increase of 0.04). The highest v/c ratio on Fuller Street is 0.02 (an increase of 0.01) which occurs in several segments in both directions.

In the PM peak hour, the highest v/c ratio of Trowbridge Street/Bridge Street occur between Denmark Street and Bayfield Street in the westbound direction with a v/c ratio of 0.19 (an increase of 0.04). The highest v/c ratio on Boucher Street occur between Fuller Street and St. Vincent Street in the eastbound direction with a v/c ratio of 0.08 (an increase of 0.05). The highest v/c ratio on Fuller Street is 0.04 (an increase of 0.01) which occurs in several segments in both directions.

In the Summer Saturday peak hour, the highest v/c ration is on Bridge Street between Denmark Street and Bayfield Street in both the eastbound and westbound directions with a v/c ratio of 0.29.

The forecast v/c ratio indicates that there will be significant peak hour capacity available on the study area roads under future total traffic conditions.

Based on the forecast 2028 Total PM peak hour traffic volumes, Bridge Street between Fuller Street and St. Vincent Street is forecast to experience 950 vehicles per day (an increase of 680 vehicles per day from background conditions), Fuller Street between Boucher Street and Bridge Street at 540 vehicles per day (an increase of 280 vehicles per day from background conditions), and Boucher Street between Fuller Street and St. Vincent Street at 910 vehicles per day (an increase of 550 vehicles per day from background conditions). The forecast daily volumes are anticipated to be less than the 1,000 vehicles per day threshold for local residential streets.



TABLE 4.3: 2028 TOTAL MIDBLOCK ANALYSIS

Road Section		Capacity	2028 Total Traffic					
			AM Peak Hour		PM Peak Hour		SAT Peak Hour	
			Volume	v/c Ratio	Volume	v/c Ratio	Volume	v/c Ratio
From	To							
Trowbridge Street/Bridge Street - Eastbound								
North Sykes Street	Bayfield Street	700	59	0.08	97	0.14	154	0.22
Bayfield Street	Denmark Street	700	92	0.13	120	0.17	202	0.29
Denmark Street	St.Vincent Street	700	75	0.11	96	0.14	128	0.18
St. Vincent Street	Fuller Street	700	30	0.04	52	0.07	86	0.12
Trowbridge Street/Bridge Street - Westbound								
Fuller Street	St.Vincent Street	700	44	0.06	43	0.06	53	0.08
St. Vincent Street	Denmark Street	700	86	0.12	93	0.13	108	0.15
Denmark Street	Bayfield Street	700	108	0.15	123	0.18	200	0.29
Bayfield Street	North Sykes Street	700	61	0.09	65	0.09	117	0.17
Boucher Street - Eastbound								
South Sykes Street	St.Vincent Street	700	20	0.03	20	0.03	33	0.05
St. Vincent Street	Fuller Street	700	21	0.03	47	0.07	54	0.08
Fuller Street	Site C	700	13	0.02	45	0.06	50	0.07
Boucher Street - Westbound								
Site C	Fuller Street	700	40	0.06	34	0.05	46	0.07
Fuller Street	St.Vincent Street	700	47	0.07	44	0.06	58	0.08
St. Vincent Street	South Sykes Street	700	29	0.04	24	0.03	36	0.05
Fuller Street - Northbound								
Boucher Street	Bridge Street/Site B	700	12	0.02	21	0.03	20	0.03
Bridge Street/Site B	Site A	700	9	0.01	15	0.02	21	0.03
Street A	End	700	3	0.00	11	0.02	15	0.02
Fuller Street - Southbound								
End	Site A	700	9	0.01	20	0.03	14	0.02
Site A	Bridge Street/Site B	700	12	0.02	23	0.03	19	0.03
Bridge Street/Site B	Boucher Street	700	11	0.02	30	0.04	43	0.06



4.3.2 Intersection Analysis

The study area intersection operations analysis for the future total traffic scenario followed the same methodology used for the background traffic conditions. **Table 4.4** details the level of service conditions for the weekday AM, PM and Saturday peak hours.

All study area intersections are forecast to operate within acceptable levels of service during the AM, PM, and Saturday peak hour with no specific problem movements.

The proposed site accesses are forecast to operate at LOS A and with a v/c ratio of 0.06 or lower during the AM, PM, and Saturday peak hours.

The addition of the site generated traffic volumes increase the overall delay at the study area intersections by five (5) seconds or less during the AM and PM peak hours.

Appendix F contains the detailed Synchro 10 reports.



TABLE 4.4A: 2028 TOTAL OPERATIONS – AM PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< 23 9	> 0.11	>	C 23	< 24 12	> 0.19	>	C 24	< 4 34	> 0.39	>	A 4	< 4 34	> 0.39	>	A 4	A 6 0.36
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< 15 0	> 0.02	>	B 15	< 13 2	> 0.06	>	B 13	< 0 0	> 0.00	>	A 0	< 0 0	> 0.01	>	A 0	A 1
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< 7 0	> 0.08	>	A 7	< 8 0	> 0.06	>	A 8	< 8 0	> 0.09	>	A 8	< 7 0	> 0.01	>	A 7	A 7
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< 9 1	> 0.02	>	A 9	< 10 2	> 0.07	>	B 10	< 0 0	> 0.00	>	A 0	< 0 0	> 0.00	>	A 0	A 3
	Bridge Street/Site B & Fuller Street	TWSC	LOS Delay V/C Q	< 9 1	> 0.04	>	A 9	< 9 1	> 0.04	>	A 9	< 3 0	> 0.00	>	A 3	< 0 0	> 0.00	>	A 0	A 7
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< 4 0	> 0.01	>	A 4	< 0 0	> 0.03	>	A 0					A 9 0.01			A 9	A 3
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< 3 0	> 0.02	>	A 3	< 0 0	> 0.00	>	A 0	< 10 0	> 0.01	>	A 10	< 10 3	> 0.10	>	B 10	A 4
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< 1 0	> 0.01	>	A 1	< 0 0	> 0.00	>	A 0	< 11 1	> 0.03	>	B 11	< 9 0	> 0.01	>	A 9	A 2
	Fuller Street & Site A	TWSC	LOS Delay V/C Q					A 9 0.00			A 9		A 0 0.00		A 0	< 0 0.00			A 0	A 2
	Boucher Street & Site C	TWSC	LOS Delay V/C Q	< 6 0	> 0.01	>	A 6		A 0 0	>	A 0					A 8 0.03			A 8	A 7

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



TABLE 4.4B: 2028 TOTAL OPERATIONS – PM PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
PM Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< 24	> 0.25	> 17	C 24	< 24	> 0.22	> 14	C 24	< 5	> 0.44	> 45	A 5	< 5	> 0.42	> 42	A 5	A 7 0.41
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< 22	> 0.02	> 1	C 22	< 18	> 0.09	> 2	C 18	< 0	> 0.00	> 0	A 0	< 0	> 0.01	> 0	A 0	A 1
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< 7	> 0.11	> --	A 7	< 8	> 0.09	> --	A 8	< 8	> 0.12	> --	A 8	< 7	> 0.01	> --	A 7	A 8
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< 10	> 0.03	> 1	A 10	< 10	> 0.07	> 2	B 10	< 0	> 0.00	> 0	A 0	< 0	> 0.00	> 0	A 0	A 3
	Bridge Street/Site B & Fuller Street	TWSC	LOS Delay V/C Q	< 9	> 0.06	> 2	A 9	< 9	> 0.03	> 1	A 9	< 1	> 0.00	> 0	A 1	< 0	> 0.00	> 0	A 0	A 6
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< 3	> 0.01	> 0	A 3	< 0	> 0.02	> 0	A 0				A 9 0.03				A 9	A 4
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< 4	> .03	> 1	A 4	< 0	> 0.00	> 0	A 0	< 11	> 0.00	> 0	B 11	< 11	> 0.15	> 4	B 11	A 4
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< 1	> 0.01	> 0	A 1	< 0	> 0.00	> 0	A 0	< 11	> 0.02	> 1	B 11	< 9	> 0.02	> 1	A 9	A 2
	Fuller Street & Site A	TWSC	LOS Delay V/C Q					A 9 0.00			A 9		A 0 0.01		A 0	< 0	> 0.00		A 0	A 1
	Boucher Street & Site C	TWSC	LOS Delay V/C Q	< 6	> 0.02	> 1	A 6		A 0 0.01		A 0					A 8 0.02			A 8	A 5

MOE - Measure of Effectiveness

LOS - Level of Service

Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length (m)

< - Shared Left-Turn

> - Shared Right-Turn

TCS - Traffic Control Signal

TWSC - Two-Way Stop Control

AWSC - All-Way Stop Control



TABLE 4.4C: 2028 TOTAL OPERATIONS – SATURDAY PEAK HOUR

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
Saturday Peak Hour	North Sykes Street & Trowbridge Street	TCS	LOS Delay V/C Q	< 23 0.19 15	> 23	< 25 0.42 22	> 25	< 25 0.42 22	> 25	< 6 0.55 78	> 6	< 7 0.58 80	> 7	< 7 0.58 80	> 7	< 7 0.58 80	> 7	< 7 0.58 80	> 7	A 9 0.55
	South Sykes Street & Boucher Street	TWSC	LOS Delay V/C Q	< 28 0.05 1	> 28	< 24 0.17 5	> 24	< 24 0.17 5	> 24	< 0 0.01 0	> 0	< 0 0.02 0	> 0	< 0 0.02 0	> 0	< 0 0.02 0	> 0	< 0 0.02 0	> 0	A 1
	St. Vincent Street & Bridge Street	AWSC	LOS Delay V/C Q	< 8 0.17 -	> 8	< 8 0.07 -	> 8	< 8 0.07 -	> 8	< 9 0.16 -	> 9	< 8 0.04 -	> 8	< 8 0.04 -	> 8	< 8 0.04 -	> 8	< 8 0.04 -	> 8	A 8
	St. Vincent Street & Boucher Street	TWSC	LOS Delay V/C Q	< 11 0.05 1	> 11	< 11 0.10 3	> 11	< 11 0.10 3	> 11	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 0 0.00 0	> 0	A 3
	Bridge Street/Site B & Fuller Street	TWSC	LOS Delay V/C Q	< 9 0.10 3	> 9	< 10 0.06 1	> 10	< 10 0.06 1	> 10	< 1 0.00 0	> 1	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 0 0.00 0	> 0	A 7
	Boucher Street & Fuller Street	TWSC	LOS Delay V/C Q	< 3 0.01 0	> 3	< 0 0.03 0	> 0	< 0 0.03 0	> 0	< 0 0.03 0	> 0	< 0 0.03 0	> 0	< 0 0.03 0	> 0	< 0 0.03 0	> 0	< 0 0.03 0	> 0	A 4
	Trowbridge Street/Bridge Street & Bayfield Street	TWSC	LOS Delay V/C Q	< 3 0.04 1	> 3	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 13 0.03 1	> 13	< 13 0.25 8	> 13	< 13 0.25 8	> 13	< 13 0.25 8	> 13	< 13 0.25 8	> 13	A 5
	Bridge Street & Denmark Street	TWSC	LOS Delay V/C Q	< 3 0.05 1	> 3	< 0 0.00 0	> 0	< 0 0.00 0	> 0	< 14 0.07 2	> 14	< 10 0.11 3	> 10	< 10 0.11 3	> 10	< 10 0.11 3	> 10	< 10 0.11 3	> 10	A 4
	Fuller Street & Site A	TWSC	LOS Delay V/C Q	< 9 0.01 0	> 9	< 9 0.01 0	> 9	< 9 0.01 0	> 9	< 0 0.01 0	> 0	< 0 0.01 0	> 0	< 0 0.01 0	> 0	< 0 0.01 0	> 0	< 0 0.01 0	> 0	A 1
	Boucher Street & Site C	TWSC	LOS Delay V/C Q	< 6 0.02 1	> 6	< 0 0.01 0	> 0	< 0 0.01 0	> 0	< 0 0.01 0	> 0	< 0 0.03 1	> 0	< 0 0.03 1	> 0	< 0 0.03 1	> 0	< 0 0.03 1	> 0	A 6

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4.4 Turn Lane Analysis

The Ministry of Transportation's Design Supplement to the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads¹³ provides guidance on the assessment of and/or need for auxiliary left-turn lanes at unsignalized intersections.

The need for a left-turn lane at the site driveways was reviewed with **Appendix G** containing the warrant analysis.

Table 4.5 summarizes the left-turn lane warrants along Fuller Street. It indicates that left-turn lanes are not warranted under 2028 total traffic conditions.

Table 4.6 summarizes the left-turn lane warrants along Boucher Street. It indicates that left-turn lanes are not warranted under 2028 total traffic conditions.

As the forecast traffic volumes on Fuller Street and Boucher Street are generally too low and the future intersection operations show no significant impacts, the need for auxiliary turn lanes at the site driveway are not warranted.

No changes to the existing lane geometrics are recommended at this time.

¹³ Transportation Association of Canada, MTO Design Supplement for TAC Geometric Design Guide for Canadian Roads – Appendix 9A, Ministry of Transportation of Ontario, 2017.



TABLE 4.5: LEFT-TURN LANE WARRANT SUMMARY – FULLER STREET

Roadway	Fuller Street								
Intersection	Site A			Site B			Bridge Street		
Approach Direction	Southbound			Southbound			Northbound		
Design Speed	60 km/h			60 km/h			60 km/h		
Horizon	Total (2028)			Total (2028)			Total (2028)		
Peak Hour	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
Advancing Volume	9	20	14	12	22	18	12	21	20
Opposing Volumes	8	14	21	12	21	20	12	22	18
Left Turning Traffic	0	0	0	0	0	0	5	2	3
% of Left Turning Traffic	0%	0%	0%	0%	0%	0%	42%	10%	15%
Figure Used*	9A-6	9A-6	9A-6	9A-6	9A-6	9A-6	9A-9	9A-6	9A-6
Warranted	No	No	No	No	No	No	No	No	No
Storage Length Required	--	--	--	--	--	--	--	--	--

*Based on MTO Design Supplement for TAC Geometric Design Guide for Canadian Roads - June 2017

TABLE 4.6: LEFT-TURN LANE WARRANT SUMMARY – BOUCHER STREET

Roadway	Boucher Street					
Intersection	Fuller Street			Site C		
Approach Direction	Eastbound			Eastbound		
Design Speed	60 km/h			60 km/h		
Horizon	Total (2028)			Total (2028)		
Peak Hour	AM	PM	SAT	AM	PM	SAT
Advancing Volume	20	47	38	13	45	50
Opposing Volumes	40	33	45	6	13	13
Left Turning Traffic	11	19	17	10	34	37
% of Left Turning Traffic	55%	40%	45%	77%	76%	74%
Figure Used*	9A-9	9A-9	9A-9	9A-8	9A-8	9A-8
Warranted	No	No	No	No	No	No
Storage Length Required	--	--	--	--	--	--

*Based on MTO Design Supplement for TAC Geometric Design Guide for Canadian Roads - June 2017



5 Parking Justification

As with any equilibrium system, there are a minimum of two components that are required to be in balance to reach the equilibrium point. With parking systems, this requires the balance of parking supply and demand. Reaching an appropriate supply level is equally as important as demand. The ubiquitous oversupply of cheap and accessible free parking has long been identified as a major contributing factor to the growth in single-occupant (SOV) travel.

5.1 Proposed Parking Supply

The on-site (off-street) parking supply proposes a total of 293 parking spaces as illustrated in **Table 5.1**. This results in a total parking rate of 1.30 spaces per unit and hotel rooms.

It should be noted that 13 townhouse units are directly fronting onto Fuller Street and 8 townhouse units are directly fronting onto Boucher Street. These townhouse units will have one driveway space and garage per unit (42 spaces total) and are not included in the off-street parking supply.

TABLE 5.1: PROPOSED PARKING SUPPLY

Lane Use	Units	Parking Provided	Rate Per Unit
Townhouses - Stacked (Units)	88	148	1.68
Apartments (Units)	60	75	1.25
Hotel (Rooms)	78	70	0.90
Total	226	293	1.30

5.2 Municipality of Meaford Zoning By-law Requirements

Off-street parking requirements in the Municipality of Meaford are outlined in the Zoning By-law 60-2009¹⁴ which identifies the following minimum parking requirements:

- ▶ Residential Parking Requirements (Townhouse, Apartment Buildings, Multiple Dwelling Units) of 1.5 parking spaces per dwelling unit; and
- ▶ Non-Residential Parking Requirements (Hotel, Motel, Tourist Establishment) of 1.0 parking space per guest room plus 1.0

¹⁴ Meaford Zoning By-law 60-2009, Office Consolidation, July 2019



parking space per 9.3 square metres of floor space devoted to public use.

Table 5.2 outlines the zoning requirement for the site using the above noted rates. It indicates in a parking requirement of 315 spaces for the development.

TABLE 5.2: ZONING BY-LAW PARKING REQUIREMENTS

Land Use	Units	Rate	Required
Townhomes - Stacked (Units)	88	1.5 spaces per unit	132
Apartments (Units)	60	1.5 spaces per unit	90
Hotel (Rooms)	78	1.0 space per room	78
Hotel (Public Use)	135m ²	1.0 space per 9.3m ²	15
Total			315

The second hotel parking rate of 1.0 spaces per 9.3 square metres of floor space is not provided in the proposed parking supply as the time of use of the public space (on-site spa) differs from the hotel rooms. The spa users will use the parking spaces during the day, early evening while the hotel users will use the parking spaces overnight.

However, there are a number of considerations that justify a parking supply that is lower than required under the Municipality's standard by-law, as explained in the remainder of this section. Proposed Transportation Demand Management (TDM) measures could also be examined for their potential to further reduce parking demand.

5.2.1 Applicability of Zoning By-Law 60-2009

Between the 1940s and 1970s, many municipalities adopted minimum off-street parking requirements with the intent of preventing the parking demand generated by one land use or property from congesting on-street parking and/or reducing accessibility to adjacent properties and land uses.

However, minimum off-street parking requirements are an expensive and inefficient way to manage on and off-street parking demand and produce unwanted side effects that are in direct conflict with the established vision for more sustainable oriented urban centres. There are fundamental issues that are related to the application of the parking policies, particularly:

- ▶ **Reduce streetscape quality.** A great street is defined by activity, street-facing windows, and interesting facades. Excessive off-street parking located between buildings can disrupt the quality of such streetscapes.



- ▶ **Promote auto traffic.** Minimum parking requirements are generally set at a level that assumes everyone drives. This effectively creates unlimited supply which leads to a self-fulfilling prophecy where everyone will drive.
- ▶ **Reduce development feasibility.** For small infill projects and historic building retrofits, parking requirements often make these projects unattractive or infeasible. In some cases, the required parking may not physically fit on to a site; in other cases, it may be too expensive to provide.
- ▶ **Discourage innovation.** Car-sharing, cash incentives, subsidized transit passes, secure bike parking, and carpool/vanpool matching services are proven to reduce driving alone. But if the same amount of parking is still required, there is no incentive to use these programs.
- ▶ **Reduce density.** Even structured parking takes up physical space that is not available for other uses. Minimum parking requirements reduce the number of units or floor area by 20% or more. Parking often prevents a downtown from achieving the density needed for economic health.
- ▶ **Diminish economic vitality.** Downtowns depend on pedestrians and a 'park once' system where people park once and walk to various stores for impulse buys. With on-site parking people drive, park, visit their destination, and go home – eliminating street activity and potential customers.
- ▶ **Discourage mixed use development.** With mixed uses, peak parking times often do not coincide. Minimum parking requirements assume that each use has its own supply of parking, which does not allow mixed-use projects to reduce parking in order to offset higher development costs.

5.3 Parking Demand Forecasts

A review of actual parking demands that are likely to be generated by the proposed development has been considered to assess, independent and separate from a review of Zoning By-Law requirements.

5.3.1 Travel Characteristics

Parking rates defined by municipalities associated with multiple family land uses tend to be conservative in nature to account for automobile trips as the primary trip modes.



A review of the commuting characteristics provided by Statistics Canada¹⁵ for residents of Meaford confirms that a significant portion of travel undertaken during the morning and afternoon peak periods is by non-autos means. Information provided by Statistics Canada suggests that the proportion of people who choose to drive in the area is on average 87%.

Table 5.3 outlines the 2016 main mode of commuting for Meaford.

TABLE 5.3: TRIP MODE

Mode	Trips	Percentage
Car; Truck; Van - as a driver	3,975	87%
Car; Truck; Van - as a passenger	245	6%
Public Transit	20	0%
Walked	285	6%
Bicycle	10	0%
Other Method	50	1%
Total	4,585	100%

5.3.2 Area Specific Auto-Ownership

The need for parking is based, in part, on auto ownership rates. The Transportation Tomorrow Survey (TTS)¹⁶ provides data with respect to the number of vehicles owned by private households within the Greater Golden Horseshoe (Greater Toronto and surrounding area). Data are collected every five years and trends can be identified by comparing subsequent data sets.

Data was extracted from the 2016 TTS survey for several smaller communities with no or limited public transit for auto-ownership rates for those residing in apartment and townhouse units. **Table 5.4** outlines the survey data and indicates a range of 0.77 to 1.70 vehicles per townhouse. The average of the 11 communities is 1.33 vehicles per townhouse which is less than the zoning requirement of 1.5 spaces per townhouse. **Table 5.5** outlines the survey data for apartments and indicates a range of 0.63 to 0.95 vehicles per apartment. The average of the 11 communities is 0.82 vehicle per apartment which is less than the zoning requirement of 1.5 spaces per apartment.

¹⁵ Statistics Canada. 2017. Census Profile. 2016 Census.

¹⁶ The Transportation Tomorrow Survey (TTS) is a comprehensive travel survey conducted in the Greater Toronto and Hamilton Area (GTHA) once every five years (2016) and includes the City of Brantford.



TABLE 5.4: 2016 TTS AUTO-OWNERSHIP - TOWNHOUSES

Municipality	Number of Vehicles Per Household				Num. of Townhomes	Num. of Vehicles	Vehicles / Townhomes
	0	1	2	3			
Elora	-	92	130	-	222	352	1.59
Fergus	15	200	85	27	327	451	1.38
Stayner	-	107	63	-	170	233	1.37
Lindsay	32	286	139	20	477	624	1.31
Port Perry	95	-	-	-	95	-	0.00
Shelburne	-	116	88	-	204	292	1.43
Penetanguishene	4	84	17	-	105	118	1.12
Midland	18	257	180	-	455	617	1.36
Port Colborne	70	37	37	-	144	111	0.77
Fort Erie	-	38	87	-	125	212	1.70
Uxbridge	-	166	187	-	353	540	1.53
Total	234	1,383	1,013	47	2,677	3,550	1.33

TABLE 5.5: 2016 TTS AUTO-OWNERSHIP – APARTMENTS

Municipality	Population	Vehicles / Apartment	Demand for 60 Apartments
Elora	7,756	0.89	54
Shelburne	8,126	0.64	39
Penetanguishene	8,962	0.92	56
Port Perry	9,453	0.90	54
Stayner	14,151	0.63	38
Midland	16,864	0.65	39
Port Colborne	18,306	0.81	49
Lindsay	20,713	0.77	47
Fergus	20,767	0.92	56
Uxbridge	21,179	0.95	57
Fort Erie	30,710	0.94	57
Average		0.82	50



5.3.3 Comparable Site Parking Demands

To better understand the actual parking demand that can be expected for this development, parking demand surveys have been completed at sites in various locations in Ontario. It should be noted that these sites do have some access to local public transit networks and have larger populations than Meaford. The sites are described as follows:

- ▶ 450 Cumberland Avenue, Hamilton: This development has 75 townhome units with 94 surface parking spaces. Parking is provided at a rate of 1.25 spaces per unit. The survey indicated a maximum of 0.69 spaces per unit;
- ▶ 325 Lakeview Drive, Woodstock: This development is a single five-storey building with 108 units and 129 parking spaces. Parking is provided at a rate of 1.2 spaces per unit. The survey indicated a maximum parking observed rate of 0.9 spaces per unit;
- ▶ 56-64 Hiawatha Road, Woodstock: This development is three four-storey buildings with 96 units and 131 parking spaces. Parking is provided at a rate of 1.4 spaces per unit. The survey indicated a maximum observed rate of 0.75 spaces per unit; and
- ▶ 562 Durham Crescent, Woodstock: This development is a single five-storey building with 40 units and 54 parking spaces. Parking is provided at a rate of 1.4 spaces per unit. The survey indicated a maximum observed rate of 0.53 spaces per unit.

The parking demand surveys were conducted on a typical weekday in July and September 2019 from evening to early morning. **Appendix H** contains the survey data.

The survey results show a peak demand of 0.9 spaces per unit for multifamily dwellings. This rate is considerably lower than the 1.25 spaces per unit requirement in Zoning By-law 60-2009.

Using the observed rate of 0.9 spaces per unit for the residential land uses, the recommended parking supply for the subject site would be 211 parking spaces. With a proposed supply of 293 parking spaces, this represents a surplus of 82 parking spaces as shown in **Table 5.6**.

TABLE 5.6: OBSERVED PARKING DEMAND

Land Use	Units	Rate	Required	Provided	Surplus/ Deficient
Townhomes (Units)	88	0.9 spaces per unit	79	148	69
Apartments (Units)	60	0.9 spaces per unit	54	75	21
Hotel (rooms)	78	1.0 space per room	78	70	-8
Total			211	293	82



5.3.4 ITE Parking Generation

The Institute of Transportation Engineers (ITE) is a well recognized parking data resource. The ITE publishes Parking Generation (5th Edition), an informational report of parking data for various land use types in the United States of America and Canada.

ITE specifically notes that Parking Generation is not to be considered a standard, rather it is simply a compilation of available parking data, some more accurate than others, to be used as one resource in evaluation parking requirements. These are maximum parking ratios that are to be adjusted downward for local mode splits and for complementary parking utilization patterns.

ITE land use codes 220 (Multifamily Housing – Low Rise), 221 (Multifamily Housing – Mid Rise); and 310 (Hotel) have been used for the purpose of estimating the parking demand for the subject site.

Table 5.7 summarizes the estimated ITE parking demand base rates. The number of parking spaces recommended by ITE is 278, which is 15 less than the proposed parking supply of 293 spaces. The ITE parking rates do not reflect local impacts such as active mode usage, thus are conservative.

TABLE 5.7: ITE PARKING DEMAND

ITE Land Use	Units	Rate per Unit	Required	Provided	Surplus/ Deficient
220 - Multifamily Housing, Low-Rise (Dwelling Units)					
Weekday (Monday-Friday)	88	1.21	106	148	42
Saturday	88	1.31	115	148	33
Sunday	88	1.66	146	148	2
221 - Multifamily Housing, Mid-Rise (Dwelling Units)					
Weekday (Monday-Friday)	60	1.31	79	75	-4
Saturday	60	1.22	73	75	2
Sunday	60	2.05	123	75	-48
310 - Hotel (Rooms)					
Weekday (Monday-Friday)	78	0.74	58	70	12
Saturday	78	1.15	90	70	-20
Sunday	78	N/A	--	--	--
Total					
Weekday (Monday-Friday)			243	293	50
Saturday			278	293	15
Sunday			269	293	24

5.3.5 Hotel Parking Demand

As noted in **Table 5.7**, the maximum ITE parking demand for the hotel is 90 spaces. The ITE defines the hotel land use as:

“A hotel is a place for lodging that provides sleeping accommodations and supporting facilities such as full-service restaurant, cocktail lounge,

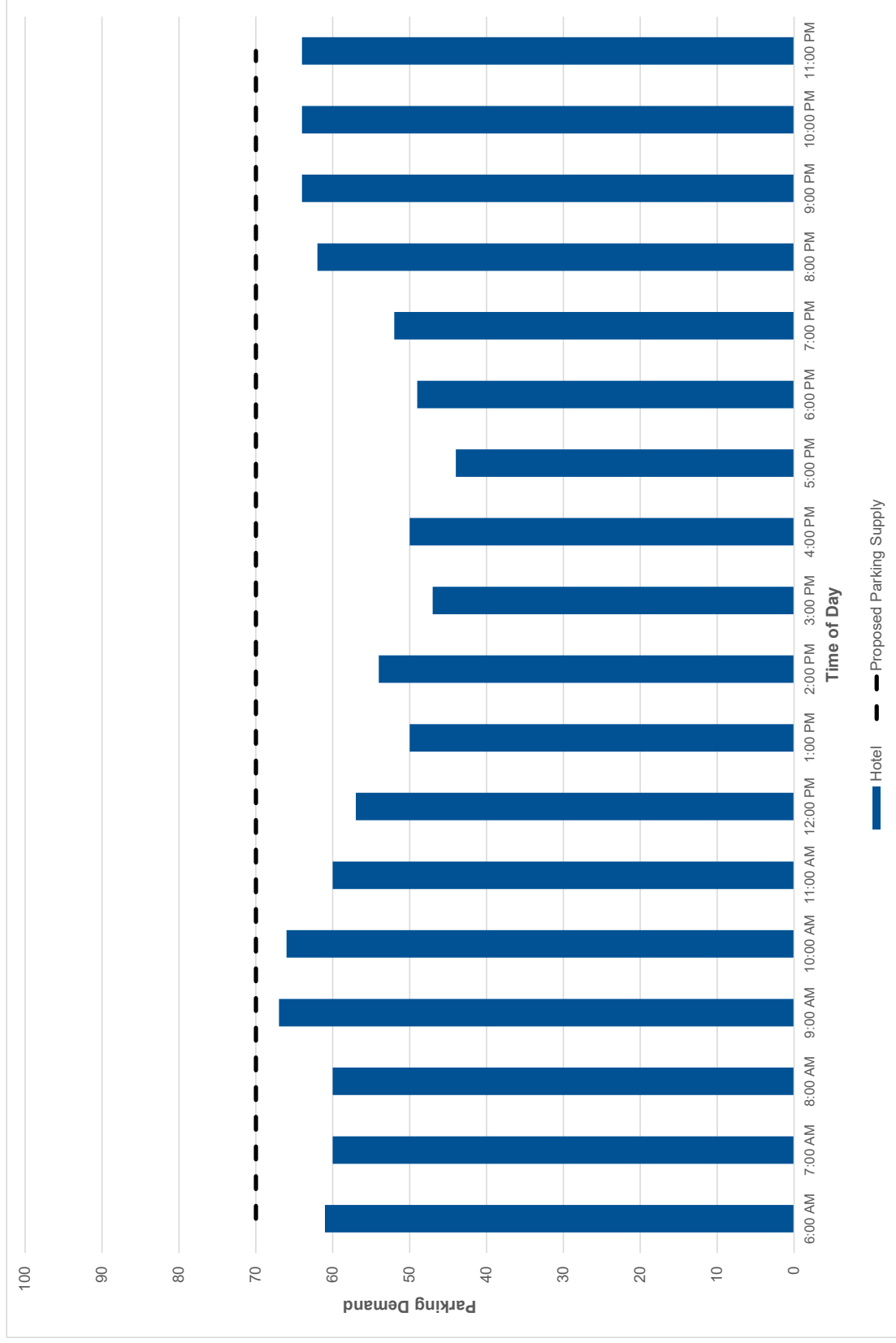


meeting rooms, banquet rooms, and convention facilities. It typically provides a swimming pool or another recreational facility as a fitness room.”¹⁷

The ITE also provides a breakdown of peak parking demand by time of day for the hotel land use. **Figure 5.1** illustrates the peak parking demand for the hotel by time of day. It indicates that the peak parking demand is typically late evening or early morning which corresponds to guests staying the night at the hotel. Also noted is that there remains excess parking capacity during the daytime hours to accommodate overflow.

¹⁷ Institute of Transportation Engineers Parking Generation Manual, 5th Edition, Lane Use: 310 Hotel





Hotel Peak Parking Demand

Figure 5.1

5.3.6 Walking

A sidewalk is currently provided along Bridge Street/Trowbridge Street from Fuller Street to Sykes Street. Connectivity to the municipal sidewalks should be provided to encourage walking, specifically to the downtown area. The subject site is approximately 600 metres (8-minute walk or 3 minutes to bicycle) to the downtown area.

Providing a safe and attractive environment for residents that choose to walk/cycle to/from the development will contribute to achieving sustainable transportation.

5.4 Estimated Parking Demand

Although a parking shortfall of approximately 22 spaces could result (based on the Zoning By-law), providing additional parking is not recommended, but rather supporting the reduction through a Transportation Demand Management (TDM) program.

Rather than establish generous parking requirements to satisfy the maximum potential demand that may occur, parking management (a TDM tool) allows contingency-based planning, which means that various solutions are identified which can be deployed if needed.

Reducing parking spaces should not exacerbate any current parking issues, however reducing the number of parking spaces should be explored to further encourage residents to use other modes of travel. Implementing a paid-parking operation is one of the most effective strategies for encouraging alternative travel habits.

To further encourage residents to use sustainable travel modes, the development can lease parking spaces separately from the cost to lease or purchase a unit (unbundle parking). This is more equitable and efficient since occupants are not forced to pay for parking they do not need and allows consumers to adjust their parking supply to reflect their needs.

This is an important factor that supports providing a reduced parking supply as residents are notified at the onset that parking will be on a limited basis and will be provided as an additional cost in lieu of the price to lease or purchase a unit.



6 Conclusions and Recommendations

6.1 Conclusions

Based on the investigations carried out, it is concluded that:

Transportation Impact Assessment

- ▶ **Existing Traffic Conditions:** The study area intersections are currently operating within acceptable levels of service and not critical movements during the AM, PM, and Saturday peak hours.
- ▶ **Development Trip Generation:** the residential development is forecast to generate approximately 107, 123, and 174 trips during the AM, PM, and Saturday peak hours, respectively.
- ▶ **2028 Background Traffic Conditions:** the study area intersections are forecast to operate within acceptable levels of service with no specific problem movements.
- ▶ **2028 Total Traffic Conditions:** the study area intersections are forecast to continue to operate within acceptable levels of service with no specific problem movements.
- ▶ The new driveway connections to Fuller Street and Boucher Street are forecast to operate within acceptable level of services during the AM, PM, and Saturday peak hours.
- ▶ The addition of the site generated traffic increases the overall delay at the study area intersections by five (5) seconds or less during the AM and PM peak hours.
- ▶ **Turn Lane Analysis:** left-turn lanes on Fuller Street and Boucher Street at the site accesses are not warranted during 2028 total traffic conditions.
- ▶ Any speeding concerns can be addressed by Town staff through traffic calming measures with public engagement to determine the most appropriate measures to implement to reduce vehicle speeds and improve safety for all users.

Parking Study

- ▶ The proposed parking supply for the development is 335 spaces. This includes 75 spaces for the apartment building, 134 spaces for the stacked townhouses, 42 spaces for the street townhouses and 70 spaces for the hotel. There are -161 underground parking spaces split between the apartments, stacked townhouses, and hotel. The street townhouses have one driveway and garage per unit.



- ▶ The Municipality's Zoning By-law requires 1.5 parking spaces per unit for residential multiple dwelling buildings and 1.0 parking spaces per room for a hotel, for a total parking requirement of 347 parking spaces. The proposed development parking supply of 335 can be considered adequate.
- ▶ Parking surveys conducted at similar sites indicate a peak parking demand rate of 0.9 spaces per unit for residential townhouse and apartment buildings and a peak rate of 0.75 spaces per hotel room.
- ▶ Auto-ownership rates for townhouses in small municipalities with none or limited public transit indicates an average rate of 1.33 vehicles per townhouse which is less than the zoning requirement of 1.5 spaces per townhouse. The average auto-ownership rates for apartments is 0.82 vehicles per apartment which is less than the zoning requirement of 1.5 spaces per apartment.
- ▶ Providing additional parking is not recommended, but rather supporting the reduction through a Transportation Demand Management (TDM) program that includes the following key measures:
 - Limited parking supply.
 - Provision of short-term and long-term bicycle parking; and
 - Consider parking to be unbundled from the cost of a unit.

6.2 Recommendations

Based on the findings of this study, it is recommended that the development be approved with no requirement for off-site transportation improvements.



Appendix A

Pre-Study Consultation



From: Tori Perejmybida <tperejmybida@meaford.ca>
Sent: January 14, 2021 8:45 AM
To: Erica Bayley <ebayley@ptsl.com>
Cc: Andrew Evans <aevans@ptsl.com>; Rob Armstrong <rarmstrong@meaford.ca>
Subject: RE: (200616) RE: Stanley Knights Property Development - Traffic Counts

Good morning Erica,

We have reviewed the Traffic Study terms of reference and have the following comments.

- The following intersection should also be reviewed as part of the study:
 - o Bayfield Street and Trowbridge Street – There is a new all-way stop located at this intersection. The additional stop signs were implemented as a result of changed sight lines from a recent bridge rehabilitation.
 - o Denmark Street and Bridge Street – as this is an irregular intersection, entrance to the harbour and end of the Georgian Trail we want to ensure that the necessary intersection improvements are made to ensure safety at this intersection is maintained with the addition of vehicles to the development.

The scope identified that only weekday traffic will be considered. As the development is located adjacent to the harbour weekday traffic will not properly take into consideration weekend traffic volumes that need to be taken into consideration as part of this study.

A link to the current development map is provided below.

<https://www.meaford.ca/en/business-development/current-developments.aspx>

If you have any question please let me know.

Kind regards,

Tori Perejmybida
Director of Infrastructure Services
Municipality of Meaford



21 Trowbridge Street West, Meaford
519 538-1060 ext. 1132 | tperejmybida@meaford.ca
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From: Andrew Evans
Sent: December 14, 2020 10:32 AM
To: tperejmybida@meaford.ca
Cc: Erica Bayley <ebayley@ptsl.com>
Subject: (200616) Stanley Knights Property Development Scope of Work

Greetings,

Paradigm has been retained to undertake a Transportation Impact Assessment (TIA) and a Parking Study (PS) for a proposed mixed-use development located on the north east corner of Boucher Street East and Fuller Street in Meaford, ON.

The property owner is proposing a mixed-use development with 86 townhouses, 120 apartment units, and a 102-room hotel. Vehicle access is proposed via three all-moves accesses to Fuller Street and three all-moves access to Boucher Street. Six of the townhouses will have direct driveway access onto Fuller Street and 8 of the townhouses will have direct driveway access onto Boucher Street.

Below is our scope of work for your review and approval:

Study Area Intersections:

- North Sykes Street (Hwy 26) & Trowbridge Street (signalized);
- South Sykes Street (Hwy 26) & Boucher Street (unsignalized);
- Boucher Street & St. Vincent Street (unsignalized);
- Bridge Street & St. Vincent Street (unsignalized);
- Boucher Street & Fuller Street (unsignalized);
- Fuller Street & Bridge Street (unsignalized); and
- Up to six site driveways.

Planning Horizons:

- Five years from full build-out (assumed Year 2028).

Analysis Periods:

- Weekday AM and PM peak hours.

Existing Traffic:

- Derived from Turning Movement Counts at study area intersections

Background Traffic:

- A background growth rate, please confirm.
- Please provide any information on background developments from nearby approved and/or in-stream developments

Site Generated Traffic:

- ITE Trip Generation Manual (10th Edition)
- Trip Distribution based on Existing Traffic Patterns

Traffic Analysis

- We will analyze the operation of the study area intersections for the Existing, Future Background (without the development) and Future Total (with the development) traffic conditions for each analysis period using Synchro v10

software. Volume to capacity (v/c) ratios, Level of Service (LOS) and 95th percentile queueing will be assessed.

- Based on the analysis results, we will identify any operational deficiencies as well as the net impact of the proposed development on the study area road network. The need for road improvements (e.g. auxiliary turn lanes) and/or other mitigating measures (e.g. traffic control device modifications) to address deficiencies (if any) will be determined. A sensitivity analysis will be conducted to determine what increase in traffic can be accommodated before network improvements are warranted. We will assess whether these measures are required due to non-site traffic (i.e. Existing for Future Background) or the increase in volumes resulting from the proposed development.

Parking Study

- We will estimate the parking demand generated by the proposed development and establish the number of on-site parking spaces that should be provided, recognizing site constraints and local conditions. If needed, a strategy would be developed to satisfy the parking demands of the proposed development.

Thank you and regards.

Andrew Evans, M.Sc.

Transportation Planner



Paradigm Transportation Solutions Limited

5A-150 Pinebush Road Cambridge ON N1R 8J8

p: 905.381.2229 x **305**

m: 519.497.3239

e: aevans@ptsl.com

w: www.ptsl.com

Appendix B

Traffic Data





Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: North Sykes Street & Trowbridge
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Trowbridge Street Eastbound						Trowbridge Street Westbound						North Sykes Street Northbound						North Sykes Street 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	0	0	1	0	1	1	1	1	0	0	0	2	0	40	0	0	0	40	0	34	1	0	1	35	78
7:15 AM	0	4	5	0	0	9	3	2	1	0	0	6	0	33	2	0	0	35	0	45	0	0	0	45	95
7:30 AM	1	3	2	0	0	6	2	2	3	0	0	7	1	46	0	0	0	47	3	61	1	0	0	65	125
7:45 AM	2	3	2	0	0	7	2	2	1	0	4	5	2	42	4	0	0	48	2	80	2	0	0	84	144
Hourly Total	3	10	10	0	1	23	8	7	5	0	4	20	3	161	6	0	0	170	5	220	4	0	1	229	442
8:00 AM	3	2	3	0	2	8	3	0	5	0	1	8	3	67	2	0	1	72	2	57	2	0	2	61	149
8:15 AM	2	3	1	0	2	6	1	2	2	0	0	5	1	49	3	0	3	53	3	62	0	0	2	65	129
8:30 AM	1	1	4	0	1	6	5	2	2	0	1	9	4	52	3	0	0	59	2	80	1	0	2	83	157
8:45 AM	1	2	7	0	2	10	5	5	2	0	0	12	7	83	8	0	0	98	3	76	1	0	5	80	200
Hourly Total	7	8	15	0	7	30	14	9	11	0	2	34	15	251	16	0	4	282	10	275	4	0	11	289	635
9:00 AM	1	3	6	0	1	10	2	4	3	0	0	9	3	67	6	0	4	76	0	64	4	0	1	68	163
9:15 AM	4	2	4	0	2	10	1	2	3	0	0	6	3	56	5	0	1	64	2	58	2	0	3	62	142
9:30 AM	3	1	6	0	1	10	4	0	1	0	0	5	2	56	2	0	1	60	0	63	2	0	2	65	140
9:45 AM	4	2	6	0	4	12	3	4	3	0	1	10	4	52	11	0	0	67	1	60	4	1	2	66	155
Hourly Total	12	8	22	0	8	42	10	10	10	0	1	30	12	231	24	0	6	267	3	245	12	1	8	261	600
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	5	9	6	0	19	20	4	3	3	0	0	10	7	54	3	0	3	64	0	72	3	0	3	75	169
12:15 PM	3	4	7	0	9	14	2	3	2	0	1	7	5	65	4	0	3	74	2	56	3	0	3	61	156
12:30 PM	2	3	9	0	2	14	6	3	1	0	0	10	6	67	8	0	0	81	4	64	8	0	3	76	181
12:45 PM	3	9	8	0	6	20	5	4	0	0	1	9	6	76	6	0	0	88	2	75	4	0	8	81	198
Hourly Total	13	25	30	0	36	68	17	13	6	0	2	36	24	262	21	0	6	307	8	267	18	0	17	293	704
1:00 PM	2	3	8	0	7	13	4	2	4	0	1	10	5	67	5	0	2	77	2	90	5	0	14	97	197
1:15 PM	6	3	11	0	6	20	3	1	3	0	2	7	8	67	10	0	8	85	0	78	3	0	9	81	193
1:30 PM	3	4	10	0	2	17	4	3	3	0	2	10	3	58	7	0	2	68	5	67	3	0	1	75	170
1:45 PM	2	4	11	0	3	17	8	2	2	0	0	12	3	59	5	0	0	67	4	77	3	0	3	84	180
Hourly Total	13	14	40	0	18	67	19	8	12	0	5	39	19	251	27	0	12	297	11	312	14	0	27	337	740
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	6	9	8	0	6	23	7	2	5	0	5	14	2	56	10	0	2	68	2	86	7	0	7	95	200
3:15 PM	8	9	12	0	1	29	3	4	1	0	2	8	3	83	10	0	0	96	1	77	4	0	1	82	215
3:30 PM	2	1	7	0	9	10	5	3	3	1	1	12	8	85	5	0	0	98	3	57	1	0	4	61	181
3:45 PM	4	2	10	0	9	16	4	7	0	0	1	11	5	84	5	0	4	94	2	64	2	0	7	68	189
Hourly Total	20	21	37	0	25	78	19	16	9	1	9	45	18	308	30	0	6	356	8	284	14	0	19	306	785
4:00 PM	4	3	2	0	1	9	2	3	4	0	1	9	3	74	5	0	1	82	2	79	0	0	2	81	181
4:15 PM	4	4	6	0	4	14	4	1	1	0	0	6	4	84	2	0	1	90	0	78	6	0	3	84	194
4:30 PM	6	1	5	0	2	12	5	4	3	0	1	12	5	81	6	0	1	92	1	71	7	0	0	79	195

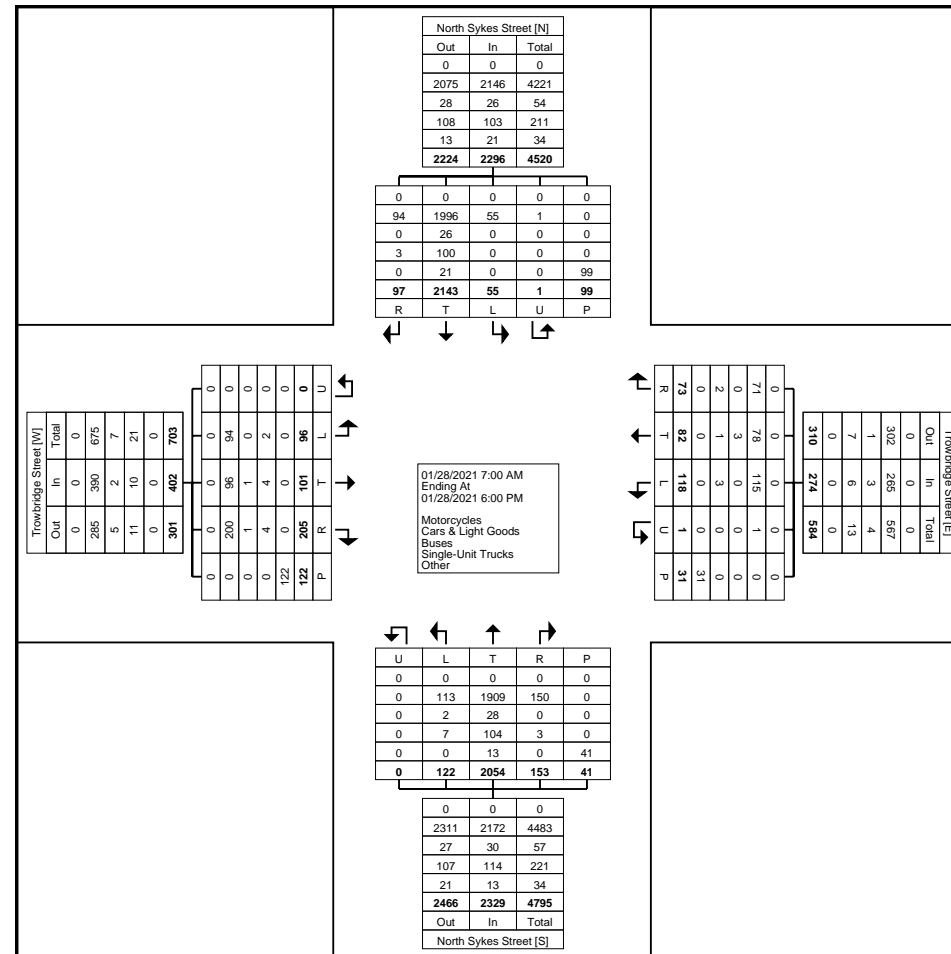
4:45 PM	4	2	6	0	6	12	8	6	4	0	0	18	5	75	4	0	0	84	2	68	6	0	2	76	190
Hourly Total	18	10	19	0	13	47	19	14	12	0	2	45	17	314	17	0	3	348	5	296	19	0	7	320	760
5:00 PM	3	1	16	0	6	20	4	0	3	0	0	7	3	83	5	0	1	91	2	80	3	0	2	85	203
5:15 PM	3	1	7	0	2	11	4	1	2	0	6	7	2	69	3	0	2	74	2	57	6	0	4	65	157
5:30 PM	1	2	6	0	4	9	1	3	1	0	0	5	5	56	1	0	0	62	1	53	0	0	1	54	130
5:45 PM	3	1	3	0	2	7	3	1	2	0	0	6	4	68	3	0	1	75	0	54	3	0	2	57	145
Hourly Total	10	5	32	0	14	47	12	5	8	0	6	25	14	276	12	0	4	302	5	244	12	0	9	261	635
Grand Total	96	101	205	0	122	402	118	82	73	1	31	274	122	2054	153	0	41	2329	55	2143	97	1	99	2296	5301
Approach %	23.9	25.1	51.0	0.0	-	-	43.1	29.9	26.6	0.4	-	-	5.2	88.2	6.6	0.0	-	-	2.4	93.3	4.2	0.0	-	-	-
Total %	1.8	1.9	3.9	0.0	-	7.6	2.2	1.5	1.4	0.0	-	5.2	2.3	38.7	2.9	0.0	-	43.9	1.0	40.4	1.8	0.0	-	43.3	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Cars & Light Goods	94	96	200	0	-	390	115	78	71	1	-	265	113	1909	150	0	-	2172	55	1996	94	1	-	2146	4973
% Cars & Light Goods	97.9	95.0	97.6	-	-	97.0	97.5	95.1	97.3	100.0	-	96.7	92.6	92.9	98.0	-	-	93.3	100.0	93.1	96.9	100.0	-	93.5	93.8
Buses	0	1	1	0	-	2	0	3	0	0	-	3	2	28	0	0	-	30	0	26	0	0	-	26	61
% Buses	0.0	1.0	0.5	-	-	0.5	0.0	3.7	0.0	0.0	-	1.1	1.6	1.4	0.0	-	-	1.3	0.0	1.2	0.0	0.0	-	1.1	1.2
Single-Unit Trucks	2	4	4	0	-	10	3	1	2	0	-	6	7	104	3	0	-	114	0	100	3	0	-	103	233
% Single-Unit Trucks	2.1	4.0	2.0	-	-	2.5	2.5	1.2	2.7	0.0	-	2.2	5.7	5.1	2.0	-	-	4.9	0.0	4.7	3.1	0.0	-	4.5	4.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	13	0	0	-	13	0	21	0	0	-	21	34
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.6	0.0	-	-	0.6	0.0	1.0	0.0	0.0	-	0.9	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	122	-	-	-	-	-	31	-	-	-	-	-	41	-	-	-	-	-	99	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data (8:30 AM)

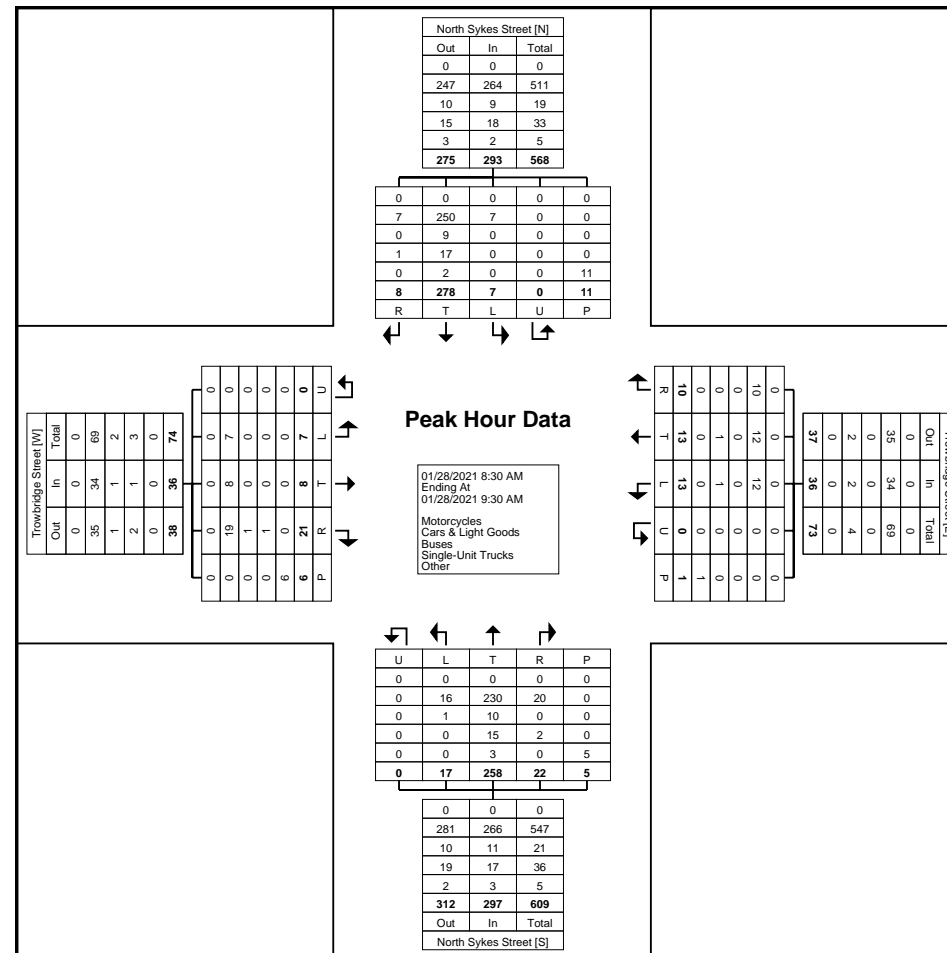
Start Time	Trowbridge Street Eastbound						Trowbridge Street Westbound						North Sykes Street Northbound						North Sykes Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
8:30 AM	1	1	4	0	1	6	5	2	2	0	1	9	4	52	3	0	0	59	2	80	1	0	2	83	157
8:45 AM	1	2	7	0	2	10	5	5	2	0	0	12	7	83	8	0	0	98	3	76	1	0	5	80	200
9:00 AM	1	3	6	0	1	10	2	4	3	0	0	9	3	67	6	0	4	76	0	64	4	0	1	68	163
9:15 AM	4	2	4	0	2	10	1	2	3	0	0	6	3	56	5	0	1	64	2	58	2	0	3	62	142
Total	7	8	21	0	6	36	13	13	10	0	1	36	17	258	22	0	5	297	7	278	8	0	11	293	662
Approach %	19.4	22.2	58.3	0.0	-	-	36.1	36.1	27.8	0.0	-	-	5.7	86.9	7.4	0.0	-	-	2.4	94.9	2.7	0.0	-	-	-
Total %	1.1	1.2	3.2	0.0	-	5.4	2.0	2.0	1.5	0.0	-	5.4	2.6	39.0	3.3	0.0	-	44.9	1.1	42.0	1.2	0.0	-	44.3	-
PHF	0.438	0.667	0.750	0.000	-	0.900	0.650	0.650	0.833	0.000	-	0.750	0.607	0.777	0.688	0.000	-	0.758	0.583	0.869	0.500	0.000	-	0.883	0.828
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	7	8	19	0	-	34	12	12	10	0	-	34	16	230	20	0	-	266	7	250	7	0	-	264	598
% Cars & Light Goods	100.0	100.0	90.5	-	-	94.4	92.3	92.3	100.0	-	-	94.4	94.1	89.1	90.9	-	-	89.6	100.0	89.9	87.5	-	-	90.1	90.3
Buses	0	0	1	0	-	1	0	0	0	0	-	0	1	10	0	0	-	11	0	9	0	0	-	9	21
% Buses	0.0	0.0	4.8	-	-	2.8	0.0	0.0	0.0	-	-	0.0	5.9	3.9	0.0	-	-	3.7	0.0	3.2	0.0	-	-	3.1	3.2
Single-Unit Trucks	0	0	1	0	-	1	1	1	0	0	-	2	0	15	2	0	-	17	0	17	1	0	-	18	38
% Single-Unit Trucks	0.0	0.0	4.8	-	-	2.8	7.7	7.7	0.0	-	-	5.6	0.0	5.8	9.1	-	-	5.7	0.0	6.1	12.5	-	-	6.1	5.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	3	0	0	-	3	0	2	0	0	-	2	5
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.2	0.0	-	-	1.0	0.0	0.7	0.0	-	-	0.7	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	11	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: North Sykes Street & Trowbridge
Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data Plot (8:30 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data (12:30 PM)

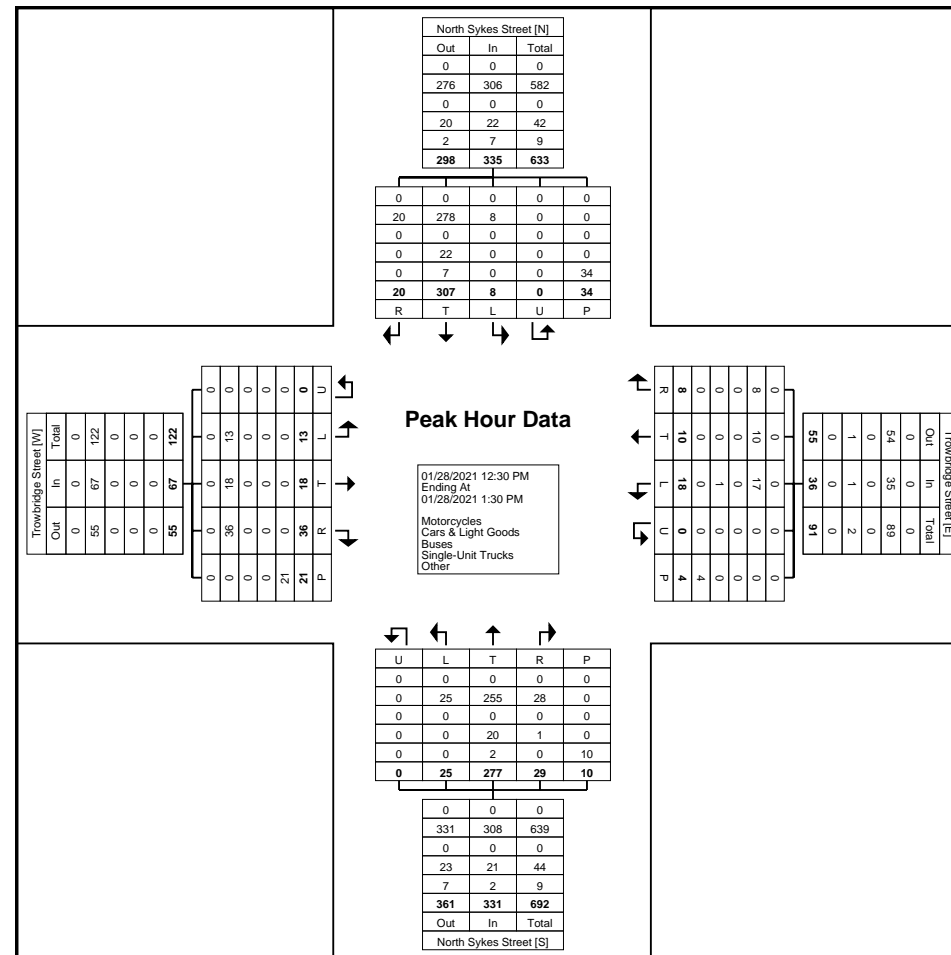
Start Time	Trowbridge Street Eastbound						Trowbridge Street Westbound						North Sykes Street Northbound						North Sykes Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:30 PM	2	3	9	0	2	14	6	3	1	0	0	10	6	67	8	0	0	81	4	64	8	0	3	76	181
12:45 PM	3	9	8	0	6	20	5	4	0	0	1	9	6	76	6	0	0	88	2	75	4	0	8	81	198
1:00 PM	2	3	8	0	7	13	4	2	4	0	1	10	5	67	5	0	2	77	2	90	5	0	14	97	197
1:15 PM	6	3	11	0	6	20	3	1	3	0	2	7	8	67	10	0	8	85	0	78	3	0	9	81	193
Total	13	18	36	0	21	67	18	10	8	0	4	36	25	277	29	0	10	331	8	307	20	0	34	335	769
Approach %	19.4	26.9	53.7	0.0	-	-	50.0	27.8	22.2	0.0	-	-	7.6	83.7	8.8	0.0	-	-	2.4	91.6	6.0	0.0	-	-	-
Total %	1.7	2.3	4.7	0.0	-	8.7	2.3	1.3	1.0	0.0	-	4.7	3.3	36.0	3.8	0.0	-	43.0	1.0	39.9	2.6	0.0	-	43.6	-
PHF	0.542	0.500	0.818	0.000	-	0.838	0.750	0.625	0.500	0.000	-	0.900	0.781	0.911	0.725	0.000	-	0.940	0.500	0.853	0.625	0.000	-	0.863	0.971
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	13	18	36	0	-	67	17	10	8	0	-	35	25	255	28	0	-	308	8	278	20	0	-	306	716
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	94.4	100.0	100.0	-	-	97.2	100.0	92.1	96.6	-	-	93.1	100.0	90.6	100.0	-	-	91.3	93.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	1	0	0	0	-	1	0	20	1	0	-	21	0	22	0	0	-	22	44
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	5.6	0.0	0.0	-	-	2.8	0.0	7.2	3.4	-	-	6.3	0.0	7.2	0.0	-	-	6.6	5.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	7	0	0	-	7	9
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	-	-	0.6	0.0	2.3	0.0	-	-	2.1	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	21	-	-	-	-	-	4	-	-	-	-	-	10	-	-	-	-	-	34	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
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Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data (3:00 PM)

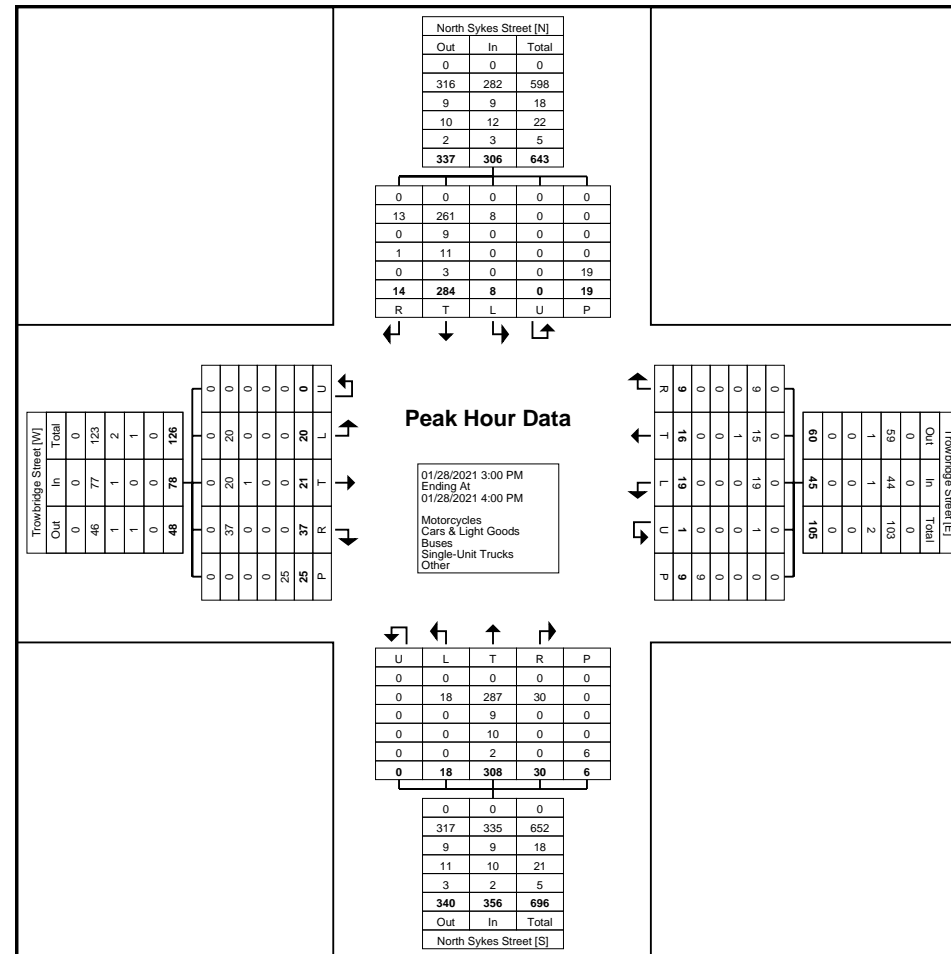
Start Time	Trowbridge Street Eastbound						Trowbridge Street Westbound						North Sykes Street Northbound						North Sykes Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
3:00 PM	6	9	8	0	6	23	7	2	5	0	5	14	2	56	10	0	2	68	2	86	7	0	7	95	200
3:15 PM	8	9	12	0	1	29	3	4	1	0	2	8	3	83	10	0	0	96	1	77	4	0	1	82	215
3:30 PM	2	1	7	0	9	10	5	3	3	1	1	12	8	85	5	0	0	98	3	57	1	0	4	61	181
3:45 PM	4	2	10	0	9	16	4	7	0	0	1	11	5	84	5	0	4	94	2	64	2	0	7	68	189
Total	20	21	37	0	25	78	19	16	9	1	9	45	18	308	30	0	6	356	8	284	14	0	19	306	785
Approach %	25.6	26.9	47.4	0.0	-	-	42.2	35.6	20.0	2.2	-	-	5.1	86.5	8.4	0.0	-	-	2.6	92.8	4.6	0.0	-	-	-
Total %	2.5	2.7	4.7	0.0	-	9.9	2.4	2.0	1.1	0.1	-	5.7	2.3	39.2	3.8	0.0	-	45.4	1.0	36.2	1.8	0.0	-	39.0	-
PHF	0.625	0.583	0.771	0.000	-	0.672	0.679	0.571	0.450	0.250	-	0.804	0.563	0.906	0.750	0.000	-	0.908	0.667	0.826	0.500	0.000	-	0.805	0.913
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	20	20	37	0	-	77	19	15	9	1	-	44	18	287	30	0	-	335	8	261	13	0	-	282	738
% Cars & Light Goods	100.0	95.2	100.0	-	-	98.7	100.0	93.8	100.0	100.0	-	97.8	100.0	93.2	100.0	-	-	94.1	100.0	91.9	92.9	-	-	92.2	94.0
Buses	0	1	0	0	-	1	0	1	0	0	-	1	0	9	0	0	-	9	0	9	0	0	-	9	20
% Buses	0.0	4.8	0.0	-	-	1.3	0.0	6.3	0.0	0.0	-	2.2	0.0	2.9	0.0	-	-	2.5	0.0	3.2	0.0	-	-	2.9	2.5
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	10	0	0	-	10	0	11	1	0	-	12	22
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	3.2	0.0	-	-	2.8	0.0	3.9	7.1	-	-	3.9	2.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	3	0	0	-	3	5
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.6	0.0	-	-	0.6	0.0	1.1	0.0	-	-	1.0	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	25	-	-	-	-	-	9	-	-	-	-	-	6	-	-	-	-	-	19	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
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Turning Movement Peak Hour Data Plot (3:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: South Sykes Street & Boucher
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Victoria Cres. Eastbound						Boucher Street Westbound						South Sykes Street Northbound						South Sykes Street 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	0	0	0	0	1	0	0	1	0	0	1	1	39	0	0	0	40	1	34	1	0	0	36	78
7:15 AM	0	0	2	0	0	2	1	0	2	0	0	3	1	35	1	0	0	37	2	54	0	0	0	56	98
7:30 AM	0	0	1	0	0	1	0	1	0	0	0	1	0	47	0	0	0	47	1	66	0	0	0	67	116
7:45 AM	0	1	1	0	2	2	0	0	0	0	0	0	0	57	1	0	1	58	1	88	1	0	0	90	150
Hourly Total	1	1	4	0	2	6	1	1	3	0	0	5	2	178	2	0	1	182	5	242	2	0	0	249	442
8:00 AM	0	0	1	0	2	1	2	0	4	0	1	6	0	64	0	0	0	64	1	69	0	0	1	70	141
8:15 AM	0	0	0	0	1	0	0	0	1	0	0	1	1	58	0	0	0	59	0	67	0	0	0	67	127
8:30 AM	0	0	1	0	2	1	0	0	2	0	0	2	0	66	1	0	0	67	2	97	1	0	2	100	170
8:45 AM	0	0	0	0	3	0	1	0	4	0	0	5	1	99	5	0	0	105	0	94	0	0	0	94	204
Hourly Total	0	0	2	0	8	2	3	0	11	0	1	14	2	287	6	0	0	295	3	327	1	0	3	331	642
9:00 AM	0	0	3	0	3	3	0	0	1	0	0	1	0	73	2	0	0	75	5	75	0	0	1	80	159
9:15 AM	1	1	0	0	0	2	1	0	3	0	0	4	0	62	0	0	1	62	1	65	0	0	0	66	134
9:30 AM	0	0	0	0	0	0	1	0	1	0	0	2	0	62	1	0	0	63	2	72	1	0	0	75	140
9:45 AM	0	2	1	0	0	3	1	0	1	0	0	2	0	69	1	0	0	70	1	68	0	0	0	69	144
Hourly Total	1	3	4	0	3	8	3	0	6	0	0	9	0	266	4	0	1	270	9	280	1	0	1	290	577
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	0	0	2	0	1	2	0	1	0	0	0	1	0	71	4	0	0	75	0	82	0	0	1	82	160
12:15 PM	1	0	0	0	3	1	0	0	1	0	0	1	0	74	2	0	0	76	2	65	2	0	0	69	147
12:30 PM	1	0	0	0	0	1	1	0	1	0	0	2	1	90	2	0	0	93	1	90	0	0	0	91	187
12:45 PM	0	0	0	0	3	0	0	0	0	0	0	0	0	96	2	0	2	98	0	88	0	0	0	88	186
Hourly Total	2	0	2	0	7	4	1	1	2	0	0	4	1	331	10	0	2	342	3	325	2	0	1	330	680
1:00 PM	0	1	1	0	3	2	1	0	5	0	0	6	0	82	0	0	0	82	2	94	2	0	0	98	188
1:15 PM	0	0	1	0	5	1	0	0	4	0	0	4	2	84	1	0	0	87	2	89	0	0	1	91	183
1:30 PM	0	1	2	0	1	3	3	0	0	0	2	3	2	74	1	0	0	77	0	88	2	0	0	90	173
1:45 PM	1	0	0	0	2	1	1	0	2	0	0	3	0	74	2	0	0	76	1	91	3	0	0	95	175
Hourly Total	1	2	4	0	11	7	5	0	11	0	2	16	4	314	4	0	0	322	5	362	7	0	1	374	719
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	2	1	3	1	1	7	0	0	2	0	0	2	0	69	7	0	0	76	1	99	0	0	0	100	185
3:15 PM	0	0	1	0	4	1	2	1	3	0	0	6	3	108	5	0	0	116	2	93	1	0	0	96	219
3:30 PM	0	0	2	0	4	2	2	0	2	0	1	4	1	104	0	0	0	105	2	70	0	0	0	72	183
3:45 PM	1	0	0	0	6	1	2	0	2	0	0	4	0	94	2	0	0	96	2	78	0	0	0	80	181
Hourly Total	3	1	6	1	15	11	6	1	9	0	1	16	4	375	14	0	0	393	7	340	1	0	0	348	768
4:00 PM	1	0	0	0	0	1	1	0	2	0	0	3	0	92	2	0	0	94	2	78	2	0	0	82	180
4:15 PM	0	0	0	0	1	0	1	0	2	0	0	3	1	91	3	0	0	95	2	96	1	0	0	99	197
4:30 PM	1	0	1	0	0	2	1	0	3	0	0	4	0	102	1	0	2	103	2	85	0	0	0	87	196

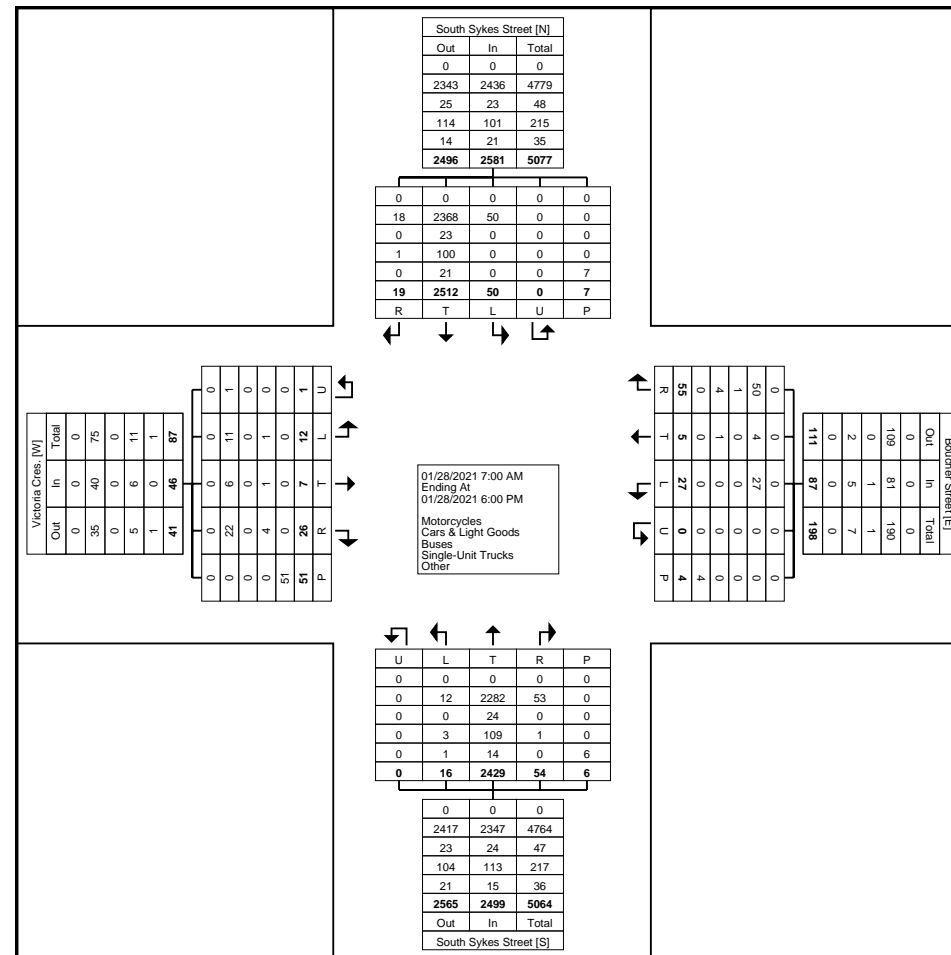
4:45 PM	1	0	2	0	0	3	1	1	1	0	0	3	0	87	0	0	0	87	1	89	0	0	0	90	183
Hourly Total	3	0	3	0	1	6	4	1	8	0	0	13	1	372	6	0	2	379	7	348	3	0	0	358	756
5:00 PM	0	0	0	0	2	0	1	0	0	0	0	1	0	99	1	0	0	100	3	97	2	0	1	102	203
5:15 PM	0	0	1	0	2	1	0	0	0	0	0	0	2	79	1	0	0	82	2	66	0	0	0	68	151
5:30 PM	0	0	0	0	0	0	2	1	1	0	0	4	0	58	2	0	0	60	4	59	0	0	0	63	127
5:45 PM	1	0	0	0	0	1	1	0	4	0	0	5	0	70	4	0	0	74	2	66	0	0	0	68	148
Hourly Total	1	0	1	0	4	2	4	1	5	0	0	10	2	306	8	0	0	316	11	288	2	0	1	301	629
Grand Total	12	7	26	1	51	46	27	5	55	0	4	87	16	2429	54	0	6	2499	50	2512	19	0	7	2581	5213
Approach %	26.1	15.2	56.5	2.2	-	-	31.0	5.7	63.2	0.0	-	-	0.6	97.2	2.2	0.0	-	-	1.9	97.3	0.7	0.0	-	-	-
Total %	0.2	0.1	0.5	0.0	-	0.9	0.5	0.1	1.1	0.0	-	1.7	0.3	46.6	1.0	0.0	-	47.9	1.0	48.2	0.4	0.0	-	49.5	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	11	6	22	1	-	40	27	4	50	0	-	81	12	2282	53	0	-	2347	50	2368	18	0	-	2436	4904
% Cars & Light Goods	91.7	85.7	84.6	100.0	-	87.0	100.0	80.0	90.9	-	-	93.1	75.0	93.9	98.1	-	-	93.9	100.0	94.3	94.7	-	-	94.4	94.1
Buses	0	0	0	0	-	0	0	0	1	0	-	1	0	24	0	0	-	24	0	23	0	0	-	23	48
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	1.8	-	-	1.1	0.0	1.0	0.0	-	-	1.0	0.0	0.9	0.0	-	-	0.9	0.9
Single-Unit Trucks	1	1	4	0	-	6	0	1	4	0	-	5	3	109	1	0	-	113	0	100	1	0	-	101	225
% Single-Unit Trucks	8.3	14.3	15.4	0.0	-	13.0	0.0	20.0	7.3	-	-	5.7	18.8	4.5	1.9	-	-	4.5	0.0	4.0	5.3	-	-	3.9	4.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	1	14	0	0	-	15	0	21	0	0	-	21	36
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	6.3	0.6	0.0	-	-	0.6	0.0	0.8	0.0	-	-	0.8	0.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	51	-	-	-	-	-	4	-	-	-	-	-	6	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: South Sykes Street & Boucher
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: South Sykes Street & Boucher
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 4

Turning Movement Peak Hour Data (8:30 AM)

Start Time	Victoria Cres. Eastbound						Boucher Street Westbound						South Sykes Street Northbound						South Sykes Street 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	
8:30 AM	0	0	1	0	2	1	0	0	2	0	0	2	0	66	1	0	0	67	2	97	1	0	2	100	170
8:45 AM	0	0	0	0	3	0	1	0	4	0	0	5	1	99	5	0	0	105	0	94	0	0	0	94	204
9:00 AM	0	0	3	0	3	3	0	0	1	0	0	1	0	73	2	0	0	75	5	75	0	0	1	80	159
9:15 AM	1	1	0	0	0	2	1	0	3	0	0	4	0	62	0	0	1	62	1	65	0	0	0	66	134
Total	1	1	4	0	8	6	2	0	10	0	0	12	1	300	8	0	1	309	8	331	1	0	3	340	667
Approach %	16.7	16.7	66.7	0.0	-	-	16.7	0.0	83.3	0.0	-	-	0.3	97.1	2.6	0.0	-	-	2.4	97.4	0.3	0.0	-	-	-
Total %	0.1	0.1	0.6	0.0	-	0.9	0.3	0.0	1.5	0.0	-	1.8	0.1	45.0	1.2	0.0	-	46.3	1.2	49.6	0.1	0.0	-	51.0	-
PHF	0.250	0.250	0.333	0.000	-	0.500	0.500	0.000	0.625	0.000	-	0.600	0.250	0.758	0.400	0.000	-	0.736	0.400	0.853	0.250	0.000	-	0.850	0.817
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	1	1	4	0	-	6	2	0	7	0	-	9	1	272	8	0	-	281	8	303	1	0	-	312	608
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	100.0	-	70.0	-	-	75.0	100.0	90.7	100.0	-	-	90.9	100.0	91.5	100.0	-	-	91.8	91.2
Buses	0	0	0	0	-	0	0	0	1	0	-	1	0	10	0	0	-	10	0	9	0	0	-	9	20
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	-	10.0	-	-	8.3	0.0	3.3	0.0	-	-	3.2	0.0	2.7	0.0	-	-	2.6	3.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	2	0	-	2	0	15	0	0	-	15	0	17	0	0	-	17	34
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	20.0	-	-	16.7	0.0	5.0	0.0	-	-	4.9	0.0	5.1	0.0	-	-	5.0	5.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	3	0	0	-	3	0	2	0	0	-	2	5
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	1.0	0.0	-	-	1.0	0.0	0.6	0.0	-	-	0.6	0.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-
Pedestrians	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	3	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-

Turning Movement Peak Hour Data Plot (8:30 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: South Sykes Street & Boucher
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 6

Turning Movement Peak Hour Data (12:30 PM)

Start Time	Victoria Cres. Eastbound						Boucher Street Westbound						South Sykes Street Northbound						South Sykes Street 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	
12:30 PM	1	0	0	0	0	1	1	0	1	0	0	2	1	90	2	0	0	93	1	90	0	0	0	91	187
12:45 PM	0	0	0	0	3	0	0	0	0	0	0	0	0	96	2	0	2	98	0	88	0	0	0	88	186
1:00 PM	0	1	1	0	3	2	1	0	5	0	0	6	0	82	0	0	0	82	2	94	2	0	0	98	188
1:15 PM	0	0	1	0	5	1	0	0	4	0	0	4	2	84	1	0	0	87	2	89	0	0	1	91	183
Total	1	1	2	0	11	4	2	0	10	0	0	12	3	352	5	0	2	360	5	361	2	0	1	368	744
Approach %	25.0	25.0	50.0	0.0	-	-	16.7	0.0	83.3	0.0	-	-	0.8	97.8	1.4	0.0	-	-	1.4	98.1	0.5	0.0	-	-	-
Total %	0.1	0.1	0.3	0.0	-	0.5	0.3	0.0	1.3	0.0	-	1.6	0.4	47.3	0.7	0.0	-	48.4	0.7	48.5	0.3	0.0	-	49.5	-
PHF	0.250	0.250	0.500	0.000	-	0.500	0.500	0.000	0.500	0.000	-	0.500	0.375	0.917	0.625	0.000	-	0.918	0.625	0.960	0.250	0.000	-	0.939	0.989
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	1	1	2	0	-	4	2	0	9	0	-	11	3	330	5	0	-	338	5	331	2	0	-	338	691
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	100.0	-	90.0	-	-	91.7	100.0	93.8	100.0	-	-	93.9	100.0	91.7	100.0	-	-	91.8	92.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	18	0	0	-	18	0	23	0	0	-	23	42
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	10.0	-	-	8.3	0.0	5.1	0.0	-	-	5.0	0.0	6.4	0.0	-	-	6.3	5.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	4	0	0	-	4	0	7	0	0	-	7	11
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	1.1	0.0	-	-	1.1	0.0	1.9	0.0	-	-	1.9	1.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-
Pedestrians	-	-	-	-	11	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	1	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-

Turning Movement Peak Hour Data Plot (12:30 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: South Sykes Street & Boucher
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 8

