700 Paris Street
City of Greater Sudbury

Traffic Impact Study for
2226553 Ontario Inc.

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Executive Summary

This report summarizes the traffic impact study prepared for the proposed development on a site municipally known as 700 Paris Street, located on the east side of Paris Street between Boland Avenue and Facer Street, in the City of Greater Sudbury [City]. The report assesses the impact of traffic related to the development on the adjacent roadway and provides recommendations to accommodate this traffic in a safe and efficient manner.

The proposed development is anticipated to consist of a 16-storey building with 198 units, a 20-storey building with 250 units and a ground-floor restaurant (500 sq.m. of GFA) and a 10-storey retirement home with 100 rooms.

The proposed development will redevelop the existing site which was formerly the location St. Joseph Hospital. The St. Joseph Hospital has been closed since 2012.

The proposed development will share the existing access with the municipal parking lot south of the proposed development [Paris Driveway], located at the east leg of the Paris Street / Boland Avenue & Existing Driveway intersection. The proposed development will include a full-movement access driveway onto Bell Park Road [Bell Park Access] and an ingress only parking lot access onto Bell Park Road [Bell Park Ingress].

The scope of this analysis includes a review of the following intersections:

- Paris Street / Brady Street;
- Paris Street / Van Horne Street;
- Paris Street / John Street;
- Paris Street / McNaughton Street;
- Paris Street / Facer Street;
- Facer Street / Bell Park Road;
- Paris Street / Boland Avenue & Paris Driveway;
- Paris Street / York Street; and
- Paris Street / Ramsey Lake Road.

Conclusions

1. The proposed development is expected to generate a total of 202 AM and 206 PM peak hour primary trips and 18 PM peak hour pass-by trips.
2. Background traffic and pedestrian counts were commissioned for the existing intersections of Paris Street / Van Horne Street, Paris Street / McNaughton Street, Paris Street / Facer Street, Facer Street / Bell Park Road and Paris Street / York Street completed on Wednesday, April 20th 2022. Background traffic and pedestrian counts at the study area intersections were also obtained from the City.
3. An intersection operation analysis was completed at the study area intersections, using the existing (2022) and background (2027 & 2032) traffic volumes, with the adjacent development traffic. This enabled a review of existing and future traffic deficiencies that would be present without the influence of the proposed development. These improvements are warranted based on the anticipated growth in the City and traffic generated by future developments in the study area without the proposed development. The following improvements are recommended:

Existing (2022) Traffic Volumes

- **Paris Street / John Street and Paris Street / Ramsey Lake Road**
  - Optimize signal timing plan.

Background (2027) Traffic Volumes

- **Paris Street / Van Horne Street, Paris Street / McNaughton Street, Paris Street / Boland Avenue & Paris Driveway and Paris Street / York Street**
  - Optimize signal timing plan.

Background (2032) Traffic Volumes

- **Paris Street / Brady Street**
  - Adjust eastbound pavement markings to accommodate a double left-turn lane.
  - Adjust eastbound signal heads to accommodate a protected eastbound left turn phase.
  - Optimize signal timing plan.
- **Paris Street / Ramsey Lake Road**
  - Widen Ramsey Lake Road to accommodate westbound double right turn lane with a 100 metre storage length and 60 metre taper length
  - Optimize signal timing plan.

4. An estimate of the amount of traffic that would be generated by the Subject Site was prepared and assigned to the study area streets and intersections.
5. An intersection operation analysis was completed under total (2027 & 2032) traffic volumes with the proposed development operational at the study area intersections. The following improvements are recommended prior to build-out of the proposed development:

   Opening Day (2027) Traffic Volumes

   Paris Street / Boland Avenue & Paris Driveway

   - Shift the Paris Driveway to align with Boland Avenue.
   - The westbound configuration of Paris Driveway at the intersection shall include a left turn lane and through-right lane.

   Facer Street

   - Construct sidewalk on the south side of the road between Paris Street and Bell Park Road.

   Bell Park Road

   - Reconstruct Bell Park Road south of Facer Street to a 6.0 metre wide paved condominium road.
   - Bell Park Road shall have a posted speed limit of 20 km/h once Bell Park Road is reconstructed.
6. The proposed development will shift the location of the Paris Driveway slightly further north at the intersection to align with Boland Avenue. It is recommended the westbound lane configuration at the Paris Street / Boland Avenue & Paris Driveway intersection include a left turn lane and through-right lane. A single ingress and egress lane at the Paris Driveway will

provide the necessary capacity to service the proposed development. The Paris Driveway will provide ingress and egress access to the underground parking and surface parking.

7. The Bell Park Access will operate as full-movement access driveway. A single ingress and egress lane at the Bell Park Access will provide the necessary capacity to service the proposed development. The Bell Park Ingress will operate efficiently with a single ingress only driveway. A single ingress lane at the Bell Park Ingress will provide the necessary capacity to service the proposed development. Bell Park Access will provide ingress and egress access to the surface parking and the Bell Park Ingress will provide ingress only access to the underground parking.
8. There are no issues regarding the sight distance available for the proposed Paris Driveway and Bell Park Access.
9. The proposed parking supply for the proposed development meets the minimum parking requirement specified in the City's Zoning By-law 2010–100Z.
10. In summary the proposed development will not cause any operational issues and will not add significant delay or congestion to the local roadway network.

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1 Introduction

1.1 Background

2226553 Ontario Inc. [The Client] is proposing a development on a site municipally known as 700 Paris Street, located on the east side of Paris Street between Boland Avenue and Facer Street, in the City of Greater Sudbury [City]. The proposed development is anticipated to consist of a 16-storey building with 198 units, a 20-storey building with 250 units and a ground-floor restaurant (500 sq.m. of GFA) and a 10-storey retirement home with 100 rooms.

The proposed development will redevelop the existing site which was formerly the location St. Joseph Hospital. The St. Joseph Hospital has been closed since 2012.

The proposed development will share the existing access with the municipal parking lot south of the proposed development [Paris Driveway], located at the east leg of the Paris Street / Boland Avenue & Existing Driveway intersection. The Paris Driveway will provide ingress and egress access to the underground parking and surface parking.

The proposed development will include a full-movement access driveway onto Bell Park Road [Bell Park Access] and an ingress only parking lot access onto Bell Park Road [Bell Park Ingress]. Bell Park Access will provide ingress and egress access to the surface parking and the Bell Park Ingress will provide ingress only access to the underground parking.

The Client has retained **JD Northcote Engineering Inc.** [JD Engineering] to prepare this traffic impact study in support of the proposed development.

1.2 Study Area

Figure 1 illustrates the location of the subject site and study area intersections in relation to the surrounding area. The Draft Plan by ACK Architects is attached in **Appendix A**.

The subject site is bound by Paris Street to the west, Facer Street to the north, Bell Park Road to the east and existing municipal parking lot to the south.

Through our consultation with the City, the following intersections will be analysed as part of the study:

- Paris Street / Brady Street;
- Paris Street / Van Horne Street;
- Paris Street / John Street;
- Paris Street / McNaughton Street;
- Paris Street / Facer Street;
- Facer Street / Bell Park Road;
- Paris Street / Boland Avenue & Paris Driveway;
- Paris Street / York Street; and
- Paris Street / Ramsey Lake Road.

Figure 1 – Proposed Site Location and Study Area

1.3 Study Scope and Objectives

The purpose of this study is to identify the potential impacts to traffic flow at the site access and on the surrounding roadway network. The study analysis includes the following tasks:

- Determine existing traffic volumes and circulation patterns;
- Estimate future traffic volumes if the proposed development was not constructed, including the impact of additional proposed developments in the area;
- Complete level-of-service [LOS] analysis of horizon year (without the proposed development) traffic conditions and identify operational deficiencies;
- Estimate the amount of traffic that would be generated by the proposed development and assign to the roadway network;
- Complete LOS analysis of horizon year (with the proposed development) traffic conditions and identify additional operational deficiencies;
- Identify improvement options to address operational deficiencies;
- Calculate lane improvements for the Site Access based on the Transportation Association of Canada [TAC] and Ontario Ministry of Transportation [MTO] guidelines;
- Review the proposed configuration of the site accesses;
- Review the suitability of the proposed parking supply; and
- Document findings and recommendations in a final report.

1.4 Horizon Year and Analysis Periods

Traffic scenarios for the existing (2022) and horizon (2027 & 2032) year were selected for analysis of traffic operations in the study area. The weekday morning [AM] and weekday afternoon [PM] peak hours have been selected as the analysis periods for this study.

2 Information Gathering

2.1 Street and Intersection Characteristics

Paris Street is a primary arterial road with an urban cross-section and sidewalks on both sides of the road in the study area. Paris Street is a two-lane roadway south of Van Horne Street and a three-lane roadway north of Van Horne Street. Paris Street has a multi-use paths on both sides of the road south of Boland Avenue. Paris Street north of John Street has a posted speed limit of 50 km/h, Paris Street between John Street and York Street has a posted speed limit of 40 km/h and Paris Street south of York Street has a posted speed limit of 60km/h. Paris Street is under jurisdiction of the City.

Brady Street is a two-lane primary arterial road with an urban cross-section and sidewalks on both sides of the road. Brady Street has a posted speed limit of 50 km/h and is under jurisdiction of the City.

Van Horne Street is a secondary arterial road with an urban cross-section and sidewalks on both sides of the road. Van Horne Street has an unposted (assumed) speed limit of 50km/h east of Paris Street and a posted speed limit of 40 km/h west of Brady Street. Van Horne Street is under jurisdiction of the City.

John Street is a two-lane local road with an urban cross-section and a sidewalk on both sides of the road east of Paris Street and no sidewalk west of Paris Street. John Street has an unposted (assumed) speed limit of 50km/h and is under jurisdiction of the City.

McNaughton Street is a two-lane local road with an urban cross-section and a sidewalk on the south side of the road east of Paris Street and no sidewalk west of Paris Street. McNaughton Street has an unposted (assumed) speed limit of 50km/h and is under jurisdiction of the City.

Facer Street is a two-lane local road with an urban cross-section and no sidewalk. Facer Street has an unposted (assumed) speed limit of 50km/h and is under jurisdiction of the City.

Bell Park Road is a two-lane local road with a rural cross-section and a gravel surface. Bell Park Road has an unposted (assumed) speed limit of 50km/h and is under jurisdiction of the City.

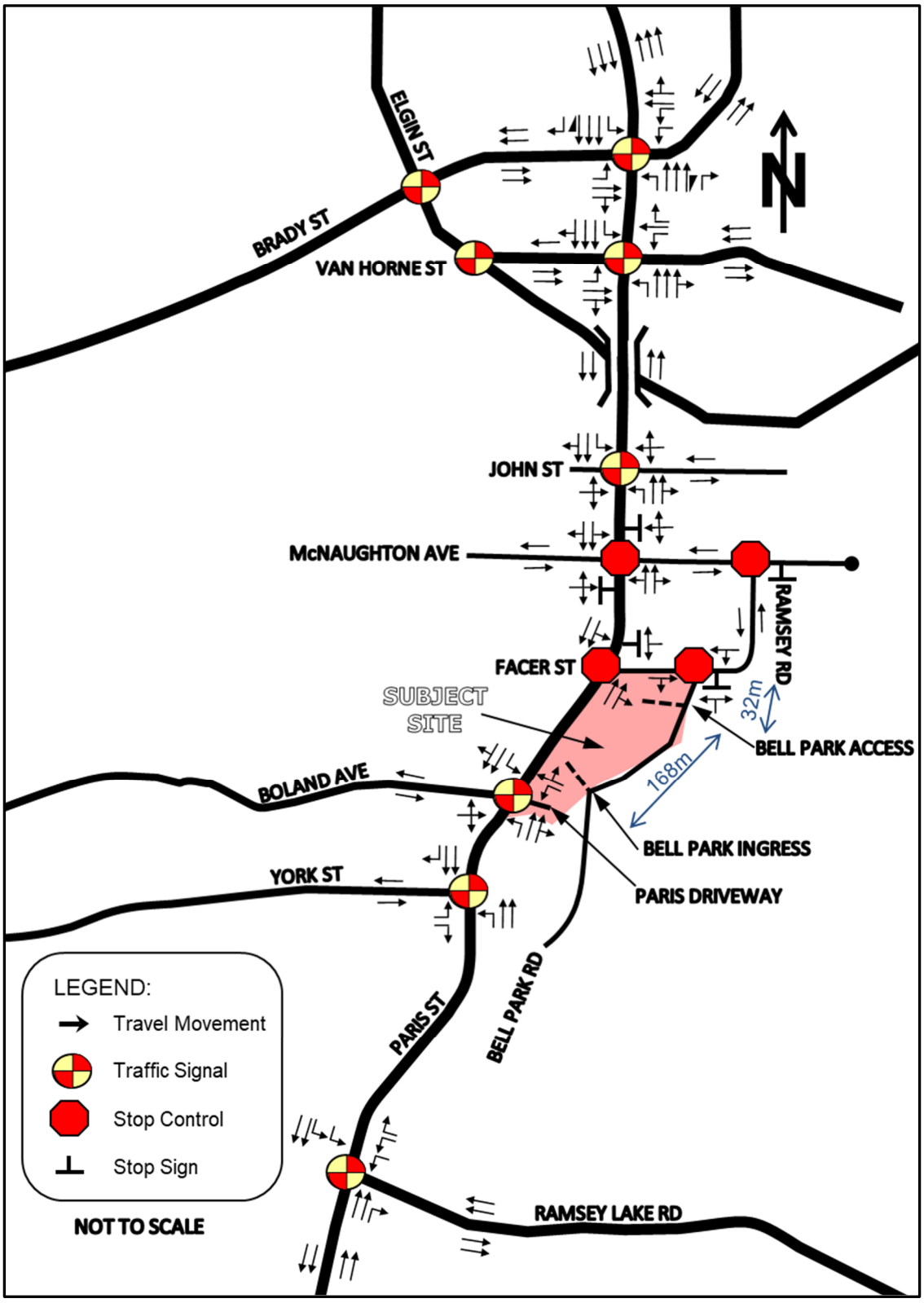
Boland Avenue is a two-lane collector road with an urban cross-section and a sidewalk on the south side of the road. Boland Avenue has an unposted (assumed) speed limit of 50km/h and is under jurisdiction of the City.

York Street is a two-lane collector road with an urban cross-section including sidewalks and bike lanes on the both sides of the road. York Street has a posted speed limit of 40km/h and is under jurisdiction of the City.

Ramsey Lake Road is a four-lane secondary arterial road with an urban cross-section and sidewalks on both sides of the road. Ramsey Lake Road has a posted speed limit of 60 km/h and is under jurisdiction of the City.

The existing intersection lane configuration within the study area is illustrated in **Figure 2**.

Figure 2 – Existing Lane Configuration within Study Area



2.2 Local Transportation Infrastructure Improvements

Based on a review of the City's Transportation Master Plan (2016) [TMP] and 2022 Capital Budget, there are no planned road improvements in the study area.

The City is planning to construct a bikeway path along Paris Street & Notre Dame Street from Van Horne Street to Wilma Street located north of the study area. Construction of the bikeway is planned to start construction in 2022 which will coincide with the rehabilitation of the Bridge of Nations, which includes the addition of a cycle track as part of the improvements.

2.3 Transit Access

The City's bus service [GOVA Transit] provides one bus route near the subject site. The Route 1 (Main Line) bus route provides service along Paris Street.

Route 1 operates from 06:15 – 24:00 on weekdays with service every 15 minutes and from 07:15 – 23:30 on the weekend with service every 15 minutes. The closest bus stop for Route 1 northbound and southbound route are located at the northeast (85 metres from the subject site) and northwest (25 metres from the subject site) corner of the Paris Street / Boland Avenue intersection.

2.4 Other Developments within the Study Area

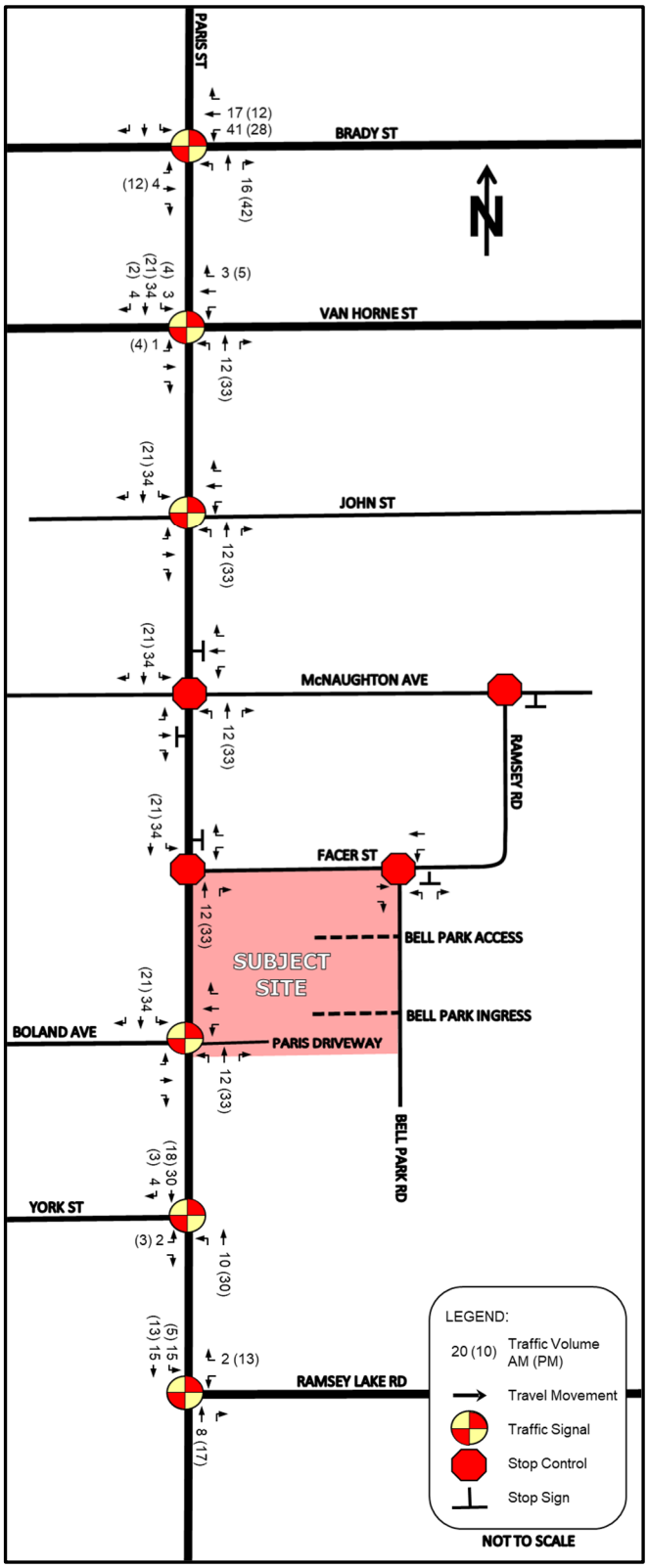
Based on correspondence with the City's planning department, the Manitou Residential Development is the only other development that would impact traffic in the study area.