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Victoria Cres. Eastbound						Boucher Street Westbound						South Sykes Street Northbound						South Sykes Street 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	
4:15 PM	0	0	0	0	1	0	1	0	2	0	0	3	1	91	3	0	0	95	2	96	1	0	0	99	197
4:30 PM	1	0	1	0	0	2	1	0	3	0	0	4	0	102	1	0	2	103	2	85	0	0	0	87	196
4:45 PM	1	0	2	0	0	3	1	1	1	0	0	3	0	87	0	0	0	87	1	89	0	0	0	90	183
5:00 PM	0	0	0	0	2	0	1	0	0	0	0	1	0	99	1	0	0	100	3	97	2	0	1	102	203
Total	2	0	3	0	3	5	4	1	6	0	0	11	1	379	5	0	2	385	8	367	3	0	1	378	779
Approach %	40.0	0.0	60.0	0.0	-	-	36.4	9.1	54.5	0.0	-	-	0.3	98.4	1.3	0.0	-	-	2.1	97.1	0.8	0.0	-	-	-
Total %	0.3	0.0	0.4	0.0	-	0.6	0.5	0.1	0.8	0.0	-	1.4	0.1	48.7	0.6	0.0	-	49.4	1.0	47.1	0.4	0.0	-	48.5	-
PHF	0.500	0.000	0.375	0.000	-	0.417	1.000	0.250	0.500	0.000	-	0.688	0.250	0.929	0.417	0.000	-	0.934	0.667	0.946	0.375	0.000	-	0.926	0.959
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	1	0	3	0	-	4	4	1	6	0	-	11	0	368	5	0	-	373	8	364	3	0	-	375	763
% Cars & Light Goods	50.0	-	100.0	-	-	80.0	100.0	100.0	100.0	-	-	100.0	0.0	97.1	100.0	-	-	96.9	100.0	99.2	100.0	-	-	99.2	97.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.1
Single-Unit Trucks	1	0	0	0	-	1	0	0	0	0	-	0	0	9	0	0	-	9	0	2	0	0	-	2	12
% Single-Unit Trucks	50.0	-	0.0	-	-	20.0	0.0	0.0	0.0	-	-	0.0	0.0	2.4	0.0	-	-	2.3	0.0	0.5	0.0	-	-	0.5	1.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	1	1	0	0	-	2	0	1	0	0	-	1	3
% Articulated Trucks	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	100.0	0.3	0.0	-	-	0.5	0.0	0.3	0.0	-	-	0.3	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	1	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-

Turning Movement Peak Hour Data Plot (4:15 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Trowbridge Street & Bayfield
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Trowbridge Street Eastbound						Bridge Street Westbound						Bayfield Street Northbound						Bayfield Street 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	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	2	0	0	5	8
7:15 AM	0	2	1	0	0	3	0	1	9	0	0	10	0	1	0	0	0	1	2	1	5	0	0	8	22
7:30 AM	5	3	0	0	0	8	1	2	5	0	0	8	0	1	0	0	1	1	6	0	4	0	0	10	27
7:45 AM	3	2	1	0	0	6	0	2	6	0	0	8	0	1	0	0	0	1	3	1	3	0	1	7	22
Hourly Total	8	7	2	0	0	17	1	5	23	0	0	29	0	3	0	0	1	3	14	2	14	0	1	30	79
8:00 AM	1	4	1	0	1	6	0	2	12	0	0	14	0	0	0	0	0	0	6	0	2	0	1	8	28
8:15 AM	3	3	1	0	0	7	0	3	6	0	0	9	0	0	1	0	0	1	10	1	3	0	2	14	31
8:30 AM	2	2	1	0	0	5	0	3	2	0	0	5	1	1	0	0	0	2	12	1	6	0	4	19	31
8:45 AM	6	4	0	0	0	10	0	10	22	0	0	32	0	1	1	0	2	2	13	1	2	0	0	16	60
Hourly Total	12	13	3	0	1	28	0	18	42	0	0	60	1	2	2	0	2	5	41	3	13	0	7	57	150
9:00 AM	3	3	0	0	1	6	0	6	21	0	0	27	1	1	0	0	2	2	6	1	3	0	1	10	45
9:15 AM	5	4	0	0	0	9	0	5	9	0	0	14	0	0	0	0	1	0	2	2	1	0	0	5	28
9:30 AM	2	1	0	0	0	3	0	0	7	0	0	7	0	1	1	0	1	2	5	2	8	0	0	15	27
9:45 AM	7	5	0	0	0	12	2	1	5	0	0	8	1	0	0	0	4	1	3	0	5	0	0	8	29
Hourly Total	17	13	0	0	1	30	2	12	42	0	0	56	2	2	1	0	8	5	16	5	17	0	1	38	129
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	7	3	0	0	0	10	0	4	4	0	0	8	0	0	0	0	0	0	13	1	3	0	3	17	35
12:15 PM	9	2	0	0	1	11	0	5	8	0	2	13	0	1	0	0	2	1	10	0	2	0	2	12	37
12:30 PM	7	5	0	1	0	13	0	3	12	0	0	15	1	0	0	0	1	1	8	0	4	0	0	12	41
12:45 PM	5	8	2	0	1	15	0	4	15	0	0	19	1	0	1	0	0	2	4	1	3	0	4	8	44
Hourly Total	28	18	2	1	2	49	0	16	39	0	2	55	2	1	1	0	3	4	35	2	12	0	9	49	157
1:00 PM	6	2	1	0	0	9	1	4	10	0	0	15	1	1	0	0	1	2	8	0	3	0	8	11	37
1:15 PM	8	5	1	0	3	14	0	2	13	0	2	15	0	0	0	0	0	0	5	0	4	0	1	9	38
1:30 PM	7	8	0	0	0	15	0	4	12	0	0	16	0	0	0	0	0	0	7	1	6	0	8	14	45
1:45 PM	6	5	0	0	0	11	0	5	10	0	0	15	1	0	0	0	0	1	14	0	4	0	9	18	45
Hourly Total	27	20	2	0	3	49	1	15	45	0	2	61	2	1	0	0	1	3	34	1	17	0	26	52	165
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	13	8	0	0	0	21	0	3	14	0	0	17	1	0	0	0	2	1	14	1	6	0	4	21	60
3:15 PM	11	8	0	0	0	19	0	8	24	0	0	32	0	0	0	0	0	0	16	0	5	0	0	21	72
3:30 PM	7	2	0	0	0	9	0	1	17	0	0	18	0	1	0	0	3	1	6	1	7	0	2	14	42
3:45 PM	4	4	0	0	1	8	0	4	16	0	0	20	0	0	0	0	0	0	13	0	5	0	3	18	46
Hourly Total	35	22	0	0	1	57	0	16	71	0	0	87	1	1	0	0	5	2	49	2	23	0	9	74	220
4:00 PM	7	3	0	0	0	10	0	2	7	0	0	9	0	1	0	0	0	1	11	0	3	0	2	14	34
4:15 PM	4	4	0	0	0	8	1	2	8	0	0	11	1	0	0	0	0	1	14	0	4	0	0	18	38
4:30 PM	5	1	1	0	0	7	0	1	9	0	0	10	1	0	0	0	0	1	7	0	6	0	1	13	31

4:45 PM	2	2	0	0	1	4	0	6	16	0	0	22	1	0	0	0	0	1	8	1	8	0	4	17	44
Hourly Total	18	10	1	0	1	29	1	11	40	0	0	52	3	1	0	0	0	4	40	1	21	0	7	62	147
5:00 PM	7	2	1	0	0	10	0	1	8	0	0	9	0	0	1	0	0	1	12	0	4	0	0	16	36
5:15 PM	3	2	1	0	0	6	0	0	9	0	0	9	0	1	0	0	3	1	8	0	4	0	1	12	28
5:30 PM	2	3	0	0	0	5	0	1	5	0	0	6	0	0	0	0	1	0	5	0	3	0	2	8	19
5:45 PM	1	2	0	0	0	3	0	2	4	0	0	6	1	0	0	0	1	1	5	0	2	0	2	7	17
Hourly Total	13	9	2	0	0	24	0	4	26	0	0	30	1	1	1	0	5	3	30	0	13	0	5	43	100
Grand Total	158	112	12	1	9	283	5	97	328	0	4	430	12	12	5	0	25	29	259	16	130	0	65	405	1147
Approach %	55.8	39.6	4.2	0.4	-	-	1.2	22.6	76.3	0.0	-	-	41.4	41.4	17.2	0.0	-	-	64.0	4.0	32.1	0.0	-	-	-
Total %	13.8	9.8	1.0	0.1	-	24.7	0.4	8.5	28.6	0.0	-	37.5	1.0	1.0	0.4	0.0	-	2.5	22.6	1.4	11.3	0.0	-	35.3	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	154	110	12	0	-	276	5	94	320	0	-	419	12	12	5	0	-	29	251	16	125	0	-	392	1116
% Cars & Light Goods	97.5	98.2	100.0	0.0	-	97.5	100.0	96.9	97.6	-	-	97.4	100.0	100.0	100.0	-	-	100.0	96.9	100.0	96.2	-	-	96.8	97.3
Buses	0	1	0	0	-	1	0	2	5	0	-	7	0	0	0	0	-	0	2	0	2	0	-	4	12
% Buses	0.0	0.9	0.0	0.0	-	0.4	0.0	2.1	1.5	-	-	1.6	0.0	0.0	0.0	-	-	0.0	0.8	0.0	1.5	-	-	1.0	1.0
Single-Unit Trucks	4	1	0	1	-	6	0	1	3	0	-	4	0	0	0	0	-	0	6	0	3	0	-	9	19
% Single-Unit Trucks	2.5	0.9	0.0	100.0	-	2.1	0.0	1.0	0.9	-	-	0.9	0.0	0.0	0.0	-	-	0.0	2.3	0.0	2.3	-	-	2.2	1.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	9	-	-	-	-	-	4	-	-	-	-	-	25	-	-	-	-	-	65	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Trowbridge Street & Bayfield Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 4

Turning Movement Peak Hour Data (8:15 AM)

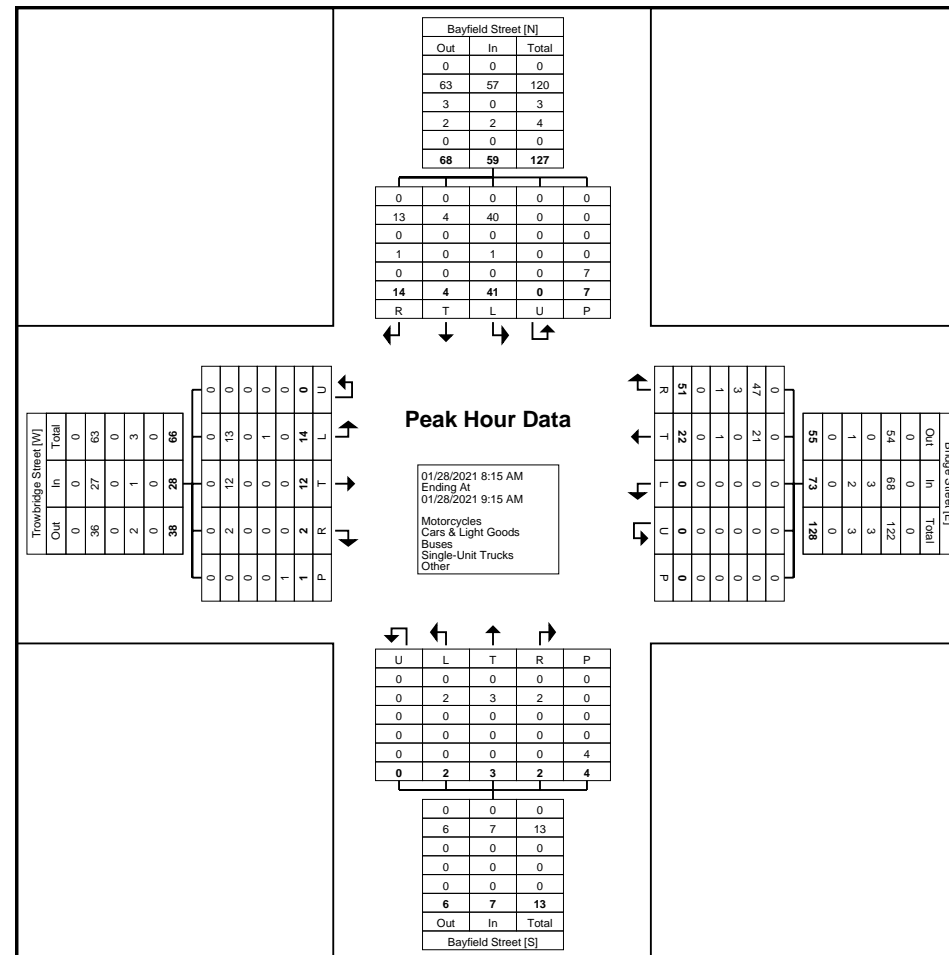
Start Time	Trowbridge Street Eastbound						Bridge Street Westbound						Bayfield Street Northbound						Bayfield Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
8:15 AM	3	3	1	0	0	7	0	3	6	0	0	9	0	0	1	0	0	1	10	1	3	0	2	14	31
8:30 AM	2	2	1	0	0	5	0	3	2	0	0	5	1	1	0	0	0	2	12	1	6	0	4	19	31
8:45 AM	6	4	0	0	0	10	0	10	22	0	0	32	0	1	1	0	2	2	13	1	2	0	0	16	60
9:00 AM	3	3	0	0	1	6	0	6	21	0	0	27	1	1	0	0	2	2	6	1	3	0	1	10	45
Total	14	12	2	0	1	28	0	22	51	0	0	73	2	3	2	0	4	7	41	4	14	0	7	59	167
Approach %	50.0	42.9	7.1	0.0	-	-	0.0	30.1	69.9	0.0	-	-	28.6	42.9	28.6	0.0	-	-	69.5	6.8	23.7	0.0	-	-	-
Total %	8.4	7.2	1.2	0.0	-	16.8	0.0	13.2	30.5	0.0	-	43.7	1.2	1.8	1.2	0.0	-	4.2	24.6	2.4	8.4	0.0	-	35.3	-
PHF	0.583	0.750	0.500	0.000	-	0.700	0.000	0.550	0.580	0.000	-	0.570	0.500	0.750	0.500	0.000	-	0.875	0.788	1.000	0.583	0.000	-	0.776	0.696
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	13	12	2	0	-	27	0	21	47	0	-	68	2	3	2	0	-	7	40	4	13	0	-	57	159
% Cars & Light Goods	92.9	100.0	100.0	-	-	96.4	-	95.5	92.2	-	-	93.2	100.0	100.0	100.0	-	-	100.0	97.6	100.0	92.9	-	-	96.6	95.2
Buses	0	0	0	0	-	0	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	3
% Buses	0.0	0.0	0.0	-	-	0.0	-	0.0	5.9	-	-	4.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	1.8
Single-Unit Trucks	1	0	0	0	-	1	0	1	1	0	-	2	0	0	0	0	-	0	1	0	1	0	-	2	5
% Single-Unit Trucks	7.1	0.0	0.0	-	-	3.6	-	4.5	2.0	-	-	2.7	0.0	0.0	0.0	-	-	0.0	2.4	0.0	7.1	-	-	3.4	3.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Trowbridge Street & Bayfield
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 5





Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Trowbridge Street & Bayfield Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 6

Turning Movement Peak Hour Data (1:00 PM)

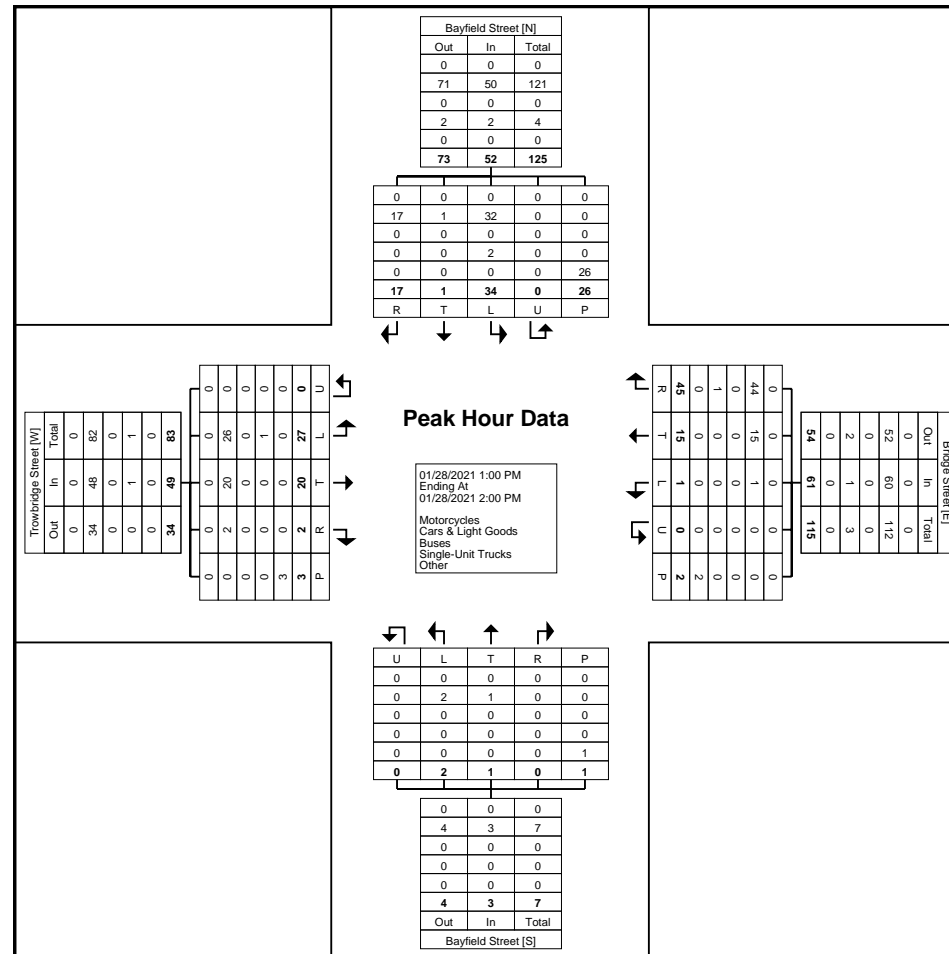
Start Time	Trowbridge Street Eastbound						Bridge Street Westbound						Bayfield Street Northbound						Bayfield Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
1:00 PM	6	2	1	0	0	9	1	4	10	0	0	15	1	1	0	0	1	2	8	0	3	0	8	11	37
1:15 PM	8	5	1	0	3	14	0	2	13	0	2	15	0	0	0	0	0	0	5	0	4	0	1	9	38
1:30 PM	7	8	0	0	0	15	0	4	12	0	0	16	0	0	0	0	0	0	7	1	6	0	8	14	45
1:45 PM	6	5	0	0	0	11	0	5	10	0	0	15	1	0	0	0	0	1	14	0	4	0	9	18	45
Total	27	20	2	0	3	49	1	15	45	0	2	61	2	1	0	0	1	3	34	1	17	0	26	52	165
Approach %	55.1	40.8	4.1	0.0	-	-	1.6	24.6	73.8	0.0	-	-	66.7	33.3	0.0	0.0	-	-	65.4	1.9	32.7	0.0	-	-	-
Total %	16.4	12.1	1.2	0.0	-	29.7	0.6	9.1	27.3	0.0	-	37.0	1.2	0.6	0.0	0.0	-	1.8	20.6	0.6	10.3	0.0	-	31.5	-
PHF	0.844	0.625	0.500	0.000	-	0.817	0.250	0.750	0.865	0.000	-	0.953	0.500	0.250	0.000	0.000	-	0.375	0.607	0.250	0.708	0.000	-	0.722	0.917
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	26	20	2	0	-	48	1	15	44	0	-	60	2	1	0	0	-	3	32	1	17	0	-	50	161
% Cars & Light Goods	96.3	100.0	100.0	-	-	98.0	100.0	100.0	97.8	-	-	98.4	100.0	100.0	-	-	-	100.0	94.1	100.0	100.0	-	-	96.2	97.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	1	0	0	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	2	0	0	0	-	2	4
% Single-Unit Trucks	3.7	0.0	0.0	-	-	2.0	0.0	0.0	2.2	-	-	1.6	0.0	0.0	-	-	-	0.0	5.9	0.0	0.0	-	-	3.8	2.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	26	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Trowbridge Street & Bayfield
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Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Trowbridge Street & Bayfield Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data (3:00 PM)

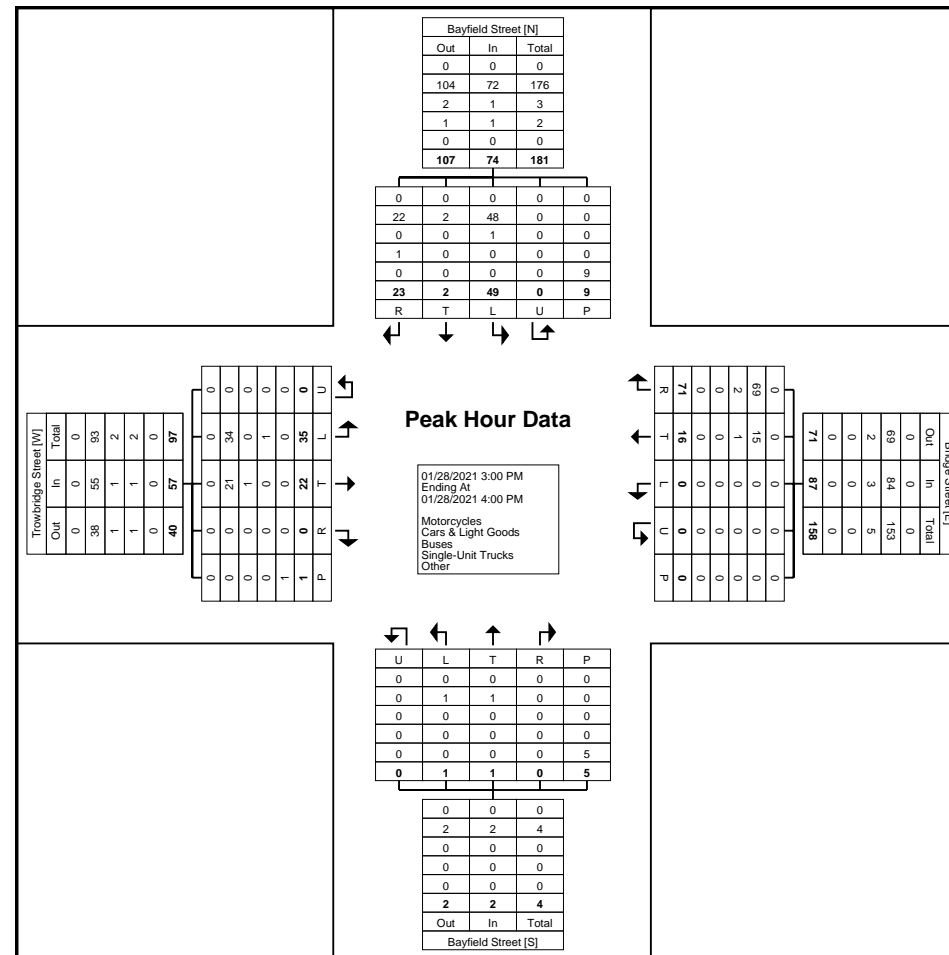
Start Time	Trowbridge Street Eastbound						Bridge Street Westbound						Bayfield Street Northbound						Bayfield Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
3:00 PM	13	8	0	0	0	21	0	3	14	0	0	17	1	0	0	0	2	1	14	1	6	0	4	21	60
3:15 PM	11	8	0	0	0	19	0	8	24	0	0	32	0	0	0	0	0	0	16	0	5	0	0	21	72
3:30 PM	7	2	0	0	0	9	0	1	17	0	0	18	0	1	0	0	3	1	6	1	7	0	2	14	42
3:45 PM	4	4	0	0	1	8	0	4	16	0	0	20	0	0	0	0	0	0	13	0	5	0	3	18	46
Total	35	22	0	0	1	57	0	16	71	0	0	87	1	1	0	0	5	2	49	2	23	0	9	74	220
Approach %	61.4	38.6	0.0	0.0	-	-	0.0	18.4	81.6	0.0	-	-	50.0	50.0	0.0	0.0	-	-	66.2	2.7	31.1	0.0	-	-	-
Total %	15.9	10.0	0.0	0.0	-	25.9	0.0	7.3	32.3	0.0	-	39.5	0.5	0.5	0.0	0.0	-	0.9	22.3	0.9	10.5	0.0	-	33.6	-
PHF	0.673	0.688	0.000	0.000	-	0.679	0.000	0.500	0.740	0.000	-	0.680	0.250	0.250	0.000	0.000	-	0.500	0.766	0.500	0.821	0.000	-	0.881	0.764
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	34	21	0	0	-	55	0	15	69	0	-	84	1	1	0	0	-	2	48	2	22	0	-	72	213
% Cars & Light Goods	97.1	95.5	-	-	-	96.5	-	93.8	97.2	-	-	96.6	100.0	100.0	-	-	-	100.0	98.0	100.0	95.7	-	-	97.3	96.8
Buses	0	1	0	0	-	1	0	1	2	0	-	3	0	0	0	0	-	0	1	0	0	0	-	1	5
% Buses	0.0	4.5	-	-	-	1.8	-	6.3	2.8	-	-	3.4	0.0	0.0	-	-	-	0.0	2.0	0.0	0.0	-	-	1.4	2.3
Single-Unit Trucks	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	2
% Single-Unit Trucks	2.9	0.0	-	-	-	1.8	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	4.3	-	-	1.4	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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Count Name: Trowbridge Street & Bayfield
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Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Bridge Street & Denmark Street
Site Code: 200616
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Turning Movement Data

Start Time	Bridge Street Eastbound						Bridge Street Westbound						Denmark Street Northbound						Harbour Entrance 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	14	1	0	5	16	0	4	0	0	3	4	2	0	0	0	5	2	0	0	2	0	0	2	24
12:15 PM	1	11	0	0	3	12	0	9	0	0	0	9	1	0	0	0	0	1	0	1	4	0	0	5	27
12:30 PM	3	8	2	0	1	13	0	10	0	0	0	10	2	1	0	0	2	3	0	1	2	0	0	3	29
12:45 PM	4	8	1	0	3	13	1	17	0	0	0	18	0	0	0	0	1	0	0	1	2	0	0	3	34
Hourly Total	9	41	4	0	12	54	1	40	0	0	3	41	5	1	0	0	8	6	0	3	10	0	0	13	114
1:00 PM	3	6	1	0	4	10	0	9	0	0	1	9	0	0	0	0	2	0	0	0	6	0	8	6	25
1:15 PM	2	7	1	0	3	10	0	9	0	0	0	9	3	0	0	0	2	3	1	0	3	0	1	4	26
1:30 PM	3	9	2	0	3	14	0	14	0	0	1	14	1	0	0	0	2	1	0	0	1	0	7	1	30
1:45 PM	2	16	1	0	5	19	0	9	0	0	2	9	0	0	0	0	5	0	0	0	6	0	4	6	34
Hourly Total	10	38	5	0	15	53	0	41	0	0	4	41	4	0	0	0	11	4	1	0	16	0	20	17	115
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	4	15	3	0	3	22	0	15	0	0	1	15	1	0	0	0	1	1	0	1	2	0	2	3	41
3:15 PM	5	17	3	0	0	25	0	21	0	0	0	21	5	0	0	0	0	5	1	0	5	0	0	6	57
3:30 PM	1	5	2	0	6	8	0	13	0	0	2	13	2	1	0	0	8	3	0	0	3	0	3	3	27
3:45 PM	3	13	1	0	5	17	0	12	0	0	1	12	3	0	0	0	2	3	0	1	5	0	2	6	38
Hourly Total	13	50	9	0	14	72	0	61	0	0	4	61	11	1	0	0	11	12	1	2	15	0	7	18	163
4:00 PM	2	9	3	0	0	14	0	7	0	0	0	7	2	0	0	0	0	2	0	0	1	0	2	1	24
4:15 PM	2	11	4	0	0	17	0	6	0	0	0	6	3	0	0	0	0	3	0	0	1	0	2	1	27
4:30 PM	0	8	1	0	1	9	0	8	0	0	0	8	0	0	1	0	1	1	0	0	2	0	0	2	20
4:45 PM	1	8	1	0	2	10	0	17	0	0	0	17	2	0	0	0	4	2	1	0	3	0	0	4	33
Hourly Total	5	36	9	0	3	50	0	38	0	0	0	38	7	0	1	0	5	8	1	0	7	0	4	8	104
5:00 PM	2	11	2	0	0	15	0	7	0	0	0	7	0	0	0	0	1	0	0	0	2	0	0	2	24
5:15 PM	0	7	3	0	2	10	0	9	0	0	0	9	1	1	0	0	1	2	0	0	0	0	0	0	21
5:30 PM	1	8	0	0	1	9	0	5	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	14
5:45 PM	0	6	1	0	1	7	0	5	0	0	0	5	0	0	0	0	2	0	0	0	1	0	0	1	13
Hourly Total	3	32	6	0	4	41	0	26	0	0	0	26	1	1	0	0	5	2	0	0	3	0	0	3	72
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	1	0	0	0	1	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
7:15 AM	1	2	0	0	1	3	0	7	0	0	0	7	1	0	0	0	0	1	0	0	0	0	1	0	11
7:30 AM	2	3	1	0	0	6	0	7	1	0	0	8	2	0	0	0	1	2	0	0	2	0	1	2	18
7:45 AM	4	5	1	0	0	10	1	4	0	0	0	5	0	0	0	0	0	0	0	0	2	0	1	2	17
Hourly Total	7	11	2	0	1	20	1	22	1	0	0	24	3	0	0	0	1	3	0	0	4	0	3	4	51
8:00 AM	2	7	0	0	0	9	0	8	0	0	0	8	5	0	0	0	0	5	0	0	2	0	0	2	24
8:15 AM	1	6	0	0	0	7	0	7	0	0	0	7	2	0	0	0	1	2	0	0	1	0	0	1	17
8:30 AM	2	5	1	0	2	8	1	9	0	0	0	10	4	0	0	0	2	4	0	0	1	0	0	1	23

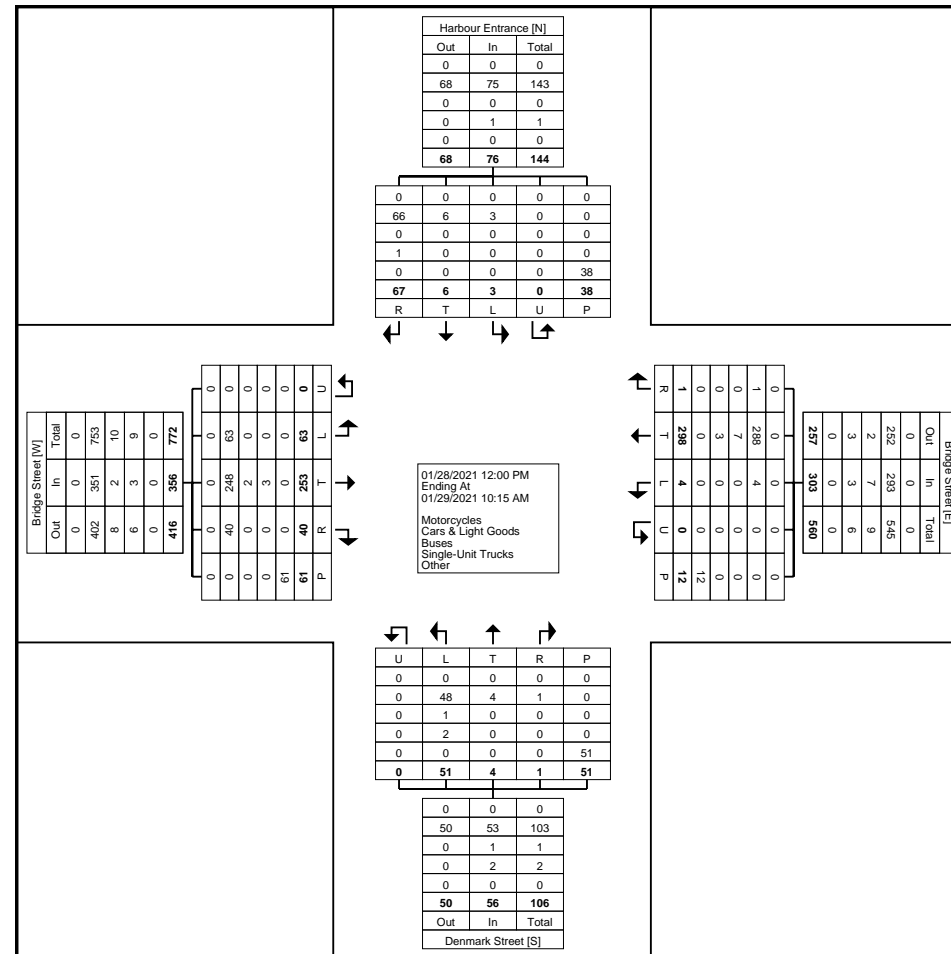
8:45 AM	2	6	0	0	2	8	0	15	0	0	1	15	3	1	0	0	1	4	0	1	2	0	0	3	30
Hourly Total	7	24	1	0	4	32	1	39	0	0	1	40	14	1	0	0	4	15	0	1	6	0	0	7	94
9:00 AM	1	6	0	0	3	7	0	17	0	0	0	17	2	0	0	0	3	2	0	0	2	0	2	2	28
9:15 AM	4	4	1	0	1	9	0	5	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	14
9:30 AM	3	3	1	0	2	7	0	6	0	0	0	6	0	0	0	0	2	0	0	0	2	0	1	2	15
9:45 AM	1	8	2	0	2	11	1	3	0	0	0	4	4	0	0	0	0	4	0	0	2	0	1	2	21
Hourly Total	9	21	4	0	8	34	1	31	0	0	0	32	6	0	0	0	6	6	0	0	6	0	4	6	78
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
Grand Total	63	253	40	0	61	356	4	298	1	0	12	303	51	4	1	0	51	56	3	6	67	0	38	76	791
Approach %	17.7	71.1	11.2	0.0	-	-	1.3	98.3	0.3	0.0	-	-	91.1	7.1	1.8	0.0	-	-	3.9	7.9	88.2	0.0	-	-	-
Total %	8.0	32.0	5.1	0.0	-	45.0	0.5	37.7	0.1	0.0	-	38.3	6.4	0.5	0.1	0.0	-	7.1	0.4	0.8	8.5	0.0	-	9.6	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	63	248	40	0	-	351	4	288	1	0	-	293	48	4	1	0	-	53	3	6	66	0	-	75	772
% Cars & Light Goods	100.0	98.0	100.0	-	-	98.6	100.0	96.6	100.0	-	-	96.7	94.1	100.0	100.0	-	-	94.6	100.0	100.0	98.5	-	-	98.7	97.6
Buses	0	2	0	0	-	2	0	7	0	0	-	7	1	0	0	0	-	1	0	0	0	0	-	0	10
% Buses	0.0	0.8	0.0	-	-	0.6	0.0	2.3	0.0	-	-	2.3	2.0	0.0	0.0	-	-	1.8	0.0	0.0	0.0	-	-	0.0	1.3
Single-Unit Trucks	0	3	0	0	-	3	0	3	0	0	-	3	2	0	0	0	-	2	0	0	1	0	-	1	9
% Single-Unit Trucks	0.0	1.2	0.0	-	-	0.8	0.0	1.0	0.0	-	-	1.0	3.9	0.0	0.0	-	-	3.6	0.0	0.0	1.5	-	-	1.3	1.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	61	-	-	-	-	-	12	-	-	-	-	-	51	-	-	-	-	-	38	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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Count Name: Bridge Street & Denmark Street
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Turning Movement Data Plot



Paradigm Transportation Solutions Limited
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Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data (12:15 PM)

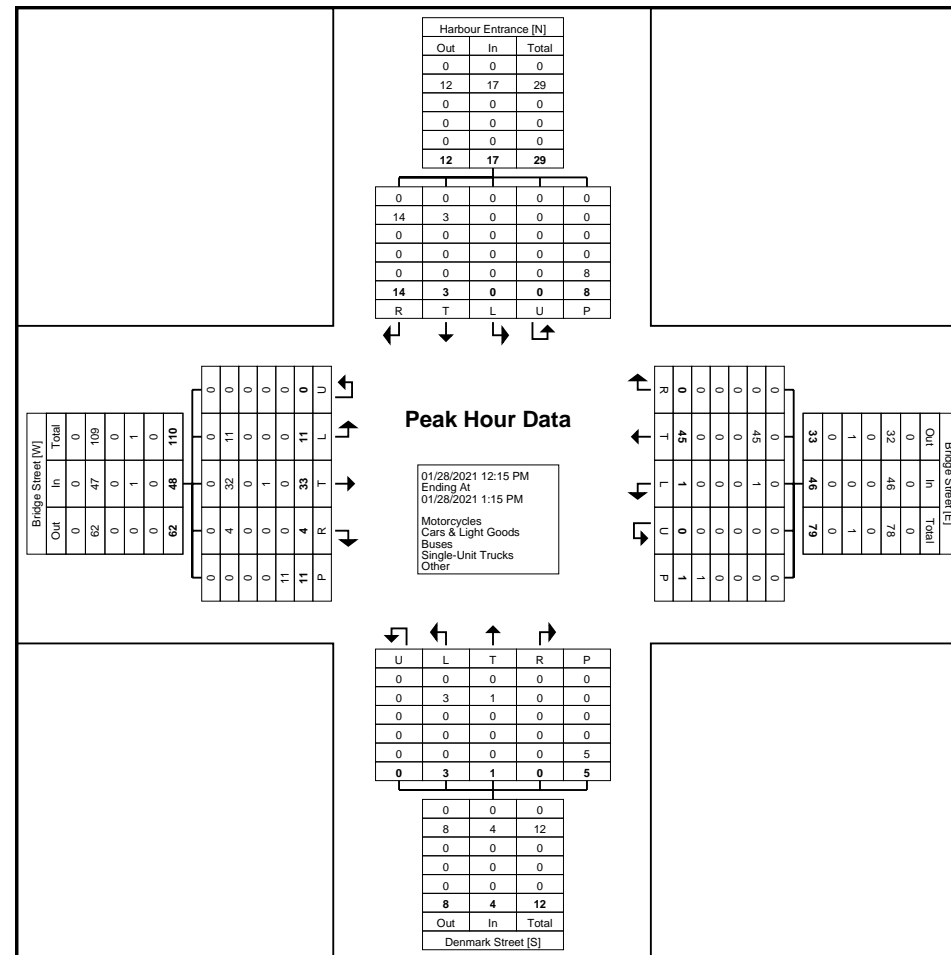
Start Time	Bridge Street Eastbound						Bridge Street Westbound						Denmark Street Northbound						Harbour Entrance Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:15 PM	1	11	0	0	3	12	0	9	0	0	0	9	1	0	0	0	0	1	0	1	4	0	0	5	27
12:30 PM	3	8	2	0	1	13	0	10	0	0	0	10	2	1	0	0	2	3	0	1	2	0	0	3	29
12:45 PM	4	8	1	0	3	13	1	17	0	0	0	18	0	0	0	0	1	0	0	1	2	0	0	3	34
1:00 PM	3	6	1	0	4	10	0	9	0	0	1	9	0	0	0	0	2	0	0	0	6	0	8	6	25
Total	11	33	4	0	11	48	1	45	0	0	1	46	3	1	0	0	5	4	0	3	14	0	8	17	115
Approach %	22.9	68.8	8.3	0.0	-	-	2.2	97.8	0.0	0.0	-	-	75.0	25.0	0.0	0.0	-	-	0.0	17.6	82.4	0.0	-	-	-
Total %	9.6	28.7	3.5	0.0	-	41.7	0.9	39.1	0.0	0.0	-	40.0	2.6	0.9	0.0	0.0	-	3.5	0.0	2.6	12.2	0.0	-	14.8	-
PHF	0.688	0.750	0.500	0.000	-	0.923	0.250	0.662	0.000	0.000	-	0.639	0.375	0.250	0.000	0.000	-	0.333	0.000	0.750	0.583	0.000	-	0.708	0.846
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	11	32	4	0	-	47	1	45	0	0	-	46	3	1	0	0	-	4	0	3	14	0	-	17	114
% Cars & Light Goods	100.0	97.0	100.0	-	-	97.9	100.0	100.0	-	-	-	100.0	100.0	100.0	-	-	-	100.0	-	100.0	100.0	-	-	100.0	99.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Single-Unit Trucks	0.0	3.0	0.0	-	-	2.1	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	11	-	-	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 5



Turning Movement Peak Hour Data Plot (12:15 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data (3:00 PM)

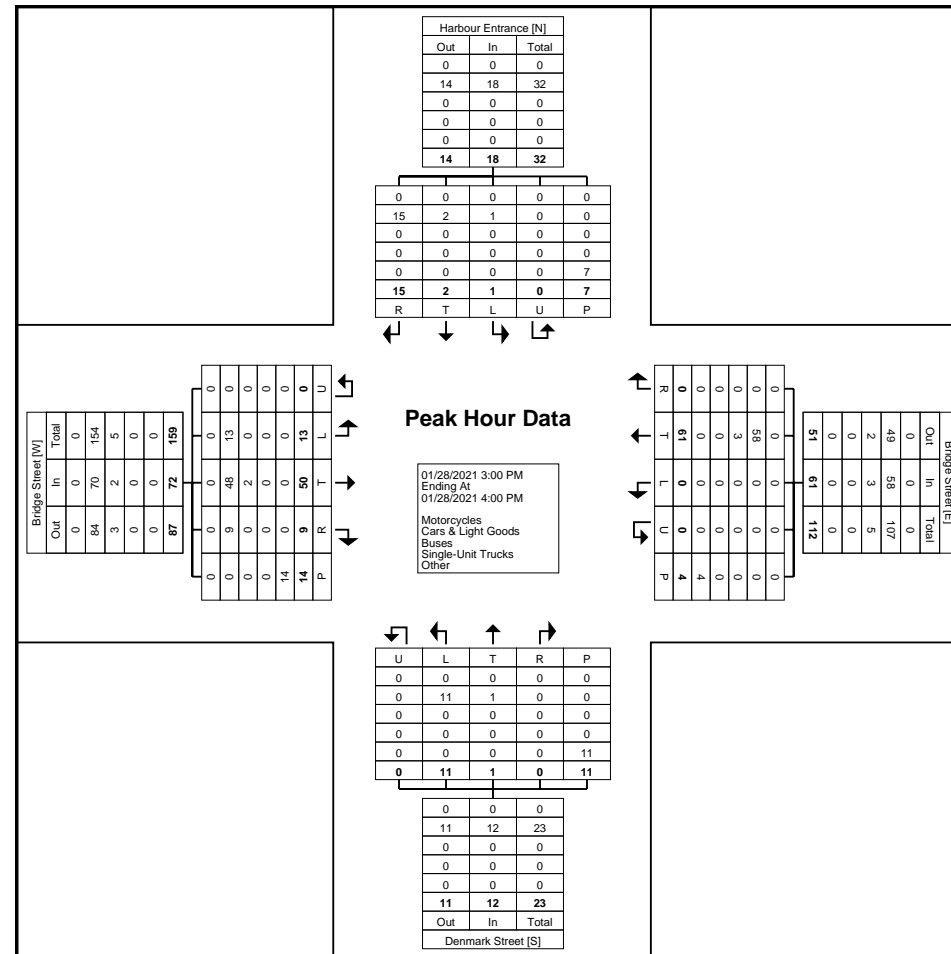
Start Time	Bridge Street Eastbound						Bridge Street Westbound						Denmark Street Northbound						Harbour Entrance Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
3:00 PM	4	15	3	0	3	22	0	15	0	0	1	15	1	0	0	0	1	1	0	1	2	0	2	3	41
3:15 PM	5	17	3	0	0	25	0	21	0	0	0	21	5	0	0	0	0	5	1	0	5	0	0	6	57
3:30 PM	1	5	2	0	6	8	0	13	0	0	2	13	2	1	0	0	8	3	0	0	3	0	3	3	27
3:45 PM	3	13	1	0	5	17	0	12	0	0	1	12	3	0	0	0	2	3	0	1	5	0	2	6	38
Total	13	50	9	0	14	72	0	61	0	0	4	61	11	1	0	0	11	12	1	2	15	0	7	18	163
Approach %	18.1	69.4	12.5	0.0	-	-	0.0	100.0	0.0	0.0	-	-	91.7	8.3	0.0	0.0	-	-	5.6	11.1	83.3	0.0	-	-	-
Total %	8.0	30.7	5.5	0.0	-	44.2	0.0	37.4	0.0	0.0	-	37.4	6.7	0.6	0.0	0.0	-	7.4	0.6	1.2	9.2	0.0	-	11.0	-
PHF	0.650	0.735	0.750	0.000	-	0.720	0.000	0.726	0.000	0.000	-	0.726	0.550	0.250	0.000	0.000	-	0.600	0.250	0.500	0.750	0.000	-	0.750	0.715
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	13	48	9	0	-	70	0	58	0	0	-	58	11	1	0	0	-	12	1	2	15	0	-	18	158
% Cars & Light Goods	100.0	96.0	100.0	-	-	97.2	-	95.1	-	-	-	95.1	100.0	100.0	-	-	-	100.0	100.0	100.0	100.0	-	-	100.0	96.9
Buses	0	2	0	0	-	2	0	3	0	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	5
% Buses	0.0	4.0	0.0	-	-	2.8	-	4.9	-	-	-	4.9	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	3.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	14	-	-	-	-	-	4	-	-	-	-	-	11	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 7



Turning Movement Peak Hour Data Plot (3:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 8

Turning Movement Peak Hour Data (8:15 AM)

Start Time	Bridge Street Eastbound						Bridge Street Westbound						Denmark Street Northbound						Harbour Entrance 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	
8:15 AM	1	6	0	0	0	7	0	7	0	0	0	7	2	0	0	0	1	2	0	0	1	0	0	1	17
8:30 AM	2	5	1	0	2	8	1	9	0	0	0	10	4	0	0	0	2	4	0	0	1	0	0	1	23
8:45 AM	2	6	0	0	2	8	0	15	0	0	1	15	3	1	0	0	1	4	0	1	2	0	0	3	30
9:00 AM	1	6	0	0	3	7	0	17	0	0	0	17	2	0	0	0	3	2	0	0	2	0	2	2	28
Total	6	23	1	0	7	30	1	48	0	0	1	49	11	1	0	0	7	12	0	1	6	0	2	7	98
Approach %	20.0	76.7	3.3	0.0	-	-	2.0	98.0	0.0	0.0	-	-	91.7	8.3	0.0	0.0	-	-	0.0	14.3	85.7	0.0	-	-	-
Total %	6.1	23.5	1.0	0.0	-	30.6	1.0	49.0	0.0	0.0	-	50.0	11.2	1.0	0.0	0.0	-	12.2	0.0	1.0	6.1	0.0	-	7.1	-
PHF	0.750	0.958	0.250	0.000	-	0.938	0.250	0.706	0.000	0.000	-	0.721	0.688	0.250	0.000	0.000	-	0.750	0.000	0.250	0.750	0.000	-	0.583	0.817
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	6	22	1	0	-	29	1	45	0	0	-	46	9	1	0	0	-	10	0	1	5	0	-	6	91
% Cars & Light Goods	100.0	95.7	100.0	-	-	96.7	100.0	93.8	-	-	-	93.9	81.8	100.0	-	-	-	83.3	-	100.0	83.3	-	-	85.7	92.9
Buses	0	0	0	0	-	0	0	3	0	0	-	3	1	0	0	0	-	1	0	0	0	0	-	0	4
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	6.3	-	-	-	6.1	9.1	0.0	-	-	-	8.3	-	0.0	0.0	-	-	0.0	4.1
Single-Unit Trucks	0	1	0	0	-	1	0	0	0	0	-	0	1	0	0	0	-	1	0	0	1	0	-	1	3
% Single-Unit Trucks	0.0	4.3	0.0	-	-	3.3	0.0	0.0	-	-	-	0.0	9.1	0.0	-	-	-	8.3	-	0.0	16.7	-	-	14.3	3.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	-	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	2	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-

Turning Movement Peak Hour Data Plot (8:15 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Bridge Street Eastbound						Bridge Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	1	12	0	0	14	1	0	0	0	0	1	6	1	1	1	2	9	0	0	0	0	0	0	24
12:15 PM	0	1	9	0	1	10	1	0	0	0	0	1	10	3	1	0	1	14	0	0	0	0	0	0	25
12:30 PM	0	0	8	0	0	8	0	1	0	0	0	1	8	4	0	0	1	12	0	1	0	0	0	1	22
12:45 PM	1	0	8	0	0	9	0	1	0	0	0	1	14	4	0	0	1	18	0	1	2	0	0	3	31
Hourly Total	2	2	37	0	1	41	2	2	0	0	0	4	38	12	2	1	5	53	0	2	2	0	0	4	102
1:00 PM	1	0	4	0	0	5	0	0	0	0	0	0	9	0	0	0	5	9	0	2	0	0	0	2	16
1:15 PM	0	0	8	0	0	8	0	0	0	0	0	0	10	5	1	0	4	16	0	0	0	0	0	0	24
1:30 PM	0	0	8	0	0	8	0	1	0	0	0	1	11	2	1	1	3	15	1	2	0	0	0	3	27
1:45 PM	0	2	12	0	0	14	1	2	1	0	0	4	7	1	2	0	0	10	0	1	0	0	0	1	29
Hourly Total	1	2	32	0	0	35	1	3	1	0	0	5	37	8	4	1	12	50	1	5	0	0	0	6	96
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	1	13	0	0	14	1	3	1	0	0	5	11	1	2	0	2	14	0	0	1	0	0	1	34
3:15 PM	0	3	14	0	1	17	1	1	0	0	0	2	20	1	1	0	5	22	1	3	0	0	0	4	45
3:30 PM	0	1	6	0	0	7	0	1	0	0	0	1	12	3	0	0	2	15	0	1	0	0	0	1	24
3:45 PM	0	2	10	0	0	12	3	0	0	0	0	3	12	2	1	0	1	15	0	0	0	0	0	0	30
Hourly Total	0	7	43	0	1	50	5	5	1	0	0	11	55	7	4	0	10	66	1	4	1	0	0	6	133
4:00 PM	0	0	11	0	0	11	1	0	0	0	0	1	8	1	0	0	0	9	1	1	0	0	0	2	23
4:15 PM	0	2	6	0	0	8	1	1	0	0	0	2	6	2	0	0	0	8	0	2	0	0	0	2	20
4:30 PM	0	2	6	0	0	8	0	0	0	0	0	0	7	2	2	0	0	11	0	2	0	0	0	2	21
4:45 PM	0	2	7	0	0	9	1	1	0	0	0	2	16	2	0	0	0	18	0	1	0	0	0	1	30
Hourly Total	0	6	30	0	0	36	3	2	0	0	0	5	37	7	2	0	0	46	1	6	0	0	0	7	94
5:00 PM	0	0	10	0	0	10	2	1	0	0	0	3	6	0	0	0	3	6	0	1	0	0	0	1	20
5:15 PM	0	2	6	0	0	8	0	1	0	0	0	1	8	0	1	0	0	9	0	0	0	0	0	0	18
5:30 PM	0	0	7	0	0	7	1	0	0	0	0	1	6	0	0	0	1	6	0	0	0	0	0	0	14
5:45 PM	0	1	5	0	0	6	0	0	0	0	0	0	5	1	1	0	1	7	0	0	0	0	0	0	13
Hourly Total	0	3	28	0	0	31	3	2	0	0	0	5	25	1	2	0	5	28	0	1	0	0	0	1	65
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	2	0	0	2	1	0	0	0	1	1	4	0	0	0	1	4	0	0	0	0	0	0	7
7:15 AM	0	0	2	0	0	2	0	1	0	0	1	1	6	0	0	0	0	6	1	0	0	0	1	1	10
7:30 AM	0	0	3	0	1	3	1	0	0	0	0	1	8	0	0	0	0	8	0	0	0	0	0	0	12
7:45 AM	0	1	4	0	1	5	2	0	0	0	0	2	5	0	0	0	0	5	1	1	0	0	0	2	14
Hourly Total	0	1	11	0	2	12	4	1	0	0	2	5	23	0	0	0	1	23	2	1	0	0	1	3	43
8:00 AM	0	1	6	0	0	7	0	2	0	0	0	2	7	1	0	0	0	8	0	0	0	0	0	0	17
8:15 AM	0	0	6	0	0	6	1	1	0	0	0	2	5	1	0	1	0	7	0	0	0	0	2	0	15
8:30 AM	0	1	4	0	0	5	0	0	0	0	0	0	11	0	0	0	0	11	0	0	0	0	0	0	16

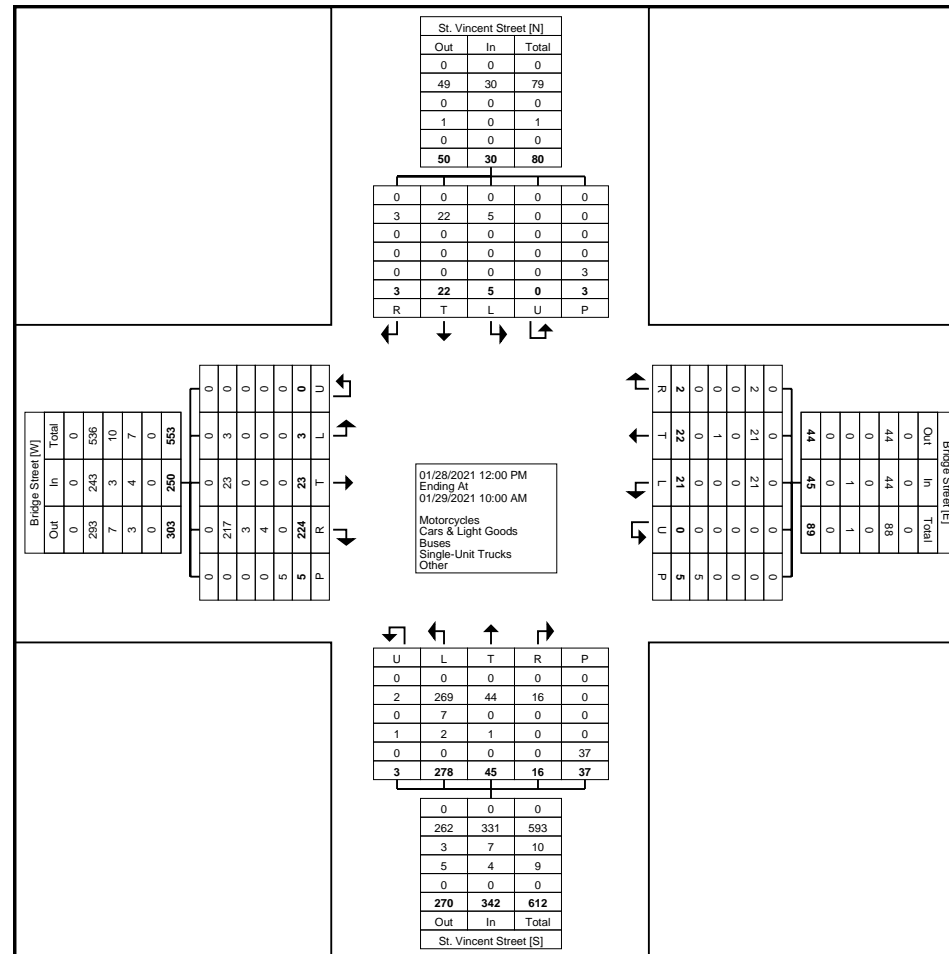
8:45 AM	0	0	6	0	0	6	1	0	0	0	0	1	14	2	0	0	1	16	0	0	0	0	0	0	23
Hourly Total	0	2	22	0	0	24	2	3	0	0	0	5	37	4	0	1	1	42	0	0	0	0	2	0	71
9:00 AM	0	0	6	0	1	6	1	3	0	0	0	4	13	1	1	0	2	15	0	0	0	0	0	0	25
9:15 AM	0	0	4	0	0	4	0	0	0	0	2	0	4	1	0	0	0	5	0	2	0	0	0	2	11
9:30 AM	0	0	3	0	0	3	0	0	0	0	1	0	6	1	1	0	0	8	0	1	0	0	0	1	12
9:45 AM	0	0	8	0	0	8	0	1	0	0	0	1	3	3	0	0	1	6	0	0	0	0	0	0	15
Hourly Total	0	0	21	0	1	21	1	4	0	0	3	5	26	6	2	0	3	34	0	3	0	0	0	3	63
Grand Total	3	23	224	0	5	250	21	22	2	0	5	45	278	45	16	3	37	342	5	22	3	0	3	30	667
Approach %	1.2	9.2	89.6	0.0	-	-	46.7	48.9	4.4	0.0	-	-	81.3	13.2	4.7	0.9	-	-	16.7	73.3	10.0	0.0	-	-	-
Total %	0.4	3.4	33.6	0.0	-	37.5	3.1	3.3	0.3	0.0	-	6.7	41.7	6.7	2.4	0.4	-	51.3	0.7	3.3	0.4	0.0	-	4.5	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	3	23	217	0	-	243	21	21	2	0	-	44	269	44	16	2	-	331	5	22	3	0	-	30	648
% Cars & Light Goods	100.0	100.0	96.9	-	-	97.2	100.0	95.5	100.0	-	-	97.8	96.8	97.8	100.0	66.7	-	96.8	100.0	100.0	100.0	-	-	100.0	97.2
Buses	0	0	3	0	-	3	0	0	0	0	-	0	7	0	0	0	-	7	0	0	0	0	-	0	10
% Buses	0.0	0.0	1.3	-	-	1.2	0.0	0.0	0.0	-	-	0.0	2.5	0.0	0.0	0.0	-	2.0	0.0	0.0	0.0	-	-	0.0	1.5
Single-Unit Trucks	0	0	4	0	-	4	0	1	0	0	-	1	2	1	0	1	-	4	0	0	0	0	-	0	9
% Single-Unit Trucks	0.0	0.0	1.8	-	-	1.6	0.0	4.5	0.0	-	-	2.2	0.7	2.2	0.0	33.3	-	1.2	0.0	0.0	0.0	-	-	0.0	1.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	5	-	-	-	-	-	37	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsI.com

Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 4

Turning Movement Peak Hour Data (12:00 PM)

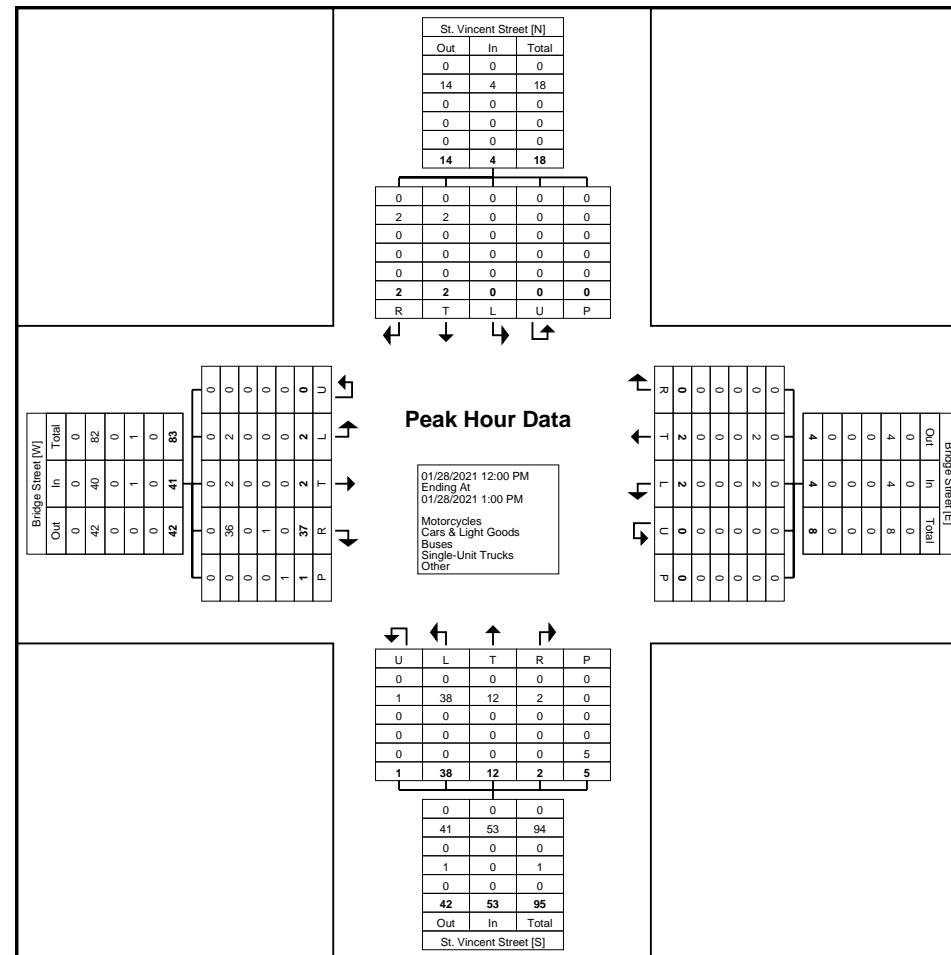
Start Time	Bridge Street Eastbound						Bridge Street Westbound						St. Vincent Street Northbound						St. Vincent Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:00 PM	1	1	12	0	0	14	1	0	0	0	0	1	6	1	1	1	2	9	0	0	0	0	0	0	24
12:15 PM	0	1	9	0	1	10	1	0	0	0	0	1	10	3	1	0	1	14	0	0	0	0	0	0	25
12:30 PM	0	0	8	0	0	8	0	1	0	0	0	1	8	4	0	0	1	12	0	1	0	0	0	1	22
12:45 PM	1	0	8	0	0	9	0	1	0	0	0	1	14	4	0	0	1	18	0	1	2	0	0	3	31
Total	2	2	37	0	1	41	2	2	0	0	0	4	38	12	2	1	5	53	0	2	2	0	0	4	102
Approach %	4.9	4.9	90.2	0.0	-	-	50.0	50.0	0.0	0.0	-	-	71.7	22.6	3.8	1.9	-	-	0.0	50.0	50.0	0.0	-	-	-
Total %	2.0	2.0	36.3	0.0	-	40.2	2.0	2.0	0.0	0.0	-	3.9	37.3	11.8	2.0	1.0	-	52.0	0.0	2.0	2.0	0.0	-	3.9	-
PHF	0.500	0.500	0.771	0.000	-	0.732	0.500	0.500	0.000	0.000	-	1.000	0.679	0.750	0.500	0.250	-	0.736	0.000	0.500	0.250	0.000	-	0.333	0.823
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	2	2	36	0	-	40	2	2	0	0	-	4	38	12	2	1	-	53	0	2	2	0	-	4	101
% Cars & Light Goods	100.0	100.0	97.3	-	-	97.6	100.0	100.0	-	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	-	100.0	100.0	-	-	100.0	99.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Single-Unit Trucks	0.0	0.0	2.7	-	-	2.4	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	1.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 5



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



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 6

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Bridge Street Eastbound						Bridge Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	
3:00 PM	0	1	13	0	0	14	1	3	1	0	0	5	11	1	2	0	2	14	0	0	1	0	0	1	34
3:15 PM	0	3	14	0	1	17	1	1	0	0	0	2	20	1	1	0	5	22	1	3	0	0	0	4	45
3:30 PM	0	1	6	0	0	7	0	1	0	0	0	1	12	3	0	0	2	15	0	1	0	0	0	1	24
3:45 PM	0	2	10	0	0	12	3	0	0	0	0	3	12	2	1	0	1	15	0	0	0	0	0	0	30
Total	0	7	43	0	1	50	5	5	1	0	0	11	55	7	4	0	10	66	1	4	1	0	0	6	133
Approach %	0.0	14.0	86.0	0.0	-	-	45.5	45.5	9.1	0.0	-	-	83.3	10.6	6.1	0.0	-	-	16.7	66.7	16.7	0.0	-	-	-
Total %	0.0	5.3	32.3	0.0	-	37.6	3.8	3.8	0.8	0.0	-	8.3	41.4	5.3	3.0	0.0	-	49.6	0.8	3.0	0.8	0.0	-	4.5	-
PHF	0.000	0.583	0.768	0.000	-	0.735	0.417	0.417	0.250	0.000	-	0.550	0.688	0.583	0.500	0.000	-	0.750	0.250	0.333	0.250	0.000	-	0.375	0.739
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	0	7	41	0	-	48	5	5	1	0	-	11	52	7	4	0	-	63	1	4	1	0	-	6	128
% Cars & Light Goods	-	100.0	95.3	-	-	96.0	100.0	100.0	100.0	-	-	100.0	94.5	100.0	100.0	-	-	95.5	100.0	100.0	100.0	-	-	100.0	96.2
Buses	0	0	2	0	-	2	0	0	0	0	-	0	3	0	0	0	-	3	0	0	0	0	-	0	5
% Buses	-	0.0	4.7	-	-	4.0	0.0	0.0	0.0	-	-	0.0	5.5	0.0	0.0	-	-	4.5	0.0	0.0	0.0	-	-	0.0	3.8
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	10	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Turning Movement Peak Hour Data Plot (3:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 8

Turning Movement Peak Hour Data (8:15 AM)

Start Time	Bridge Street Eastbound						Bridge Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	
8:15 AM	0	0	6	0	0	6	1	1	0	0	0	2	5	1	0	1	0	7	0	0	0	0	2	0	15
8:30 AM	0	1	4	0	0	5	0	0	0	0	0	0	11	0	0	0	0	11	0	0	0	0	0	0	16
8:45 AM	0	0	6	0	0	6	1	0	0	0	0	1	14	2	0	0	1	16	0	0	0	0	0	0	23
9:00 AM	0	0	6	0	1	6	1	3	0	0	0	4	13	1	1	0	2	15	0	0	0	0	0	0	25
Total	0	1	22	0	1	23	3	4	0	0	0	7	43	4	1	1	3	49	0	0	0	0	2	0	79
Approach %	0.0	4.3	95.7	0.0	-	-	42.9	57.1	0.0	0.0	-	-	87.8	8.2	2.0	2.0	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	1.3	27.8	0.0	-	29.1	3.8	5.1	0.0	0.0	-	8.9	54.4	5.1	1.3	1.3	-	62.0	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.250	0.917	0.000	-	0.958	0.750	0.333	0.000	0.000	-	0.438	0.768	0.500	0.250	0.250	-	0.766	0.000	0.000	0.000	0.000	-	0.000	0.790
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Cars & Light Goods	0	1	21	0	-	22	3	4	0	0	-	7	40	3	1	0	-	44	0	0	0	0	-	0	73
% Cars & Light Goods	-	100.0	95.5	-	-	95.7	100.0	100.0	-	-	-	100.0	93.0	75.0	100.0	0.0	-	89.8	-	-	-	-	-	-	92.4
Buses	0	0	0	0	-	0	0	0	0	0	-	0	3	0	0	0	-	3	0	0	0	0	-	0	3
% Buses	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	7.0	0.0	0.0	0.0	-	6.1	-	-	-	-	-	-	3.8
Single-Unit Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	1	0	1	-	2	0	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	4.5	-	-	4.3	0.0	0.0	-	-	-	0.0	0.0	25.0	0.0	100.0	-	4.1	-	-	-	-	-	-	3.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Turning Movement Peak Hour Data Plot (8:15 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Bridge Street Eastbound					Fuller Street Northbound					Fuller Street Southbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
12:00 PM	1	0	0	2	1	0	0	0	0	0	0	2	0	0	2	3
12:15 PM	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Hourly Total	2	1	0	4	3	0	0	0	0	0	0	4	0	0	4	7
1:00 PM	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	1
1:15 PM	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	1	0	0	0	1	0	0	0	0	0	2	1	0	0	3	4
1:45 PM	2	1	0	0	3	1	0	0	0	1	1	2	0	0	3	7
Hourly Total	4	1	0	3	5	1	0	0	0	1	4	3	0	0	7	13
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	1	0	0	0	1	1	1	0	0	2	1	2	0	0	3	6
3:15 PM	2	2	0	0	4	0	2	0	0	2	3	1	0	0	4	10
3:30 PM	0	2	0	0	2	0	0	0	0	0	4	0	0	0	4	6
3:45 PM	0	2	0	0	2	1	1	0	0	2	0	0	0	0	0	4
Hourly Total	3	6	0	0	9	2	4	0	0	6	8	3	0	0	11	26
4:00 PM	1	0	0	0	1	1	2	0	0	3	1	0	0	0	1	5
4:15 PM	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	4
4:30 PM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	3
4:45 PM	0	2	0	0	2	1	2	0	0	3	0	0	0	0	0	5
Hourly Total	1	6	0	0	7	3	5	0	0	8	1	1	0	0	2	17
5:00 PM	0	0	0	1	0	1	1	0	0	2	0	1	0	0	1	3
5:15 PM	0	1	0	1	1	1	0	0	0	1	1	0	0	0	1	3
5:30 PM	0	0	0	4	0	1	0	0	0	1	1	0	0	0	1	2
5:45 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Hourly Total	2	1	0	6	3	3	1	0	0	4	2	1	0	0	3	10
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
7:45 AM	1	1	0	0	2	0	0	0	0	0	1	2	0	0	3	5
Hourly Total	2	1	0	0	3	0	0	0	0	0	2	4	0	0	6	9
8:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	2	0	0	0	2	0	1	0	0	1	3

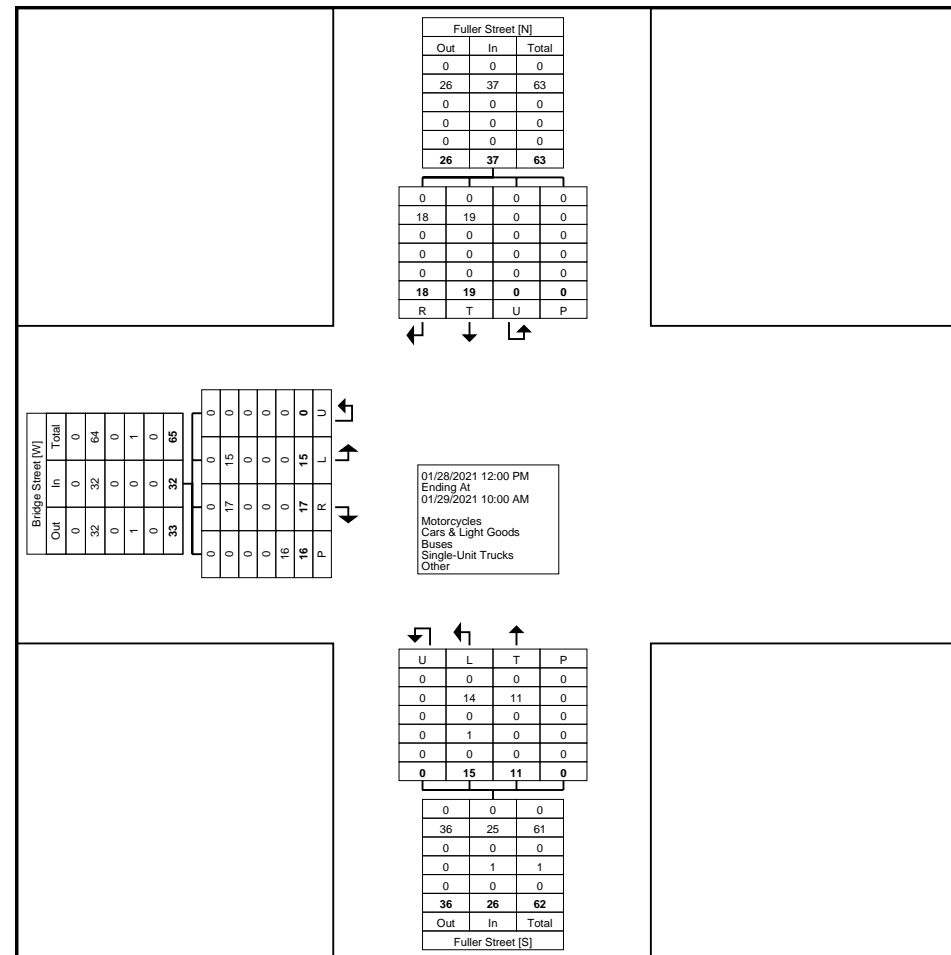
[illegible]



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Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Data Plot

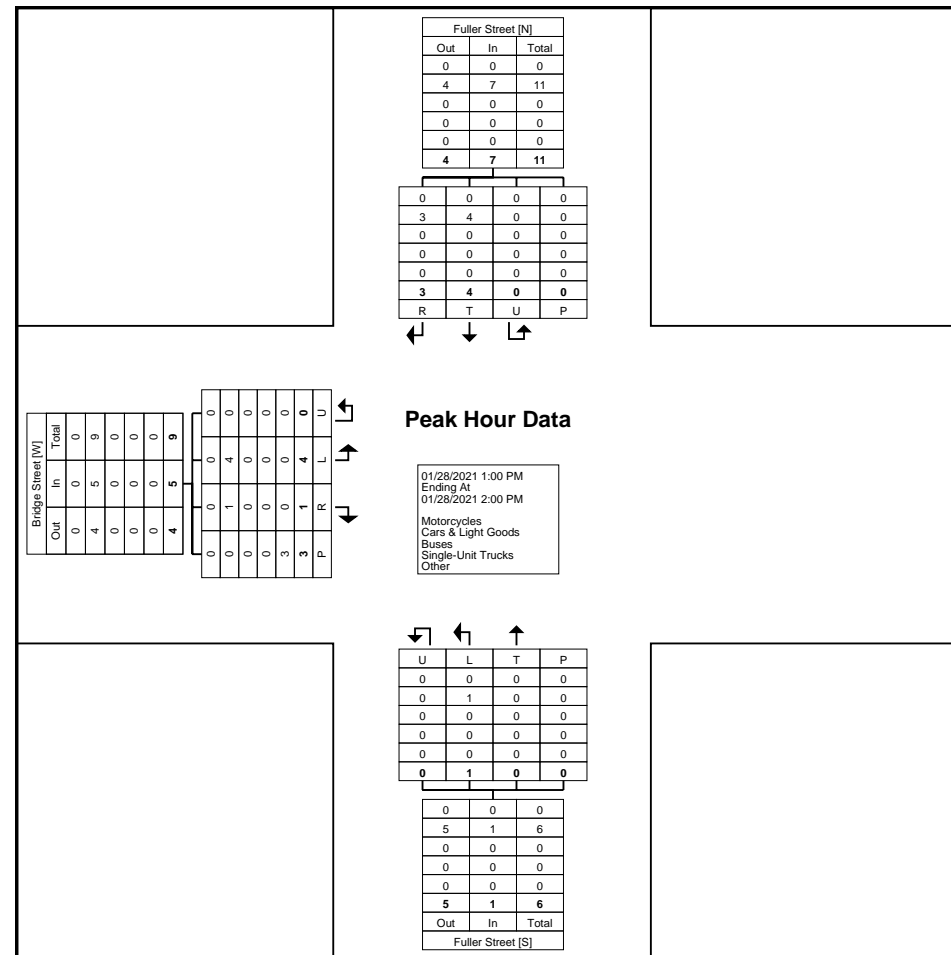
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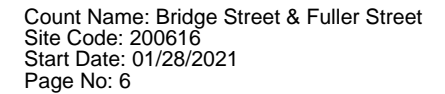
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Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data Plot (1:00 PM)

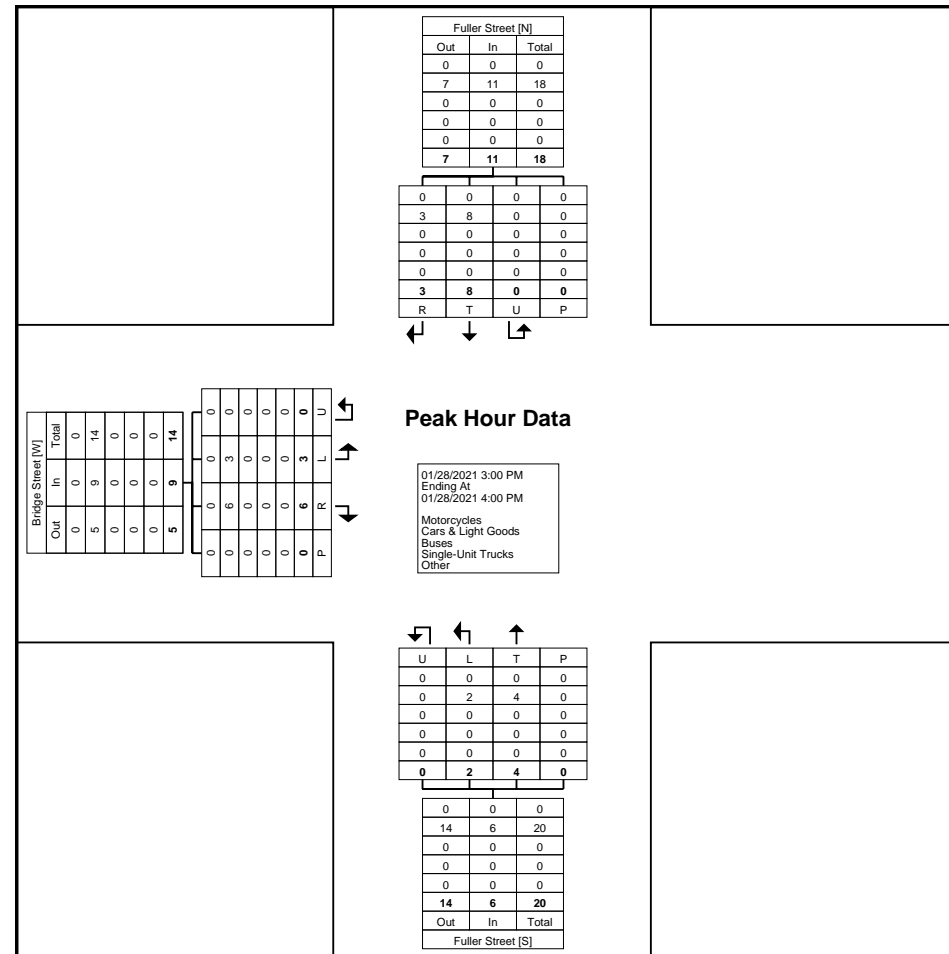




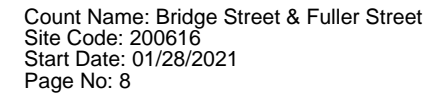
Paradigm Transportation Solutions Limited
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Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data Plot (3:00 PM)

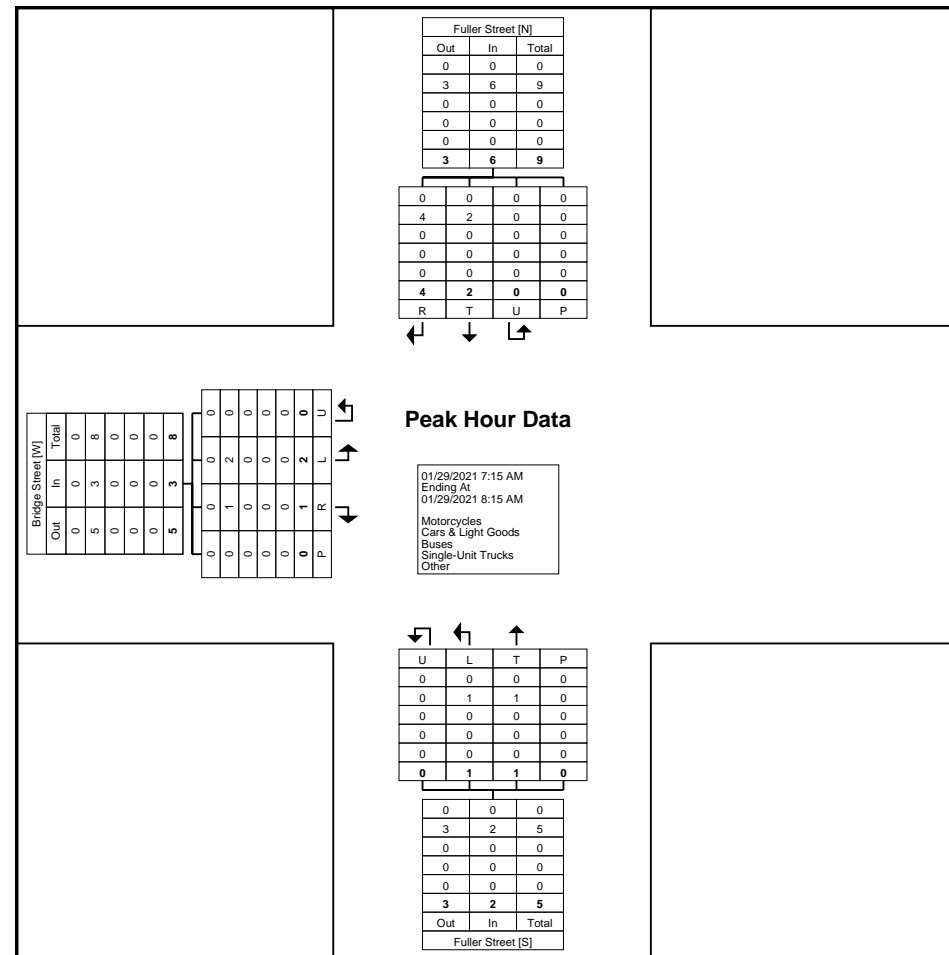




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Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
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Turning Movement Peak Hour Data Plot (7:15 AM)



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Count Name: Boucher Street & St. Vincent
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Boucher Street Eastbound						Boucher Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	3	2	0	0	6	1	0	2	0	0	3	0	7	0	0	1	7	1	11	2	0	0	14	30
12:15 PM	0	1	0	0	0	1	0	2	0	0	0	2	1	13	0	0	2	14	0	9	0	0	0	9	26
12:30 PM	2	1	0	0	0	3	0	0	0	0	1	0	0	9	0	0	0	9	0	9	0	0	0	9	21
12:45 PM	0	0	0	0	0	0	1	0	0	0	1	1	0	19	0	0	0	19	0	9	0	0	0	9	29
Hourly Total	3	5	2	0	0	10	2	2	2	0	2	6	1	48	0	0	3	49	1	38	2	0	0	41	106
1:00 PM	0	0	2	0	0	2	0	3	1	0	5	4	3	8	0	0	0	11	0	6	0	0	1	6	23
1:15 PM	1	1	1	0	0	3	0	0	0	0	4	0	0	14	0	0	0	14	0	8	0	0	2	8	25
1:30 PM	0	0	0	0	0	0	1	2	0	0	2	3	0	16	1	0	0	17	1	10	0	0	0	11	31
1:45 PM	0	1	2	0	0	3	1	0	1	0	1	2	2	8	0	0	0	10	0	14	0	0	1	14	29
Hourly Total	1	2	5	0	0	8	2	5	2	0	12	9	5	46	1	0	0	52	1	38	0	0	4	39	108
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	2	4	4	0	0	10	2	0	3	0	3	5	1	11	3	0	0	15	0	14	0	0	1	14	44
3:15 PM	1	0	0	0	0	1	2	2	1	0	7	5	1	19	1	0	1	21	1	14	1	0	1	16	43
3:30 PM	0	1	1	0	0	2	5	2	1	0	2	8	1	14	1	0	3	16	1	6	2	0	0	9	35
3:45 PM	0	2	1	0	0	3	1	1	1	0	0	3	0	13	3	0	3	16	0	12	1	0	0	13	35
Hourly Total	3	7	6	0	0	16	10	5	6	0	12	21	3	57	8	0	7	68	2	46	4	0	2	52	157
4:00 PM	0	1	1	0	1	2	1	1	0	0	0	2	2	11	2	0	1	15	3	10	0	0	0	13	32
4:15 PM	0	2	1	0	2	3	1	1	0	0	3	2	0	7	2	0	0	9	0	10	0	0	2	10	24
4:30 PM	0	0	2	0	0	2	3	1	0	0	0	4	1	12	0	0	0	13	0	8	0	0	1	8	27
4:45 PM	0	0	4	0	0	4	1	1	2	0	0	4	1	17	2	0	0	20	0	9	0	0	1	9	37
Hourly Total	0	3	8	0	3	11	6	4	2	0	3	12	4	47	6	0	1	57	3	37	0	0	4	40	120
5:00 PM	0	2	2	0	1	4	0	0	0	0	1	0	1	8	2	0	2	11	0	12	1	0	1	13	28
5:15 PM	1	0	1	0	1	2	0	0	1	0	0	1	0	7	0	0	1	7	2	6	0	0	0	8	18
5:30 PM	0	1	3	0	0	4	2	1	0	0	2	3	0	6	2	0	0	8	1	7	0	0	0	8	23
5:45 PM	1	3	0	0	1	4	1	1	0	0	0	2	1	7	1	0	1	9	0	4	1	0	0	5	20
Hourly Total	2	6	6	0	3	14	3	2	1	0	3	6	2	28	5	0	4	35	3	29	2	0	1	34	89
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	1	0	0	1	0	0	0	0	1	0	3	3	0	0	0	6	1	2	0	0	1	3	10
7:15 AM	0	1	1	0	0	2	0	0	1	0	0	1	1	4	0	0	0	5	0	1	0	0	0	1	9
7:30 AM	0	0	0	0	0	0	2	0	0	0	0	2	1	8	1	0	0	10	0	4	0	0	0	4	16
7:45 AM	0	0	2	0	2	2	2	1	0	0	0	3	1	5	1	0	0	7	0	6	0	0	0	6	18
Hourly Total	0	1	4	0	2	5	4	1	1	0	1	6	6	20	2	0	0	28	1	13	0	0	1	14	53
8:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	1	8	2	0	0	11	0	7	0	0	0	7	19
8:15 AM	0	0	1	0	2	1	0	0	0	0	0	0	2	5	0	0	0	7	0	6	1	0	0	7	15
8:30 AM	0	1	2	0	2	3	1	2	2	0	3	5	1	9	1	0	0	11	0	4	0	0	0	4	23

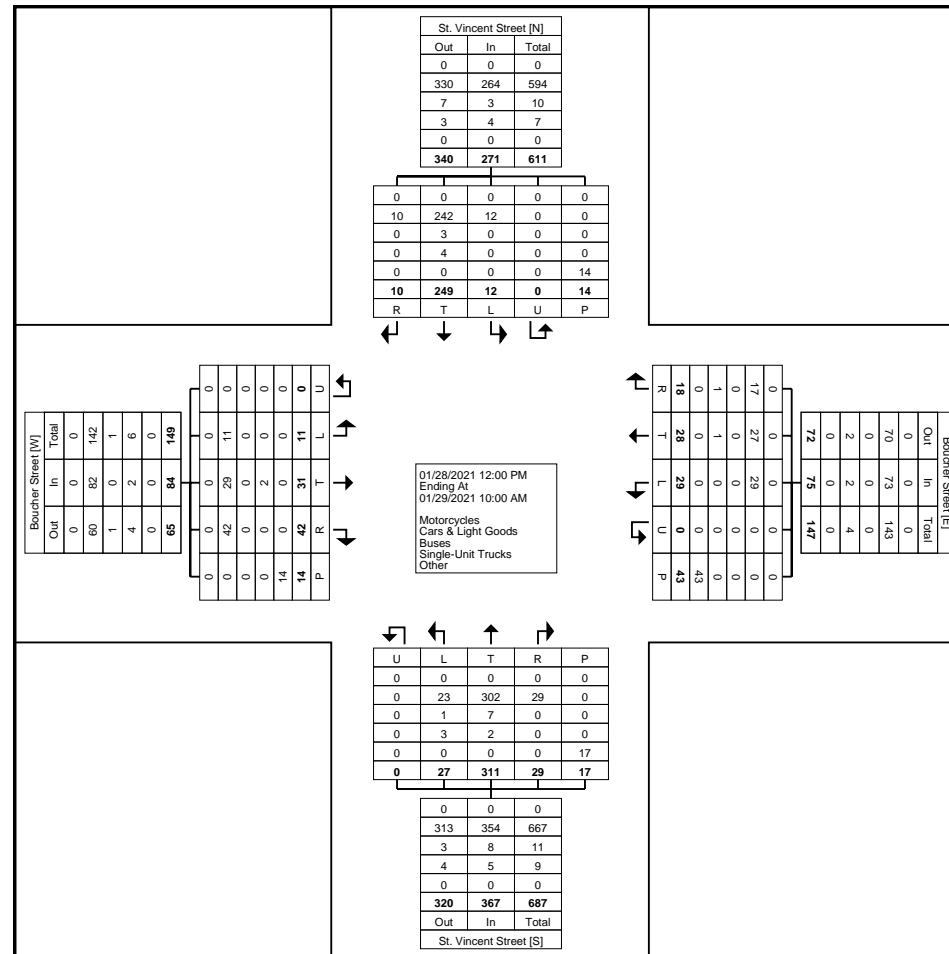
8:45 AM	1	1	4	0	0	6	0	2	0	0	2	2	1	16	3	0	0	20	0	7	0	0	0	7	35
Hourly Total	1	3	7	0	4	11	1	4	2	0	5	7	5	38	6	0	0	49	0	24	1	0	0	25	92
9:00 AM	0	0	2	0	0	2	0	2	0	0	2	2	0	10	1	0	0	11	0	7	0	0	0	7	22
9:15 AM	0	1	1	0	0	2	1	0	1	0	0	2	1	4	0	0	0	5	0	6	1	0	2	7	16
9:30 AM	0	0	0	0	0	0	0	2	0	0	2	2	0	8	0	0	0	8	0	5	0	0	0	5	15
9:45 AM	1	3	1	0	2	5	0	1	1	0	1	2	0	5	0	0	2	5	1	6	0	0	0	7	19
Hourly Total	1	4	4	0	2	9	1	5	2	0	5	8	1	27	1	0	2	29	1	24	1	0	2	26	72
Grand Total	11	31	42	0	14	84	29	28	18	0	43	75	27	311	29	0	17	367	12	249	10	0	14	271	797
Approach %	13.1	36.9	50.0	0.0	-	-	38.7	37.3	24.0	0.0	-	-	7.4	84.7	7.9	0.0	-	-	4.4	91.9	3.7	0.0	-	-	-
Total %	1.4	3.9	5.3	0.0	-	10.5	3.6	3.5	2.3	0.0	-	9.4	3.4	39.0	3.6	0.0	-	46.0	1.5	31.2	1.3	0.0	-	34.0	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	11	29	42	0	-	82	29	27	17	0	-	73	23	302	29	0	-	354	12	242	10	0	-	264	773
% Cars & Light Goods	100.0	93.5	100.0	-	-	97.6	100.0	96.4	94.4	-	-	97.3	85.2	97.1	100.0	-	-	96.5	100.0	97.2	100.0	-	-	97.4	97.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	1	7	0	0	-	8	0	3	0	0	-	3	11
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	3.7	2.3	0.0	-	-	2.2	0.0	1.2	0.0	-	-	1.1	1.4
Single-Unit Trucks	0	2	0	0	-	2	0	1	1	0	-	2	3	2	0	0	-	5	0	4	0	0	-	4	13
% Single-Unit Trucks	0.0	6.5	0.0	-	-	2.4	0.0	3.6	5.6	-	-	2.7	11.1	0.6	0.0	-	-	1.4	0.0	1.6	0.0	-	-	1.5	1.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	14	-	-	-	-	-	43	-	-	-	-	-	17	-	-	-	-	-	14	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: Boucher Street & St. Vincent
Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Boucher Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 4

Turning Movement Peak Hour Data (12:45 PM)

Start Time	Boucher Street Eastbound						Boucher Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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		
12:45 PM	0	0	0	0	0	0	1	0	0	0	1	1	0	19	0	0	0	0	19	0	9	0	0	0	9	29
1:00 PM	0	0	2	0	0	2	0	3	1	0	5	4	3	8	0	0	0	0	11	0	6	0	0	1	6	23
1:15 PM	1	1	1	0	0	3	0	0	0	0	4	0	0	14	0	0	0	0	14	0	8	0	0	2	8	25
1:30 PM	0	0	0	0	0	0	1	2	0	0	2	3	0	16	1	0	0	0	17	1	10	0	0	0	11	31
Total	1	1	3	0	0	5	2	5	1	0	12	8	3	57	1	0	0	0	61	1	33	0	0	3	34	108
Approach %	20.0	20.0	60.0	0.0	-	-	25.0	62.5	12.5	0.0	-	-	4.9	93.4	1.6	0.0	-	-	2.9	97.1	0.0	0.0	-	-	-	-
Total %	0.9	0.9	2.8	0.0	-	4.6	1.9	4.6	0.9	0.0	-	7.4	2.8	52.8	0.9	0.0	-	56.5	0.9	30.6	0.0	0.0	-	31.5	-	
PHF	0.250	0.250	0.375	0.000	-	0.417	0.500	0.417	0.250	0.000	-	0.500	0.250	0.750	0.250	0.000	-	0.803	0.250	0.825	0.000	0.000	-	0.773	0.871	
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	
Cars & Light Goods	1	1	3	0	-	5	2	5	1	0	-	8	3	56	1	0	-	60	1	31	0	0	-	32	105	
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	98.2	100.0	-	-	98.4	100.0	93.9	-	-	-	94.1	97.2	
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	2	0	0	-	2	3	
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.8	0.0	-	-	1.6	0.0	6.1	-	-	-	5.9	2.8	
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	
Pedestrians	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	0	-	-	-	-	-	3	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	

Turning Movement Peak Hour Data Plot (12:45 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Boucher Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 6

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Boucher Street Eastbound						Boucher Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	
3:00 PM	2	4	4	0	0	10	2	0	3	0	3	5	1	11	3	0	0	15	0	14	0	0	1	14	44
3:15 PM	1	0	0	0	0	1	2	2	1	0	7	5	1	19	1	0	1	21	1	14	1	0	1	16	43
3:30 PM	0	1	1	0	0	2	5	2	1	0	2	8	1	14	1	0	3	16	1	6	2	0	0	9	35
3:45 PM	0	2	1	0	0	3	1	1	1	0	0	3	0	13	3	0	3	16	0	12	1	0	0	13	35
Total	3	7	6	0	0	16	10	5	6	0	12	21	3	57	8	0	7	68	2	46	4	0	2	52	157
Approach %	18.8	43.8	37.5	0.0	-	-	47.6	23.8	28.6	0.0	-	-	4.4	83.8	11.8	0.0	-	-	3.8	88.5	7.7	0.0	-	-	-
Total %	1.9	4.5	3.8	0.0	-	10.2	6.4	3.2	3.8	0.0	-	13.4	1.9	36.3	5.1	0.0	-	43.3	1.3	29.3	2.5	0.0	-	33.1	-
PHF	0.375	0.438	0.375	0.000	-	0.400	0.500	0.625	0.500	0.000	-	0.656	0.750	0.750	0.667	0.000	-	0.810	0.500	0.821	0.500	0.000	-	0.813	0.892
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	3	7	6	0	-	16	10	5	6	0	-	21	3	54	8	0	-	65	2	44	4	0	-	50	152
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	94.7	100.0	-	-	95.6	100.0	95.7	100.0	-	-	96.2	96.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	3	0	0	-	3	0	2	0	0	-	2	5
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	5.3	0.0	-	-	4.4	0.0	4.3	0.0	-	-	3.8	3.2
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	7	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Turning Movement Peak Hour Data Plot (3:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Boucher Street & St. Vincent Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 8

Turning Movement Peak Hour Data (8:30 AM)

Start Time	Boucher Street Eastbound						Boucher Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	
8:30 AM	0	1	2	0	2	3	1	2	2	0	3	5	1	9	1	0	0	11	0	4	0	0	0	4	23
8:45 AM	1	1	4	0	0	6	0	2	0	0	2	2	1	16	3	0	0	20	0	7	0	0	0	7	35
9:00 AM	0	0	2	0	0	2	0	2	0	0	2	2	0	10	1	0	0	11	0	7	0	0	0	7	22
9:15 AM	0	1	1	0	0	2	1	0	1	0	0	2	1	4	0	0	0	5	0	6	1	0	2	7	16
Total	1	3	9	0	2	13	2	6	3	0	7	11	3	39	5	0	0	47	0	24	1	0	2	25	96
Approach %	7.7	23.1	69.2	0.0	-	-	18.2	54.5	27.3	0.0	-	-	6.4	83.0	10.6	0.0	-	-	0.0	96.0	4.0	0.0	-	-	-
Total %	1.0	3.1	9.4	0.0	-	13.5	2.1	6.3	3.1	0.0	-	11.5	3.1	40.6	5.2	0.0	-	49.0	0.0	25.0	1.0	0.0	-	26.0	-
PHF	0.250	0.750	0.563	0.000	-	0.542	0.500	0.750	0.375	0.000	-	0.550	0.750	0.609	0.417	0.000	-	0.588	0.000	0.857	0.250	0.000	-	0.893	0.686
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	1	3	9	0	-	13	2	6	3	0	-	11	2	36	5	0	-	43	0	23	1	0	-	24	91
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	66.7	92.3	100.0	-	-	91.5	-	95.8	100.0	-	-	96.0	94.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	1	3	0	0	-	4	0	0	0	0	-	0	4
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	33.3	7.7	0.0	-	-	8.5	-	0.0	0.0	-	-	0.0	4.2
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	4.2	0.0	-	-	4.0	1.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Turning Movement Peak Hour Data Plot (8:30 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Boucher Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 1

Turning Movement Data

Start Time	Boucher Street Eastbound					Boucher Street Westbound					Fuller Street Southbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	3	0	0	0	3	0	0	0	0	0	0	3	0	0	3	6
Hourly Total	4	1	0	0	5	0	0	0	0	0	0	3	0	0	3	8
8:00 AM	2	0	0	0	2	1	0	0	0	1	0	1	0	0	1	4
8:15 AM	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
8:45 AM	1	0	0	0	1	1	0	0	0	1	0	1	0	0	1	3
Hourly Total	4	1	0	0	5	4	0	0	0	4	0	3	0	0	3	12
9:00 AM	1	0	0	0	1	1	0	0	0	1	1	2	0	0	3	5
9:15 AM	1	0	0	0	1	0	0	0	0	0	0	2	0	1	2	3
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
9:45 AM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	3
Hourly Total	2	1	0	0	3	1	1	0	0	2	1	6	0	1	7	12
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12:00 PM	1	3	0	1	4	1	0	0	0	1	0	0	0	1	0	5
12:15 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	3	0	1	4	2	0	0	0	2	0	1	0	1	1	7
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
1:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	1	0	1	0	0	0	0	0	0	2	0	2	2	3
1:45 PM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	4
Hourly Total	1	2	1	0	4	0	0	0	0	0	0	5	0	4	5	9
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	1	5	0	0	6	3	1	0	0	4	0	0	0	1	0	10
3:15 PM	1	0	0	0	1	2	1	0	0	3	2	4	0	0	6	10
3:30 PM	0	1	0	0	1	2	0	0	0	2	0	6	0	0	6	9
3:45 PM	2	1	1	0	4	1	0	0	0	1	0	1	0	4	1	6
Hourly Total	4	7	1	0	12	8	2	0	0	10	2	11	0	5	13	35
4:00 PM	2	1	0	0	3	0	1	0	0	1	0	1	0	0	1	5
4:15 PM	2	1	0	0	3	0	0	0	0	0	0	2	0	0	2	5
4:30 PM	1	0	1	0	2	1	0	0	0	1	0	2	0	0	2	5
4:45 PM	1	0	0	0	1	1	1	0	0	2	1	2	0	0	3	6

Hourly Total	6	2	1	0	9	2	2	0	0	4	1	7	0	0	8	21
5:00 PM	2	1	0	0	3	0	0	0	0	0	0	0	0	1	0	3
5:15 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
5:30 PM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1	4
5:45 PM	1	3	0	0	4	1	0	0	0	1	0	1	0	0	1	6
Hourly Total	5	5	0	0	10	2	0	0	0	2	0	3	0	1	3	15
Grand Total	27	22	3	1	52	19	5	0	0	24	4	39	0	12	43	119
Approach %	51.9	42.3	5.8	-	-	79.2	20.8	0.0	-	-	9.3	90.7	0.0	-	-	-
Total %	22.7	18.5	2.5	-	43.7	16.0	4.2	0.0	-	20.2	3.4	32.8	0.0	-	36.1	-
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	24	21	3	-	48	18	5	0	-	23	4	37	0	-	41	112
% Cars & Light Goods	88.9	95.5	100.0	-	92.3	94.7	100.0	-	-	95.8	100.0	94.9	-	-	95.3	94.1
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	3	1	0	-	4	1	0	0	-	1	0	2	0	-	2	7
% Single-Unit Trucks	11.1	4.5	0.0	-	7.7	5.3	0.0	-	-	4.2	0.0	5.1	-	-	4.7	5.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	12	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

Turning Movement Data Plot

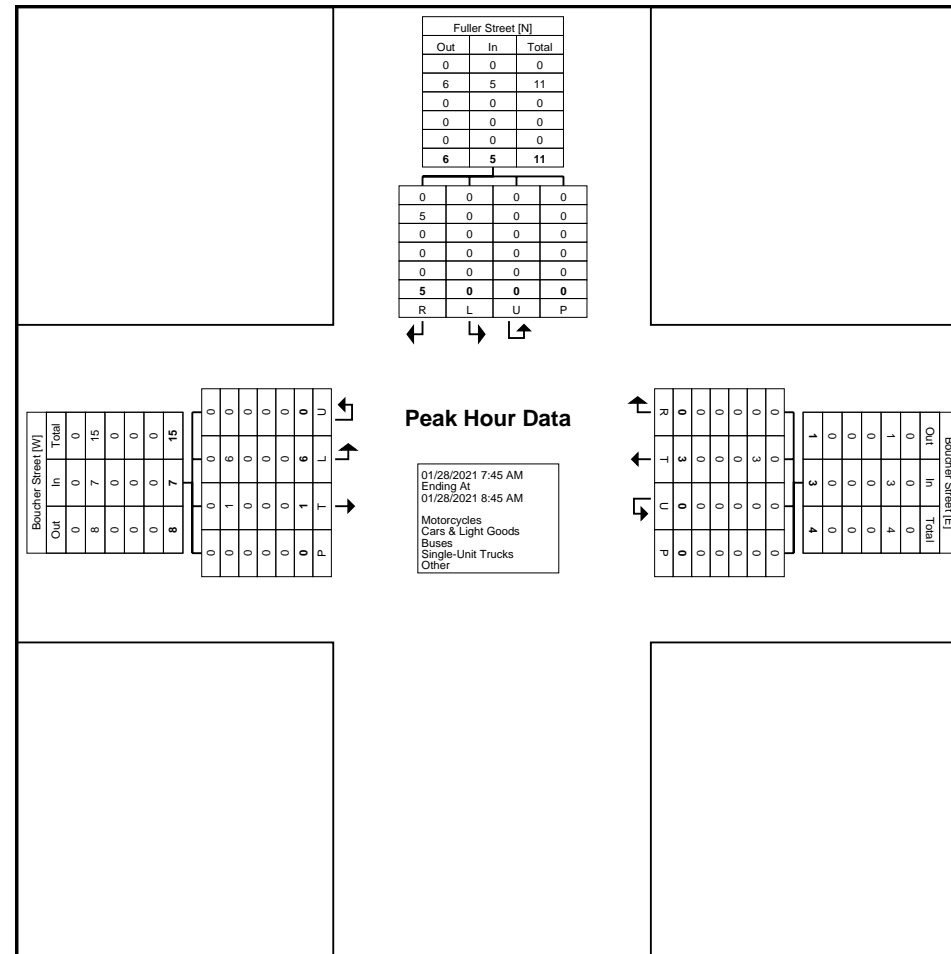
[illegible]



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Boucher Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 5



Turning Movement Peak Hour Data Plot (7:45 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Boucher Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 6

Turning Movement Peak Hour Data (1:00 PM)

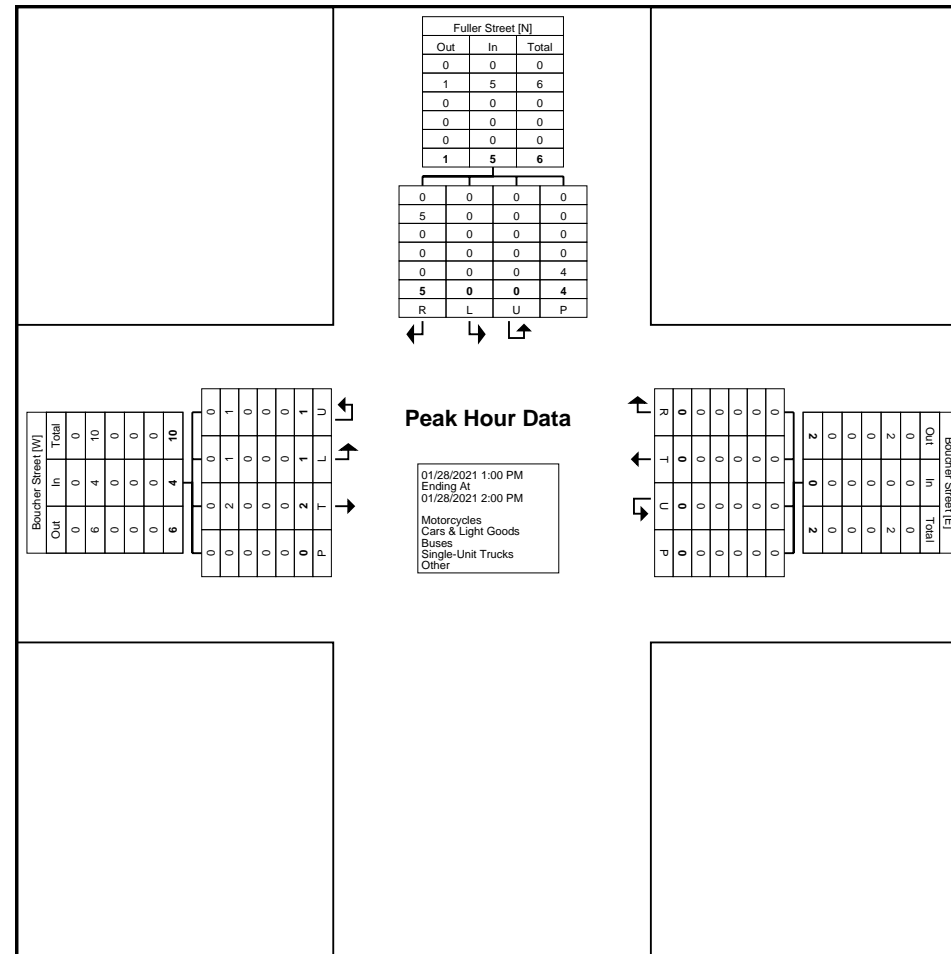
Start Time	Boucher Street Eastbound					Boucher Street Westbound					Fuller Street Southbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
1:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1
1:30 PM	0	0	1	0	1	0	0	0	0	0	0	2	0	2	2	3
1:45 PM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	4
Total	1	2	1	0	4	0	0	0	0	0	0	5	0	4	5	9
Approach %	25.0	50.0	25.0	-	-	0.0	0.0	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	11.1	22.2	11.1	-	44.4	0.0	0.0	0.0	-	0.0	0.0	55.6	0.0	-	55.6	-
PHF	0.250	0.500	0.250	-	0.500	0.000	0.000	0.000	-	0.000	0.000	0.625	0.000	-	0.625	0.563
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0	-	-	0.0	0.0
Cars & Light Goods	1	2	1	-	4	0	0	0	-	0	0	5	0	-	5	9
% Cars & Light Goods	100.0	100.0	100.0	-	100.0	-	-	-	-	-	-	100.0	-	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Boucher Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 7



Turning Movement Peak Hour Data Plot (1:00 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Boucher Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 8

Turning Movement Peak Hour Data (3:00 PM)

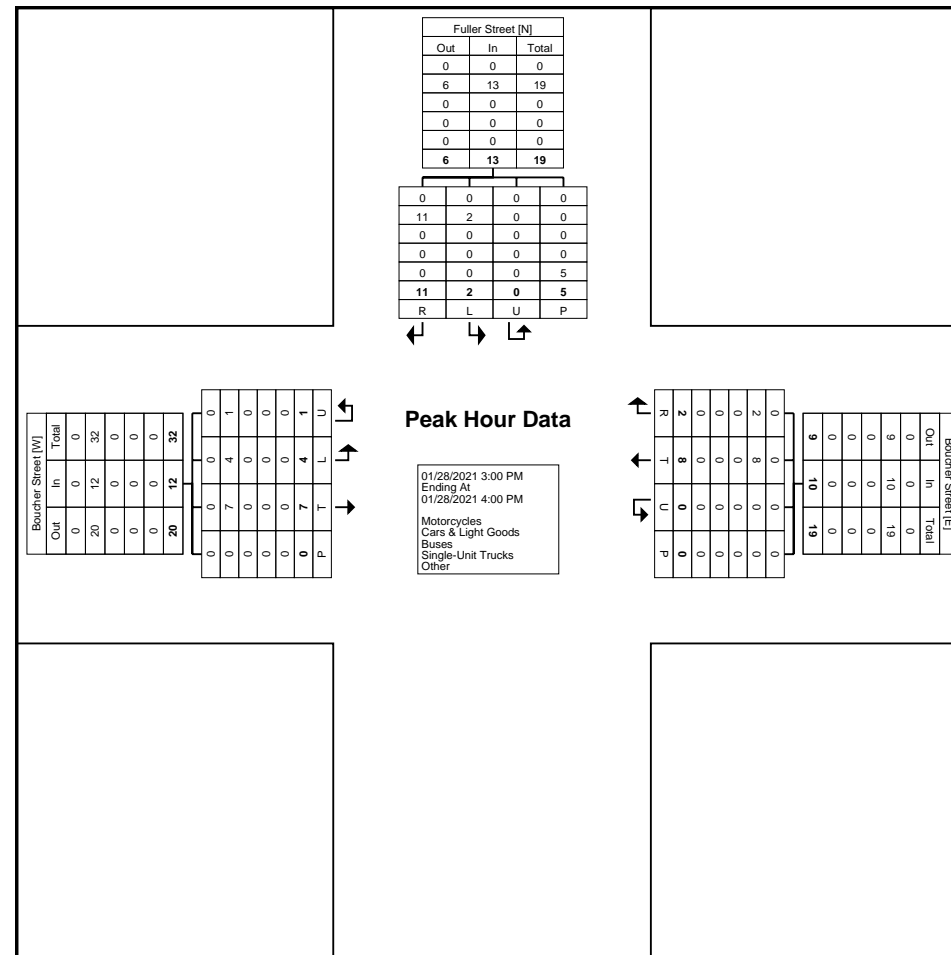
Start Time	Boucher Street Eastbound					Boucher Street Westbound					Fuller Street Southbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
3:00 PM	1	5	0	0	6	3	1	0	0	4	0	0	0	1	0	10
3:15 PM	1	0	0	0	1	2	1	0	0	3	2	4	0	0	6	10
3:30 PM	0	1	0	0	1	2	0	0	0	2	0	6	0	0	6	9
3:45 PM	2	1	1	0	4	1	0	0	0	1	0	1	0	4	1	6
Total	4	7	1	0	12	8	2	0	0	10	2	11	0	5	13	35
Approach %	33.3	58.3	8.3	-	-	80.0	20.0	0.0	-	-	15.4	84.6	0.0	-	-	-
Total %	11.4	20.0	2.9	-	34.3	22.9	5.7	0.0	-	28.6	5.7	31.4	0.0	-	37.1	-
PHF	0.500	0.350	0.250	-	0.500	0.667	0.500	0.000	-	0.625	0.250	0.458	0.000	-	0.542	0.875
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	4	7	1	-	12	8	2	0	-	10	2	11	0	-	13	35
% Cars & Light Goods	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Boucher Street & Fuller Street
Site Code: 200616
Start Date: 01/28/2021
Page No: 9



Turning Movement Peak Hour Data Plot (3:00 PM)

20. EPAC300 PROGRAM LOG

Prepared By : __Kyle Stephenson__ Date: 28 / Feb / 2013

Approved By..... : _____ Date: ___ / ___ / ___

Intersection Name : __Sykes St. (HWY 26) and Trowbridge St. Meaford__

UTILITIES - ACCESS

Access Code..... : _____ Codes: Four Digits (0000 - 9999)

PHASE DATA - VEHICLE TIMINGS

<u>Basic Times</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green..... :		0	8	0	8	0	0	0	0	—	—	—	—	—	—	—	—
Passage Time..... :		40	30	40	30	0	0	0	0	—	—	—	—	—	—	—	—
Maximum No 1..... :		0	41	0	22	0	0	0	0	—	—	—	—	—	—	—	—
Maximum No 2..... :		0	0	0	0	0	0	0	0	—	—	—	—	—	—	—	—
Yellow Change..... :		40	40	40	40	30	30	30	30	—	—	—	—	—	—	—	—
Red Clearance..... :		10	20	10	20	0	0	0	0	—	—	—	—	—	—	—	—
<u>Density Times</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

PHASE DATA - PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk..... :		—	30	—	12	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance..... :		—	10	—	10	—	—	—	—	—	—	—	—	—	—	—	—
<u>Pedestrian Control</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear. :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk..... :		—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Pedestrian Control Entry: "1" = Yes & "0" = No

PHASE DATA - VEHICLE CONTROL

<u>Veh Control</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory..... :		—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Dual Entry..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Last Car Passage..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Conditional Service..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Simultaneous Gap..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Vehicle Control Entry: "1" = Yes & "0" = No

PHASE DATA - GENERAL CONTROL

<u>General Control</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Initialization	:	0	3	0	1	0	0	0	0	—	—	—	—	—	—	—	—
Non-Act Response	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vehicle Recall	:	—	3	—	0	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Recall	:	—	2	—	0	—	—	—	—	—	—	—	—	—	—	—	—
Recall Delay	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>Codes</u>	:	0				1				2				3			
Initialization	:	NONE				INACTIVE				RED				YELLOW			
Non-Act Response	:	NONE				TO NA I				TO NA II				TO BOTH			
Vehicle Recall	:	NONE				1 CALL				MINIMUM				MAXIMUM			
Pedestrian Recall	:	NONE				1 CALL				PED				NA			
	:													SOFT			
	:													NA+			

PHASE DATA - SEQUENCE CONTROL

<u>Sequence Control</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase Omit	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase - Yellow	:	2	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase Omit Call	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>Codes</u>	:	0				01 TO 16 (# - PHASE)											
Phase Omit	:	NONE				Phase Is Omitted By # - Phase On											
Phase - Yellow	:	NONE				Phase Yellow Is Omitted By # - Phase Yellow											
Phase Omit Call	:	NONE				When Omitted, Dets Call # Phase											

PHASE DATA - VEH DETECTOR CONTROL

<u>Control</u>	Detector:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Assigned Phase	:	—	—	4	4	—	—	—	—	—	—	—	—	—	—	—	—				
Operation Mode	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Switch	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Extend Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Delay Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
<u>Control</u>	Detector:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32				
Assigned Phase	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Operation Mode	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Switch	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Extend Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
Delay Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
<u>Codes</u>	:	0				1				2				3				4			
Operation Mode	:	NORM VEH				NORM PED				ONE CALL				ST BAR A				ST BAR B			
Assigned Phase	:	NONE				Detector Is Assigned To # - Phase															
Switch	:	NONE				Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green															

PHASE DATA - VEH DETECTOR CONTROL

<u>Control</u>	Detector:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Assigned Phase	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Operation Mode	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Switch	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extend Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Delay Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Control</u>	Detector:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Assigned Phase	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Operation Mode	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Switch	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extend Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Delay Time	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Codes</u>	:	0	1	2	3	4
Operation Mode	:	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase	:	NONE	Detector Is Assigned To # - Phase			
Switch	:	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

PHASE DATA - PED DETECTOR CONTROL

<u>Control</u>	Detector:	1	2	3	4	5	6	7	8
Assigned Phase	:	—	—	—	—	—	—	—	—
Operation Mode	:	—	—	—	—	—	—	—	—
Switch	:	—	—	—	—	—	—	—	—
Extend Time	:	—	—	—	—	—	—	—	—
Delay Time	:	—	—	—	—	—	—	—	—

<u>Codes</u>	:	0	1	2	3	4
Operation Mode	:	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase	:	NONE	Detector Is Assigned To # - Phase			
Switch	:	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

PHASE DATA - SPC DETECTOR CONTROL

<u>Control</u>	Detector:	1	2	3	4	5	6	7	8
Assigned Phase	:	—	—	—	—	—	—	—	—
Operation Mode	:	—	—	—	—	—	—	—	—
Switch	:	—	—	—	—	—	—	—	—
Extend Time	:	—	—	—	—	—	—	—	—
Delay Time	:	—	—	—	—	—	—	—	—

<u>Codes</u>	:	0	1	2	3	4
Operation Mode	:	NORM VEH	NORM PED	ONE CALL	ST BAR A	ST BAR B
Assigned Phase	:	NONE	Detector Is Assigned To # - Phase			
Switch	:	NONE	Detector Is Switched To # - Phase When The Assigned Phase Is Yellow / Red & # - Phase Is Green			

UNIT DATA - STARTUP & MISC

Startup Time..... : 5 Time In Seconds
 Startup State : 0-Flash 1-Red
 Red Revert..... : 40 Time In Tenth Second
 Auto Pedestrian Clear : 0-No 1-Yes
 Stop Time Reset..... : 0-No 1-Yes
 Alternate Sequence..... : 00-15 Alt Sequence ##

UNIT DATA - AUTOMATIC FLASH

TST A = Flash..... : 0 - NO / 1 - YES For TEST A Input For An Automatic Flash Input

Control	Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash.....	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Alt Flash.....	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	

Control	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flash Entry Phase.....	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Flash Exit Phase.....	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

<u>Codes</u>	:	0	1	2	
Flash.....	:	NO	RED	YEL	All = 0 Then Voltage Monitor Flash
Alt Flash.....	:	NO	YES	--	Used To Provide Wig-Wag Flashing
Flash Entry Phase.....	:	NO	YES	--	Phase(s) To Precede Automatic Flash
Flash Exit Phase.....	:	NO	YES	--	Phase(s) To Follow Automatic Flash

UNIT DATA - OVERLAP

Control	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
OL A Phase(s)	:	<u> 1 </u>	<u> 1 </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL B Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL C Phase(s)	:	<u> </u>	<u> </u>	<u> 1 </u>	<u> 1 </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL D Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL E Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL F Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL G Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL H Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL I Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL J Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL K Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL L Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL M Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL N Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL O Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OL P Phase(s)	:	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	Codes:	0 - NO		1 - YES		Phase Is Included In Overlap											

UNIT DATA - OVERLAP

Control	Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
OL A Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL B Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL C Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL D Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL E Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL F Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL G Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL H Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL I Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL J Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL K Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL L Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL M Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL N Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL O Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OL P Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Codes: 0 – NO 1 - YES Overlap Outputs To Channel

Overlap Controls MUST First Be Assigned To Channels. Once Assigned, They Must Also Be Assigned To Hardware Output Pins.

UNIT DATA – OVERLAP

Control	:	TRL GRN	TRL YEL	TRL RED	-GRN/YEL	+GRN
Overlap A	:	—	—	—	—	—
Overlap B	:	—	—	—	—	—
Overlap C	:	—	—	—	—	—
Overlap D	:	—	—	—	—	—
Overlap E	:	—	—	—	—	—
Overlap F	:	—	—	—	—	—
Overlap G	:	—	—	—	—	—
Overlap H	:	—	—	—	—	—
Overlap I	:	—	—	—	—	—
Overlap J	:	—	—	—	—	—
Overlap K	:	—	—	—	—	—
Overlap L	:	—	—	—	—	—
Overlap M	:	—	—	—	—	—
Overlap N	:	—	—	—	—	—
Overlap O	:	—	—	—	—	—
Overlap P	:	—	—	—	—	—

Codes

TRL GRN Time In Seconds
 TRL YEL Time In Tenth Seconds
 TRL RED Time In Tenth Seconds
 -GRN / YEL
 +GRN

UNIT DATA - RING STRUCTURE

Control	Channel:	RING	NXT	CONCUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase 1	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 2	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 3	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 4	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 5	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 6	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 7	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 8	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 11	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 12	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 13	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 14	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 15	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase 16	:	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Codes

RING Ring Number For Phase (1-4)
 PH NXT Phase Next In Ring (1-16)
 CONCUR PH Phase(s) To Run Concurrent (0-NO / 1-YES)

UNIT DATA - RING STRUCTURE

Control	Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Ph 01 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 01 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 02 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 02 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 03 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 03 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 04 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 04 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 05 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 05 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 06 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 06 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 07 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 07 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 08 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 08 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 09 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 09 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 10 Veh Channel(s) ...	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 10 Ped Channel(s)	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

UNIT DATA - RING STRUCTURE

Control	Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Ph 12 Veh Channel(s) ... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 12 Ped Channel(s) :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 13 Veh Channel(s) ... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 13 Ped Channel(s) :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 14 Veh Channel(s) ... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 14 Ped Channel(s) :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 15 Veh Channel(s) ... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 15 Ped Channel(s) :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 16 Veh Channel(s) ... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ph 16 Ped Channel(s) :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Codes: 0 – NO 1 - YES Phase Vehicle / Pedest Outputs To Channel

Phase Controls MUST First Be Assigned To Channels. Once Assigned, They Must Also Be Assigned To Hardware Output Pins.

UNIT DATA - ALTERNATE SEQUENCE

<u>Control</u>	REVERSE PHASES							
Alternate Sequence 00	NONE							
Alternate Sequence 01	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 02	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 03	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 04	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 05	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 06	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 07	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 08	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 09	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 10	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 11	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 12	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 13	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 14	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Alternate Sequence 15	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—

Reverse Phases Must Be In The Same Ring And Next To Each Other

UNIT DATA - PORT 1

[illegible]

UNIT DATA - I/O MISC

Ring I/O	Ring:	1	2	3	4	
Input Response	:	___	___	___	___	Ring # (1-4)
Output Select	:	___	___	___	___	Ring # (1-4)
I/O Modes	:	INPUT	OUTPUT			
“ABC” Connector	:	___	___			
“D” Connector	:	___	___			

UNIT DATA - SIGNAL DRIVER OUTPUTS

SIGNAL DRIVER GROUP	CHN	HARDWARE OUTPUT PIN	SET	Reference SET ## Function
_____ ...	01	_____ ...	___	01 - Ph 1 Red/Yel/Grn
_____ ...	02	_____ ...	___	02 - Ph 2 Red/Yel/Grn
_____ ...	03	_____ ...	___	03 - Ph 3 Red/Yel/Grn
_____ ...	04	_____ ...	___	04 - Ph 4 Red/Yel/Grn
_____ ...	05	_____ ...	___	05 - Ph 5 Red/Yel/Grn
_____ ...	06	_____ ...	___	06 - Ph 6 Red/Yel/Grn
_____ ...	07	_____ ...	___	07 - Ph 7 Red/Yel/Grn
_____ ...	08	_____ ...	___	08 - Ph 8 Red/Yel/Grn
_____ ...	09	_____ ...	___	09 - Ph 1 DW/PC/WK
_____ ...	10	_____ ...	___	10 - Ph 2 DW/PC/WK
_____ ...	11	_____ ...	___	11 - Ph 3 DW/PC/WK
_____ ...	12	_____ ...	___	12 - Ph 4 DW/PC/WK
_____ ...	13	_____ ...	___	13 - Ph 5 DW/PC/WK
_____ ...	14	_____ ...	___	14 - Ph 6 DW/PC/WK
_____ ...	15	_____ ...	___	15 - Ph 7 DW/PC/WK
_____ ...	16	_____ ...	___	16 - Ph 8 DW/PC/WK
_____ ...	17	_____ ...	___	17 - OL A Red/Yel/Grn
_____ ...	18	_____ ...	___	18 - OL B Red/Yel/Grn
_____ ...	19	_____ ...	___	19 - OL C Red/Yel/Grn
_____ ...	20	_____ ...	___	20 - OL D Red/Yel/Grn
_____ ...	21	_____ ...	___	21 - Ph 1 On/Nxt/Chk
_____ ...	22	_____ ...	___	22 - Ph 2 On/Nxt/Chk
_____ ...	23	_____ ...	___	23 - Ph 3 On/Nxt/Chk
_____ ...	24	_____ ...	___	24 - Ph 4 On/Nxt/Chk
	X			25 - Ph 5 On/Nxt/Chk
	X			26 - Ph 6 On/Nxt/Chk
	X			27 - Ph 7 On/Nxt/Chk
	X			28 - Ph 8 On/Nxt/Chk

SIGNAL DRIVER GROUP column is automatic & indicates the assigned Channels in Ring Structure & Overlap database.

CHN column is a list of the available channels 01-24 in numerical order.

HARDWARE OUTPUT PIN column is automatic & indicates the assigned SET entered here.

SET column is for user entry of the hardware outputs to receive a channels outputs.

COORD DATA – MODE

Control		Codes:	0	1	2	3	4	5
Operation.....	: _1_		FRE	AUT	MAN	---	---	---
Mode	: _0_		PRM	YLD	PYL	POM	SOM	FAC
Maximum	: _0_		INH	MX1	MX2	---	---	---
Correction.....	: _3_		DW	MDW	SWY	SW+	---	---
Offset (?? Of Green).....	: _0_		BEGIN	END OF GREEN				
Force	: _0_		PLAN	CYCLE TIME				
Max Dwell Time	: _0_		Time In Seconds					
Yield Period	: _0_		Time In Seconds					
Manual	Pattern	1/1/1						
(Dial/Split/Offset)								

COORD DATA - TIMING PLANS

Control	Timing Plan:	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length.....	: _75_	___	___	___	___	___	___	___	___
Phase 01 Time/Mode.....	: 0 / 6	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 02 Time/Mode.....	: 47/ 1	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 03 Time/Mode.....	: 0 / 6	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 04 Time/Mode.....	: 28/ 5	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 05 Time/Mode.....	: 0 / 6	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 06 Time/Mode.....	: 0 / 6	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 07 Time/Mode.....	: 0 / 6	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 08 Time/Mode.....	: 0 / 6	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 09 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 10 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 11 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 12 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 13 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 14 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 15 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 16 Time/Mode.....	: ___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Offset 1.....	: ___	___	___	___	___	___	___	___	___
Offset 1 Alt Sequence	: ___	___	___	___	___	___	___	___	___
Offset 1 Pattern Mode	: ___	___	___	___	___	___	___	___	___
Offset 1 Ring 2 Lag	: ___	___	___	___	___	___	___	___	___
Offset 1 Ring 3 Lag	: ___	___	___	___	___	___	___	___	___
Offset 1 Ring 4 Lag	: ___	___	___	___	___	___	___	___	___
Offset 2.....	: ___	___	___	___	___	___	___	___	___
Offset 2 Alt Sequence	: ___	___	___	___	___	___	___	___	___
Offset 2 Pattern Mode	: ___	___	___	___	___	___	___	___	___
Offset 2 Ring 2 Lag	: ___	___	___	___	___	___	___	___	___
Offset 2 Ring 3 Lag	: ___	___	___	___	___	___	___	___	___
Offset 2 Ring 4 Lag	: ___	___	___	___	___	___	___	___	___
Offset 3.....	: ___	___	___	___	___	___	___	___	___
Offset 3 Alt Sequence	: ___	___	___	___	___	___	___	___	___
Offset 3 Pattern Mode	: ___	___	___	___	___	___	___	___	___
Offset 3 Ring 2 Lag	: ___	___	___	___	___	___	___	___	___
Offset 3 Ring 3 Lag	: ___	___	___	___	___	___	___	___	___
Offset 3 Ring 4 Lag	: ___	___	___	___	___	___	___	___	___

COORD DATA - TIMING PLANS

Control	Timing Plan:	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Phase 01 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 02 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 03 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 04 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 05 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 06 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 07 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 08 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 09 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 10 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 11 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 12 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 13 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 14 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 15 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Phase 16 Time/Mode :	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___	___/___
Offset 1 Time..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 1 Alt Sequence :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 1 Pattern Mode..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 1 Ring 2 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 1 Ring 3 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 1 Ring 4 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 2..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 2 Alt Sequence :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 2 Pattern Mode..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 2 Ring 2 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 2 Ring 3 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 2 Ring 4 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 3..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 3 Alt Sequence :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 3 Pattern Mode..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 3 Ring 2 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 3 Ring 3 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Offset 3 Ring 4 Lag..... :	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes..... :									
Phase Mode..... :	0-Actuated		1-Coord Phase		2-Min Rec		3-Max Rec		
	4-Ped Rec		5-Max+Ped Recall		6-Phase Omitted		7-Dual Coord Phase		
Pattern Mode..... :	00-15 (Unit Data Has Definition)								
Alternate Sequence :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Act								
R# LAG..... :	Time In Seconds Of The Ring Offset To Lcl Cycle 0 When Not Barrier Locked To Ring								
	1								

[illegible][illegible]

DEC 01

[illegible][illegible]

TIME BASE DATA - DIMMING

DIM OUTPUTS	Channel:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Channel Red..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Channel Yellow..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Channel Green..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dim Alternate..... :		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

CODES: 0-NO DIMMING / 1-DIMMING

TIME BASE DATA - PHASE FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHS 01 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 02 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 03 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 04 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 05 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 06 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 07 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 08 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																
PHS 09 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 10 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 11 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 12 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 13 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 14 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 15 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 16 MAX # 2..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																
PHS 01 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 02 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 03 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 04 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 05 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 06 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 07 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 08 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																
PHS 09 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 10 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 11 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 12 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 13 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 14 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 15 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 16 PHS OMIT..... :	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																

[illegible]

TIME BASE DATA - PHASE FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHS 02 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 03 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 04 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 05 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 06 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 07 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 08 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																
PHS 09 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 10 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 11 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 12 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 13 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 14 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 15 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 16 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																
PHS 01 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 02 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 03 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 04 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 05 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 06 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 07 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 08 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																
PHS 09 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 10 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 11 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 12 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 13 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 14 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 15 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PHS 16 PED RECALL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CODES: 0-OFF / 1-ON																

TIME BASE DATA - SPECIAL FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	CODES:
Special Function 1	—	—	—	—	—	—	—	—	0-OFF
Special Function 2	—	—	—	—	—	—	—	—	1-ON
Special Function 3	—	—	—	—	—	—	—	—	
Special Function 4	—	—	—	—	—	—	—	—	
Special Function 5	—	—	—	—	—	—	—	—	
Special Function 6	—	—	—	—	—	—	—	—	
Special Function 7	—	—	—	—	—	—	—	—	
Special Function 8	—	—	—	—	—	—	—	—	
PAS3+MAX3=VEH 33-48	—	—	—	—	—	—	—	—	
TIME:									
PAS4+MAX4=VEH 49-64	—	—	—	—	—	—	—	—	
TIME:									
PAS5+MAX5=SPC+PED	—	—	—	—	—	—	—	—	
TIME:									
DYNA MAX3=VEH 33-48	—	—	—	—	—	—	—	—	
TIME:									

TIME BASE DATA - SPECIAL FUNCTION MAPPING

FUNCTION NAME	1	2	3	4	5	6	7	8	CODES:
DYNA MAX4=VEH 49-64 TIME:	___	___	___	___	___	___	___	___	
DYNA MAX5=SPC+PED TIME:	___	___	___	___	___	___	___	___	
DISABLE PROT/PERM OMITS:	___	___	___	___	___	___	___	___	
PHASE 2 SIGN CONTROL:	___	___	___	___	___	___	___	___	
PHASE 4 SIGN CONTROL:	___	___	___	___	___	___	___	___	
PHASE 6 SIGN CONTROL:	___	___	___	___	___	___	___	___	
PHASE 8 SIGN CONTROL:	___	___	___	___	___	___	___	___	
TX DIAMOND - 4 PHASE:	___	___	___	___	___	___	___	___	
TX DIAMOND - 3 PHASE:	___	___	___	___	___	___	___	___	
TX DIAMOND -SEPARATE:	___	___	___	___	___	___	___	___	
QUE1/LVL1 CONTROLS.:	___	___	___	___	___	___	___	___	
QUE1/LVL2 CONTROLS.:	___	___	___	___	___	___	___	___	
QUE2/LVL1 CONTROLS.:	___	___	___	___	___	___	___	___	
QUE2/LVL2 CONTROLS.:	___	___	___	___	___	___	___	___	
AS8-15=OLI-P FL G PHS.:	___	___	___	___	___	___	___	___	
AS8-15=OLI-P FL R PHS.:	___	___	___	___	___	___	___	___	

PREEMPTION DATA – MISCELLANEOUS

Ring:	1	2	3	4	
Minimum Green / Walk Time	___10	___10	___10	___10	Time In Seconds

PRIORITIES

Preemption > Automatic	___1
Flash.....:	
Preempt 1 > Preempt 2.....:	___1
Preempt 2 > Preempt 3.....:	___1
Preempt 3 > Preempt 4.....:	___1
Preempt 4 > Preempt 5.....:	___1
Preempt 5 > Preempt 6.....:	___1

PRIORITY: 0-NO (Equal Priority)

1-1st Has Priority

When A Function Has Priority Over Another,
The Function Of Lower Priority Will Terminate
And The Higher Priority Will Assume Control.

PREEMPT DATA - PREEMPT 1**CONTROL**

Non-Lock: — 0-NO / 1-YES

Link PE #: — 0-6 Preempt #

Delay: — 0-999 Seconds

Extend: — 0-999 Seconds

Duration: — 0-999 Seconds

Max Call: — 0-999 Seconds

Lock Out: — 0-999 Seconds

INTERVAL TIMES

Selective Ped Clear.: _8_ 0-999 Seconds

Selective Yel Chg...: _40_ 0-99.9 Seconds

Selective Red Clear.: _20_ 0-99.9 Seconds

Track Green.....: _0_ 0-999 Seconds

Track Ped Clear.....: _0_ 0-999 Seconds

Track Yel Chg.....: _0_ 0-99.9 Seconds

Track Red Clear.....: _0_ 0-99.9 Seconds

Dwell Green.....: _10_ 0-999 Seconds

Return Ped Clear.....: _8_ 0-999 Seconds

Return Yel Chg.....: _40_ 0-99.9 Seconds

Return Red Clear....: _20_ 0-99.9 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)		—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Exit Call(s)		—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Codes		0			1												
Non-Lock		NO			YES												
Exit Phase(s)		NO			YES												
Exit Call(s)		NO			YES												

Preempt Memory To Be Non-Locking

Phase(s) To Be Serviced First Following Preempt

Phase(s) To Receive Calls On Preempt Exit

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.

Set Max Call = 0 To Disable

Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 1 - OUTPUT STATUS

Phase Vehicle	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dwell Status		—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cycle		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase Pedest	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dwell Status		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cycle		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Overlap Vehicle	Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dwell Status		1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cycle		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Codes		0				1					3			4			
Vehicle		RED				GRN					FL Y			DARK			
Pedest		DT WK				WALK					DARK			----			
Cycle Vehicle		NO				ACT'D					MAX REC			----			
Cycle Pedest		NO				ACT'D					----			----			
Cycle Overlap		NO				ACT'D					----			----			

PREEMPT 1 - LOW PRIORITY ROUTINE

Non-Lock: — 0-NO / 1-YES - When No Dwell Phases Are Set, This Routine Is Disabled.

Skip: — 0-NO / 1-YES - Skip (Yes) Will Allow Phases To Be Skipped To Service The

Delay: — 0-999 Seconds Dwell Phases

Extend: — 0-999 Seconds - Set Max Call = 0 To Disable

Duration: — 0-999 Seconds - Lock Out Duration Will Be Dependent On Calls If = 0

Dwell.....: — 0-999 Seconds - Calls (Yes) Will Place A Ped Call On Exit From Routine

Max Call: — 0-999 Seconds

Lock Out: — 0-999 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exit Call(s)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 2**CONTROL**

Non-Lock: — 0-NO / 1-YES

Link PE #: — 0-6 Preempt #

Delay: — 0-999 Seconds

Extend: — 0-999 Seconds

Duration: — 0-999 Seconds

Max Call.....: — 0-999 Seconds

Lock Out: — 0-999 Seconds

INTERVAL TIMES

Selective Ped Clear.: _8_ 0-999 Seconds

Selective Yel Chg ...: _40_ 0-99.9 Seconds

Selective Red Clear.: _20_ 0-99.9 Seconds

Track Green.....: _0_ 0-999 Seconds

Track Ped Clear.....: _0_ 0-999 Seconds

Track Yel Chg: _0_ 0-99.9 Seconds

Track Red Clear.....: _0_ 0-99.9 Seconds

Dwell Green.....: _10_ 0-999 Seconds

Return Ped Clear.....: _8_ 0-999 Seconds

Return Yel Chg: _40_ 0-99.9 Seconds

Return Red Clear: _20_ 0-99.9 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)		1															
Exit Call(s)		1															
Codes		0			1												
Non-Lock		NO			YES												
Exit Phase(s)		NO			YES												
Exit Call(s)		NO			YES												

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.

Set Max Call = 0 To Disable

Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 2 - OUTPUT STATUS

Phase Vehicle	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status.....																	
Dwell Status				1													
Cycle																	
Phase Pedest	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status.....																	
Dwell Status																	
Cycle																	
Overlap Vehicle	Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status.....																	
Dwell Status				1													
Cycle																	
Codes		0			1		2			3		4					
Vehicle		RED			GRN		FL R			FL Y		DARK					
Pedest		DT WK			WALK		FL WK			DARK		----					
Cycle Vehicle.....		NO			ACT'D		MIN REC			MAX REC		----					
Cycle Pedest.....		NO			ACT'D		REC			----		----					
Cycle Overlap		NO			ACT'D		----			----		----					

PREEMPT 2 - LOW PRIORITY ROUTINE

Non-Lock: — 0-NO / 1-YES - When No Dwell Phases Are Set, This Routine Is Disabled.

Skip: — 0-NO / 1-YES - Skip (Yes) Will Allow Phases To Be Skipped To Service The

Delay: — 0-999 Seconds Dwell Phases

Extend: — 0-999 Seconds - Set Max Call = 0 To Disable

Duration: — 0-999 Seconds - Lock Out Duration Will Be Dependent On Calls If = 0

Dwell.....: — 0-999 Seconds - Calls (Yes) Will Place A Ped Call On Exit From Routine

Max Call.....: — 0-999 Seconds

Lock Out: — 0-999 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)																	
Exit Call(s)																	

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 3**CONTROL**

Non-Lock: _____ 0-NO / 1-YES

Link PE #: _____ 0-6 Preempt #

Delay: _____ 0-999 Seconds

Extend: _____ 0-999 Seconds

Duration: _____ 0-999 Seconds

Max Call: _____ 0-999 Seconds

Lock Out: _____ 0-999 Seconds

INTERVAL TIMES

Selective Ped Clear .: _____ 0-999 Seconds

Selective Yel Chg ...: _____ 0-99.9 Seconds

Selective Red Clear : _____ 0-99.9 Seconds

Track Green: _____ 0-999 Seconds

Track Ped Clear: _____ 0-999 Seconds

Track Yel Chg: _____ 0-99.9 Seconds

Track Red Clear.....: _____ 0-99.9 Seconds

Dwell Green.....: _____ 0-999 Seconds

Return Ped Clear.....: _____ 0-999 Seconds

Return Yel Chg.....: _____ 0-99.9 Seconds

Return Red Clear: _____ 0-99.9 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0		1													
Non-Lock		NO		YES													
Exit Phase(s)		NO		YES													
Exit Call(s)		NO		YES													

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.

Set Max Call = 0 To Disable

Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 3 - OUTPUT STATUS

Phase Vehicle	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Phase Pedest	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Overlap Vehicle	Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0		1		2		3		4							
Vehicle		RED		GRN		FL R		FL Y		DARK							
Pedest		DT WK		WALK		FL WK		DARK		----							
Cycle Vehicle		NO		ACT'D		MIN REC		MAX REC		----							
Cycle Pedest		NO		ACT'D		REC		----		----							
Cycle Overlap		NO		ACT'D		----		----		----							

PREEMPT 3 - LOW PRIORITY ROUTINE

Non-Lock: _____ 0-NO / 1-YES - When No Dwell Phases Are Set, This Routine Is Disabled.

Skip: _____ 0-NO / 1-YES - Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases

Delay: _____ 0-999 Seconds - Set Max Call = 0 To Disable

Extend: _____ 0-999 Seconds - Lock Out Duration Will Be Dependent On Calls If = 0

Duration: _____ 0-999 Seconds - Calls (Yes) Will Place A Ped Call On Exit From Routine

Dwell.....: _____ 0-999 Seconds

Max Call: _____ 0-999 Seconds

Lock Out: _____ 0-999 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 4**CONTROL**

Non-Lock: _____ 0-NO / 1-YES

Link PE #: _____ 0-6 Preempt #

Delay: _____ 0-999 Seconds

Extend: _____ 0-999 Seconds

Duration: _____ 0-999 Seconds

Max Call.....: _____ 0-999 Seconds

Lock Out: _____ 0-999 Seconds

INTERVAL TIMES

Selective Ped Clear.: _____ 0-999 Seconds

Selective Yel Chg ...: _____ 0-99.9 Seconds

Selective Red Clear.: _____ 0-99.9 Seconds

Track Green.....: _____ 0-999 Seconds

Track Ped Clear: _____ 0-999 Seconds

Track Yel Chg: _____ 0-99.9 Seconds

Track Red Clear.....: _____ 0-99.9 Seconds

Dwell Green.....: _____ 0-999 Seconds

Return Ped Clear.....: _____ 0-999 Seconds

Return Yel Chg: _____ 0-99.9 Seconds

Return Red Clear: _____ 0-99.9 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0		1													
Non-Lock		NO		YES													
Exit Phase(s)		NO		YES													
Exit Call(s)		NO		YES													

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.

Set Max Call = 0 To Disable

Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 4 - OUTPUT STATUS

<u>Phase Vehicle</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status.....	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Phase Pedest</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status.....	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Overlap Vehicle</u>	Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status.....	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0		1		2		3		4							
Vehicle		RED		GRN		FL R		FL Y		DARK							
Pedest		DT WK		WALK		FL WK		DARK		----							
Cycle Vehicle.....		NO		ACT'D		MIN REC		MAX REC		----							
Cycle Pedest.....		NO		ACT'D		REC		----		----							
Cycle Overlap		NO		ACT'D		----		----		----							

PREEMPT 4 - LOW PRIORITY ROUTINE

Non-Lock: _____ 0-NO / 1-YES - When No Dwell Phases Are Set, This Routine Is Disabled.

Skip: _____ 0-NO / 1-YES - Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases

Delay: _____ 0-999 Seconds - Set Max Call = 0 To Disable

Extend: _____ 0-999 Seconds - Lock Out Duration Will Be Dependent On Calls If = 0

Duration: _____ 0-999 Seconds - Calls (Yes) Will Place A Ped Call On Exit From Routine

Dwell.....: _____ 0-999 Seconds

Max Call.....: _____ 0-999 Seconds

Lock Out: _____ 0-999 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 5**CONTROL**

Non-Lock : _____ 0-NO / 1-YES

Link PE # : _____ 0-6 Preempt #

Delay : _____ 0-999 Seconds

Extend : _____ 0-999 Seconds

Duration : _____ 0-999 Seconds

Max Call : _____ 0-999 Seconds

Lock Out : _____ 0-999 Seconds

INTERVAL TIMES

Selective Ped Clear . : _____ 0-999 Seconds

Selective Yel Chg ... : _____ 0-99.9 Seconds

Selective Red Clear : _____ 0-99.9 Seconds

Track Green : _____ 0-999 Seconds

Track Ped Clear : _____ 0-999 Seconds

Track Yel Chg : _____ 0-99.9 Seconds

Track Red Clear : _____ 0-99.9 Seconds

Dwell Green : _____ 0-999 Seconds

Return Ped Clear : _____ 0-999 Seconds

Return Yel Chg : _____ 0-99.9 Seconds

Return Red Clear : _____ 0-99.9 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0			1												
Non-Lock		NO			YES												
Exit Phase(s)		NO			YES												
Exit Call(s)		NO			YES												

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.

Set Max Call = 0 To Disable

Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 5 - OUTPUT STATUS

<u>Phase Vehicle</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Phase Pedest</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Overlap Vehicle</u>	Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0			1					2			3			4	
Vehicle		RED			GRN					FL R			FL Y			DARK	
Pedest		DT WK			WALK					FL WK			DARK			----	
Cycle Vehicle		NO			ACT'D					MIN REC			MAX REC			----	
Cycle Pedest		NO			ACT'D					REC			----			----	
Cycle Overlap		NO			ACT'D					----			----			----	

PREEMPT 5 - LOW PRIORITY ROUTINE

Non-Lock : _____ 0-NO / 1-YES - When No Dwell Phases Are Set, This Routine Is Disabled.

Skip : _____ 0-NO / 1-YES - Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases

Delay : _____ 0-999 Seconds - Set Max Call = 0 To Disable

Extend : _____ 0-999 Seconds - Lock Out Duration Will Be Dependent On Calls If = 0

Duration : _____ 0-999 Seconds - Calls (Yes) Will Place A Ped Call On Exit From Routine

Dwell : _____ 0-999 Seconds

Max Call : _____ 0-999 Seconds

Lock Out : _____ 0-999 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

PREEMPT DATA - PREEMPT 6**CONTROL**

Non-Lock: _____ 0-NO / 1-YES

Link PE #: _____ 0-6 Preempt #

Delay: _____ 0-999 Seconds

Extend: _____ 0-999 Seconds

Duration: _____ 0-999 Seconds

Max Call.....: _____ 0-999 Seconds

Lock Out: _____ 0-999 Seconds

INTERVAL TIMES

Selective Ped Clear.: _____ 0-999 Seconds

Selective Yel Chg ...: _____ 0-99.9 Seconds

Selective Red Clear.: _____ 0-99.9 Seconds

Track Green.....: _____ 0-999 Seconds

Track Ped Clear: _____ 0-999 Seconds

Track Yel Chg: _____ 0-99.9 Seconds

Track Red Clear.....: _____ 0-99.9 Seconds

Dwell Green.....: _____ 0-999 Seconds

Return Ped Clear.....: _____ 0-999 Seconds

Return Yel Chg: _____ 0-99.9 Seconds

Return Red Clear: _____ 0-99.9 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0		1													
Non-Lock		NO		YES													
Exit Phase(s)		NO		YES													
Exit Call(s)		NO		YES													

Notes:

If Track Green Time = 0, Then All Track Intervals Are Omitted.

Set Max Call = 0 To Disable

Lock Out Duration Will Be Dependent On Calls If = 0

PREEMPT 6 - OUTPUT STATUS

<u>Phase Vehicle</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status.....	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Phase Pedest</u>	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Track Status.....	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>Overlap Vehicle</u>	Overlap:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Track Status.....	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Dwell Status	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cycle	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Codes		0		1		2		3		4							
Vehicle		RED		GRN		FL R		FL Y		DARK							
Pedest		DT WK		WALK		FL WK		DARK		----							
Cycle Vehicle.....		NO		ACT'D		MIN REC		MAX REC		----							
Cycle Pedest.....		NO		ACT'D		REC		----		----							
Cycle Overlap		NO		ACT'D		----		----		----							

PREEMPT 6 - LOW PRIORITY ROUTINE

Non-Lock: _____ 0-NO / 1-YES - When No Dwell Phases Are Set, This Routine Is Disabled.

Skip: _____ 0-NO / 1-YES - Skip (Yes) Will Allow Phases To Be Skipped To Service The Dwell Phases

Delay: _____ 0-999 Seconds - Set Max Call = 0 To Disable

Extend: _____ 0-999 Seconds - Lock Out Duration Will Be Dependent On Calls If = 0

Duration: _____ 0-999 Seconds - Calls (Yes) Will Place A Ped Call On Exit From Routine

Dwell.....: _____ 0-999 Seconds

Max Call.....: _____ 0-999 Seconds

Lock Out: _____ 0-999 Seconds

	Phase:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dwell Phase(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Exit Call(s)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Dwell Phase(s) & Exit Call(s) Control Entry: "1" = Yes & "0" = No

SYSTEM DATA - GENERAL

Local Address : _____ Three Digits (000 - 032)
 Revert To Backup : _____ Time In Minutes (000- 255)
 1) An Address Other Than "000" Transfers Local "D" Connector I/O To It's System Definition
 2) On Loss Of Communications, The Local Will Revert To It's Time Base Events After The Revert To Backup Time

SYSTEM DATA - SYSTEM DETECTORS

ASSIGN System Detector 1 2 3 4 5 6 7 8
 Assigned Detector : _____

To Assign : VEH 01-64 Enter 01-64 / SPC 01-08 Enter 65-72 / PED 01-08 Enter 73-80

V+O	System Detector	1	2	3	4	5	6	7	8	V+O PARAMETERS:
VPHR X 100.....	:	_____	_____	_____	_____	_____	_____	_____	_____	VPHR - Lane Capacity
AVGT (Minutes).....	:	_____	_____	_____	_____	_____	_____	_____	_____	AVGT - Averaging Time
CTFC / 10	:	_____	_____	_____	_____	_____	_____	_____	_____	CTFC - Correct Factor
MVOL.....	:	_____	_____	_____	_____	_____	_____	_____	_____	MVOL - Min Vol b4 Occ Add

Report Interval : _____ Time In Minutes (00- 99) / Time Base Aux D2 Starts A Report

SYSTEM DATA - QUEUE ROUTINES

QUEUE 1					QUEUE 2				
ASSIGN	Detector:	1	2	3 4	ASSIGN	Detector:	1	2 3 4	
System Detector	:	_____	_____	_____	System Detector	:	_____	_____	Det # 1 To 8
WTFC Factor	:	_____	_____	_____	WTFC Factor	:	_____	_____	Factor 1 To 100
Input Select	:	_____			Input Select	:	_____		0-AVG / 1-HIGH
Failed Level	:	_____			Failed Level	:	_____		# To Fail Channel
SELECT	Level:	A		B	SELECT	Level:	A		B
Enter (UP)	:	_____		_____	Enter (UP)	:	_____		_____
Leave (DN)	:	_____		_____	Leave (DN)	:	_____		_____
PATTERN	D / S / O	D / S / O			PATTERN	D / S / O	D / S / O		
Called	:	___/___/___	___/___/___		Pattern Called	:	___/___/___	___/___/___	

Queue Pattern or Partial Pattern Selection Is Made When The V+O Of Assigned System Detectors Exceeds The Level To Enter.

SYSTEM DATA - VEH DETECTOR DIAGNOSTICS

<u>VALUE 0</u>	Detector:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 1</u>	Detector:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 0</u>	Detector:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 1</u>	Detector:	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 0</u>	Detector:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 1</u>	Detector:	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 0</u>	Detector:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<u>VALUE 1</u>	Detector:	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Max Presence		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Time Base Auxiliary "D1" Enables Value 1 diagnostic Parameters

SYSTEM DATA - PED DETECTOR DIAGNOSTICS

<u>VALUE 0</u>	Detector:	1	2	3	4	5	6	7	8
Max Presence		—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—
<u>VALUE 1</u>	Detector:	1	2	3	4	5	6	7	8
Max Presence		—	—	—	—	—	—	—	—
No Activity.....		—	—	—	—	—	—	—	—
Erratic Counts		—	—	—	—	—	—	—	—

Time Base Auxiliary "D1" Enables Value 1 diagnostic Parameters

SYSTEM DATA - SPC DETECTOR DIAGNOSTICS

VALUE 0 Detector: 1 2 3 4 5 6 7 8
 Max Presence: — — — — — — — —
 No Activity.....: — — — — — — — —
 Erratic Counts.....: — — — — — — — —

VALUE 1 Detector: 1 2 3 4 5 6 7 8
 Max Presence: — — — — — — — —
 No Activity.....: — — — — — — — —
 Erratic Counts.....: — — — — — — — —

Time Base Auxiliary "D1" Enables Value 1 diagnostic Parameters

SYSTEM DATA - SPEED

Measurement.....: — 0-Miles Per Hour / 1-Kilometers Per Hour

SPEED TRAP 1		SPEED TRAP 2	
Detector: 1 2		Detector: 1 2	
Assigned Detector	— —	Assigned Detector	— —
Distance.....	—	Distance.....	—

1) Each Speed Trap Needs Two Detectors Assigned, Any Vehicle, Special, or Pedestrian Detector May Be Assigned.

To Assign : VEH 01-64 Enter 01-64 / SPC 01-08 Enter 65-72 / PED 01-08 Enter 73-80

2) The Distance Between Det 1 and Det 2 May Be Either 11 Feet or 22 Feet. Enter '1' For 11 Ft or '2' for 22 Ft.

RANGES / PATTERN

PATTERN		OFFSET 1		OFFSET 2		OFFSET 3	
Dial	Split	Low	High	Low	High	Low	High
1	1	—	—	—	—	—	—
1	2	—	—	—	—	—	—
1	3	—	—	—	—	—	—
1	4	—	—	—	—	—	—
2	1	—	—	—	—	—	—
2	2	—	—	—	—	—	—
2	3	—	—	—	—	—	—
2	4	—	—	—	—	—	—
3	1	—	—	—	—	—	—
3	2	—	—	—	—	—	—
3	3	—	—	—	—	—	—
3	4	—	—	—	—	—	—
4	1	—	—	—	—	—	—
4	2	—	—	—	—	—	—
4	3	—	—	—	—	—	—
4	4	—	—	—	—	—	—

RANGES:

Enter The Low & High Speed
 In MPH or KPH For Each Pattern
 To Enable A Report Of % Lower,
 Within, & Above It



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsI.com

Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 1

Turning Movement Data

Start Time	Trowbridge Street Eastbound						Trowbridge Street Westbound						North Sykes Street Northbound						North Sykes Street 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	
10:00 AM	3	2	8	0	5	13	10	1	4	0	2	15	3	74	8	0	1	85	2	81	1	0	6	84	197
10:15 AM	2	3	3	0	8	8	5	1	2	0	2	8	2	97	11	0	1	110	0	74	3	0	2	77	203
10:30 AM	0	5	5	0	6	10	7	1	3	0	5	11	5	112	10	0	2	127	1	95	3	0	5	99	247
10:45 AM	1	4	5	0	7	10	13	4	4	0	0	21	4	98	13	0	1	115	7	100	2	0	2	109	255
Hourly Total	6	14	21	0	26	41	35	7	13	0	9	55	14	381	42	0	5	437	10	350	9	0	15	369	902
11:00 AM	4	6	6	0	4	16	4	4	3	0	2	11	3	80	2	0	1	85	3	100	3	0	1	106	218
11:15 AM	2	4	5	1	1	12	5	8	8	0	2	21	3	103	9	0	1	115	3	83	2	0	3	88	236
11:30 AM	3	2	5	0	8	10	7	2	3	0	4	12	2	95	9	0	2	106	0	88	6	0	6	94	222
11:45 AM	5	4	2	0	6	11	9	5	2	0	10	16	6	104	14	1	3	125	2	100	8	0	4	110	262
Hourly Total	14	16	18	1	19	49	25	19	16	0	18	60	14	382	34	1	7	431	8	371	19	0	14	398	938
12:00 PM	1	6	4	0	10	11	10	3	7	0	13	20	3	86	11	0	7	100	5	95	2	0	3	102	233
12:15 PM	1	2	5	0	5	8	9	3	2	0	11	14	2	103	15	0	2	120	6	61	4	0	1	71	213
12:30 PM	1	3	4	0	10	8	5	3	3	0	3	11	5	106	12	0	1	123	2	94	3	0	8	99	241
12:45 PM	3	8	12	0	4	23	11	5	7	0	9	23	4	97	12	0	11	113	2	109	2	0	3	113	272
Hourly Total	6	19	25	0	29	50	35	14	19	0	36	68	14	392	50	0	21	456	15	359	11	0	15	385	959
1:00 PM	4	3	5	0	5	12	12	2	2	0	8	16	1	119	8	0	2	128	5	80	3	0	3	88	244
1:15 PM	2	6	7	0	8	15	12	5	2	0	4	19	5	81	5	0	5	91	0	90	4	0	14	94	219
1:30 PM	1	3	5	0	3	9	6	6	3	0	4	15	2	113	8	0	4	123	5	105	2	0	8	112	259
1:45 PM	5	3	8	0	4	16	4	2	4	0	6	10	4	87	17	0	2	108	8	107	5	0	6	120	254
Hourly Total	12	15	25	0	20	52	34	15	11	0	22	60	12	400	38	0	13	450	18	382	14	0	31	414	976
Grand Total	38	64	89	1	94	192	129	55	59	0	85	243	54	1555	164	1	46	1774	51	1462	53	0	75	1566	3775
Approach %	19.8	33.3	46.4	0.5	-	-	53.1	22.6	24.3	0.0	-	-	3.0	87.7	9.2	0.1	-	-	3.3	93.4	3.4	0.0	-	-	-
Total %	1.0	1.7	2.4	0.0	-	5.1	3.4	1.5	1.6	0.0	-	6.4	1.4	41.2	4.3	0.0	-	47.0	1.4	38.7	1.4	0.0	-	41.5	-
Motorcycles	0	1	0	0	-	1	4	2	0	0	-	6	0	66	10	0	-	76	2	60	0	0	-	62	145
% Motorcycles	0.0	1.6	0.0	0.0	-	0.5	3.1	3.6	0.0	-	-	2.5	0.0	4.2	6.1	0.0	-	4.3	3.9	4.1	0.0	-	-	4.0	3.8
Cars & Light Goods	38	58	89	1	-	186	122	48	49	0	-	219	54	1469	154	1	-	1678	45	1391	48	0	-	1484	3567
% Cars & Light Goods	100.0	90.6	100.0	100.0	-	96.9	94.6	87.3	83.1	-	-	90.1	100.0	94.5	93.9	100.0	-	94.6	88.2	95.1	90.6	-	-	94.8	94.5
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	11	0	0	-	11	0	9	0	0	-	9	20
% Single-Unit Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	0.0	-	0.6	0.0	0.6	0.0	-	-	0.6	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	2	0	0	-	2	3
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	0.0	-	0.1	0.0	0.1	0.0	-	-	0.1	0.1

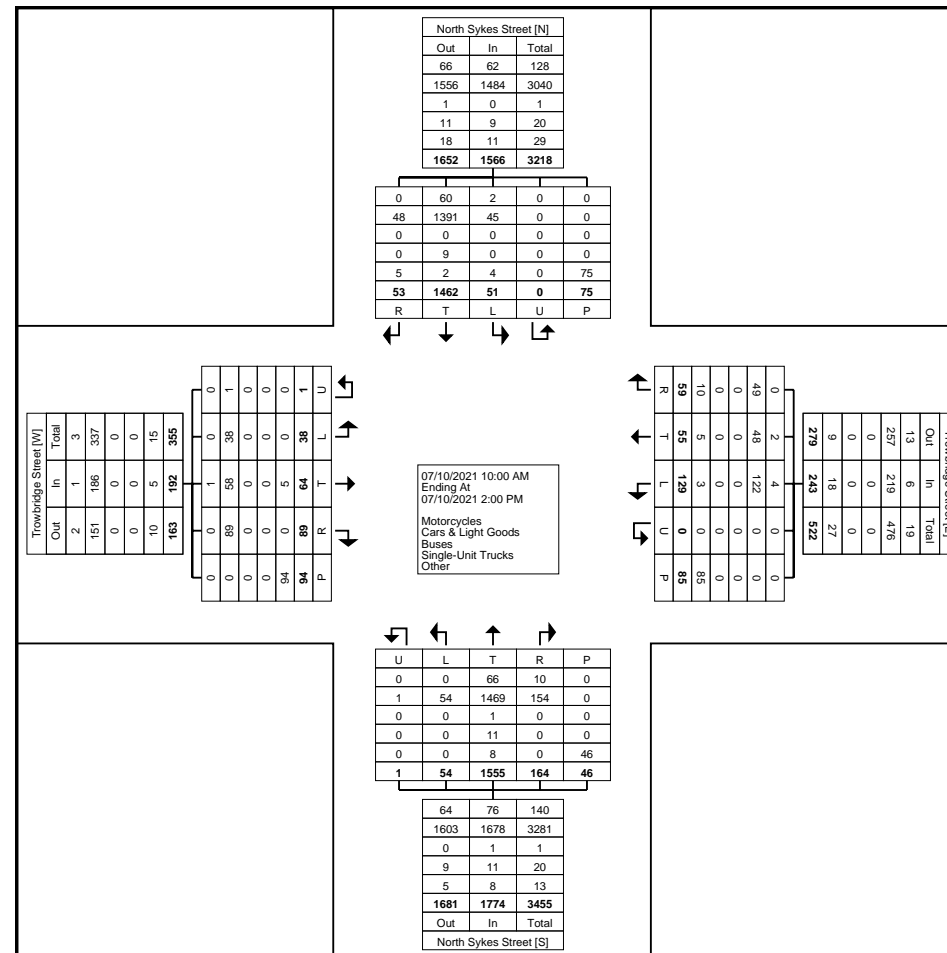
Bicycles on Road	0	5	0	0	-	5	3	5	10	0	-	18	0	7	0	0	-	7	4	0	5	0	-	9	39
% Bicycles on Road	0.0	7.8	0.0	0.0	-	2.6	2.3	9.1	16.9	-	-	7.4	0.0	0.5	0.0	0.0	-	0.4	7.8	0.0	9.4	-	-	0.6	1.0
Bicycles on Crosswalk	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	11	-	-	-	-	-	4	-	-
% Bicycles on Crosswalk	-	-	-	-	6.4	-	-	-	-	-	1.2	-	-	-	-	-	23.9	-	-	-	-	-	5.3	-	-
Pedestrians	-	-	-	-	88	-	-	-	-	-	84	-	-	-	-	-	35	-	-	-	-	-	71	-	-
% Pedestrians	-	-	-	-	93.6	-	-	-	-	-	98.8	-	-	-	-	-	76.1	-	-	-	-	-	94.7	-	-



Paradigm Transportation Solutions Limited
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 4

Turning Movement Peak Hour Data (12:45 PM)

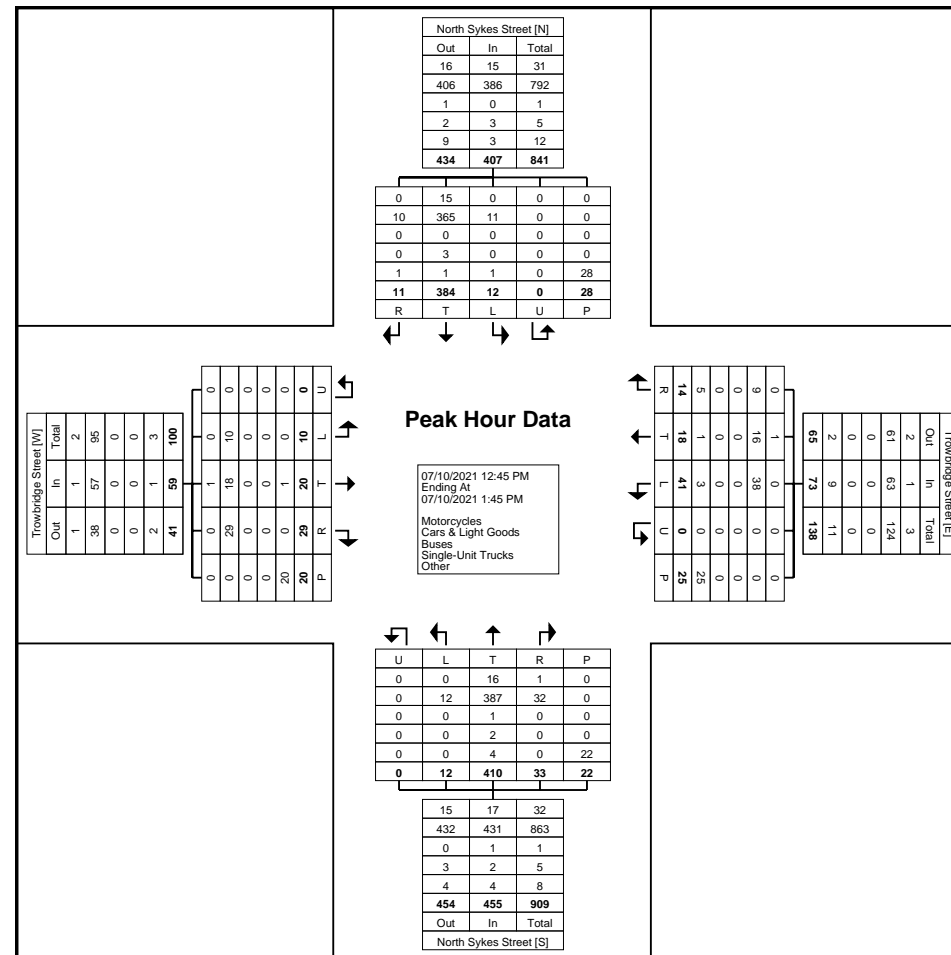
Start Time	Trowbridge Street Eastbound						Trowbridge Street Westbound						North Sykes Street Northbound						North Sykes Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:45 PM	3	8	12	0	4	23	11	5	7	0	9	23	4	97	12	0	11	113	2	109	2	0	3	113	272
1:00 PM	4	3	5	0	5	12	12	2	2	0	8	16	1	119	8	0	2	128	5	80	3	0	3	88	244
1:15 PM	2	6	7	0	8	15	12	5	2	0	4	19	5	81	5	0	5	91	0	90	4	0	14	94	219
1:30 PM	1	3	5	0	3	9	6	6	3	0	4	15	2	113	8	0	4	123	5	105	2	0	8	112	259
Total	10	20	29	0	20	59	41	18	14	0	25	73	12	410	33	0	22	455	12	384	11	0	28	407	994
Approach %	16.9	33.9	49.2	0.0	-	-	56.2	24.7	19.2	0.0	-	-	2.6	90.1	7.3	0.0	-	-	2.9	94.3	2.7	0.0	-	-	-
Total %	1.0	2.0	2.9	0.0	-	5.9	4.1	1.8	1.4	0.0	-	7.3	1.2	41.2	3.3	0.0	-	45.8	1.2	38.6	1.1	0.0	-	40.9	-
PHF	0.625	0.625	0.604	0.000	-	0.641	0.854	0.750	0.500	0.000	-	0.793	0.600	0.861	0.688	0.000	-	0.889	0.600	0.881	0.688	0.000	-	0.900	0.914
Motorcycles	0	1	0	0	-	1	0	1	0	0	-	1	0	16	1	0	-	17	0	15	0	0	-	15	34
% Motorcycles	0.0	5.0	0.0	-	-	1.7	0.0	5.6	0.0	-	-	1.4	0.0	3.9	3.0	-	-	3.7	0.0	3.9	0.0	-	-	3.7	3.4
Cars & Light Goods	10	18	29	0	-	57	38	16	9	0	-	63	12	387	32	0	-	431	11	365	10	0	-	386	937
% Cars & Light Goods	100.0	90.0	100.0	-	-	96.6	92.7	88.9	64.3	-	-	86.3	100.0	94.4	97.0	-	-	94.7	91.7	95.1	90.9	-	-	94.8	94.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	3	0	0	-	3	5
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.5	0.0	-	-	0.4	0.0	0.8	0.0	-	-	0.7	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.2	0.1
Bicycles on Road	0	1	0	0	-	1	3	1	5	0	-	9	0	4	0	0	-	4	1	0	1	0	-	2	16
% Bicycles on Road	0.0	5.0	0.0	-	-	1.7	7.3	5.6	35.7	-	-	12.3	0.0	1.0	0.0	-	-	0.9	8.3	0.0	9.1	-	-	0.5	1.6
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	-	10.0	-	-	-	-	-	0.0	-	-	-	-	-	36.4	-	-	-	-	-	10.7	-	-
Pedestrians	-	-	-	-	18	-	-	-	-	-	25	-	-	-	-	-	14	-	-	-	-	-	25	-	-
% Pedestrians	-	-	-	-	90.0	-	-	-	-	-	100.0	-	-	-	-	-	63.6	-	-	-	-	-	89.3	-	-