2356268 Ontario Ltd. is proposing a residential development located northeast of the Paris Street / Van Horne Street intersection [Manitou Residential Development]. The Manitou Residential Development will consist of two high-rise buildings with a total of 826 dwelling units. The buildings will contain 476 units for active older adults and 350 units at rental rates geared to income. Transplan Associates completed a traffic impact study [TIS] for the Manitou Residential Development (dated May 2018) [Transplan TIS]. The Manitou Residential Development is site plan approved with no timeline for build-out.

The traffic generation and assignment for the Manitou Residential Development was obtained from the Transplan TIS (excerpts provided in **Appendix B**) and assumed in the study area.

Figure 3 illustrates the traffic assignment for the Manitou Residential Development, during the AM and PM peak hour.

Figure 3 – Manitou Residential Development Traffic Assignment



2.5 Background Traffic Growth

Based on correspondence with the City a 1.5% background traffic growth rate was applied on collector and arterial roads in the study area. The 1.5% background traffic growth rate was applied on Paris Street, Van Horne Street, Boland Avenue, York Street and Ramsey Lake Road. Based on a review of the surrounding development and road network, no background traffic growth was applied on John Street, McNaughton Street, Facer Street and Bell Park Road.

2.6 Traffic Counts

Detailed turning movements traffic and pedestrian counts were obtained from the City and commissioned by JD Engineering at the study area intersections. **Table 1** summarizes the traffic count data collection information.

Table 1 - Traffic Count Data

Intersection (N-S Street / E-W Street)	Count Date	AM Peak Hour	PM Peak Hour	Source
Paris Street / Brady Street	Thursday, August 5th 2021	-	16:00 – 17:00	City
	Friday, August 6th 2021	07:30 – 08:30	-	
Paris Street / Van Horne Street	Thursday, August 5th 2021	-	16:00 – 17:00	City
	Friday, August 6th 2021	07:30 – 08:30	-	
	Wednesday, April 20th 2022	07:45 – 08:45	16:00 – 17:00	JD Eng*
Paris Street / John Street	Thursday, July 18th 2019	-	16:00 – 17:00	City
	Friday, July 19th 2019	08:00 – 09:00	-	
Paris Street / McNaughton Street	Wednesday, April 20th 2022	07:45 – 08:45	16:00 – 17:00	JD Eng*
Paris Street / Facer Street	Wednesday, April 20th 2022	07:45 – 08:45	16:00 – 17:00	JD Eng*
Facer Street / Bell Park Road	Wednesday, April 20th 2022	08:00 – 09:00	16:15 – 17:15	JD Eng*
Paris Street / Boland Avenue & Paris Driveway	Monday, August 9th 2021	-	15:45 – 16:45	City
	Tuesday, August 9th 2021	07:30 – 08:30	-	
Paris Street / York Street	Tuesday, July 23rd 2019	-	16:00 – 17:00	City
	Wednesday, July 24th 2019	07:45 – 08:45	-	
	Wednesday, April 20th 2022	07:45 – 08:45	16:00 – 17:00	JD Eng*
Paris Street / Ramsey Lake Road	Tuesday, August 6th 2019	-	15:45 – 16:45	City
	Wednesday, August 7th 2019	08:00 – 09:00	-	

** Traffic counts were completed by Ontario Traffic Inc. on behalf of JD Engineering.

Detailed traffic count data can be found in **Appendix C**.

The peak hours of traffic generation for all other peak hours at the study area intersections generally aligned with the anticipated peak hour of traffic generation by the proposed development.

To determine the equivalent existing (2022) traffic volumes, the background traffic growth rate noted in Section 2.5 was applied to the traffic counts completed in 2019 and 2021.

Heavy vehicle percentages and pedestrian crossings from the traffic count data have also been included in the Synchro analysis.

As a result of the physical distancing requirements associated with COVID-19, the traffic counts completed in 2019, 2021 and 2022 [2019 Counts, 2021 Counts & 2022 Counts respectively] are notably different in comparison, with the critical scenario generally observed in the 2019 Counts. For the purposes of this report, we have adjusted the traffic volumes to illustrate the critical scenarios observed in the AM and PM peak hours. The following sections will discuss the adjustments made at the study area intersections for use in the traffic model.

Based on our review, there is a notable difference between the traffic patterns observed for the intersections in the City's downtown core (Paris Street at Brady Street and Van Horne Street) [Internal Downtown Intersections] and the intersections south of the downtown area (Paris Street at John Street, McNaughton Street, Facer Street, Boland Avenue, York Street and Ramsey Lake Road) [External Downtown Intersections]; Consequently, the following sections will review slightly different methodologies for both areas.

2.6.1 Internal Downtown Intersections

2.6.1.1 AM Peak Hour

Based on a comparison of the 2021 and 2022 Counts at the Paris Street / Van Horne Street intersection, the 2022 Counts were 31% higher than the 2021 Counts. For the AM peak hour, the 2022 Counts were used at the Paris Street / Van Horne Street intersection and the 2021 Counts with a 31% factor applied was used at the Paris Street / Brady Street intersection. The southbound traffic at the Paris Street / Van Horne Street intersection was adjusted to match the south leg egress traffic at the Paris Street / Brady Street intersection to accurately depict the traffic volumes[1]. It is noted, the south leg of traffic at the Paris Street / Van Horne Street intersection is consistent with the north leg 2019 Counts at the Paris Street / John Street intersection.

2.6.1.2 PM Peak Hour

Based on a comparison of the 2021 and 2022 Counts at the Paris Street / Van Horne Street intersection, there is a marginal difference between the counts. Based on a comparison of the 2019 Counts and 2022 Counts at the Paris Street / York Street intersection, the 2019 Counts were 18% higher than the 2022 Counts. Since there is marginal difference between the 2021 and 2022 Counts, the Internal Downtown Intersections were increased by 18% in the PM peak hour. The southbound traffic on Paris Street between Brady Street, Van Horne Street and John Street were adjusted to match at each leg to accurately depict the traffic volumes[1]. It is noted, the south leg of traffic at the Paris Street / Van Horne Street intersection is consistent with the north leg 2019 Counts at the Paris Street / John Street intersection.

2.6.2 External Downtown Intersections

2.6.2.1 AM Peak Hour

Based on a comparison of the 2019 and 2022 Counts at the Paris Street / York Street intersection, the 2019 Counts were higher than the 2022 Counts by 17%, 4% and 16% in the northbound, southbound and west leg movements respectively, at the intersection. The 2022 Counts at the External Downtown Intersections were increased by 17%, 4% and 16% for the northbound through, southbound through and side street traffic volumes respectively in the AM peak hour.

The northbound and southbound through traffic volumes from the 2021 Counts at the Paris Street / Boland Avenue & & Paris Driveway intersection were adjusted to match the north leg of the Paris Street / York Street intersection. The side street traffic at the Paris Street / Boland Avenue & & Paris Driveway

[1] There are no driveways onto Paris Street, between the intersections, in the southbound direction.

intersection were increased by 31% in the AM peak hour, based on the increase between 2021 to 2022 Counts as noted in Section 2.6.1.1.

2.6.2.2 **PM Peak Hour**

Based on a comparison of the 2019 and 2022 Counts at the Paris Street / York Street intersection, the 2019 Counts were higher than the 2022 Counts by 15%, 24% and 16% in the northbound, southbound and west leg movements respectively, at the intersection. The 2022 Counts at the External Downtown Intersections were increased by 15%, 24% and 16% for the northbound through, southbound through and side street traffic volumes respectively in the PM peak hour.

The northbound and southbound through traffic volumes from the 2021 Counts at the Paris Street / Boland Avenue & & Paris Driveway intersection were adjusted to match the north leg of the Paris Street / York Street intersection. The side street traffic at the Paris Street / Boland Avenue & & Paris Driveway intersection were increased by 18% in the PM peak hour, based on the increase between 2021 to 2022 Counts as noted in Section 2.6.1.2.

Figure 4 illustrates the existing (2022) AM and PM peak hour traffic volumes in the study area.

2.7 Horizon Year Traffic Volumes

In addition to the adjacent development traffic volumes (outlined in Section 2.4), the background (2027 & 2032) traffic volumes were estimated for the AM and PM peak hour by applying the background traffic growth rates discussed in Section 2.5 to the existing traffic volumes.

Figures 5 and **6** illustrates the background (2027 & 2032) AM and PM peak hour traffic volumes respectively, in the study area.

Figure 4 – Existing (2022) Traffic Volumes

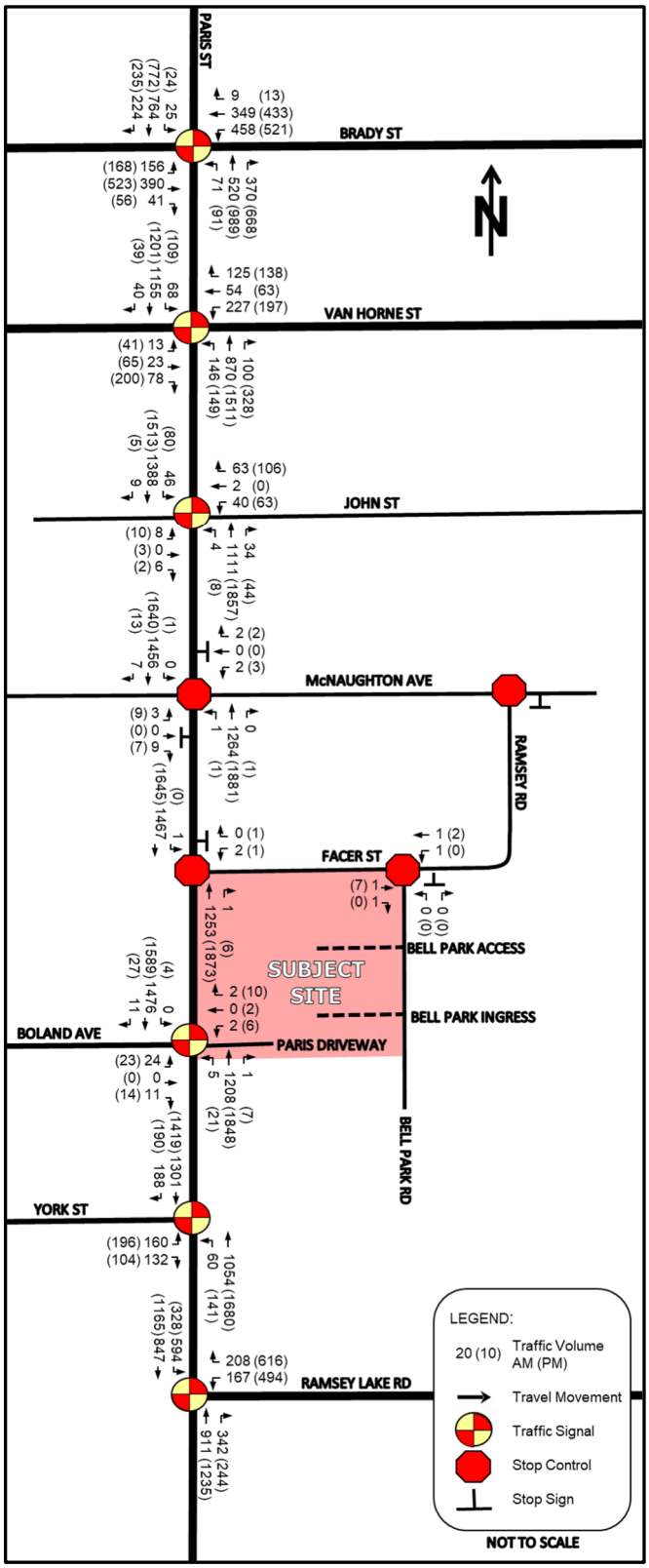


Figure 5 – Background (2027) Traffic Volumes

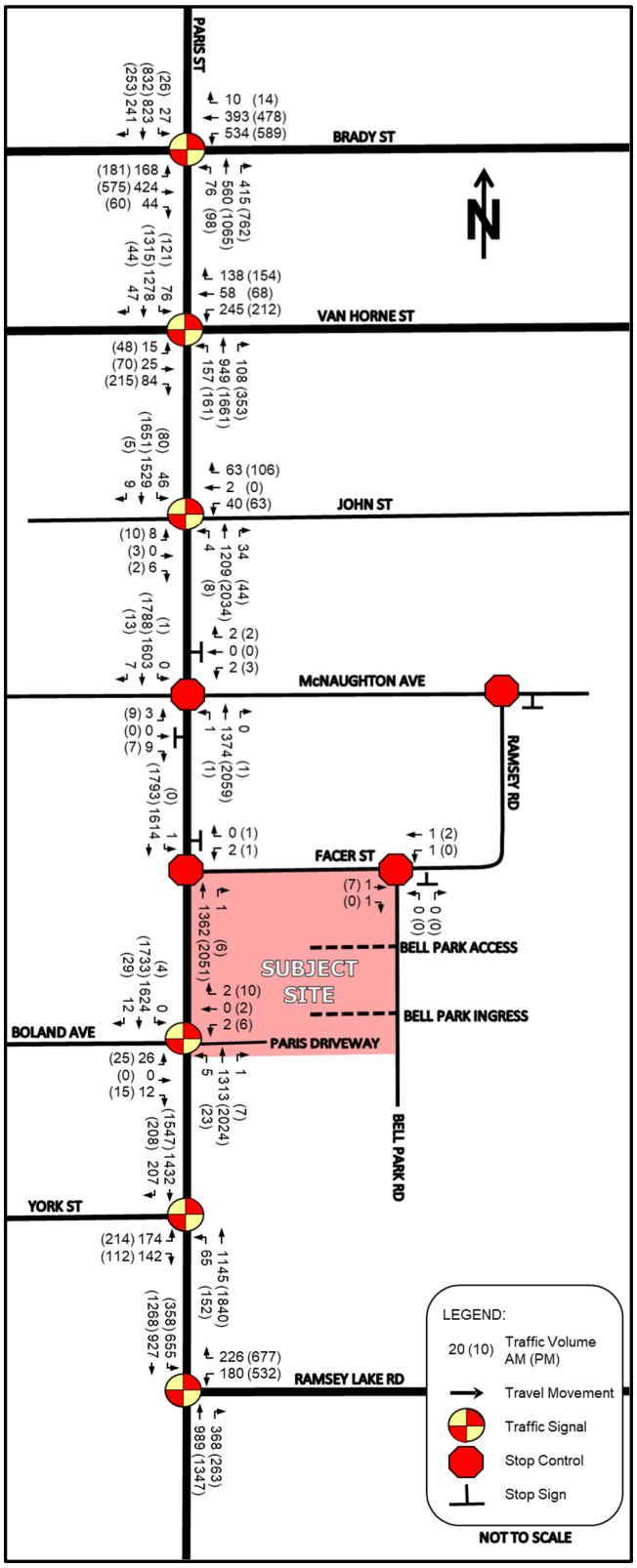
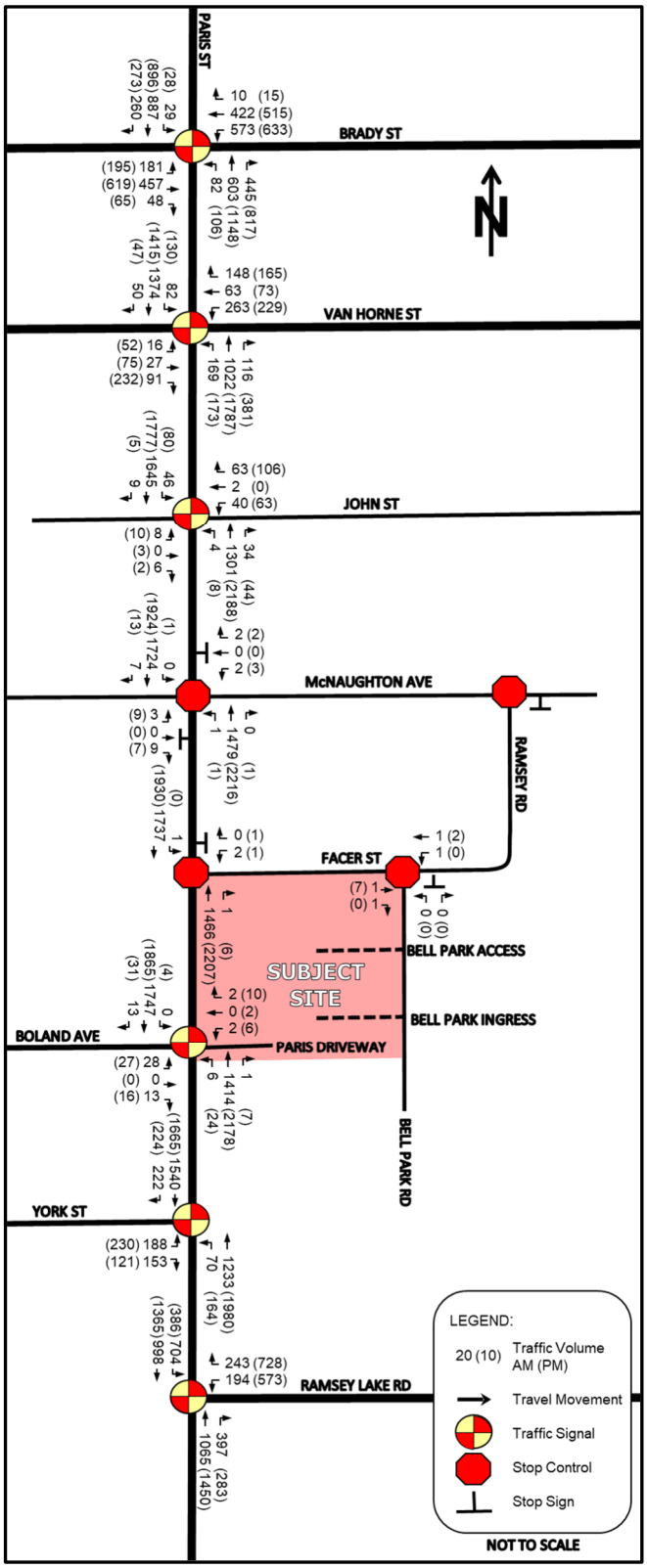


Figure 6 – Background (2032) Traffic Volumes



3 Intersection Operation with Proposed Development

3.1 Intersection Capacity Analysis Criteria

Intersection performance was measured using the traffic analysis software, Synchro 11, a deterministic model that employs Highway Capacity Manual and Intersection Capacity Utilization methodologies for analysing intersection operations. These procedures are accepted by provincial and municipal agencies throughout North America.