Paradigm Transportation Solutions Limited
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Count Name: North Sykes Street & Trowbridge Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Peak Hour Data Plot (12:45 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsI.com

Count Name: South Sykes Street & Boucher
Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 1

Turning Movement Data

Start Time	Boucher Street Eastbound						Boucher Street Westbound						South Sykes Street Northbound						South Sykes Street 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	
10:00 AM	0	0	1	0	2	1	0	0	3	0	0	3	0	81	4	0	0	85	2	105	1	0	3	108	197
10:15 AM	1	2	2	0	3	5	0	1	5	0	1	6	2	114	0	0	0	116	4	89	1	0	0	94	221
10:30 AM	1	0	1	0	2	2	2	0	3	0	0	5	0	126	5	0	1	131	3	108	3	0	2	114	252
10:45 AM	0	0	2	0	1	2	2	0	3	0	2	5	1	118	2	0	0	121	1	123	0	0	2	124	252
Hourly Total	2	2	6	0	8	10	4	1	14	0	3	19	3	439	11	0	1	453	10	425	5	0	7	440	922
11:00 AM	1	0	2	0	2	3	2	0	6	0	2	8	0	83	2	0	0	85	3	109	2	0	0	114	210
11:15 AM	1	0	2	0	7	3	0	1	3	0	2	4	0	108	3	0	2	111	4	90	1	0	0	95	213
11:30 AM	1	0	0	0	1	1	2	0	5	0	0	7	0	105	1	0	1	106	4	102	1	0	0	107	221
11:45 AM	1	1	0	0	1	2	0	1	2	0	3	3	1	116	2	0	0	119	3	116	1	0	1	120	244
Hourly Total	4	1	4	0	11	9	4	2	16	0	7	22	1	412	8	0	3	421	14	417	5	0	1	436	888
12:00 PM	2	0	0	0	2	2	1	0	3	0	0	4	1	97	3	0	4	101	3	108	3	0	0	114	221
12:15 PM	1	0	1	0	3	2	0	0	4	0	0	4	2	122	4	0	2	128	5	75	1	0	0	81	215
12:30 PM	0	0	1	0	3	1	0	1	1	0	1	2	0	130	3	0	0	133	2	98	1	0	0	101	237
12:45 PM	0	1	2	0	11	3	1	0	4	0	0	5	3	116	3	0	0	122	6	121	1	1	0	129	259
Hourly Total	3	1	4	0	19	8	2	1	12	0	1	15	6	465	13	0	6	484	16	402	6	1	0	425	932
1:00 PM	0	0	1	0	7	1	1	0	2	0	2	3	0	127	0	0	0	127	0	118	1	0	1	119	250
1:15 PM	1	0	0	0	1	1	0	0	1	0	2	1	2	101	4	0	0	107	4	110	2	0	0	116	225
1:30 PM	1	1	1	0	4	3	2	0	1	0	1	3	2	122	2	0	0	126	2	108	3	0	0	113	245
1:45 PM	2	0	1	0	3	3	0	1	2	0	6	3	0	106	1	0	1	107	2	120	2	0	0	124	237
Hourly Total	4	1	3	0	15	8	3	1	6	0	11	10	4	456	7	0	1	467	8	456	8	0	1	472	957
Grand Total	13	5	17	0	53	35	13	5	48	0	22	66	14	1772	39	0	11	1825	48	1700	24	1	9	1773	3699
Approach %	37.1	14.3	48.6	0.0	-	-	19.7	7.6	72.7	0.0	-	-	0.8	97.1	2.1	0.0	-	-	2.7	95.9	1.4	0.1	-	-	-
Total %	0.4	0.1	0.5	0.0	-	0.9	0.4	0.1	1.3	0.0	-	1.8	0.4	47.9	1.1	0.0	-	49.3	1.3	46.0	0.6	0.0	-	47.9	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	78	0	0	-	78	0	64	0	0	-	64	142
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	4.4	0.0	-	-	4.3	0.0	3.8	0.0	0.0	-	3.6	3.8
Cars & Light Goods	13	3	17	0	-	33	13	4	47	0	-	64	14	1677	38	0	-	1729	48	1618	24	1	-	1691	3517
% Cars & Light Goods	100.0	60.0	100.0	-	-	94.3	100.0	80.0	97.9	-	-	97.0	100.0	94.6	97.4	-	-	94.7	100.0	95.2	100.0	100.0	-	95.4	95.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	1	0	0	-	1	2
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.1	0.0	0.0	-	0.1	0.1
Single-Unit Trucks	0	1	0	0	-	1	0	1	0	0	-	1	0	12	0	0	-	12	0	11	0	0	-	11	25
% Single-Unit Trucks	0.0	20.0	0.0	-	-	2.9	0.0	20.0	0.0	-	-	1.5	0.0	0.7	0.0	-	-	0.7	0.0	0.6	0.0	0.0	-	0.6	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	1	0	0	-	1	2
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.1	0.0	0.0	-	0.1	0.1

Bicycles on Road	0	1	0	0	-	1	0	0	1	0	-	1	0	3	1	0	-	4	0	5	0	0	-	5	11
% Bicycles on Road	0.0	20.0	0.0	-	-	2.9	0.0	0.0	2.1	-	-	1.5	0.0	0.2	2.6	-	-	0.2	0.0	0.3	0.0	0.0	-	0.3	0.3
Bicycles on Crosswalk	-	-	-	-	7	-	-	-	-	4	-	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	13.2	-	-	-	-	18.2	-	-	-	-	-	-	0.0	-	-	-	-	-	11.1	-	-
Pedestrians	-	-	-	-	46	-	-	-	-	18	-	-	-	-	-	-	11	-	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	86.8	-	-	-	-	81.8	-	-	-	-	-	-	100.0	-	-	-	-	-	88.9	-	-

Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: South Sykes Street & Boucher Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 4

Turning Movement Peak Hour Data (12:45 PM)

Start Time	Boucher Street Eastbound						Boucher Street Westbound						South Sykes Street Northbound						South Sykes Street 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	
12:45 PM	0	1	2	0	11	3	1	0	4	0	0	5	3	116	3	0	0	122	6	121	1	1	0	129	259
1:00 PM	0	0	1	0	7	1	1	0	2	0	2	3	0	127	0	0	0	127	0	118	1	0	1	119	250
1:15 PM	1	0	0	0	1	1	0	0	1	0	2	1	2	101	4	0	0	107	4	110	2	0	0	116	225
1:30 PM	1	1	1	0	4	3	2	0	1	0	1	3	2	122	2	0	0	126	2	108	3	0	0	113	245
Total	2	2	4	0	23	8	4	0	8	0	5	12	7	466	9	0	0	482	12	457	7	1	1	477	979
Approach %	25.0	25.0	50.0	0.0	-	-	33.3	0.0	66.7	0.0	-	-	1.5	96.7	1.9	0.0	-	-	2.5	95.8	1.5	0.2	-	-	-
Total %	0.2	0.2	0.4	0.0	-	0.8	0.4	0.0	0.8	0.0	-	1.2	0.7	47.6	0.9	0.0	-	49.2	1.2	46.7	0.7	0.1	-	48.7	-
PHF	0.500	0.500	0.500	0.000	-	0.667	0.500	0.000	0.500	0.000	-	0.600	0.583	0.917	0.563	0.000	-	0.949	0.500	0.944	0.583	0.250	-	0.924	0.945
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	18	0	0	-	18	0	18	0	0	-	18	36
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	3.9	0.0	-	-	3.7	0.0	3.9	0.0	0.0	-	3.8	3.7
Cars & Light Goods	2	2	4	0	-	8	4	0	7	0	-	11	7	443	8	0	-	458	12	430	7	1	-	450	927
% Cars & Light Goods	100.0	100.0	100.0	-	-	100.0	100.0	-	87.5	-	-	91.7	100.0	95.1	88.9	-	-	95.0	100.0	94.1	100.0	100.0	-	94.3	94.7
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	3	0	0	-	3	5
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.4	0.0	0.7	0.0	0.0	-	0.6	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.2	0.0	0.0	-	0.2	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	2	1	0	-	3	0	5	0	0	-	5	9
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	-	12.5	-	-	8.3	0.0	0.4	11.1	-	-	0.6	0.0	1.1	0.0	0.0	-	1.0	0.9
Bicycles on Crosswalk	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	26.1	-	-	-	-	-	20.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	17	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	73.9	-	-	-	-	-	80.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Turning Movement Peak Hour Data Plot (12:45 PM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 1

Turning Movement Data

Start Time	Bridge Street Eastbound						Bridge Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	
10:00 AM	0	0	13	0	0	13	1	1	0	0	1	2	8	8	2	0	0	18	0	2	1	0	0	3	36
10:15 AM	0	0	9	0	0	9	1	0	0	0	2	1	11	10	1	0	0	22	0	2	0	0	0	2	34
10:30 AM	0	1	8	0	0	9	1	1	0	0	3	2	2	9	1	0	1	12	0	2	0	0	0	2	25
10:45 AM	1	2	8	0	0	11	1	3	0	0	4	4	9	9	3	0	1	21	0	2	0	0	0	2	38
Hourly Total	1	3	38	0	0	42	4	5	0	0	10	9	30	36	7	0	2	73	0	8	1	0	0	9	133
11:00 AM	0	1	11	1	1	13	1	0	0	0	1	1	11	5	1	0	0	17	0	12	0	0	0	12	43
11:15 AM	0	2	10	0	1	12	0	0	0	0	0	0	12	7	1	0	0	20	6	5	1	0	0	12	44
11:30 AM	1	0	9	0	0	10	0	0	0	0	0	0	18	5	1	0	3	24	0	1	0	0	0	1	35
11:45 AM	2	2	9	0	0	13	0	2	0	0	0	2	13	4	0	0	0	17	0	4	1	0	0	5	37
Hourly Total	3	5	39	1	2	48	1	2	0	0	1	3	54	21	3	0	3	78	6	22	2	0	0	30	159
12:00 PM	0	2	17	0	0	19	1	0	0	0	0	1	12	4	0	0	2	16	1	6	0	0	0	7	43
12:15 PM	0	0	14	0	0	14	0	0	0	0	0	0	11	6	3	0	0	20	0	4	1	0	0	5	39
12:30 PM	0	2	10	0	0	12	0	0	0	0	2	0	4	5	1	1	0	11	0	4	1	0	0	5	28
12:45 PM	0	3	7	0	0	10	0	1	0	0	0	1	19	5	1	0	1	25	0	1	0	0	0	1	37
Hourly Total	0	7	48	0	0	55	1	1	0	0	2	2	46	20	5	1	3	72	1	15	2	0	0	18	147
1:00 PM	0	0	8	0	0	8	0	1	0	0	0	1	10	8	1	0	3	19	0	4	0	0	1	4	32
1:15 PM	0	0	13	0	0	13	1	2	0	0	2	3	15	12	0	0	0	27	0	3	0	0	0	3	46
1:30 PM	0	0	10	0	0	10	0	2	0	0	0	2	7	6	0	0	1	13	0	3	0	0	0	3	28
1:45 PM	0	2	10	0	0	12	0	3	0	0	0	3	11	8	1	0	1	20	1	7	1	0	0	9	44
Hourly Total	0	2	41	0	0	43	1	8	0	0	2	9	43	34	2	0	5	79	1	17	1	0	1	19	150
Grand Total	4	17	166	1	2	188	7	16	0	0	15	23	173	111	17	1	13	302	8	62	6	0	1	76	589
Approach %	2.1	9.0	88.3	0.5	-	-	30.4	69.6	0.0	0.0	-	-	57.3	36.8	5.6	0.3	-	-	10.5	81.6	7.9	0.0	-	-	-
Total %	0.7	2.9	28.2	0.2	-	31.9	1.2	2.7	0.0	0.0	-	3.9	29.4	18.8	2.9	0.2	-	51.3	1.4	10.5	1.0	0.0	-	12.9	-
Motorcycles	0	1	4	0	-	5	0	1	0	0	-	1	3	2	0	0	-	5	0	1	0	0	-	1	12
% Motorcycles	0.0	5.9	2.4	0.0	-	2.7	0.0	6.3	-	-	-	4.3	1.7	1.8	0.0	0.0	-	1.7	0.0	1.6	0.0	-	-	1.3	2.0
Cars & Light Goods	4	14	151	1	-	170	6	13	0	0	-	19	155	98	14	0	-	267	3	60	4	0	-	67	523
% Cars & Light Goods	100.0	82.4	91.0	100.0	-	90.4	85.7	81.3	-	-	-	82.6	89.6	88.3	82.4	0.0	-	88.4	37.5	96.8	66.7	-	-	88.2	88.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	1	1	0	-	2	0	0	0	0	-	0	0	2	1	0	-	3	0	0	0	0	-	0	5
% Single-Unit Trucks	0.0	5.9	0.6	0.0	-	1.1	0.0	0.0	-	-	-	0.0	0.0	1.8	5.9	0.0	-	1.0	0.0	0.0	0.0	-	-	0.0	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0

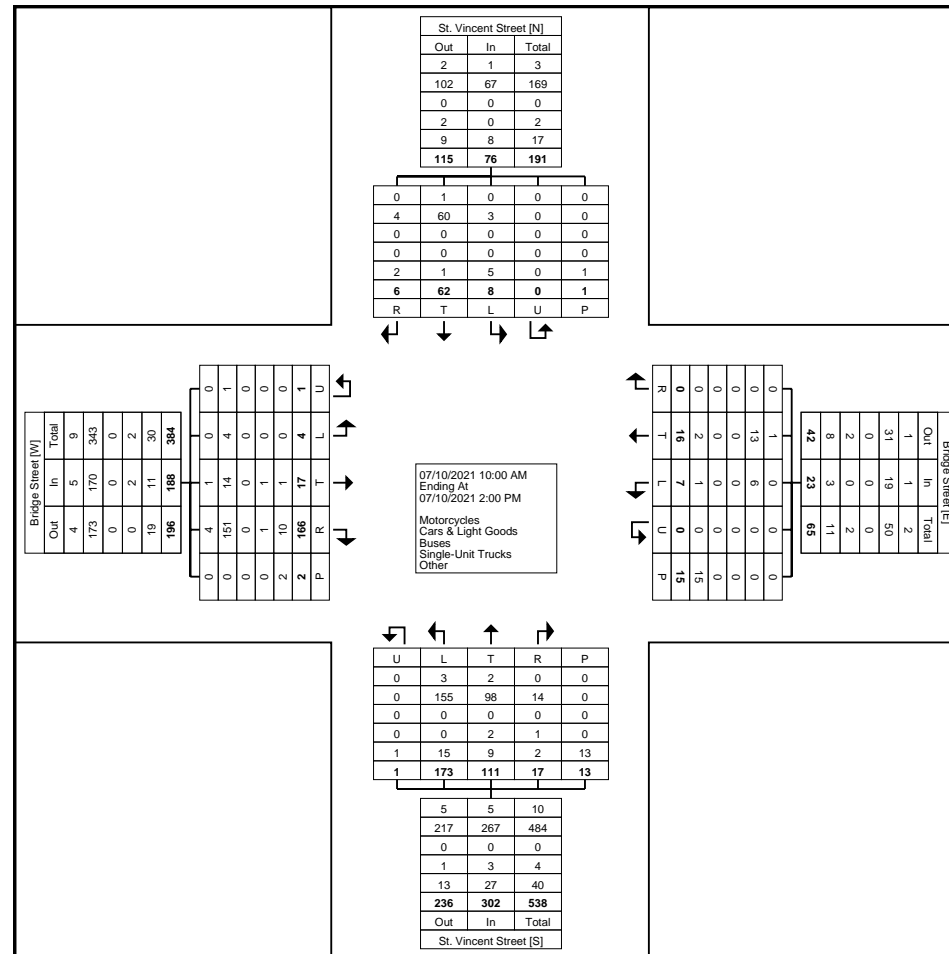
Bicycles on Road	0	1	10	0	-	11	1	2	0	0	-	3	15	9	2	1	-	27	5	1	2	0	-	8	49
% Bicycles on Road	0.0	5.9	6.0	0.0	-	5.9	14.3	12.5	-	-	-	13.0	8.7	8.1	11.8	100.0	-	8.9	62.5	1.6	33.3	-	-	10.5	8.3
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	50.0	-	-	-	-	-	6.7	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	14	-	-	-	-	-	13	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	50.0	-	-	-	-	-	93.3	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
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Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Peak Hour Data (10:45 AM)

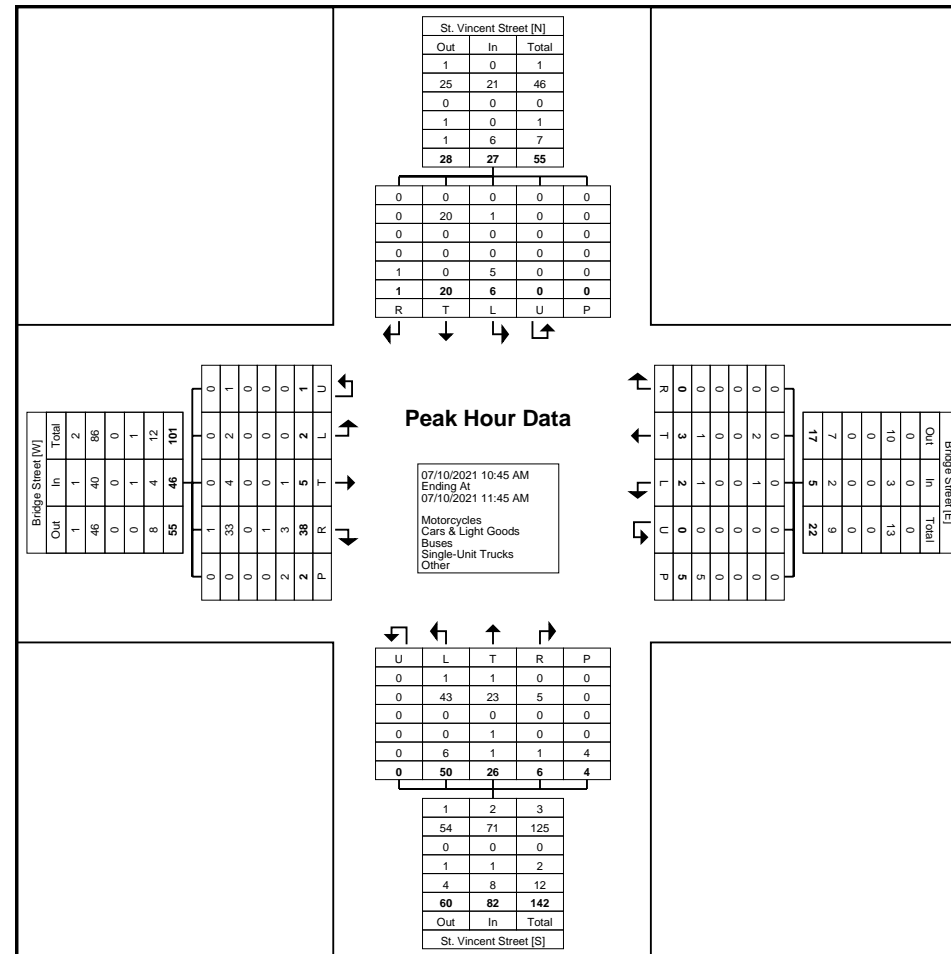
Start Time	Bridge Street Eastbound						Bridge Street Westbound						St. Vincent Street Northbound						St. Vincent Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
10:45 AM	1	2	8	0	0	11	1	3	0	0	4	4	9	9	3	0	1	21	0	2	0	0	0	2	38
11:00 AM	0	1	11	1	1	13	1	0	0	0	1	1	11	5	1	0	0	17	0	12	0	0	0	12	43
11:15 AM	0	2	10	0	1	12	0	0	0	0	0	0	12	7	1	0	0	20	6	5	1	0	0	12	44
11:30 AM	1	0	9	0	0	10	0	0	0	0	0	0	18	5	1	0	3	24	0	1	0	0	0	1	35
Total	2	5	38	1	2	46	2	3	0	0	5	5	50	26	6	0	4	82	6	20	1	0	0	27	160
Approach %	4.3	10.9	82.6	2.2	-	-	40.0	60.0	0.0	0.0	-	-	61.0	31.7	7.3	0.0	-	-	22.2	74.1	3.7	0.0	-	-	-
Total %	1.3	3.1	23.8	0.6	-	28.8	1.3	1.9	0.0	0.0	-	3.1	31.3	16.3	3.8	0.0	-	51.3	3.8	12.5	0.6	0.0	-	16.9	-
PHF	0.500	0.625	0.864	0.250	-	0.885	0.500	0.250	0.000	0.000	-	0.313	0.694	0.722	0.500	0.000	-	0.854	0.250	0.417	0.250	0.000	-	0.563	0.909
Motorcycles	0	0	1	0	-	1	0	0	0	0	-	0	1	1	0	0	-	2	0	0	0	0	-	0	3
% Motorcycles	0.0	0.0	2.6	0.0	-	2.2	0.0	0.0	-	-	-	0.0	2.0	3.8	0.0	-	-	2.4	0.0	0.0	0.0	-	-	0.0	1.9
Cars & Light Goods	2	4	33	1	-	40	1	2	0	0	-	3	43	23	5	0	-	71	1	20	0	0	-	21	135
% Cars & Light Goods	100.0	80.0	86.8	100.0	-	87.0	50.0	66.7	-	-	-	60.0	86.0	88.5	83.3	-	-	86.6	16.7	100.0	0.0	-	-	77.8	84.4
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	2
% Single-Unit Trucks	0.0	0.0	2.6	0.0	-	2.2	0.0	0.0	-	-	-	0.0	0.0	3.8	0.0	-	-	1.2	0.0	0.0	0.0	-	-	0.0	1.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	1	3	0	-	4	1	1	0	0	-	2	6	1	1	0	-	8	5	0	1	0	-	6	20
% Bicycles on Road	0.0	20.0	7.9	0.0	-	8.7	50.0	33.3	-	-	-	40.0	12.0	3.8	16.7	-	-	9.8	83.3	0.0	100.0	-	-	22.2	12.5
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	50.0	-	-	-	-	-	20.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	50.0	-	-	-	-	-	80.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Bridge Street & St. Vincent Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 5



Turning Movement Peak Hour Data Plot (10:45 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsll.com

Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 1

Turning Movement Data

Start Time	Bridge Street Eastbound					Fuller Street Northbound					Fuller Street Southbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
10:00 AM	2	0	0	0	2	0	1	0	0	1	3	1	0	0	4	7
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	1	1	0	6	2	0	1	0	0	1	4	2	0	1	6	9
10:45 AM	2	1	0	1	3	1	1	0	0	2	1	2	0	1	3	8
Hourly Total	5	2	0	7	7	1	3	0	0	4	8	5	0	2	13	24
11:00 AM	3	0	0	1	3	2	1	0	0	3	5	0	0	1	5	11
11:15 AM	1	6	0	4	7	0	2	0	0	2	0	0	0	0	0	9
11:30 AM	1	0	0	5	1	0	0	0	0	0	0	0	0	2	0	1
11:45 AM	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	4
Hourly Total	6	6	0	10	12	3	5	0	0	8	5	0	0	3	5	25
12:00 PM	3	0	0	0	3	0	2	0	0	2	2	0	0	0	2	7
12:15 PM	2	0	0	0	2	0	5	0	0	5	3	0	0	0	3	10
12:30 PM	0	1	0	0	1	0	1	0	0	1	2	0	0	0	2	4
12:45 PM	1	2	0	0	3	0	2	0	0	2	4	0	0	0	4	9
Hourly Total	6	3	0	0	9	0	10	0	0	10	11	0	0	0	11	30
1:00 PM	0	0	0	0	0	0	1	0	0	1	2	1	0	0	3	4
1:15 PM	1	0	0	0	1	1	1	0	0	2	3	2	0	0	5	8
1:30 PM	0	0	0	0	0	0	1	0	0	1	4	1	0	0	5	6
1:45 PM	1	2	0	4	3	2	1	0	0	3	1	1	0	1	2	8
Hourly Total	2	2	0	4	4	3	4	0	0	7	10	5	0	1	15	26
Grand Total	19	13	0	21	32	7	22	0	0	29	34	10	0	6	44	105
Approach %	59.4	40.6	0.0	-	-	24.1	75.9	0.0	-	-	77.3	22.7	0.0	-	-	-
Total %	18.1	12.4	0.0	-	30.5	6.7	21.0	0.0	-	27.6	32.4	9.5	0.0	-	41.9	-
Motorcycles	1	0	0	-	1	0	0	0	-	0	0	1	0	-	1	2
% Motorcycles	5.3	0.0	-	-	3.1	0.0	0.0	-	-	0.0	0.0	10.0	-	-	2.3	1.9
Cars & Light Goods	17	9	0	-	26	5	22	0	-	27	32	9	0	-	41	94
% Cars & Light Goods	89.5	69.2	-	-	81.3	71.4	100.0	-	-	93.1	94.1	90.0	-	-	93.2	89.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	1	0	0	-	1	0	0	0	-	0	1	0	0	-	1	2
% Single-Unit Trucks	5.3	0.0	-	-	3.1	0.0	0.0	-	-	0.0	2.9	0.0	-	-	2.3	1.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	4	0	-	4	2	0	0	-	2	1	0	0	-	1	7
% Bicycles on Road	0.0	30.8	-	-	12.5	28.6	0.0	-	-	6.9	2.9	0.0	-	-	2.3	6.7
Bicycles on Crosswalk	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-

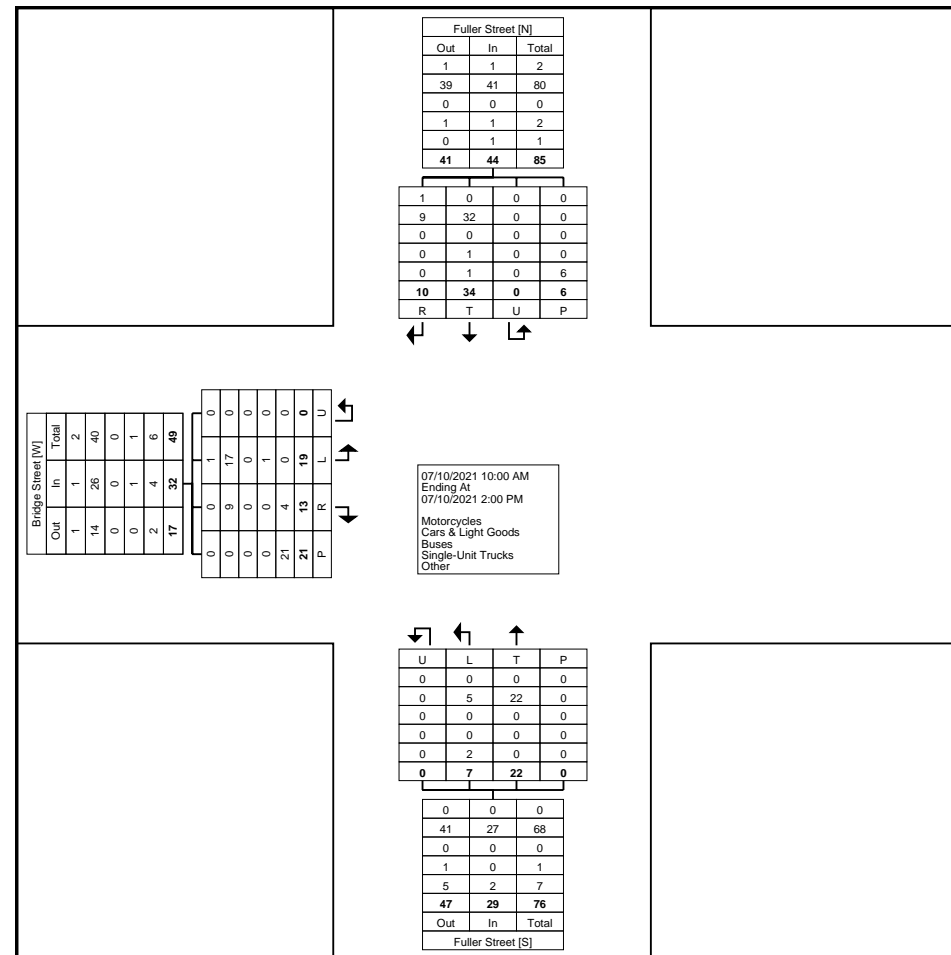
[illegible]



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Bridge Street & Fuller Street
Site Code: 200616
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Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Bridge Street & Fuller Street
Site Code: 200616
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Turning Movement Peak Hour Data (10:30 AM)

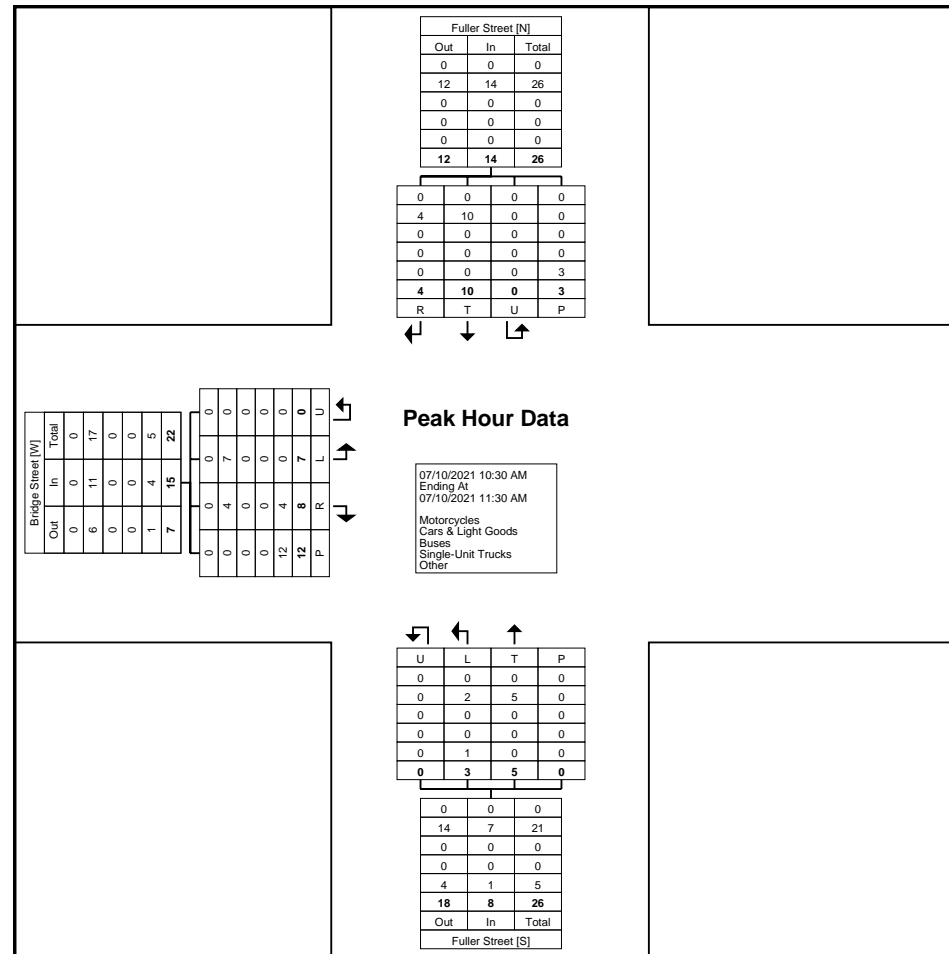
Start Time	Bridge Street Eastbound					Fuller Street Northbound					Fuller Street Southbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
10:30 AM	1	1	0	6	2	0	1	0	0	1	4	2	0	1	6	9
10:45 AM	2	1	0	1	3	1	1	0	0	2	1	2	0	1	3	8
11:00 AM	3	0	0	1	3	2	1	0	0	3	5	0	0	1	5	11
11:15 AM	1	6	0	4	7	0	2	0	0	2	0	0	0	0	0	9
Total	7	8	0	12	15	3	5	0	0	8	10	4	0	3	14	37
Approach %	46.7	53.3	0.0	-	-	37.5	62.5	0.0	-	-	71.4	28.6	0.0	-	-	-
Total %	18.9	21.6	0.0	-	40.5	8.1	13.5	0.0	-	21.6	27.0	10.8	0.0	-	37.8	-
PHF	0.583	0.333	0.000	-	0.536	0.375	0.625	0.000	-	0.667	0.500	0.500	0.000	-	0.583	0.841
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	7	4	0	-	11	2	5	0	-	7	10	4	0	-	14	32
% Cars & Light Goods	100.0	50.0	-	-	73.3	66.7	100.0	-	-	87.5	100.0	100.0	-	-	100.0	86.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	4	0	-	4	1	0	0	-	1	0	0	0	-	0	5
% Bicycles on Road	0.0	50.0	-	-	26.7	33.3	0.0	-	-	12.5	0.0	0.0	-	-	0.0	13.5
Bicycles on Crosswalk	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	33.3	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	8	-	-	-	-	0	-	-	-	-	3	-	-
% Pedestrians	-	-	-	66.7	-	-	-	-	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
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Count Name: Bridge Street & Fuller Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Peak Hour Data Plot (10:30 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: Fuller Street & Boucher Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Data

Start Time	Boucher Street Eastbound					Boucher Street Westbound					Fuller Street Southbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
10:00 AM	2	2	0	0	4	1	0	0	0	1	0	3	0	0	3	8
10:15 AM	1	1	0	0	2	1	0	0	0	1	0	0	0	2	0	3
10:30 AM	1	1	0	0	2	0	0	0	0	0	0	5	0	0	5	7
10:45 AM	3	1	0	0	4	1	0	0	1	1	0	1	0	0	1	6
Hourly Total	7	5	0	0	12	3	0	0	1	3	0	9	0	2	9	24
11:00 AM	2	0	0	3	2	0	0	0	0	0	1	4	0	0	5	7
11:15 AM	1	1	0	0	2	2	1	0	0	3	6	4	0	0	10	15
11:30 AM	0	0	0	0	0	6	0	0	0	6	0	0	0	2	0	6
11:45 AM	2	2	0	0	4	0	2	0	0	2	0	4	0	0	4	10
Hourly Total	5	3	0	3	8	8	3	0	0	11	7	12	0	2	19	38
12:00 PM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	4
12:15 PM	6	3	0	3	9	1	0	0	0	1	0	4	0	0	4	14
12:30 PM	2	0	0	1	2	1	0	0	0	1	0	3	0	0	3	6
12:45 PM	3	0	0	0	3	1	0	0	0	1	1	5	1	1	7	11
Hourly Total	12	4	0	4	16	3	0	0	0	3	1	14	1	1	16	35
1:00 PM	0	0	0	2	0	0	1	0	0	1	2	2	0	0	4	5
1:15 PM	1	0	0	1	1	0	0	0	0	0	0	3	0	0	3	4
1:30 PM	1	2	0	0	3	2	1	0	0	3	2	4	0	0	6	12
1:45 PM	2	2	0	1	4	1	0	1	0	2	0	2	0	0	2	8
Hourly Total	4	4	0	4	8	3	2	1	0	6	4	11	0	0	15	29
Grand Total	28	16	0	11	44	17	5	1	1	23	12	46	1	5	59	126
Approach %	63.6	36.4	0.0	-	-	73.9	21.7	4.3	-	-	20.3	78.0	1.7	-	-	-
Total %	22.2	12.7	0.0	-	34.9	13.5	4.0	0.8	-	18.3	9.5	36.5	0.8	-	46.8	-
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Cars & Light Goods	27	15	0	-	42	13	5	0	-	18	7	36	1	-	44	104
% Cars & Light Goods	96.4	93.8	-	-	95.5	76.5	100.0	0.0	-	78.3	58.3	78.3	100.0	-	74.6	82.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	0	-	1	0	0	0	-	0	0	1	0	-	1	2
% Single-Unit Trucks	0.0	6.3	-	-	2.3	0.0	0.0	0.0	-	0.0	0.0	2.2	0.0	-	1.7	1.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	1	0	0	-	1	4	0	1	-	5	5	9	0	-	14	20
% Bicycles on Road	3.6	0.0	-	-	2.3	23.5	0.0	100.0	-	21.7	41.7	19.6	0.0	-	23.7	15.9
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-

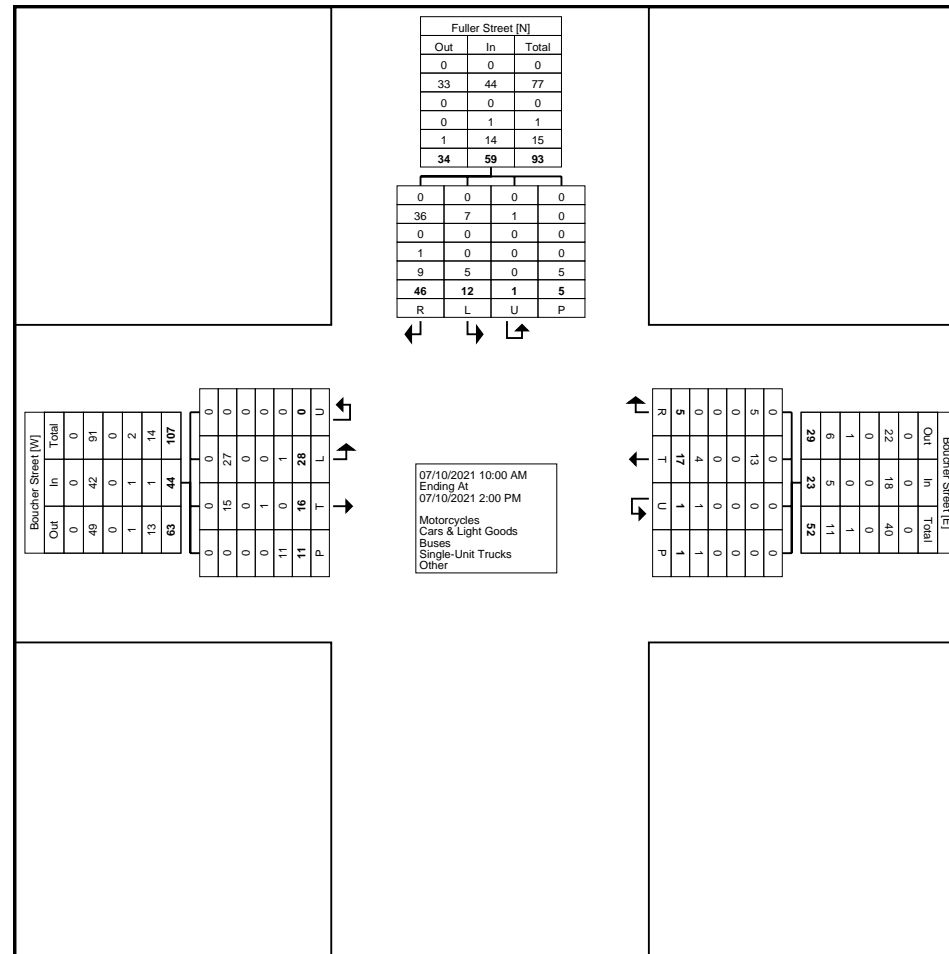
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	0.0	-	-
Pedestrians	-	-	-	11	-	-	-	-	1	-	-	-	5	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
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Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Fuller Street & Boucher Street
Site Code: 200616
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Turning Movement Peak Hour Data (11:00 AM)

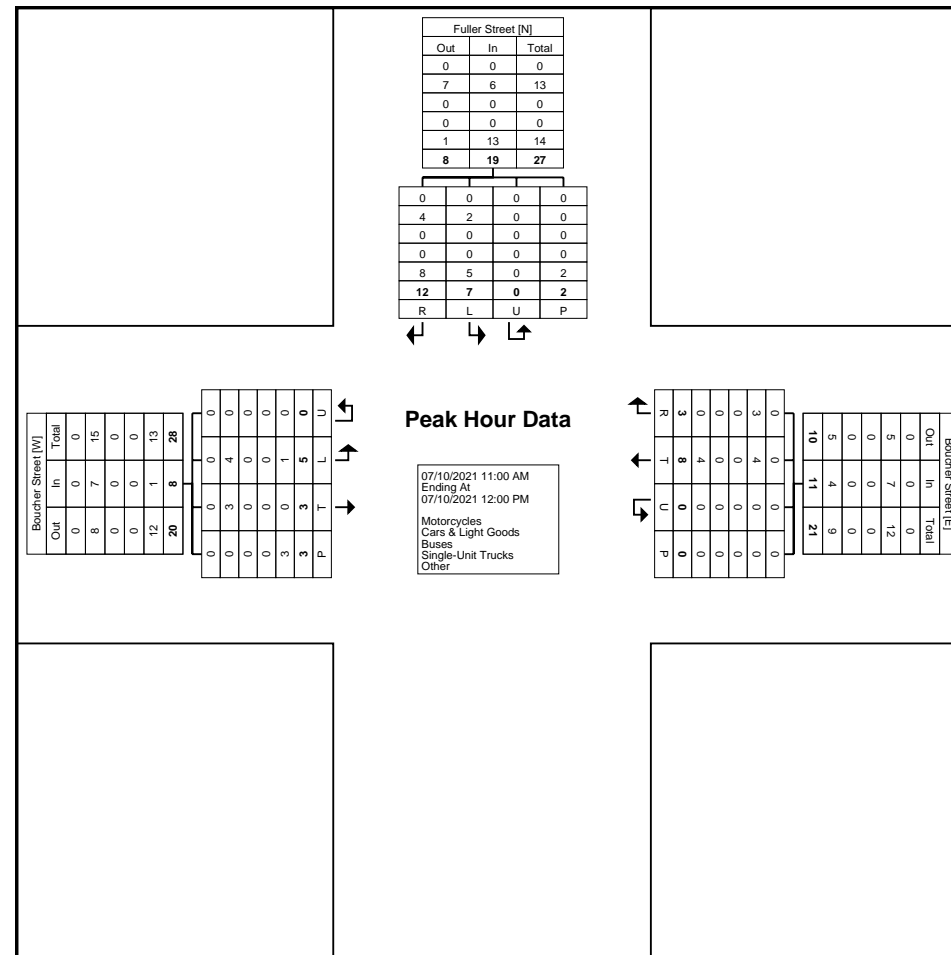
Start Time	Boucher Street Eastbound					Boucher Street Westbound					Fuller Street Southbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
11:00 AM	2	0	0	3	2	0	0	0	0	0	1	4	0	0	5	7
11:15 AM	1	1	0	0	2	2	1	0	0	3	6	4	0	0	10	15
11:30 AM	0	0	0	0	0	6	0	0	0	6	0	0	0	2	0	6
11:45 AM	2	2	0	0	4	0	2	0	0	2	0	4	0	0	4	10
Total	5	3	0	3	8	8	3	0	0	11	7	12	0	2	19	38
Approach %	62.5	37.5	0.0	-	-	72.7	27.3	0.0	-	-	36.8	63.2	0.0	-	-	-
Total %	13.2	7.9	0.0	-	21.1	21.1	7.9	0.0	-	28.9	18.4	31.6	0.0	-	50.0	-
PHF	0.625	0.375	0.000	-	0.500	0.333	0.375	0.000	-	0.458	0.292	0.750	0.000	-	0.475	0.633
Motorcycles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Motorcycles	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Cars & Light Goods	4	3	0	-	7	4	3	0	-	7	2	4	0	-	6	20
% Cars & Light Goods	80.0	100.0	-	-	87.5	50.0	100.0	-	-	63.6	28.6	33.3	-	-	31.6	52.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	1	0	0	-	1	4	0	0	-	4	5	8	0	-	13	18
% Bicycles on Road	20.0	0.0	-	-	12.5	50.0	0.0	-	-	36.4	71.4	66.7	-	-	68.4	47.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	3	-	-	-	-	0	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
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Count Name: Fuller Street & Boucher Street
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Turning Movement Peak Hour Data Plot (11:00 AM)



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
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Count Name: St. Vincent Street & Boucher Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Data

Start Time	Boucher Street Eastbound						Boucher Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	
10:00 AM	0	0	0	0	0	0	2	0	1	0	1	3	3	16	2	0	0	21	0	16	0	0	0	16	40
10:15 AM	0	0	2	0	5	2	2	1	0	0	3	3	1	21	1	0	0	23	0	10	1	0	8	11	39
10:30 AM	1	1	2	0	0	4	5	0	0	0	2	5	1	11	1	0	0	13	1	10	0	1	0	12	34
10:45 AM	2	3	1	0	0	6	2	1	0	0	5	3	0	21	2	1	0	24	0	10	3	1	0	14	47
Hourly Total	3	4	5	0	5	12	11	2	1	0	11	14	5	69	6	1	0	81	1	46	4	2	8	53	160
11:00 AM	0	0	2	0	0	2	2	2	1	0	0	5	4	16	1	0	0	21	2	19	1	0	0	22	50
11:15 AM	3	2	1	0	0	6	3	1	0	0	1	4	0	13	0	0	5	13	0	13	0	0	1	13	36
11:30 AM	0	2	1	0	0	3	0	2	0	0	0	2	0	24	0	0	0	24	0	10	1	0	0	11	40
11:45 AM	0	1	5	0	0	6	0	1	1	0	0	2	1	15	2	0	1	18	0	12	0	0	0	12	38
Hourly Total	3	5	9	0	0	17	5	6	2	0	1	13	5	68	3	0	6	76	2	54	2	0	1	58	164
12:00 PM	1	1	1	0	0	3	1	1	1	0	0	3	1	15	1	0	0	17	2	20	0	0	0	22	45
12:15 PM	3	3	1	0	0	7	3	2	0	0	0	5	0	17	6	0	0	23	1	20	0	1	0	22	57
12:30 PM	0	0	3	0	0	3	5	1	1	0	2	7	2	8	4	0	2	14	0	22	0	0	0	22	46
12:45 PM	3	3	1	0	0	7	2	5	0	0	1	7	3	23	2	0	0	28	0	9	0	0	0	9	51
Hourly Total	7	7	6	0	0	20	11	9	2	0	3	22	6	63	13	0	2	82	3	71	0	1	0	75	199
1:00 PM	0	1	2	0	0	3	2	0	1	0	1	3	1	17	1	0	0	19	0	12	0	0	0	12	37
1:15 PM	2	1	2	0	0	5	1	0	1	0	1	2	0	26	1	0	0	27	0	17	0	0	1	17	51
1:30 PM	1	0	1	0	0	2	6	1	0	0	0	7	0	10	3	0	0	13	0	13	1	0	0	14	36
1:45 PM	0	1	1	0	0	2	3	2	1	0	0	6	0	18	2	0	0	20	0	17	0	0	0	17	45
Hourly Total	3	3	6	0	0	12	12	3	3	0	2	18	1	71	7	0	0	79	0	59	1	0	1	60	169
Grand Total	16	19	26	0	5	61	39	20	8	0	17	67	17	271	29	1	8	318	6	230	7	3	10	246	692
Approach %	26.2	31.1	42.6	0.0	-	-	58.2	29.9	11.9	0.0	-	-	5.3	85.2	9.1	0.3	-	-	2.4	93.5	2.8	1.2	-	-	-
Total %	2.3	2.7	3.8	0.0	-	8.8	5.6	2.9	1.2	0.0	-	9.7	2.5	39.2	4.2	0.1	-	46.0	0.9	33.2	1.0	0.4	-	35.5	-
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	5	0	0	-	5	0	7	0	0	-	7	12
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.8	0.0	0.0	-	1.6	0.0	3.0	0.0	0.0	-	2.8	1.7
Cars & Light Goods	12	18	26	0	-	56	37	19	8	0	-	64	17	242	29	1	-	289	5	210	5	1	-	221	630
% Cars & Light Goods	75.0	94.7	100.0	-	-	91.8	94.9	95.0	100.0	-	-	95.5	100.0	89.3	100.0	100.0	-	90.9	83.3	91.3	71.4	33.3	-	89.8	91.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.4	0.0	0.0	-	0.4	0.1
Single-Unit Trucks	1	1	0	0	-	2	1	1	0	0	-	2	0	2	0	0	-	2	0	1	0	0	-	1	7
% Single-Unit Trucks	6.3	5.3	0.0	-	-	3.3	2.6	5.0	0.0	-	-	3.0	0.0	0.7	0.0	0.0	-	0.6	0.0	0.4	0.0	0.0	-	0.4	1.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0

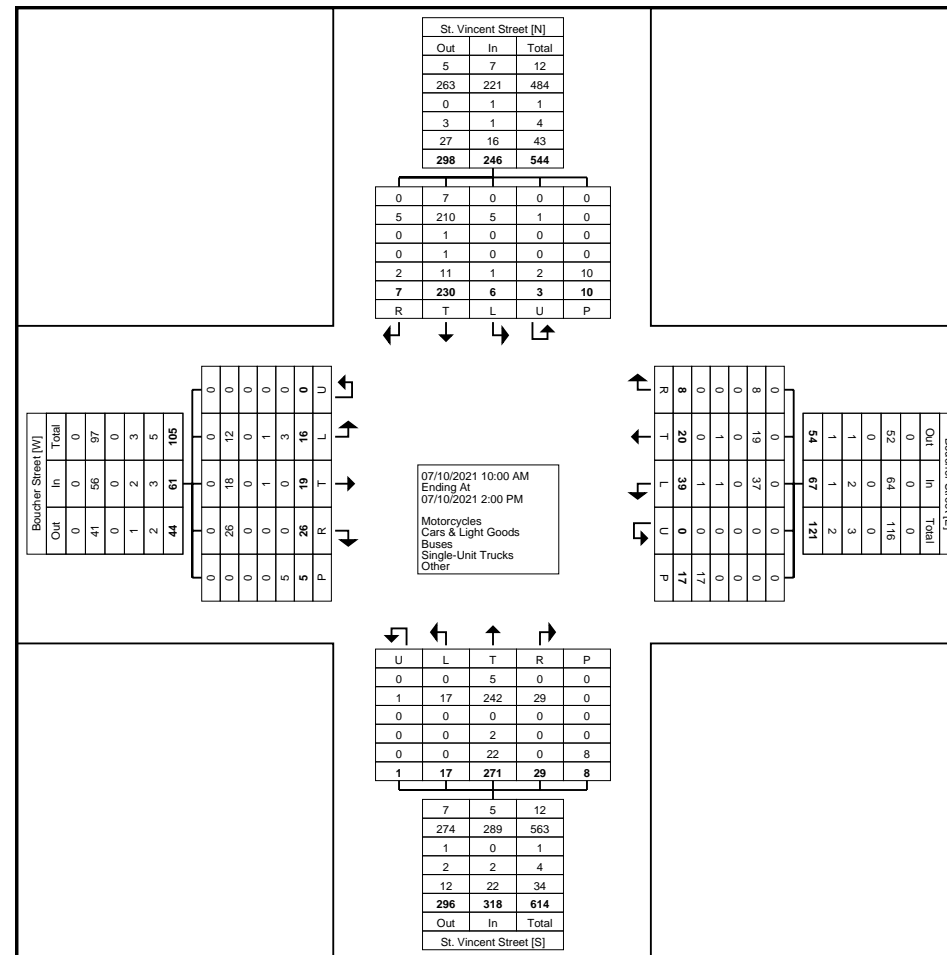
Bicycles on Road	3	0	0	0	-	3	1	0	0	0	-	1	0	22	0	0	-	22	1	11	2	2	-	16	42
% Bicycles on Road	18.8	0.0	0.0	-	-	4.9	2.6	0.0	0.0	-	-	1.5	0.0	8.1	0.0	0.0	-	6.9	16.7	4.8	28.6	66.7	-	6.5	6.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	17	-	-	-	-	-	8	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: St. Vincent Street & Boucher
Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: St. Vincent Street & Boucher Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 4

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Boucher Street Eastbound						Boucher Street Westbound						St. Vincent Street Northbound						St. Vincent Street 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	1	1	0	0	3	1	1	1	0	0	3	1	15	1	0	0	17	2	20	0	0	0	22	45
12:15 PM	3	3	1	0	0	7	3	2	0	0	0	5	0	17	6	0	0	23	1	20	0	1	0	22	57
12:30 PM	0	0	3	0	0	3	5	1	1	0	2	7	2	8	4	0	2	14	0	22	0	0	0	22	46
12:45 PM	3	3	1	0	0	7	2	5	0	0	1	7	3	23	2	0	0	28	0	9	0	0	0	9	51
Total	7	7	6	0	0	20	11	9	2	0	3	22	6	63	13	0	2	82	3	71	0	1	0	75	199
Approach %	35.0	35.0	30.0	0.0	-	-	50.0	40.9	9.1	0.0	-	-	7.3	76.8	15.9	0.0	-	-	4.0	94.7	0.0	1.3	-	-	-
Total %	3.5	3.5	3.0	0.0	-	10.1	5.5	4.5	1.0	0.0	-	11.1	3.0	31.7	6.5	0.0	-	41.2	1.5	35.7	0.0	0.5	-	37.7	-
PHF	0.583	0.583	0.500	0.000	-	0.714	0.550	0.450	0.500	0.000	-	0.786	0.500	0.685	0.542	0.000	-	0.732	0.375	0.807	0.000	0.250	-	0.852	0.873
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	3	0	0	-	3	3
% Motorcycles	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	4.2	-	0.0	-	4.0	1.5
Cars & Light Goods	6	6	6	0	-	18	10	9	2	0	-	21	6	62	13	0	-	81	3	62	0	1	-	66	186
% Cars & Light Goods	85.7	85.7	100.0	-	-	90.0	90.9	100.0	100.0	-	-	95.5	100.0	98.4	100.0	-	-	98.8	100.0	87.3	-	100.0	-	88.0	93.5
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0
Single-Unit Trucks	1	1	0	0	-	2	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	3
% Single-Unit Trucks	14.3	14.3	0.0	-	-	10.0	9.1	0.0	0.0	-	-	4.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	0.0	-	0.0	1.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	6	0	0	-	6	7
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	1.6	0.0	-	-	1.2	0.0	8.5	-	0.0	-	8.0	3.5
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@pts1.com

Count Name: Trowbridge Street & Bayfield Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 1

Turning Movement Data

Start Time	Trowbridge Street Eastbound						Bridge Street Westbound						Bayfield Street Northbound						Bayfield Street 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	
10:00 AM	9	6	1	0	2	16	0	7	15	0	0	22	0	1	0	0	4	1	16	0	10	0	1	26	65
10:15 AM	3	10	1	0	3	14	0	6	20	0	1	26	0	0	0	0	5	0	13	0	4	0	3	17	57
10:30 AM	6	7	0	0	3	13	0	2	14	0	1	16	1	0	0	0	2	1	11	1	5	0	4	17	47
10:45 AM	8	14	1	0	0	23	0	8	22	0	0	30	2	0	0	0	1	2	20	2	13	0	1	35	90
Hourly Total	26	37	3	0	8	66	0	23	71	0	2	94	3	1	0	0	12	4	60	3	32	0	9	95	259
11:00 AM	4	7	0	0	1	11	1	8	17	0	2	26	0	2	0	0	4	2	17	0	2	0	3	19	58
11:15 AM	5	4	1	0	2	10	2	13	18	0	0	33	0	0	0	0	3	0	21	0	5	0	11	26	69
11:30 AM	6	4	1	0	4	11	1	7	23	0	0	31	0	1	2	0	3	3	20	0	7	0	1	27	72
11:45 AM	13	7	1	0	3	21	0	10	20	0	1	30	0	0	0	0	3	0	24	0	7	0	2	31	82
Hourly Total	28	22	3	0	10	53	4	38	78	0	3	120	0	3	2	0	13	5	82	0	21	0	17	103	281
12:00 PM	8	9	2	0	0	19	0	9	25	0	0	34	0	1	0	0	3	1	23	0	5	0	3	28	82
12:15 PM	14	11	2	0	2	27	2	6	17	0	0	25	2	5	0	0	8	7	21	0	6	0	0	27	86
12:30 PM	6	9	2	0	1	17	2	8	19	0	1	29	0	2	0	0	1	2	15	0	2	0	4	17	65
12:45 PM	11	14	0	0	5	25	0	18	27	0	0	45	1	0	1	0	3	2	18	3	8	0	5	29	101
Hourly Total	39	43	6	0	8	88	4	41	88	0	1	133	3	8	1	0	15	12	77	3	21	0	12	101	334
1:00 PM	8	3	2	0	2	13	0	7	25	0	0	32	3	2	0	0	5	5	13	0	9	0	0	22	72
1:15 PM	4	9	0	0	3	13	0	12	24	0	0	36	0	0	0	0	2	0	19	0	7	0	6	26	75
1:30 PM	8	9	1	0	1	18	0	7	17	0	2	24	0	1	0	0	3	1	16	0	6	0	1	22	65
1:45 PM	9	16	1	0	0	26	0	5	17	0	1	22	0	0	0	0	4	0	22	0	8	0	2	30	78
Hourly Total	29	37	4	0	6	70	0	31	83	0	3	114	3	3	0	0	14	6	70	0	30	0	9	100	290
Grand Total	122	139	16	0	32	277	8	133	320	0	9	461	9	15	3	0	54	27	289	6	104	0	47	399	1164
Approach %	44.0	50.2	5.8	0.0	-	-	1.7	28.9	69.4	0.0	-	-	33.3	55.6	11.1	0.0	-	-	72.4	1.5	26.1	0.0	-	-	-
Total %	10.5	11.9	1.4	0.0	-	23.8	0.7	11.4	27.5	0.0	-	39.6	0.8	1.3	0.3	0.0	-	2.3	24.8	0.5	8.9	0.0	-	34.3	-
Motorcycles	9	4	0	0	-	13	0	3	5	0	-	8	0	0	0	0	-	0	5	0	1	0	-	6	27
% Motorcycles	7.4	2.9	0.0	-	-	4.7	0.0	2.3	1.6	-	-	1.7	0.0	0.0	0.0	-	-	0.0	1.7	0.0	1.0	-	-	1.5	2.3
Cars & Light Goods	111	128	15	0	-	254	3	109	274	0	-	386	9	12	1	0	-	22	256	5	103	0	-	364	1026
% Cars & Light Goods	91.0	92.1	93.8	-	-	91.7	37.5	82.0	85.6	-	-	83.7	100.0	80.0	33.3	-	-	81.5	88.6	83.3	99.0	-	-	91.2	88.1
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	0	-	1	1
% Buses	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	0.0	0.0	-	-	0.3	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	1	0	0	0	-	1	3
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.6	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.3	0.0	0.0	-	-	0.3	0.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0

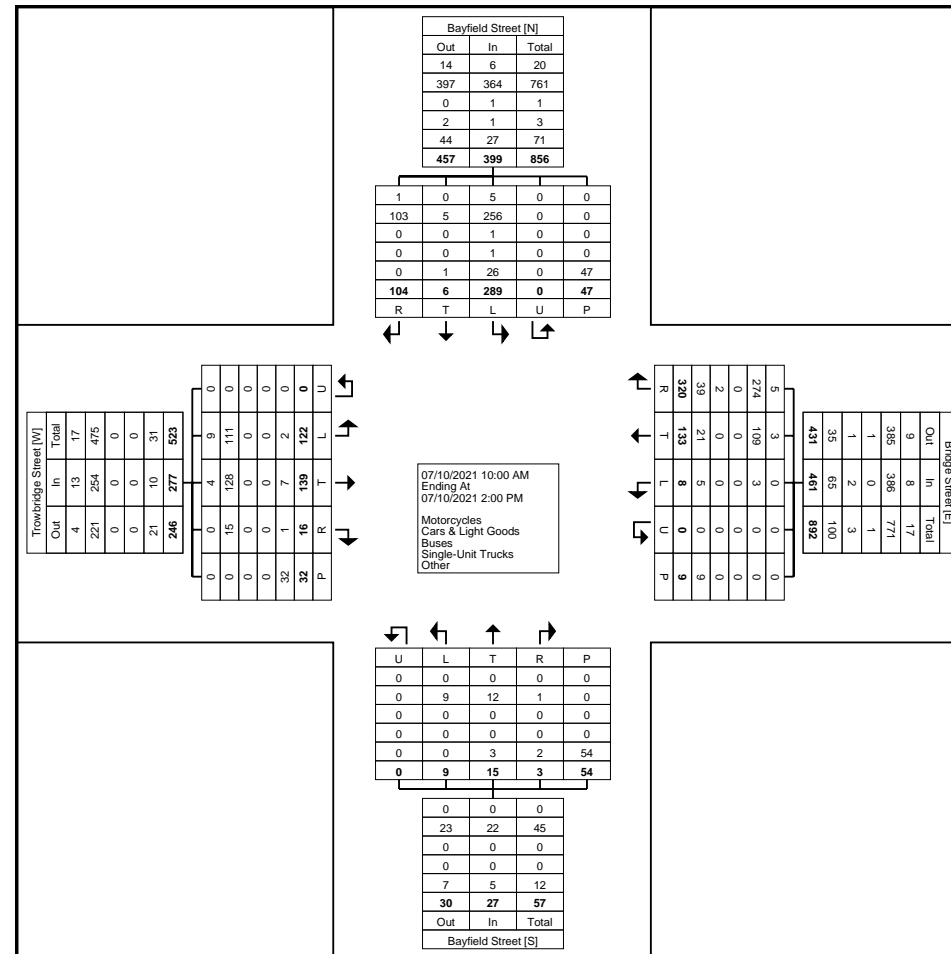
Bicycles on Road	2	7	1	0	-	10	5	21	39	0	-	65	0	3	2	0	-	5	26	1	0	0	-	27	107
% Bicycles on Road	1.6	5.0	6.3	-	-	3.6	62.5	15.8	12.2	-	-	14.1	0.0	20.0	66.7	-	-	18.5	9.0	16.7	0.0	-	-	6.8	9.2
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	-	3.1	-	-	-	-	-	11.1	-	-	-	-	-	13.0	-	-	-	-	-	6.4	-	-
Pedestrians	-	-	-	-	31	-	-	-	-	-	8	-	-	-	-	-	47	-	-	-	-	-	44	-	-
% Pedestrians	-	-	-	-	96.9	-	-	-	-	-	88.9	-	-	-	-	-	87.0	-	-	-	-	-	93.6	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Trowbridge Street & Bayfield
Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Trowbridge Street & Bayfield Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 4

Turning Movement Peak Hour Data (12:00 PM)

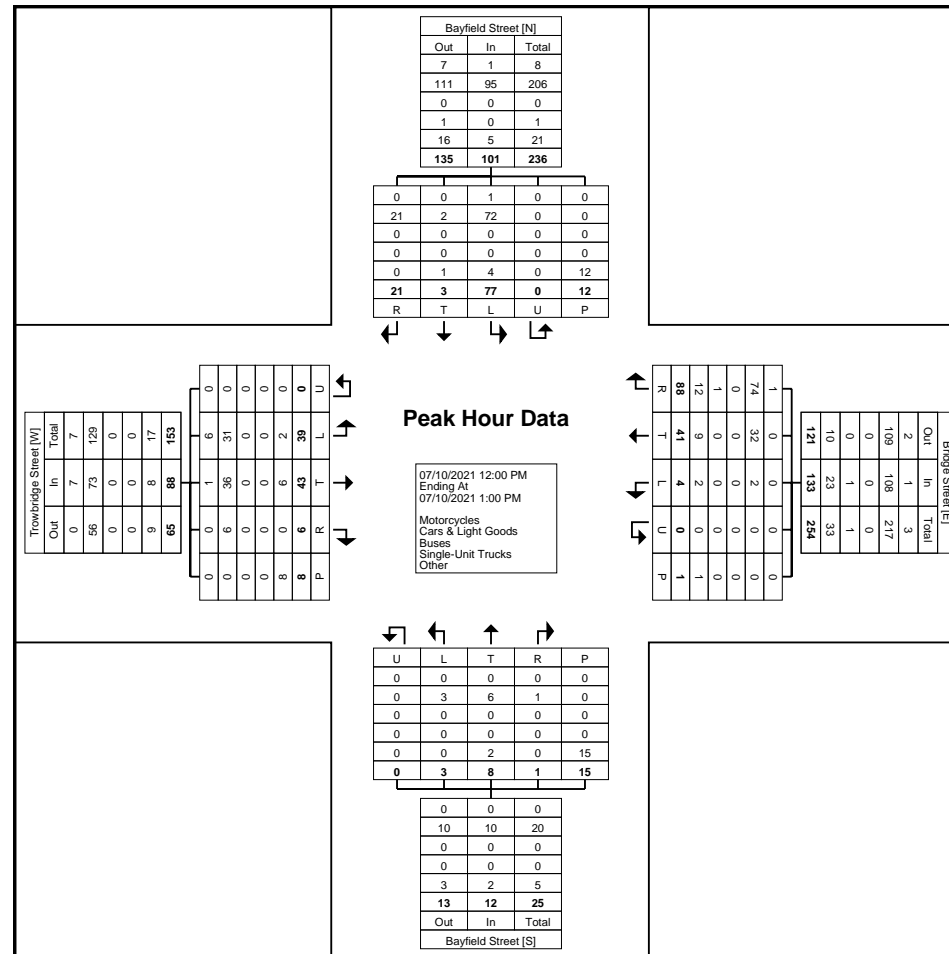
Start Time	Trowbridge Street Eastbound						Bridge Street Westbound						Bayfield Street Northbound						Bayfield Street Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:00 PM	8	9	2	0	0	19	0	9	25	0	0	34	0	1	0	0	3	1	23	0	5	0	3	28	82
12:15 PM	14	11	2	0	2	27	2	6	17	0	0	25	2	5	0	0	8	7	21	0	6	0	0	27	86
12:30 PM	6	9	2	0	1	17	2	8	19	0	1	29	0	2	0	0	1	2	15	0	2	0	4	17	65
12:45 PM	11	14	0	0	5	25	0	18	27	0	0	45	1	0	1	0	3	2	18	3	8	0	5	29	101
Total	39	43	6	0	8	88	4	41	88	0	1	133	3	8	1	0	15	12	77	3	21	0	12	101	334
Approach %	44.3	48.9	6.8	0.0	-	-	3.0	30.8	66.2	0.0	-	-	25.0	66.7	8.3	0.0	-	-	76.2	3.0	20.8	0.0	-	-	-
Total %	11.7	12.9	1.8	0.0	-	26.3	1.2	12.3	26.3	0.0	-	39.8	0.9	2.4	0.3	0.0	-	3.6	23.1	0.9	6.3	0.0	-	30.2	-
PHF	0.696	0.768	0.750	0.000	-	0.815	0.500	0.569	0.815	0.000	-	0.739	0.375	0.400	0.250	0.000	-	0.429	0.837	0.250	0.656	0.000	-	0.871	0.827
Motorcycles	6	1	0	0	-	7	0	0	1	0	-	1	0	0	0	0	-	0	1	0	0	0	-	1	9
% Motorcycles	15.4	2.3	0.0	-	-	8.0	0.0	0.0	1.1	-	-	0.8	0.0	0.0	0.0	-	-	0.0	1.3	0.0	0.0	-	-	1.0	2.7
Cars & Light Goods	31	36	6	0	-	73	2	32	74	0	-	108	3	6	1	0	-	10	72	2	21	0	-	95	286
% Cars & Light Goods	79.5	83.7	100.0	-	-	83.0	50.0	78.0	84.1	-	-	81.2	100.0	75.0	100.0	-	-	83.3	93.5	66.7	100.0	-	-	94.1	85.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	1.1	-	-	0.8	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	2	6	0	0	-	8	2	9	12	0	-	23	0	2	0	0	-	2	4	1	0	0	-	5	38
% Bicycles on Road	5.1	14.0	0.0	-	-	9.1	50.0	22.0	13.6	-	-	17.3	0.0	25.0	0.0	-	-	16.7	5.2	33.3	0.0	-	-	5.0	11.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	6.7	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	14	-	-	-	-	-	12	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	93.3	-	-	-	-	-	100.0	-	-



Paradigm Transportation Solutions Limited
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Count Name: Trowbridge Street & Bayfield
Street
Site Code: 200616
Start Date: 07/10/2021
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Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8
519-896-3163 cbowness@ptsl.com

Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 07/10/2021
Page No: 1

Turning Movement Data

Start Time	Bridge Street Eastbound						Bridge Street Westbound						Denmark Street Northbound						Harbour Entrance 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	
10:00 AM	10	12	1	0	4	23	0	9	0	0	0	9	2	1	0	0	2	3	0	0	10	0	0	10	45
10:15 AM	10	8	4	0	8	22	0	9	0	0	0	9	4	0	0	0	2	4	0	1	18	0	0	19	54
10:30 AM	5	10	4	0	4	19	0	4	0	0	0	4	0	4	0	0	3	4	0	3	14	0	0	17	44
10:45 AM	19	9	4	0	15	32	2	9	0	0	0	11	1	2	1	0	4	4	0	3	19	0	0	22	69
Hourly Total	44	39	13	0	31	96	2	31	0	0	0	33	7	7	1	0	11	15	0	7	61	0	0	68	212
11:00 AM	12	12	2	0	17	26	2	13	0	0	2	15	2	1	0	0	4	3	0	1	10	0	0	11	55
11:15 AM	15	13	2	0	11	30	0	12	0	0	0	12	2	0	0	0	1	2	0	0	23	0	0	23	67
11:30 AM	11	8	3	0	6	22	1	13	3	0	1	17	5	3	1	0	5	9	0	1	16	0	0	17	65
11:45 AM	15	13	3	0	7	31	0	15	0	0	0	15	2	3	0	0	2	5	0	0	16	0	0	16	67
Hourly Total	53	46	10	0	41	109	3	53	3	0	3	59	11	7	1	0	12	19	0	2	65	0	0	67	254
12:00 PM	13	20	3	0	7	36	0	11	1	0	0	12	3	3	1	0	0	7	0	0	14	0	0	14	69
12:15 PM	10	14	5	0	11	29	0	11	1	0	0	12	1	0	0	0	3	1	0	0	14	0	0	14	56
12:30 PM	8	13	4	0	12	25	0	4	0	0	0	4	5	2	1	0	2	8	0	0	22	0	0	22	59
12:45 PM	14	9	3	0	15	26	0	17	1	0	0	18	6	2	0	0	1	8	0	0	13	0	0	13	65
Hourly Total	45	56	15	0	45	116	0	43	3	0	0	46	15	7	2	0	6	24	0	0	63	0	0	63	249
1:00 PM	9	8	3	0	13	20	0	13	0	0	0	13	4	1	1	0	5	6	0	1	12	0	1	13	52
1:15 PM	10	13	2	0	16	25	0	15	0	0	0	15	1	1	0	0	0	2	0	0	17	0	1	17	59
1:30 PM	16	9	4	0	2	29	0	12	0	0	0	12	2	1	0	0	0	3	0	1	14	0	2	15	59
1:45 PM	22	13	2	0	6	37	0	14	0	0	1	14	2	0	0	0	1	2	0	1	6	0	6	7	60
Hourly Total	57	43	11	0	37	111	0	54	0	0	1	54	9	3	1	0	6	13	0	3	49	0	10	52	230
Grand Total	199	184	49	0	154	432	5	181	6	0	4	192	42	24	5	0	35	71	0	12	238	0	10	250	945
Approach %	46.1	42.6	11.3	0.0	-	-	2.6	94.3	3.1	0.0	-	-	59.2	33.8	7.0	0.0	-	-	0.0	4.8	95.2	0.0	-	-	-
Total %	21.1	19.5	5.2	0.0	-	45.7	0.5	19.2	0.6	0.0	-	20.3	4.4	2.5	0.5	0.0	-	7.5	0.0	1.3	25.2	0.0	-	26.5	-
Motorcycles	3	5	0	0	-	8	0	5	0	0	-	5	1	0	0	0	-	1	0	0	3	0	-	3	17
% Motorcycles	1.5	2.7	0.0	-	-	1.9	0.0	2.8	0.0	-	-	2.6	2.4	0.0	0.0	-	-	1.4	-	0.0	1.3	-	-	1.2	1.8
Cars & Light Goods	168	173	43	0	-	384	4	167	6	0	-	177	37	19	3	0	-	59	0	10	177	0	-	187	807
% Cars & Light Goods	84.4	94.0	87.8	-	-	88.9	80.0	92.3	100.0	-	-	92.2	88.1	79.2	60.0	-	-	83.1	-	83.3	74.4	-	-	74.8	85.4
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	2	0	-	2	3
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	20.0	-	-	1.4	-	0.0	0.8	-	-	0.8	0.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0

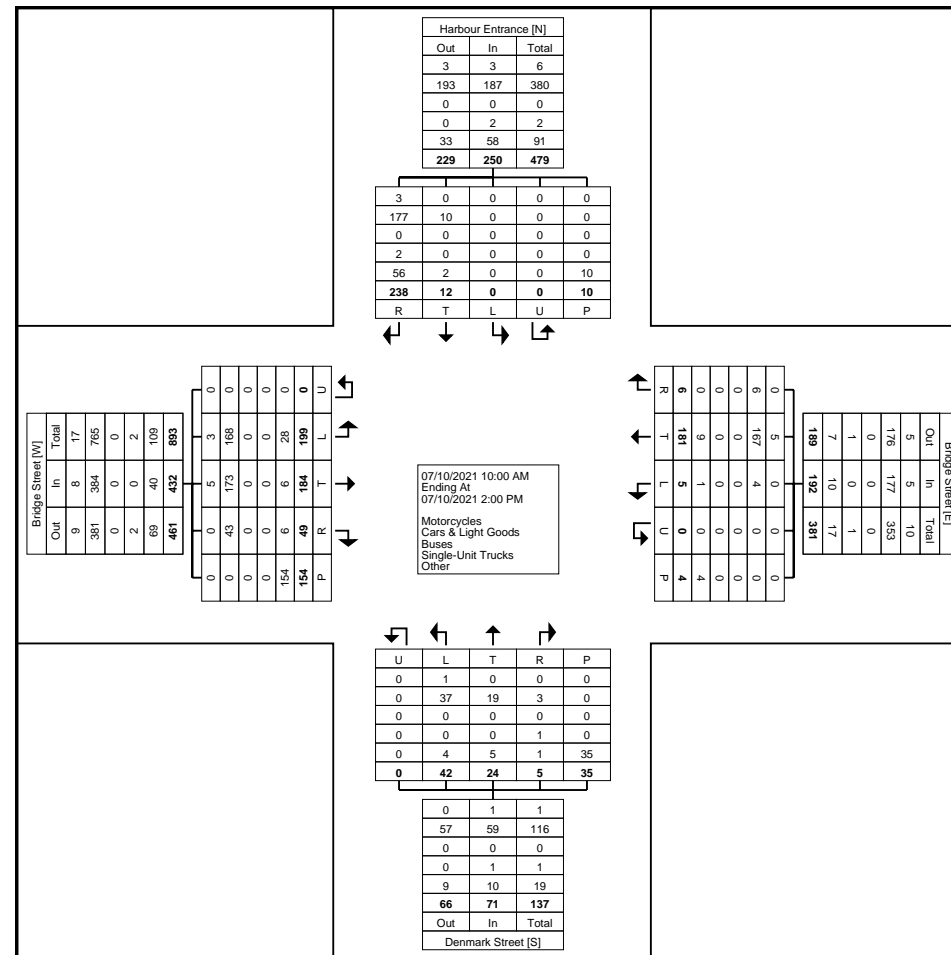
Bicycles on Road	28	6	6	0	-	40	1	9	0	0	-	10	4	5	1	0	-	10	0	2	56	0	-	58	118
% Bicycles on Road	14.1	3.3	12.2	-	-	9.3	20.0	5.0	0.0	-	-	5.2	9.5	20.8	20.0	-	-	14.1	-	16.7	23.5	-	-	23.2	12.5
Bicycles on Crosswalk	-	-	-	-	74	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	5	-	-
% Bicycles on Crosswalk	-	-	-	-	48.1	-	-	-	-	-	25.0	-	-	-	-	-	11.4	-	-	-	-	-	50.0	-	-
Pedestrians	-	-	-	-	80	-	-	-	-	-	3	-	-	-	-	-	31	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	51.9	-	-	-	-	-	75.0	-	-	-	-	-	88.6	-	-	-	-	-	50.0	-	-



Paradigm Transportation Solutions Limited
5A-150 Pinebush Rd

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Count Name: Bridge Street & Denmark Street
Site Code: 200616
Start Date: 07/10/2021
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Turning Movement Data Plot



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Turning Movement Peak Hour Data (11:15 AM)

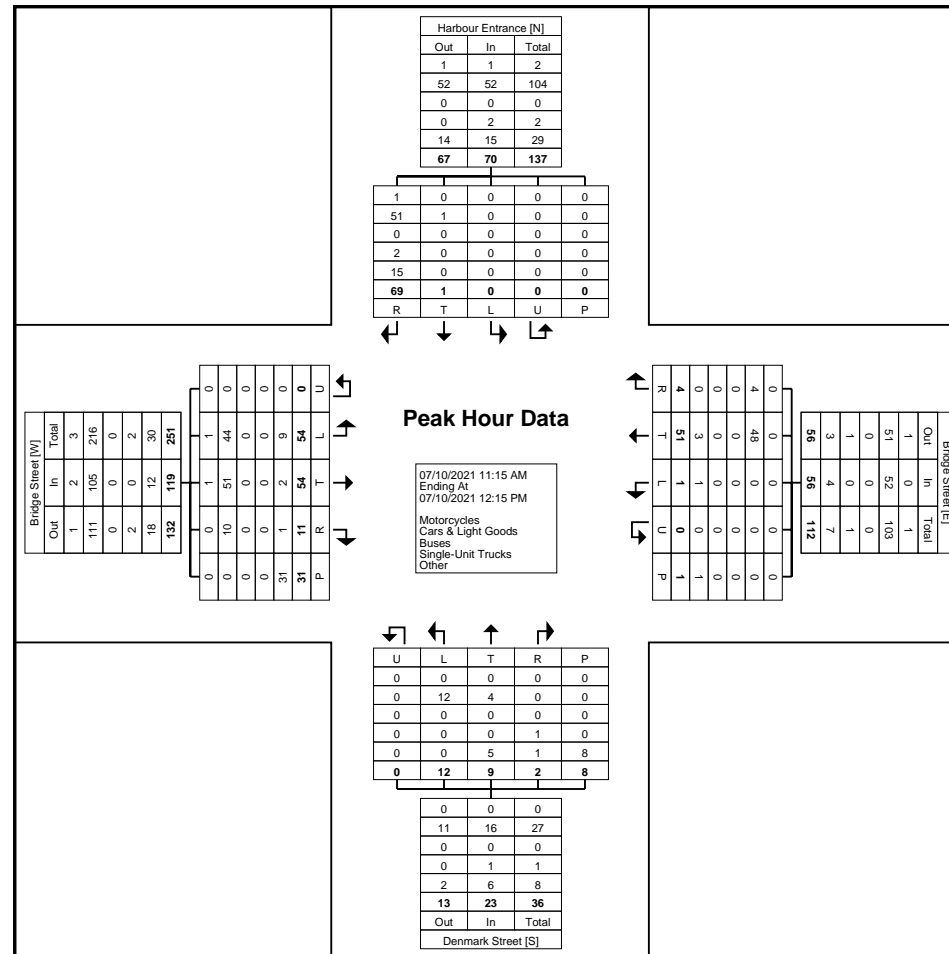
Start Time	Bridge Street Eastbound						Bridge Street Westbound						Denmark Street Northbound						Harbour Entrance Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:15 AM	15	13	2	0	11	30	0	12	0	0	0	12	2	0	0	0	1	2	0	0	23	0	0	23	67
11:30 AM	11	8	3	0	6	22	1	13	3	0	1	17	5	3	1	0	5	9	0	1	16	0	0	17	65
11:45 AM	15	13	3	0	7	31	0	15	0	0	0	15	2	3	0	0	2	5	0	0	16	0	0	16	67
12:00 PM	13	20	3	0	7	36	0	11	1	0	0	12	3	3	1	0	0	7	0	0	14	0	0	14	69
Total	54	54	11	0	31	119	1	51	4	0	1	56	12	9	2	0	8	23	0	1	69	0	0	70	268
Approach %	45.4	45.4	9.2	0.0	-	-	1.8	91.1	7.1	0.0	-	-	52.2	39.1	8.7	0.0	-	-	0.0	1.4	98.6	0.0	-	-	-
Total %	20.1	20.1	4.1	0.0	-	44.4	0.4	19.0	1.5	0.0	-	20.9	4.5	3.4	0.7	0.0	-	8.6	0.0	0.4	25.7	0.0	-	26.1	-
PHF	0.900	0.675	0.917	0.000	-	0.826	0.250	0.850	0.333	0.000	-	0.824	0.600	0.750	0.500	0.000	-	0.639	0.000	0.250	0.750	0.000	-	0.761	0.971
Motorcycles	1	1	0	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	3
% Motorcycles	1.9	1.9	0.0	-	-	1.7	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	1.4	-	-	1.4	1.1
Cars & Light Goods	44	51	10	0	-	105	0	48	4	0	-	52	12	4	0	0	-	16	0	1	51	0	-	52	225
% Cars & Light Goods	81.5	94.4	90.9	-	-	88.2	0.0	94.1	100.0	-	-	92.9	100.0	44.4	0.0	-	-	69.6	-	100.0	73.9	-	-	74.3	84.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	2	0	-	2	3
% Single-Unit Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	50.0	-	-	4.3	-	0.0	2.9	-	-	2.9	1.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	9	2	1	0	-	12	1	3	0	0	-	4	0	5	1	0	-	6	0	0	15	0	-	15	37
% Bicycles on Road	16.7	3.7	9.1	-	-	10.1	100.0	5.9	0.0	-	-	7.1	0.0	55.6	50.0	-	-	26.1	-	0.0	21.7	-	-	21.4	13.8
Bicycles on Crosswalk	-	-	-	-	12	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	38.7	-	-	-	-	-	100.0	-	-	-	-	-	25.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	19	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	61.3	-	-	-	-	-	0.0	-	-	-	-	-	75.0	-	-	-	-	-	-	-	-