Synchro 11 enables the study area to be graphically defined in terms of streets and intersections, along with their geometric and traffic control characteristics. The user is able to evaluate both signalized and unsignalized intersections in relation to each other, thus not only providing level of service for the individual intersections, but also enabling an assessment of the impact the various intersections in a network have on each other in terms of spacing, traffic congestion, delay, and queuing.

Individual turning movements with a volume-to-capacity [V/C] ratio of 0.85 or greater are considered to be critical movements and have been highlighted in the LOS tables.

The intersection operations were also evaluated in terms of the LOS. LOS is a common measure of the quality of performance at an intersection and is defined in terms of vehicular delay. This delay includes deceleration delay, queue move-up time, stopped delay, and acceleration delay. LOS is expressed on a scale of A through F, where LOS A represents very little delay (i.e. less than 10 seconds per vehicle) and LOS F represents very high delay (i.e. greater than 50 seconds per vehicle for a stop sign controlled intersection and greater than 80 seconds per vehicle for a signalized intersection).

The LOS criteria for signalized and stop sign controlled intersections are shown in **Table 2.** A description of traffic performance characteristics is included for each LOS.

Table 2 – Level of Service Criteria for Intersections

LOS	LOS Description	Control Delay (seconds per vehicle)	
		Signalized Intersections	**Stop Controlled Intersections**
A	Very low delay; most vehicles do not stop (**Excellent**)	less than 10.0	less than 10.0
B	Higher delay; more vehicles stop (**Very Good**)	between 10.0 and 20.0	between 10.0 and 15.0
C	Higher level of congestion; number of vehicles stopping is significant, although many still pass through intersection without stopping **(Good**)	between 20.0 and 35.0	between 15.0 and 25.0
D	Congestion becomes noticeable; vehicles must sometimes wait through more than one red light; many vehicles stop (**Satisfactory**)	between 35.0 and 55.0	between 25.0 and 35.0
E	Vehicles must often wait through more than one red light; considered by many agencies to be the limit of **acceptable** delay	between 55.0 and 80.0	between 35.0 and 50.0
F	This level is considered to be unacceptable to most drivers; occurs when arrival flow rates exceed the capacity of the intersection (**Unacceptable**)	greater than 80.0	greater than 50.0

3.2 Existing (2022) Intersection Operation

The results of the LOS analysis under existing (2022) traffic volumes during the AM and PM peak hours can be found below in **Table 3**. The existing intersection geometry and traffic control has been utilized in this scenario. Detailed output of the Synchro analysis can be found in **Appendix D**.

Table 3 – Existing (2022) LOS

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Brady Street (signalized)	0.64	26.8	C	-	-	0.70	30.2	C	-	-
EBL	0.43	23.4	C	36	57	0.46	27.1	C	44	57
EBTR	0.69	36.5	D	66	-	0.76	44.0	D	109	-
WBL	0.72	36.7	D	78	85	0.71	41.9	D	89	85
WBTR	0.41	26.7	C	52	-	0.42	30.0	C	72	-
NBL	0.32	18.6	B	20	70	0.34	21.6	C	24	70
NBT	0.36	23.5	C	47	-	0.59	29.9	C	92	-
NBR	0.33	9.5	A	41	-	0.60	14.3	B	111	-
SBL	0.11	22.7	C	9	24	0.14	24.8	C	9	24
SBT	0.63	29.9	C	74	-	0.51	31.3	C	74	-
SBR	0.32	19.0	B	39	-	0.26	20.3	C	34	-
Paris Street / Van Horne Street (signalized)	0.67	16.2	B	-	-	0.72	17.8	B	-	-
EBL	0.05	25.4	C	7	21	0.14	26.2	C	14	21
EBTR	0.07	25.4	C	8	-	0.20	26.5	C	18	-
WBL	0.81	45.4	D	68	133	0.82	50.9	D	61	133
WBT	0.14	26.0	C	18	-	0.14	26.1	C	19	-
WBR	0.09	25.6	C	14	62	0.09	25.8	C	14	62
NBL	0.62	12.8	B	27	34	0.54	10.4	B	21	34
NBTR	0.40	11.9	B	58	-	0.70	16.3	B	127	-
SBL	0.22	7.5	A	11	48	0.50	12.5	B	19	48
SBTR	0.48	12.9	B	71	-	0.46	12.6	B	68	-
Paris Street / John Street (signalized)	0.61	8.1	A	-	-	0.84	16.6	B	-	-
EB	0.01	21.8	C	0	-	0.07	29.4	C	7	-
WB	0.28	23.3	C	20	-	0.49	33.0	C	33	-
NBL	0.02	6.0	A	2	33	0.05	6.9	A	3	33
NBTR	0.63	9.6	A	82	-	0.94	23.4	C	245	-
SBL	0.17	4.9	A	5	23	0.39	16.7	B	11	23
SBTR	0.61	5.6	A	69	-	0.62	6.3	A	97	-
Paris Street / McNaughton Street (unsignalized)	-	0.2	A	-	-	-	0.1	D	-	-
EB	0.06	23.4	C	2	-	0.05	15.7	C	2	-
WB	0.03	33.9	D	1	-	0.02	20.0	C	1	-

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Facer Street (unsignalized)	-	0.1	A	-	-	-	0.0	B	-	-
WB	0.01	30.9	D	1	-	0.01	17.9	C	1	-
Bell Park Road / Facer Street (unsignalized)	-	1.8	A	-	-	-	0.0	A	-	-
WB	0.00	0.0	A	0	-	0.00	0.0	A	0	-
Paris Street / Boland Avenue & Paris Driveway (signalized)	0.57	3.9	A	-	-	0.70	5.6	A	-	-
EB	0.02	25.5	C	7	-	0.04	29.1	C	9	-
WBL	0.02	25.5	C	2	-	0.06	29.1	C	5	-
WBTR	0.00	25.4	C	0	-	0.03	28.9	C	5	-
NBL	0.03	2.1	A	2	40	0.16	2.8	A	4	40
NBTR	0.49	3.2	A	46	-	0.76	5.9	A	108	-
SBL	0.00	0.0	A	0	100	0.03	2.2	A	1	100
SBTR	0.61	3.9	A	65	-	0.66	4.6	A	79	-
Paris Street / York Street (signalized)	0.71	13.1	B	-	-	0.80	15.8	B	-	-
EBL	0.56	29.7	C	49	21	0.64	34.0	C	58	21
EBR	0.10	25.3	C	16	-	0.07	26.9	C	14	-
NBL	0.27	9.4	A	8	123	0.49	13.2	B	25	123
NBT	0.51	6.5	A	67	-	0.74	9.9	A	135	-
SBT	0.78	16.0	B	141	-	0.84	20.5	C	160	-
SBR	0.14	8.9	A	11	72	0.13	10.5	B	12	72
Paris Street / Ramsey Lake Road (signalized)	0.65	17.6	B	-	-	0.96	31.4	C	-	-
WBL	0.35	29.4	C	25	158	0.72	44.4	D	87	158
WBR	0.25	11.7	B	34	-	0.88	38.4	D	223	-
NBT	0.73	22.4	C	92	-	0.93	42.5	D	217	-
NBR	0.36	17.5	B	35	37	0.31	22.6	C	49	37
SBL	0.69	27.5	C	87	175	0.50	40.1	D	56	175
SBT	0.37	4.7	A	41	-	0.54	9.8	A	90	-

The results of the analysis indicate that the intersections of Paris Street / John Street and Paris Street / Ramsey Lake Road are operating marginally outside the typical design limits noted in Section 3.1 during the PM peak hour. It is recommended the signal timing at these intersections are adjusted to optimize the use of the existing infrastructure.

A summary of the results of the Synchro analysis with the above-noted improvements, during the PM peak hour, can be found below in **Table 4**. Detailed output of the Synchro analysis can be found in **Appendix D**.

Table 4 – Existing (2022) LOS with Improvements

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / John Street (signalized)	-	-	-	-	-	0.81	14.0	B	-	-
EB	-	-	-	-	-	0.06	33.4	C	10	-
WB	-	-	-	-	-	0.56	39.2	D	51	-
NBL	-	-	-	-	33	0.05	6.2	A	3	33
NBTR	-	-	-	-	-	0.87	17.2	B	215	-
SBL	-	-	-	-	23	0.55	20.4	C	15	23
SBTR	-	-	-	-	-	0.61	6.7	A	101	-
Paris Street / Ramsey Lake Road (signalized)	-	-	-	-	-	0.96	31.2	C	-	-
WBL	-	-	-	-	158	0.60	37.9	D	82	158
WBR	-	-	-	-	-	0.92	45.0	D	245	-
NBT	-	-	-	-	-	0.89	36.0	D	185	-
NBR	-	-	-	-	37	0.29	21.0	C	42	37
SBL	-	-	-	-	175	0.71	51.0	D	63	175
SBT	-	-	-	-	-	0.58	12.7	B	105	-

The results of the LOS analysis indicate that the intersections of Paris Street / John Street and Paris Street / Ramsey Lake Road are operating outside the typical design limits as noted in Section 3.1; however, no improvements are recommended as the intersection is operating within theoretical capacity (V/C of 1.0) and the methodology noted in Section 2.6 assumed conservative traffic volumes along Paris Street in the study area. The northbound movements in the PM peak hour exceeds the capacity for a two-lane roadway in each direction (1800 vph); it is recommended the City monitor the traffic volumes and queuing on Paris Street to determine if improvements are warranted and prioritize transportation demand management [TDM] strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for northbound movements at the Paris Street / John Street intersection will extend past the intersections of Paris Street at David Street (90 metres) and McNaughton Street (192 metres). As noted above, northbound traffic volumes are approaching the capacity for a two-lane roadway (1800 vph); it is recommended the City monitor the northbound queue at the intersection and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for eastbound left turn movements at the Paris Street / York Street intersection exceeds the existing storage and taper length; however, the excess queue will not block any intersections. Consequently, there are no issues with the anticipated eastbound left turn queue.

The anticipated queue for all other highlighted auxiliary left turn movements exceed the existing storage, however, the excess queue can be accommodated by the taper length.

There are no other issues regarding the anticipated queuing for all other movements at the study area intersections.

An analysis was completed for left turn movements at the unsignalized intersections in the study area, based on the criteria outlined in Appendix 9A of the MTO Design Supplement for TAC Geometric Design Guide for Canadian Roads (dated June 2017) [MTO DS]. Based on the above noted criteria a

left-turn lane is not warranted at the unsignalized intersections in the study area (results are provided in **Appendix G**).

A review of the need for additional auxiliary right turn lanes was completed as part of our analysis. The results of the Synchro analysis indicate that there is excess capacity for all right turn movements; consequently, additional right turn lane improvements are not recommended.

Based on the Ontario Traffic Manual Book 12 *Signal Justification*, traffic signals are not warranted at the unsignalized intersections in the study area (results are provided in **Appendix H**).

No improvements are recommended for the existing (2022) scenario.

3.3 Background (2027) Intersection Operation

The results of the LOS analysis under background (2027) traffic volumes during the AM and PM peak hours can be found below in **Table 5**. The signal timing improvements noted in Section 3.2 and additional signal timing improvements at all other intersections were applied in this scenario to optimize the use of the existing infrastructure. Detailed output of the Synchro analysis can be found in **Appendix E**.

Table 5 – Background (2027) LOS

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Brady Street (signalized)	0.69	30.1	C	-	-	0.80	31.5	C	-	-
EBL	0.47	26.1	C	42	57	0.49	27.8	C	44	57
EBTR	0.74	41.4	D	84	-	0.77	45.2	D	110	-
WBL	0.74	39.3	D	92	85	0.76	45.7	D	106	85
WBTR	0.41	27.5	C	64	-	0.42	29.6	C	76	-
NBL	0.39	22.6	C	24	70	0.39	24.5	C	30	70
NBT	0.40	27.8	C	56	-	0.53	26.8	C	96	-
NBR	0.38	10.8	B	49	-	0.69	13.4	B	171	-
SBL	0.11	24.8	C	11	24	0.21	33.7	C	15	24
SBT	0.69	34.6	C	91	-	0.63	38.1	D	91	-
SBR	0.32	21.4	C	42	-	0.35	25.3	C	52	-
Paris Street / Van Horne Street (signalized)	0.68	18.9	B	-	-	0.79	20.1	C	-	-
EBL	0.05	23.0	C	7	21	0.15	26.5	C	16	21
EBTR	0.07	23.1	C	8	-	0.24	27.2	C	24	-
WBL	0.80	40.9	D	73	133	0.82	51.0	D	66	133
WBT	0.13	23.6	C	19	-	0.14	26.4	C	20	-
WBR	0.10	23.4	C	14	62	0.19	26.9	C	22	62
NBL	0.59	15.1	B	38	34	0.62	14.4	B	41	34
NBTR	0.46	13.8	B	74	-	0.76	18.7	B	167	-
SBL	0.28	10.5	B	14	48	0.69	25.6	C	44	48
SBTR	0.63	18.9	B	109	-	0.54	16.3	B	101	-
Paris Street / John Street (signalized)	0.66	8.6	A	-	-	0.86	15.6	B	-	-
EB	0.01	23.1	C	0	-	0.07	37.6	D	10	-
WB	0.29	24.8	C	20	-	0.60	45.2	D	51	-
NBL	0.03	5.8	A	2	33	0.06	5.9	A	3	33
NBTR	0.66	9.8	A	91	-	0.91	19.5	B	268	-
SBL	0.19	5.2	A	5	23	0.61	28.9	C	20	23
SBTR	0.66	6.0	A	81	-	0.65	6.9	A	119	-
Paris Street / McNaughton Street (unsignalized)	-	0.1	A	-	-	-	0.1	C	-	-
EB	0.06	21.6	C	2	-	0.03	12.4	B	1	-
WB	0.03	29.5	D	1	-	0.02	17.6	C	1	-
Paris Street / Facer Street (unsignalized)	-	0.1	B	-	-	-	0.0	C	-	-
WB	0.01	29.9	D	1	-	0.01	15.8	C	1	-
NB	0.59	0.0	A	0	-	0.85	0.0	A	0	-
Bell Park Road / Facer Street (unsignalized)	-	1.8	A	-	-	-	0.0	A	-	-
WB	0.04	0.0	A		-	0.02	0.0	A	0	-

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Boland Avenue & Paris Driveway (signalized)	0.61	4.7	A	-	-	0.75	6.8	A	-	-
EB	0.04	26.9	C	9	-	0.24	36.5	D	16	-
WBL	0.02	26.8	C	3	-	0.07	34.8	C	7	-
WBTR	0.00	26.7	C	0	-	0.03	34.5	C	7	-
NBL	0.03	2.3	A	1	40	0.20	2.8	A	4	40
NBTR	0.54	3.8	A	51	-	0.79	6.2	A	141	-
SBL	0.00	0.0	A	0	100	0.04	1.9	A	1	100
SBTR	0.67	4.9	A	76	-	0.69	4.5	A	99	-
Paris Street / York Street (signalized)	0.74	13.0	B	-	-	0.81	16.9	B	-	-
EBL	0.62	33.8	C	62	21	0.71	43.1	D	86	21
EBR	0.26	28.6	C	29	-	0.08	31.7	C	17	-
NBL	0.41	11.7	B	8	123	0.67	26.1	C	48	123
NBT	0.54	6.8	A	76	-	0.79	11.1	B	157	-
SBT	0.78	14.7	B	145	-	0.82	19.1	B	162	-
SBR	0.15	7.8	A	9	72	0.15	9.7	A	10	72
Paris Street / Ramsey Lake Road (signalized)	0.68	20.3	C	-	-	1.04	38.8	D	-	-
WBL	0.37	34.4	C	32	158	0.67	41.4	D	89	158
WBR	0.29	14.3	B	48	-	1.05	79.9	E	284	-
NBT	0.74	24.9	C	127	-	0.93	39.8	D	217	-
NBR	0.42	19.8	B	56	37	0.32	20.6	C	48	37
SBL	0.75	33.5	C	103	175	0.81	58.2	E	74	175
SBT	0.39	5.0	A	53	-	0.62	13.0	B	120	-

The results of the LOS analysis indicate that the intersections of Paris Street / John Street and Paris Street / Ramsey Lake Road are operating outside the typical design limits as noted in Section 3.1; however, no improvements are recommended as the intersection is only operating marginally outside theoretical capacity (V/C of 1.0) and the methodology noted in Section 2.6 assumed conservative traffic volumes along Paris Street in the study area. The northbound and southbound movements in the PM peak hour exceeds the capacity for a two-lane roadway in each direction (1800 vph); it is recommended the City monitor the traffic volumes and queuing on Paris Street to determine if improvements are warranted as development proceeds and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The results of the LOS analysis indicate that the northbound movement at the Paris Street / Facer Street intersection is operating outside the typical design limits as noted in Section 3.1; however, since there are no queuing issues and the V/C ratio only marginally exceeds the typical design limits, no improvements are recommended.