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Turning Movement Peak Hour Data Plot (11:15 AM)

Appendix C

2021 Existing Operation Reports



Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	8	21	14	14	10	17	258	22	7	278	8
Traffic Volume (vph)	7	8	21	14	14	10	17	258	22	7	278	8
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.98	0.92	0.92	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Ped Bike Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Flt Protected	0	1615	0	0	1683	0	0	1693	0	0	1720	0
Satd. Flow (prot)	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Flt Permitted	0	1496	0	0	1476	0	0	1661	0	0	1708	0
Satd. Flow (perm)	0	1496	0	0	1476	0	0	1661	0	0	1708	0
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	23	11	11	11	11	11	11	11	11	11	11	11
Link Speed (km/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	188.1	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7
Travel Time (s)	13.5	12.5	12.5	11	11	11	6.1	6.1	1	1	19.0	6
Confl. Peds. (#/hr)	11	5	5	5	5	5	11	11	1	1	1	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	10%	8%	8%	0%	6%	11%	9%	0%	10%	13%
Adj. Flow (vph)	8	9	23	15	15	11	18	280	24	8	302	9
Shared Lane Traffic (%)	0	40	0	0	41	0	0	322	0	0	319	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	15	25	25	15	25	15	25	15	25	15
Turning Speed (km/h)	1	2	1	2	2	1	2	1	2	1	2	1
Number of Detectors	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Detector Template	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0
Leading Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6
Detector 2 Size(m)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	4	4	4	2	2	2	2	2	2
Switch Phase	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	48.0	48.0	48.0	48.0	48.0	48.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (%)	33.9%	33.9%	33.9%	33.9%	33.9%	33.9%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0	15.0	35.0	35.0	35.0	35.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	None	None	None	None	None	None	Max	Max	Max	Max	Max	Max
Recall Mode	12.0	12.0	12.0	12.0	12.0	12.0	30.0	30.0	30.0	30.0	30.0	30.0
Walk Time (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Flash Dont Walk (s)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Calls (#/hr)	10.2	10.2	10.2	10.2	10.2	10.2	49.6	49.6	49.6	49.6	49.6	49.6
Act Effct Green (s)	0.17	0.17	0.17	0.17	0.17	0.17	0.82	0.82	0.82	0.82	0.82	0.82
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.24	0.24	0.24	0.24	0.24	0.24
v/c Ratio	14.6	14.6	14.6	14.6	14.6	14.6	3.1	3.1	3.1	3.1	3.1	3.1
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	14.6	14.6	14.6	14.6	14.6	14.6	3.1	3.1	3.1	3.1	3.1	3.1
Total Delay	B	B	B	B	B	B	A	A	A	A	A	A
LOS	B	B	B	B	B	B	A	A	A	A	A	A
Approach Delay	14.6	14.6	14.6	14.6	14.6	14.6	3.1	3.1	3.1	3.1	3.1	3.1
Approach LOS	B	B	B	B	B	B	A	A	A	A	A	A
Intersection Summary	Other											
Area Type:	Other											
Cycle Length:	62											
Actuated Cycle Length:	60.6											
Natural Cycle:	80											
Control Type:	Semi Act-Uncoordinated											
Maximum v/c Ratio:	0.24											
Intersection Signal Delay:	4.7											
Intersection LOS:	A											
Intersection Capacity Utilization:	50.2%											
Analysis Period (min):	15											



Queues

HCM Signalized Intersection Capacity Analysis

101: N Sykes St & Trowbridge St

Existing (2021) Weekday AM Peak Hour

	EBT	WBT	NBT	SBT
Lane Group				
Lane Group Flow (vph)	40	41	322	319
v/c Ratio	0.15	0.16	0.24	0.23
Control Delay	14.6	18.8	3.1	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.6	18.8	3.1	3.1
Queue Length 50th (m)	1.7	3.0	10.2	10.3
Queue Length 95th (m)	8.8	10.4	19.6	19.5
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	436	422	1361	1397
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	0.09	0.10	0.24	0.23
Intersection Summary				

HCM Signalized Intersection Capacity Analysis

101: N Sykes St & Trowbridge St

Existing (2021) Weekday AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	8	21	14	14	10	17	258	22	7	278	8
Future Volume (vph)	7	8	21	14	14	10	17	258	22	7	278	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb. ped/bikes	0.98			0.99			1.00				1.00	
Flpb. ped/bikes	1.00			1.00			1.00				1.00	
Frt	0.92			0.96			0.99				1.00	
Flt Protected	0.99			0.98			1.00				1.00	
Satd. Flow (prot)	1611			1679			1693				1720	
Flt Permitted	0.92			0.86			0.98				0.99	
Satd. Flow (perm)	1496			1474			1661				1709	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	9	23	15	15	11	18	280	24	8	302	9
RTOR Reduction (vph)	0	20	0	0	10	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	20	0	0	31	0	0	319	0	0	318	0
Confl. Peds. (#/hr)	11	5	5	5	11	6	11	1	1	1	6	6
Heavy Vehicles (%)	0%	0%	10%	8%	8%	0%	6%	11%	9%	0%	10%	13%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4			4			2		2		2
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	5.0			5.0			46.0			46.0		46.0
Effective Green, g (s)	7.0			7.0			48.0			48.0		48.0
Actuated g/C Ratio	0.11			0.11			0.76			0.76		0.76
Clearance Time (s)	6.0			6.0			6.0			6.0		6.0
Vehicle Extension (s)	3.0			3.0			3.0			3.0		3.0
Lane Grp Cap (vph)	166			163			1265			1302		1302
v/s Ratio Prot												
v/s Ratio Perm	0.01			c0.02			c0.19			0.19		0.19
v/c Ratio	0.12			0.19			0.25			0.24		0.24
Uniform Delay, d1	25.2			25.4			2.2			2.2		2.2
Progression Factor	1.00			1.00			1.00			1.00		1.00
Incremental Delay, d2	0.3			0.6			0.5			0.4		0.4
Delay (s)	25.5			26.0			2.7			2.6		2.6
Level of Service	C			C			A			A		A
Approach Delay (s)	25.5			26.0			2.7			2.6		2.6
Approach LOS	C			C			A			A		A
Intersection Summary												
HCM 2000 Control Delay		5.3								A		
HCM 2000 Volume to Capacity ratio		0.24										
Actuated Cycle Length (s)		63.0								8.0		
Intersection Capacity Utilization		50.2%								A		
Analysis Period (min)		15										
c Critical Lane Group												

Lanes, Volumes, Timings

102: S Sykes St & Boucher St

Existing (2021)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	4	2	0	10	1	300	8	8	331	1
Traffic Volume (vph)	1	1	4	2	0	10	1	300	8	8	331	1
Future Volume (vph)	1	1	4	2	0	10	1	300	8	8	331	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.910			0.886			0.996				
Flt Protected		0.992			0.992							
Satd. Flow (prot)	0	1715	0	0	1670	0	0	1740	0	0	1761	0
Flt Permitted		0.992			0.992							
Satd. Flow (perm)	0	1715	0	0	1670	0	0	1740	0	0	1761	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		85.4			372.8			139.8			130.1	
Travel Time (s)		6.1			26.8			10.1			9.4	
Conf. Peds. (#/hr)	3	1	1	1	3	8						8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	8%	0%
Adj. Flow (vph)	1	1	4	2	0	11	1	326	9	9	360	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	0	13	0	0	336	0	0	370	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	25	25	15	25	25	15	25	25	15	15
Turning Speed (k/h)		Stop			Stop			Free			Free	
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	34.3%
Analysis Period (min)	15
ICU Level of Service A	

HCM Unsignalized Intersection Capacity Analysis

102: S Sykes St & Boucher St

Existing (2021)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	4	2	0	10	1	300	8	8	331	1
Traffic Volume (veh/h)	1	1	4	2	0	10	1	300	8	8	331	1
Future Volume (Veh/h)	1	1	4	2	0	10	1	300	8	8	331	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	4	2	0	11	1	326	9	9	360	1
Pedestrians		8						1			3	
Lane Width (m)		3.6						3.6			3.6	
Walking Speed (m/s)		1.2						1.2			1.2	
Percent Blockage		1						0			0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (m)											215	
pK, platoon unblocked												
VC, conflicting volume	733	724	370	716	720	334	369		335			
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	733	724	370	716	720	334	369		335			
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1		4.1			
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2		2.2			
p0 queue free %	100	100	99	99	100	98	100		99			
qM capacity (veh/h)	327	349	676	341	351	711	1193		1236			
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	6	13	336	370								
Volume Left	1	2	1	9								
Volume Right	4	11	9	1								
cSH	507	609	1193	1236								
Volume to Capacity	0.01	0.02	0.00	0.01								
Queue Length 95th (m)	0.3	0.5	0.0	0.2								
Control Delay (s)	12.2	11.0	0.0	0.3								
Lane LOS	B	B	A	A								
Approach Delay (s)	12.2	11.0	0.0	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utilization			34.3%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings

103: St. Vincent St & Bridge St

Existing (2021)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	2	42	3	4	0	41	4	1	0	0	9
Traffic Volume (vph)	0	2	42	3	4	0	41	4	1	0	0	9
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.871						0.997					0.865
Ped Bike Factor												
Flt Protected	0	1579	0	0	1860	0	0	1674	0	0	1644	0
Satd. Flow (prot)	0	1579	0	0	1860	0	0	1674	0	0	1644	0
Flt Permitted	0	1579	0	0	1860	0	0	1674	0	0	1644	0
Satd. Flow (perm)	0	1579	0	0	1860	0	0	1674	0	0	1644	0
Link Speed (k/h)	50						50					50
Link Distance (m)	85.2						185.4					158.1
Travel Time (s)	6.1						13.3					11.4
Conf. Peds. (#/hr)	2						2					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	7%	25%	0%	0%	0%	0%
Adj. Flow (vph)	0	2	46	3	4	0	45	4	1	0	0	10
Shared Lane Traffic (%)	0	48	0	0	7	0	0	50	0	0	10	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0						0.0					0.0
Median Width(m)	0.0						0.0					0.0
Link Offset(m)	0.0						0.0					0.0
Crosswalk Width(m)	4.8						4.8					4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25						15					25
Turning Speed (k/h)	Stop						Stop					Stop
Sign Control	Stop						Stop					Stop

Intersection Summary	Other
Area Type:	Control Type: Unsignalized
Intersection Capacity Utilization	20.2%
Analysis Period (min)	15

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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HCM Unsignalized Intersection Capacity Analysis

103: St. Vincent St & Bridge St

Existing (2021)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	2	42	3	4	0	41	4	1	0	0	9
Sign Control	Stop			Stop			Stop			Stop		
Traffic Volume (vph)	0	2	42	3	4	0	41	4	1	0	0	9
Future Volume (vph)	0	2	42	3	4	0	41	4	1	0	0	9
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2	46	3	4	0	45	4	1	0	0	10
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	48	7	50	10								
Volume Left (vph)	0	3	45	0								
Volume Right (vph)	46	0	1	10								
Head (s)	-0.49	0.09	0.31	-0.60								
Departure Headway (s)	3.5	4.2	4.3	3.5								
Degree Utilization, x	0.05	0.01	0.06	0.01								
Capacity (veh/h)	982	847	811	1017								
Control Delay (s)	6.7	7.2	7.6	6.5								
Approach Delay (s)	6.7	7.2	7.6	6.5								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay												
Level of Service												
Intersection Capacity Utilization												
Analysis Period (min)												

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Existing (2021)

Weekday

AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	4	9	3	6	2	3	43	5	0	44	1
Traffic Volume (vph)	1	4	9	3	6	2	3	43	5	0	44	1
Future Volume (vph)	1	4	9	3	6	2	3	43	5	0	44	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.910			0.977			0.988			0.997	
Flt Protected		0.997			0.988			0.997			0.997	
Satd. Flow (prot)	0	1724	0	0	1834	0	0	1723	0	0	1823	0
Flt Permitted		0.997			0.988			0.997			0.997	
Satd. Flow (perm)	0	1724	0	0	1834	0	0	1723	0	0	1823	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		372.8			190.6			146.8			142.5	
Travel Time (s)		26.8			13.7			10.6			10.3	
Conf. Peds. (#/hr)		2		2				1				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0	0%	0%	0%	0%	0%	33%	8%	0%	0%	4%	0%
Adj. Flow (vph)	1	4	10	3	7	2	3	47	5	0	48	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	12	0	0	55	0	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	25	15	15
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 15.7%	ICU Level of Service A											
Analysis Period (min) 15												

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St

Existing (2021)

Weekday

AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	4	9	3	6	2	3	43	5	0	44	1
Traffic Volume (veh/h)	1	4	9	3	6	2	3	43	5	0	44	1
Future Volume (Veh/h)	1	4	9	3	6	2	3	43	5	0	44	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	4	10	3	7	2	3	47	5	0	48	1
Pedestrians		1						2				
Lane Width (m)		3.6						3.6				
Walking Speed (m/s)		1.2						1.2				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None				
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	110	108	52	118	106	50	50		52			
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	110	108	52	118	106	50	50		52			
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.4		4.1			
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.5		2.2			
p0 queue free %	100	99	99	100	99	100	100		100			
dM capacity (veh/h)	862	784	1020	848	786	1025	1378		1567			
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	15	12	55	49								
Volume Left	1	3	3	0								
Volume Right	10	2	5	1								
cSH	933	833	1378	1567								
Volume to Capacity	0.02	0.01	0.00	0.00								
Queue Length 95th (m)	0.4	0.4	0.1	0.0								
Control Delay (s)	8.9	9.4	0.4	0.0								
Lane LOS	A	A	A	A								
Approach Delay (s)	8.9	9.4	0.4	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			15.7%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
105: Fuller St & Bridge St

Existing (2021)

Weekday
AM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W						
Traffic Volume (vph)	2	1	4	3	5	3	
Future Volume (vph)	2	1	4	3	5	3	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Flt Protected	0.955			0.949			
Flt Permitted	0.968			0.972			
Satd. Flow (prot)	1756	0	0	1847	1803	0	
Satd. Flow (perm)	0.968			0.972			
Link Speed (k/h)	1756	0	0	1847	1803	0	
Link Distance (m)	50			50			
Travel Time (s)	185.4			141.8	109.5		
Peak Hour Factor	13.3			10.2	7.9		
Heavy Vehicles (%)	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0%	0%	0%	0%	0%	0%	
Shared Lane Traffic (%)	2	1	4	3	5	3	
Lane Group Flow (vph)	3	0	0	7	8	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	
Median Width(m)	3.6			0.0	0.0		
Link Offset(m)	0.0			0.0	0.0		
Crosswalk Width(m)	4.8			4.8	4.8		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25	15	25			15	
Sign Control	Stop			Free	Free		
Intersection Summary	Other						
Area Type:	Other						
Control Type: Unsignalized							
Intersection Capacity Utilization 13.7%	ICU Level of Service A						
Analysis Period (min) 15							

HCM Unsignalized Intersection Capacity Analysis
105: Fuller St & Bridge St

Existing (2021)

Weekday
AM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W						
Traffic Volume (veh/h)	2	1	4	3	5	3	
Future Volume (Veh/h)	2	1	4	3	5	3	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	2	1	4	3	5	3	
Pedestrians							
Lane Width (m)							
Walking Speed (m/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None	None			
Median storage (veh)							
Upstream signal (m)							
pK, platoon unblocked	18	6	8				
VC, conflicting volume							
VC1, stage 1 conf vol							
VC2, stage 2 conf vol							
VCu, unblocked vol	18	6	8				
IC, single (s)	6.4	6.2	4.1				
IC, 2 stage (s)							
IF (s)	3.5	3.3	2.2				
p0 queue free %	100	100	100				
dM capacity (veh/h)	1003	1082	1625				
Direction, Lane #	EB 1	NB 1	SB 1				
Volume Total	3	7	8				
Volume Left	2	4	0				
Volume Right	1	0	3				
cSH	1028	1625	1700				
Volume to Capacity	0.00	0.00	0.00				
Queue Length 95th (m)	0.1	0.1	0.0				
Control Delay (s)	8.5	4.1	0.0				
Lane LOS	A	A					
Approach Delay (s)	8.5	4.1	0.0				
Approach LOS	A						
Intersection Summary							
Average Delay			3.0				
Intersection Capacity Utilization			13.7%				
Analysis Period (min)			15				
					ICU Level of Service	A	

Lanes, Volumes, Timings
106: Boucher St & Fuller St

Existing (2021)

Weekday
AM Peak Hour

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (vph)	6	3	5	0	0	6
Future Volume (vph)	6	3	5	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fit	0.865					
Fit Protected	0.966					
Satd. Flow (prot)	0	1835	1900	0	1644	0
Fit Permitted	0.966					
Satd. Flow (perm)	0	1835	1900	0	1644	0
Link Speed (k/h)	50					
Link Distance (m)	190.6					
Travel Time (s)	13.7					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	3	5	0	0	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	10	5	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)	0.0					
Link Offset(m)	0.0					
Crosswalk Width(m)	4.8					
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	Free	Free	15	25	15
Sign Control	Stop					
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 15.5%						
Analysis Period (min) 15						
ICU Level of Service A						

HCM Unsignalized Intersection Capacity Analysis
106: Boucher St & Fuller St

Existing (2021)

Weekday
AM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↱		↰	↱
Traffic Volume (veh/h)	6	3	5	0	0	6
Future Volume (Veh/h)	6	3	5	0	0	6
Sign Control	Free	Free	Free	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	3	5	0	0	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None	None	None			
Median storage (veh)						
Upstream signal (m)						
pK, platoon unblocked						
VC, conflicting volume	5			22	5	
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	5			22	5	
IC, single (s)	4.1			6.4	6.2	
IC, 2 stage (s)						
IF (s)	2.2			3.5	3.3	
p0 queue free %	100			100	99	
dM capacity (veh/h)	1630			995	1084	
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	10	5	7			
Volume Left	7	0	0			
Volume Right	0	0	7			
CSH	1630	1700	1084			
Volume to Capacity	0.00	0.00	0.01			
Queue Length 95th (m)	0.1	0.0	0.2			
Control Delay (s)	5.1	0.0	8.3			
Lane LOS	A		A			
Approach Delay (s)	5.1	0.0	8.3			
Approach LOS			A			
Intersection Summary						
Average Delay				5.0		
Intersection Capacity Utilization				15.5%	ICU Level of Service	
Analysis Period (min)				15	A	

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Existing (2021)

Weekday AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	19	16	2	0	22	51	2	3	2	41	4	14
Traffic Volume (vph)	19	16	2	0	22	51	2	3	2	41	4	14
Future Volume (vph)	19	16	2	0	22	51	2	3	2	41	4	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.993				0.906		0.961				0.968	
Flt Protected	0.974						0.986				0.966	
Satd. Flow (prot)	0	1772	0	0	1657	0	0	1800	0	0	1736	0
Flt Permitted	0.974						0.986				0.966	
Satd. Flow (perm)	0	1772	0	0	1657	0	0	1800	0	0	1736	0
Link Speed (k/h)	50				50		50				50	
Link Distance (m)	173.7				86.8		54.3				122.0	
Travel Time (s)	12.5				6.2		3.9				8.8	
Confl. Peds. (#/hr)	7				4		1				1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	5%	0%	0%	6%	3%	0%	0%	0%	2%	0%	4%
Adj. Flow (vph)	21	17	2	0	24	55	2	3	2	45	4	15
Shared Lane Traffic (%)	0	40	0	0	79	0	0	7	0	0	64	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8				4.8		4.8				4.8	
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25				15		25		15		25	
Turning Speed (k/h)	Free				Free		Stop		15		25	
Sign Control	Free				Free		Stop		15		25	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	23.4%
Analysis Period (min)	15
ICU Level of Service A	

107: Bayfield St & Trowbridge St/Bridge St

Existing (2021)

Weekday AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	19	16	2	0	22	51	2	3	2	41	4	14
Traffic Volume (veh/h)	19	16	2	0	22	51	2	3	2	41	4	14
Future Volume (Veh/h)	19	16	2	0	22	51	2	3	2	41	4	14
Sign Control	Free				Free		Stop				Stop	
Grade	0%				0%		0%				0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	17	2	0	24	55	2	3	2	45	4	15
Pedestrians	1						4				7	
Lane Width (m)	3.6						3.6				3.6	
Walking Speed (m/s)	1.2						1.2				1.2	
Percent Blockage	0						0				1	
Right turn flare (veh)	None				None							
Median type	None				None							
Median storage (veh)												
Upstream signal (m)	174											
pX platoon unblocked												
VC, conflicting volume	86			23			134	150	22	122	124	60
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	86			23			134	150	22	122	124	60
IC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)												
IF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	95	99	98
qM capacity (veh/h)	1495			1600			809	728	1057	829	753	994
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	40	79	7	64								
Volume Left	21	0	2	45								
Volume Right	2	55	2	15								
cSH	1495	1600	825	857								
Volume to Capacity	0.01	0.00	0.01	0.07								
Queue Length 95th (m)	0.3	0.0	0.2	1.9								
Control Delay (s)	4.0	0.0	9.4	9.5								
Lane LOS	A	A	A	A								
Approach Delay (s)	4.0	0.0	9.4	9.5								
Approach LOS	A	A	A	A								
Intersection Summary												
Average Delay			4.4									
Intersection Capacity Utilization			23.4%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Existing (2021)

Weekday
AM Peak Hour








	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	13	44	2	1	53	0	13	1	0	0	1	7
Traffic Volume (vph)	13	44	2	1	53	0	13	1	0	0	1	7
Future Volume (vph)	13	44	2	1	53	0	13	1	0	0	1	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.996											0.880
Flt Protected	0	0.989	0	0	0.999	0	0.955	0	0	0	0	0
Satd. Flow (prot)	0	1817	0	0	1792	0	0	1354	0	0	0	1453
Flt Permitted	0	0.989	0	0	0.999	0	0.955	0	0	0	0	0
Satd. Flow (perm)	0	1817	0	0	1792	0	0	1554	0	0	0	1453
Link Speed (k/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	86.8	65.5	65.5	65.5	65.5	65.5	110.7	89.9	89.9	89.9	89.9	89.9
Travel Time (s)	6.2	4.7	4.7	4.7	4.7	4.7	8.0	6.5	6.5	6.5	6.5	6.5
Conf. Peds. (#/hr)	2	7	7	7	7	7	7	1	1	1	1	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	18%	0%	0%	0%	0%	17%
Adj. Flow (vph)	14	48	2	1	58	0	14	1	0	0	1	8
Shared Lane Traffic (%)	0	64	0	0	59	0	0	15	0	0	0	9
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	25	25	15	25	25	15	25	25	15	15
Turning Speed (k/h)	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free

Intersection Summary	Other
Area Type:	Intersection Type: Unsignalized
Control Type:	Intersection Capacity Utilization 24.9%
Analysis Period (min)	15
ICU Level of Service A	

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Existing (2021)

Weekday
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	44	2	1	53	0	13	1	0	0	1	7
Future Volume (Veh/h)	13	44	2	1	53	0	13	1	0	0	1	7
Sign Control	Free	Free		Free	Free			Stop		Stop	Stop	
Grade	0%	0%		0%	0%			0%		0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	48	2	1	58	0	14	1	0	0	1	8
Pedestrians	7	7		1	1			7		0	2	
Lane Width (m)	3.6	3.6		3.6	3.6			3.6		3.6	3.6	
Walking Speed (m/s)	1.2	1.2		1.2	1.2			1.2		1.2	1.2	
Percent Blockage	1	1		0	0			1		0	0	
Right turn flare (veh)		None			None							
Median type		None			None							
Median storage (veh)		261										
Upstream signal (m)		261										
pK, platoon unblocked		60		57			160	146	57	140	147	67
vC, conflicting volume		60		57			160	146	57	140	147	67
vC1, stage 1 conf vol		60		57			160	146	57	140	147	67
vC2, stage 2 conf vol		60		57			160	146	57	140	147	67
vCu, unblocked vol	60	57		57			160	146	57	140	147	67
IC, single (s)	4.1	4.1		4.1			7.3	6.5	6.2	7.1	6.5	6.4
IC, 2 stage (s)	2.2	2.2		2.2			3.7	4.0	3.3	3.5	4.0	3.5
p0 queue free %	99	100		100			98	100	100	100	99	99
dM capacity (veh/h)	1554	1551		1551			745	736	1008	820	735	949
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	64	59	15	9								
Volume Left	14	1	14	0								
Volume Right	2	0	0	8								
cSH	1554	1551	745	919								
Volume to Capacity	0.01	0.00	0.02	0.01								
Queue Length 95th (m)	0.2	0.0	0.5	0.2								
Control Delay (s)	1.7	0.1	9.9	9.0								
Lane LOS	A	A	A	A								
Approach Delay (s)	1.7	0.1	9.9	9.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Average Delay	2.3											
Intersection Capacity Utilization	24.9%			ICU Level of Service								
Analysis Period (min)	15			A								

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	20	21	37	19	16	9	18	308	30	8	284	14
Traffic Volume (vph)	20	21	37	19	16	9	18	308	30	8	284	14
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.98	0.98	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.936			0.972			0.989			0.994		
Flt Protected	0.987			0.979			0.997			0.999		
Satd. Flow (prot)	0	1709	0	0	1753	0	0	1763	0	0	1748	0
Flt Permitted	0.901			0.877			0.978			0.990		
Satd. Flow (perm)	0	1550	0	0	1566	0	0	1728	0	0	1732	0
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	40			10			13			7		
Link Speed (km/h)	50			50			50			50		
Link Distance (m)	188.1			173.7			84.5			284.4		
Travel Time (s)	13.5			12.5			6.1			19.0		
Confl. Peds. (#/hr)	19			6			19			9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	6%	0%	0%	7%	0%	0%	8%	7%
Adj. Flow (vph)	22	23	40	21	17	10	20	335	33	9	309	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	0	0	48	0	0	388	0	0	333	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8			4.8			4.8			4.8		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (km/h)	25			15			25			15		
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)	9.4			9.4			9.4			9.4		
Detector 2 Size(m)	0.6			0.6			0.6			0.6		
Detector 2 Type	CI+Ex			CI+Ex			CI+Ex			CI+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0			0.0		
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4			4			2			2		
Permitted Phases												



Queues
101: N Sykes St & Trowbridge St

Existing (2021) Weekday
PM Peak Hour

	EBT	WBT	NBT	SBT
Lane Group				
Lane Group Flow (vph)	85	48	388	333
v/c Ratio	0.28	0.17	0.30	0.25
Control Delay	16.0	19.4	4.1	3.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.0	19.4	4.1	3.9
Queue Length 50th (m)	4.5	3.8	12.8	10.7
Queue Length 95th (m)	15.1	11.7	26.9	22.8
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	462	444	1304	1306
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	0.18	0.11	0.30	0.25
Intersection Summary				

HCM Signalized Intersection Capacity Analysis
101: N Sykes St & Trowbridge St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations												
Traffic Volume (vph)	20	21	37	19	16	9	18	308	30	8	284	14
Future Volume (vph)	20	21	37	19	16	9	18	308	30	8	284	14
Future Volume (vphb)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frb. ped/bikes	0.99			0.99			1.00				1.00	
Flbb. ped/bikes	0.99			1.00			1.00				1.00	
Frt	0.94			0.97			0.99				0.99	
Flt Protected	0.99			0.98			1.00				1.00	
Satd. Flow (prot)	1689			1747			1761				1747	
Flt Permitted	0.90			0.88			0.98				0.99	
Satd. Flow (perm)	1550			1566			1727				1732	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	23	40	21	17	10	20	335	33	9	309	15
RTOR Reduction (vph)	0	34	0	0	9	0	0	4	0	0	2	0
Lane Group Flow (vph)	0	51	0	0	39	0	0	384	0	0	331	0
Confl. Peds. (#/hr)	19		6	6	19	25	9		9		25	
Heavy Vehicles (%)	0%	5%	0%	0%	6%	0%	0%	7%	0%	0%	8%	7%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4			4			2		2		2
Permitted Phases	4			4			2		2		2	
Actuated Green, G (s)	7.0			7.0			43.0		43.0		43.0	
Effective Green, g (s)	9.0			9.0			45.0		45.0		45.0	
Actuated g/C Ratio	0.15			0.15			0.73		0.73		0.73	
Clearance Time (s)	6.0			6.0			6.0		6.0		6.0	
Vehicle Extension (s)	3.0			3.0			3.0		3.0		3.0	
Lane Grp Cap (vph)	225			227			1253				1257	
v/s Ratio Prot												
v/s Ratio Perm	c0.03			0.03			c0.22				0.19	
v/c Ratio	0.23			0.17			0.31				0.26	
Uniform Delay, d1	23.4			23.2			3.0				2.9	
Progression Factor	1.00			1.00			1.00				1.00	
Incremental Delay, d2	0.5			0.4			0.6				0.5	
Delay (s)	23.9			23.6			3.6				3.4	
Level of Service	C			C			A				A	
Approach Delay (s)	23.9			23.6			3.6				3.4	
Approach LOS	C			C			A				A	
Intersection Summary												
HCM 2000 Control Delay			6.7				HCM 2000 Level of Service				A	
HCM 2000 Volume to Capacity ratio			0.29									
Actuated Cycle Length (s)			62.0				Sum of lost time (s)				8.0	
Intersection Capacity Utilization			52.1%				ICU Level of Service				A	
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
102: S Sykes St & Boucher St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	0	2	4	1	6	1	379	5	8	367	3
Traffic Volume (vph)	3	0	2	4	1	6	1	379	5	8	367	3
Future Volume (vph)	3	0	2	4	1	6	1	379	5	8	367	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.946				0.921			0.998			0.999	
Frt	0.971				0.984			0.999			0.999	
Flt Protected	0	1745	0	0	1722	0	0	1842	0	0	1878	0
Satd. Flow (prot)	0.971				0.984			0.999			0.999	
Flt Permitted	0	1745	0	0	1722	0	0	1842	0	0	1878	0
Satd. Flow (perm)	50				50			50			50	
Link Speed (k/h)	85.4				372.8			139.8			130.1	
Link Distance (m)	6.1				26.8			10.1			9.4	
Travel Time (s)	1				2			3			3	
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	1%	0%
Heavy Vehicles (%)	3	0	2	4	1	7	1	412	5	9	399	3
Adj. Flow (vph)	0	5	0	0	12	0	0	418	0	0	411	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Lane Group Flow (vph)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Enter Blocked Intersection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	4.8				4.8			4.8			4.8	
Link Offset(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Crosswalk Width(m)	25	15	25	15	25	15	25	15	25	15	25	15
Two way Left Turn Lane	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Headway Factor	15	15	15	15	15	15	15	15	15	15	15	15
Turning Speed (k/h)	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization 36.1%	ICU Level of Service A											
Analysis Period (min) 15	ICU Level of Service A											

HCM Unsignalized Intersection Capacity Analysis
102: S Sykes St & Boucher St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	0	2	4	1	6	1	379	5	8	367	3
Traffic Volume (veh/h)	3	0	2	4	1	6	1	379	5	8	367	3
Future Volume (Veh/h)	3	0	2	4	1	6	1	379	5	8	367	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	0	2	4	1	7	1	412	5	9	399	3
Pedestrians	3							2			1	
Lane Width (m)	3.6							3.6			3.6	
Walking Speed (m/s)	1.2							1.2			1.2	
Percent Blockage	0							0			0	
Right turn flare (veh)								None			None	
Median type								None			None	
Median storage (veh)								215				
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	846	840	406	839	840	416	405		417			
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	846	840	406	839	840	416	405		417			
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1		4.1			
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2		2.2			
p0 queue free %	99	100	100	99	100	99	100		99			
dM capacity (veh/h)	277	300	647	284	301	641	1162		1153			
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	5	12	418	411								
Volume Left	3	4	1	9								
Volume Right	2	7	5	3								
cSH	359	423	1162	1153								
Volume to Capacity	0.01	0.03	0.00	0.01								
Queue Length 95th (m)	0.3	0.7	0.0	0.2								
Control Delay (s)	15.2	13.8	0.0	0.3								
Lane LOS	C	B	A	A								
Approach Delay (s)	15.2	13.8	0.0	0.3								
Approach LOS	C	B										
Intersection Summary	Intersection Summary											
Average Delay			0.4									
Intersection Capacity Utilization			36.1%									
Analysis Period (min)			15									

Lanes, Volumes, Timings

103: St. Vincent St & Bridge St

Existing (2021) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	7	43	5	5	1	55	7	4	1	4	1
Future Volume (vph)	0	7	43	5	5	1	55	7	4	1	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.885			0.988			0.992			0.977	
Flt Protected					0.978			0.960			0.992	
Satd. Flow (prot)	0	1613	0	0	1836	0	0	1737	0	0	1841	0
Flt Permitted					0.978			0.960			0.992	
Satd. Flow (perm)	0	1613	0	0	1836	0	0	1737	0	0	1841	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		85.2			185.4			142.5			158.1	
Travel Time (s)		6.1			13.3			10.3			11.4	
Conf. Peds. (#/hr)			10	10			1					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	8	47	5	5	1	60	8	4	1	4	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	11	0	0	72	0	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)		0.0		0.0		0.0		0.0		0.0		0.0
Link Offset(m)		0.0		0.0		0.0		0.0		0.0		0.0
Crosswalk Width(m)		4.8		4.8		4.8		4.8		4.8		4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	15	25	15
Sign Control		Stop		Stop		Stop		Stop		Stop		Stop
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	23.6%											
Analysis Period (min)	15											

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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HCM Unsignalized Intersection Capacity Analysis

103: St. Vincent St & Bridge St

Existing (2021) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop		Stop		Stop		Stop		Stop		Stop
Traffic Volume (vph)	0	7	43	5	5	1	55	7	4	1	4	1
Future Volume (vph)	0	7	43	5	5	1	55	7	4	1	4	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	47	5	5	1	60	8	4	1	4	1
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	55	11	72	6								
Volume Left (vph)	0	5	60	1								
Volume Right (vph)	47	1	4	1								
Head (s)	-0.44	0.04	0.20	-0.07								
Departure Headway (s)	3.6	4.2	4.2	4.0								
Degree Utilization, x	0.06	0.01	0.08	0.01								
Capacity (veh/h)	961	843	826	870								
Control Delay (s)	6.9	7.2	7.6	7.1								
Approach Delay (s)												
Approach LOS	A	A	A	A								
Intersection Summary												
Delay	7.3											
Level of Service	A											
Intersection Capacity Utilization	23.6%											
ICU Level of Service	A											
Analysis Period (min)	15											

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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Lanes, Volumes, Timings
104: St. Vincent St & Boucher St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	4	6	10	4	6	3	57	4	2	46	4
Traffic Volume (vph)	3	4	6	10	4	6	3	57	4	2	46	4
Future Volume (vph)	3	4	6	10	4	6	3	57	4	2	46	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.932			0.957			0.992			0.990	
Frt		0.989			0.976			0.998			0.998	
Flt Protected	0	1751	0	0	1775	0	0	1800	0	0	1813	0
Satd. Flow (prot)		0.989			0.976			0.998			0.998	
Flt Permitted	0	1751	0	0	1775	0	0	1800	0	0	1813	0
Satd. Flow (perm)		50			50			50			50	
Link Speed (k/h)		372.8			190.6			146.8			142.5	
Link Distance (m)		26.8			13.7			10.6			10.3	
Travel Time (s)		2			7			12			12	
Conf. Peds. (#/hr)		0.92			0.92			0.92			0.92	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	4%	0%
Adj. Flow (vph)	3	4	7	11	4	7	3	62	4	2	50	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	14	0	0	22	0	0	69	0	0	56	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	25	15	25	15	25	15	25	15	25	15
Turning Speed (k/h)		Stop		Stop		Stop		Free		Free		Free
Sign Control		Stop		Stop		Stop		Free		Free		Free
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization	19.5%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
104: St. Vincent St & Boucher St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	4	6	10	4	6	3	57	4	2	46	4
Traffic Volume (veh/h)	3	4	6	10	4	6	3	57	4	2	46	4
Future Volume (Veh/h)	3	4	6	10	4	6	3	57	4	2	46	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	4	7	11	4	7	3	62	4	2	50	4
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	137	140	59	154	140	78	54			78		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	137	140	59	154	140	78	54			78		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	99	99	99	99	100			100		
dM capacity (veh/h)	819	745	1006	788	745	977	1564			1518		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	14	22	69	56								
Volume Left	3	11	3	2								
Volume Right	7	7	4	4								
cSH	876	830	1564	1518								
Volume to Capacity	0.02	0.03	0.00	0.00								
Queue Length 95th (m)	0.4	0.7	0.0	0.0								
Control Delay (s)	9.2	9.5	0.3	0.3								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.2	9.5	0.3	0.3								
Approach LOS	A	A										
Intersection Summary												
Average Delay	2.3											
Intersection Capacity Utilization	19.5%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
105: Fuller St & Bridge St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W			4	4	8	9
Traffic Volume (vph)	6	6	2	4	8	8	9
Future Volume (vph)	6	6	2	4	8	8	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.932			0.929			
Flt Permitted	0.976			0.984			
Satd. Flow (prot)	1728	0	0	1870	1765	0	
Flt Permitted	0.976			0.984			
Satd. Flow (perm)	1728	0	0	1870	1765	0	
Link Speed (k/h)	50			50	50		
Link Distance (m)	185.4			141.8	109.5		
Travel Time (s)	13.3			10.2	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	
Adj. Flow (vph)	7	7	2	4	9	10	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	14	0	0	6	19	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	
Median Width(m)	3.6			0.0	0.0		
Link Offset(m)	0.0	0.0	0.0	0.0	0.0		
Crosswalk Width(m)	4.8			4.8	4.8		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25	15	25			15	
Sign Control	Stop			Free	Free		
Intersection Summary							
Area Type:	Other						
Control Type:	Unsignalized						
Intersection Capacity Utilization	13.3%						ICU Level of Service A
Analysis Period (min)	15						

HCM Unsignalized Intersection Capacity Analysis
105: Fuller St & Bridge St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W			4	4	8	9
Traffic Volume (veh/h)	6	6	2	4	8	8	9
Future Volume (Veh/h)	6	6	2	4	8	8	9
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	7	7	2	4	9	10	
Pedestrians							
Lane Width (m)							
Walking Speed (m/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage (veh)							
Upstream signal (m)							
pK, platoon unblocked							
VC, conflicting volume	22	14	19				
VC1, stage 1 conf vol							
VC2, stage 2 conf vol							
VCu, unblocked vol	22	14	19				
IC, single (s)	6.4	6.2	4.1				
IC, 2 stage (s)							
IF (s)	3.5	3.3	2.2				
p0 queue free %	99	99	100				
dM capacity (veh/h)	988	1072	1611				
Direction, Lane #	EB 1	NB 1	SB 1				
Volume Total	14	6	19				
Volume Left	7	2	0				
Volume Right	7	0	10				
cSH	1034	1611	1700				
Volume to Capacity	0.01	0.00	0.01				
Queue Length 95th (m)	0.3	0.0	0.0				
Control Delay (s)	8.5	2.4	0.0				
Lane LOS	A	A					
Approach Delay (s)	8.5	2.4	0.0				
Approach LOS	A						
Intersection Summary							
Average Delay	3.4						
Intersection Capacity Utilization	13.3%						ICU Level of Service A
Analysis Period (min)	15						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	7	2	3	11
Traffic Volume (vph)	4	7	9	2	3	11
Future Volume (vph)	4	7	9	2	3	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Flt			0.977		0.892	
Flt Protected		0.984			0.990	
Satd. Flow (prot)	0	1870	1856	0	1678	0
Flt Permitted		0.984			0.990	
Satd. Flow (perm)	0	1870	1856	0	1678	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		190.6	229.8		141.8	
Travel Time (s)		13.7	16.5		10.2	
Confl. Peds. (#/hr)	5			5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	4	8	10	2	3	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	12	12	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free	Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization	14.9%					
Analysis Period (min)	15					
ICU Level of Service A						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔		↔	
Traffic Volume (veh/h)	4	7	9	2	3	11
Future Volume (Veh/h)	4	7	9	2	3	11
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	8	10	2	3	12
Pedestrians					5	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
VC, conflicting volume	17				32	16
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	17				32	16
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
CM capacity (veh/h)	1607				980	1065
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	12	12	15			
Volume Left	4	0	3			
Volume Right	0	2	12			
cSH	1607	1700	1047			
Volume to Capacity	0.00	0.01	0.01			
Queue Length 95th (m)	0.1	0.0	0.3			
Control Delay (s)	2.4	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	2.4	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay	4.0					
Intersection Capacity Utilization	14.9%					
Analysis Period (min)	15					
				ICU Level of Service		
				A		

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Existing (2021) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	37	22	0	0	16	71	1	1	0	49	2	27
Traffic Volume (vph)	37	22	0	0	16	71	1	1	0	49	2	27
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor												
Ped Bike Factor												
Frt												
Flt Protected	0	1776	0	0	1631	0	0	1854	0	0	1709	0
Satd. Flow (prot)												
Flt Permitted	0	1776	0	0	1631	0	0	1854	0	0	1709	0
Satd. Flow (perm)												
Link Speed (k/h)												
Link Distance (m)												
Travel Time (s)												
Confl. Peds. (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	5%	0%	0%	6%	3%	0%	0%	0%	2%	0%	4%
Adj. Flow (vph)	40	24	0	0	17	77	1	1	0	53	2	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	64	0	0	94	0	0	2	0	0	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	25	15	25	25	15	25	25	15	15
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	23.5%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

Existing (2021) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	37	22	0	0	16	71	1	1	0	49	2	27
Traffic Volume (veh/h)	37	22	0	0	16	71	1	1	0	49	2	27
Future Volume (Veh/h)	37	22	0	0	16	71	1	1	0	49	2	27
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	24	0	0	17	77	1	1	0	53	2	29
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
VC, conflicting volume	103			29			196	212	29	169	174	66
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	103			29			196	212	29	169	174	66
IC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)												
IF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	100	100	93	100	97
dM capacity (veh/h)	1471			1591			718	662	1047	765	696	985
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	64	94	2	84								
Volume Left	40	0	1	53								
Volume Right	0	77	0	29								
cSH	1471	1591	689	826								
Volume to Capacity	0.03	0.00	0.00	0.10								
Queue Length 95th (m)	0.7	0.0	0.1	2.7								
Control Delay (s)	4.8	0.0	10.2	9.8								
Lane LOS	A	A	B	A								
Approach Delay (s)	4.8	0.0	10.2	9.8								
Approach LOS	B	A		A								
Intersection Summary												
Average Delay				4.7								
Intersection Capacity Utilization				23.5%						A		
Analysis Period (min)				15								

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Existing (2021) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	13	49	9	0	61	0	11	1	0	1	2	15
Traffic Volume (vph)	13	49	9	0	61	0	11	1	0	1	2	15
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Peak Hour Factor	0.982											
Ped Bike Factor	Frt											
Flt Protected	0.991											
Satd. Flow (prot)	0.1799											
Flt Permitted	0.991											
Satd. Flow (perm)	0.1799											
Link Speed (k/h)	50											
Link Distance (m)	86.8											
Travel Time (s)	6.2											
Conf. Peds. (#/hr)	7											
Peak Hour Factor	0.92											
Heavy Vehicles (%)	0%											
Adj. Flow (vph)	14	53	10	0	66	0	12	1	0	1	2	16
Shared Lane Traffic (%)	0											
Lane Group Flow (vph)	0											
Enter Blocked Intersection	No											
Lane Alignment	Left											
Median Width(m)	0.0											
Link Offset(m)	0.0											
Crosswalk Width(m)	4.8											
Two way Left Turn Lane	1.00											
Headway Factor	25											
Turning Speed (k/h)	15											
Sign Control	Free											
Intersection Summary	Area Type: Other											
Control Type: Unsignalized	Intersection Capacity Utilization 25.2%											
Analysis Period (min) 15	ICU Level of Service A											

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Existing (2021) Weekday
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	13	49	9	0	61	0	11	1	0	1	2	15
Future Volume (Veh/h)	13	49	9	0	61	0	11	1	0	1	2	15
Sign Control	Free											
Grade	0%											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	53	10	0	66	0	12	1	0	1	2	16
Pedestrians	14											
Lane Width (m)	3.6											
Walking Speed (m/s)	1.2											
Percent Blockage	1											
Right turn flare (veh)	None											
Median type	None											
Median storage (veh)	261											
Upstream signal (m)	73											
pX, platoon unblocked	74											
VC, conflicting volume	194											
VC1, stage 1 conf vol	170											
VC2, stage 2 conf vol	73											
VCu, unblocked vol	4.1											
IC, single (s)	2.2											
IC, 2 stage (s)	99											
p0 queue free %	1531											
dM capacity (veh/h)	EB 1											
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	77	66	13	19								
Volume Left	14	0	12	1								
Volume Right	10	0	0	16								
cSH	1531	1524	725	914								
Volume to Capacity	0.01	0.00	0.02	0.02								
Queue Length 95th (m)	0.2	0.0	0.4	0.5								
Control Delay (s)	1.4	0.0	10.1	9.0								
Lane LOS	A	B	B	A								
Approach Delay (s)	1.4	0.0	10.1	9.0								
Approach LOS	B	A	A	A								
Intersection Summary												
Average Delay	2.3				ICU Level of Service				A			
Intersection Capacity Utilization	25.2%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	10	27	23	41	18	14	12	410	45	16	384	11
Traffic Volume (vph)	10	27	23	41	18	14	12	410	45	16	384	11
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.97	0.940	0.97	0.97	0.975	0.987	0.987	0.987	0.987	0.987	0.987	0.987
Ped Bike Factor	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992
Flt Protected	0	1698	0	0	1589	0	0	1834	0	0	1859	0
Satd. Flow (prot)	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942	0.942
Flt Permitted	0	1604	0	0	1358	0	0	1814	0	0	1823	0
Satd. Flow (perm)	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	32	32	32	32	32	32	32	32	32	32	32	32
Link Speed (km/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1	188.1
Travel Time (s)	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Conf. Peds. (#/hr)	28	22	22	22	22	22	22	22	22	22	22	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	7%	36%	0%	2%	0%	8%	1%	9%	0%
Adj. Flow (vph)	11	29	32	45	20	15	13	446	49	17	417	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	72	0	0	80	0	0	508	0	0	446	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (km/h)	25	15	15	25	15	15	25	15	25	15	25	15
Number of Detectors	1	2	1	2	1	2	1	2	1	2	1	2
Detector Template	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Leading Detector (m)	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6
Detector 2 Size(m)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (s)	21.0	21.0		21.0	21.0		41.0	41.0		41.0	41.0	
Total Split (%)	33.9%	33.9%		33.9%	33.9%		66.1%	66.1%		66.1%	66.1%	
Maximum Green (s)	15.0	15.0		15.0	15.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	12.0	12.0		12.0	12.0		30.0	30.0		30.0	30.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	11.3	11.3		11.3	11.3		45.9	45.9		45.9	45.9	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.75	0.75		0.75	0.75	
v/c Ratio	0.22	0.22		0.31	0.31		0.37	0.37		0.33	0.33	
Control Delay	15.3	15.3		21.5	21.5		5.0	5.0		4.8	4.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.3	15.3		21.5	21.5		5.0	5.0		4.8	4.8	
LOS	B	B		C	C		A	A		A	A	
Approach Delay	15.3	15.3		21.5	21.5		5.0	5.0		4.8	4.8	
Approach LOS	B	B		C	C		A	A		A	A	
Intersection Summary												
Area Type:	Other											
Cycle Length:	62											
Actuated Cycle Length:	61.6											
Natural Cycle:	60											
Control Type:	Semi Act-Uncoordinated											
Maximum v/c Ratio:	0.37											
Intersection Signal Delay:	6.8											
Intersection Capacity Utilization:	55.5%											
ICU Level of Service:	B											
Analysis Period (min):	15											



Queues
101: N Sykes St & Trowbridge St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBT	WBT	NBT	SBT
Lane Group				
Lane Group Flow (vph)	72	80	508	446
v/c Ratio	0.22	0.31	0.37	0.33
Control Delay	15.3	21.5	5.0	4.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.3	21.5	5.0	4.8
Queue Length 50th (m)	4.0	6.7	18.6	16.0
Queue Length 95th (m)	13.4	17.2	41.6	35.7
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	466	386	1355	1358
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	0.15	0.21	0.37	0.33
Intersection Summary				

HCM Signalized Intersection Capacity Analysis
101: N Sykes St & Trowbridge St

Existing (2021) Summer Weekend

SAT Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	27	29	41	18	14	12	410	45	16	384	11
Future Volume (vph)	10	27	29	41	18	14	12	410	45	16	384	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frb. ped/bikes	0.98			0.99			1.00				1.00	
Frb. ped/bikes	0.99			0.98			1.00				1.00	
Frt	0.94			0.97			0.99				1.00	
Flt Protected	0.99			0.97			1.00				1.00	
Satd. Flow (prot)	1889			1563			1833				1859	
Flt Permitted	0.94			0.85			0.99				0.98	
Satd. Flow (perm)	1603			1358			1814				1823	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	29	32	45	20	15	13	446	49	17	417	12
RTOR Reduction (vph)	0	27	0	0	13	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	45	0	0	67	0	0	504	0	0	445	0
Confl. Peds. (#/hr)	28	22	22	28	28	20	25	25	25	25	20	20
Heavy Vehicles (%)	0%	5%	0%	7%	6%	36%	0%	2%	0%	8%	1%	9%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4			4			2			2		2
Permitted Phases												
Actuated Green, G (s)	7.7			7.7			43.1			43.1		43.1
Effective Green, g (s)	9.7			9.7			45.1			45.1		45.1
Actuated g/C Ratio	0.15			0.15			0.72			0.72		0.72
Clearance Time (s)	6.0			6.0			6.0			6.0		6.0
Vehicle Extension (s)	3.0			3.0			3.0			3.0		3.0
Lane Grp Cap (vph)	247			209			1302			1309		1309
v/s Ratio Prot												
v/s Ratio Perm	0.03			c0.05			c0.28			0.24		0.24
v/c Ratio	0.18			0.32			0.39			0.34		0.34
Uniform Delay, d1	23.1			23.6			3.5			3.3		3.3
Progression Factor	1.00			1.00			1.00			1.00		1.00
Incremental Delay, d2	0.4			0.9			0.9			0.7		0.7
Delay (s)	23.5			24.5			4.3			4.0		4.0
Level of Service	C			C			A			A		A
Approach Delay (s)	23.5			24.5			4.3			4.0		4.0
Approach LOS	C			C			A			A		A
Intersection Summary												
HCM 2000 Control Delay			6.9				HCM 2000 Level of Service			A		
HCM 2000 Volume to Capacity ratio			0.38									
Actuated Cycle Length (s)			62.8				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			55.5%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

102: S Sykes St & Boucher St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	2	4	4	4	0	8	7	466	9	12	457
Traffic Volume (vph)	2	2	4	4	4	0	8	7	466	9	12	457
Future Volume (vph)	2	2	4	4	4	0	8	7	466	9	12	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.932			0.907			0.997				0.998
Frt		0.988			0.985			0.999				0.999
Flt Protected		0	1750	0	0	1557	0	0	1870	0	0	1859
Satd. Flow (prot)		0.988			0.985			0.999				0.999
Flt Permitted		0	1750	0	0	1557	0	0	1870	0	0	1859
Satd. Flow (perm)		50			50			50				50
Link Speed (k/h)		85.4			372.8			139.8				130.1
Link Distance (m)		6.1			26.8			10.1				9.4
Travel Time (s)		1			23			5				23
Conf. Peds. (#/hr)		0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor		0%	0%	0%	0%	13%	0%	1%	11%	0%	2%	0%
Heavy Vehicles (%)		2	2	4	4	0	9	8	507	10	13	497
Adj. Flow (vph)		0	8	0	0	13	0	0	525	0	0	518
Shared Lane Traffic (%)		No	No	No	No	No	No	No	No	No	No	No
Lane Group Flow (vph)		0	8	0	0	13	0	0	525	0	0	518
Enter Blocked Intersection		Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left
Lane Alignment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)		4.8			4.8			4.8				4.8
Crosswalk Width(m)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane		25	15	25	15	25	15	25	15	25	25	15
Headway Factor		Stop			Stop			Free				Free
Turning Speed (k/h)		Stop			Stop			Free				Free
Sign Control		Stop			Stop			Free				Free
Intersection Summary												
Area Type:		Other										
Control Type: Unsignalized												
Intersection Capacity Utilization		41.6%										
Analysis Period (min)		15										

Stanley Knights, Meaford TIS

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Synchro 10 Report

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HCM Unsignalized Intersection Capacity Analysis

102: S Sykes St & Boucher St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	2	4	4	4	0	8	7	466	9	12	457
Traffic Volume (veh/h)	2	2	4	4	4	0	8	7	466	9	12	457
Future Volume (Veh/h)	2	2	4	4	4	0	8	7	466	9	12	457
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	4	4	4	0	9	8	507	10	13	497
Pedestrians	23				5							1
Lane Width (m)	3.6				3.6							3.6
Walking Speed (m/s)	1.2				1.2							1.2
Percent Blockage	2				0							0
Right turn flare (veh)												
Median type							None					None
Median storage (veh)												
Upstream signal (m)												215
pX platoon unblocked	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
VC, conflicting volume	1088	1088	524	1065	1087	518	528			522		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	1069	1069	480	1045	1068	518	484			522		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.3	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	99	99	99	98	100	98	99			99		
p0 capacity (veh/h)	179	204	554	189	205	534	1022			1050		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	8	13	525	518								
Volume Left	2	4	8	13								
Volume Right	4	9	10	8								
cSH	284	342	1022	1050								
Volume to Capacity	0.03	0.04	0.01	0.01								
Queue Length 95th (m)	0.7	0.9	0.2	0.3								
Control Delay (s)	18.1	15.9	0.2	0.4								
Lane LOS	C	C	A	A								
Approach Delay (s)	18.1	15.9	0.2	0.4								
Approach LOS	C	C										
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			41.6%							A		
Analysis Period (min)			15									

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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Lanes, Volumes, Timings
103: St. Vincent St & Bridge St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	6	48	2	3	0	54	26	6	6	20	1
Traffic Volume (vph)	3	6	48	2	3	0	54	26	6	6	20	1
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.887						0.990					
Ped Bike Factor	0.887						0.990					
Flt	0.998						0.980					
Flt Protected	0	1509	0	0	1862	0	0	1860	0	0	1868	0
Satd. Flow (prot)	0.998				0.980		0.970				0.988	
Flt Permitted	0	1509	0	0	1862	0	0	1860	0	0	1868	0
Satd. Flow (perm)	50				50		50				50	
Link Speed (k/h)	85.2				185.4		142.5				138.1	
Link Distance (m)	6.1				13.3		10.3				11.4	
Travel Time (s)	4				4		2				5	
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	20%	11%	0%	0%	0%	12%	8%	0%	0%	0%	0%
Heavy Vehicles (%)	3	7	52	2	3	0	59	28	7	7	22	1
Adj. Flow (vph)	0	62	0	0	5	0	0	94	0	0	30	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0				0.0		0.0			0.0		
Median Width(m)	0.0				0.0		0.0			0.0		
Link Offset(m)	4.8				4.8		4.8			4.8		
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	15	25	15
Headway Factor	Stop			Stop			Stop			Stop		
Turning Speed (k/h)	Stop			Stop			Stop			Stop		
Sign Control	Stop			Stop			Stop			Stop		

Intersection Summary	Other
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	23.3%
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
103: St. Vincent St & Bridge St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	6	48	2	3	0	54	26	6	6	20	1
Sign Control	Stop			Stop			Stop			Stop		
Traffic Volume (vph)	3	6	48	2	3	0	54	26	6	6	20	1
Future Volume (vph)	3	6	48	2	3	0	54	26	6	6	20	1
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	7	52	2	3	0	59	28	7	7	22	1
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	62	5	94	30								
Volume Left (vph)	3	2	59	7								
Volume Right (vph)	52	0	7	1								
Head (s)	-0.30	0.08	0.25	0.03								
Departure Headway (s)	3.9	4.3	4.3	4.2								
Degree Utilization, x	0.07	0.01	0.11	0.03								
Capacity (veh/h)	894	802	811	843								
Control Delay (s)	7.2	7.3	7.9	7.3								
Approach Delay (s)	7.2	7.3	7.9	7.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay				7.5								
Level of Service				A								
Intersection Capacity Utilization				23.3%								
Analysis Period (min)				15								

Lanes, Volumes, Timings
104: St. Vincent St & Boucher St

Existing (2021) Summer Weekend

SAT Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	7	6	11	9	2	6	67	13	3	71	0
Future Volume (vph)	7	7	6	11	9	2	6	67	13	3	71	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.959			0.989			0.980				
Frt		0.983			0.976			0.996				
Flt Protected		0	1791	0	0	1834	0	0	1746	0	0	1860
Satd. Flow (prot)		0	1791	0	0	1834	0	0	1746	0	0	1860
Flt Permitted		0	1791	0	0	1834	0	0	1746	0	0	1860
Satd. Flow (perm)		0	1791	0	0	1834	0	0	1746	0	0	1860
Link Speed (k/h)			50		50			50			50	
Link Distance (m)		372.8			190.6			146.8			142.5	
Travel Time (s)		26.8		2	13.7			10.6		3	10.3	
Conf. Peds. (#/hr)			2									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	2%	0%
Adj. Flow (vph)	8	8	7	12	10	2	7	73	14	3	77	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	0	0	24	0	0	94	0	0	80	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Link Offset(m)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Crosswalk Width(m)		4.8		4.8	4.8		4.8	4.8		4.8	4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25	15	25	25	15	25	25	15	15
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	18.0%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
104: St. Vincent St & Boucher St

Existing (2021) Summer Weekend

SAT Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	7	6	11	9	2	6	67	13	3	71	0
Future Volume (Veh/h)	7	7	6	11	9	2	6	67	13	3	71	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	8	7	12	10	2	7	73	14	3	77	0
Pedestrians						3		2				
Lane Width (m)						3.6		3.6				
Walking Speed (m/s)						1.2		1.2				
Percent Blockage						0		0				
Right turn flare (veh)												
Median type								None				None
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
VC, conflicting volume	184	187	79	193	180	83	77			90		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	184	187	79	193	180	83	77			90		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	98	99	100	100			100		
dM capacity (veh/h)	766	705	985	751	711	980	1535			1514		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	23	24	94	80								
Volume Left	8	12	7	3								
Volume Right	7	2	14	0								
cSH	796	748	1535	1514								
Volume to Capacity	0.03	0.03	0.00	0.00								
Queue Length 95th (m)			0.1	0.0								
Control Delay (s)	9.7	10.0	0.6	0.3								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.7	10.0	0.6	0.3								
Approach LOS	A	A										
Intersection Summary												
Average Delay			2.4									
Intersection Capacity Utilization			18.0%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
105: Fuller St & Bridge St

Existing (2021) Summer Weekend

SAT Peak Hour

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	1	
Traffic Volume (vph)	8	10	3	5	10	2
Future Volume (vph)	8	10	3	5	10	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Ft	0.926			0.979		
Flt Protected	0.978			0.982		
Satd. Flow (prot)	1721	0	0	1866	1860	0
Flt Permitted	0.978			0.982		
Satd. Flow (perm)	1721	0	0	1866	1860	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	185.4			141.8	109.5	
Travel Time (s)	13.3			10.2	7.9	
Confl. Peds. (#/hr)	3		12			12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	9	11	3	5	11	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	8	13	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25		15	
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization	16.6%					
Analysis Period (min)	15					
ICU Level of Service A						

HCM Unsignalized Intersection Capacity Analysis
105: Fuller St & Bridge St

Existing (2021) Summer Weekend

SAT Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	1	
Traffic Volume (veh/h)	8	10	3	5	10	2
Future Volume (Veh/h)	8	10	3	5	10	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	11	3	5	11	2
Pedestrians	12				3	
Lane Width (m)	3.6				3.6	
Walking Speed (m/s)	1.2				1.2	
Percent Blockage	1				0	
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
VC, conflicting volume	38	24	25			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	38	24	25			
IC, single (s)	6.4	6.2	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	100			
dM capacity (veh/h)	965	1048	1587			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	20	8	13			
Volume Left	9	3	0			
Volume Right	11	0	2			
cSH	1009	1587	1700			
Volume to Capacity	0.02	0.00	0.01			
Queue Length 95th (m)	0.5	0.0	0.0			
Control Delay (s)	8.6	2.7	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.6	2.7	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			16.6%			A
Analysis Period (min)			15			

Lanes, Volumes, Timings
106: Boucher St & Fuller St

Existing (2021) Summer Weekend
SAT Peak Hour

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4	4	4	4
Traffic Volume (vph)	5	3	8	3	8	13
Future Volume (vph)	5	3	8	3	8	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.966		0.918	
Flt Protected		0.970			0.981	
Satd. Flow (prot)	0	1843	1835	0	1711	0
Flt Permitted		0.970			0.981	
Satd. Flow (perm)	0	1843	1835	0	1711	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		190.6	229.8		141.8	
Travel Time (s)		13.7	16.5		10.2	
Confl. Peds. (#/hr)	2			2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	3	9	3	9	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	8	12	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free	Free	Stop	Stop
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 15.5%						
Analysis Period (min) 15						
ICU Level of Service A						

HCM Unsignalized Intersection Capacity Analysis
106: Boucher St & Fuller St

Existing (2021) Summer Weekend
SAT Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4		4	
Traffic Volume (veh/h)	5	3	8	3	8	13
Future Volume (Veh/h)	5	3	8	3	8	13
Sign Control		Free	Free		Stop	Stop
Grade		0%	0%		0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	3	9	3	9	14
Pedestrians		3			2	
Lane Width (m)		3.6			3.6	
Walking Speed (m/s)		1.2			1.2	
Percent Blockage		0			0	
Right turn flare (veh)						0
Median type		None		None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	14				26	16
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
vCu, unblocked vol	14				26	16
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
dM capacity (veh/h)	1615				990	1065
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	8	12	23			
Volume Left	5	0	9			
Volume Right	0	3	14			
cSH	1615	1700	1035			
Volume to Capacity	0.00	0.01	0.02			
Queue Length 95th (m)	0.1	0.0	0.5			
Control Delay (s)	4.5	0.0	8.6			
Lane LOS	A	A	A			
Approach Delay (s)	4.5	0.0	8.6			
Approach LOS		A				
Intersection Summary						
Average Delay	5.4					
Intersection Capacity Utilization	15.5%					
Analysis Period (min)	15					
	ICU Level of Service A					

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	39	43	6	4	46	88	3	8	1	77	3	24
Traffic Volume (vph)	39	43	6	4	46	88	3	8	1	77	3	24
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.990				0.914		0.990					0.969
Frt	0.979				0.999		0.989					0.964
Flt Protected	0	1689	0	0	1592	0	0	1860	0	0	1711	0
Satd. Flow (prot)	0.979				0.999		0.989					0.964
Flt Permitted	0	1689	0	0	1592	0	0	1860	0	0	1711	0
Satd. Flow (perm)	50				50		50					50
Link Speed (k/h)	173.7				86.8		54.3					122.0
Link Distance (m)	12.5				6.2		3.9					8.8
Travel Time (s)	12				15		8					8
Confl. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	5%	14%	0%	0%	14%	0%	0%	0%	0%	5%	0%	0%
Heavy Vehicles (%)	42	47	7	4	50	96	3	9	1	84	3	26
Adj. Flow (vph)	0	96	0	0	150	0	0	13	0	0	113	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	4.8				4.8		4.8					4.8
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	15	25	15
Headway Factor	Free				Free		Stop			Stop		Stop
Turning Speed (k/h)												
Sign Control												
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	41.4%											
Analysis Period (min)	15											
ICU Level of Service A												

HCM Unsignalized Intersection Capacity Analysis

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	39	43	6	4	46	88	3	8	1	77	3	24
Traffic Volume (veh/h)	39	43	6	4	46	88	3	8	1	77	3	24
Future Volume (Veh/h)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Sign Control	Free				Free		Stop			Stop		Stop
Grade	0%				0%		0%			0%		0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	47	7	4	50	96	3	9	1	84	3	26
Pedestrians	8				1		15					12
Lane Width (m)	3.6				3.6		3.6					3.6
Walking Speed (m/s)	1.2				1.2		1.2					1.2
Percent Blockage	1				0		1					1
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (m)	174											
pX, platoon unblocked												
VC, conflicting volume	158			69			291	316	66	259	271	118
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	158			69			291	316	66	259	271	118
IC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)												
IF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			100	98	100	87	100	97
dM capacity (veh/h)	1389			1526			606	571	989	644	604	924
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	96	150	13	113								
Volume Left	42	4	3	84								
Volume Right	7	96	1	26								
cSH	1389	1526	598	691								
Volume to Capacity	0.03	0.00	0.02	0.16								
Queue Length 95th (m)	0.7	0.1	0.5	4.7								
Control Delay (s)	3.5	0.2	11.2	11.2								
Lane LOS	A	A	B	B								
Approach Delay (s)	3.5	0.2	11.2	11.2								
Approach LOS	B	B										
Intersection Summary												
Average Delay	4.8											
Intersection Capacity Utilization	41.4%											
ICU Level of Service	A											
Analysis Period (min)	15											

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Existing (2021) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	55	55	11	1	53	4	13	9	2	0	1	72
Traffic Volume (vph)	55	55	11	1	53	4	13	9	2	0	1	72
Future Volume (vph)	55	55	11	1	53	4	13	9	2	0	1	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.988				0.991			0.990				0.887
Frt	0.978				0.999			0.974				0.867
Flt Protected	0	1664	0	0	1783	0	0	1832	0	0	1353	0
Satd. Flow (prot)	0.978				0.999			0.974				0.867
Flt Permitted	0	1664	0	0	1783	0	0	1832	0	0	1353	0
Satd. Flow (perm)	50				50			50				50
Link Speed (k/h)	86.8				65.5			110.7				89.9
Link Distance (m)	6.2				4.7			8.0				6.5
Travel Time (s)	8				8			31				31
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	17%	4%	9%	0%	6%	0%	0%	0%	0%	0%	0%	22%
Heavy Vehicles (%)	60	60	12	1	58	4	14	10	2	0	1	78
Adj. Flow (vph)	0	132	0	0	63	0	0	26	0	0	79	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8				4.8			4.8				4.8
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	15	25	15
Headway Factor	Free				Free			Stop				Stop
Turning Speed (k/h)	Free				Free			Stop				Stop
Sign Control	Free				Free			Stop				Stop

Intersection Summary	Other
Area Type:	Other
Control Type: Unsignalized	ICU Level of Service A
Intersection Capacity Utilization 31.2%	
Analysis Period (min) 15	

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Existing (2021) Summer Weekend

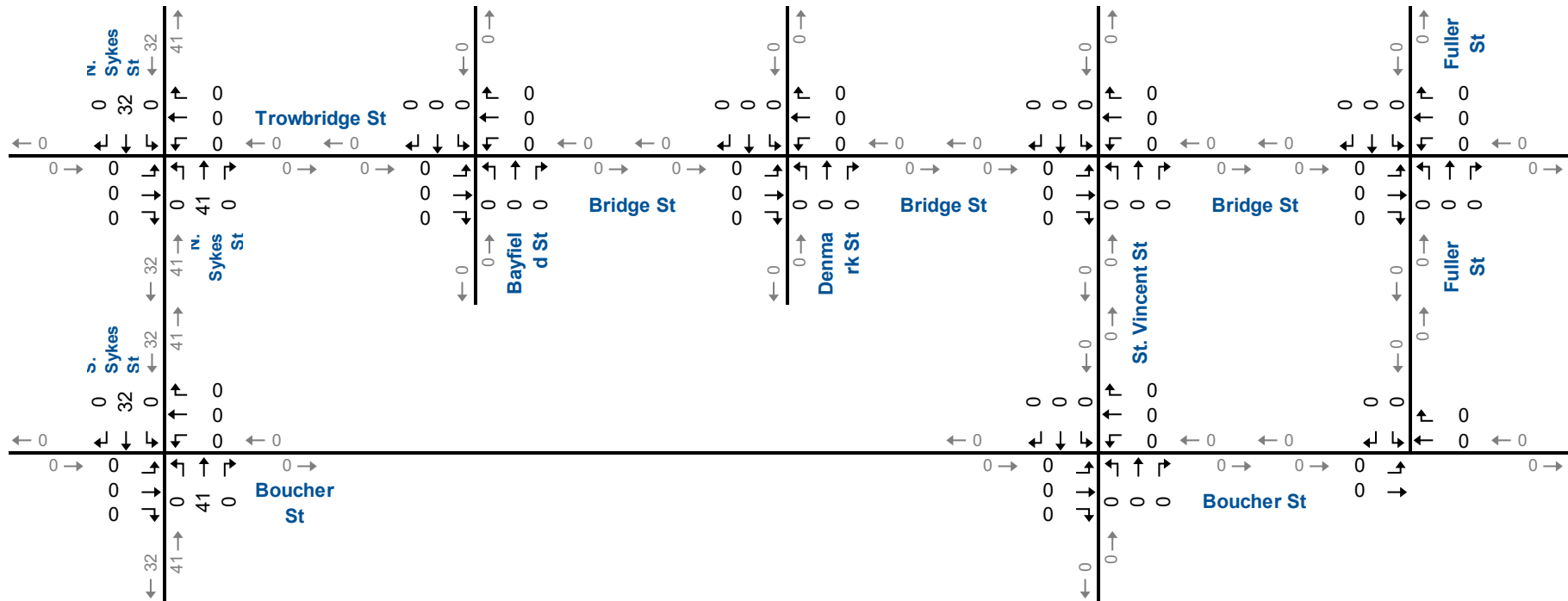
SAT Peak Hour

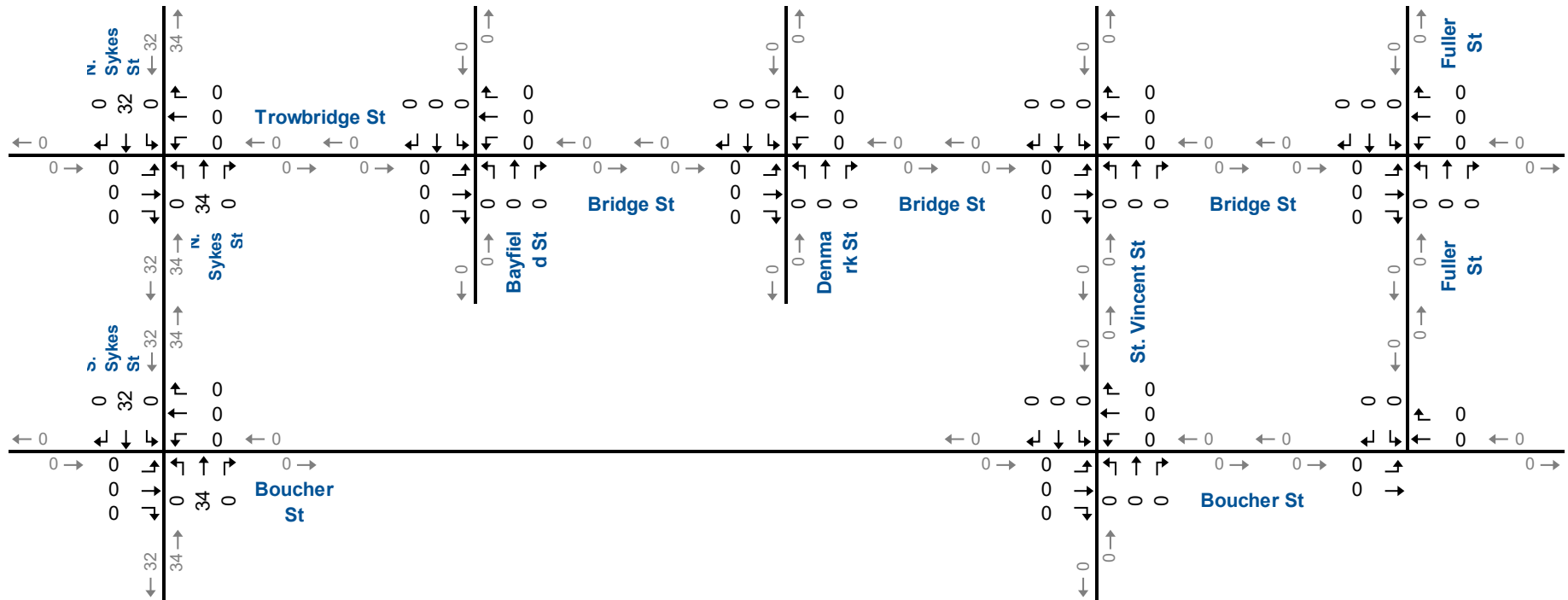
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	55	55	11	1	53	4	13	9	2	0	1	72
Traffic Volume (veh/h)	55	55	11	1	53	4	13	9	2	0	1	72
Future Volume (Veh/h)	55	55	11	1	53	4	13	9	2	0	1	72
Sign Control	Free				Free			Stop				Stop
Grade	0%				0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	60	12	1	58	4	14	10	2	0	1	78
Pedestrians	31				1			8				31
Lane Width (m)	3.6				3.6			3.6				3.6
Walking Speed (m/s)	1.2				1.2			1.2				1.2
Percent Blockage	3				0			1				1
Right turn flare (veh)	None				None			None				None
Median type	None				None			None				None
Median storage (veh)	261				261			261				261
Upstream signal (m)	62				80			366				256
pX, platoon unblocked	62				80			366				256
VC, conflicting volume	62				80			366				256
VC1, stage 1 conf vol	62				80			366				256
VC2, stage 2 conf vol	4.3				4.1			7.1				6.4
IC, single (s)	2.4				2.2			3.5				4.0
IC, 2 stage (s)	96				100			97				100
p0 queue free %	1450				1520			505				615
dM capacity (veh/h)	132				79			262				91
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	132	63	26	79								
Volume Left	60	1	14	0								
Volume Right	12	4	2	78								
cSH	1450	1520	566	886								
Volume to Capacity	0.04	0.00	0.05	0.09								
Queue Length 95th (m)	1.0	0.0	1.2	2.3								
Control Delay (s)	3.6	0.1	11.7	9.5								
Lane LOS	A	A	B	A								
Approach Delay (s)	3.6	0.1	11.7	9.5								
Approach LOS	B	A	B	A								
Intersection Summary												
Average Delay			5.1									
Intersection Capacity Utilization			31.2%									
Analysis Period (min)			15									

Appendix D

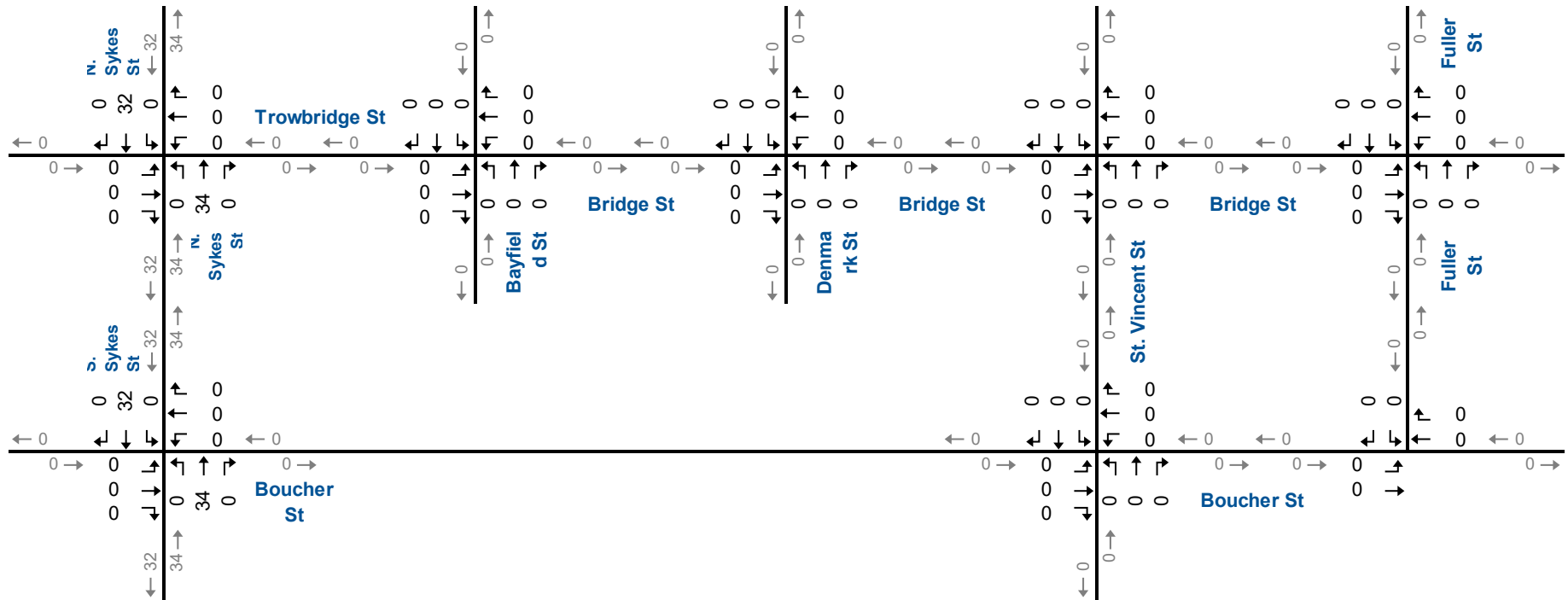
Background Development Traffic Volumes



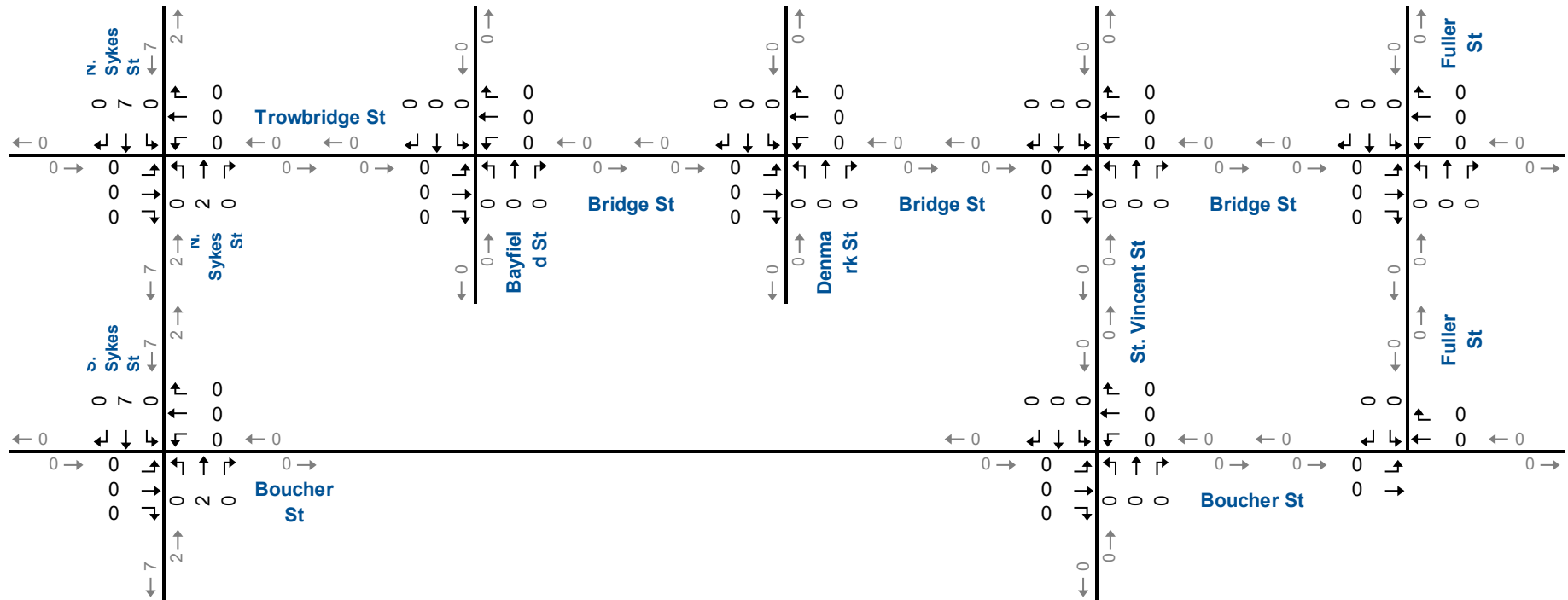




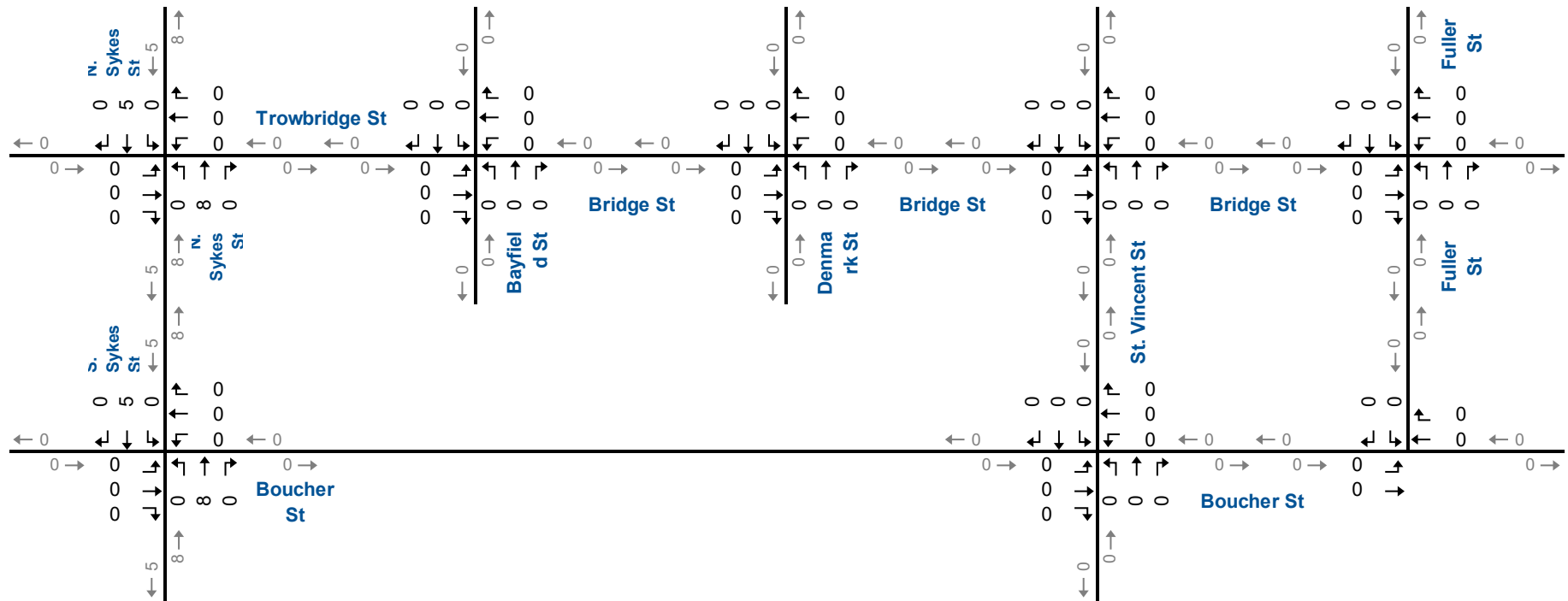
25-39 Nelson Street & 35-47 Sykes Street Traffic Volumes PM Peak Hour