The anticipated queue for northbound movements at the Paris Street / John Street intersection will extend past the intersections of Paris Street at David Street (90 metres) and McNaughton Street (192 metres). As noted above, northbound traffic volumes are approaching the capacity for a two-lane roadway (1800 vph); it is recommended the City monitor the northbound queue at the intersection and

prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for eastbound left turn movements at the Paris Street / York Street intersection exceeds the existing storage and taper length; however, the excess queue will not block any intersections. Consequently, there are no issues with the anticipated eastbound left turn queue.

The anticipated queue for all other highlighted auxiliary left turn movements exceed the existing storage, however, the excess queue can be accommodated by the taper length.

An analysis was completed for left turn movements at the unsignalized intersections in the study area, based on the criteria outlined in Appendix 9A of the MTO DS. Based on the above noted criteria a left-turn lane is not warranted at the unsignalized intersections in the study area (results are provided in **Appendix G**).

A review of the need for additional auxiliary right turn lanes was completed as part of our analysis. The results of the Synchro analysis indicate that there is excess capacity for all right turn movements; consequently, additional right turn lane improvements are not recommended.

Based on the Ontario Traffic Manual Book 12 *Signal Justification*, traffic signals are not warranted at the unsignalized intersections in the study area (results are provided in **Appendix H**).

No further improvements are recommended for the background (2027) scenario.

3.4 Background (2032) Intersection Operation

The results of the LOS analysis under background (2032) traffic volumes during the AM and PM peak hours can be found below in **Table 6**. The signal timing improvements noted in Section 3.2 and 3.3 have been utilized in this scenario. Detailed output of the Synchro analysis can be found in **Appendix E**.

Table 6 – Background (2032) LOS

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Brady Street (signalized)	0.73	32.5	D	-	-	0.85	34.5	C	-	-
EBL	0.51	27.9	C	46	57	0.53	30.0	C	48	57
EBTR	0.78	45.7	D	93	-	0.81	50.0	D	119	-
WBL	0.79	43.3	D	103	85	0.83	52.6	D	121	85
WBTR	0.43	29.0	C	70	-	0.45	32.0	C	83	-
NBL	0.44	24.3	C	25	70	0.44	26.3	C	32	70
NBT	0.42	29.3	C	61	-	0.56	28.6	C	105	-
NBR	0.41	11.4	B	57	-	0.74	15.9	B	200	-
SBL	0.13	26.1	C	11	24	0.24	35.4	D	17	75
SBT	0.72	37.1	D	99	-	0.64	40.0	D	99	-
SBR	0.35	22.7	C	46	-	0.37	26.4	C	57	-
Paris Street / Van Horne Street (signalized)	0.73	20.7	C	-	-	0.87	23.2	C	-	-
EBL	0.06	23.0	C	8	21	0.16	26.4	C	18	21
EBTR	0.07	23.0	C	9	-	0.27	27.2	C	27	-
WBL	0.83	44.0	D	78	133	0.92	69.2	E	88	133
WBT	0.14	23.6	C	20	-	0.14	26.2	C	22	-
WBR	0.10	23.3	C	14	62	0.21	26.8	C	25	62
NBL	0.63	19.2	B	42	34	0.73	22.2	C	45	34
NBTR	0.51	15.0	B	81	-	0.82	20.8	C	146	-
SBL	0.33	11.5	B	15	48	0.75	32.5	C	40	48
SBTR	0.70	21.0	C	120	-	0.58	17.1	B	88	-
Paris Street / John Street (signalized)	0.69	8.6	A	-	-	0.90	17.7	B	-	-
EB	0.01	24.5	C	0	-	0.08	41.7	D	10	-
WB	0.30	26.3	C	21	-	0.64	52.2	D	51	-
NBL	0.03	5.6	A	2	33	0.06	5.6	A	3	33
NBTR	0.68	9.9	A	102	-	0.94	22.7	C	351	-
SBL	0.20	5.6	A	5	23	0.65	38.4	D	24	23
SBTR	0.70	6.3	A	93	-	0.68	7.0	A	138	-
Paris Street / McNaughton Street (unsignalized)	-	0.1	B	-	-	-	0.2	C	-	-
EB	0.06	22.2	C	2	-	0.03	12.9	B	1	-
WB	0.03	29.2	D	1	-	0.02	20.3	C	1	-
Paris Street / Facer Street (unsignalized)	-	0.1	C	-	-	-	0.0	D	-	-
WB	0.01	31.0	D	1	-	0.01	17.2	C	1	-
NB	0.64	0.0	A	0	-	0.91	0.0	A	0	-

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Bell Park Road / Facer Street (unsignalized)	-	1.8	A	-	-	-	0.0	A	-	-
WB	0.04	0.0	A	0	-	0.02	0.0	A	0	-
Paris Street / Boland Avenue & Paris Driveway (signalized)	0.65	4.9	A	-	-	0.79	7.2	A	-	-
EB	0.07	28.8	C	9	-	0.23	41.4	D	17	-
WBL	0.02	28.4	C	3	-	0.07	40.0	D	7	-
WBTR	0.00	28.3	C	0	-	0.02	39.6	D	7	-
NBL	0.05	2.3	A	2	40	0.25	3.6	A	6	40
NBTR	0.57	3.8	A	58	-	0.84	7.9	A	182	-
SBL	0.00	0.0	A	0	100	0.05	2.1	A	1	100
SBTR	0.70	5.2	A	202	-	0.73	5.4	A	121	-
Paris Street / York Street (signalized)	0.78	14.3	B	-	-	0.86	19.3	B	-	-
EBL	0.66	37.3	D	67	21	0.77	50.4	D	100	21
EBR	0.32	31.0	C	34	-	0.08	34.6	C	18	-
NBL	0.48	14.7	B	10	123	0.79	43.3	D	63	123
NBT	0.58	7.4	A	85	-	0.83	13.0	B	185	-
SBT	0.82	16.2	B	167	-	0.85	20.5	C	185	-
SBR	0.16	7.9	A	10	72	0.17	9.6	A	12	72
Paris Street / Ramsey Lake Road (signalized)	0.71	22.5	C	-	-	1.12	48.5	D	-	-
WBL	0.39	37.1	D	34	158	0.73	44.3	D	97	158
WBR	0.32	15.6	B	53	-	1.15	117.0	F	317	-
NBT	0.78	27.8	C	145	-	0.98	48.8	D	259	-
NBR	0.47	21.6	C	67	37	0.34	20.7	C	53	37
SBL	0.79	37.5	D	123	175	0.88	67.6	E	83	175
SBT	0.41	5.4	A	63	-	0.66	13.7	B	136	-

The results of the LOS analysis indicate that the Paris Street / Brady Street intersection is operating outside the typical design limits as noted in Section 3.1. It is recommended the eastbound pavement markings be adjusted to accommodate a double left-turn lane; the recommended eastbound lane configuration will include double left turn lanes, a single through lane and a single through-right turn lane. It is recommended the eastbound signal heads are adjusted to include a protected eastbound left turn phase and adjust the signal timing plan, to accommodate the double eastbound left turn lanes.

The results of the LOS analysis indicate that the Paris Street / Ramsey Lake Road intersection is operating outside the typical design limits as noted in Section 3.1. It is recommended Ramsey Lake Road is widened to accommodate a westbound double right turn lane with a 100 metre storage length and 60 metre taper length; the recommended westbound lane configuration will include double left turn lanes and a double right lane. It is recommended the signal timing plan is adjusted to accommodate the double westbound right turn lane improvement.

A summary of the results of the Synchro analysis with the above-noted improvements, during the PM peak hour, can be found below in **Table 7**. Detailed output of the Synchro analysis can be found in **Appendix E**.

Table 7 – Background (2032) LOS with Improvements

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Brady Street (signalized)	0.73	33.1	C	-	-	0.85	35.0	D	-	-
EBL	0.53	46.4	D	38	57	0.57	53.8	D	41	57
EBTR	0.78	46.3	D	93	-	0.81	50.0	D	119	-
WBL	0.79	43.9	D	101	85	0.83	52.6	D	121	85
WBTR	0.41	28.4	C	68	-	0.44	31.0	C	81	-
NBL	0.44	24.2	C	25	70	0.44	26.3	C	32	70
NBT	0.42	28.4	C	61	-	0.56	28.6	C	105	-
NBR	0.41	11.3	B	57	-	0.74	15.9	B	200	-
SBL	0.13	26.0	C	11	24	0.24	35.4	D	17	75
SBT	0.71	36.8	D	99	-	0.64	40.0	D	99	-
SBR	0.31	19.3	B	49	-	0.33	23.0	C	59	-
Paris Street / Ramsey Lake Road (signalized)	0.72	20.5	C	-	-	0.89	31.6	C	-	-
WBL	0.48	38.1	D	34	158	0.84	51.8	D	107	158
WBR	0.18	14.4	B	26	-	0.68	29.0	C	117	-
NBT	0.77	25.4	C	128	-	0.94	39.9	D	249	-
NBR	0.46	19.9	B	59	37	0.33	18.9	B	50	37
SBL	0.76	33.8	C	105	175	0.82	57.5	E	77	175
SBT	0.40	4.3	A	46	-	0.63	11.1	B	121	-

The results of the LOS analysis indicate that the intersections of Paris Street / Brady Street, Paris Street / Van Horne Street, Paris Street / John Street, Paris Street / York Street and Paris Street / Ramsey Lake Road operates outside the typical design limits noted in Section 3.1 in the PM peak hour; however, no improvements are recommended as the intersection is still operating within theoretical capacity (V/C < 1.0). The northbound and southbound movements in the PM peak hour exceeds the capacity for a two-lane roadway in each direction (1800 vph); it is recommended the City monitor the traffic volumes and queuing on Paris Street to determine if further improvements are warranted and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for northbound and southbound movements at the intersections of Paris Street / John Street, Paris Street / Facer Street and Paris Street / McNaughton Street intersection will marginally extend past intersections along Paris Street. As noted above, northbound traffic volumes are approaching the capacity for a two-lane roadway; it is recommended the City monitor the queuing at the intersections and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for eastbound left turn movements at the Paris Street / York Street intersection exceeds the existing storage and taper length; however, the excess queue will not block any intersections. Consequently, there are no issues with the anticipated eastbound left turn queue.

The anticipated queue for all other highlighted auxiliary left turn movements exceed the existing storage, however, the excess queue can be accommodated by the taper length.

An analysis was completed for left turn movements at the unsignalized intersections in the study area, based on the criteria outlined in Appendix 9A of the MTO DS. Based on the above noted criteria a left-turn lane is not warranted at the unsignalized intersections in the study area (results are provided in **Appendix G**).

A review of the need for additional auxiliary right turn lanes was completed as part of our analysis. The results of the Synchro analysis indicate that there is excess capacity for all right turn movements; consequently, additional right turn lane improvements are not recommended.

Based on the Ontario Traffic Manual Book 12 *Signal Justification*, traffic signals are not warranted at the unsignalized intersections in the study area (results are provided in **Appendix H**).

No further improvements are recommended for the background (2032) scenario.

4 Proposed Development Traffic Generation and Assignment

4.1 Traffic Generation

The traffic generation for the proposed development has been based on the ITE Trip Generation Manual. The following ITE land uses have been applied to estimate the traffic from the proposed development:

- ITE land use 222 (Multi-Family Housing (High-Rise)) – General Urban / Suburban Setting
- ITE land use 251 (Senior Adult Housing - Single-Family) – General Urban / Suburban Setting
- ITE land use 932 (High-Turnover (Sit-Down) Restaurant) – General Urban / Suburban Setting

The estimated trip generation of the proposed development is illustrated below in **Table 8**. The AM and PM peak hour traffic generation for the proposed development is not expected to exactly align with the AM and PM peak hour in the traffic counts; consequently, we have applied the peak hour of adjacent street traffic values provided in the ITE Trip Generation Manual.

Table 8 – Estimated Traffic Generation of Proposed Development

Land Use	Size	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Multi-Family Housing High-Rise ITE Land Use: 222	448 units	41	80	121	81	63	144
Senior Adult Housing - Single-Family ITE Land Use: 251	100 rooms	13	26	39	27	18	45
High-Turnover (Sit-Down) Restaurant ITE Land Use: 932	500 sq.m. (5,382 sq.ft).	29	23	52	30	19	49
TOTAL TRIP GENERATION		**83**	**129**	**212**	**138**	**100**	**228**
INTERNAL CAPTURE*		-5	-5	-10	-7	-7	-14
NET GENERATION		**78**	**124**	**202**	**131**	**93**	**224**
PASS-BY TRIPS (ITE Land Use: 932)**		0	0	0	-9	-9	-18
TOTAL TRAFFIC GENERATION		**78**	**124**	**202**	**122**	**84**	**206**

* The internal capture rate has been calculated using the methodology outlined in the National Cooperative Highway Research Program (NCHRP) Report 684. Internal capture reports are provided in **Appendix I**.
** Pass-by trips for the AM and PM peak hour are 0% and 43% respectively, according to the ITE data for ITE land use 932.

In order to be conservative, no transportation modal split reduction has been applied to the above-noted traffic generation calculation.

4.2 Traffic Assignment

For the purposes of this study, it has been assumed that all traffic generated by the proposed development will be new traffic and would not be in the study area if the development was not constructed.

The distribution of traffic for the proposed development is assumed to follow the existing trip distribution of the traffic counts in Section 2.6. The distribution of trips is illustrated in **Table 9** using the methodology outlined above.

Table 9 – Proposed Development Traffic Distribution Summary

Scenario	Direction	Ingress / Egress Traffic Direction								
		North via Paris Street	**South** via Paris Street	**West** via Brady Street	**East** via Brady Street	**West** via Van Horne Street	**East** via Van Horne Street	**West** via Boland Avenue	**West** via York Street	**East** via Ramsey Lake Road
AM	In	21%	25%	12%	17%	2%	8%	1%	6%	8%
	Out	14%	21%	14%	17%	5%	4%	0%	5%	20%
PM	In	16%	23%	12%	15%	5%	6%	1%	5%	17%
	Out	18%	25%	12%	18%	4%	8%	1%	5%	9%

Figures 7 to **9** illustrates the traffic assignment for the residential and restaurant (primary and pass-by trips) components for the proposed development, during the AM and PM peak hour.

Figure 7 – Traffic Assignment for Proposed Development (Residential Trips)

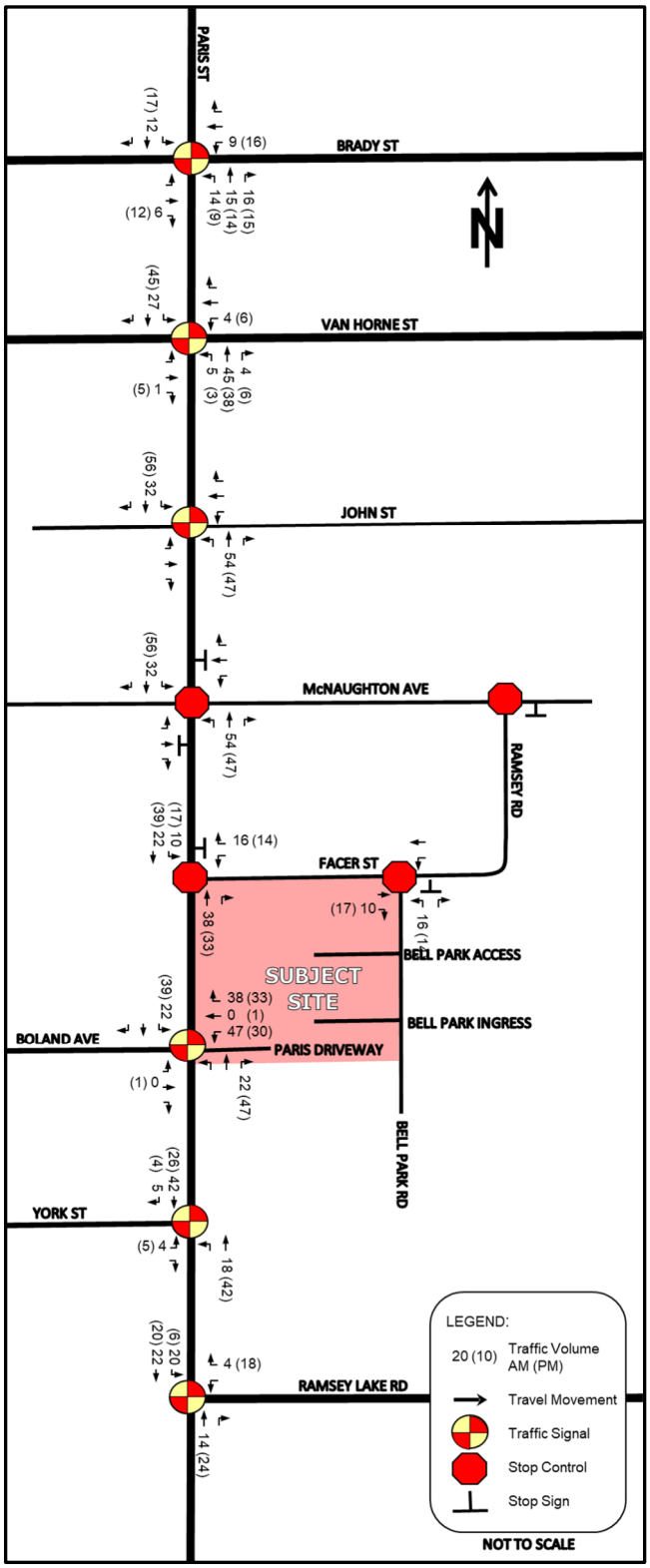


Figure 8 – Traffic Assignment for Proposed Development (Restaurant Primary Trips)

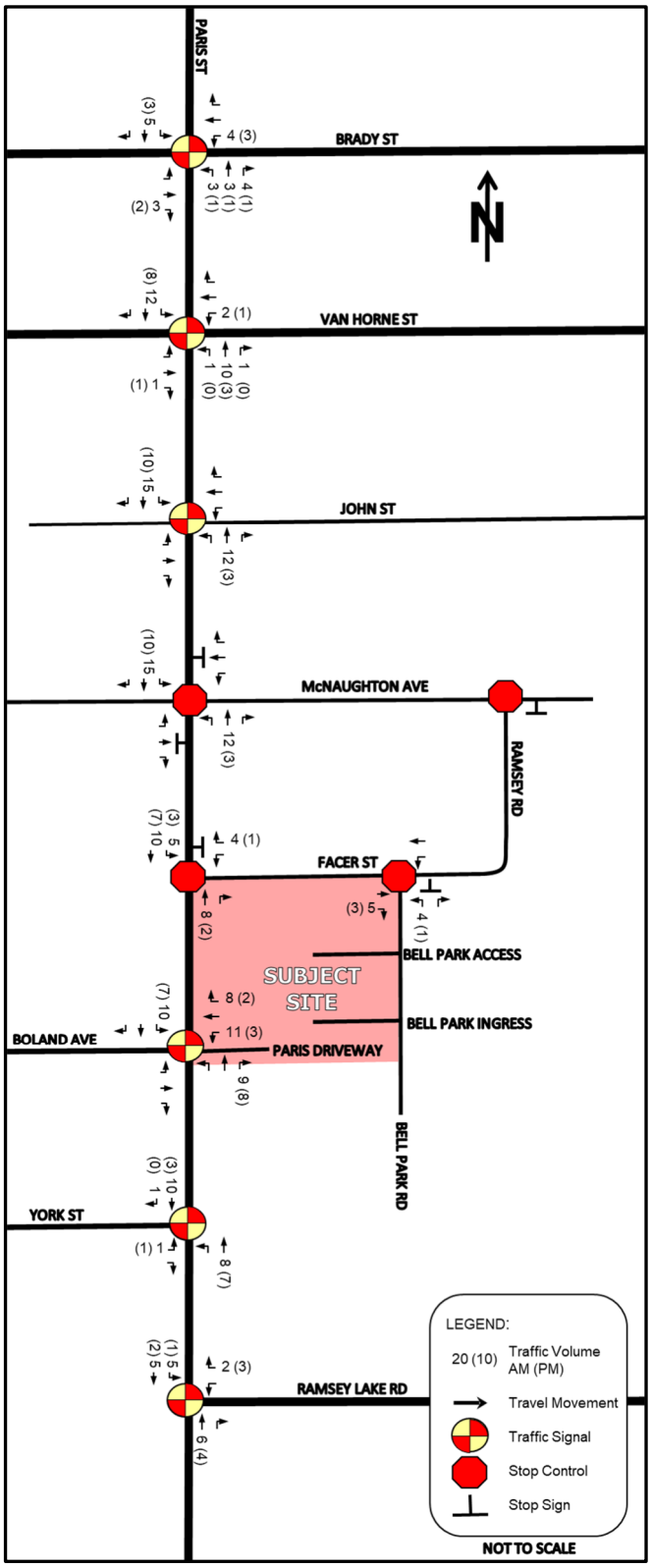
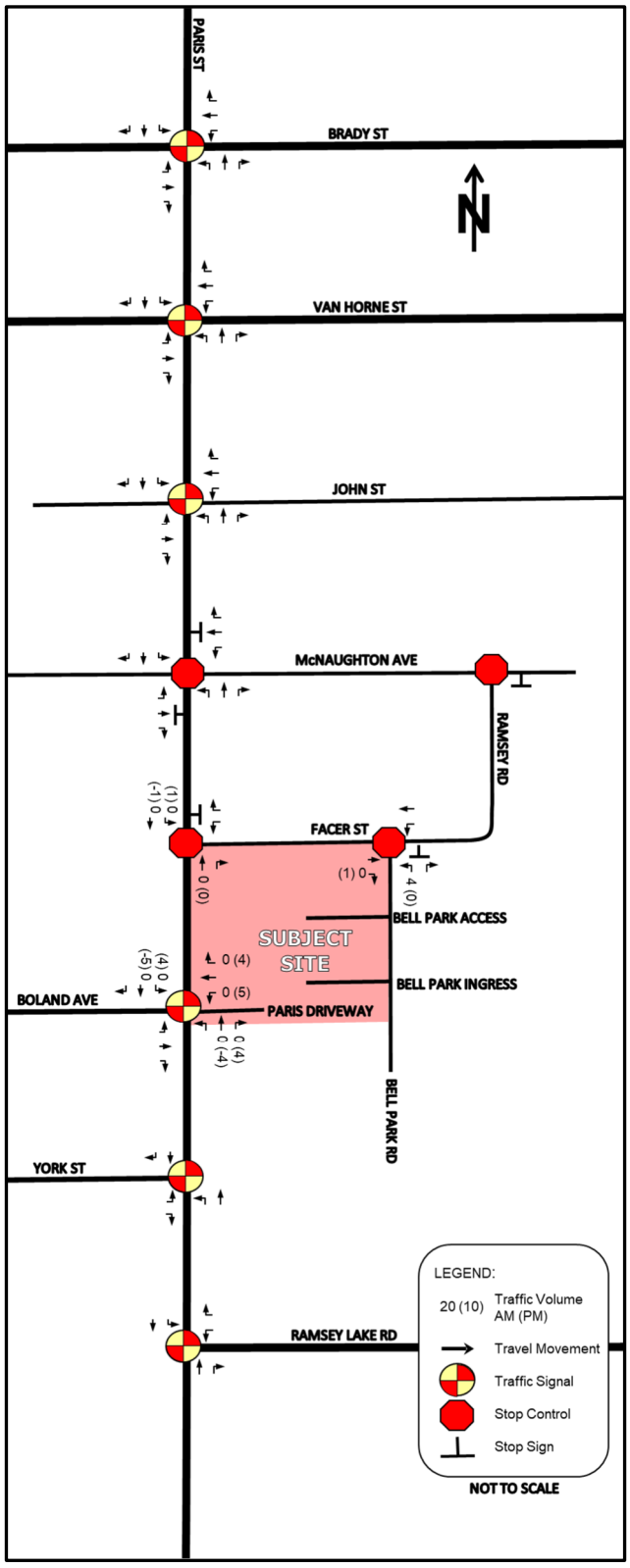


Figure 9 – Traffic Assignment for Proposed Development (Restaurant Pass-by Trips)



4.3 Total Horizon Year Traffic Volumes with the Proposed Development

For the total (2027 & 2032) horizon year traffic volumes, the proposed development traffic was added to the background (2027 & 2032) traffic volumes. The resulting total (2027 & 2032) horizon year traffic volume for the AM and PM peak hour are illustrated in **Figure 10** and **11,** respectively.

Figure 10 – Total (2027) Traffic Volumes

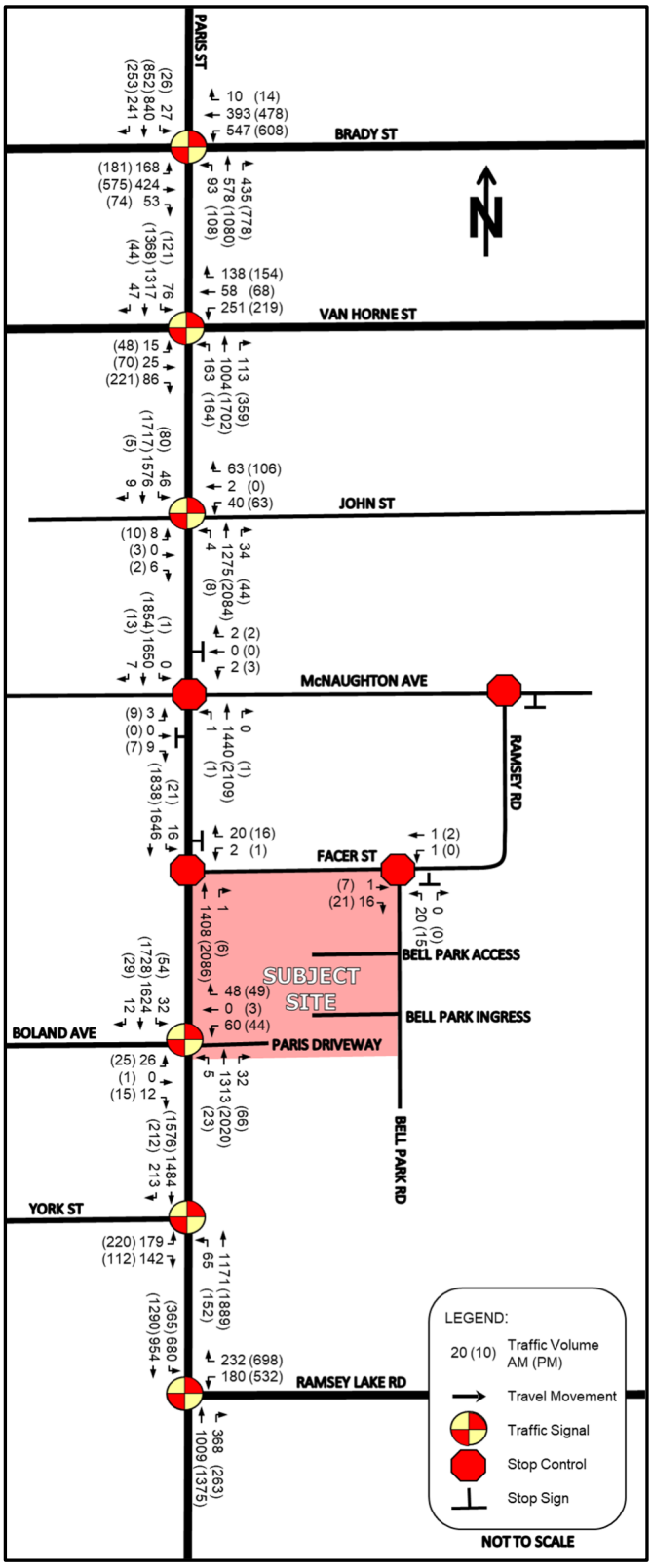
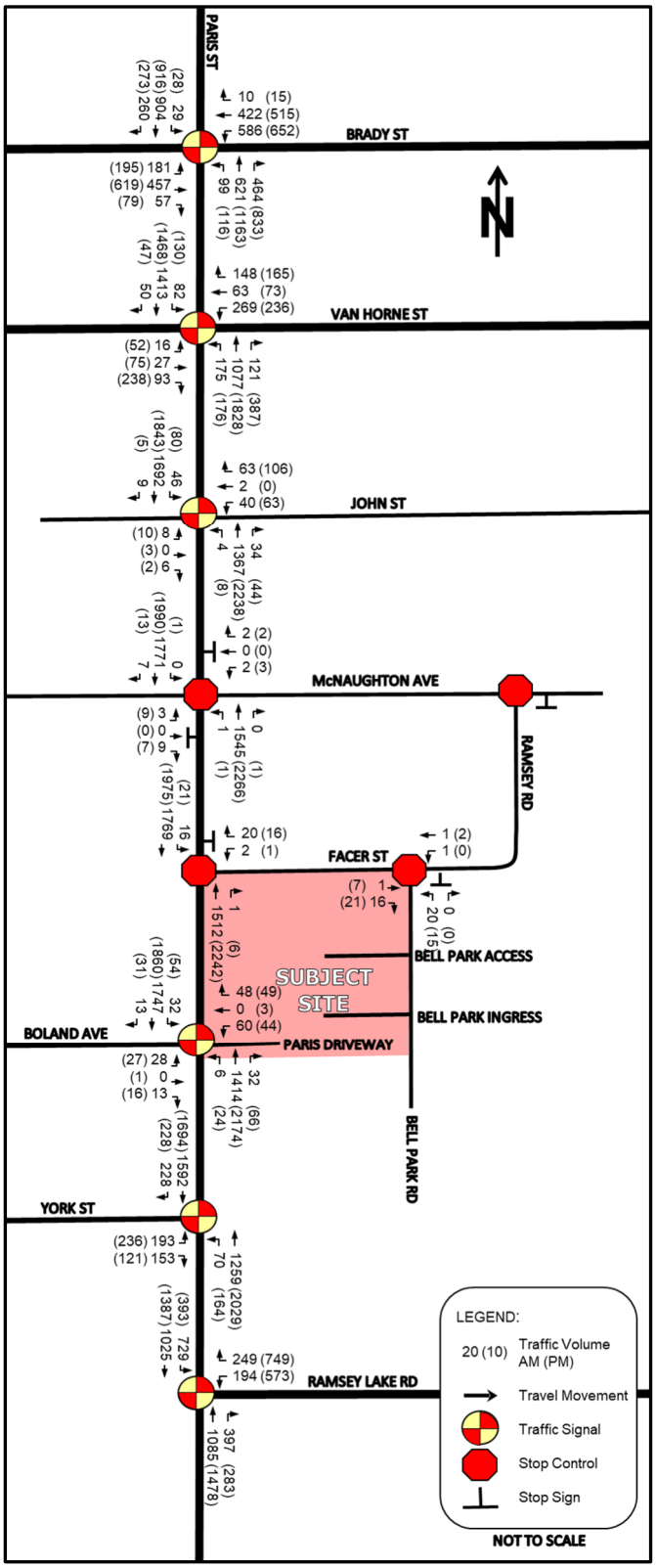


Figure 11 – Total (2032) Traffic Volumes



5 Intersection Operation with Proposed Development

5.1 Total (2027) Intersection Operation

The results of the LOS analysis under total (2027) traffic volumes during the AM and PM peak hours can be found below in **Table 10**. The infrastructure improvements and signal timing improvements noted in Section 3.3 have been utilized in this scenario.

The proposed development will shift the location of the Paris Driveway slightly further north at the intersection to align with Boland Avenue. It is recommended the westbound lane configuration at the Paris Street / Boland Avenue & Paris Driveway intersection include a left turn lane and through-right lane.

Detailed output of the Synchro analysis can be found in **Appendix F**.

Table 10 – Total (2027) LOS

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Brady Street (signalized)	0.70	32.2	C	-	-	0.82	32.5	C	-	-
EBL	0.49	29.0	C	43	57	0.49	28.5	C	44	57
EBTR	0.78	46.4	D	88	-	0.78	46.6	D	112	-
WBL	0.79	44.3	D	97	85	0.78	47.5	D	110	85
WBTR	0.42	30.0	C	65	-	0.42	29.8	C	76	-
NBL	0.40	21.9	C	28	70	0.43	25.5	C	32	70
NBT	0.38	27.2	C	58	-	0.54	27.5	B	98	-
NBR	0.40	10.7	B	53	-	0.71	14.1	C	178	-
SBL	0.11	26.1	C	11	24	0.21	34.6	D	15	24
SBT	0.69	36.3	D	94	-	0.64	39.3	C	94	-
SBR	0.32	22.9	C	42	-	0.35	26.1		53	-
Paris Street / Van Horne Street (signalized)	0.70	19.5	C	-	-	0.81	21.6	C	-	-
EBL	0.05	23.0	C	7	21	0.14	26.3	C	16	21
EBTR	0.07	23.1	C	9	-	0.25	27.1	C	25	-
WBL	0.81	41.9	D	76	133	0.84	52.6	D	69	133
WBT	0.13	23.6	C	19	-	0.13	26.1	C	20	-
WBR	0.10	23.3	C	14	62	0.19	26.7	C	22	62
NBL	0.61	16.9	B	40	34	0.66	17.7	B	48	34
NBTR	0.49	14.3	B	79	-	0.78	19.9	B	177	-
SBL	0.30	11.0	B	14	48	0.70	27.3	C	44	48
SBTR	0.66	19.6	B	114	-	0.56	17.2	B	108	-
Paris Street / John Street (signalized)	0.67	8.4	A	-	-	0.87	16.2	B	-	-
EB	0.01	24.2	C	0	-	0.07	38.9	D	10	-
WB	0.30	25.9	C	21	-	0.61	47.1	D	51	-
NBL	0.03	5.6	A	2	33	0.06	5.8	A	3	33
NBTR	0.67	9.8	A	99	-	0.92	20.5	C	292	-
SBL	0.20	5.5	A	5	23	0.62	31.4	C	21	23
SBTR	0.67	6.0	A	86	-	0.67	7.1	A	128	-
Paris Street / McNaughton Street (unsignalized)	-	0.1	B	-	-	-	0.1	C	-	-
EB	0.04	18.0	C	2	-	0.03	12.8	B	1	-
WB	0.02	23.5	C	1	-	0.02	16.2	C	1	-
Paris Street / Facer Street (unsignalized)	-	0.8	C	-	-	-	0.4	D	-	-
WB	0.04	11.7	B	2	-	0.07	20.7	C	2	-
Bell Park Road / Facer Street (unsignalized)	-	4.7	A	-	-	-	2.9	A	-	-
WB	0.04	8.8	A	1	-	0.02	8.7	A		-

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Boland Avenue & Paris Driveway (signalized)	0.67	7.3	A	-	-	0.76	7.7	A	-	-
EB	0.03	23.1	C	9	-	0.30	48.8	D	18	-
WBL	0.37	25.3	C	20	-	0.48	51.2	D	23	-
WBTR	0.03	23.1	C	9	-	0.33	48.8	D	22	-
NBL	0.04	3.3	A	2	40	0.18	2.8	A	5	40
NBTR	0.60	5.7	A	67	-	0.79	6.6	A	178	-
SBL	0.17	4.0	A	6	100	0.79	45.7	D	23	100
SBTR	0.73	7.3	A	96	-	0.66	4.6	A	114	-
Paris Street / York Street (signalized)	0.76	13.5	B	-	-	0.83	17.5	B	-	-
EBL	0.63	35.3	D	64	21	0.73	45.3	D	93	21
EBR	0.27	29.6	C	30	-	0.08	32.6	C	17	-
NBL	0.42	12.8	B	8	123	0.68	28.9	C	51	123
NBT	0.55	7.0	A	78	-	0.80	11.8	B	166	-
SBT	0.80	15.4	B	156	-	0.82	19.4	B	167	-
SBR	0.15	7.8	A	10	72	0.15	9.7	A	11	72
Paris Street / Ramsey Lake Road (signalized)	0.69	21.0	C	-	-	1.07	41.8	D	-	-
WBL	0.37	35.2	D	32	158	0.67	41.7	D	89	158
WBR	0.30	14.5	B	50	-	1.09	93.2	F	298	-
NBT	0.76	26.1	C	132	-	0.94	41.9	D	236	-
NBR	0.43	20.4	C	58	37	0.32	20.6	C	48	37
SBL	0.76	34.3	C	114	175	0.83	60.2	E	76	175
SBT	0.40	5.1	A	57	-	0.63	13.2	B	124	-

The results of the LOS analysis indicate that the intersections of Paris Street / John Street and Paris Street / Ramsey Lake Road are operating outside the typical design limits as noted in Section 3.1; however, no improvements are recommended as the intersection is operating marginally outside the theoretical capacity (V/C of 1.0) and the methodology noted in Section 2.6 assumed conservative traffic volumes along Paris Street in the study area. The northbound and southbound movements in the PM peak hour exceeds the capacity for a two-lane roadway in each direction (1800 vph); it is recommended the City monitor the traffic volumes and queuing on Paris Street to determine if improvements are warranted and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The results of the LOS analysis indicate that the northbound movement at the Paris Street / Facer Street intersection is operating outside the typical design limits as noted in Section 3.1; however, since there are no queuing issues and the V/C ratio only marginally exceeds the typical design limits, no improvements are recommended.