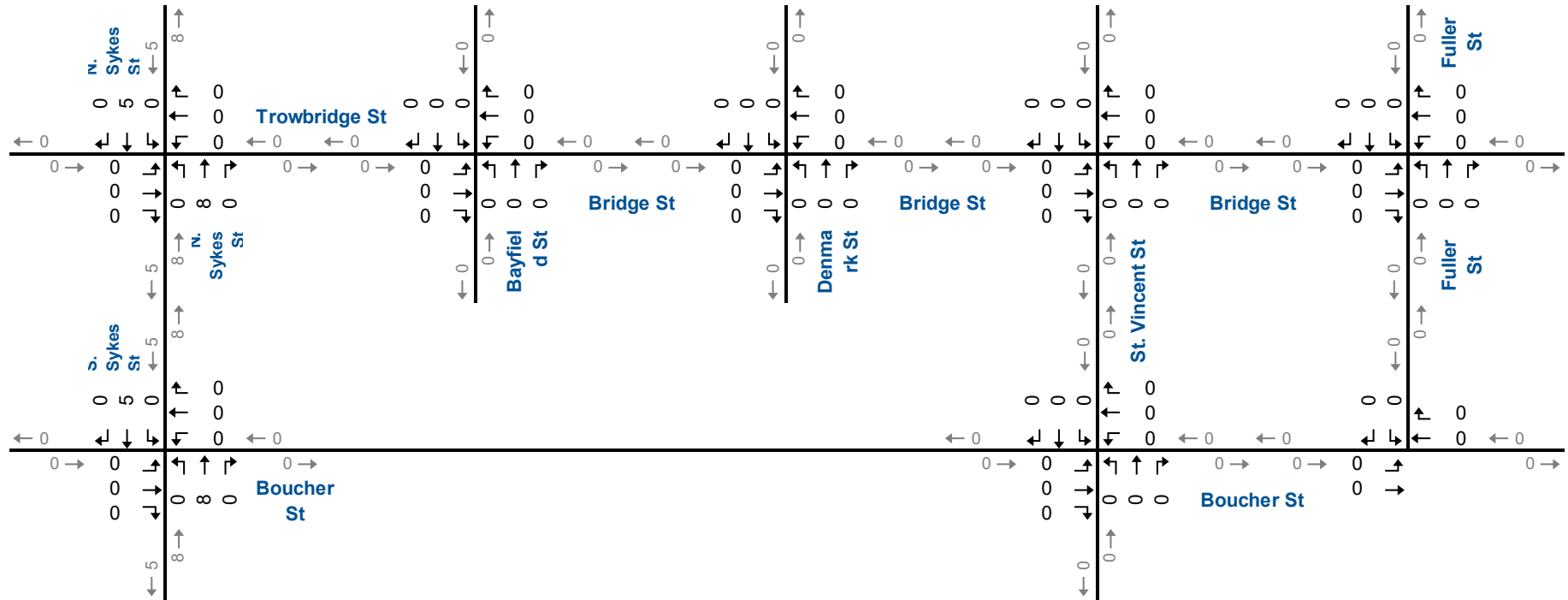


25-39 Nelson Street & 35-47 Sykes Street Traffic Volumes Saturday Peak Hour

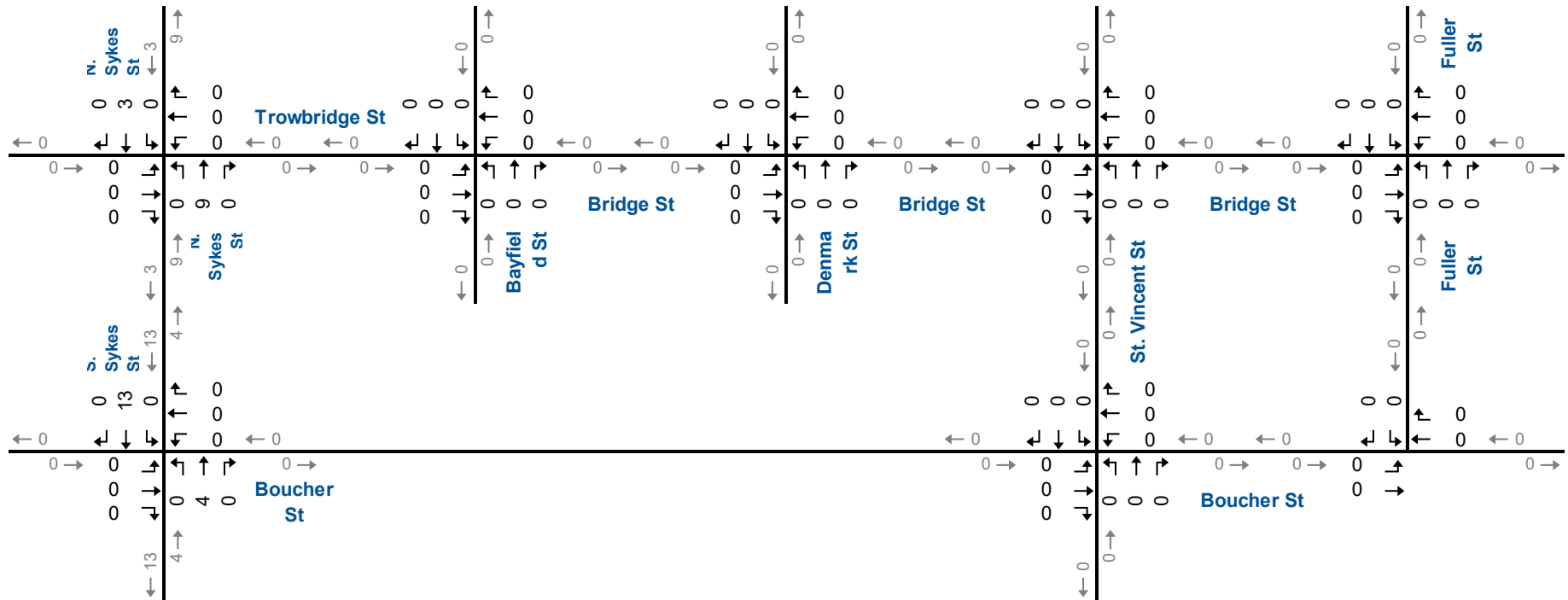


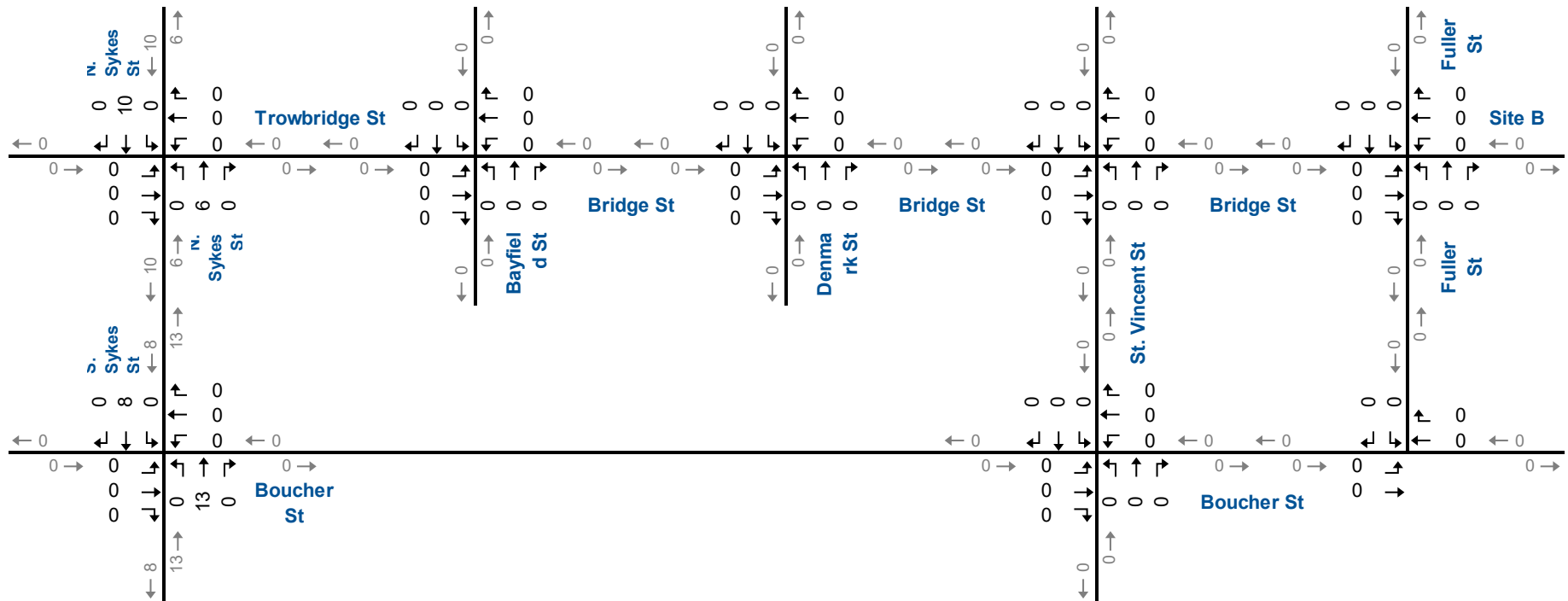
74 Bayfield Street Traffic Volumes AM Peak Hour



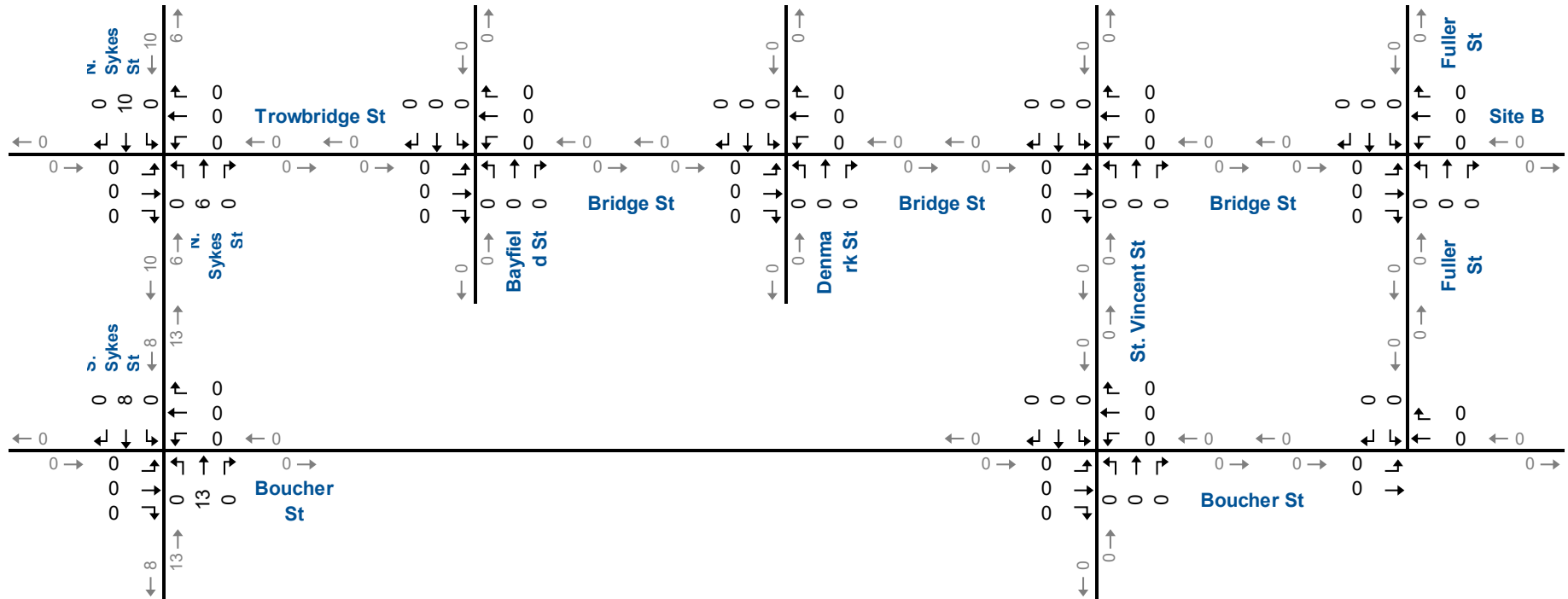


74 Bayfield Street Traffic Volumes Saturday Peak Hour

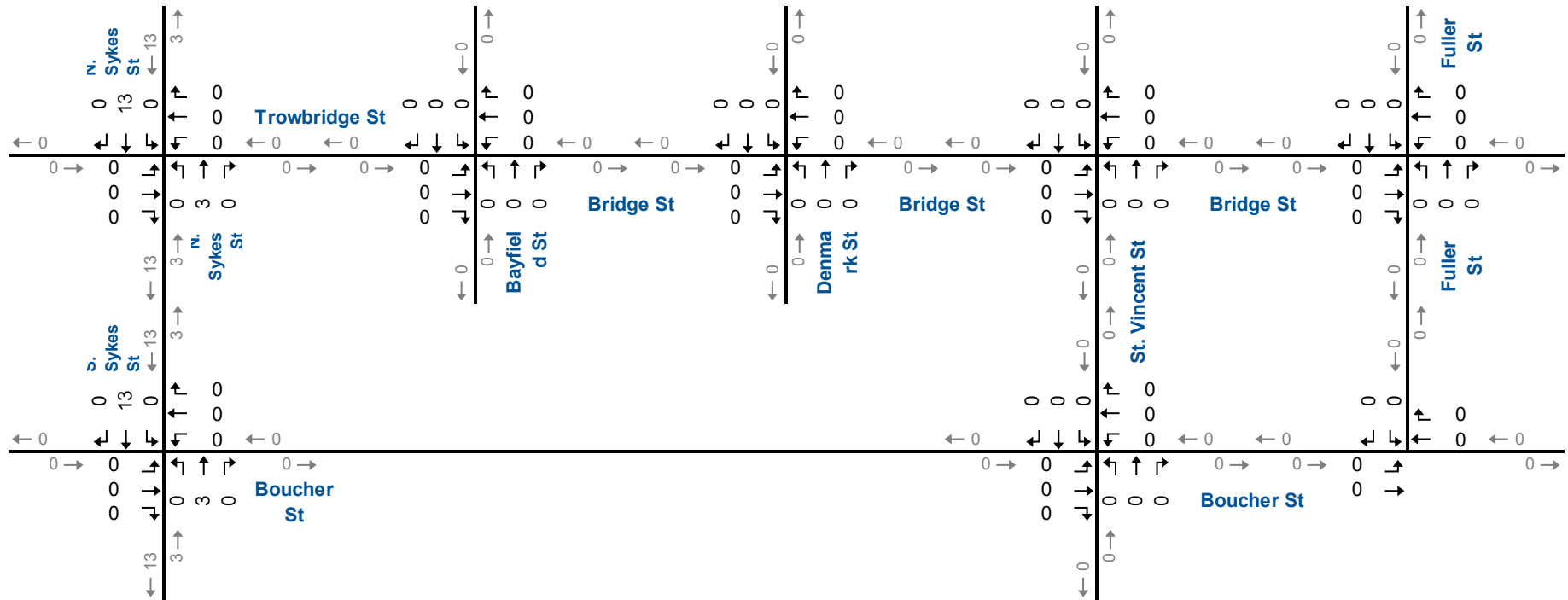




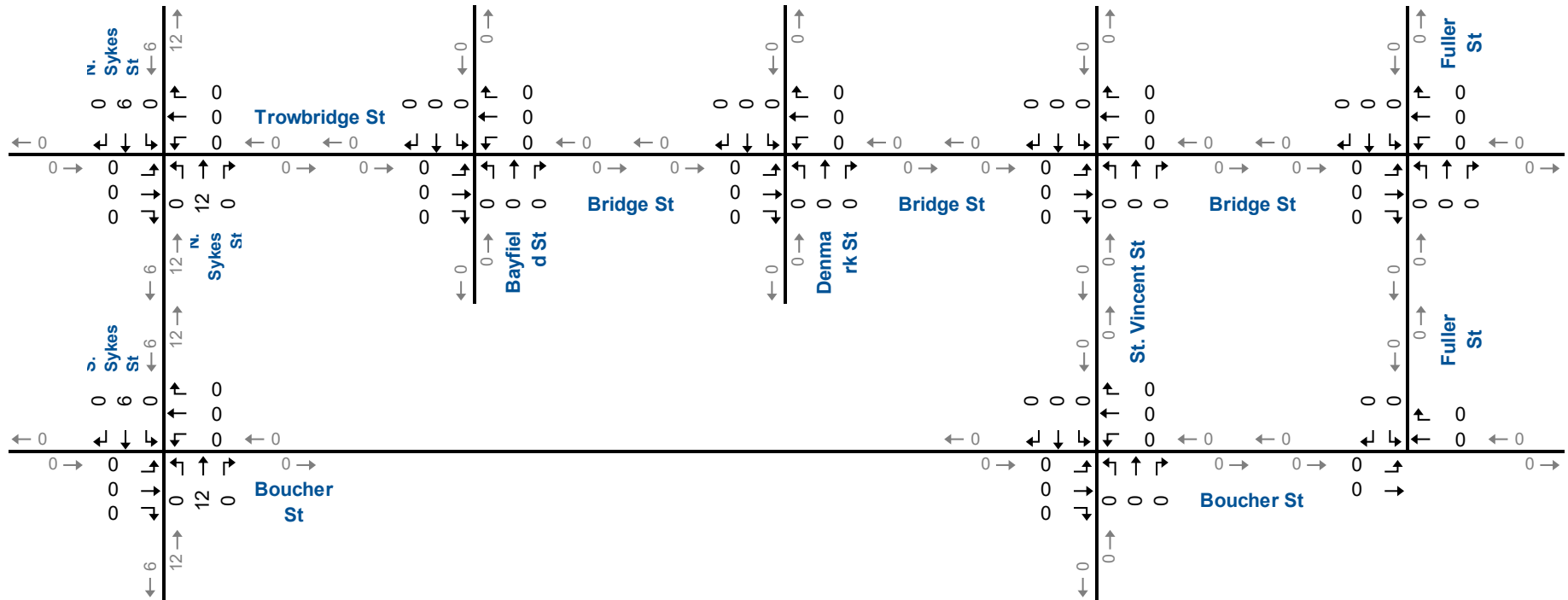
1 Legion Road Traffic Volumes PM Peak Hour



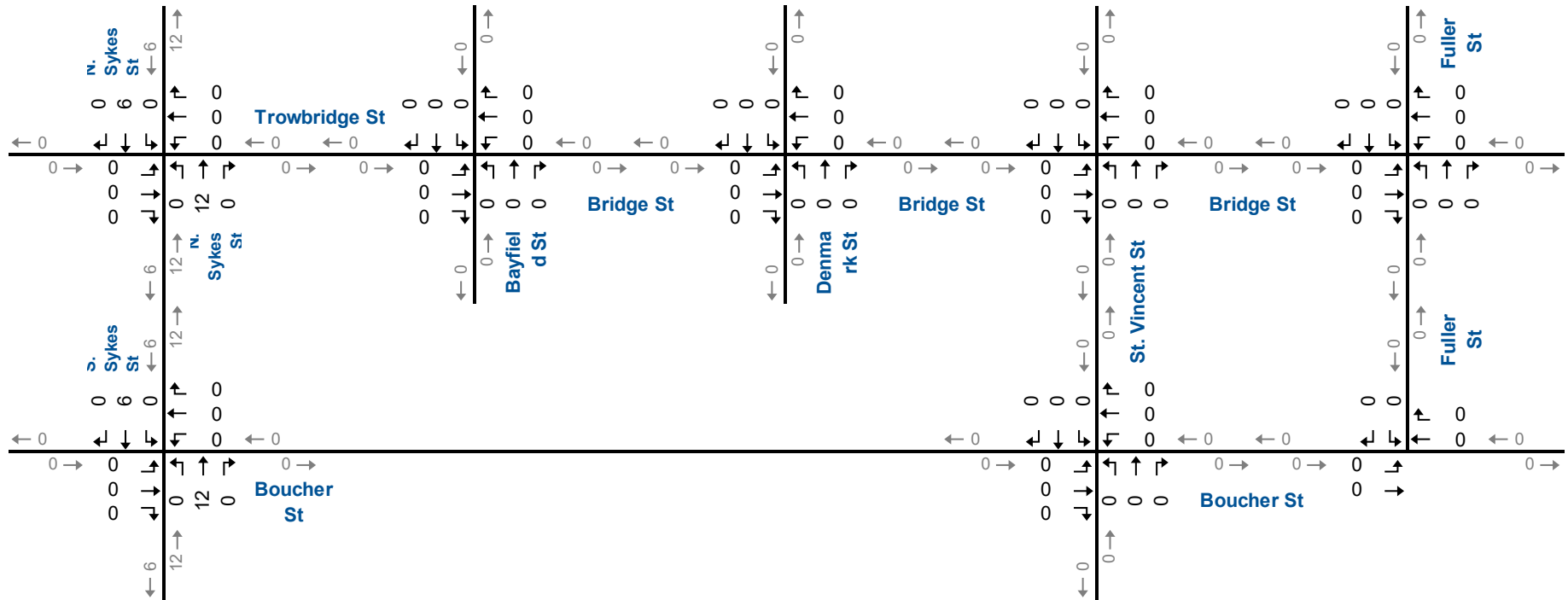
1 Legion Road Traffic Volumes Saturday Peak Hour



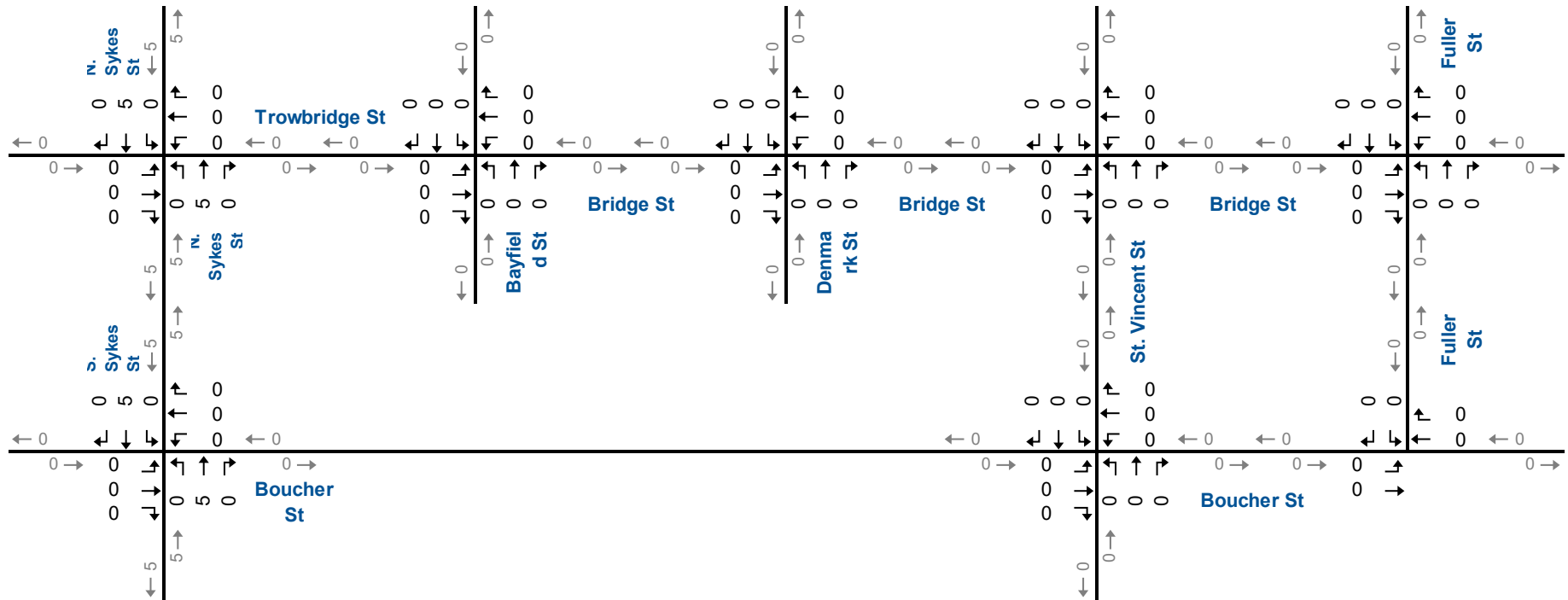
Collingwood Street Traffic Volumes AM Peak Hour



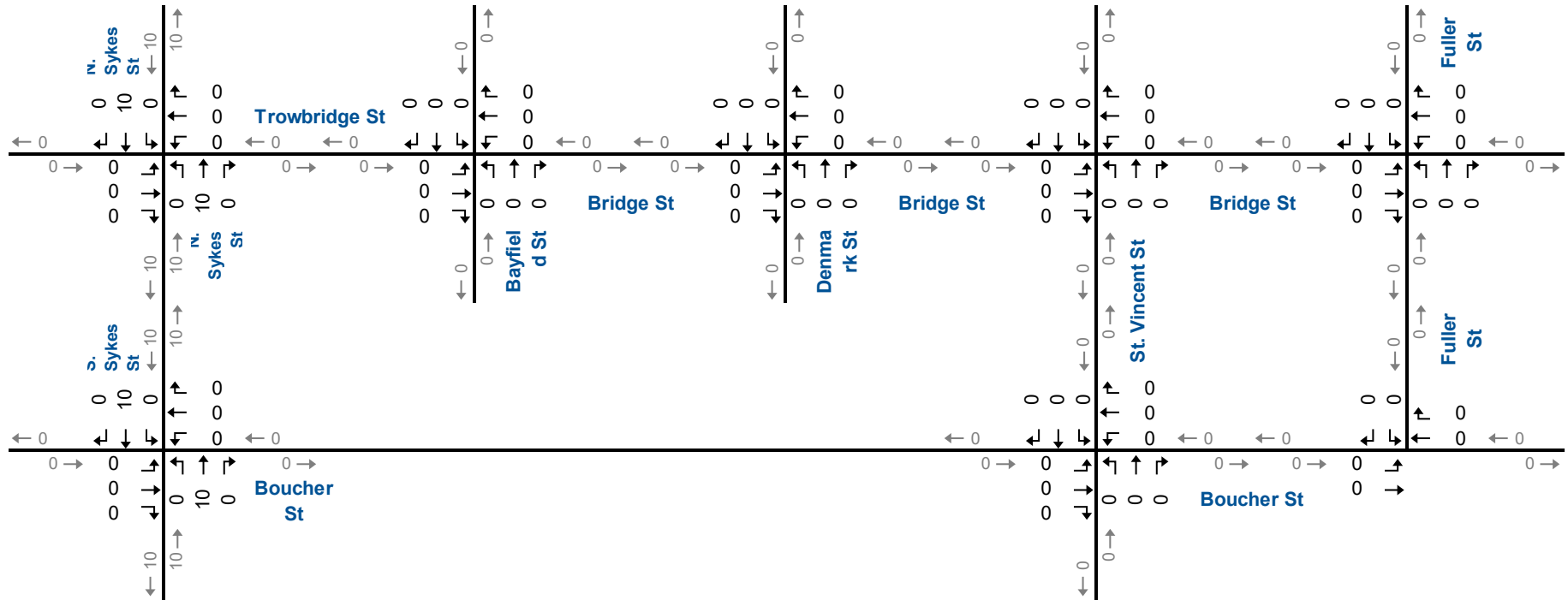
Collingwood Street Traffic Volumes PM Peak Hour

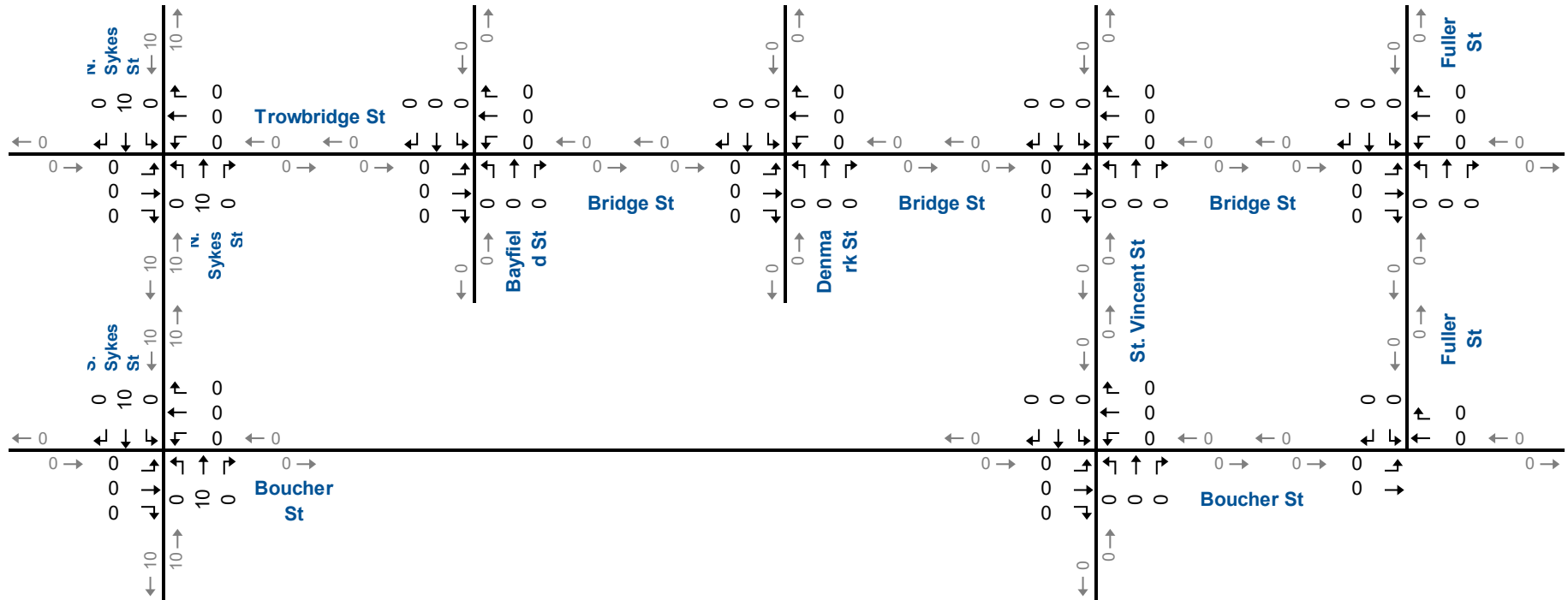


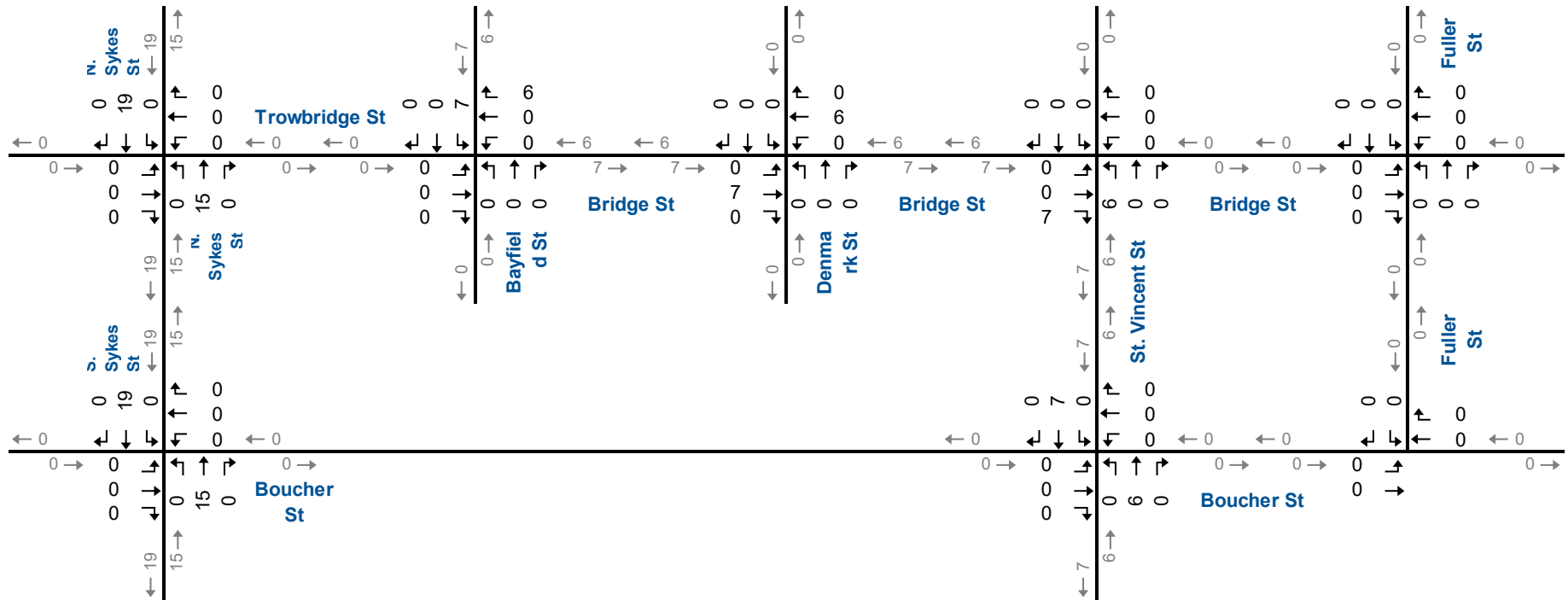
Collingwood Street Traffic Volumes Saturday Peak Hour

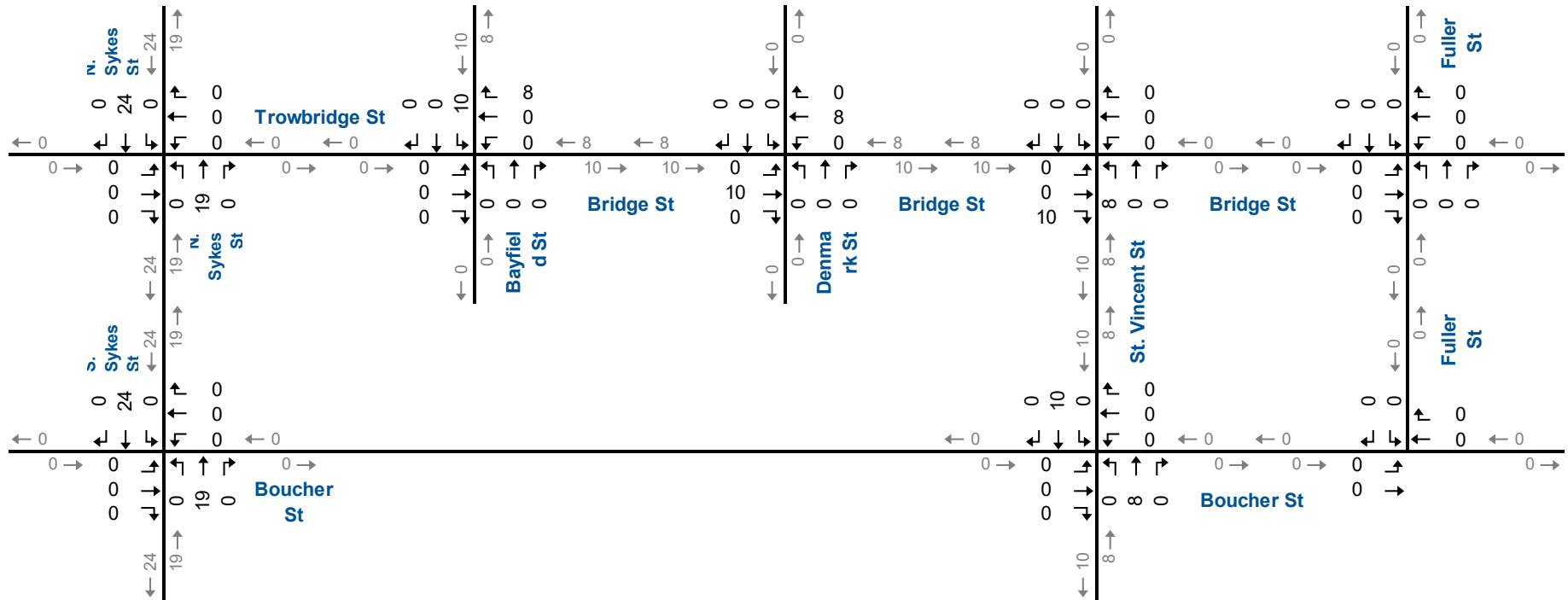


186 Cook Street Traffic Volumes AM Peak Hour

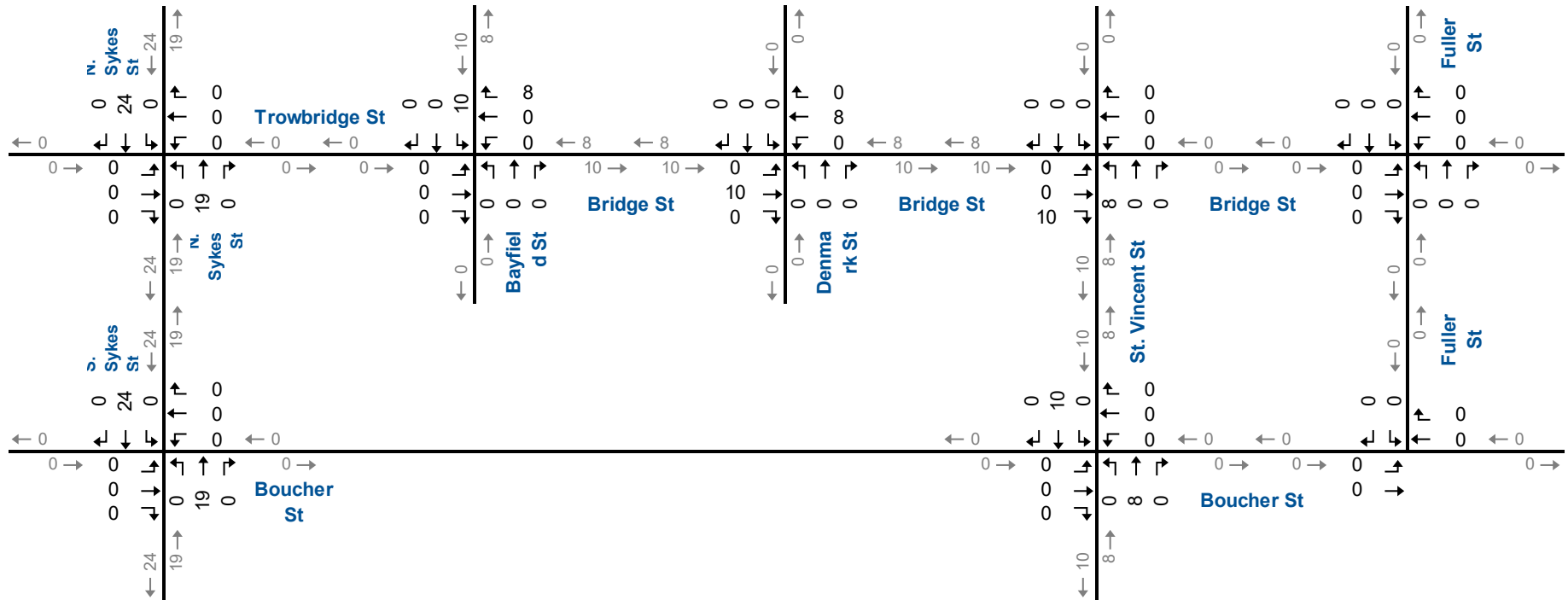








337 Sykes Street Traffic Volumes PM Peak Hour



337 Sykes Street Traffic Volumes Saturday Peak Hour

Appendix E

2028 Background Operation Reports



Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	8	9	24	16	16	11	20	371	25	8	398	9
Traffic Volume (vph)	8	9	24	16	16	11	20	371	25	8	398	9
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.98	0.92	0.92	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.922	0.965	0.965	0.982	0.982	0.982	0.992	0.992	0.992	0.997	0.997	0.997
Flt Protected	0	1613	0	0	1683	0	0	1698	0	0	1721	0
Satd. Flow (prot)	0	918	0	0	859	0	0	973	0	0	992	0
Flt Permitted	0	1491	0	0	1469	0	0	1655	0	0	1709	0
Satd. Flow (perm)	0	1491	0	0	1469	0	0	1655	0	0	1709	0
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	26	50	12	50	12	50	9	50	12	50	9	50
Link Speed (km/h)	188.1	173.7	188.1	173.7	188.1	173.7	188.1	173.7	188.1	173.7	188.1	173.7
Link Distance (m)	13.5	12.5	12.5	11	6	6.1	1	19.0	1	1	19.0	6
Travel Time (s)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Conf. Peds. (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0	0	0	0	0	0	0	0	0	0	0	0
Adj. Flow (vph)	9	10	26	17	17	12	22	403	27	9	433	10
Shared Lane Traffic (%)	0	45	0	0	46	0	0	452	0	0	452	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	15	25	15	15	25	15	25	15	25	15
Turning Speed (km/h)	1	2	1	2	1	2	1	2	1	2	1	2
Number of Detectors	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Detector Template	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0
Leading Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6
Detector 2 Size(m)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4	4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	4	4	4	2	2	2	2	2	2
Switch Phase	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	42.0	42.0	42.0	42.0	42.0	42.0
Total Split (%)	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%
Maximum Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	36.0	36.0	36.0	36.0	36.0	36.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)	None	None	None	None	None	None	Max	Max	Max	Max	Max	Max
Recall Mode	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Walk Time (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Flash Dont Walk (s)	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Calls (#/hr)	10.2	10.2	10.2	10.2	10.2	10.2	48.8	48.8	48.8	48.8	48.8	48.8
Act Effct Green (s)	0.17	0.17	0.17	0.17	0.17	0.17	0.82	0.82	0.82	0.82	0.82	0.82
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16	0.16	0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	14.0	14.0	14.0	14.0	14.0	14.0	3.8	3.8	3.8	3.8	3.8	3.8
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	14.0	14.0	14.0	14.0	14.0	14.0	3.8	3.8	3.8	3.8	3.8	3.8
Total Delay	B	B	B	B	B	B	A	A	A	A	A	A
LOS	B	B	B	B	B	B	A	A	A	A	A	A
Approach Delay	14.0	14.0	14.0	14.0	14.0	14.0	3.8	3.8	3.8	3.8	3.8	3.8
Approach LOS	B	B	B	B	B	B	A	A	A	A	A	A
Intersection Summary	Other											
Area Type:	Other											
Cycle Length:	64											
Actuated Cycle Length:	59.6											
Natural Cycle:	60											
Control Type:	Semi Act-Uncoordinated											
Maximum v/c Ratio:	0.33											
Intersection Signal Delay:	4.9											
Intersection Capacity Utilization:	48.1%											
Analysis Period (min):	15											



Queues

101: N Sykes St & Trowbridge St

Background (2028)

Weekday
AM Peak Hour

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	45	46	452	452
v/c Ratio	0.16	0.18	0.33	0.32
Control Delay	14.0	18.6	3.8	3.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.0	18.6	3.8	3.7
Queue Length 50th (m)	2.2	4.1	16.2	16.3
Queue Length 95th (m)	8.9	10.6	30.6	30.5
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	470	454	1358	1401
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	0.10	0.10	0.33	0.32
Intersection Summary				

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HCM Signalized Intersection Capacity Analysis

Background (2028)

Weekday
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔		↔		↔
Traffic Volume (vph)	8	9	24	16	16	11	20	371	25	8	398	9
Future Volume (vph)	8	9	24	16	16	11	20	371	25	8	398	9
Ideal Flow (vphpb)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frb. ped/bikes	0.98			0.99			1.00				1.00	
Frb. ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.92			0.96			0.99				1.00	
Flt Protected	0.99			0.98			1.00				1.00	
Satd. Flow (prot)	1608			1679			1697				1721	
Flt Permitted	0.92			0.86			0.97				0.99	
Satd. Flow (perm)	1492			1469			1656				1709	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	10	26	17	17	12	22	403	27	9	433	10
RTOR Reduction (vph)	0	23	0	0	11	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	22	0	0	35	0	0	450	0	0	451	0
Confl. Peds. (#/hr)	11	5	5	5	11	6	11	1	1	1	6	6
Heavy Vehicles (%)	0%	0%	10%	8%	8%	0%	6%	11%	9%	0%	10%	13%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4		4		4		2		2		2	
Permitted Phases		4		4		4		2		2		2
Actuated Green, G (s)		4.9		4.9		4.9		45.1		45.1		45.1
Effective Green, g (s)		6.9		6.9		6.9		47.1		47.1		47.1
Actuated g/C Ratio		0.11		0.11		0.11		0.76		0.76		0.76
Clearance Time (s)		6.0		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
Lane Grp Cap (vph)		166		163		163		1258		1298		1298
v/s Ratio Prot												
v/s Ratio Perm		0.01		c0.02		c0.27					0.26	
v/c Ratio		0.13		0.22		0.36					0.35	
Uniform Delay, d1		24.8		25.1		2.5		2.5		2.4		2.4
Progression Factor		1.00		1.00		1.00		1.00		1.00		1.00
Incremental Delay, d2		0.4		0.7		0.8		0.7		0.7		0.7
Delay (s)		25.2		25.8		3.3		3.3		3.2		3.2
Level of Service		C		C		A		A		A		A
Approach Delay (s)		25.2		25.8		3.3		3.3		3.2		3.2
Approach LOS		C		C		A		A		A		A
Intersection Summary												
HCM 2000 Control Delay		5.2		HCM 2000 Level of Service								
HCM 2000 Volume to Capacity ratio		0.34										
Actuated Cycle Length (s)		62.0		Sum of lost time (s)								
Intersection Capacity Utilization		48.1%		ICU Level of Service								
Analysis Period (min)		15										
c Critical Lane Group												

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Lanes, Volumes, Timings
102: S Sykes St & Boucher St

Background (2028)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	5	2	0	11	1	415	9	9	469	1
Traffic Volume (vph)	1	1	5	2	0	11	1	415	9	9	469	1
Future Volume (vph)	1	1	5	2	0	11	1	415	9	9	469	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.904				0.884			0.997				
Flt Protected	0.993				0.993							
Satd. Flow (prot)	0	1706	0	0	1668	0	0	1741	0	0	1760	0
Flt Permitted	0.993				0.993							
Satd. Flow (perm)	0	1706	0	0	1668	0	0	1741	0	0	1760	0
Link Speed (k/h)	50				50			50			50	
Link Distance (m)	85.4				372.8			139.8			130.1	
Travel Time (s)	6.1				26.8			10.1			9.4	
Conf. Peds. (#/hr)	3		1	1		3	8					8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	8%	0%
Adj. Flow (vph)	1	1	5	2	0	12	1	451	10	10	510	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	0	14	0	0	462	0	0	521	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8				4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control	Stop		Stop		Stop		Free		Free		Free	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	42.4%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
102: S Sykes St & Boucher St

Background (2028)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	5	2	0	11	1	415	9	9	469	1
Traffic Volume (veh/h)	1	1	5	2	0	11	1	415	9	9	469	1
Future Volume (Veh/h)	1	1	5	2	0	11	1	415	9	9	469	1
Sign Control	Stop		Stop		Stop		Free		Free		Free	
Grade	0%		0%		0%		0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	5	2	0	12	1	451	10	10	510	1
Pedestrians	8						1				3	
Lane Width (m)	3.6						3.6				3.6	
Walking Speed (m/s)	1.2						1.2				1.2	
Percent Blockage	1						0				0	
Right turn flare (veh)												
Median type	None											
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked	0.98	0.98	0.98	0.98	0.98	0.98	0.98				215	
VC, conflicting volume	1012	1002	520	995	997	459	519			461		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	1000	990	496	983	985	459	496			461		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
p0 queue free %	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	99	100	98	100			99		
all capacity (veh/h)	210	239	560	219	240	605	1046			1111		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	7	14	462	521								
Volume Left	1	2	1	10								
Volume Right	5	12	10	1								
cSH	391	483	1046	1111								
Volume to Capacity	0.02	0.03	0.00	0.01								
Queue Length 95th (m)	0.4	0.7	0.0	0.2								
Control Delay (s)	14.4	12.7	0.0	0.3								
Lane LOS	B	B	A	A								
Approach Delay (s)	14.4	12.7	0.0	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay	0.4											
Intersection Capacity Utilization	42.4%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
103: St. Vincent St & Bridge St

Background (2028) AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	2	55	3	5	0	53	5	1	0	0	10
Traffic Volume (vph)	0	2	55	3	5	0	53	5	1	0	0	10
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.869						0.998					0.865
Ped Bike Factor												
Flt Protected	0	1575	0	0	1866	0	0	1676	0	0	1644	0
Satd. Flow (prot)												
Flt Permitted	0	1575	0	0	1866	0	0	1676	0	0	1644	0
Satd. Flow (perm)												
Link Speed (k/h)	50						50					50
Link Distance (m)	85.2						185.4					158.1
Travel Time (s)	6.1						13.3					11.4
Conf. Peds. (#/hr)	2						2					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	7%	25%	0%	0%	0%	0%
Adj. Flow (vph)	0	2	60	3	5	0	58	5	1	0	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	62	0	0	8	0	0	64	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0						0.0					0.0
Link Offset(m)	0.0						0.0					0.0
Crosswalk Width(m)	4.8						4.8					4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25						15	25	15	25	25	15
Sign Control	Stop						Stop					Stop
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	21.3%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
103: St. Vincent St & Bridge St

Background (2028) AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	2	55	3	5	0	53	5	1	0	0	10
Sign Control	Stop			Stop			Stop			Stop		
Traffic Volume (vph)	0	2	55	3	5	0	53	5	1	0	0	10
Future Volume (vph)	0	2	55	3	5	0	53	5	1	0	0	10
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2	60	3	5	0	58	5	1	0	0	11
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	62	8	64	11								
Volume Left (vph)	0	3	58	0								
Volume Right (vph)	60	0	1	11								
Head (s)	-0.50	0.08	0.31	-0.60								
Departure Headway (s)	3.6	4.2	4.4	3.5								
Degree Utilization, x	0.06	0.01	0.08	0.01								
Capacity (veh/h)	980	836	803	999								
Control Delay (s)	6.8	7.2	7.7	6.5								
Approach Delay (s)	6.8	7.2	7.7	6.5								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay	7.2											
Level of Service	A											
Intersection Capacity Utilization	21.3%											
Analysis Period (min)	15											

Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Background (2028)

Weekday AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	5	10	3	7	2	3	55	6	0	58	1
Traffic Volume (vph)	1	5	10	3	7	2	3	55	6	0	58	1
Future Volume (vph)	1	5	10	3	7	2	3	55	6	0	58	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.913			0.979			0.986			0.998	
Flt Protected		0.997			0.989			0.998				
Satd. Flow (prot)	0	1729	0	0	1840	0	0	1727	0	0	1824	0
Flt Permitted		0.997			0.989			0.998				
Satd. Flow (perm)	0	1729	0	0	1840	0	0	1727	0	0	1824	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		372.8			190.6			146.8			142.5	
Travel Time (s)		26.8			13.7			10.6			10.3	
Confl. Peds. (#/hr)			2	2			1					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	33%	8%	0%	0%	4%	0%
Adj. Flow (vph)	1	5	11	3	8	2	3	60	7	0	63	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	13	0	0	70	0	0	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	15	25	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization	16.4%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St

Background (2028)

Weekday AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	5	10	3	7	2	3	55	6	0	58	1
Traffic Volume (veh/h)	1	5	10	3	7	2	3	55	6	0	58	1
Future Volume (Veh/h)	1	5	10	3	7	2	3	55	6	0	58	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	5	11	3	8	2	3	60	7	0	63	1
Pedestrians		1			1			2				
Lane Width (m)		3.6			3.6			3.6				
Walking Speed (m/s)		1.2			1.2			1.2				
Percent Blockage		0			0			0				
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	140	138	66	148	134	64	65					67
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VC, unblocked vol	140	138	66	148	134	64	65					67
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.4					4.1
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.5					2.2
p0 queue free %	100	99	99	100	99	100	100					100
dM capacity (veh/h)	824	755	1000	808	758	1007	1360					1547
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	17	13	70	64								
Volume Left	1	3	3	0								
Volume Right	11	2	7	1								
cSH	903	800	1360	1547								
Volume to Capacity	0.02	0.02	0.00	0.00								
Queue Length 95th (m)	0.5	0.4	0.1	0.0								
Control Delay (s)	9.1	9.6	0.3	0.0								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.1	9.6	0.3	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay	1.8											
Intersection Capacity Utilization	16.4%											
Analysis Period (min)	15											

	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W			4	1	3	
Traffic Volume (vph)	2	1	5	3	6	3	
Future Volume (vph)	2	1	5	3	6	3	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Flt Protected	0.955			0.959			
Flt Permitted	0.968			0.970			
Satd. Flow (prot)	1756	0	0	1843	1822	0	
Flt Permitted	0.968			0.970			
Satd. Flow (perm)	1756	0	0	1843	1822	0	
Link Speed (k/h)	50			50	50		
Link Distance (m)	185.4			141.8	109.5		
Travel Time (s)	13.3			10.2	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	
Adj. Flow (vph)	2	1	5	3	7	3	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	3	0	0	8	10	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	
Median Width(m)	3.6			0.0	0.0		
Link Offset(m)	0.0			0.0	0.0		
Crosswalk Width(m)	4.8			4.8	4.8		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25	15	25			15	
Sign Control	Stop			Free	Free		
Intersection Summary							
Area Type:	Other						
Control Type:	Unsignalized						
Intersection Capacity Utilization	14.6%						
Analysis Period (min)	15						
ICU Level of Service	A						

	EBL	EBR	NBL	NBT	SBT	SBR	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W			4	1	3	
Traffic Volume (veh/h)	2	1	5	3	6	3	
Future Volume (Veh/h)	2	1	5	3	6	3	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	2	1	5	3	7	3	
Pedestrians							
Lane Width (m)							
Walking Speed (m/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage (veh)							
Upstream signal (m)							
pK, platoon unblocked	22	8	10				
VC, conflicting volume							
VC1, stage 1 conf vol							
VC2, stage 2 conf vol							
VCu, unblocked vol	22	8	10				
IC, single (s)	6.4	6.2	4.1				
IC, 2 stage (s)							
IF (s)	3.5	3.3	2.2				
p0 queue free %	100	100	100				
dM capacity (veh/h)	997	1079	1623				
Direction, Lane #	EB 1	NB 1	SB 1				
Volume Total	3	8	10				
Volume Left	2	5	0				
Volume Right	1	0	3				
cSH	1023	1623	1700				
Volume to Capacity	0.00	0.00	0.01				
Queue Length 95th (m)	0.1	0.1	0.0				
Control Delay (s)	8.5	4.5	0.0				
Lane LOS	A	A					
Approach Delay (s)	8.5	4.5	0.0				
Approach LOS	A						
Intersection Summary							
Average Delay	2.9						
Intersection Capacity Utilization	14.6%						
ICU Level of Service	A						
Analysis Period (min)	15						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	3	6	0	0	7
Future Volume (vph)	7	3	6	0	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Friction	0.965					
Satd. Flow (prot)	0	1834	1900	0	1644	0
Friction Permitted	0.965					
Satd. Flow (perm)	0	1834	1900	0	1644	0
Link Speed (k/h)	50					
Link Distance (m)	190.6					
Travel Time (s)	13.7					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	8	3	7	0	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	11	7	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)	0.0					
Link Offset(m)	0.0					
Crosswalk Width(m)	4.8					
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	Free	Free	15	25	15
Sign Control	Free					
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	16.3%					
Analysis Period (min)	15					



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	2		2	
Traffic Volume (veh/h)	7	3	6	0	0	7
Future Volume (Veh/h)	7	3	6	0	0	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	7	0	0	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)		None	None			
Median type						
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vc, conflicting volume	7				26	7
vc1, stage 1 conf vol						
vc2, stage 2 conf vol						
vcU, unblocked vol	7				26	7
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1627				990	1081
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	11	7	8			
Volume Left	8	0	0			
Volume Right	0	0	8			
cSH	1627	1700	1081			
Volume to Capacity	0.00	0.00	0.01			
Queue Length 95th (m)	0.1	0.0	0.2			
Control Delay (s)	5.3	0.0	8.4			
Lane LOS	A	A	A			
Approach Delay (s)	5.3	0.0	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			16.3%			A
Analysis Period (min)			15			

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Background (2028)

Weekday AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	22	18	2	0	25	65	2	3	2	54	5	16
Traffic Volume (vph)	22	18	2	0	25	65	2	3	2	54	5	16
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.994	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975
Ped Bike Factor	0.994	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975
Flt Protected	0	1775	0	0	1651	0	0	1800	0	0	1742	0
Satd. Flow (prot)	0	1775	0	0	1651	0	0	1800	0	0	1742	0
Flt Permitted	0	1775	0	0	1651	0	0	1800	0	0	1742	0
Satd. Flow (perm)	0	1775	0	0	1651	0	0	1800	0	0	1742	0
Link Speed (k/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	173.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
Travel Time (s)	12.5	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Conf. Peds. (#/hr)	7	4	4	4	4	4	4	4	4	4	4	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	5%	0%	0%	6%	3%	0%	0%	0%	2%	0%	4%
Adj. Flow (vph)	24	20	2	0	27	71	2	3	2	59	5	17
Shared Lane Traffic (%)	0	46	0	0	98	0	0	7	0	0	0	81
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	25	25	15	25	25	15	25	25	15	15
Turning Speed (k/h)	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization 25.7%	ICU Level of Service A											
Analysis Period (min) 15	ICU Level of Service A											

HCM Unsignalized Intersection Capacity Analysis

107: Bayfield St & Trowbridge St/Bridge St

Background (2028)

Weekday AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	22	18	2	0	25	65	2	3	2	54	5	16
Traffic Volume (veh/h)	22	18	2	0	25	65	2	3	2	54	5	16
Future Volume (Veh/h)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	20	2	0	27	71	2	3	2	59	5	17
Pedestrians	1	1	1	1	1	1	1	1	1	1	1	1
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Walking Speed (m/s)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Percent Blockage	0	0	0	0	0	0	0	0	0	0	0	0
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	174	174	174	174	174	174	174	174	174	174	174	174
Upstream signal (m)	105	105	105	105	105	105	105	105	105	105	105	105
pK, platoon unblocked	105	105	105	105	105	105	105	105	105	105	105	105
VC, conflicting volume	105	105	105	105	105	105	105	105	105	105	105	105
VC1, stage 1 conf vol	105	105	105	105	105	105	105	105	105	105	105	105
VC2, stage 2 conf vol	105	105	105	105	105	105	105	105	105	105	105	105
VCu, unblocked vol	105	105	105	105	105	105	105	105	105	105	105	105
IC, single (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
IC, 2 stage (s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	98	98	98	98	98	98	98	98	98	98	98	98
dM capacity (veh/h)	1471	1471	1471	1471	1471	1471	1471	1471	1471	1471	1471	1471
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	EB 1	WB 1	NB 1	SB 1	EB 1	WB 1	NB 1	SB 1
Volume Total	46	98	7	81	46	98	7	81	46	98	7	81
Volume Left	24	0	2	59	24	0	2	59	24	0	2	59
Volume Right	2	71	2	17	2	71	2	17	2	71	2	17
cSH	1471	1596	800	829	1471	1596	800	829	1471	1596	800	829
Volume to Capacity	0.02	0.00	0.01	0.10	0.02	0.00	0.01	0.10	0.02	0.00	0.01	0.10
Queue Length 95th (m)	0.4	0.0	0.2	2.6	0.4	0.0	0.2	2.6	0.4	0.0	0.2	2.6
Control Delay (s)	4.0	0.0	9.5	9.8	4.0	0.0	9.5	9.8	4.0	0.0	9.5	9.8
Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	4.0	0.0	9.5	9.8	4.0	0.0	9.5	9.8	4.0	0.0	9.5	9.8
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A
Intersection Summary	Intersection Summary											
Average Delay	4.5											
Intersection Capacity Utilization	25.7%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Background (2028)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	15	58	2	1	67	0	15	1	0	0	1	8
Traffic Volume (vph)	15	58	2	1	67	0	15	1	0	0	1	8
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.997											
Ped Bike Factor	0.990											0.878
Flt Protected	0	1819	0	0	1792	0	0	1352	0	0	1447	0
Satd. Flow (prot)	0.990											
Flt Permitted	0	1819	0	0	1792	0	0	1552	0	0	1447	0
Satd. Flow (perm)	50											
Link Speed (k/h)	86.8											
Link Distance (m)	6.2											
Travel Time (s)	6.2											
Conf. Peds. (#/hr)	2											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	18%	0%	0%	0%	0%	17%
Adj. Flow (vph)	16	63	2	1	73	0	16	1	0	0	1	9
Shared Lane Traffic (%)	0	81	0	0	74	0	0	17	0	0	10	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8											
Crosswalk Width(m)	4.8											
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25											
Turning Speed (k/h)	15	25	15	25	15	25	15	25	15	25	15	15
Sign Control	Free											Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	25.6%
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Background (2028)

Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	15	58	2	1	67	0	15	1	0	0	1	8
Traffic Volume (veh/h)	15	58	2	1	67	0	15	1	0	0	1	8
Future Volume (Veh/h)	Free											
Sign Control	0%											Stop
Grade	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	16	63	2	1	73	0	16	1	0	0	1	9
Hourly flow rate (vph)	7											
Pedestrians	3.6											
Lane Width (m)	1.2											
Walking Speed (m/s)	1											
Percent Blockage	None											
Right turn flare (veh)	None											
Median type	Median storage (veh)											
Upstream signal (m)	261											
pK, platoon unblocked	75											
VC, conflicting volume	75											
VC1, stage 1 conf vol	75											
VC2, stage 2 conf vol	4.1											
VCu, unblocked vol	2.2											
IC, single (s)	99											
IC, 2 stage (s)	2.2											
p0 queue free %	100											
dM capacity (veh/h)	1535											
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	81	74	17	10								
Volume Left	16	1	16	0								
Volume Right	2	0	0	9								
cSH	1535	1532	705	902								
Volume to Capacity	0.01	0.00	0.02	0.01								
Queue Length 95th (m)	0.3	0.0	0.6	0.3								
Control Delay (s)	1.5	0.1	10.2	9.0								
Lane LOS	A	A	B	A								
Approach Delay (s)	1.5	0.1	10.2	9.0								
Approach LOS	B	A										
Intersection Summary												
Average Delay	2.2											
Intersection Capacity Utilization	25.6%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Background (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	23	24	43	22	18	10	21	443	34	9	413	16
Traffic Volume (vph)	23	24	43	22	18	10	21	443	34	9	413	16
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.98	0.98	1.00	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.935			0.973			0.991			0.995		
Flt Protected	0.987			0.979			0.998			0.999		
Satd. Flow (prot)	0	1706	0	0	1754	0	0	1765	0	0	1748	0
Flt Permitted	0.898			0.866			0.975			0.989		
Satd. Flow (perm)	0	1541	0	0	1546	0	0	1723	0	0	1731	0
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	47			11			10			5		
Link Speed (km/h)	50			50			50			50		
Link Distance (m)	188.1			173.7			84.5			264.4		
Travel Time (s)	13.5			12.5			6.1			19.0		
Confl. Peds. (#/hr)	19			6			19			9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	6%	0%	7%	0%	0%	8%	7%	
Adj. Flow (vph)	25	26	47	24	20	11	23	482	37	10	449	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	98	0	0	55	0	0	542	0	0	476	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8			4.8			4.8			4.8		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (km/h)	25			15			25			15		
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)	9.4			9.4			9.4			9.4		
Detector 2 Size(m)	0.6			0.6			0.6			0.6		
Detector 2 Type	CI+Ex			CI+Ex			CI+Ex			CI+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0			0.0		
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases												
Permitted Phases	4			4			2			2		

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Background (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4	4	2	2	2	2	2	2
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	22.0	22.0		22.0	22.0	22.0	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (%)	34.9%	34.9%		34.9%	34.9%	34.9%	65.1%	65.1%	65.1%	65.1%	65.1%	65.1%
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	35.0	35.0	35.0	35.0	35.0	35.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0			-2.0			-2.0			-2.0		
Total Lost Time (s)	4.0			4.0			4.0			4.0		
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effct Green (s)	10.7			10.7			44.0			44.0		
Actuated g/C Ratio	0.18			0.18			0.75			0.75		
v/c Ratio	0.31			0.19			0.42			0.37		
Control Delay	14.8			18.2			5.4			4.9		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	14.8			18.2			5.4			4.9		
LOS	B			B			A			A		
Approach Delay	14.8			18.2			5.4			4.9		
Approach LOS	B			B			A			A		
Intersection Summary												
Area Type:	Other											
Cycle Length:	63											
Actuated Cycle Length:	59											
Natural Cycle:	60											
Control Type:	Semi Act-Uncoord											
Maximum v/c Ratio:	0.42											
Intersection Signal Delay:	6.6											
Intersection Capacity Utilization	54.3%											
Analysis Period (min)	15											

Splits and Phases: 101: N Sykes St & Trowbridge St



	EBT	WBT	NBT	SBT
Lane Group				
Lane Group Flow (vph)	98	55	542	476
v/c Ratio	0.31	0.19	0.42	0.37
Control Delay	14.8	18.2	5.4	4.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.8	18.2	5.4	4.9
Queue Length 50th (m)	4.8	4.1	20.6	17.3
Queue Length 95th (m)	15.2	11.8	43.8	36.4
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	505	482	1288	1292
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	0.19	0.11	0.42	0.37
Intersection Summary				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	24	43	22	18	10	21	443	34	9	413	16
Future Volume (vph)	23	24	43	22	18	10	21	443	34	9	413	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frbp. ped/bikes	0.99			0.99			1.00				1.00	
Flbb. ped/bikes	0.99			1.00			1.00				1.00	
Frt	0.94			0.97			0.99				1.00	
Flt Protected	0.99			0.98			1.00				1.00	
Satd. Flow (prot)	1696			1748			1763				1748	
Flt Permitted	0.90			0.87			0.98				0.99	
Satd. Flow (perm)	1543			1546			1723				1732	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	26	47	24	20	11	23	482	37	10	449	17
RTOR Reduction (vph)	0	40	0	0	9	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	58	0	0	46	0	0	539	0	0	475	0
Confl. Peds. (#/hr)	19		6	6		19	25		9	9		25
Heavy Vehicles (%)	0%	5%	0%	0%	0%	0%	7%	0%	0%	0%	8%	7%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	7.0			7.0			41.2			41.2		
Effective Green, g (s)	9.0			9.0			43.2			43.2		
Actuated g/C Ratio	0.15			0.15			0.72			0.72		
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)	230			231			1236			1242		
v/s Ratio Prot												
v/s Ratio Perm	c0.04			0.03			c0.31			0.27		
v/c Ratio	0.25			0.20			0.44			0.38		
Uniform Delay, d1	22.6			22.4			3.5			3.3		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.6			0.4			1.1			0.9		
Delay (s)	23.2			22.9			4.6			4.2		
Level of Service	C			C			A			A		
Approach Delay (s)	23.2			22.9			4.6			4.2		
Approach LOS	C			C			A			A		
Intersection Summary												
HCM 2000 Control Delay			6.9				HCM 2000 Level of Service			A		
HCM 2000 Volume to Capacity ratio			0.40									
Actuated Cycle Length (s)			60.2				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			54.3%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
102: S Sykes St & Boucher St

Background (2028) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	0	2	5	1	7	1	531	6	9	507	3
Traffic Volume (vph)	3	0	2	5	1	7	1	531	6	9	507	3
Future Volume (vph)	3	0	2	5	1	7	1	531	6	9	507	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.946				0.923			0.998			0.999	
Frt	0.971				0.982						0.999	
Flt Protected	0	1745	0	0	1722	0	0	1842	0	0	1878	0
Satd. Flow (prot)	0.971				0.982						0.999	
Flt Permitted	0	1745	0	0	1722	0	0	1842	0	0	1878	0
Satd. Flow (perm)	50				50			50			50	
Link Speed (k/h)	85.4				372.8			139.8			130.1	
Link Distance (m)	6.1				26.8			10.1			9.4	
Travel Time (s)	1				2			3			3	
Confl. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	1%	0%
Heavy Vehicles (%)	3	0	2	5	1	8	1	577	7	10	551	3
Adj. Flow (vph)												
Shared Lane Traffic (%)	0	5	0	0	14	0	0	585	0	0	564	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8				4.8			4.8			4.8	
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25				15	25	15	25	15	25	25	15
Headway Factor	Stop				Stop			Free			Free	
Turning Speed (k/h)												
Sign Control												
Intersection Summary	Other											
Area Type:	Intersection Capacity Utilization 44.4%											
Control Type: Unsignalized	ICU Level of Service A											
Analysis Period (min) 15												

HCM Unsignalized Intersection Capacity Analysis
102: S Sykes St & Boucher St

Background (2028) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	0	2	5	1	7	1	531	6	9	507	3
Traffic Volume (veh/h)	3	0	2	5	1	7	1	531	6	9	507	3
Future Volume (Veh/h)	3	0	2	5	1	7	1	531	6	9	507	3
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	0	2	5	1	8	1	577	7	10	551	3
Pedestrians	3						2				1	
Lane Width (m)	3.6						3.6				3.6	
Walking Speed (m/s)	1.2						1.2				1.2	
Percent Blockage	0						0				0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (m)											215	
pK, platoon unblocked	0.95	0.95	0.95	0.95	0.95	0.95	0.95					
VC, conflicting volume	1168	1162	558	1159	1180	582	557			584		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	1148	1142	503	1139	1140	582	503			584		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	100	97	99	98	100			99		
dM capacity (veh/h)	162	188	539	167	189	517	1011			1001		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	5	14	585	564								
Volume Left	3	5	1	10								
Volume Right	2	8	7	3								
cSH	225	276	1011	1001								
Volume to Capacity	0.02	0.05	0.00	0.01								
Queue Length 95th (m)	0.5	1.3	0.0	0.2								
Control Delay (s)	21.4	18.7	0.0	0.3								
Lane LOS	C	C	A	A								
Approach Delay (s)	21.4	18.7	0.0	0.3								
Approach LOS	C	C										
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization			44.4%								A	
Analysis Period (min)			15									

Lanes, Volumes, Timings

103: St. Vincent St & Bridge St

Background (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	8	59	6	6	1	71	8	5	1	5	1
Traffic Volume (vph)	0	8	59	6	6	1	71	8	5	1	5	1
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.882											
Ped Bike Factor												
Flt												
Flt Protected												
Satd. Flow (prot)	0	1605	0	0	1840	0	0	1736	0	0	1851	0
Flt Permitted												
Satd. Flow (perm)	0	1605	0	0	1840	0	0	1736	0	0	1851	0
Link Speed (k/h)												
Link Distance (m)												
Travel Time (s)												
Conf. Peds. (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	9	64	7	7	1	77	9	5	1	5	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	73	0	0	15	0	0	91	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8			4.8			4.8			4.8		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	15	25	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	25.3%
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

103: St. Vincent St & Bridge St

Background (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	8	59	6	6	1	71	8	5	1	5	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume (vph)	0	8	59	6	6	1	71	8	5	1	5	1
Future Volume (vph)	0	8	59	6	6	1	71	8	5	1	5	1
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	9	64	7	7	1	77	9	5	1	5	1
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	73	15	91	7								
Volume Left (vph)	0	7	77	1								
Volume Right (vph)	64	1	5	1								
Head (s)	-0.45	0.05	0.21	-0.06								
Departure Headway (s)	3.7	4.2	4.3	4.1								
Degree Utilization, x	0.07	0.02	0.11	0.01								
Capacity (veh/h)	947	823	814	849								
Control Delay (s)	7.0	7.3	7.8	7.1								
Approach Delay (s)	7.0	7.3	7.8	7.1								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay												
Level of Service												
Intersection Capacity Utilization												
Analysis Period (min)												

Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Background (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	5	7	11	5	7	3	73	5	2	63	5
Traffic Volume (vph)	3	5	7	11	5	7	3	73	5	2	63	5
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.932			0.957			0.992			0.991		
Ped Bike Factor	0.991			0.977			0.998			0.999		
Flt Protected	0	1755	0	0	1776	0	0	1799	0	0	1815	0
Satd. Flow (prot)	0.991			0.977			0.998			0.999		
Flt Permitted	0	1755	0	0	1776	0	0	1799	0	0	1815	0
Satd. Flow (perm)	50			50			50			50		
Link Speed (k/h)	372.8			190.6			146.8			142.5		
Link Distance (m)	2			13.7			10.6			10.3		
Travel Time (s)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	4%	0%
Heavy Vehicles (%)	3	5	8	12	5	8	3	79	5	2	68	5
Adj. Flow (vph)	0	16	0	0	25	0	0	87	0	0	75	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Lane Group Flow (vph)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Enter Blocked Intersection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	4.8			4.8			4.8			4.8		
Link Offset(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Crosswalk Width(m)	25	15	25	15	25	15	25	15	25	25	15	15
Two way Left Turn Lane	Stop			Stop			Free			Free		
Headway Factor												
Turning Speed (k/h)												
Sign Control												
Intersection Summary	Other											
Area Type:	Intersection Type: Unsignalized											
Control Type:	Intersection Capacity Utilization 20.2%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St

Background (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	5	7	11	5	7	3	73	5	2	63	5
Traffic Volume (veh/h)	3	5	7	11	5	7	3	73	5	2	63	5
Future Volume (Veh/h)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	5	8	12	5	8	3	79	5	2	68	5
Pedestrians				12			7			3.6		
Lane Width (m)				3.6			1.2			1.2		
Walking Speed (m/s)				1			1			1		
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked	174	176	78	192	176	96	73			96		
VC, conflicting volume												
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	174	176	78	192	176	96	73			96		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	99	98	99	99	100			100		
dM capacity (veh/h)	773	711	983	743	711	955	1540			1495		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	16	25	87	75								
Volume Left	3	12	3	2								
Volume Right	8	8	5	5								
cSH	840	792	1540	1495								
Volume to Capacity	0.02	0.03	0.00	0.00								
Queue Length 95th (m)	0.5	0.8	0.0	0.0								
Control Delay (s)	9.4	9.7	0.3	0.2								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.4	9.7	0.3	0.2								
Approach LOS	A	A										
Intersection Summary												
Average Delay	2.1											
Intersection Capacity Utilization	20.2%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
105: Fuller St & Bridge St

Background (2028) Weekday
PM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W			4	4	4	
Traffic Volume (vph)	7	7	2	5	9	10	
Future Volume (vph)	7	7	2	5	9	10	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Flt Protected	0.932			0.929			
Flt Permitted	0.976			0.986			
Satd. Flow (prot)	1728	0	0	1873	1765	0	
Flt Permitted	0.976			0.986			
Satd. Flow (perm)	1728	0	0	1873	1765	0	
Link Speed (k/h)	50			50	50		
Link Distance (m)	185.4			141.8	109.5		
Travel Time (s)	13.3			10.2	7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	
Adj. Flow (vph)	8	8	2	5	10	11	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	16	0	0	7	21	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right	
Median Width(m)	3.6			0.0	0.0		
Link Offset(m)	0.0			0.0	0.0		
Crosswalk Width(m)	4.8			4.8	4.8		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25	15	25			15	
Sign Control	Stop			Free	Free		
Intersection Summary							
Area Type:	Other						
Control Type:	Unsignalized						
Intersection Capacity Utilization	13.3%						
Analysis Period (min)	15						
ICU Level of Service A							

HCM Unsignalized Intersection Capacity Analysis
105: Fuller St & Bridge St

Background (2028) Weekday
PM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR	
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	W			4	4	4	
Traffic Volume (veh/h)	7	7	2	5	9	10	
Future Volume (Veh/h)	7	7	2	5	9	10	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	8	8	2	5	10	11	
Pedestrians							
Lane Width (m)							
Walking Speed (m/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage (veh)							
Upstream signal (m)							
pk. platoon unblocked	24	16	21				
VC, conflicting volume							
VC1, stage 1 conf vol							
VC2, stage 2 conf vol							
VCu, unblocked vol	24	16	21				
IC, single (s)	6.4	6.2	4.1				
IC, 2 stage (s)							
IF (s)	3.5	3.3	2.2				
p0 queue free %	99	99	100				
dm capacity (veh/h)	995	1070	1608				
Direction, Lane #	EB 1	NB 1	SB 1				
Volume Total	16	7	21				
Volume Left	8	2	0				
Volume Right	8	0	11				
cSH	1031	1608	1700				
Volume to Capacity	0.02	0.00	0.01				
Queue Length 95th (m)	0.4	0.0	0.0				
Control Delay (s)	8.5	2.1	0.0				
Lane LOS	A	A					
Approach Delay (s)	8.5	2.1	0.0				
Approach LOS	A						
Intersection Summary							
Average Delay	3.4						
Intersection Capacity Utilization	13.3%						
ICU Level of Service	A						
Analysis Period (min)	15						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		W	
Traffic Volume (vph)	5	8	10	2	3	13
Future Volume (vph)	5	8	10	2	3	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.979		0.889	
Flt Protected		0.982			0.991	
Satd. Flow (prot)	0	1866	1860	0	1674	0
Flt Permitted		0.982			0.991	
Satd. Flow (perm)	0	1866	1860	0	1674	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		190.6	229.8		141.8	
Travel Time (s)		13.7	16.5		10.2	
Conf. Peds. (#/hr)	5			5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	9	11	2	3	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	14	13	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Right	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free	Free	Stop	
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 14.9%	ICU Level of Service A					
Analysis Period (min) 15						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		W	
Traffic Volume (veh/h)	5	8	10	2	3	13
Future Volume (Veh/h)	5	8	10	2	3	13
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	9	11	2	3	14
Pedestrians					5	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None		None		
Median storage (veh)						
Upstream signal (m)						
pX platoon unblocked						
VC, conflicting volume	18				36	17
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	18				36	17
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
CM capacity (veh/h)	1605				975	1063
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	14	13	17			
Volume Left	5	0	3			
Volume Right	0	2	14			
cSH	1605	1700	1046			
Volume to Capacity	0.00	0.01	0.02			
Queue Length 95th (m)	0.1	0.0	0.4			
Control Delay (s)	2.6	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	2.6	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay	4.1					
Intersection Capacity Utilization	14.9%					
ICU Level of Service	A					
Analysis Period (min)	15					

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St Background (2028) Weekday PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations												
Traffic Volume (vph)	43	25	0	0	18	90	1	1	0	66	2	31
Future Volume (vph)	43	25	0	0	18	90	1	1	0	66	2	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.888							0.957
Flt Protected		0.969						0.976				0.968
Satd. Flow (prot)		0.1775			0.1630			0.1854				0.1716
Flt Permitted		0.969						0.976				0.968
Satd. Flow (perm)		0.1775			0.1630			0.1854				0.1716
Link Speed (k/h)		50			50			50				50
Link Distance (m)		173.7			86.8			54.3				122.0
Travel Time (s)		12.5			6.2			3.9				8.8
Confl. Peds. (#/hr)		9			5			1				1
Peak Hour Factor		0.92			0.92			0.92				0.92
Heavy Vehicles (%)		3%			6%			0%				0%
Adj. Flow (vph)		47			27			1				34
Shared Lane Traffic (%)												
Lane Group Flow (vph)		0			74			0				0
Enter Blocked Intersection		No			No			No				No
Lane Alignment		Left			Left			Left				Left
Median Width(m)		0.0			0.0			0.0				0.0
Link Offset(m)		0.0			0.0			0.0				0.0
Crosswalk Width(m)		4.8			4.8			4.8				4.8
Two way Left Turn Lane												
Headway Factor		1.00			1.00			1.00				1.00
Turning Speed (k/h)		25			15			25				15
Sign Control		Free			Free			Stop				Stop
Intersection Summary												
Area Type:		Other										
Control Type: Unsignalized												
Intersection Capacity Utilization		25.7%										
Analysis Period (min)		15										

HCM Unsignalized Intersection Capacity Analysis
107: Bayfield St & Trowbridge St/Bridge St

Background (2028) Weekday PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations												
Traffic Volume (veh/h)	43	25	0	0	18	90	1	1	0	66	2	31
Future Volume (Veh/h)	43	25	0	0	18	90	1	1	0	66	2	31
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Peak Hour Factor		0.92			0.92			0.92				0.92
Hourly flow rate (vph)		47			27			98				34
Pedestrians		1			1			5				9
Lane Width (m)		3.6			3.6			3.6				3.6
Walking Speed (m/s)		1.2			1.2			1.2				1.2
Percent Blockage		0			0			0				1
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)		174										
pX, platoon unblocked												
VC, conflicting volume		127			32			231				204
VC1, stage 1 conf vol												79
VC2, stage 2 conf vol												
VCu, unblocked vol		127			32			231				204
IC, single (s)		4.1			4.1			7.1				6.2
IC, 2 stage (s)												
IF (s)		2.2			2.2			3.5				4.0
p0 queue free %		97			100			100				100
dM capacity (veh/h)		1442			1587			674				968
Direction, Lane #		EB 1			WB 1			NB 1				SB 1
Volume Total		74			118			2				108
Volume Left		47			0			1				72
Volume Right		0			98			0				34
cSH		1442			1587			649				788
Volume to Capacity		0.03			0.00			0.00				0.14
Queue Length 95th (m)		0.8			0.0			0.1				3.8
Control Delay (s)		4.9			0.0			10.6				10.3
Lane LOS		A			B			B				B
Approach Delay (s)		4.9			0.0			10.6				10.3
Approach LOS					B			B				
Intersection Summary												
Average Delay					5.0							
Intersection Capacity Utilization					25.7%							A
Analysis Period (min)					15							