The anticipated queue for northbound movements at the Paris Street / John Street intersection will extend past the intersections of Paris Street at David Street (90 metres) and McNaughton Street (192 metres). As noted above, northbound traffic volumes are approaching the capacity for a two-lane roadway (1800 vph); it is recommended the City monitor the northbound queue at the intersection and

prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for eastbound left turn movements at the Paris Street / York Street intersection exceeds the existing storage and taper length; however, the excess queue will not block any intersections. Consequently, there are no issues with the anticipated eastbound left turn queue.

The anticipated queue for all other highlighted auxiliary left turn movements exceed the existing storage, however, the excess queue can be accommodated by the taper length.

An analysis was completed for left turn movements at the unsignalized intersections in the study area, based on the criteria outlined in Appendix 9A of the MTO DS.

Based on the above noted criteria a southbound left turn lane is warranted at the Paris Street / Facer Street intersection; however, left turn movements will only block the left lane (turning lane) 9% of the time during the critical PM peak hour scenario. Furthermore, southbound through vehicles will be able to use the right-lane (curb-lane) in the event the turning lane is blocked. Consequently, a southbound left turn lane is not recommended at the Paris Street / Facer Street intersection

Based on the above noted criteria a left-turn lane is not warranted at all other unsignalized intersections in the study area (results are provided in **Appendix G**).

A review of the need for additional auxiliary right turn lanes was completed as part of our analysis. The results of the Synchro analysis indicate that there is excess capacity for all right turn movements; consequently, additional right turn lane improvements are not recommended.

Based on the Ontario Traffic Manual Book 12 *Signal Justification*, traffic signals are not warranted at the unsignalized intersections in the study area (results are provided in **Appendix H**).

No further improvements are recommended for the background (2027) scenario.

5.2 Total (2032) Intersection Operation

The results of the LOS analysis under total (2032) traffic volumes during the AM and PM peak hours can be found below in **Table 11**. The infrastructure and signal timing improvements noted in Section 3.3, 3.4 and 5.1 have been utilized in this scenario. Detailed output of the Synchro analysis can be found in **Appendix F**.

Table 11 – Total (2032) LOS

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Brady Street (signalized)	0.75	35.4	D	-	-	0.87	36.1	D	-	-
EBL	0.56	50.2	D	38	57	0.58	55.2	E	41	57
EBTR	0.83	52.7	D	100	-	0.83	51.8	D	122	-
WBL	0.82	49.0	D	105	85	0.84	53.9	D	127	85
WBTR	0.43	30.8	C	69	-	0.43	31.0	C	81	-
NBL	0.45	23.8	C	29	70	0.49	27.4	C	34	70
NBT	0.40	28.6	C	63	-	0.57	29.3	C	107	-
NBR	0.43	11.2	B	61	-	0.76	16.5	B	209	-
SBL	0.13	27.3	C	11	24	0.25	36.5	D	17	75
SBT	0.72	38.7	D	102	-	0.67	41.4	D	102	-
SBR	0.31	20.9	C	50	-	0.37	23.9	C	60	-
Paris Street / Van Horne Street (signalized)	0.75	21.5	C	-	-	0.89	24.4	C	-	-
EBL	0.06	22.9	C	8	21	0.15	26.1	C	18	21
EBTR	0.07	23.0	C	9	-	0.27	27.0	C	28	-
WBL	0.84	45.2	D	83	133	0.94	72.6	E	92	133
WBT	0.14	23.5	C	20	-	0.14	26.0	C	22	-
WBR	0.10	23.3	C	14	62	0.21	26.6	C	25	62
NBL	0.65	20.7	C	43	34	0.78	29.3	C	50	34
NBTR	0.54	15.7	B	87	-	0.84	22.2	C	152	-
SBL	0.35	12.0	B	15	48	0.76	34.4	C	40	48
SBTR	0.72	22.1	C	125	-	0.61	17.9	B	92	-
Paris Street / John Street (signalized)	0.71	8.7	A	-	-	0.91	18.3	B	-	-
EB	0.01	25.2	C	0	-	0.08	43.7	D	10	-
WB	0.31	27.2	C	21	-	0.67	55.9	E	51	-
NBL	0.03	5.4	A	2	33	0.07	5.5	A	3	33
NBTR	0.70	10.1	B	111	-	0.95	23.7	C	265	-
SBL	0.22	6.0	A	5	23	0.66	41.1	D	25	23
SBTR	0.71	6.3	A	99	-	0.70	7.1	A	149	-
Paris Street / McNaughton Street (unsignalized)	-	0.1	B	-	-	-	0.2	D	-	-
EB	0.05	18.1	C	2	-	0.03	12.5	B	1	-
WB	0.02	22.6	C	1	-	0.02	18.9	C	1	-
Paris Street / Facer Street (unsignalized)	-	1.1	C	-	-	-	0.5	D	-	-
WB	0.04	11.7	B	2	-	0.07	21.0	C	2	-
NB	0.66	0.0	A	0	-	0.93	0.0	D	0	-
Bell Park Road / Facer Street (unsignalized)	-	4.7	A	-	-	-	2.9	A	-	-
WB	0.04	8.8	A	1	-	0.02	8.7	A	1	-

Location (N-S Street / E-W Street)	Weekday AM Peak Hour					Weekday PM Peak Hour				
	V/C	Delay (s)	LOS	95% Queue (m)		V/C	Delay (s)	LOS	95% Queue (m)	
				Model	Storage				Model	Storage
Paris Street / Boland Avenue & Paris Driveway (signalized)	0.71	7.6	A	-	-	0.82	9.0	A	-	-
EB	0.05	24.9	C	9	-	0.33	49.4	D	19	-
WBL	0.39	27.4	C	20	-	0.48	51.4	D	23	-
WBTR	0.08	25.0	C	11	-	0.37	49.5	D	23	-
NBL	0.05	3.2	A	2	40	0.24	3.4	A	6	40
NBTR	0.63	5.7	A	76	-	0.85	8.4	A	223	-
SBL	0.19	4.0	A	6	100	0.84	62.7	E	25	100
SBTR	0.76	7.7	A	113	-	0.71	5.2	A	135	-
Paris Street / York Street (signalized)	0.80	14.9	B	-	-	0.88	20.2	C	-	-
EBL	0.67	38.6	D	69	21	0.79	52.8	D	105	21
EBR	0.33	31.7	C	34	-	0.09	35.5	D	18	-
NBL	0.48	15.9	B	11	123	0.81	47.4	D	65	123
NBT	0.59	7.6	A	88	-	0.85	13.8	B	197	-
SBT	0.84	17.3	B	179	-	0.85	20.9	C	192	-
SBR	0.17	8.0	A	11	72	0.17	9.6	A	12	72
Paris Street / Ramsey Lake Road (signalized)	0.73	21.0	C	-	-	0.91	32.8	C	-	-
WBL	0.49	39.0	D	34	158	0.84	52.3	D	107	158
WBR	0.18	14.6	B	27	-	0.70	30.1	C	121	-
NBT	0.78	26.2	C	131	-	0.96	42.2	D	257	-
NBR	0.46	20.2	C	60	37	0.33	18.9	B	50	37
SBL	0.78	34.6	C	116	175	0.84	59.9	E	80	175
SBT	0.41	4.3	A	48	-	0.64	11.4	B	125	-

The results of the LOS analysis indicate that the intersections of Paris Street / Brady Street, Paris Street / Van Horne Street, Paris Street / John Street, Paris Street / York Street and Paris Street / Ramsey Lake Road operates outside the typical design limits noted in Section 3.1 in the PM peak hour; however, no improvements are recommended as the intersection is still operating within the theoretical capacity (V/C < 1.0). The northbound and southbound movements in the PM peak hour exceeds the capacity for a two-lane roadway in each direction (1800 vph); it is recommended the City monitor the traffic volumes and queuing on Paris Street to determine if further improvements are warranted and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The results of the LOS analysis indicate that the northbound movement at the Paris Street / Facer Street intersection is operating outside the typical design limits as noted in Section 3.1; however, since there are no queuing issues and the V/C ratio only marginally exceeds the typical design limits, no improvements are recommended.

The anticipated queue for northbound and southbound movements at the intersections of Paris Street / John Street, Paris Street / Facer Street and Paris Street / McNaughton Street intersection will marginally extend past intersections along Paris Street. As noted above, northbound traffic volumes are approaching the capacity for a two-lane roadway; it is recommended the City monitor the queuing

at the intersections and prioritize TDM strategies and promote active transportation to reduce automobile traffic along Paris Street in the downtown area.

The anticipated queue for eastbound left turn movements at the Paris Street / York Street intersection exceeds the existing storage and taper length; however, the excess queue will not block any intersections. Consequently, there are no issues with the anticipated eastbound left turn queue.

The anticipated queue for all other highlighted auxiliary left turn movements exceed the existing storage, however, the excess queue can be accommodated by the taper length.

Based on the above noted criteria a southbound left turn lane is warranted at the Paris Street / Facer Street intersection; however, left turn movements will only block the left lane (turning lane) 10% of the time during the critical PM peak hour scenario. Furthermore, southbound through vehicles will be able to use the right-lane (curb-lane) in the event the turning lane is blocked. Consequently, a southbound left turn lane is not recommended at the Paris Street / Facer Street intersection.

Based on the above noted criteria a left-turn lane is not warranted at all other unsignalized intersections in the study area (results are provided in **Appendix G**).

A review of the need for additional auxiliary right turn lanes was completed as part of our analysis. The results of the Synchro analysis indicate that there is excess capacity for all right turn movements; consequently, additional right turn lane improvements are not recommended.

Based on the Ontario Traffic Manual Book 12 *Signal Justification*, traffic signals are not warranted at the unsignalized intersections in the study area (results are provided in **Appendix H**).

No further improvements are recommended for the background (2032) scenario.

5.3 Sight Distance Review

A review of the available sight distance for the proposed Paris Driveway, Bell Park Access and Bell Park Ingress was completed as part of this analysis.

The sight distance north (greater than 140 metres) and south (greater than 150 metres) of the Paris Driveway exceed the minimum stopping and intersection sight distance requirements as identified in the Transportation Association of Canada Design Guide for Canadian Roads (2017) [TAC Guidelines] for a design speed of 50 km/h (65 metres & 105 metres respectively).

The proposed development will reconstruct and pave Bell Park Road prior to build-out of the proposed development. The current sightlines on Bell Park Road at the Bell Park Access will change as a result. The sight distance at the Bell Park Access is based on the sight distance triangles observed in the proposed road configuration in the site plan (provided in **Appendix A**).

The following sight distance was observed south of the Bell Park Access (75 metres). It is recommended Bell Park Road from Facer Street to the Bell Park Ingress have a posted speed limit of 20 km/h, once Bell Park Road is reconstructed; with a posted speed limit of 20 km/h the sight distance noted exceeds the minimum stopping and intersection sight distance requirements as identified in the TAC Guidelines for the proposed posted speed of 20 km/h (design speed of 30 km/h) – 35 metres & 65 metres respectively.

The sight distance west of the Bell Park Access (19 metres) is less than the stopping sight distance requirements as identified in the TAC Guidelines for the proposed posted speed of 20 km/h (design speed of 30 km/h) – 35 metres; however, vehicles will be turning onto Bell Park Road from Facer Street

at much slower speeds; furthermore, there are no issues with driveway spacing requirements identified in Section 5.5. Consequently, there are no issues with the proposed location of the Bell Park Access.

The sight distance available at the proposed Paris Driveway, Bell Park Access and Bell Park Ingress are acceptable for the intended use.

5.4 Site Access

The proposed development will shift the location of the Paris Driveway slightly further north at the intersection to align with Boland Avenue. It is recommended the westbound lane configuration at the Paris Street / Boland Avenue & Paris Driveway intersection include a left turn lane and through-right lane, as noted in Section 5.1. A single ingress and egress lane at the Paris Driveway will provide the necessary capacity to service the proposed development. The Paris Driveway will provide ingress and egress access to the underground parking and surface parking.

The Bell Park Access will operate as full-movement access driveway. A single ingress and egress lane at the Bell Park Access will provide the necessary capacity to service the proposed development. Bell Park Access will provide ingress and egress access to the surface parking

The Bell Park Ingress will operate efficiently with a single ingress only driveway. A single ingress lane at the Bell Park Ingress will provide the necessary capacity to service the proposed development. Bell Park Ingress will provide ingress only access to the underground parking.

The proposed spacing between the Bell Park Access and Facer Street (22 metres – measured edge of driveway to edge of road) exceeds the minimum driveway spacing requirements identified in the TAC Guidelines Figure 8.8.2 – 15 metres for a local road.

The proposed spacing between the Bell Park Access and Bell Park Ingress (148 metres – measured edge to edge of driveway) are greater than the minimum driveway spacing requirements as per the TAC Guidelines – Figure 8.9.2 (Driveway Spacing Guidelines – Locals and Collectors).

5.5 Parking Review

The proposed parking supply meets the requirements as noted in the City's Zoning By-law 2010–100Z [Zoning By-law]. **Table 12** illustrates the parking requirement for the proposed development, according to the Zoning By-law.

Table 12 – Zoning By-law Requirement Parking Calculation

Unit Type	Section	Parking Standard	Proposed Units	Required Parking	Proposed Parking
Residential Dwelling, Multiple	5.5.1	1.5 sp./unit	448	672 spaces	672 spaces
Retirement Home		4 spaces plus 0.5 parking spaces for each of the first 30 guest rooms plus 0.25 spaces for each additional guest rooms 1/20 sq.m. gross floor area used for medical, health or personal services	100	38 spaces	38 spaces
Restaurant	5.3	1 spaces per 1/12.5 sq.m. net floor area	500 sq.m.	40 spaces	40 spaces
TOTAL REQUIRED PARKING SPACES				**750 spaces**	**750 spaces**
Accessible Parking	5.2.3.5	2 sp. plus 1 space for each additional 50 sp. greater than 100 sp.	750	15 spaces	15 spaces
Bicycle Parking (Residential)	5.8	0.5 sp./unit	448	224 spaces	224 spaces
Bicycle Parking (Restaurant)	5.8	2 spaces on a lot, plus 1 space per 500 sq.m. gross floor area to a maximum requirement of 24/lot	500 sq.m.	3 spaces	3 spaces
TOTAL REQUIRED BICYCLE PARKING SPACES				**227 spaces**	**227 spaces**

6 Transportation Demand Management

As noted in Section 3.4 and 5.2, the traffic volumes along Paris Street in the study area are reaching overcapacity and further widening of the road is not feasible. It is recommended the City, implement TDM measures to reduce single-occupancy vehicles and improve the accessibility of transit and non-auto modes of transportation. The following transportation demand management measures are recommended as part of the proposed development:

- Construct sidewalk on the south side of Facer Street extending from Facer Street to Bell Park Road;
- The proposed development includes an internal sidewalk network with pedestrian connections to the proposed sidewalk on Facer Street and the existing municipal pedestrian infrastructure on Paris Street;
- The proposed development includes 227 bicycle parking spaces;
- An information display board will be provided in a central location in the apartment buildings to display travel information such as bicycle maps, local transit map/schedule and other relevant information;
- Information packages will be distributed to new residents including transit and cycling maps; and
- Subsidized transit passes be provided to residents.

7 Summary

2226553 Ontario Inc. retained **JD Engineering** to prepare this traffic impact study in support of the proposed development on a site municipally known as 700 Paris Street, located on the east side of Paris Street between Boland Avenue and Facer Street, in the City of Greater Sudbury. The proposed Draft Plan by ACK Architects is shown in **Appendix A**. This chapter summarizes the conclusions and recommendations from the study.

The proposed development is anticipated to consist of a 16-storey building with 198 units, a 20-storey building with 250 units and a ground-floor restaurant (500 sq.m. of GFA) and a 10-storey retirement home with 100 rooms.

1. The proposed development is expected to generate a total of 202 AM and 206 PM peak hour primary trips and 18 PM peak hour pass-by trips.
2. Background traffic and pedestrian counts were commissioned for the existing intersections of Paris Street / Van Horne Street, Paris Street / McNaughton Street, Paris Street / Facer Street, Facer Street / Bell Park Road and Paris Street / York Street completed on Wednesday, April 20th 2022. Background traffic and pedestrian counts at the study area intersections were also obtained from the City.
3. An intersection operation analysis was completed at the study area intersections, using the existing (2022) and background (2027 & 2032) traffic volumes, with the adjacent development traffic. This enabled a review of existing and future traffic deficiencies that would be present without the influence of the proposed development. These improvements are warranted based on the anticipated growth in the City and traffic generated by future developments in the study area without the proposed development. The following improvements are recommended:

Existing (2022) Traffic Volumes

- **Paris Street / John Street and Paris Street / Ramsey Lake Road**
  - Optimize signal timing plan.

Background (2027) Traffic Volumes

- **Paris Street / Van Horne Street, Paris Street / McNaughton Street, Paris Street / Boland Avenue & Paris Driveway and Paris Street / York Street**
  - Optimize signal timing plan.

Background (2032) Traffic Volumes

- **Paris Street / Brady Street**
  - Adjust eastbound pavement markings to accommodate a double left-turn lane.
  - Adjust eastbound signal heads to accommodate a protected eastbound left turn phase.
  - Optimize signal timing plan.
- **Paris Street / Ramsey Lake Road**
  - Widen Ramsey Lake Road to accommodate westbound double right turn lane with a 100 metre storage length and 60 metre taper length
  - Optimize signal timing plan.

4. An estimate of the amount of traffic that would be generated by the Subject Site was prepared and assigned to the study area streets and intersections.
5. An intersection operation analysis was completed under total (2027 & 2032) traffic volumes with the proposed development operational at the study area intersections. The following improvements are recommended prior to build-out of the proposed development:

   Opening Day (2027) Traffic Volumes

   Paris Street / Boland Avenue & Paris Driveway

   - Shift the Paris Driveway to align with Boland Avenue.
   - The westbound configuration of Paris Driveway at the intersection shall include a left turn lane and through-right lane.

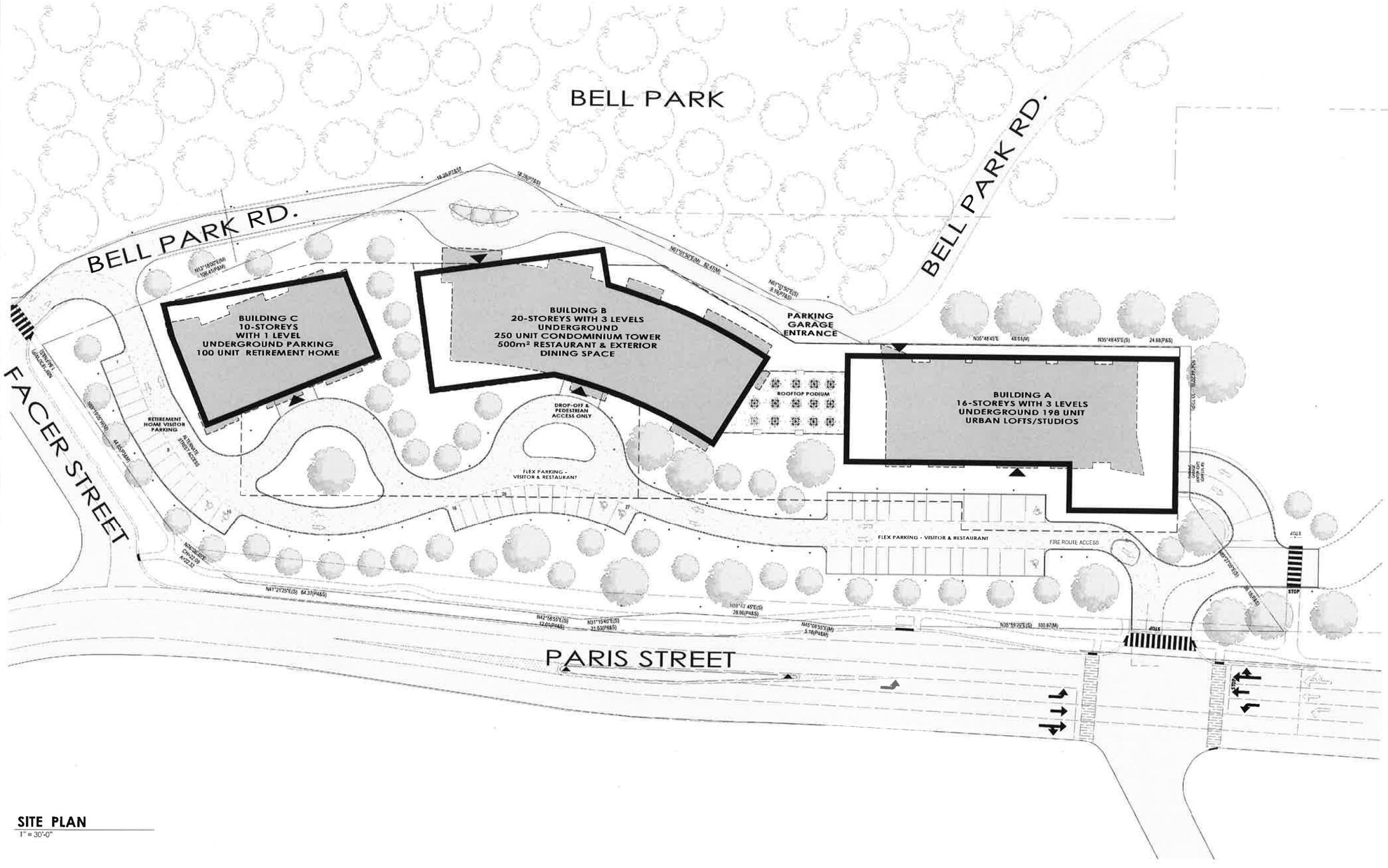
   Facer Street

   - Construct a sidewalk on the south side of the road between Paris Street and Bell Park Road.

   Bell Park Road

   - Reconstruct Bell Park Road south of Facer Street to a 6.0 metre wide paved condominium road.
   - Bell Park Road shall have a posted speed limit of 20 km/h once Bell Park Road is reconstructed.
6. The proposed development will shift the location of the Paris Driveway slightly further north at the intersection to align with Boland Avenue. It is recommended the westbound lane configuration at the Paris Street / Boland Avenue & Paris Driveway intersection include a left turn lane and through-right lane. A single ingress and egress lane at the Paris Driveway will provide the necessary capacity to service the proposed development. The Paris Driveway will provide ingress and egress access to the underground parking and surface parking.
7. The Bell Park Access will operate as full-movement access driveway. A single ingress and egress lane at the Bell Park Access will provide the necessary capacity to service the proposed development. The Bell Park Ingress will operate efficiently with a single ingress only driveway. A single ingress lane at the Bell Park Ingress will provide the necessary capacity to service the proposed development. Bell Park Access will provide ingress and egress access to the surface parking and the Bell Park Ingress will provide ingress only access to the underground parking.
8. There are no issues regarding the sight distance available for the proposed Paris Driveway and Bell Park Access.
9. The proposed parking supply for the proposed development meets the minimum parking requirement specified in the City's Zoning By-law 2010–100Z.
10. In summary the proposed development will not cause any operational issues and will not add significant delay or congestion to the local roadway network.

Appendix A – Site Plan



SITE PLAN
1" = 30'-0"

NO.	DATE:	REVISION:	BY:
1	JULY 29 2019	SCHEMATIC CONCEPTS	JMR/MDA
2	AUG. 7 2019	SCHEMATIC CONCEPTS	JMR/MDA
3	MAY 7 2021	PARKING GARAGE LAYOUT	CH
4	JUNE 18 2021	REVISED BLD. HEIGHTS	CH

COMMISSION:

PROPOSED MIXED USE DEVELOPMENT

700 PARIS STREET, SUDBURY, ONTARIO

N

A·C·K
architects
STUDIO INC.

SHEET TITLE:

SITE PLAN

Issued for Re-Zoning	
Issued for Site Plan Agreement	
Issued for Permit	
Issued for Tender	
Issued for Construction	
DRAWN BY	JMR
CHECKED BY	MDA
DATE	JULY 2019
SCALE	AS SHOWN
PROJECT No.	2019-210

DWG. No.

.SP1

Appendix B –
Adjacent Development Excerpts

Transplan TIS

Proposed
Project Manitou
Residential Development
City of Greater Sudbury

Traffic Impact Study

Revised May 22, 2018

Prepared by:
Tranplan Associates
Sudbury 705-522-0272
Toronto 416-670-2005
Peterborough 705-874-3638
www.tranplan.com

Prepared for:
2356268 ONTARIO LIMITED
per
D.S. Dorland Limited
May 2018

NOTE: Not to scale

Exhibit 1.1
Key Plan

tranplan associates
TRAFFIC, TRANSIT, PARKING, TRANSPORTATION PLANNING
TORONTO 905-670-2005
SUDBURY 705-522-0272
PETERBOROUGH 705-874-3638
www.tranplan.com

Table 4.1: PROJECTED TRIP GENERATION BY PROPOSED PROJECT MANITOU RESIDENTIAL DEVELOPMENT

LAND USE		WEEKDAY AM PEAK HOUR				WEEKDAY PM PEAK HOUR			
		Trip Generation Rate (ITE Trip Generation Manual - 8th Edition)	Vehicle Trips			Trip Generation Rate (ITE Trip Generation Manual - 8th Edition)	Vehicle Trips		
			Total	In	Out		Total	In	Out
Senior Adult Units									
High-Rise Apartments (ITE L.U. 222)	**476** units	Ln(T) = 0.99Ln(X)-1.14 where T = vehicle trips X = no of dwelling units	**143**	25% **36**	75% **107**	T = 0.32(X) + 12.30	**165**	61% **100**	39% **64**
Senior Adult Housing (ITE L.U.252)	**476** units	T = 0.19(X) - 13.86 where T = vehicle trips X = no of dwelling units	**77**	36% **28**	64% **49**	T = 0.24(X) - 16.45 where T = vehicle trips X = no of dwelling units	**98**	60% **59**	40% **39**
Average of LU 222 & 252			**110**	**32**	**78**		**131**	**80**	**52**
Rent Geared to Income Units									
Modified Cherry Gardens Survey Trip Rates*	**350** units	T = 0.15 (X)	**53**	25% **13**	75% **39**	T = 0.20 (X)	**70**	60% **42**	40% **28**
TOTAL UNITS	**826** units		**162**	**45**	**118**		**201**	**122**	**80**

Note: Numbers do not add up exactly due to rounding.

Cherry Gardens survey trip rates increased by 25% to reflect slightly greater distance from Paris Street and potential higher parking supply.

- The new apartments may have more available parking.

Using the two trip rates as shown in **Table 4.1**, the proposed development is projected to generate approximately 200 vehicle trips during the afternoon peak hour (120 in, 80 out) and 160 vehicle trips during the morning peak hour (45 in, 115 out).

ITE trip rates for the active older people are considered to be conservative (higher volumes than likely) because of the downtown location of the proposed development. The proximity of the site to downtown will likely result in a higher proportion of walking and transit trips, with fewer auto trips than the ITE rates would project.

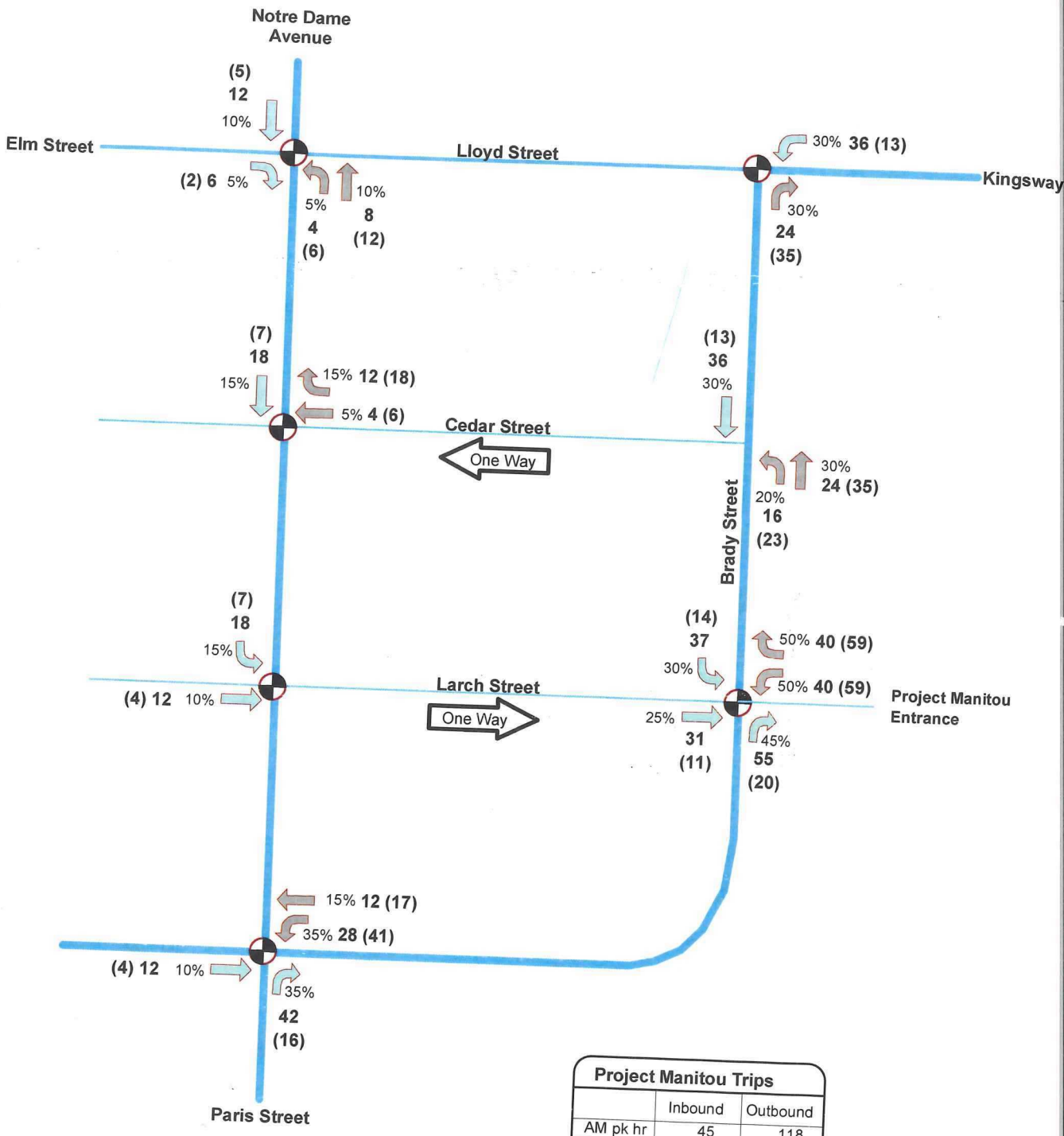
4.3 Orientation of the Site Traffic

As shown in **Exhibit 4.2** traffic is expected to leave the site:

i) split evenly between left turns and right turns onto Brady Street.
ii) 35% will go south on Paris Street
iii) 15% will continue west along Brady
iv) 30% will go out to the Kingsway
v) 20% will turn left into Cedar Street with 5% staying downtown, 10% going up Notre Dame and 5% going west on Elm.

Traffic is expected to approach the site

i) 30% from the north along Brady Street (from the Kingsway)
ii) 45% from the south along Brady Street (35% from Paris Street south and 10% from Brady Street west)
iii) 25% eastbound along Larch Street (10% from Notre Dame, 5% from Elm west and 10% from downtown)



Project Manitou Trips		
	Inbound	Outbound
AM pk hr	45	118
PM pk hr	122	80

N

NOTE: Not to scale

Exhibit 4.2
Site Traffic

Afternoon Peak Hour (Morning Peak Hour in Brackets)

tranplan associates
TRAFFIC, TRANSIT, PARKING, TRANSPORTATION PLANNING
TORONTO 905-670-2005
SUDBURY 705-522-0272
PETERBOROUGH 705-874-3638
www.tranplan.com

Appendix C –
Traffic Count Data

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Brady Street @ Paris Street
Site Code: 00911103
Start Date: 08/05/2021