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Background (2028) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	15	66	10	0	78	0	13	1	0	1	2	17
Traffic Volume (vph)	15	66	10	0	78	0	13	1	0	1	2	17
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Peak Hour Factor	0.985											
Ped Bike Factor	0.992											
Flt Protected	0	1804	0	0	1900	0	0	1814	0	0	1676	0
Satd. Flow (prot)	0.992	0.992	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Flt Permitted	0	1804	0	0	1900	0	0	1814	0	0	1676	0
Satd. Flow (perm)	50	50	50	50	50	50	50	50	50	50	50	50
Link Speed (k/h)	86.8	65.5	65.5	110.7								
Link Distance (m)	6.2	11	11	7	14	4	4					
Travel Time (s)	7	11	11	7	14	4	4					
Confl. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	72	11	0	85	0	14	1	0	1	2	18
Shared Lane Traffic (%)	0	99	0	0	85	0	0	15	0	0	21	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	25	15	25	15	25	15	25	15	25	15
Turning Speed (k/h)	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization	26.0%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Background (2028) Weekday
PM Peak Hour

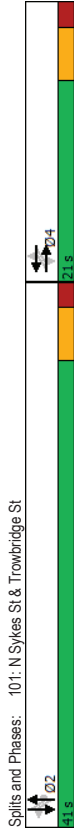
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	15	66	10	0	78	0	13	1	0	1	2	17
Traffic Volume (veh/h)	15	66	10	0	78	0	13	1	0	1	2	17
Future Volume (Veh/h)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	72	11	0	85	0	14	1	0	1	2	18
Pedestrians	14	14	14	4	4	4	11	11	11	11	7	7
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Walking Speed (m/s)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Percent Blockage	1	1	1	0	0	0	1	1	1	1	1	1
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	261											
Upstream signal (m)	92											
pX, platoon unblocked	92											
VC, conflicting volume	92											
VC1, stage 1 conf vol	92											
VC2, stage 2 conf vol	92											
VCu, unblocked vol	92											
IC, single (s)	4.1											
IC, 2 stage (s)	2.2											
p0 queue free %	99											
dM capacity (veh/h)	1507											
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	99	85	15	21								
Volume Left	16	0	14	1								
Volume Right	11	0	0	18								
cSH	1507	1499	676	891								
Volume to Capacity	0.01	0.00	0.02	0.02								
Queue Length 95th (m)	0.3	0.0	0.5	0.6								
Control Delay (s)	1.3	0.0	10.4	9.1								
Lane LOS	A	B	B	A								
Approach Delay (s)	1.3	0.0	10.4	9.1								
Approach LOS	B	A	A	A								
Intersection Summary	Intersection Summary											
Average Delay	2.2											
Intersection Capacity Utilization	26.0%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	31	33	47	21	16	14	560	52	18	528	13
Traffic Volume (vph)	11	31	33	47	21	16	14	560	52	18	528	13
Future Volume (vph)	11	31	33	47	21	16	14	560	52	18	528	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Frt	0.941			0.975			0.989			0.997		
Flt Protected	0.993			0.973			0.999			0.998		
Satd. Flow (prot)	0	1701	0	0	1589	0	0	1838	0	0	1863	0
Flt Permitted	0.943			0.837			0.986			0.974		
Satd. Flow (perm)	0	1607	0	0	1346	0	0	1814	0	0	1817	0
Right Turn on Red		Yes		Yes			Yes			Yes		
Satd. Flow (RTOR)	36			17			13			3		
Link Speed (km/h)	50			50			50			50		
Link Distance (m)	188.1			173.7			84.5			284.4		
Travel Time (s)	13.5			12.5			6.1			19.0		
Confl. Peds. (#/hr)	28			22			28			25		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	7%	36%	0%	2%	0%	8%	1%	9%	0%
Adj. Flow (vph)	12	34	36	51	23	17	15	609	57	20	574	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	82	0	0	91	0	0	681	0	0	608	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8			4.8			4.8			4.8		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (km/h)	25			15			25			15		
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)	9.4			9.4			9.4			9.4		
Detector 2 Size(m)	0.6			0.6			0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0			0.0		
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (s)	21.0	21.0		21.0	21.0		41.0	41.0		41.0	41.0	
Total Split (%)	33.9%	33.9%		33.9%	33.9%		66.1%	66.1%		66.1%	66.1%	
Maximum Green (s)	15.0	15.0		15.0	15.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)							4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	12.0	12.0		12.0	12.0		30.0	30.0		30.0	30.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	11.7			11.7			45.9			45.9		
Actuated g/C Ratio	0.19			0.19			0.74			0.74		
v/c Ratio	0.25			0.34			0.51			0.45		
Control Delay	15.4			21.9			6.6			6.0		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	15.4			21.9			6.6			6.0		
LOS	B			C			A			A		
Approach Delay	15.4			21.9			6.6			6.0		
Approach LOS	B			C			A			A		
Intersection Summary												
Area Type:	Other											
Cycle Length:	62											
Actuated Cycle Length:	62											
Natural Cycle:	60											
Control Type:	Semi Act-Uncoord											
Maximum v/c Ratio:	0.51											
Intersection Signal Delay:	7.8											
Intersection Capacity Utilization	61.1%											
Analysis Period (min)	15											



	EBT	WBT	NBT	SBT
Lane Group				
Lane Group Flow (vph)	82	91	681	608
v/c Ratio	0.25	0.34	0.51	0.45
Control Delay	15.4	21.9	6.6	6.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.4	21.9	6.6	6.0
Queue Length 50th (m)	4.7	7.7	30.0	25.6
Queue Length 95th (m)	14.6	18.9	68.2	57.7
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	467	381	1347	1347
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	0.18	0.24	0.51	0.45
Intersection Summary				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Lane Configurations												
Traffic Volume (vph)	11	31	33	47	21	16	14	560	52	18	528	13
Future Volume (vph)	11	31	33	47	21	16	14	560	52	18	528	13
Ideal Flow (vphpb)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	0.98			0.99			1.00				1.00	
Flpb, ped/bikes	1.00			0.98			1.00				1.00	
Frt	0.94			0.97			0.99				1.00	
Flt Protected	0.99			0.97			1.00				1.00	
Satd. Flow (prot)	1691			1564			1837				1863	
Flt Permitted	0.94			0.84			0.98				0.97	
Satd. Flow (perm)	1606			1346			1813				1817	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	34	36	51	23	17	15	609	57	20	574	14
RTOR Reduction (vph)	0	30	0	0	14	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	52	0	0	77	0	0	677	0	0	607	0
Confl. Peds. (#/hr)	28	22	22	28	28	20	25	25	25	25	20	20
Heavy Vehicles (%)	0%	5%	0%	7%	6%	36%	0%	2%	0%	8%	1%	9%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases	4			4			2			2		2
Permitted Phases				4			2			2		
Actuated Green, G (s)	8.1			8.1			43.1			43.1		43.1
Effective Green, g (s)	10.1			10.1			45.1			45.1		45.1
Actuated g/C Ratio	0.16			0.16			0.71			0.71		0.71
Clearance Time (s)	6.0			6.0			6.0			6.0		6.0
Vehicle Extension (s)	3.0			3.0			3.0			3.0		3.0
Lane Grp Cap (vph)	256			215			1293			1296		1296
v/s Ratio Prot												
v/s Ratio Perm	0.03			c0.06			c0.37			0.33		0.33
v/c Ratio	0.20			0.36			0.52			0.47		0.47
Uniform Delay, d1	23.1			23.7			4.1			3.9		3.9
Progression Factor	1.00			1.00			1.00			1.00		1.00
Incremental Delay, d2	0.4			1.0			1.5			1.2		1.2
Delay (s)	23.4			24.7			5.7			5.1		5.1
Level of Service	C			C			A			A		A
Approach Delay (s)	23.4			24.7			5.7			5.1		5.1
Approach LOS	C			C			A			A		A
Intersection Summary												
HCM 2000 Control Delay				7.6			HCM 2000 Level of Service			A		
HCM 2000 Volume to Capacity ratio				0.49								
Actuated Cycle Length (s)				63.2			Sum of lost time (s)			8.0		
Intersection Capacity Utilization				61.1%			ICU Level of Service			B		
Analysis Period (min)				15								
c Critical Lane Group												

Lanes, Volumes, Timings
102: S Sykes St & Boucher St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	2	5	5	0	9	8	631	10	14	610	8
Traffic Volume (vph)	2	2	5	5	0	9	8	631	10	14	610	8
Future Volume (vph)	2	2	5	5	0	9	8	631	10	14	610	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.925			0.910			0.998				0.998	
Frt	0.989			0.984			0.999				0.999	
Flt Protected	0	1738	0	0	1566	0	0	1873	0	0	1858	0
Satd. Flow (prot)	0	0.989		0.984			0.999				0.999	
Flt Permitted	0	1738	0	0	1566	0	0	1873	0	0	1858	0
Satd. Flow (perm)	0	0.989		0.984			0.999				0.999	
Link Speed (k/h)	50			50			50				50	
Link Distance (m)	85.4			372.8			139.8				130.1	
Travel Time (s)	6.1			26.8			10.1				9.4	
Conf. Peds. (#/hr)	1			1			23			5	23	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	13%	0%	1%	11%	0%	2%	0%
Adj. Flow (vph)	2	2	5	5	0	10	9	686	11	15	663	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	15	0	0	706	0	0	687	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8			4.8			4.8				4.8	
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25			15	25	15	25			15	25	
Turning Speed (k/h)	Stop			Stop			Free			Free		
Sign Control	Stop			Stop			Free			Free		
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 51.2%	ICU Level of Service A											
Analysis Period (min) 15												

HCM Unsignalized Intersection Capacity Analysis
102: S Sykes St & Boucher St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	2	5	5	0	9	8	631	10	14	610	8
Traffic Volume (veh/h)	2	2	5	5	0	9	8	631	10	14	610	8
Future Volume (Veh/h)	2	2	5	5	0	9	8	631	10	14	610	8
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	5	5	0	10	9	686	11	15	663	9
Pedestrians	23			5							1	
Lane Width (m)	3.6			3.6							3.6	
Walking Speed (m/s)	1.2			1.2							1.2	
Percent Blockage	2			0							0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (m)											215	
pX platoon unblocked	0.87	0.87	0.87	0.87	0.87	0.87	0.87					
VC, conflicting volume	1441	1440	690	1418	1440	698	695			702		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	1432	1432	569	1406	1430	698	574			702		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.3	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	98	98	99	95	100	98	99			98		
p0 capacity (veh/h)	90	112	448	96	112	420	860			901		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	9	15	706	687								
Volume Left	2	5	9	15								
Volume Right	5	10	11	9								
cSH	176	197	860	901								
Volume to Capacity	0.05	0.08	0.01	0.02								
Queue Length 95th (m)	1.3	2.0	0.3	0.4								
Control Delay (s)	26.5	24.7	0.3	0.4								
Lane LOS	D	C	A	A								
Approach Delay (s)	26.5	24.7	0.3	0.4								
Approach LOS	D	C										
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			51.2%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
103: St. Vincent St & Bridge St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	7	65	2	3	0	70	30	7	7	23	1
Traffic Volume (vph)	3	7	65	2	3	0	70	30	7	7	23	1
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.883						0.991					
Ped Bike Factor	0.998						0.969					
Flt Protected	0	1502	0	0	1862	0	0	1658	0	0	1870	0
Satd. Flow (prot)	0.998				0.980			0.969			0.988	
Flt Permitted	0	1502	0	0	1862	0	0	1658	0	0	1870	0
Satd. Flow (perm)	50				50			50			50	
Link Speed (k/h)	85.2				185.4			142.5			158.1	
Link Distance (m)	6.1				13.3			10.3			11.4	
Travel Time (s)	4				4			2			5	
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	20%	11%	0%	0%	0%	12%	8%	0%	0%	0%	0%
Heavy Vehicles (%)	3	8	71	2	3	0	76	33	8	8	25	1
Adj. Flow (vph)	0	82	0	0	5	0	0	117	0	0	34	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0				0.0			0.0			0.0	
Median Width(m)	0.0				0.0			0.0			0.0	
Link Offset(m)	4.8				4.8			4.8			4.8	
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	15	25	15
Headway Factor	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Turning Speed (k/h)												
Sign Control												
Intersection Summary	Other											
Area Type:	Control Type: Unsignalized											
Intersection Capacity Utilization	25.4%											
Analysis Period (min)	15											
ICU Level of Service A												

HCM Unsignalized Intersection Capacity Analysis
103: St. Vincent St & Bridge St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	7	65	2	3	0	70	30	7	7	23	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume (vph)	3	7	65	2	3	0	70	30	7	7	23	1
Future Volume (vph)	3	7	65	2	3	0	70	30	7	7	23	1
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	8	71	2	3	0	76	33	8	8	25	1
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	82	5	117	34								
Volume Left (vph)	3	2	76	8								
Volume Right (vph)	71	0	8	1								
Head (s)	-0.32	0.08	0.26	0.03								
Departure Headway (s)	3.9	4.4	4.4	4.2								
Degree Utilization, x	0.09	0.01	0.14	0.04								
Capacity (veh/h)	878	781	798	825								
Control Delay (s)	7.3	7.4	8.1	7.4								
Approach Delay (s)	7.3	7.4	8.1	7.4								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay	7.7											
Level of Service	A											
Intersection Capacity Utilization	25.4%											
Analysis Period (min)	15											
ICU Level of Service	A											

Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Background (2028) Summer Weekend

SAT Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	8	8	7	13	10	2	7	85	15	3	92	0
Traffic Volume (vph)	8	8	7	13	10	2	7	85	15	3	92	0
Future Volume (vph)	8	8	7	13	10	2	7	85	15	3	92	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.958			0.990				0.981				
Frt	0.983			0.975				0.997				
Flt Protected	0	1789	0	0	1834	0	0	1747	0	0	1862	0
Satd. Flow (prot)	0.983	0.975			0.997			0.999				
Flt Permitted	0	1789	0	0	1834	0	0	1747	0	0	1862	0
Satd. Flow (perm)	50			50				50				
Link Speed (k/h)	372.8			190.6				146.8				
Link Distance (m)	26.8			13.7				10.6				
Travel Time (s)	2			2				3				
Confl. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	2%	0%
Heavy Vehicles (%)	9	9	8	14	11	2	8	92	16	3	100	0
Adj. Flow (vph)	0	26	0	0	27	0	0	116	0	0	103	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8			4.8				4.8				
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	25	15	15
Headway Factor	Stop			Stop				Free			Free	
Turning Speed (k/h)												
Sign Control												

Intersection Summary	Other
Area Type:	Control Type: Unsignalized
Intersection Capacity Utilization 19.6%	ICU Level of Service A
Analysis Period (min) 15	

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St





Background (2028) Summer Weekend

SAT Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	8	8	7	13	10	2	7	85	15	3	92	0
Traffic Volume (veh/h)	8	8	7	13	10	2	7	85	15	3	92	0
Future Volume (Veh/h)	8	8	7	13	10	2	7	85	15	3	92	0
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	9	8	14	11	2	8	92	16	3	100	0
Pedestrians						3				2		
Lane Width (m)						3.6				3.6		
Walking Speed (m/s)						1.2				1.2		
Percent Blockage						0				0		
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (m)												
pX platoon unblocked												
VC, conflicting volume	230	233	102	240	225	103	100			111		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	230	233	102	240	225	103	100			111		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	98	98	100	99			100		
dM capacity (veh/h)	714	664	957	697	671	955	1505			1488		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	26	27	116	103								
Volume Left	9	14	8	3								
Volume Right	8	2	16	0								
cSH	753	700	1505	1488								
Volume to Capacity	0.03	0.04	0.01	0.00								
Queue Length 95th (m)	0.9	1.0	0.1	0.0								
Control Delay (s)	10.0	10.3	0.5	0.2								
Lane LOS	A	B	A	A								
Approach Delay (s)	10.0	10.3	0.5	0.2								
Approach LOS	A	B										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			19.6%									
Analysis Period (min)			15									

Lanes, Volumes, Timings
105: Fuller St & Bridge St

Background (2028) Summer Weekend
SAT Peak Hour





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	9	11	3	6	11	2
Future Volume (vph)	9	11	3	6	11	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.926				0.981	
Flt Protected	0.978			0.985		
Satd. Flow (prot)	1721	0	0	1872	1864	0
Flt Permitted	0.978			0.985		
Satd. Flow (perm)	1721	0	0	1872	1864	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	185.4			141.8	109.5	
Travel Time (s)	13.3			10.2	7.9	
Confl. Peds. (#/hr)	3		12			12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	12	3	7	12	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	10	14	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25		15	
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization	16.6%					
Analysis Period (min)	15					
ICU Level of Service A						

HCM Unsignalized Intersection Capacity Analysis
105: Fuller St & Bridge St

Background (2028) Summer Weekend
SAT Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W					
Traffic Volume (veh/h)	9	11	3	6	11	2
Future Volume (Veh/h)	9	11	3	6	11	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	12	3	7	12	2
Pedestrians	12				3	
Lane Width (m)	3.6				3.6	
Walking Speed (m/s)	1.2				1.2	
Percent Blockage	1				0	
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (m)						
pK, platoon unblocked						
VC, conflicting volume	41	25	26			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	41	25	26			
IC, single (s)	6.4	6.2	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	100			
dM capacity (veh/h)	961	1046	1585			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	22	10	14			
Volume Left	10	3	0			
Volume Right	12	0	2			
cSH	1006	1585	1700			
Volume to Capacity	0.02	0.00	0.01			
Queue Length 95th (m)	0.5	0.0	0.0			
Control Delay (s)	8.7	2.2	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	2.2	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			16.6%			A
Analysis Period (min)			15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Volume (vph)	6	3	9	3	9	15
Future Volume (vph)	6	3	9	3	9	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.969		0.917	
Flt Protected		0.966			0.981	
Satd. Flow (prot)	0	1835	1841	0	1709	0
Flt Permitted		0.966			0.981	
Satd. Flow (perm)	0	1835	1841	0	1709	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		190.6	229.8		141.8	
Travel Time (s)		13.7	16.5		10.2	
Conf. Peds. (#/hr)	2			2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	3	10	3	10	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	10	13	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Right	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free	Free	Stop	Stop
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 16.4%						
Analysis Period (min) 15						
ICU Level of Service A						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	3	9	3	9	15
Future Volume (Veh/h)	6	3	9	3	9	15
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	3	10	3	10	16
Pedestrians		3			2	
Lane Width (m)		3.6			3.6	
Walking Speed (m/s)		1.2			1.2	
Percent Blockage		0			0	
Right turn flare (veh)						
Median type		None		None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	15				30	16
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	15				30	16
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	100				99	98
qM capacity (veh/h)	1613				983	1064
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	10	13	26			
Volume Left	7	0	10			
Volume Right	0	3	16			
cSH	1613	1700	1031			
Volume to Capacity	0.00	0.01	0.03			
Queue Length 95th (m)	0.1	0.0	0.6			
Control Delay (s)	5.1	0.0	8.6			
Lane LOS	A		A			
Approach Delay (s)	5.1	0.0	8.6			
Approach LOS			A			
Intersection Summary						
Average Delay	5.6					
Intersection Capacity Utilization	16.4%					
Analysis Period (min)	15					
	ICU Level of Service A					

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	45	49	7	5	53	109	3	9	1	98	3	28
Traffic Volume (vph)	45	49	7	5	53	109	3	9	1	98	3	28
Future Volume (vph)	45	49	7	5	53	109	3	9	1	98	3	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.990			0.912			0.990				0.971
Frt		0.978			0.999			0.989				0.963
Flt Protected		0	1688	0	0	1586	0	0	1860	0	0	1711
Satd. Flow (prot)		0.978			0.999			0.989				0.963
Flt Permitted		0	1688	0	0	1586	0	0	1860	0	0	1711
Satd. Flow (perm)		50			50			50				50
Link Speed (k/h)		173.7			86.8			54.3				122.0
Link Distance (m)		12.5			6.2			3.9				8.8
Travel Time (s)		12			15			8				1
Confl. Peds. (#/hr)		0.92			0.92			0.92				0.92
Peak Hour Factor		5%			0%			0%				0%
Heavy Vehicles (%)		49			53			58				107
Adj. Flow (vph)		0			0			0				3
Shared Lane Traffic (%)		0			0			0				0
Lane Group Flow (vph)		0			0			0				0
Enter Blocked Intersection		No			No			No				No
Lane Alignment		Left			Left			Left				Left
Median Width(m)		0.0			0.0			0.0				0.0
Link Offset(m)		0.0			0.0			0.0				0.0
Crosswalk Width(m)		4.8			4.8			4.8				4.8
Two way Left Turn Lane		1.00			1.00			1.00				1.00
Headway Factor		25			15			25				15
Turning Speed (k/h)		Free			Free			Stop				Stop
Sign Control		Free			Free			Stop				Stop
Intersection Summary												
Area Type:		Other										
Control Type: Unsignalized												
Intersection Capacity Utilization		44.3%			ICU Level of Service A							
Analysis Period (min)		15										

HCM Unsignalized Intersection Capacity Analysis

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	45	49	7	5	53	109	3	9	1	98	3	28
Traffic Volume (veh/h)	45	49	7	5	53	109	3	9	1	98	3	28
Future Volume (Veh/h)	45	49	7	5	53	109	3	9	1	98	3	28
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	53	8	5	58	118	3	10	1	107	3	30
Pedestrians		8			1			15				12
Lane Width (m)		3.6			3.6			3.6				3.6
Walking Speed (m/s)		1.2			1.2			1.2				1.2
Percent Blockage		1			0			1				1
Right turn flare (veh)		None			None			None				None
Median type		None			None			None				None
Median storage (veh)		174										
Upstream signal (m)												
pX, platoon unblocked												
VC, conflicting volume		188			76			336		301		313
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol		188			76			336		301		313
IC, single (s)		4.1			4.1			7.1		6.2		6.2
IC, 2 stage (s)		2.2			2.2			3.5		4.0		4.0
p0 queue free %		96			100			99		100		99
dM capacity (veh/h)		1355			1517			559		530		569
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	110	181	14	140								
Volume Left	49	5	3	107								
Volume Right	8	118	1	30								
cSH	1355	1517	554	645								
Volume to Capacity	0.04	0.00	0.03	0.22								
Queue Length 95th (m)	0.9	0.1	0.6	6.6								
Control Delay (s)	3.6	0.2	11.7	12.1								
Lane LOS	A	A	B	B								
Approach Delay (s)	3.6	0.2	11.7	12.1								
Approach LOS	B	B	B	B								
Intersection Summary												
Average Delay			5.2									
Intersection Capacity Utilization			44.3%									
Analysis Period (min)			15									

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	63	73	13	1	69	5	15	10	2	0	1	83
Traffic Volume (vph)	63	73	13	1	69	5	15	10	2	0	1	83
Future Volume (vph)	63	73	13	1	69	5	15	10	2	0	1	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.988				0.992		0.991				0.866	
Flt Protected	0.979				0.999		0.973					
Satd. Flow (prot)	0	1672	0	0	1784	0	0	1832	0	0	1351	0
Flt Permitted	0.979				0.999		0.973					
Satd. Flow (perm)	0	1672	0	0	1784	0	0	1832	0	0	1351	0
Link Speed (k/h)	50				50		50				50	
Link Distance (m)	86.8				65.5		110.7				89.9	
Travel Time (s)	6.2				4.7		8.0				6.5	
Confl. Peds. (#/hr)	8				8		31				1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	17%	4%	9%	0%	6%	0%	0%	0%	0%	0%	0%	22%
Adj. Flow (vph)	68	79	14	1	75	5	16	11	2	0	1	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	161	0	0	81	0	0	29	0	0	91	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Right	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8				4.8		4.8				4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25				15	25	15	25	15	25	25	15
Sign Control	Free				Free		Stop				Stop	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	32.9%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Background (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	63	73	13	1	69	5	15	10	2	0	1	83
Traffic Volume (veh/h)	63	73	13	1	69	5	15	10	2	0	1	83
Future Volume (Veh/h)	63	73	13	1	69	5	15	10	2	0	1	83
Sign Control	Free				Free		Stop				Stop	
Grade	0%				0%		0%				0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	79	14	1	75	5	16	11	2	0	1	90
Pedestrians	31				1		8					
Lane Width (m)	3.6				3.6		3.6					
Walking Speed (m/s)	1.2				1.2		1.2					
Percent Blockage	3				0		1					
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (m)	261											
pK, platoon unblocked												
VC, conflicting volume	80			101			431	312	95	310	316	108
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	80			101			431	312	95	310	316	108
IC, single (s)	4.3			4.1			7.1	6.5	6.2	7.1	6.5	6.4
IC, 2 stage (s)												
IF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.5
p0 queue free %	95			100			96	98	100	100	100	90
dM capacity (veh/h)	1428			1494			447	573	960	609	570	871
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	161	81	29	91								
Volume Left	68	1	16	0								
Volume Right	14	5	2	90								
cSH	1428	1494	508	865								
Volume to Capacity	0.05	0.00	0.06	0.11								
Queue Length 95th (m)	1.2	0.0	1.4	2.8								
Control Delay (s)	3.5	0.1	12.5	9.6								
Lane LOS	A	A	B	A								
Approach Delay (s)	3.5	0.1	12.5	9.6								
Approach LOS	B	A		A								
Intersection Summary												
Average Delay			5.0									
Intersection Capacity Utilization			32.9%							A		
Analysis Period (min)			15									

Appendix F

2028 Total Operation Reports



Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Total (2028) Weekday
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	8	9	24	18	16	27	20	385	26	24	398	9
Traffic Volume (vph)												
Future Volume (vph)	8	9	24	18	16	27	20	385	26	24	398	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	0.92	0.92	0.98	0.941	0.941	0.992	0.992	0.997	0.997	0.997	0.997
Flt Protected	0	0	0	0	0	0	0	0	0	0	0	0
Satd. Flow (prot)	0	1613	0	0	1658	0	0	1698	0	0	1724	0
Flt Permitted	0	0.925	0	0	0.886	0	0.973	0.973	0	0	0.967	0
Satd. Flow (perm)	0	1503	0	0	1488	0	0	1655	0	0	1672	0
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	26	50	29	29	50	29	9	50	29	50	29	9
Link Speed (km/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	188.1	188.1	173.7	173.7	173.7	173.7	84.5	84.5	84.5	84.5	84.5	84.5
Travel Time (s)	13.5	13.5	12.5	12.5	12.5	12.5	6.1	6.1	6.1	6.1	6.1	6.1
Confl. Peds. (#/hr)	11	5	5	5	11	11	6	6	1	1	1	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	10%	8%	8%	0%	6%	11%	9%	0%	10%	13%
Adj. Flow (vph)	9	10	26	20	17	29	22	418	28	26	433	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	66	0	0	468	0	0	469	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	15	25	15	15	25	15	25	25	15	15
Turning Speed (km/h)	1	2	1	2	1	2	1	2	1	2	1	2
Number of Detectors	1	2	1	2	1	2	1	2	1	2	1	2
Detector Template	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Leading Detector (m)	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6	9.4	0.6
Detector 2 Size(m)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	2	2	2	2	2	2
Permitted Phases												

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Total (2028) Weekday
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4					2	2		2	2	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (%)	34.9%	34.9%	34.9%	34.9%	34.9%	34.9%	65.1%	65.1%	65.1%	65.1%	65.1%	65.1%
Maximum Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	35.0	35.0	35.0	35.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max	Max
Walk Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Flash Dont Walk (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	10.4	10.4	10.4	10.4	10.4	10.4	45.4	45.4	45.4	45.4	45.4	45.4
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
v/c Ratio	0.16	0.16	0.23	0.23	0.23	0.23	0.37	0.37	0.37	0.37	0.37	0.37
Control Delay	13.1	13.1	15.4	15.4	15.4	15.4	4.7	4.7	4.7	4.7	4.7	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.1	13.1	15.4	15.4	15.4	15.4	4.7	4.7	4.7	4.7	4.7	4.7
LOS	B	B	B	B	B	B	A	A	A	A	A	A
Approach Delay	13.1	13.1	15.4	15.4	15.4	15.4	4.7	4.7	4.7	4.7	4.7	4.7
Approach LOS	B	B	B	B	B	B	A	A	A	A	A	A
Intersection Summary												
Area Type:	Other											
Cycle Length:	63											
Actuated Cycle Length:	60											
Natural Cycle:	60											
Control Type:	Semi Act-Uncoord											
Maximum v/c Ratio:	0.37											
Intersection Signal Delay:	5.8											
Intersection Capacity Utilization:	46.4%											
Analysis Period (min):	15											

Splits and Phases: 101: N Sykes St & Trowbridge St



Queues

101: N Sykes St & Trowbridge St

Total (2028) Weekday
AM Peak Hour

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	45	66	468	469
v/c Ratio	0.16	0.23	0.37	0.37
Control Delay	13.1	15.4	4.7	4.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.1	15.4	4.7	4.7
Queue Length 50th (m)	2.0	3.9	17.0	17.3
Queue Length 95th (m)	8.7	12.0	33.8	34.0
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	472	470	1254	1265
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	0.10	0.14	0.37	0.37
Intersection Summary				

HCM Signalized Intersection Capacity Analysis

101: N Sykes St & Trowbridge St

Total (2028) Weekday
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Volume (vph)	8	9	24	18	16	27	20	385	26	24	398	9
Future Volume (vph)	8	9	24	18	16	27	20	385	26	24	398	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb. ped/bikes	0.98			0.98			1.00				1.00	
Flpb. ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.92	0.99		0.94	0.99		0.99	1.00	1.00	1.00	1.00	1.00
Flt Protected												
Satd. Flow (prot)	1609			1654			1697				1724	
Flt Permitted	0.92			0.89			0.97				0.97	
Satd. Flow (perm)	1502			1488			1655				1672	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	10	26	20	17	29	22	418	28	26	433	10
RTOR Reduction (vph)	0	22	0	0	25	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	23	0	0	41	0	0	466	0	0	468	0
Confl. Peds. (#/hr)	11	5	5	5	11	6	11	1	1	1	6	6
Heavy Vehicles (%)	0%	0%	10%	8%	0%	0%	6%	11%	9%	0%	10%	13%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2		2			
Actuated Green, G (s)	6.7			6.7			42.5		42.5			42.5
Effective Green, g (s)	8.7			8.7			44.5		44.5			44.5
Actuated g/C Ratio	0.14			0.14			0.73		0.73			0.73
Clearance Time (s)	6.0			6.0			6.0		6.0			6.0
Vehicle Extension (s)	3.0			3.0			3.0		3.0			3.0
Lane Grp Cap (vph)	213			211			1203				1215	
v/s Ratio Prot												
v/s Ratio Perm	0.02			c0.03			c0.28				0.28	
v/c Ratio	0.11			0.19			0.39				0.39	
Uniform Delay, d1	22.9			23.2			3.2				3.2	
Progression Factor	1.00			1.00			1.00				1.00	
Incremental Delay, d2	0.2			0.5			0.9				0.9	
Delay (s)	23.1			23.6			4.1				4.1	
Level of Service	C			C			A				A	
Approach Delay (s)	23.1			23.6			4.1				4.1	
Approach LOS	C			C			A				A	
Intersection Summary												
HCM 2000 Control Delay			6.1				HCM 2000 Level of Service				A	
HCM 2000 Volume to Capacity ratio			0.36									
Actuated Cycle Length (s)			61.2				Sum of lost time (s)				8.0	
Intersection Capacity Utilization			46.4%				ICU Level of Service				A	
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

102: S Sykes St & Boucher St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	5	4	0	25	1	416	10	9	471	1
Traffic Volume (vph)	1	1	5	4	0	25	1	416	10	9	471	1
Future Volume (vph)	1	1	5	4	0	25	1	416	10	9	471	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.904				0.882			0.997				
FRT	0.993				0.994							
Flt Protected	0	1706	0	0	1666	0	0	1742	0	0	1760	0
Satd. Flow (prot)	0.993				0.994						0.999	
Flt Permitted	0	1706	0	0	1666	0	0	1742	0	0	1760	0
Satd. Flow (perm)	50				50			50			50	
Link Speed (k/h)	85.4				372.8			139.8			130.1	
Link Distance (m)	6.1				26.8			10.1			9.4	
Travel Time (s)	3				1			8			8	
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	8%	0%
Heavy Vehicles (%)	1	1	5	4	0	27	1	452	11	10	512	1
Adj. Flow (vph)												
Shared Lane Traffic (%)	0	7	0	0	31	0	0	464	0	0	523	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8				4.8			4.8			4.8	
Crosswalk Width(m)												
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25				15	25	15	25	15	25	25	15
Turning Speed (k/h)	Stop				Stop			Free			Free	
Sign Control												
Intersection Summary	Other											
Area Type:	Control Type: Unsignalized											
Intersection Capacity Utilization	42.6%											
Analysis Period (min)	15											
ICU Level of Service A												

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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HCM Unsignalized Intersection Capacity Analysis

102: S Sykes St & Boucher St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	5	4	0	25	1	416	10	9	471	1
Traffic Volume (veh/h)	1	1	5	4	0	25	1	416	10	9	471	1
Future Volume (Veh/h)	1	1	5	4	0	25	1	416	10	9	471	1
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	5	4	0	27	1	452	11	10	512	1
Pedestrians	8						1			3		
Lane Width (m)	3.6						3.6			3.6		
Walking Speed (m/s)	1.2						1.2			1.2		
Percent Blockage	1						0			0		
Right turn flare (veh)							None			None		
Median type							None			None		
Median storage (veh)												
Upstream signal (m)										215		
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96	0.96	0.96					
VC, conflicting volume	1030	1006	522	998	1000	460	521			463		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	1010	984	480	977	979	460	479			463		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
p0 queue free %	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	98	100	96	100			99		
all capacity (veh/h)	198	236	562	217	238	604	1042			1109		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	7	31	464	523								
Volume Left	1	4	1	10								
Volume Right	5	27	11	1								
cSH	385	491	1042	1109								
Volume to Capacity	0.02	0.06	0.00	0.01								
Queue Length 95th (m)	0.4	1.6	0.0	0.2								
Control Delay (s)	14.5	12.8	0.0	0.3								
Lane LOS	B	B	A	A								
Approach Delay (s)	14.5	12.8	0.0	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			42.6%							A		
Analysis Period (min)			15									

Stanley Knights, Meaford TIS

PTSL (200616)

Synchro 10 Report

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Lanes, Volumes, Timings

103: St. Vincent St & Bridge St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	19	55	21	23	0	53	5	11	0	0	10
Future Volume (vph)	0	19	55	21	23	0	53	5	11	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.900						0.978			0.865	
Flt Protected					0.977			0.963				
Satd. Flow (prot)	0	1649	0	0	1856	0	0	1671	0	0	1644	0
Flt Permitted					0.977			0.963				
Satd. Flow (perm)	0	1649	0	0	1856	0	0	1671	0	0	1644	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		85.2			185.4			142.5			138.1	
Travel Time (s)		6.1			13.3			10.3			11.4	
Confl. Peds. (#/hr)	2		3	3		2	1					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	7%	25%	0%	0%	0%	0%
Adj. Flow (vph)	0	21	60	23	25	0	58	5	12	0	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	48	0	0	75	0	0	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Left	Right	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	15	25	15
Sign Control		Stop			Stop			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	26.5%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

103: St. Vincent St & Bridge St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	19	55	21	23	0	53	5	11	0	0	10
Future Volume (vph)	0	19	55	21	23	0	53	5	11	0	0	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	21	60	23	25	0	58	5	12	0	0	11
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	81	48	75	11								
Volume Left (vph)	0	23	58	0								
Volume Right (vph)	60	0	12	11								
Head (s)	-0.38	0.10	0.18	-0.60								
Departure Headway (s)	3.8	4.3	4.4	3.6								
Degree Utilization, x	0.08	0.06	0.09	0.01								
Capacity (veh/h)	929	821	795	943								
Control Delay (s)	7.1	7.5	7.8	6.7								
Approach Delay (s)	7.1	7.5	7.8	6.7								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay	7.4											
Level of Service	A											
Intersection Capacity Utilization	26.5%											
Analysis Period (min)	15											

Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations	1	6	10	21	23	2	3	65	15	0	76	1
Traffic Volume (vph)	1	6	10	21	23	2	3	65	15	0	76	1
Future Volume (vph)	1	6	10	21	23	2	3	65	15	0	76	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.922			0.995			0.976			0.998	
Frt		0.997			0.978			0.998			0.998	
Flt Protected	0	1747	0	0	1849	0	0	1723	0	0	1824	0
Satd. Flow (prot)		0.997			0.978			0.998			0.998	
Flt Permitted	0	1747	0	0	1849	0	0	1723	0	0	1824	0
Satd. Flow (perm)		0.997			0.978			0.998			0.998	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		372.8			190.6			146.8			142.5	
Travel Time (s)		26.8			13.7			10.6			10.3	
Conf. Peds. (#/hr)		2			2			1			1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	33%	8%	0%	0%	4%	0%
Adj. Flow (vph)	1	7	11	23	25	2	3	71	16	0	83	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	50	0	0	90	0	0	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	15	25	15
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	22.7%
Analysis Period (min)	15
ICU Level of Service A	

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	1	6	10	21	23	2	3	65	15	0	76	1
Traffic Volume (veh/h)	1	6	10	21	23	2	3	65	15	0	76	1
Future Volume (Veh/h)	1	6	10	21	23	2	3	65	15	0	76	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	7	11	23	25	2	3	71	16	0	83	1
Pedestrians		1			1			2			1	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		0			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	184	178	86	185	170	79	85				87	
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	184	178	86	185	170	79	85				87	
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.4				4.1	
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.5				2.2	
p0 queue free %	100	99	99	97	97	100	100				100	
dM capacity (veh/h)	757	718	975	763	724	987	1336				1522	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	19	50	90	84								
Volume Left	1	23	3	0								
Volume Right	11	2	16	1								
cSH	850	750	1336	1522								
Volume to Capacity	0.02	0.07	0.00	0.00								
Queue Length 95th (m)	0.5	1.7	0.1	0.0								
Control Delay (s)	9.3	10.1	0.3	0.0								
Lane LOS	A	B	A									
Approach Delay (s)	9.3	10.1	0.3	0.0								
Approach LOS	A	B										
Intersection Summary												
Average Delay			2.9									
Intersection Capacity Utilization			22.7%									
Analysis Period (min)			15									
ICU Level of Service			A									

Lanes, Volumes, Timings

105: Fuller St & Bridge St/Street B

Total (2028) Weekday
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	19	5	0	33	0	5	3	4	0	6	6
Future Volume (vph)	6	19	5	0	33	0	5	3	4	0	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.980						0.955				0.932	
Flt Permitted	0.990						0.980					
Satd. Flow (prot)	0	1843	0	0	1900	0	0	1778	0	0	1771	0
Flt Permitted	0.990						0.980					
Satd. Flow (perm)	0	1843	0	0	1900	0	0	1778	0	0	1771	0
Link Speed (k/h)	50				50		50				50	
Link Distance (m)	185.4				49.8		73.8				56.8	
Travel Time (s)	13.3				3.6		5.3				4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	7	21	5	0	36	0	5	3	4	0	7	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	36	0	0	12	0	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0				0.0		0.0				0.0	
Link Offset(m)	0.0				0.0		0.0				0.0	
Crosswalk Width(m)	4.8				4.8		4.8				4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25	25	15	25	15	15	25	15	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Intersection Summary	Other											
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	18.4%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

105: Fuller St & Bridge St/Street B

Total (2028) Weekday
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	19	5	0	33	0	5	3	4	0	6	6
Future Volume (Veh/h)	6	19	5	0	33	0	5	3	4	0	6	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Grade	0%				0%		0%				0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	21	5	0	36	0	5	3	4	0	7	7
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None					None
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	44	28	10	41	29	5	14					7
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	44	28	10	41	29	5	14					7
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1					4.1
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					2.2
p0 queue free %	99	98	100	100	96	100	100					100
dM capacity (veh/h)	931	867	1077	943	865	1084	1617					1627
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	33	36	12	14								
Volume Left	7	0	5	0								
Volume Right	5	0	4	7								
cSH	907	865	1617	1627								
Volume to Capacity	0.04	0.04	0.00	0.00								
Queue Length 95th (m)	0.9	1.0	0.1	0.0								
Control Delay (s)	9.1	9.3	3.0	0.0								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.1	9.3	3.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay	7.1											
Intersection Capacity Utilization	18.4%											
Analysis Period (min)	15											

	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Group							
Lane Configurations							
Traffic Volume (vph)	11	9	40	0	4	7	
Future Volume (vph)	11	9	40	0	4	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Flt Protected		0.973			0.910		
		0.984					
Satd. Flow (prot)	0	1849	1900	0	1701	0	
Flt Permitted		0.973			0.984		
Satd. Flow (perm)	0	1849	1900	0	1701	0	
Link Speed (k/h)		50	50		50		
Link Distance (m)		190.6	77.3		68.0		
Travel Time (s)		13.7	5.6		4.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	
Adj. Flow (vph)	12	10	43	0	4	8	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	22	43	0	12	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(m)		0.0	0.0		3.6		
Link Offset(m)		0.0	0.0		0.0		
Crosswalk Width(m)		4.8	4.8		4.8		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25	Free	Free	15	25	15	
Sign Control					Stop		
Intersection Summary							
Area Type:	Other						
Control Type: Unsignalized							
Intersection Capacity Utilization 17.7%	ICU Level of Service A						
Analysis Period (min) 15							

	EBL	EBT	WBT	WBR	SBL	SBR	
Movement							
Lane Configurations							
Traffic Volume (veh/h)	11	9	40	0	4	7	
Future Volume (Veh/h)	11	9	40	0	4	7	
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	12	10	43	0	4	8	
Pedestrians							
Lane Width (m)							
Walking Speed (m/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		None	None				
Median storage (veh)							
Upstream signal (m)							
pK, platoon unblocked	43				77	43	
VC, conflicting volume							
VC1, stage 1 conf vol							
VC2, stage 2 conf vol							
VCu, unblocked vol	43				77	43	
IC, single (s)	4.1				6.4	6.2	
IC, 2 stage (s)							
IF (s)	2.2				3.5	3.3	
p0 queue free %	99				100	99	
dm capacity (veh/h)	1579				924	1033	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	22	43	12				
Volume Left	12	0	4				
Volume Right	0	0	8				
cSH	1579	1700	994				
Volume to Capacity	0.01	0.03	0.01				
Queue Length 95th (m)	0.2	0.0	0.3				
Control Delay (s)	4.0	0.0	8.7				
Lane LOS	A		A				
Approach Delay (s)	4.0	0.0	8.7				
Approach LOS			A				
Intersection Summary							
Average Delay			2.5				
Intersection Capacity Utilization			17.7%				A
Analysis Period (min)			15				

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	22	35	2	0	43	65	2	3	2	54	5	16
Traffic Volume (vph)	22	35	2	0	43	65	2	3	2	54	5	16
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.996	0.982	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
Ped Bike Factor	0.996	0.982	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
Flt Protected	0	1785	0	0	1676	0	0	1800	0	0	1742	0
Satd. Flow (prot)	0	1785	0	0	1676	0	0	1800	0	0	1742	0
Flt Permitted	0	1785	0	0	1676	0	0	1800	0	0	1742	0
Satd. Flow (perm)	0	1785	0	0	1676	0	0	1800	0	0	1742	0
Link Speed (k/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	173.7	86.8	173.7	86.8	173.7	86.8	173.7	86.8	173.7	86.8	173.7	86.8
Travel Time (s)	12.5	6.2	12.5	6.2	12.5	6.2	12.5	6.2	12.5	6.2	12.5	6.2
Conf. Peds. (#/hr)	7	4	7	4	7	4	7	4	7	4	7	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	5%	0%	0%	6%	3%	0%	0%	0%	2%	0%	4%
Adj. Flow (vph)	24	38	2	0	47	71	2	3	2	59	5	17
Shared Lane Traffic (%)	0	64	0	0	118	0	0	7	0	0	81	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	25	15	25	15	25	15	25	15	25	15
Turning Speed (k/h)	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization	26.5%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

107: Bayfield St & Trowbridge St/Bridge St

Total (2028) Weekday
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	22	35	2	0	43	65	2	3	2	54	5	16
Traffic Volume (veh/h)	22	35	2	0	43	65	2	3	2	54	5	16
Future Volume (Veh/h)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	38	2	0	47	71	2	3	2	59	5	17
Pedestrians	1	1	1	1	1	1	1	1	1	1	1	1
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Walking Speed (m/s)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Percent Blockage	0	0	0	0	0	0	0	0	0	0	0	0
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	174	174	174	174	174	174	174	174	174	174	174	174
Upstream signal (m)	125	125	125	125	125	125	125	125	125	125	125	125
pX, platoon unblocked	125	125	125	125	125	125	125	125	125	125	125	125
VC, conflicting volume	125	125	125	125	125	125	125	125	125	125	125	125
VC1, stage 1 conf vol	125	125	125	125	125	125	125	125	125	125	125	125
VC2, stage 2 conf vol	125	125	125	125	125	125	125	125	125	125	125	125
VCu, unblocked vol	125	125	125	125	125	125	125	125	125	125	125	125
IC, single (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
IC, 2 stage (s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	98	98	98	98	98	98	98	98	98	98	98	98
dM capacity (veh/h)	1447	1447	1447	1447	1447	1447	1447	1447	1447	1447	1447	1447
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	EB 1	WB 1	NB 1	SB 1	EB 1	WB 1	NB 1	SB 1
Volume Total	64	118	7	81	64	118	7	81	64	118	7	81
Volume Left	24	0	2	59	24	0	2	59	24	0	2	59
Volume Right	2	71	2	17	2	71	2	17	2	71	2	17
cSH	1447	1572	764	788	1447	1572	764	788	1447	1572	764	788
Volume to Capacity	0.02	0.00	0.01	0.10	0.02	0.00	0.01	0.10	0.02	0.00	0.01	0.10
Queue Length 95th (m)	0.4	0.0	0.2	2.7	0.4	0.0	0.2	2.7	0.4	0.0	0.2	2.7
Control Delay (s)	2.9	0.0	9.8	10.1	2.9	0.0	9.8	10.1	2.9	0.0	9.8	10.1
Lane LOS	A	A	A	B	A	A	A	B	A	A	A	B
Approach Delay (s)	2.9	0.0	9.8	10.1	2.9	0.0	9.8	10.1	2.9	0.0	9.8	10.1
Approach LOS	A	A	A	B	A	A	A	B	A	A	A	B
Intersection Summary	Intersection Summary											
Average Delay	4.0											
Intersection Capacity Utilization	26.5%											
Analysis Period (min)	15											

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Total (2028) Weekday
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔	↔	↔			↔			↔	↔
Traffic Volume (vph)	15	75	2	1	85	0	15	1	0	0	1	8
Future Volume (vph)	15	75	2	1	85	0	15	1	0	0	1	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.997										0.878
Flt Protected		0.992			0.999			0.955				
Satd. Flow (prot)	0	1819	0	0	1792	0	0	1352	0	0	1447	0
Flt Permitted		0.992			0.999			0.955				
Satd. Flow (perm)	0	1819	0	0	1792	0	0	1552	0	0	1447	0
Link Speed (k/h)		50			50			50				50
Link Distance (m)		86.8			65.5			110.7				89.9
Travel Time (s)		6.2			4.7			8.0				6.5
Conf. Peds. (#/hr)	2		7	7		2	7		1	1		7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	6%	0%	18%	0%	0%	0%	0%	17%
Adj. Flow (vph)	16	82	2	1	92	0	16	1	0	0	1	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	93	0	0	17	0	0	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)		0.0			0.0			0.0				0.0
Link Offset(m)		0.0			0.0			0.0				0.0
Crosswalk Width(m)		4.8			4.8			4.8				4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type: Other												
Control Type: Unsignalized												
Intersection Capacity Utilization 26.4%												
Analysis Period (min) 15												
ICU Level of Service A												




HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Total (2028) Weekday
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔	↔	↔			↔			↔	↔
Traffic Volume (veh/h)	15	75	2	1	85	0	15	1	0	0	1	8
Future Volume (Veh/h)	15	75	2	1	85	0	15	1	0	0	1	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	82	2	1	92	0	16	1	0	0	1	9
Pedestrians		7			1			7			2	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			0			1			0	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)		261										
pX, platoon unblocked												
VC, conflicting volume	94			91			232	218	91	212	219	101
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	94			91			232	218	91	212	219	101
IC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.5	6.4
IC, 2 stage (s)												
IF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.0	3.5
p0 queue free %	99			100			98	100	100	100	100	99
dm capacity (veh/h)	1510			1508			665	671	966	735	670	908
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	100	93	17	10								
Volume Left	16	1	16	0								
Volume Right	2	0	0	9								
cSH	1510	1508	665	877								
Volume to Capacity	0.01	0.00	0.03	0.01								
Queue Length 95th (m)	0.3	0.0	0.6	0.3								
Control Delay (s)	1.3	0.1	10.6	9.2								
Lane LOS	A	A	B	A								
Approach Delay (s)	1.3	0.1	10.6	9.2								
Approach LOS		B	A									
Intersection Summary												
Average Delay												
Intersection Capacity Utilization 26.4%												
ICU Level of Service A												
Analysis Period (min) 15												




Lanes, Volumes, Timings
201: Fuller St & Street A

Total (2028) Weekday
AM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	0	3	4	0	9
Future Volume (vph)	3	0	3	4	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr	0.923					
Flt Protected	0.950					
Satd. Flow (prot)	1805	0	1754	0	0	1900
Flt Permitted	0.950					
Satd. Flow (perm)	1805	0	1754	0	0	1900
Link Speed (k/h)	50	50				
Link Distance (m)	46.2	56.8				
Travel Time (s)	3.3	4.1				
3.8						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	3	4	0	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	0	7	0	0	10
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6	0.0				
Link Offset(m)	0.0	0.0				
Crosswalk Width(m)	4.8	4.8				
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25			
Sign Control	Stop	Free		15	Free	
Intersection Summary						
Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%						
ICU Level of Service A						
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis
201: Fuller St & Street A

Total (2028) Weekday
AM Peak Hour

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	0	3	4	0	9
Future Volume (Veh/h)	3	0	3	4	0	9
Sign Control	Stop	Free				
Grade	0%	0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	0	3	4	0	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
VC, conflicting volume	15	5	7			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	15	5	7			
IC, single (s)	6.4	6.2	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
dm capacity (veh/h)	1009	1084	1627			
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	3	7	10			
Volume Left	3	0	0			
Volume Right	0	4	0			
cSH	1009	1700	1627			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.1	0.0	0.0			
Control Delay (s)	8.6	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.6	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay	1.3					
Intersection Capacity Utilization	13.3%					
Analysis Period (min)	15					
	ICU Level of Service A					

	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group						
Lane Configurations						
Traffic Volume (vph)	10	3	6	0	0	34
Future Volume (vph)	10	3	6	0	0	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected		0.962			0.865	
Satd. Flow (prot)	0	1828	1900	0	1644	0
Flt Permitted		0.962				
Satd. Flow (perm)	0	1828	1900	0	1644	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		15.6	60.9		36.9	
Travel Time (s)		1.1	4.4		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	3	7	0	0	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	14	7	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	
Intersection Summary	Other					
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 17.4%	ICU Level of Service A					
Analysis Period (min) 15						

	EBL	EBT	WBT	WBR	SBL	SBR
Movement						
Lane Configurations						
Traffic Volume (veh/h)	10	3	6	0	0	34
Future Volume (Veh/h)	10	3	6	0	0	34
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	3	7	0	0	37
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	7				32	7
VC, conflicting volume						
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	7				32	7
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	99				100	97
dm capacity (veh/h)	1627				980	1081
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	14	7	37			
Volume Left	11	0	0			
Volume Right	0	0	37			
cSH	1627	1700	1081			
Volume to Capacity	0.01	0.00	0.03			
Queue Length 95th (m)	0.2	0.0	0.8			
Control Delay (s)	5.7	0.0	8.4			
Lane LOS	A		A			
Approach Delay (s)	5.7	0.0	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			6.8			
Intersection Capacity Utilization			17.4%			A
Analysis Period (min)			15			

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Total (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	23	24	43	24	18	23	21	452	35	37	413	16
Traffic Volume (vph)	23	24	43	24	18	23	21	452	35	37	413	16
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.98	0.98	1.00	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.935	0.935	0.952	0.952	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991
Flt Protected	0.987	0.987	0.982	0.982	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
Satd. Flow (prot)	0	1707	0	0	1718	0	0	1766	0	0	1752	0
Flt Permitted	0.913	0.913	0.879	0.879	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974
Satd. Flow (perm)	0	1569	0	0	1534	0	0	1723	0	0	1651	0
Right Turn on Red	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Satd. Flow (RTOR)	47	25	25	25	25	25	25	25	25	25	25	25
Link Speed (km/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	188.1	188.1	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7	173.7
Travel Time (s)	13.5	13.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Confl. Peds. (#/hr)	19	6	6	6	19	25	25	25	25	25	25	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	25	26	47	26	20	25	23	491	38	40	449	17
Shared Lane Traffic (%)	0	98	0	0	71	0	0	552	0	0	506	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	15	25	15	15	25	15	25	15	25	15
Turning Speed (km/h)	1	2	1	2	1	2	1	2	1	2	1	2
Number of Detectors	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Detector Template	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0
Leading Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Detector 2 Size(m)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Detector 2 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4	4

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Total (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	4	4	4	2	2	2	2	2	2
Switch Phase	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	48.0	48.0	48.0	48.0	48.0	48.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (s)	34.9%	34.9%	34.9%	34.9%	34.9%	34.9%	65.1%	65.1%	65.1%	65.1%	65.1%	65.1%
Total Split (%)	16.0	16.0	16.0	16.0	16.0	16.0	35.0	35.0	35.0	35.0	35.0	35.0
Maximum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Lost Time Adj (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lead/Lag	None	None	None	None	None	None	None	None	None	None	None	None
Lead-Lag Optimize?	12.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	10.0	10.0
Vehicle Extension (s)	0	0	0	0	0	0	0	0	0	0	0	0
Recall Mode	10.8	10.8	10.8	10.8	10.8	10.8	45.8	45.8	45.8	45.8	45.8	45.8
Walk Time (s)	0.18	0.18	0.18	0.18	0.18	0.18	0.75	0.75	0.75	0.75	0.75	0.75
Flash Dont Walk (s)	0.31	0.31	0.31	0.31	0.31	0.31	0.43	0.43	0.43	0.43	0.43	0.43
Pedestrian Calls (#/hr)	15.9	15.9	15.9	15.9	15.9	15.9	5.3	5.3	5.3	5.3	5.3	5.3
Actu. g/C Ratio	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
v/c Ratio	15.9	15.9	15.9	15.9	15.9	15.9	5.3	5.3	5.3	5.3	5.3	5.3
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	15.9	15.9	15.9	15.9	15.9	15.9	5.3	5.3	5.3	5.3	5.3	5.3
Total Delay	B	B	B	B	B	B	A	A	A	A	A	A
LOS	15.9	15.9	15.9	15.9	15.9	15.9	5.3	5.3	5.3	5.3	5.3	5.3
Approach Delay	B	B	B	B	B	B	A	A	A	A	A	A
Approach LOS	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Intersection Summary	None	None	None	None	None	None	None	None	None	None	None	None
Area Type:	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other
Cycle Length:	63	63	63	63	63	63	63	63	63	63	63	63
Actuated Cycle Length:	61	61	61	61	61	61	61	61	61	61	61	61
Natural Cycle:	80	80	80	80	80	80	80	80	80	80	80	80
Control Type:	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord	Semi Act-Uncoord
Maximum v/c Ratio:	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Intersection Signal Delay:	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Intersection Capacity Utilization:	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%
Analysis Period (min):	15	15	15	15	15	15	15	15	15	15	15	15

Splits and Phases: 101: N Sykes St & Trowbridge St



Queues

101: N Sykes St & Trowbridge St

Total (2028) Weekday
PM Peak Hour

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	98	71	552	506
v/c Ratio	0.31	0.24	0.43	0.41
Control Delay	15.9	17.7	5.3	5.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.9	17.7	5.3	5.2
Queue Length 50th (m)	5.2	4.7	21.1	19.2
Queue Length 95th (m)	16.5	14.3	45.2	41.5
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	496	470	1296	1241
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	0.15	0.43	0.41
Intersection Summary				

HCM Signalized Intersection Capacity Analysis

101: N Sykes St & Trowbridge St

Total (2028) Weekday
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔			↔	
Traffic Volume (vph)	23	24	43	24	18	23	21	452	35	37	413	16
Future Volume (vph)	23	24	43	24	18	23	21	452	35	37	413	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb. ped/bikes	0.99			0.98			1.00				1.00	
Flpb. ped/bikes	0.99			1.00			1.00				1.00	
Frt	0.94			0.95			0.99				1.00	
Flt Protected	0.99			0.98			1.00				1.00	
Satd. Flow (prot)	1698			1715			1764				1752	
Flt Permitted	0.91			0.88			0.97				0.94	
Satd. Flow (perm)	1570			1535			1722				1652	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	26	47	26	20	25	23	491	38	40	449	17
RTOR Reduction (vph)	0	40	0	0	21	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	58	0	0	50	0	0	549	0	0	505	0
Confl. Peds. (#/hr)	19	6	6	6	19	25	9	9	9	9	25	25
Heavy Vehicles (%)	0%	5%	0%	0%	0%	0%	0%	7%	0%	0%	8%	7%
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	7.2			7.2			43.0			43.0		
Effective Green, g (s)	9.2			9.2			45.0			45.0		
Actuated g/C Ratio	0.15			0.15			0.72			0.72		
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)	232			227			1245			1195		
v/s Ratio Prot												
v/s Ratio Perm	c0.04			0.03			c0.32			0.31		
v/c Ratio	0.25			0.22			0.44			0.42		
Uniform Delay, d1	23.4			23.3			3.5			3.4		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.6			0.5			1.1			1.1		
Delay (s)	24.0			23.8			4.6			4.5		
Level of Service	C			C			A			A		
Approach Delay (s)	24.0			23.8			4.6			4.5		
Approach LOS	C			C			A			A		
Intersection Summary												
HCM 2000 Control Delay			7.2				HCM 2000 Level of Service			A		
HCM 2000 Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			62.2				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			55.9%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
102: S Sykes St & Boucher St

Total (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	3	0	2	7	1	16	1	532	11	9	509	3
Future Volume (vph)	3	0	2	7	1	16	1	532	11	9	509	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.946			0.912			0.997			0.999	
Flt Protected		0.971			0.985						0.999	
Satd. Flow (prot)	0	1745	0	0	1707	0	0	1840	0	0	1878	0
Flt Permitted		0.971			0.985						0.999	
Satd. Flow (perm)	0	1745	0	0	1707	0	0	1840	0	0	1878	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		85.4			372.8			139.8			130.1	
Travel Time (s)		6.1			26.8			10.1			9.4	
Confl. Peds. (#/hr)	1		2	2		1	3					3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	1%	0%
Adj. Flow (vph)	3	0	2	8	1	17	1	578	12	10	553	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	0	0	26	0	0	591	0	0	566	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	4.8	0.0
Crosswalk Width(m)		4.8			4.8							4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25	15	15	25	15	15	25	15	25
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Other												
Area Type:												
Control Type: Unsignalized												
Intersection Capacity Utilization 44.5%												
Analysis Period (min) 15												
ICU Level of Service A												

HCM Unsignalized Intersection Capacity Analysis
102: S Sykes St & Boucher St

Total (2028) Weekday
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	2	7	1	16	1	532	11	9	509	3
Future Volume (Veh/h)	3	0	2	7	1	16	1	532	11	9	509	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	0	2	8	1	17	1	578	12	10	553	3
Pedestrians		3						2			1	
Lane Width (m)		3.6						3.6			3.6	
Walking Speed (m/s)		1.2						1.2			1.2	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (m)											215	
pX platoon unblocked	0.95	0.95	0.95	0.95	0.95	0.95	0.95					
VC, conflicting volume	1182	1170	560	1164	1185	585	559				580	
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	1164	1151	507	1146	1146	585	506				590	
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	98	100	100	95	99	97	100				99	
dM capacity (veh/h)	156	186	537	166	188	514	1010				995	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	5	26	591	566								
Volume Left	3	8	1	10								
Volume Right	2	17	12	3								
cSH	217	300	1010	995								
Volume to Capacity	0.02	0.09	0.00	0.01								
Queue Length 95th (m)	0.6	2.3	0.0	0.2								
Control Delay (s)	22.0	18.1	0.0	0.3								
Lane LOS	C	C	A	A								
Approach Delay (s)	22.0	18.1	0.0	0.3								
Approach LOS	C	C										
Intersection Summary												
Average Delay				0.6								
Intersection Capacity Utilization			44.5%								A	
Analysis Period (min)			15									

Lanes, Volumes, Timings

103: St. Vincent St & Bridge St

Total (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	37	59	21	21	1	71	8	14	1	5	1
Traffic Volume (vph)	0	37	59	21	21	1	71	8	14	1	5	1
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.917											
Ped Bike Factor	0.917											
Flt					0.997			0.980			0.981	
Flt Protected					0.976			0.963			0.993	
Satd. Flow (prot)	0	1690	0	0	1849	0	0	1727	0	0	1851	0
Flt Permitted					0.976			0.963			0.993	
Satd. Flow (perm)	0	1690	0	0	1849	0	0	1727	0	0	1851	0
Link Speed (k/h)	50				50			50			50	
Link Distance (m)	85.2				185.4			142.5			138.1	
Travel Time (s)	6.1				13.3			10.3			11.4	
Conf. Peds. (#/hr)			10	10				1				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	40	64	23	23	1	77	9	15	1	5	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	104	0	0	47	0	0	101	0	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8				4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25	15	15	25	15	25	15	25	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	27.5%
Analysis Period (min)	15

HCM Unsignalized Intersection Capacity Analysis

103: St. Vincent St & Bridge St

Total (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	37	59	21	21	1	71	8	14	1	5	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume (vph)	0	37	59	21	21	1	71	8	14	1	5	1
Future Volume (vph)	0	37	59	21	21	1	71	8	14	1	5	1
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	40	64	23	23	1	77	9	15	1	5	1
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	104	47	101	7								
Volume Left (vph)	0	23	77	1								
Volume Right (vph)	64	1	15	1								
Head (s)	-0.32	0.09	0.13	-0.06								
Departure Headway (s)	3.9	4.3	4.4	4.3								
Degree Utilization, x	0.11	0.06	0.12	0.01								
Capacity (veh/h)	886	803	794	804								
Control Delay (s)	7.4	7.6	8.0	7.3								
Approach Delay (s)	7.4	7.6	8.0	7.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.6									
Level of Service			A							A		
Intersection Capacity Utilization			27.5%									
Analysis Period (min)			15									

Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Total (2028) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	10	7	21	16	7	3	82	34	2	78	5
Traffic Volume (vph)	3	10	7	21	16	7	3	82	34	2	78	5
Future Volume (vph)	3	10	7	21	16	7	3	82	34	2	78	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.951		0.977		0.961		0.961		0.993		0.993
Flt		0.993		0.977		0.999		0.999		0.999		0.999
Flt Protected		0	1794	0	0	1814	0	0	1763	0	0	1818
Satd. Flow (prot)		0	1794	0	0	1763	0	0	1763	0	0	1818
Flt Permitted		0.993		0.977		0.999		0.999		0.999		0.999
Satd. Flow (perm)		0	1794	0	0	1814	0	0	1763	0	0	1818
Link Speed (k/h)		50		50		50		50		50		50
Link Distance (m)		372.8		190.6		146.8		146.8		142.5		142.5
Travel Time (s)		26.8		13.7		10.6		10.6		10.3		10.3
Conf. Peds. (#/hr)		2		7		12		12		12		12
Peak Hour Factor		0.92		0.92		0.92		0.92		0.92		0.92
Heavy Vehicles (%)		0%		0%		0%		0%		0%		0%
Adj. Flow (vph)		3	11	8	23	17	8	3	89	37	2	85
Shared Lane Traffic (%)		0	22	0	0	48	0	0	129	0	0	92
Lane Group Flow (vph)		0	22	0	0	48	0	0	129	0	0	92
Enter Blocked Intersection		No	No	No	No	No	No	No	No	No	No	No
Lane Alignment		Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)		4.8		4.8		4.8		4.8		4.8		4.8
Two way Left Turn Lane		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor		25		15		25		15		25		15
Turning Speed (k/h)		Stop		Stop		Stop		Free		Free		Free
Sign Control		Stop		Stop		Stop		Free		Free		Free

Intersection Summary	Other
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 23.1%	ICU Level of Service A
Analysis Period (min) 15	

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St

Total (2028) Weekday
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	10	7	21	16	7	3	82	34	2	78	5
Traffic Volume (veh/h)	3	10	7	21	16	7	3	82	34	2	78	5
Future Volume (Veh/h)	3	10	7	21	16	7	3	82	34	2	78	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	11	8	23	17	8	3	89	37	2	85	5
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked												
VC, conflicting volume	224	236	94	238	220	122	90			138		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	224	236	94	238	220	122	90			138		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	97	99	100	100			100		
dM capacity (veh/h)	708	660	962	688	673	924	1518			1444		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	22	48	129	92								
Volume Left	3	23	3	2								
Volume Right	8	8	37	5								
cSH	753	713	1518	1444								
Volume to Capacity	0.03	0.07	0.00	0.00								
Queue Length 95th (m)	0.7	1.7	0.0	0.0								
Control Delay (s)	9.9	10.4	0.2	0.2								
Lane LOS	A	B	A	A								
Approach Delay (s)	9.9	10.4	0.2	0.2								
Approach LOS	A	B										
Intersection Summary												
Average Delay			2.6									
Intersection Capacity Utilization			23.1%									
Analysis Period (min)			15									

Lanes, Volumes, Timings

105: Fuller St & Bridge St/Street B

Total (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	10	21	21	0	27	0	2	5	14	0	9	13
Traffic Volume (vph)	10	21	21	0	27	0	2	5	14	0	9	13
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.946											
Flt	0.990											
Flt Protected	0.990											
Satd. Flow (prot)	0	1779	0	0	1900	0	0	1717	0	0	1750	0
Flt Permitted	0.990											
Satd. Flow (perm)	0	1779	0	0	1900	0	0	1717	0	0	1750	0
Link Speed (k/h)	50											
Link Distance (m)	185.4											
Travel Time (s)	13.3											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	23	23	0	29	0	2	5	15	0	10	14
Shared Lane Traffic (%)	0	57	0	0	29	0	0	22	0	0	24	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8											
Crosswalk Width(m)	4.8											
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	15	15	25	25	15	25	25	15	25	15	15
Turning Speed (k/h)	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary	Other											
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	19.6%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

105: Fuller St & Bridge St/Street B

Total (2028) Weekday

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	10	21	21	0	27	0	2	5	14	0	9	13
Traffic Volume (veh/h)	10	21	21	0	27	0	2	5	14	0	9	13
Future Volume (Veh/h)	10	21	21	0	27	0	2	5	14	0	9	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	23	23	0	29	0	2	5	15	0	10	14
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (m)												
pK, platoon unblocked	48	41	17	68	40	12	24					
VC, conflicting volume												
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	48	41	17	68	40	12	24					
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1					
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					
p0 queue free %	99	97	98	100	97	100	100					
dM capacity (veh/h)	932	854	1068	890	854	1074	1604					
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	57	29	22	24								
Volume Left	11	0	2	0								
Volume Right	23	0	15	14								
cSH	946	854	1604	1609								
Volume to Capacity	0.06	0.03	0.00	0.00								
Queue Length 95th (m)	1.5	0.8	0.0	0.0								
Control Delay (s)	9.1	9.4	0.7	0.0								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.1	9.4	0.7	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay	6.1											
Intersection Capacity Utilization	19.6%											
Analysis Period (min)	15											

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	28	31	2	17	13
Future Volume (vph)	19	28	31	2	17	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.992		0.941	
Flt Protected		0.980			0.973	
Satd. Flow (prot)	0	1862	1885	0	1740	0
Flt Permitted		0.980			0.973	
Satd. Flow (perm)	0	1862	1885	0	1740	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		190.6	76.1		71.1	
Travel Time (s)		13.7	5.5		5.1	
Conf. Peds. (#/hr)	5			5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	21	30	34	2	18	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	51	36	0	32	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Right	Right	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free	Free	Stop	Stop
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.2%	ICU Level of Service A					
Analysis Period (min) 15						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	28	31	2	17	13
Future Volume (Veh/h)	19	28	31	2	17	13
Sign Control		Free	Free	Free	Stop	Stop
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	30	34	2	18	14
Pedestrians					5	
Lane Width (m)					3.6	
Walking Speed (m/s)					1.2	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX platoon unblocked						
VC, conflicting volume	41				112	40
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	41				112	40
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	99				98	99
CM capacity (veh/h)	1575				874	1033
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	51	36	32			
Volume Left	21	0	18			
Volume Right	0	2	14			
cSH	1575	1700	937			
Volume to Capacity	0.01	0.02	0.03			
Queue Length 95th (m)	0.3	0.0	0.8			
Control Delay (s)	3.1	0.0	9.0			
Lane LOS	A		A			
Approach Delay (s)	3.1	0.0	9.0			
Approach LOS			A			
Intersection Summary						
Average Delay	3.7					
Intersection Capacity Utilization	19.2%					
Analysis Period (min)	15					
	ICU Level of Service A					

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Total (2028) Weekday
PM Peak Hour

















	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	43	54	0	0	33	90	1	1	0	66	2	31
Traffic Volume (vph)	43	54	0	0	33	90	1	1	0	66	2	31
Future Volume (vph)	43	54	0	0	33	90	1	1	0	66	2	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt												
Flt Protected	0	1785	0	0	1649	0	0	1854	0	0	1716	0
Satd. Flow (prot)	0	1785	0	0	1649	0	0	1854	0	0	1716	0
Flt Permitted	0	1785	0	0	1649	0	0	1854	0	0	1716	0
Satd. Flow (perm)	0	1785	0	0	1649	0	0	1854	0	0	1716	0
Link Speed (k/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	173.7	86.8										
Travel Time (s)	12.5	6.2										
Confl. Peds. (#/hr)	9	5	5	5	5	9	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	5%	0%	0%	6%	3%	0%	0%	0%	2%	0%	4%
Adj. Flow (vph)	47	59	0	0	36	98	1	1	0	72	2	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	106	0	0	134	0	0	2	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	25	15	25	25	15	25	25	15	15
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	34.0%
Analysis Period (min)	15
ICU Level of Service A	

HCM Unsignalized Intersection Capacity Analysis

107: Bayfield St & Trowbridge St/Bridge St

Total (2028) Weekday
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	54	0	0	33	90	1	1	0	66	2	31
Future Volume (Veh/h)	43	54	0	0	33	90	1	1	0	66	2	31
Sign Control	Free	Free		Free	Free			Stop			Stop	
Grade	0%	0%		0%	0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	47	59	0	0	36	98	1	1	0	72	2	34
Pedestrians		1						5			9	
Lane Width (m)		3.6						3.6			3.6	
Walking Speed (m/s)		1.2						1.2			1.2	
Percent Blockage		0						0			1	
Right turn flare (veh)		None			None							
Median type		None			None							
Median storage (veh)												
Upstream signal (m)		174										
pX, platoon unblocked			64				279	301	64	248	252	95
vC, conflicting volume	143											
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	143		64				279	301	64	248	252	95
IC, single (s)	4.1		4.1				7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)												
IF (s)	2.2		2.2				3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97		100				100	100	100	89	100	96
dM capacity (veh/h)	1423		1545				626	588	1002	676	626	948
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	106	134	2	108								
Volume Left	47	0	1	72								
Volume Right	0	98	0	34								
cSH	1423	1545	606	742								
Volume to Capacity	0.03	0.00	0.00	0.15								
Queue Length 95th (m)	0.8	0.0	0.1	4.1								
Control Delay (s)	3.5	0.0	11.0	10.7								
Lane LOS	A	B	B	B								
Approach Delay (s)	3.5	0.0	11.0	10.7								
Approach LOS	B	B	B	B								
Intersection Summary												
Average Delay		4.4										
Intersection Capacity Utilization		34.0%										
Analysis Period (min)		15										
									A			

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Total (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔			↔	↔
Traffic Volume (vph)	15	95	10	0	93	0	13	1	0	1	2	17
Future Volume (vph)	15	95	10	0	93	0	13	1	0	1	2	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.989										
Frt		0.989										0.884
Flt Protected		0.994		0	0	1900	0	0	0.955			0.998
Satd. Flow (prot)		0	1810	0	0	1814	0	0	1814	0	0	1676
Flt Permitted		0.994					0.955					0.998
Satd. Flow (perm)		0	1810	0	0	1900	0	0	1814	0	0	1676
Link Speed (k/h)		50		0	50		50		50			50
Link Distance (m)		86.8		65.5			110.7					89.9
Travel Time (s)		6.2		4.7			8.0					6.5
Confl. Peds. (#/hr)		7		11		7	14		4		4	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	103	11	0	101	0	14	1	0	1	2	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	130	0	0	101	0	0	15	0	0	0	21
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(m)		0.0		0.0		0.0	0.0		0.0		0.0	
Link Offset(m)		0.0		0.0		0.0	0.0		0.0		0.0	
Crosswalk Width(m)		4.8		4.8			4.8				4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15	25	15	25	15	25	15
Sign Control		Free			Free		Stop		Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization	27.0%
Analysis Period (min)	15
ICU Level of Service A	




HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Total (2028) Weekday
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔			↔	↔
Traffic Volume (veh/h)	15	95	10	0	93	0	13	1	0	1	2	17
Future Volume (Veh/h)	15	95	10	0	93	0	13	1	0	1	2	17
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	103	11	0	101	0	14	1	0	1	2	18
Pedestrians		14			4			11			7	
Lane Width (m)		3.6			3.6			3.6			3.6	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		1			0			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)		261										
pX, platoon unblocked												
VC, conflicting volume	108			125			286	260	124	253	265	122
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	108			125			286	260	124	253	265	122
IC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)												
p0 queue free %	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	100	100	100	100	98
qM capacity (veh/h)	1487			1461			630	632	921	684	627	918
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	130	101	15	21								
Volume Left	16	0	14	1								
Volume Right	11	0	0	18								
cSH	1487	1461	630	866								
Volume to Capacity	0.01	0.00	0.02	0.02								
Queue Length 95th (m)		0.3	0.0	0.6								
Control Delay (s)	1.0	0.0	10.9	9.3								
Lane LOS	A		B	A								
Approach Delay (s)	1.0	0.0	10.9	9.3								
Approach LOS		B		A								
Intersection Summary												
Average Delay			1.8									
Intersection Capacity Utilization			27.0%								A	
Analysis Period (min)			15									




Lanes, Volumes, Timings
201: Fuller St & Street A

Total (2028) Weekday
PM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	0	11	3	0	20
Future Volume (vph)	3	0	11	3	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.973					
Flt Protected	0.950					
Satd. Flow (prot)	1805	0	1849	0	0	1900
Flt Permitted	0.950					
Satd. Flow (perm)	1805	0	1849	0	0	1900
Link Speed (k/h)	50		50			50
Link Distance (m)	36.6		54.6			54.8
Travel Time (s)	2.6		3.9			3.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	0	12	3	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	0	15	0	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free		Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis
201: Fuller St & Street A

Total (2028) Weekday
PM Peak Hour

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	0	11	3	0	20
Future Volume (Veh/h)	3	0	11	3	0	20
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	0	12	3	0	22
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	36	14			15	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	36	14			15	
iC, single (s)	6.4	6.2			4.1	
iC, 2 stage (s)						
iF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
d0 capacity (veh/h)	982	1072			1616	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	3	15	22			
Volume Left	3	0	0			
Volume Right	0	3	0			
gSH	982	1700	1616			
Volume to Capacity	0.00	0.01	0.00			
Queue Length 95th (m)	0.1	0.0	0.0			
Control Delay (s)	8.7	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.7	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay				0.7		
Intersection Capacity Utilization				13.3%	ICU Level of Service	
Analysis Period (min)				15	A	

Lanes, Volumes, Timings
206: Boucher St & Street C

Total (2028) Weekday
PM Peak Hour

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		👉	👈		👈	👉
Traffic Volume (vph)	34	11	13	0	0	21
Future Volume (vph)	34	11	13	0	0	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fit	0.865					
Fit Protected	0.964					
Satd. Flow (prot)	0	1832	1900	0	1644	0
Fit Permitted	0.964					
Satd. Flow (perm)	0	1832	1900	0	1644	0
Link Speed (k/h)	50					
Link Distance (m)	26.5					
Travel Time (s)	1.9					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	37	12	14	0	0	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	49	14	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)	0.0					
Link Offset(m)	0.0					
Crosswalk Width(m)	4.8					
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	Free		15	25	15
Sign Control	Free		Free		Stop	
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.1%						
Analysis Period (min) 15						
ICU Level of Service A						

HCM Unsignalized Intersection Capacity Analysis
206: Boucher St & Street C

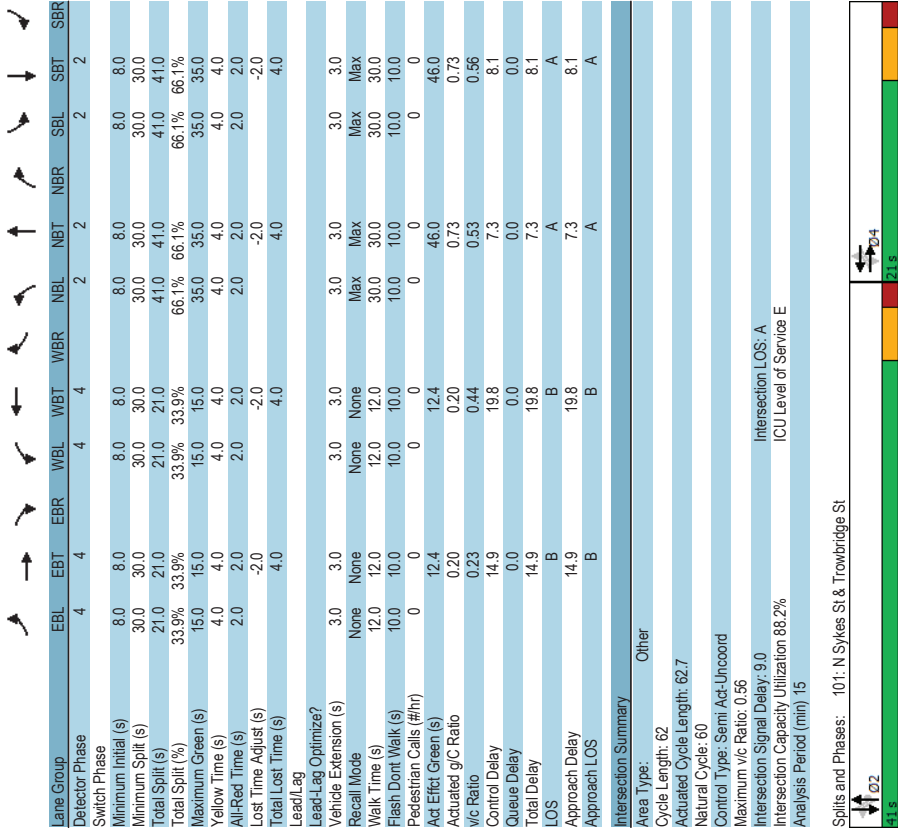
Total (2028) Weekday
PM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↱		↰	↱
Traffic Volume (veh/h)	34	11	13	0	0	21
Future Volume (Veh/h)	34	11	13	0	0	21
Sign Control	Free	Free	Free	Stop	Stop	Stop
Grade	0%					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	37	12	14	0	0	23
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	14	100				14
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	14	100				14
iC, single (s)	4.1	6.4				6.2
iC, 2 stage (s)						
iF (s)	2.2	3.5				3.3
p0 queue free %	98	100				98
dI capacity (veh/h)	1617	883				1072
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	49	14	23			
Volume Left	37	0	0			
Volume Right	0	0	23			
CSH	1617	1700	1072			
Volume to Capacity	0.02	0.01	0.02			
Queue Length 95th (m)	0.6	0.0	0.5			
Control Delay (s)	5.5	0.0	8.4			
Lane LOS	A	A	A			
Approach Delay (s)	5.5	0.0	8.4			
Approach LOS	A					
Intersection Summary						
Average Delay				5.4		
Intersection Capacity Utilization				19.1%	A	
Analysis Period (min)				15		

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lanes, Volumes, Timings
101: N Sykes St & Trowbridge St

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	11	31	33	53	21	43	14	579	55	68	528	13
Traffic Volume (vph)												
Future Volume (vph)	11	31	33	53	21	43	14	579	55	68	528	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.941			0.97			1.00	1.00	1.00	1.00	
Frt					0.950			0.988			0.997	
Flt Protected		0.993			0.978			0.999			0.994	
Satd. Flow (prot)	0	1701	0	0	1470	0	0	1836	0	0	1846	0
Flt Permitted		0.954			0.858			0.985			0.875	
Satd. Flow (perm)	0	1627	0	0	1274	0	0	1810	0	0	1823	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			46			13			3	
Link Speed (km/h)		50			50			50			50	
Link Distance (m)		188.1			173.7			84.5			284.4	
Travel Time (s)		13.5			12.5			6.1			19.0	
Confl. Peds. (#/hr)	28	22	22	22	0.92	28	20	0.92	25	25	0.92	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	7%	36%	0%	2%	0%	8%	1%	9%	0%
Adj. Flow (vph)	12	34	36	58	23	47	15	629	60	74	574	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	82	0	0	128	0	0	704	0	0	662	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8				4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (km/h)	25	15	15	25	15	25	15	25	15	25	15	15
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru	Left	Thru
Leading Detector (m)	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0	2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6	2.0	0.6
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)	9.4		9.4		9.4		9.4		9.4		9.4	
Detector 2 Size(m)	0.6		0.6		0.6		0.6		0.6		0.6	
Detector 2 Type	CI+Ex		CI+Ex		CI+Ex		CI+Ex		CI+Ex		CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)	0.0		0.0		0.0		0.0		0.0		0.0	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases												
Permitted Phases	4			4			2		2		2	



Splits and Phases: 101: N Sykes St & Trowbridge St

	EBT	WBT	NBT	SBT
Lane Group				
Lane Group Flow (vph)	82	128	704	662
v/c Ratio	0.23	0.44	0.53	0.56
Control Delay	14.9	19.8	7.3	8.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.9	19.8	7.3	8.1
Queue Length 50th (m)	4.6	8.6	33.5	33.2
Queue Length 95th (m)	14.5	22.3	77.9	80.0
Internal Link Dist (m)	164.1	149.7	60.5	240.4
Turn Bay Length (m)				
Base Capacity (vph)	468	379	1331	1191
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	0.18	0.34	0.53	0.56
Intersection Summary				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Lane Configurations												
Traffic Volume (vph)	11	31	33	53	21	43	14	579	55	68	528	13
Future Volume (vph)	11	31	33	53	21	43	14	579	55	68	528	13
Ideal Flow (vphpb)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0			4.0				4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb. ped/bikes	0.98			0.98			1.00				1.00	
Flpb. ped/bikes	1.00	0.99		0.99			1.00				1.00	
Frt	0.94	0.95		0.95			0.99				1.00	
Flt Protected	0.99	0.98		0.98			1.00				0.99	
Satd. Flow (prot)	1691	1452		1452			1837				1845	
Flt Permitted	0.95	0.86		0.86			0.98				0.87	
Satd. Flow (perm)	1625	1275		1275			1811				1623	
Peak-Hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	34	36	58	23	47	15	629	60	74	574	14
RTOR Reduction (vph)	0	30	0	0	38	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	52	0	0	90	0	0	700	0	0	661	0
Confl. Peds. (#/hr)	28	22	22	28	28	20	25	25	25	25	20	20
Heavy Vehicles (%)	0%	5%	0%	7%	6%	36%	0%	2%	0%	8%	1%	9%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	8.7			8.7			43.1			43.1		
Effective Green, g (s)	10.7			10.7			45.1			45.1		
Actuated g/C Ratio	0.17			0.17			0.71			0.71		
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)	272			213			1280			1147		
v/s Ratio Prot												
v/s Ratio Perm	0.03			c0.07			0.39			c0.41		
v/c Ratio	0.19			0.42			0.55			0.58		
Uniform Delay, d1	22.8			23.8			4.5			4.6		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.3			1.3			1.7			2.1		
Delay (s)	23.2			25.1			6.2			6.7		
Level of Service	C			C			A			A		
Approach Delay (s)	23.2			25.1			6.2			6.7		
Approach LOS	C			C			A			A		
Intersection Summary												
HCM 2000 Control Delay			8.8				HCM 2000 Level of Service			A		
HCM 2000 Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			63.8				Sum of lost time (s)			8.0		
Intersection Capacity Utilization			88.2%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
102: S Sykes St & Boucher St

Total (2028) Summer Weekend
SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	2	5	8	0	28	8	634	17	14	616	8
Traffic Volume (vph)	2	2	5	8	0	28	8	634	17	14	616	8
Future Volume (vph)	2	2	5	8	0	28	8	634	17	14	616	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.925				0.896			0.997			0.998	
Frt	0.989				0.989			0.999			0.999	
Flt Protected	0	1738	0	0	1531	0	0	1869	0	0	1858	0
Satd. Flow (prot)	0.989				0.989			0.999			0.999	
Flt Permitted	0	1738	0	0	1531	0	0	1869	0	0	1858	0
Satd. Flow (perm)	50				50			50			50	
Link Speed (k/h)	85.4				372.8			139.8			130.1	
Link Distance (m)	6.1				26.8			10.1			9.4	
Travel Time (s)	1				1			23			5	
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	13%	0%	1%	11%	0%	2%	0%
Adj. Flow (vph)	2	2	5	9	0	30	9	689	18	15	670	9
Shared Lane Traffic (%)	0	9	0	0	39	0	0	716	0	0	694	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8				4.8			4.8			4.8	
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	15	25	15
Headway Factor	Stop				Stop			Free			Free	
Turning Speed (k/h)	15	25	15	25	15	25	15	25	15	25	15	25
Sign Control	Stop				Stop			Free			Free	
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization	51.6%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis
102: S Sykes St & Boucher St

Total (2028) Summer Weekend
SAT Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔		↔
Traffic Volume (veh/h)	2	2	5	8	0	28	8	634	17	14	616	8
Future Volume (Veh/h)	2	2	5	8	0	28	8	634	17	14	616	8
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	2	5	9	0	30	9	689	18	15	670	9
Pedestrians	23			5							1	
Lane Width (m)	3.6			3.6							3.6	
Walking Speed (m/s)	1.2			1.2							1.2	
Percent Blockage	2			0							0	
Right turn flare (veh)												
Median type	None											
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86	0.86	0.86				215	
VC, conflicting volume	1474	1458	698	1432	1453	704	702			712		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	1470	1451	566	1420	1445	704	572			712		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.3	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	98	98	99	90	100	93	99			98		
dM capacity (veh/h)	80	108	445	93	109	417	852			893		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	9	39	716	694								
Volume Left	2	9	9	15								
Volume Right	5	30	18	9								
cSH	164	230	852	893								
Volume to Capacity	0.05	0.17	0.01	0.02								
Queue Length 95th (m)	1.4	4.8	0.3	0.4								
Control Delay (s)	28.2	23.8	0.3	0.4								
Lane LOS	D	C	A	A								
Approach Delay (s)	28.2	23.8	0.3	0.4								
Approach LOS	D	C										
Intersection Summary												
Average Delay	1.2											
Intersection Capacity Utilization	51.6%											
Analysis Period (min)	15											
											A	

Lanes, Volumes, Timings

103: St. Vincent St & Bridge St

Total (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3	60	65	17	36	0	70	30	19	7	23	1
Traffic Volume (vph)	3	60	65	17	36	0	70	30	19	7	23	1
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.931	0.999	0.984	0.984	0.984	0.984	0.972	0.972	0.988	0.988	0.988	0.988
Ped Bike Factor	0.931	0.999	0.984	0.984	0.984	0.984	0.972	0.972	0.988	0.988	0.988	0.988
Flt Protected	0	1537	0	0	1870	0	0	1656	0	0	1870	0
Satd. Flow (prot)	0	1537	0	0	1870	0	0	1656	0	0	1870	0
Flt Permitted	0	1537	0	0	1870	0	0	1656	0	0	1870	0
Satd. Flow (perm)	0	1537	0	0	1870	0	0	1656	0	0	1870	0
Link Speed (k/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	85.2	185.4	185.4	185.4	185.4	185.4	142.5	142.5	185.4	185.4	185.4	185.4
Travel Time (s)	6.1	13.3	13.3	13.3	13.3	13.3	10.3	10.3	13.3	13.3	13.3	13.3
Conf. Peds. (#/hr)	4	4	4	4	4	4	2	2	5	5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	20%	11%	0%	0%	0%	12%	8%	0%	0%	0%	0%
Adj. Flow (vph)	3	65	71	18	39	0	76	33	21	8	25	1
Shared Lane Traffic (%)	0	139	0	0	57	0	0	130	0	0	34	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25	15	25	15	25	15	25	15	25	15	25	15
Headway Factor	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Turning Speed (k/h)	15	25	15	25	15	25	15	25	15	25	15	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary	Other											
Area Type:	Other											
Control Type: Unsignalized	ICU Level of Service A											
Intersection Capacity Utilization	31.7%											
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

103: St. Vincent St & Bridge St

Total (2028) Summer Weekend

SAT Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔			↔	↔
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	60	65	17	36	0	70	30	19	7	23	1
Future Volume (vph)	3	60	65	17	36	0	70	30	19	7	23	1
Ideal Flow rate (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	65	71	18	39	0	76	33	21	8	25	1
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	139	57	130	34								
Volume Left (vph)	3	18	76	8								
Volume Right (vph)	71	0	21	1								
Head (s)	-0.05	0.06	0.17	0.03								
Departure Headway (s)	4.3	4.5	4.6	4.5								
Degree Utilization, x	0.17	0.07	0.16	0.04								
Capacity (veh/h)	802	752	752	742								
Control Delay (s)	8.2	7.9	8.5	7.7								
Approach Delay (s)	8.2	7.9	8.5	7.7								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay	8.2											
Level of Service	A											
Intersection Capacity Utilization	31.7%											
Analysis Period (min)	15											
A												

Lanes, Volumes, Timings

104: St. Vincent St & Boucher St

Total (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	8	15	7	24	32	2	7	97	36	3	107	0
Traffic Volume (vph)	8	15	7	24	32	2	7	97	36	3	107	0
Future Volume (vph)	8	15	7	24	32	2	7	97	36	3	107	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.967			0.996			0.965					
Frt	0.987			0.980			0.997					
Flt Protected	0	1813	0	0	1855	0	0	1732	0	0	1862	0
Satd. Flow (prot)	0.987			0.980			0.997					
Flt Permitted	0	1813	0	0	1855	0	0	1732	0	0	1862	0
Satd. Flow (perm)	50			50			50					
Link Speed (k/h)	372.8			190.6			146.8					
Link Distance (m)	26.8			13.7			10.6					
Travel Time (s)	2			2			3					
Conf. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	2%	0%
Heavy Vehicles (%)	9	16	8	26	35	2	8	105	39	3	116	0
Adj. Flow (vph)	0	33	0	0	63	0	0	152	0	0	119	0
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	4.8			4.8			4.8				4.8	
Crosswalk Width(m)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two way Left Turn Lane	25			15	25		15	25		15	25	
Headway Factor	Stop			Stop			Free			Free		
Turning Speed (k/h)	15			15			15			15		
Sign Control	Stop			Stop			Free			Free		

Intersection Summary	Other
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 22.7%	ICU Level of Service A
Analysis Period (min) 15	

HCM Unsignalized Intersection Capacity Analysis

104: St. Vincent St & Boucher St

Total (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	8	15	7	24	32	2	7	97	36	3	107	0
Traffic Volume (veh/h)	8	15	7	24	32	2	7	97	36	3	107	0
Future Volume (Veh/h)	8	15	7	24	32	2	7	97	36	3	107	0
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	16	8	26	35	2	8	105	39	3	116	0
Pedestrians				3			2					
Lane Width (m)				3.6			3.6					
Walking Speed (m/s)				1.2			1.2					
Percent Blockage				0			0					
Right turn flare (veh)												
Median type							None					
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
VC, conflicting volume	282	285	118	284	266	128	116			147		
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	282	285	118	284	266	128	116			147		
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	97	99	96	95	100	99			100		
dM capacity (veh/h)	640	621	938	646	637	926	1485			1444		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	33	63	152	119								
Volume Left	9	26	8	3								
Volume Right	8	2	39	0								
cSH	683	647	1485	1444								
Volume to Capacity	0.05	0.10	0.01	0.00								
Queue Length 95th (m)	1.2	2.6	0.1	0.0								
Control Delay (s)	10.5	11.2	0.4	0.2								
Lane LOS	B	B	A	A								
Approach Delay (s)	10.5	11.2	0.4	0.2								
Approach LOS	B	B										
Intersection Summary												
Average Delay			3.1									
Intersection Capacity Utilization			22.7%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
105: Fuller St & Bridge St/Street B

HCM Unsignalized Intersection Capacity Analysis
105: Fuller St & Bridge St/Street B

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	15	39	30	0	43	0	3	6	11	0	11	7
Traffic Volume (vph)	15	39	30	0	43	0	3	6	11	0	11	7
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.951	0.991	0.991	0.926	0.993	0.993	0.926	0.993	0.993	0.926	0.993	0.993
Ped Bike Factor	0.951	0.991	0.991	0.926	0.993	0.993	0.926	0.993	0.993	0.926	0.993	0.993
Flt Protected	0	1774	0	0	1863	0	0	1728	0	0	1797	0
Satd. Flow (prot)	0	1774	0	0	1863	0	0	1728	0	0	1797	0
Flt Permitted	0	1774	0	0	1863	0	0	1728	0	0	1797	0
Satd. Flow (perm)	0	1774	0	0	1863	0	0	1728	0	0	1797	0
Link Speed (k/h)	50	50	50	50	50	50	50	50	50	50	50	50
Link Distance (m)	185.4	185.4	185.4	52.2	52.2	52.2	141.8	141.8	141.8	58.5	58.5	58.5
Travel Time (s)	13.3	13.3	13.3	3.8	3.8	3.8	10.2	10.2	10.2	4.2	4.2	4.2
Conf. Peds. (#/hr)	3	3	3	3	3	3	12	12	12	12	12	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	2%	2%	0%	0%	0%	2%	2%	0%	0%
Adj. Flow (vph)	16	42	33	0	47	0	3	7	12	0	12	8
Shared Lane Traffic (%)	0	91	0	0	47	0	0	22	0	0	20	0
Lane Group Flow (vph)	0	91	0	0	47	0	0	22	0	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Left	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25	25	25	25	25	25	25	25	25	25	25	25
Turning Speed (k/h)	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other
Area Type:	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized	Control Type: Unsignalized
Intersection Capacity Utilization	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Analysis Period (min)	15	15	15	15	15	15	15	15	15	15	15	15

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	15	39	30	0	43	0	3	6	11	0	11	7
Traffic Volume (veh/h)	15	39	30	0	43	0	3	6	11	0	11	7
Future Volume (Veh/h)	15	39	30	0	43	0	3	6	11	0	11	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	42	33	0	47	0	3	7	12	0	12	8
Pedestrians	12	12	12	12	12	12	12	12	12	12	12	12
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Walking Speed (m/s)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Percent Blockage	1	1	1	1	1	1	1	1	1	1	1	1
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)	Median storage veh)
Upstream signal (m)	74	53	28	89	51	16	32	19	19	19	19	19
VC, conflicting volume	74	53	28	89	51	16	32	19	19	19	19	19
VC1, stage 1 conf vol	74	53	28	89	51	16	32	19	19	19	19	19
VC2, stage 2 conf vol	74	53	28	89	51	16	32	19	19	19	19	19
IC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1	4.1	4.1	4.1	4.1
IC, 2 stage (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	98	95	97	100	94	100	100	100	100	100	100	100
dM capacity (veh/h)	863	828	1042	827	830	1061	1577	1597	1597	1597	1597	1597
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 1	SB 1	SB 1	SB 1	SB 1	SB 1	SB 1	SB 1
Volume Total	91	47	22	20	20	20	20	20	20	20	20	20
Volume Left	16	0	3	0	0	0	0	0	0	0	0	0
Volume Right	33	0	12	8	8	8	8	8	8	8	8	8
cSH	902	830	1577	1597	1597	1597	1597	1597	1597	1597	1597	1597
Volume to Capacity	0.10	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Queue Length 95th (m)	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	9.4	9.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	9.4	9.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A
Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary	Intersection Summary
Average Delay	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Intersection Capacity Utilization	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%	24.7%
Analysis Period (min)	15	15	15	15	15	15	15	15	15	15	15	15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	↔
Traffic Volume (vph)	17	21	42	3	28	15
Future Volume (vph)	17	21	42	3	28	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.992		0.953	
Flt Protected		0.979			0.968	
Satd. Flow (prot)	0	1860	1885	0	1753	0
Flt Permitted		0.979			0.968	
Satd. Flow (perm)	0	1860	1885	0	1753	0
Link Speed (k/h)		50	50		50	
Link Distance (m)		190.6	134.3		141.8	
Travel Time (s)		13.7	9.7		10.2	
Confl. Peds. (#/hr)	2			2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	23	46	3	30	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	41	49	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.7%						
Analysis Period (min) 15						
ICU Level of Service A						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	21	42	3	28	15
Future Volume (Veh/h)	17	21	42	3	28	15
Sign Control		Free	Free	Free	Stop	Stop
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	23	46	3	30	16
Pedestrians		3			2	
Lane Width (m)		3.6			3.6	
Walking Speed (m/s)		1.2			1.2	
Percent Blockage		0			0	
Right turn flare (veh)						0
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
VC, conflicting volume	51				108	52
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	51				108	52
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	99				97	98
CM capacity (veh/h)	1566				882	1017
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	41	49	46			
Volume Left	18	0	30			
Volume Right	0	3	16			
cSH	1566	1700	924			
Volume to Capacity	0.01	0.03	0.05			
Queue Length 95th (m)	0.3	0.0	1.3			
Control Delay (s)	3.3	0.0	9.1			
Lane LOS	A		A			
Approach Delay (s)	3.3	0.0	9.1			
Approach LOS			A			
Intersection Summary						
Average Delay	4.1					
Intersection Capacity Utilization	19.7%					
ICU Level of Service	A					
Analysis Period (min)	15					

Lanes, Volumes, Timings

107: Bayfield St & Trowbridge St/Bridge St

Total (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	45	102	7	5	86	109	3	9	1	98	3	28
Traffic Volume (vph)	45	102	7	5	86	109	3	9	1	98	3	28
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.994											
Ped Bike Factor	0.994											
Frt	0.994											
Frt Protected	0.986											
Satd. Flow (prot)	0	1682	0	0	1633	0	0	1860	0	0	1711	0
Frt Permitted	0.986											
Satd. Flow (perm)	0	1682	0	0	1633	0	0	1860	0	0	1711	0
Link Speed (k/h)	50											
Link Distance (m)	173.7											
Travel Time (s)	12.5											
Confl. Peds. (#/hr)	12	15	15	15	12	12	8	3.9	1	1	8.8	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	14%	0%	0%	14%	0%	0%	0%	0%	5%	0%	0%
Adj. Flow (vph)	49	111	8	5	93	118	3	10	1	107	3	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	0	0	216	0	0	14	0	0	140	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Right	Left	Left	Right	Left	Right	Right
Median Width(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Link Offset(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crosswalk Width(m)	4.8				4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	25	15	15	25	15	25	25	15	15
Sign Control	Free				Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization	47.0%											
Analysis Period (min)	15											

107: Bayfield St & Trowbridge St/Bridge St

Total (2028) Summer Weekend

SAT Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	45	102	7	5	86	109	3	9	1	98	3	28
Traffic Volume (veh/h)	45	102	7	5	86	109	3	9	1	98	3	28
Future Volume (Veh/h)	45	102	7	5	86	109	3	9	1	98	3	28
Sign Control	Free				Free			Stop			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	111	8	5	93	118	3	10	1	107	3	30
Pedestrians		8			1			15			12	
Lane Width (m)	3.6				3.6			3.6			3.6	
Walking Speed (m/s)	1.2				1.2			1.2			1.2	
Percent Blockage	1				0			1			1	
Right turn flare (veh)												
Median type	None				None							
Median storage (veh)												
Upstream signal (m)	174											
pK, platoon unblocked												
VC, conflicting volume	223			134			430	461	131	394	406	172
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCU, unblocked vol	223			134			430	461	131	394	406	172
IC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)												
IF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			100			99	98	100	79	99	97
dM capacity (veh/h)	1315			1445			484	469	912	519	504	862
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	168	216	14	140								
Volume Left	49	5	3	107								
Volume Right	8	118	1	30								
cSH	1315	1445	489	567								
Volume to Capacity	0.04	0.00	0.03	0.25								
Queue Length 95th (m)	0.9	0.1	0.7	7.7								
Control Delay (s)	2.5	0.2	12.6	13.4								
Lane LOS	A	A	B	B								
Approach Delay (s)	2.5	0.2	12.6	13.4								
Approach LOS		B	B									
Intersection Summary												
Average Delay			4.7									
Intersection Capacity Utilization			47.0%							A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
108: Denmark St & Bridge St

Total (2028) Summer Weekend
SAT Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	63	126	13	1	102	5	15	10	2	0	1	83
Traffic Volume (vph)	63	126	13	1	102	5	15	10	2	0	1	83
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.991				0.994			0.991				0.866
Ped Bike Factor	0.991				0.994			0.991				0.866
Frt	0.985							0.973				
Flt Protected	0	1712	0	0	1787	0	0	1832	0	0	1351	0
Satd. Flow (prot)	0.985							0.973				
Flt Permitted	0	1712	0	0	1787	0	0	1832	0	0	1351	0
Satd. Flow (perm)	50				50			50				50
Link Speed (k/h)	86.8				65.5			110.7				89.9
Link Distance (m)	6.2				4.7			8.0				6.5
Travel Time (s)	8				8			31				31
Confl. Peds. (#/hr)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Peak Hour Factor	17%	4%	9%	0%	6%	0%	0%	0%	0%	0%	0%	22%
Heavy Vehicles (%)	68	137	14	1	111	5	16	11	2	0	1	90
Adj. Flow (vph)	0	219	0	0	117	0	0	29	0	0	0	91
Shared Lane Traffic (%)	No	No	No	No	No	No	No	No	No	No	No	No
Lane Group Flow (vph)	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
Enter Blocked Intersection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Alignment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Width(m)	4.8				4.8			4.8				4.8
Link Offset(m)	0.0				0.0			0.0				0.0
Crosswalk Width(m)	4.8				4.8			4.8				4.8
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor	25				15			25				15
Turning Speed (k/h)	Free				Free			Stop				Stop
Sign Control	Free				Free			Stop				Stop

Intersection Summary	Other
Area Type:	Control Type: Unsignalized
Intersection Capacity Utilization 35.7%	ICU Level of Service A
Analysis Period (min) 15	

HCM Unsignalized Intersection Capacity Analysis
108: Denmark St & Bridge St

Total (2028) Summer Weekend
SAT Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	63	126	13	1	102	5	15	10	2	0	1	83
Traffic Volume (veh/h)	63	126	13	1	102	5	15	10	2	0	1	83
Future Volume (Veh/h)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Sign Control	Free				Free			Stop				Stop
Grade	0%				0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	137	14	1	111	5	16	11	2	0	1	90
Pedestrians	31				1			8				
Lane Width (m)	3.6				3.6			3.6				
Walking Speed (m/s)	1.2				1.2			1.2				
Percent Blockage	3				0			1				
Right turn flare (veh)	None				None							
Median type	None				None							
Median storage (veh)	261											
Upstream signal (m)	116				159			525	406	153	404	410
pX, platoon unblocked												
VC, conflicting volume	116				159			525	406	153	404	410
VC1, stage 1 conf vol												
VC2, stage 2 conf vol												
VCu, unblocked vol	116				159			525	406	153	404	410
IC, single (s)	4.3				4.1			7.1	6.5	6.2	7.1	6.5
IC, 2 stage (s)	2.4				2.2			3.5	4.0	3.3	3.5	4.0
p0 queue free %	95				100			96	98	100	100	89
dM capacity (veh/h)	1384				1423			385	507	892	526	504
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	219	117	29	91								
Volume Left	68	1	16	0								
Volume Right	14	5	2	90								
cSH	1384	1423	442	825								
Volume to Capacity	0.05	0.00	0.07	0.11								
Queue Length 95th (m)	1.2	0.0	1.7	3.0								
Control Delay (s)	2.7	0.1	13.7	9.9								
Lane LOS	A	A	B	A								
Approach Delay (s)	2.7	0.1	13.7	9.9								
Approach LOS	B	A		A								
Intersection Summary												
Average Delay			4.2									
Intersection Capacity Utilization			35.7%									
Analysis Period (min)			15									

Lanes, Volumes, Timings

201: Fuller St & Street A

Total (2028) Summer Weekend

SAT Peak Hour

	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group						
Lane Configurations	W		P			P
Traffic Volume (vph)	5	0	15	6	0	14
Future Volume (vph)	5	0	15	6	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.950		0.959			
Satd. Flow (prot)	1770	0	1786	0	0	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	1786	0	0	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	44.2		58.5			51.0
Travel Time (s)	3.2		4.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	0	16	7	0	15
Shared Lane Traffic (%)	5	0	23	0	0	15
Lane Group Flow (vph)	No	No	No	No	No	No
Enter Blocked Intersection	Left	Right	Left	Right	Left	Left
Median Width(m)	3.6		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free
Intersection Summary	Other					
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 13.3%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

201: Fuller St & Street A

Total (2028) Summer Weekend

SAT Peak Hour

	WBL	WBR	NBT	NBR	SBL	SBT
Movement						
Lane Configurations	W		P			P
Traffic Volume (veh/h)	5	0	15	6	0	14
Future Volume (Veh/h)	5	0	15	6	0	14
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	16	7	0	15
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	34	20			23	
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCu, unblocked vol	34	20			23	
IC, single (s)	6.4	6.2			4.1	
IC, 2 stage (s)						
IF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
dm capacity (veh/h)	979	1058			1592	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	5	23	15			
Volume Left	5	0	0			
Volume Right	0	7	0			
cSH	979	1700	1592			
Volume to Capacity	0.01	0.01	0.00			
Queue Length 95th (m)	0.1	0.0	0.0			
Control Delay (s)	8.7	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.7	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			13.3%			A
Analysis Period (min)			15			

Lanes, Volumes, Timings
206: Boucher St & Street C

Total (2028) Summer Weekend
SAT Peak Hour

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		W	
Traffic Volume (vph)	37	13	13	0	0	33
Future Volume (vph)	37	13	13	0	0	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected	0.964					
Satd. Flow (prot)	0	1796	1863	0	1611	0
Flt Permitted	0.964					
Satd. Flow (perm)	0	1796	1863	0	1611	0
Link Speed (k/h)	50					
Link Distance (m)	134.3					
Travel Time (s)	9.7					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	14	14	0	0	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	54	14	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)	0.0					
Link Offset(m)	0.0					
Crosswalk Width(m)	4.8					
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control	Free		Free		Stop	
Intersection Summary						
Other						
Area Type:						
Control Type: Unsignalized						
Intersection Capacity Utilization 19.4%						
Analysis Period (min) 15						
ICU Level of Service A						

HCM Unsignalized Intersection Capacity Analysis
206: Boucher St & Street C

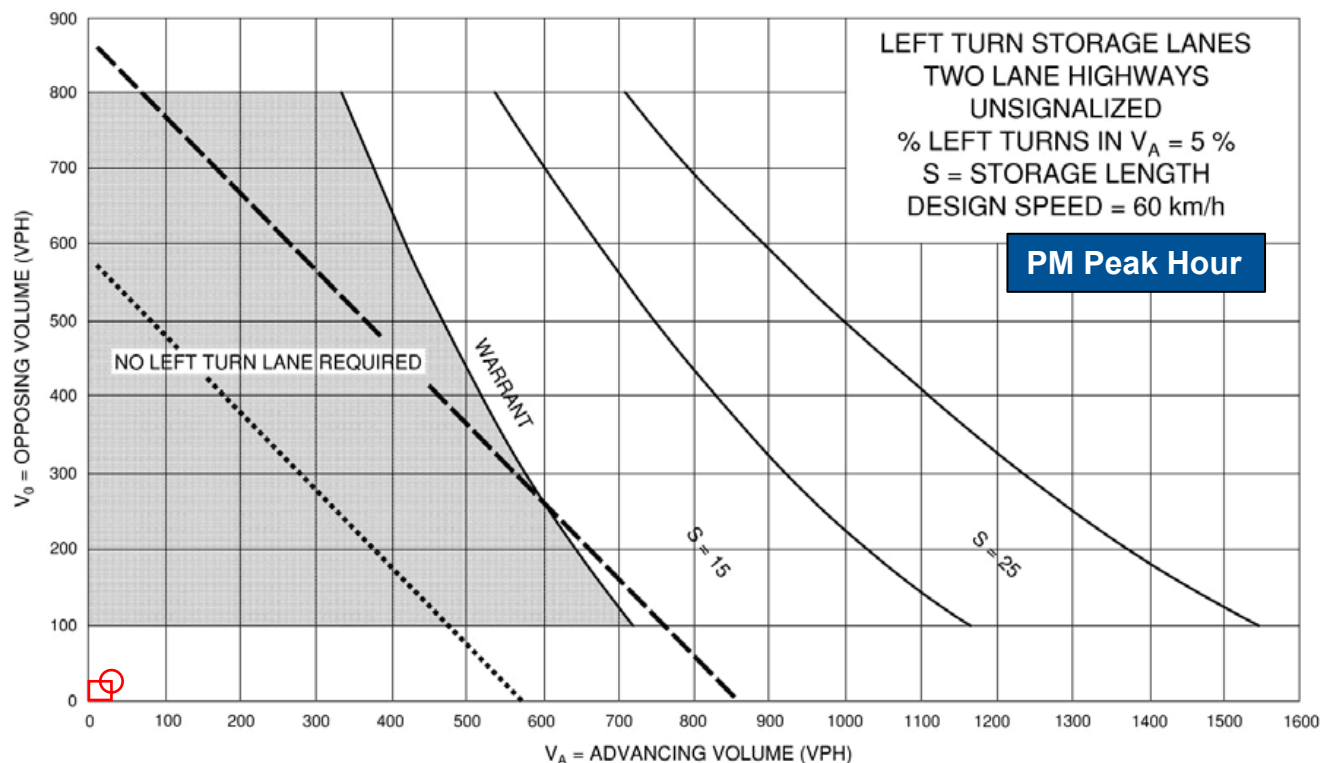
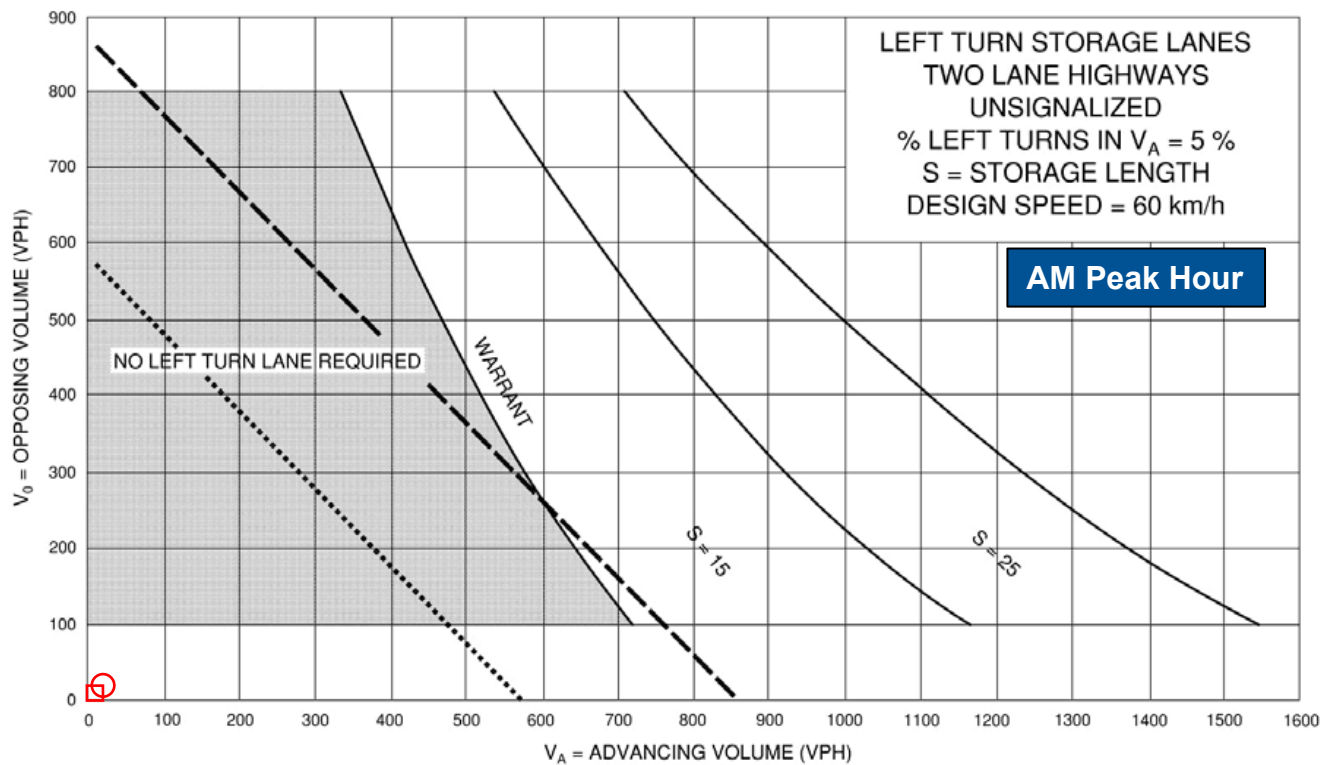
Total (2028) Summer Weekend
SAT Peak Hour

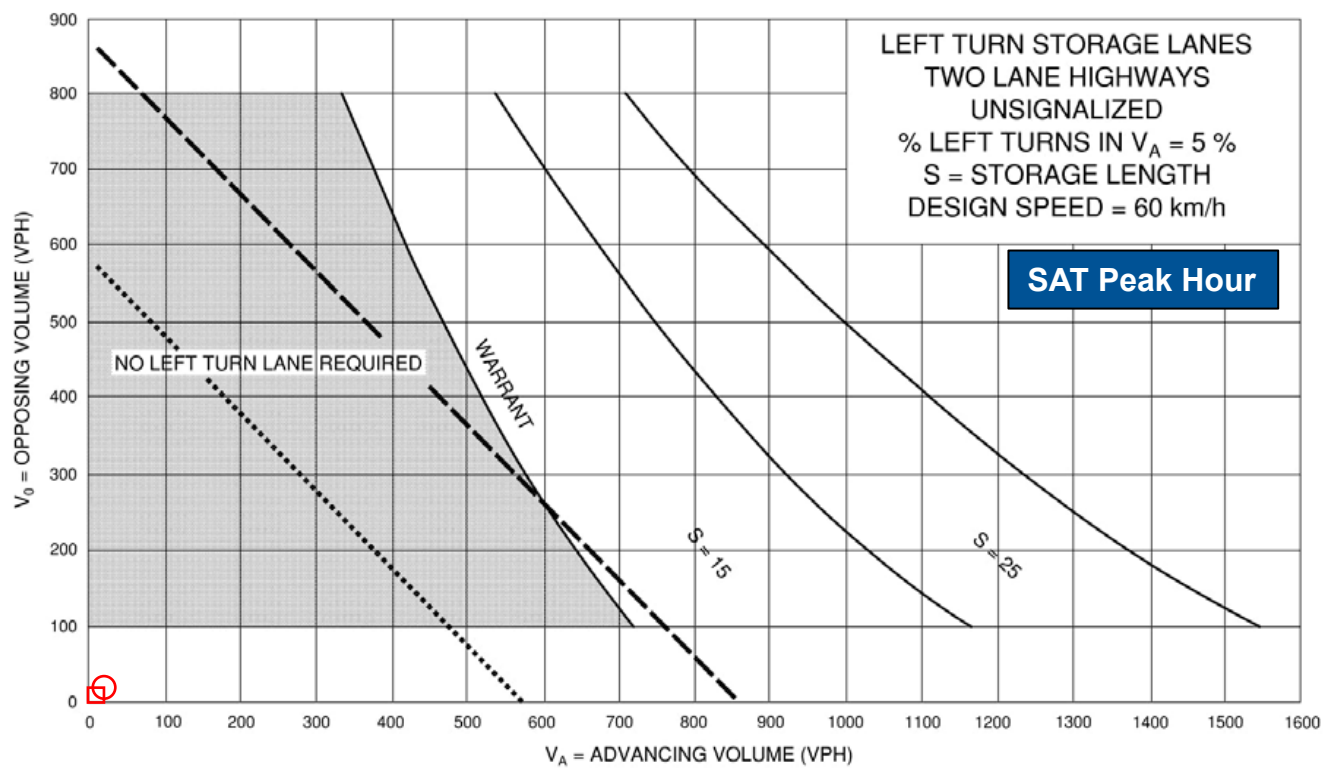
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		W	
Traffic Volume (veh/h)	37	13	13	0	0	33
Future Volume (Veh/h)	37	13	13	0	0	33
Sign Control	Free	Free	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	14	14	0	0	36
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None	None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	14				108	14
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	14				108	14
IC, single (s)	4.1				6.4	6.2
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	98				100	97
dM capacity (veh/h)	1604				867	1066
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	54	14	36			
Volume Left	40	0	0			
Volume Right	0	0	36			
gSH	1604	1700	1066			
Volume to Capacity	0.02	0.01	0.03			
Queue Length 95th (m)	0.6	0.0	0.8			
Control Delay (s)	5.5	0.0	8.5			
Lane LOS	A	A	A			
Approach Delay (s)	5.5	0.0	8.5			
Approach LOS	A					
Intersection Summary						
Average Delay	5.8					
Intersection Capacity Utilization	19.4%					
Analysis Period (min)	15					
	ICU Level of Service A					

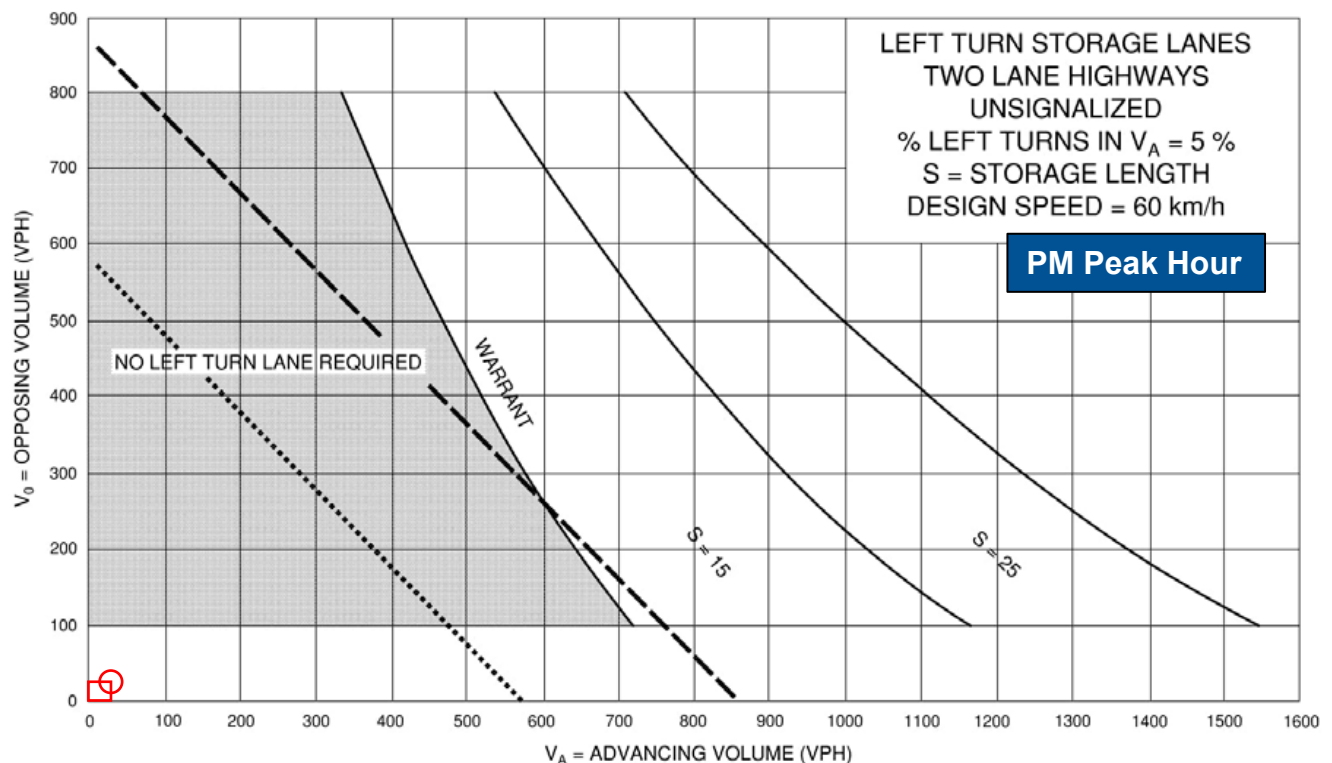
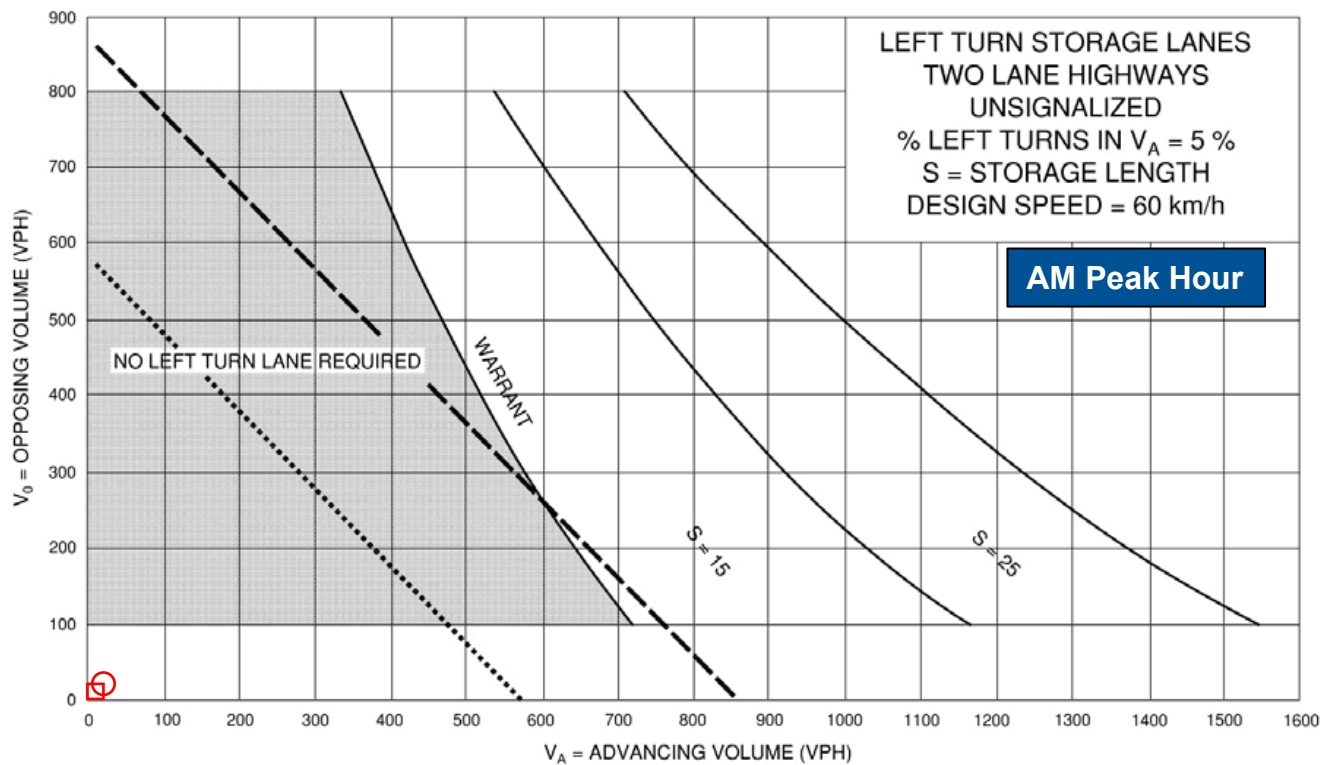
Appendix G

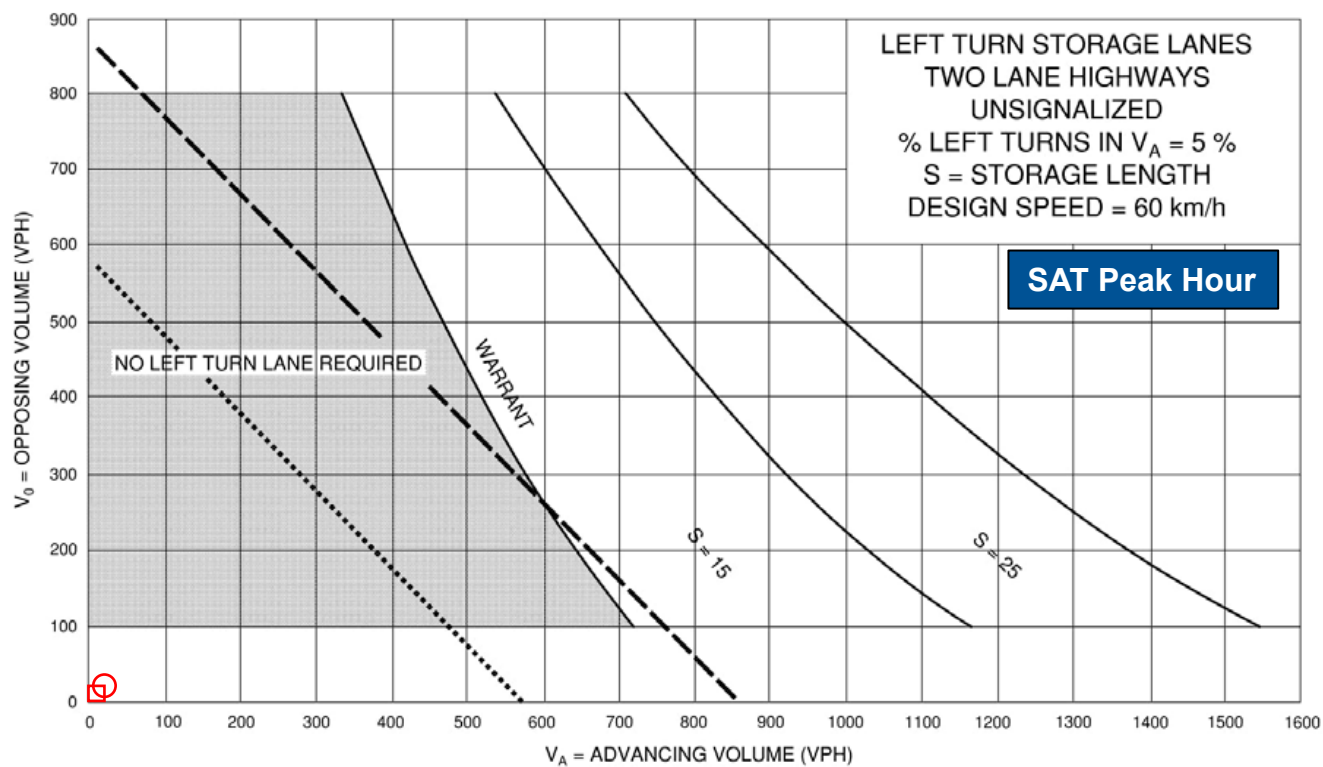
Left-Turn Lane Warrant Nomographs

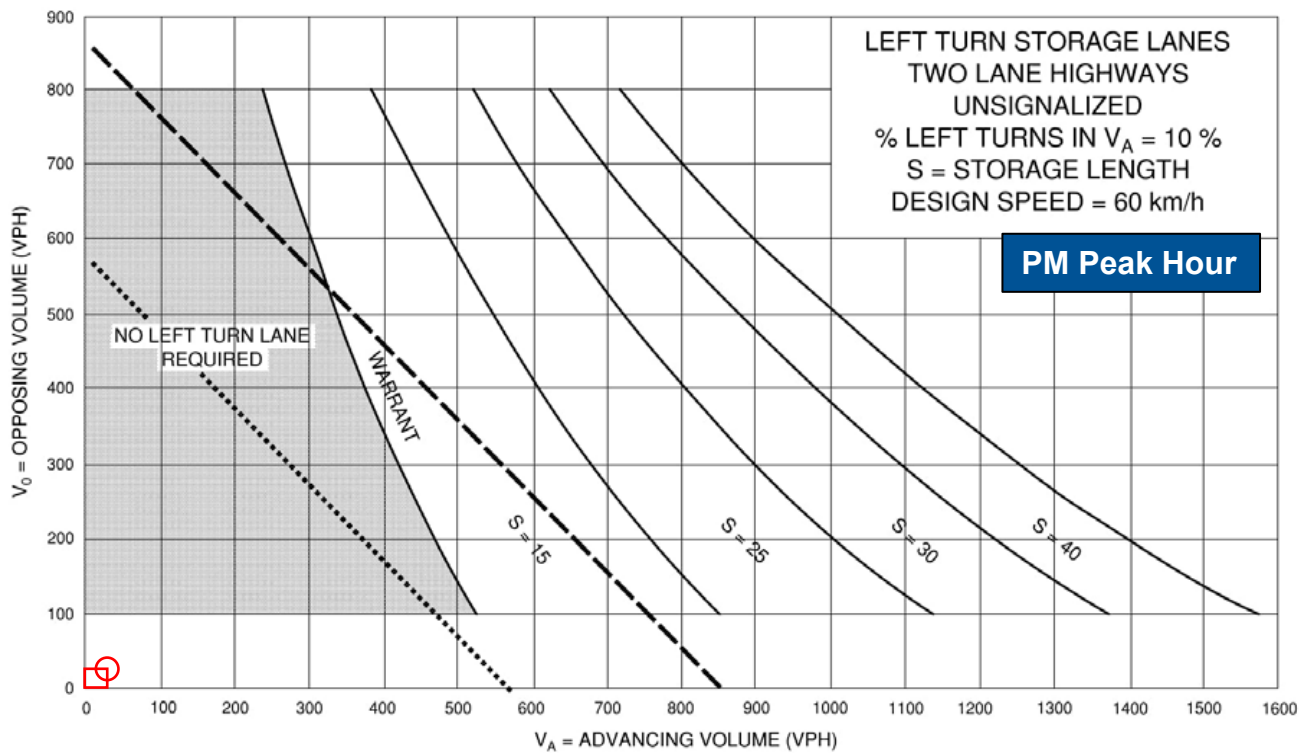
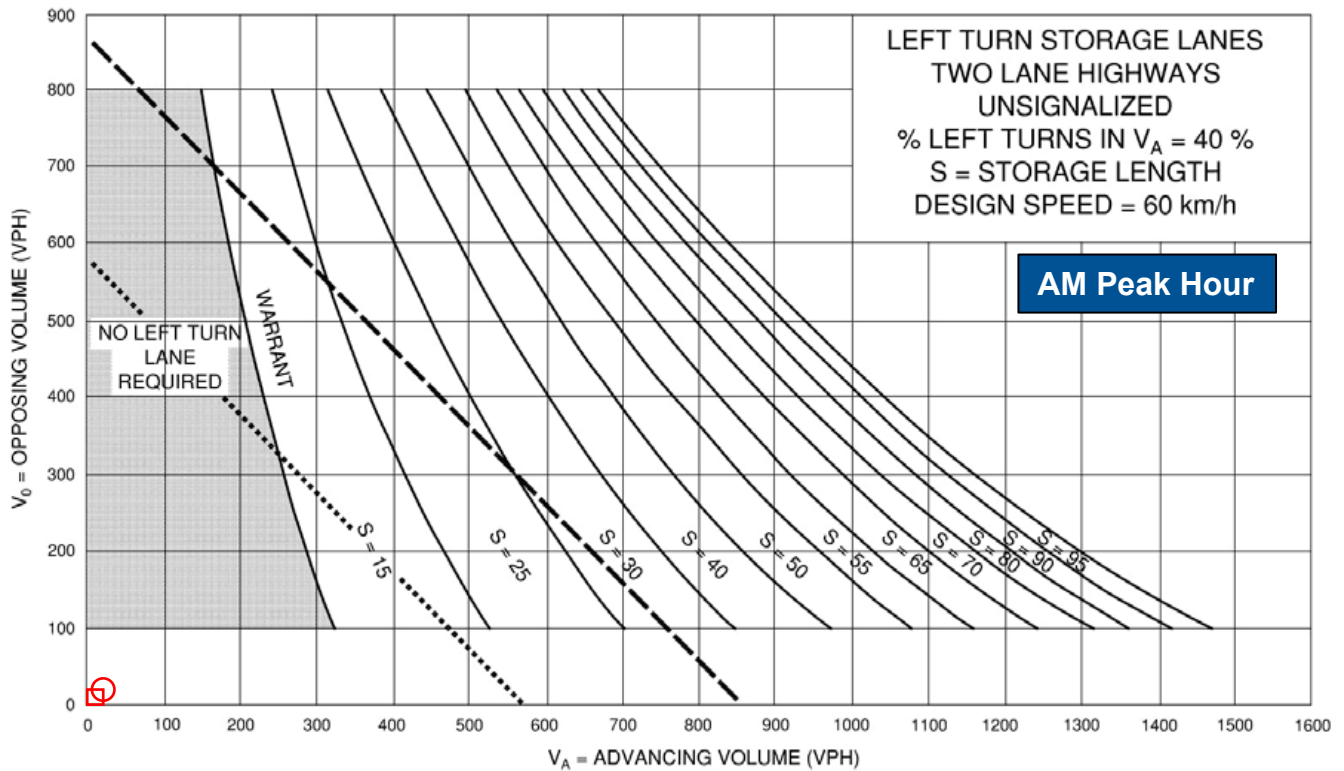


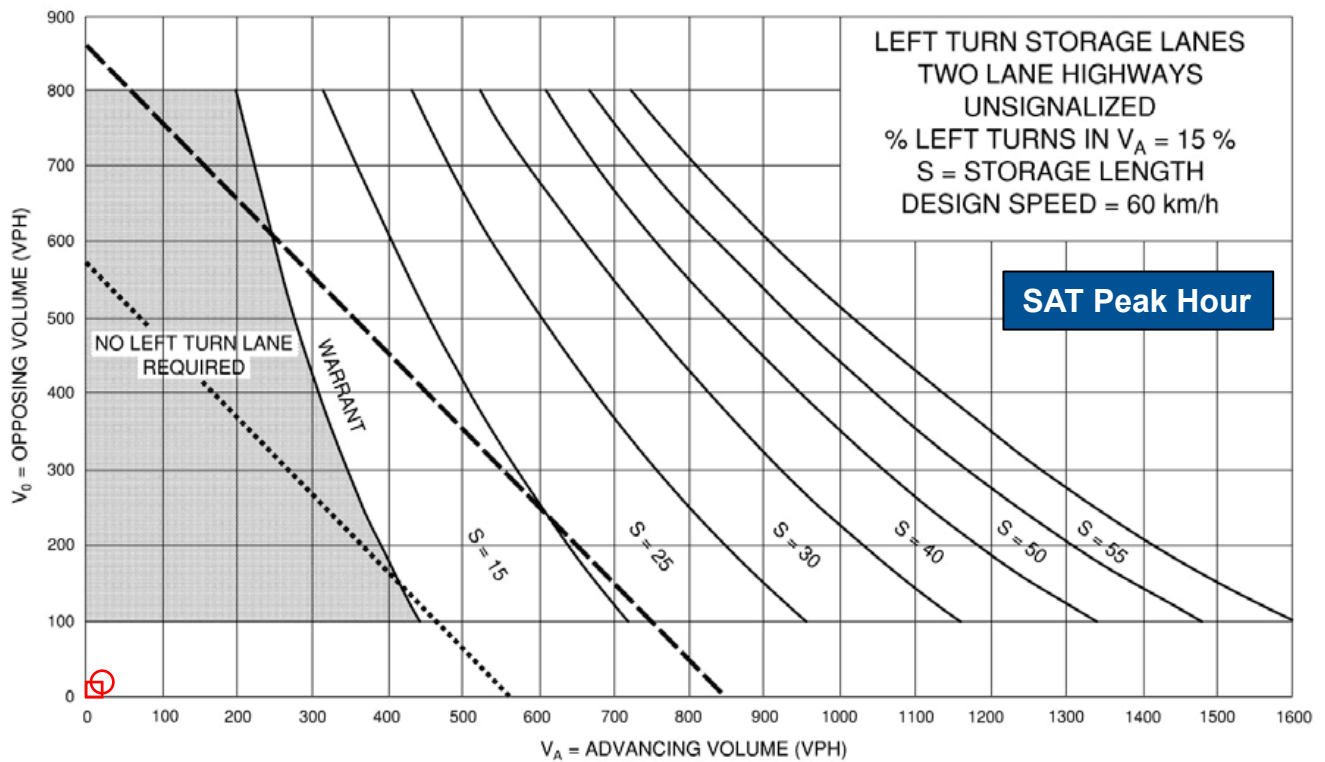


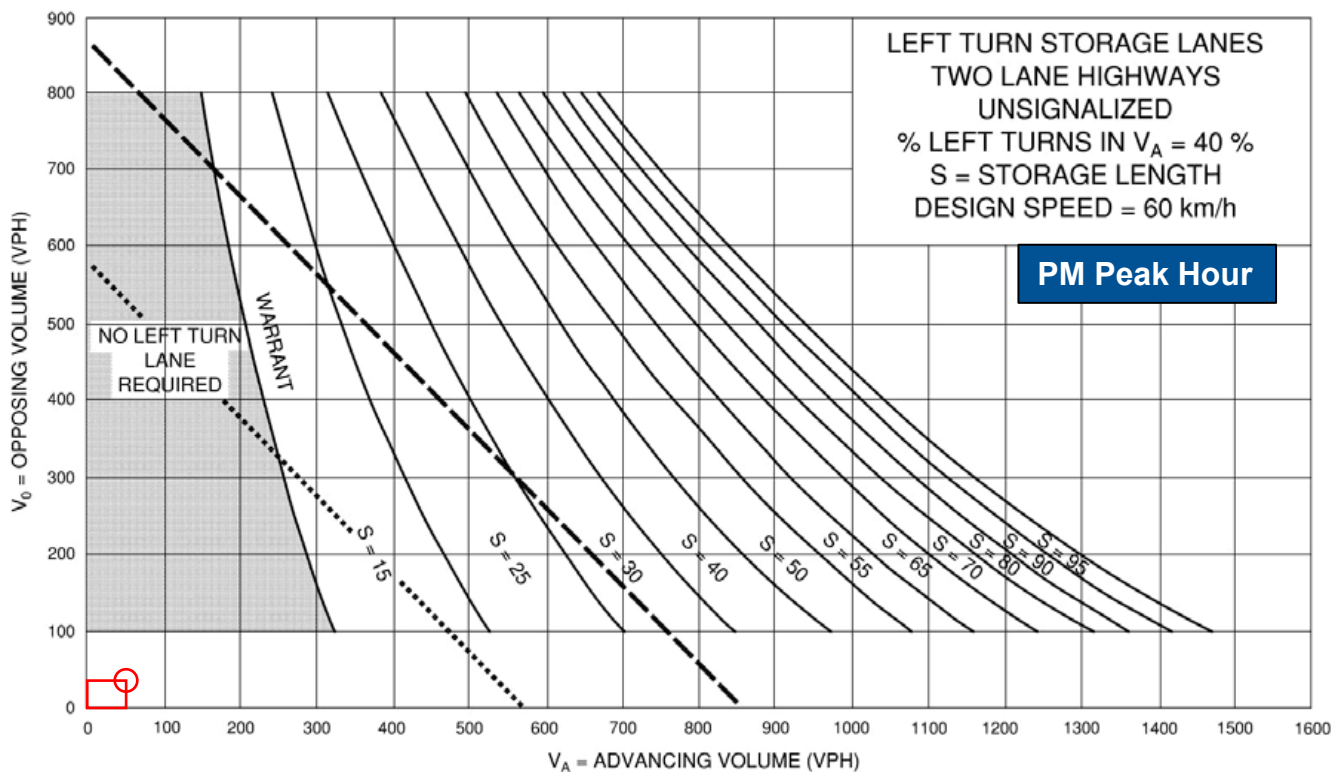
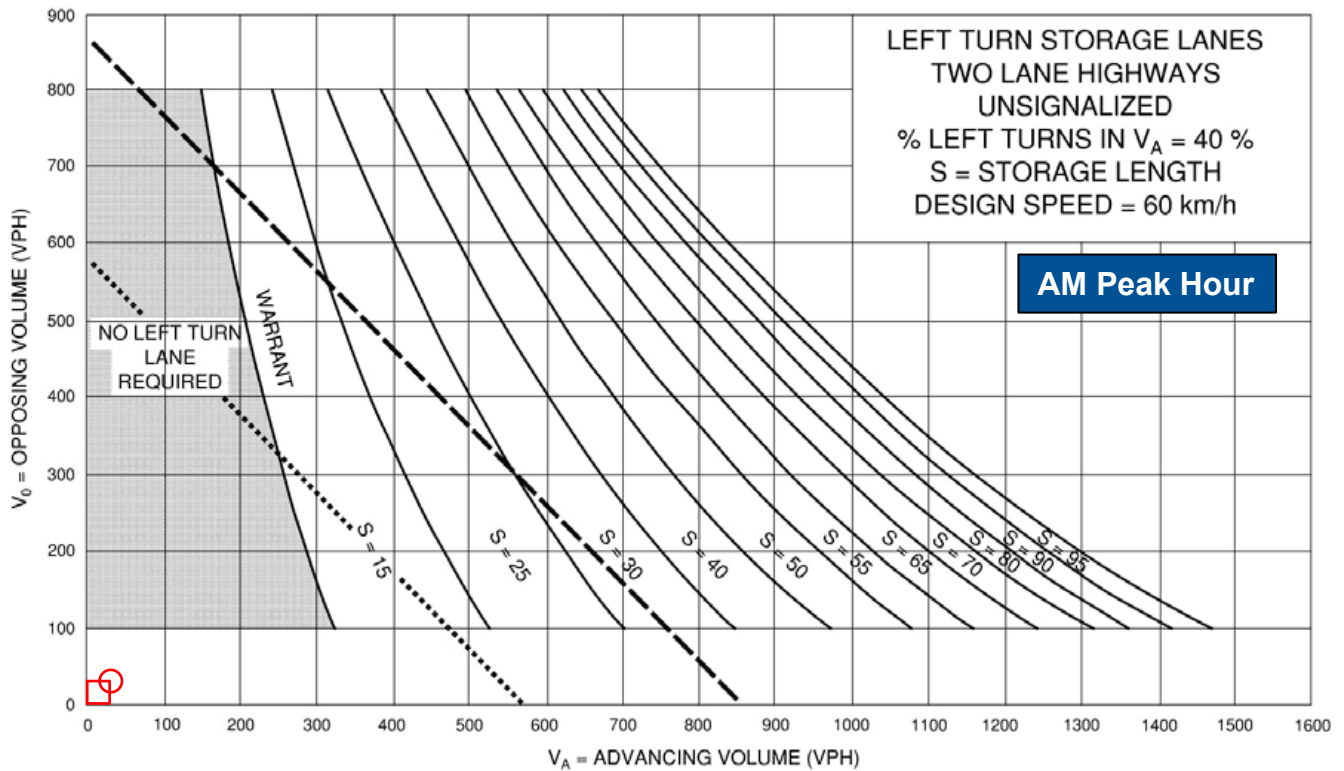


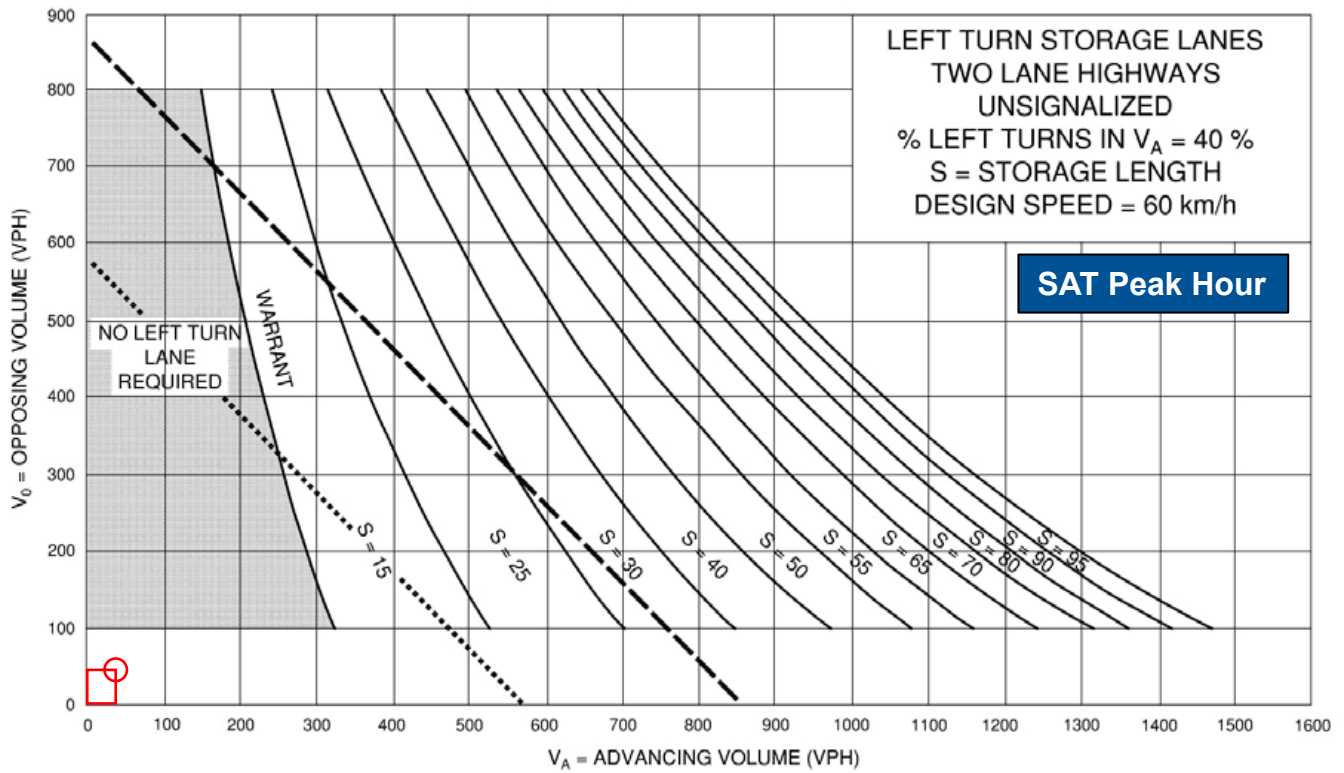


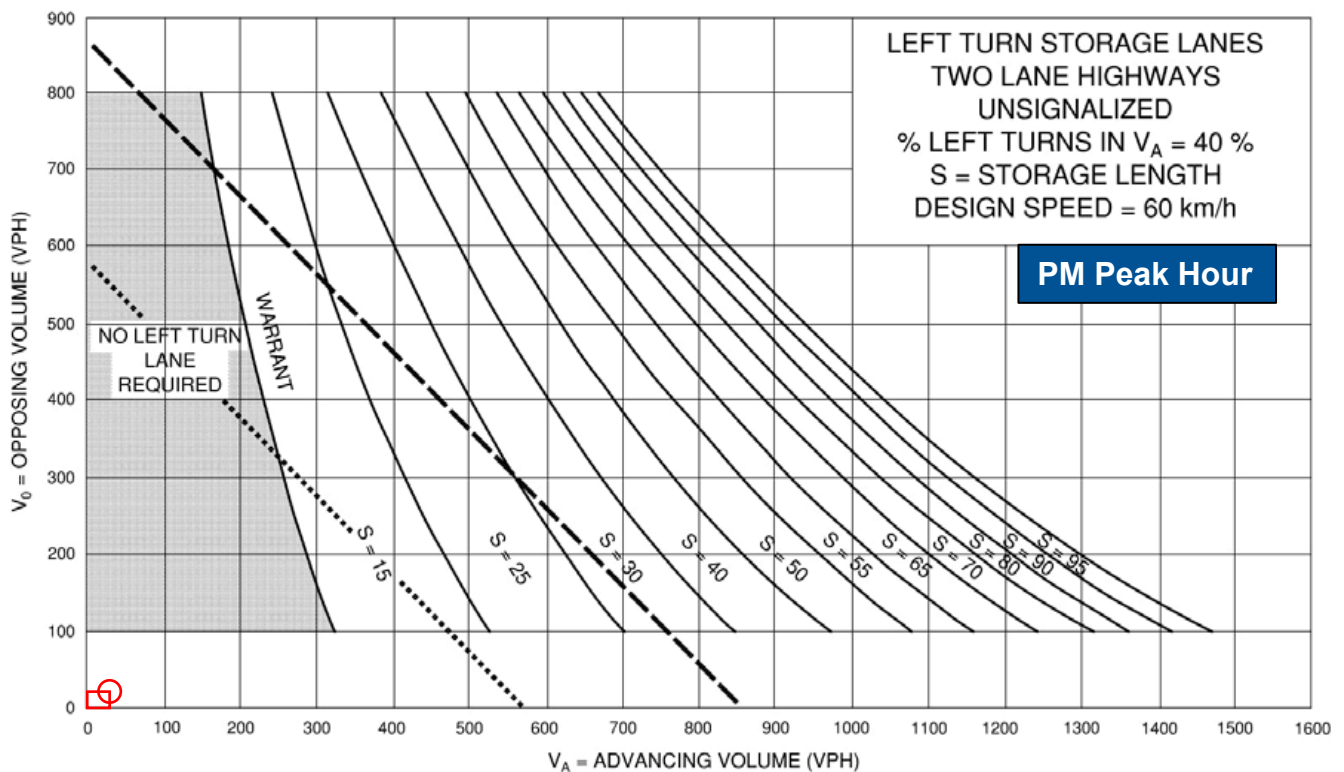
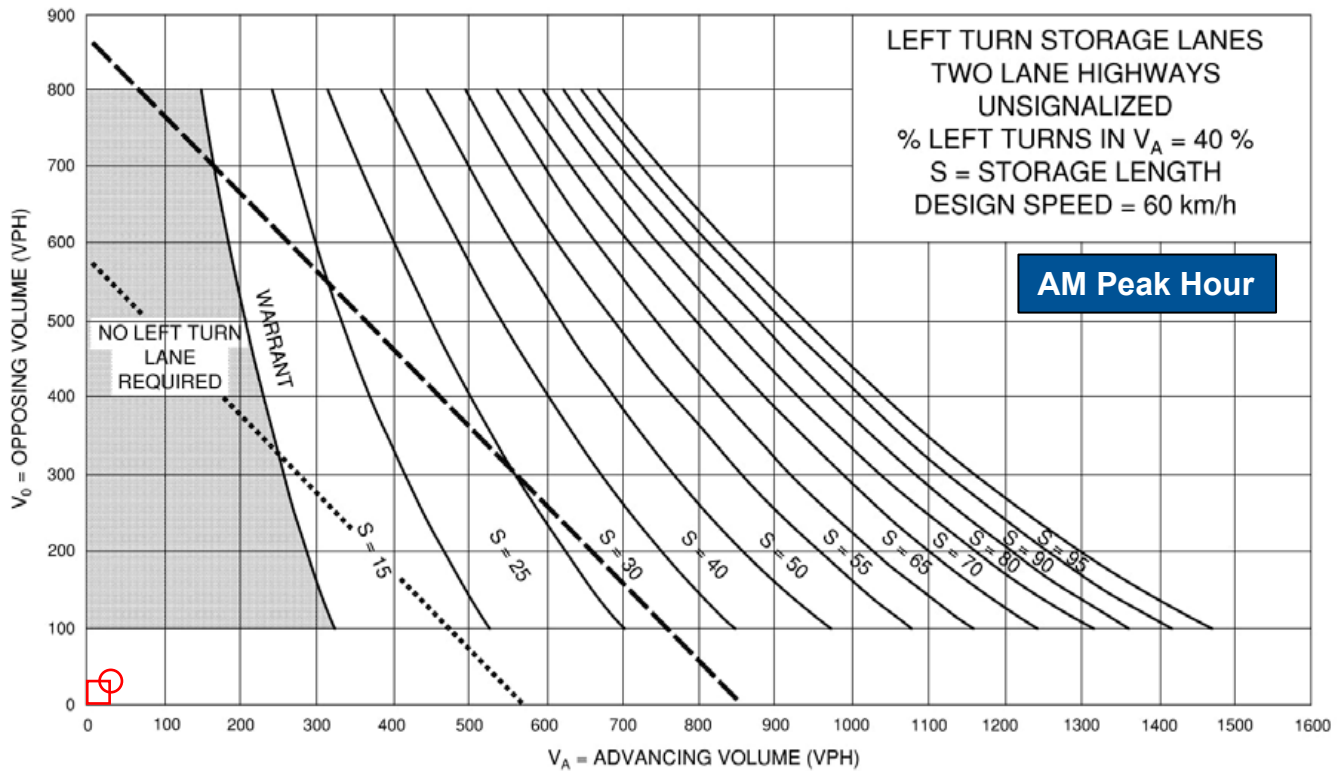


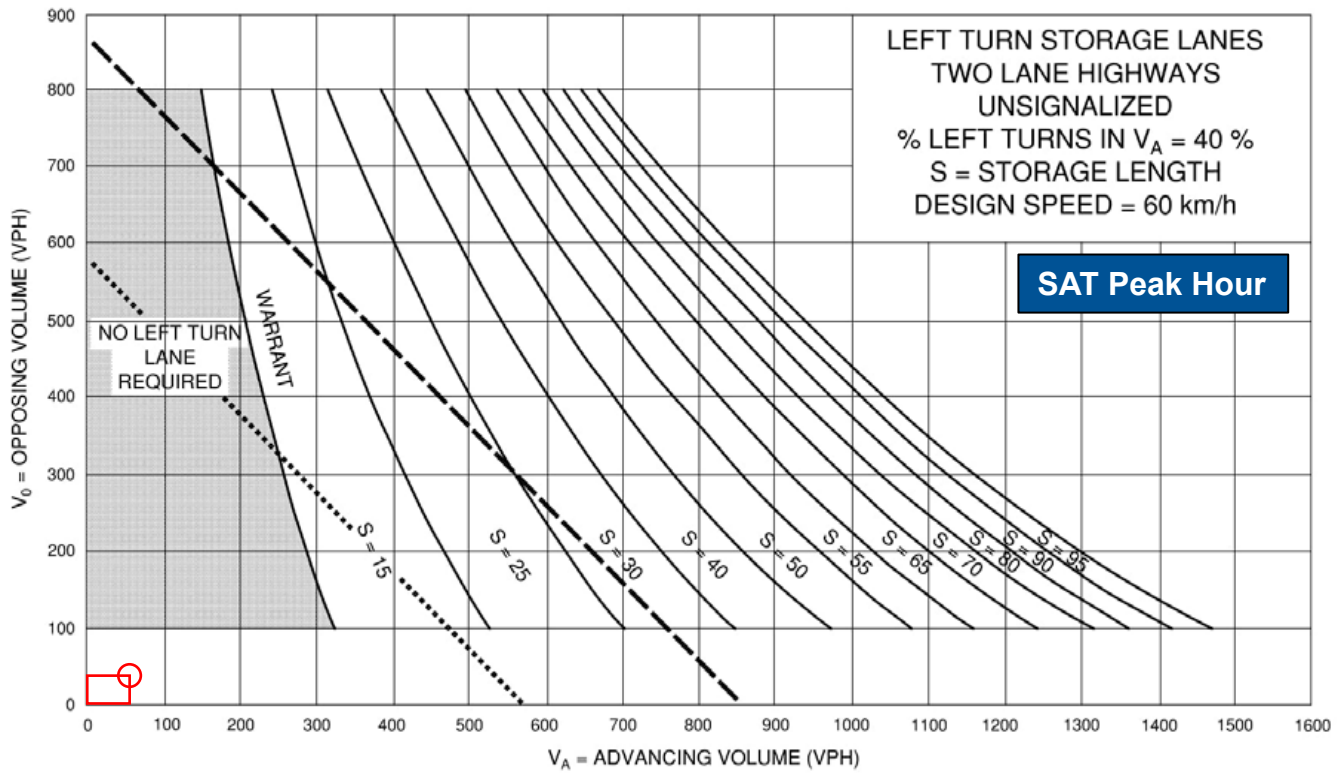












Appendix H

Proxy Parking Surveys



Project #: 190413

Task: Parking Utilization/Demand Survey

450 Cumberland, Hamilton Sept 4th 10pm-8am

Time Start	# of Vehicles Parked				
	On-street 6	Lot #1 IN 32	Lot # 1 OUT	Lot #2 IN 18	Lot #2 OUT
22:15	6	0	0	0	0
22:30	6	0	0	0	0
22:45	6	0	0	0	0
23:00	6	0	0	0	0
23:15	6	0	0	0	0
23:30	6	1	0	0	0
23:45	6	1	1	0	0
0:00	6	2	1	0	0
0:15	6	0	0	0	0
0:30	6	0	0	0	0
0:45	7	0	0	0	0
1:00	7	1	1	0	0
1:15	7	0	0	0	0
1:30	7	0	0	1	1
1:45	7	0	0	0	0
2:00	7	0	0	0	0
2:15	7	0	0	0	0
2:30	7	0	0	0	0
2:45	7	0	0	0	0
3:00	7	0	0	0	0
3:15	7	0	0	0	0
3:30	7	0	0	0	0
3:45	7	1	1	0	0
4:00	7	1	1	0	0
4:15	7	0	0	0	0
4:30	7	0	0	0	0
4:45	7	0	0	0	0
5:00	7	0	0	0	1
5:15	7	0	2	0	1
5:30	7	0	0	0	2
5:45	7	0	0	0	0
6:00	7	1	4	0	0
6:15	7	1	1	0	1
6:30	6	0	1	0	0
6:45	5	0	2	0	0
7:00	5	1	3	0	0
7:15	5	2	1	1	1
7:30	5	0	4	0	1
7:45	5	1	0	0	0
8:00	5	0	3	0	1

325 Lakeview Drive

of Units = 108 * Taken from site plan
 # of Spaces = 129
 Starting Cars = 55

Start	Time	Ins	Outs	Spaces Occupied
4:00	PM	6	3	58
4:15	PM	3	3	58
4:30	PM	3	3	58
4:45	PM	4	3	59
5:00	PM	7	3	63
5:15	PM	8	3	68
5:30	PM	7	3	72
5:45	PM	6	5	73
6:00	PM	1	2	72
6:15	PM	1	0	73
6:30	PM	3	0	76
6:45	PM	2	8	70
7:00	PM	1	3	68
7:15	PM	6	2	72
7:30	PM	3	1	74
7:45	PM	4	2	76
8:00	PM	1	0	77
8:15	PM	3	0	80
8:30	PM	7	1	86
8:45	PM	2	0	88
9:00	PM	2	0	90
9:15	PM	0	3	87
9:30	PM	2	1	88
9:45	PM	3	3	88
10:00	PM	3	0	91
10:15	PM	1	1	91
10:30	PM	0	0	91
10:45	PM	0	1	90
11:00	PM	1	3	88
11:15	PM	3	1	90
11:30	PM	0	0	90
11:45	PM	0	0	90
12:00	AM	0	0	90
12:15	AM	1	0	91
12:30	AM	0	0	91
12:45	AM	1	0	92
1:00	AM	0	0	92
1:15	AM	0	0	92
1:30	AM	2	0	94
1:45	AM	0	1	93
2:00	AM	1	0	94
2:15	AM	0	0	94
2:30	AM	2	0	96
2:45	AM	0	0	96
3:00	AM	0	0	96
3:15	AM	0	0	96
3:30	AM	1	0	97
3:45	AM	0	0	97
4:00	AM	0	0	97
4:15	AM	0	0	97
4:30	AM	0	1	96
4:45	AM	1	2	95
5:00	AM	0	1	94
5:15	AM	1	3	92
5:30	AM	0	2	90
5:45	AM	0	3	87
6:00	AM	0	3	84
6:15	AM	0	4	80
6:30	AM	0	3	77
6:45	AM	0	1	76
Max =				97
Max Veh/Unit =				0.90

56-64 Hiawatha Road

of Units = 96
 # of Spaces = 131
 Starting Cars = 38

Start	Time	Ins	Outs	Spaces Occupied
4:30	PM	9	2	45
4:45	PM	6	5	46
5:00	PM	4	8	42
5:15	PM	4	3	43
5:30	PM	8	3	48
5:45	PM	7	3	52
6:00	PM	2	5	49
6:15	PM	1	3	47
6:30	PM	0	4	43
6:45	PM	3	2	44
7:00	PM	8	0	52
7:15	PM	1	6	47
7:30	PM	3	3	47
7:45	PM	5	0	52
8:00	PM	4	2	54
8:15	PM	1	1	54
8:30	PM	2	0	56
8:45	PM	3	4	55
9:00	PM	1	3	53
9:15	PM	2	0	55
9:30	PM	1	2	54
9:45	PM	4	2	56
10:00	PM	3	1	58
10:15	PM	1	0	59
10:30	PM	2	1	60
10:45	PM	0	1	59
11:00	PM	1	0	60
11:15	PM	2	0	62
11:30	PM	3	1	64
11:45	PM	0	0	64
12:00	AM	2	0	66
12:15	AM	0	0	66
12:30	AM	1	1	66
12:45	AM	1	0	67
1:00	AM	0	0	67
1:15	AM	0	0	67
1:30	AM	0	0	67
1:45	AM	0	0	67
2:00	AM	0	0	67
2:15	AM	0	0	67
2:30	AM	0	0	67
2:45	AM	0	0	67
3:00	AM	0	0	67
3:15	AM	1	0	68
3:30	AM	0	0	68
3:45	AM	0	0	68
4:00	AM	0	0	68
4:15	AM	3	0	71
4:30	AM	2	1	72
4:45	AM	0	1	71
5:00	AM	0	0	71
5:15	AM	0	2	69
5:30	AM	1	6	64
5:45	AM	0	5	59
6:00	AM	1	5	55
6:15	AM	1	5	51
6:30	AM	0	5	46
6:45	AM	1	3	44
Max =				72
Max Veh/Unit =				0.75

562 Durham Crescent

of Units = 40
 # of Spaces = 54
 Starting Cars = 17

Start	Time	Ins	Outs	Spaces Occupied
4:15	PM	1	0	18
4:30	PM	6	3	21
4:45	PM	2	2	21
5:00	PM	2	3	20
5:15	PM	3	4	19
5:30	PM	3	4	18
5:45	PM	4	2	20
6:00	PM	2	3	19
6:15	PM	1	2	18
6:30	PM	0	1	17
6:45	PM	0	1	16
7:00	PM	0	1	15
7:15	PM	2	0	17
7:30	PM	0	1	16
7:45	PM	1	4	13
8:00	PM	1	1	13
8:15	PM	1	2	12
8:30	PM	2	0	14
8:45	PM	1	0	15
9:00	PM	0	0	15
9:15	PM	0	1	14
9:30	PM	2	0	16
9:45	PM	0	0	16
10:00	PM	0	0	16
10:15	PM	1	2	15
10:30	PM	2	0	17
10:45	PM	0	0	17
11:00	PM	0	0	17
11:15	PM	3	0	20
11:30	PM	0	1	19
11:45	PM	0	2	17
12:00	AM	1	0	18
12:15	AM	0	0	18
12:30	AM	0	0	18
12:45	AM	0	0	18
1:00	AM	0	0	18
1:15	AM	0	1	17
1:30	AM	0	0	17
1:45	AM	0	0	17
2:00	AM	1	0	18
2:15	AM	0	0	18
2:30	AM	0	0	18
2:45	AM	0	0	18
3:00	AM	0	1	17
3:15	AM	0	1	16
3:30	AM	0	0	16
3:45	AM	0	0	16
4:00	AM	0	0	16
4:15	AM	2	0	18
4:30	AM	1	0	19
4:45	AM	1	2	18
5:00	AM	1	0	19
5:15	AM	1	4	16
5:30	AM	0	2	14
5:45	AM	0	2	12
6:00	AM	0	1	11
6:15	AM	1	4	8
6:30	AM	1	4	5
6:45	AM	0	0	5
Max =				21
Max Veh/Unit =				0.53