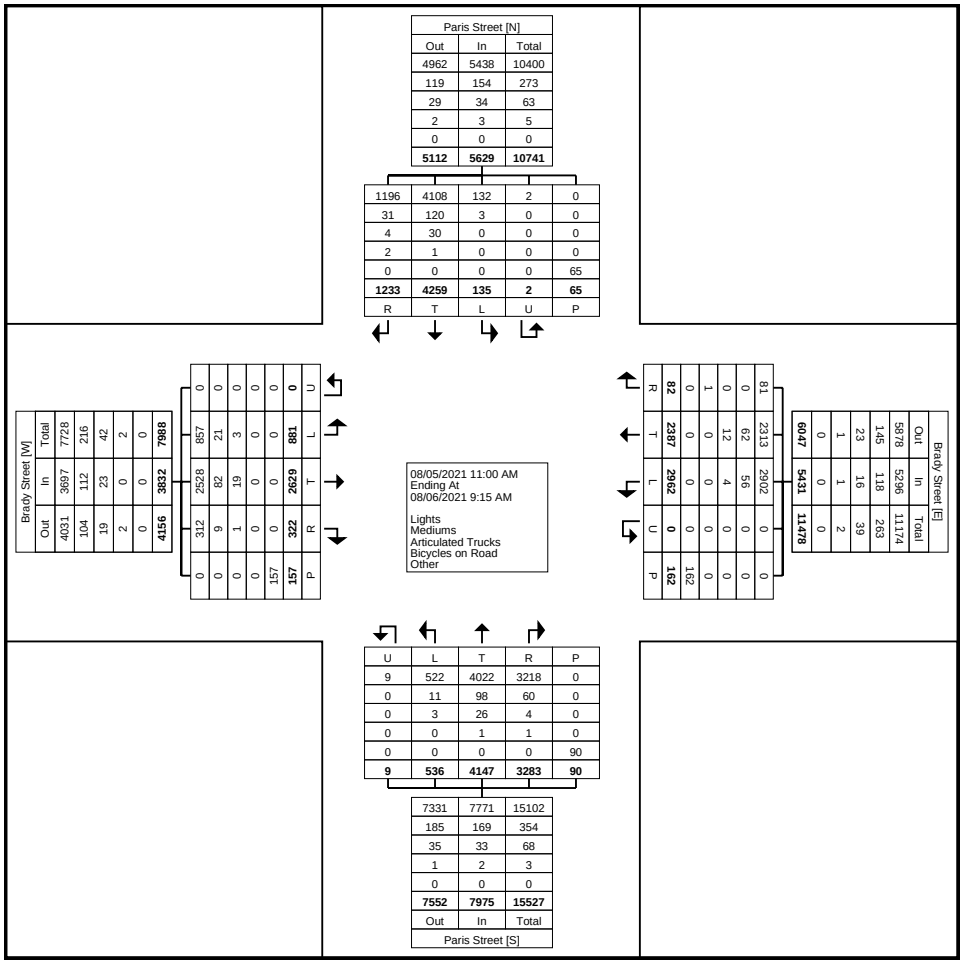
Turning Movement Data

Start Time	Paris Street Southbound						Brady Street Westbound						Paris Street Northbound						Brady Street Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	36	114	2	0	1	152	0	83	102	0	2	185	116	118	14	0	7	248	16	84	30	0	7	130	715
11:15 AM	36	122	10	1	2	169	5	74	95	0	8	174	118	132	12	0	5	262	10	76	24	0	1	110	715
11:30 AM	33	134	3	0	3	170	2	67	91	0	6	160	124	119	23	0	5	266	18	84	30	0	6	132	728
11:45 AM	45	151	7	0	1	203	3	67	99	0	4	169	124	134	14	0	5	272	13	85	18	0	5	116	760
Hourly Total	150	521	22	1	7	694	10	291	387	0	20	688	482	503	63	0	22	1048	57	329	102	0	19	488	2918
12:00 PM	37	113	8	0	5	158	4	69	94	0	10	167	122	133	23	0	1	278	10	115	41	0	10	166	769
12:15 PM	44	149	7	0	3	200	3	87	111	0	6	201	118	157	19	0	3	294	7	68	25	0	5	100	795
12:30 PM	39	153	8	0	7	200	3	77	93	0	7	173	128	125	26	1	5	280	11	87	36	0	5	134	787
12:45 PM	40	141	6	0	2	187	3	76	108	0	8	187	125	155	26	0	0	306	17	78	30	0	1	125	805
Hourly Total	160	556	29	0	17	745	13	309	406	0	31	728	493	570	94	1	9	1158	45	348	132	0	21	525	3156
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	48	138	7	0	0	193	1	98	92	0	3	191	137	160	17	1	8	315	8	109	38	0	4	155	854
3:15 PM	46	133	4	0	2	183	3	95	136	0	5	234	143	184	21	1	4	349	16	98	28	0	10	142	908
3:30 PM	49	137	2	0	12	188	5	69	117	0	8	191	153	165	24	1	7	343	16	115	32	0	7	163	885
3:45 PM	42	168	5	0	3	215	5	72	108	0	6	185	143	180	27	0	5	350	15	96	37	0	6	148	898
Hourly Total	185	576	18	0	17	779	14	334	453	0	22	801	576	689	89	3	24	1357	55	418	135	0	27	608	3545
4:00 PM	51	155	5	0	2	211	3	93	104	0	5	200	144	209	18	0	2	371	8	116	32	0	3	156	938
4:15 PM	49	153	5	0	5	207	3	79	125	0	10	207	140	213	16	0	2	369	7	115	31	0	6	153	936
4:30 PM	49	171	2	0	2	222	4	75	93	0	12	172	134	233	25	0	2	392	13	92	50	0	3	155	941
4:45 PM	47	165	8	0	0	220	1	114	113	0	6	228	139	170	17	0	0	326	19	113	27	0	13	159	933
Hourly Total	196	644	20	0	9	860	11	361	435	0	33	807	557	825	76	0	6	1458	47	436	140	0	25	623	3748
5:00 PM	56	142	4	0	1	202	1	102	106	0	8	209	122	195	17	2	1	336	13	121	35	0	8	169	916
5:15 PM	38	178	7	0	1	223	3	123	106	0	6	232	149	177	17	2	7	345	11	111	34	0	11	156	956
5:30 PM	41	152	1	0	0	194	5	88	115	0	4	208	124	141	15	1	6	281	9	96	34	0	10	139	822
5:45 PM	40	115	1	0	1	156	6	102	111	0	7	219	105	127	15	0	3	247	13	61	28	0	2	102	724
Hourly Total	175	587	13	0	3	775	15	415	438	0	25	868	500	640	64	5	17	1209	46	389	131	0	31	566	3418
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
6:00 AM	10	27	1	0	1	38	0	37	26	0	1	63	21	27	5	0	0	53	3	15	3	0	2	21	175
6:15 AM	25	50	0	0	0	75	0	44	24	0	0	68	26	44	9	0	0	79	2	36	5	0	1	43	265
6:30 AM	16	83	2	0	1	101	0	52	55	0	1	107	42	64	10	0	1	116	5	47	21	0	0	73	397
6:45 AM	30	119	3	0	0	152	2	54	75	0	4	131	39	60	9	0	0	108	7	56	17	0	2	80	471

Hourly Total	81	279	6	0	2	366	2	187	180	0	6	369	128	195	33	0	1	356	17	154	46	0	5	217	1308
7:00 AM	30	142	0	0	0	172	2	53	92	0	4	147	43	64	16	0	0	123	2	41	10	0	1	53	495
7:15 AM	22	141	2	0	0	165	0	64	55	0	1	119	47	70	13	0	2	130	2	59	14	0	2	75	489
7:30 AM	24	155	1	0	2	180	4	76	83	0	1	163	83	94	5	0	0	182	7	69	22	0	5	98	623
7:45 AM	47	158	3	0	3	208	1	77	85	0	4	163	73	82	26	0	1	181	10	88	40	0	5	138	690
Hourly Total	123	596	6	0	5	725	7	270	315	0	10	592	246	310	60	0	3	616	21	257	86	0	13	364	2297
8:00 AM	43	114	9	0	2	166	2	56	74	0	3	132	56	104	9	0	0	169	9	59	20	0	4	88	555
8:15 AM	54	146	6	0	0	206	0	53	101	0	2	154	65	110	13	0	3	188	5	76	35	0	5	116	664
8:30 AM	35	112	2	1	2	150	4	54	87	0	5	145	87	101	19	0	2	207	11	70	25	0	2	106	608
8:45 AM	31	128	4	0	1	163	4	55	86	0	5	145	92	100	16	0	3	208	9	92	29	0	5	130	646
Hourly Total	163	500	21	1	5	685	10	218	348	0	15	576	300	415	57	0	8	772	34	297	109	0	16	440	2473
9:00 AM	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	3
Grand Total	1233	4259	135	2	65	5629	82	2387	2962	0	162	5431	3283	4147	536	9	90	7975	322	2629	881	0	157	3832	22867
Approach %	21.9	75.7	2.4	0.0	-	-	1.5	44.0	54.5	0.0	-	-	41.2	52.0	6.7	0.1	-	-	8.4	68.6	23.0	0.0	-	-	-
Total %	5.4	18.6	0.6	0.0	-	24.6	0.4	10.4	13.0	0.0	-	23.8	14.4	18.1	2.3	0.0	-	34.9	1.4	11.5	3.9	0.0	-	16.8	-
Lights	1196	4108	132	2	-	5438	81	2313	2902	0	-	5296	3218	4022	522	9	-	7771	312	2528	857	0	-	3697	22202
% Lights	97.0	96.5	97.8	100.0	-	96.6	98.8	96.9	98.0	-	-	97.5	98.0	97.0	97.4	100.0	-	97.4	96.9	96.2	97.3	-	-	96.5	97.1
Mediums	31	120	3	0	-	154	0	62	56	0	-	118	60	98	11	0	-	169	9	82	21	0	-	112	553
% Mediums	2.5	2.8	2.2	0.0	-	2.7	0.0	2.6	1.9	-	-	2.2	1.8	2.4	2.1	0.0	-	2.1	2.8	3.1	2.4	-	-	2.9	2.4
Articulated Trucks	4	30	0	0	-	34	0	12	4	0	-	16	4	26	3	0	-	33	1	19	3	0	-	23	106
% Articulated Trucks	0.3	0.7	0.0	0.0	-	0.6	0.0	0.5	0.1	-	-	0.3	0.1	0.6	0.6	0.0	-	0.4	0.3	0.7	0.3	-	-	0.6	0.5
Bicycles on Road	2	1	0	0	-	3	1	0	0	0	-	1	1	1	0	0	-	2	0	0	0	0	-	0	6
% Bicycles on Road	0.2	0.0	0.0	0.0	-	0.1	1.2	0.0	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	-	-	-	-	-	25	-	-	-	-	-	6	-	-	-	-	-	16	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	15.4	-	-	-	-	-	6.7	-	-	-	-	-	10.2	-	-
Pedestrians	-	-	-	-	65	-	-	-	-	-	137	-	-	-	-	-	84	-	-	-	-	-	141	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	84.6	-	-	-	-	-	93.3	-	-	-	-	-	89.8	-	-

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Brady Street @ Paris Street
Site Code: 00911103
Start Date: 08/05/2021



Turning Movement Data Plot

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Brady Street @ Paris Street
Site Code: 00911103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Paris Street Southbound						Brady Street Westbound						Paris Street Northbound						Brady Street Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
11:00 AM	36	114	2	0	1	152	0	83	102	0	2	185	116	118	14	0	7	248	16	84	30	0	7	130	715
11:15 AM	36	122	10	1	2	169	5	74	95	0	8	174	118	132	12	0	5	262	10	76	24	0	1	110	715
11:30 AM	33	134	3	0	3	170	2	67	91	0	6	160	124	119	23	0	5	266	18	84	30	0	6	132	728
11:45 AM	45	151	7	0	1	203	3	67	99	0	4	169	124	134	14	0	5	272	13	85	18	0	5	116	760
Total	150	521	22	1	7	694	10	291	387	0	20	688	482	503	63	0	22	1048	57	329	102	0	19	488	2918
Approach %	21.6	75.1	3.2	0.1	-	-	1.5	42.3	56.3	0.0	-	-	46.0	48.0	6.0	0.0	-	-	11.7	67.4	20.9	0.0	-	-	-
Total %	5.1	17.9	0.8	0.0	-	23.8	0.3	10.0	13.3	0.0	-	23.6	16.5	17.2	2.2	0.0	-	35.9	2.0	11.3	3.5	0.0	-	16.7	-
PHF	0.833	0.863	0.550	0.250	-	0.855	0.500	0.877	0.949	0.000	-	0.930	0.972	0.938	0.685	0.000	-	0.963	0.792	0.968	0.850	0.000	-	0.924	0.960
Lights	145	505	22	1	-	673	10	283	380	0	-	673	471	487	60	0	-	1018	56	318	101	0	-	475	2839
% Lights	96.7	96.9	100.0	100.0	-	97.0	100.0	97.3	98.2	-	-	97.8	97.7	96.8	95.2	-	-	97.1	98.2	96.7	99.0	-	-	97.3	97.3
Mediums	4	15	0	0	-	19	0	6	5	0	-	11	11	12	2	0	-	25	1	9	1	0	-	11	66
% Mediums	2.7	2.9	0.0	0.0	-	2.7	0.0	2.1	1.3	-	-	1.6	2.3	2.4	3.2	-	-	2.4	1.8	2.7	1.0	-	-	2.3	2.3
Articulated Trucks	1	1	0	0	-	2	0	2	2	0	-	4	0	4	1	0	-	5	0	2	0	0	-	2	13
% Articulated Trucks	0.7	0.2	0.0	0.0	-	0.3	0.0	0.7	0.5	-	-	0.6	0.0	0.8	1.6	-	-	0.5	0.0	0.6	0.0	-	-	0.4	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	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	7	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	9.1	-	-	-	-	-	36.8	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	20	-	-	-	-	-	20	-	-	-	-	-	12	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	90.9	-	-	-	-	-	63.2	-	-

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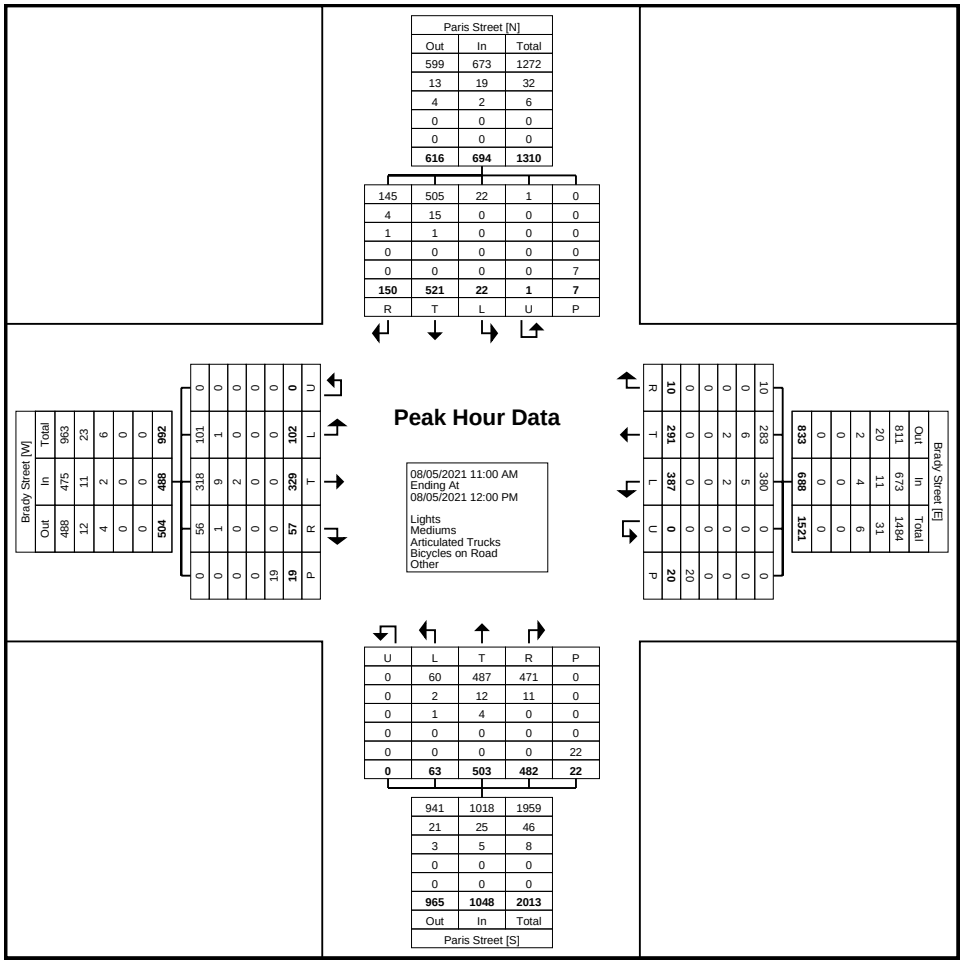

Turning Movement Peak Hour Data Plot (11:00 AM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Brady Street @ Paris Street
Site Code: 00911103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Paris Street Southbound						Brady Street Westbound						Paris Street Northbound						Brady Street Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
12:00 PM	37	113	8	0	5	158	4	69	94	0	10	167	122	133	23	0	1	278	10	115	41	0	10	166	769
12:15 PM	44	149	7	0	3	200	3	87	111	0	6	201	118	157	19	0	3	294	7	68	25	0	5	100	795
12:30 PM	39	153	8	0	7	200	3	77	93	0	7	173	128	125	26	1	5	280	11	87	36	0	5	134	787
12:45 PM	40	141	6	0	2	187	3	76	108	0	8	187	125	155	26	0	0	306	17	78	30	0	1	125	805
Total	160	556	29	0	17	745	13	309	406	0	31	728	493	570	94	1	9	1158	45	348	132	0	21	525	3156
Approach %	21.5	74.6	3.9	0.0	-	-	1.8	42.4	55.8	0.0	-	-	42.6	49.2	8.1	0.1	-	-	8.6	66.3	25.1	0.0	-	-	-
Total %	5.1	17.6	0.9	0.0	-	23.6	0.4	9.8	12.9	0.0	-	23.1	15.6	18.1	3.0	0.0	-	36.7	1.4	11.0	4.2	0.0	-	16.6	-
PHF	0.909	0.908	0.906	0.000	-	0.931	0.813	0.888	0.914	0.000	-	0.905	0.963	0.908	0.904	0.250	-	0.946	0.662	0.757	0.805	0.000	-	0.791	0.980
Lights	154	532	29	0	-	715	13	300	401	0	-	714	482	554	92	1	-	1129	42	331	131	0	-	504	3062
% Lights	96.3	95.7	100.0	-	-	96.0	100.0	97.1	98.8	-	-	98.1	97.8	97.2	97.9	100.0	-	97.5	93.3	95.1	99.2	-	-	96.0	97.0
Mediums	5	20	0	0	-	25	0	7	5	0	-	12	10	13	2	0	-	25	2	14	0	0	-	16	78
% Mediums	3.1	3.6	0.0	-	-	3.4	0.0	2.3	1.2	-	-	1.6	2.0	2.3	2.1	0.0	-	2.2	4.4	4.0	0.0	-	-	3.0	2.5
Articulated Trucks	1	4	0	0	-	5	0	2	0	0	-	2	1	3	0	0	-	4	1	3	1	0	-	5	16
% Articulated Trucks	0.6	0.7	0.0	-	-	0.7	0.0	0.6	0.0	-	-	0.3	0.2	0.5	0.0	0.0	-	0.3	2.2	0.9	0.8	-	-	1.0	0.5
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	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	6.5	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	17	-	-	-	-	-	29	-	-	-	-	-	9	-	-	-	-	-	21	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	93.5	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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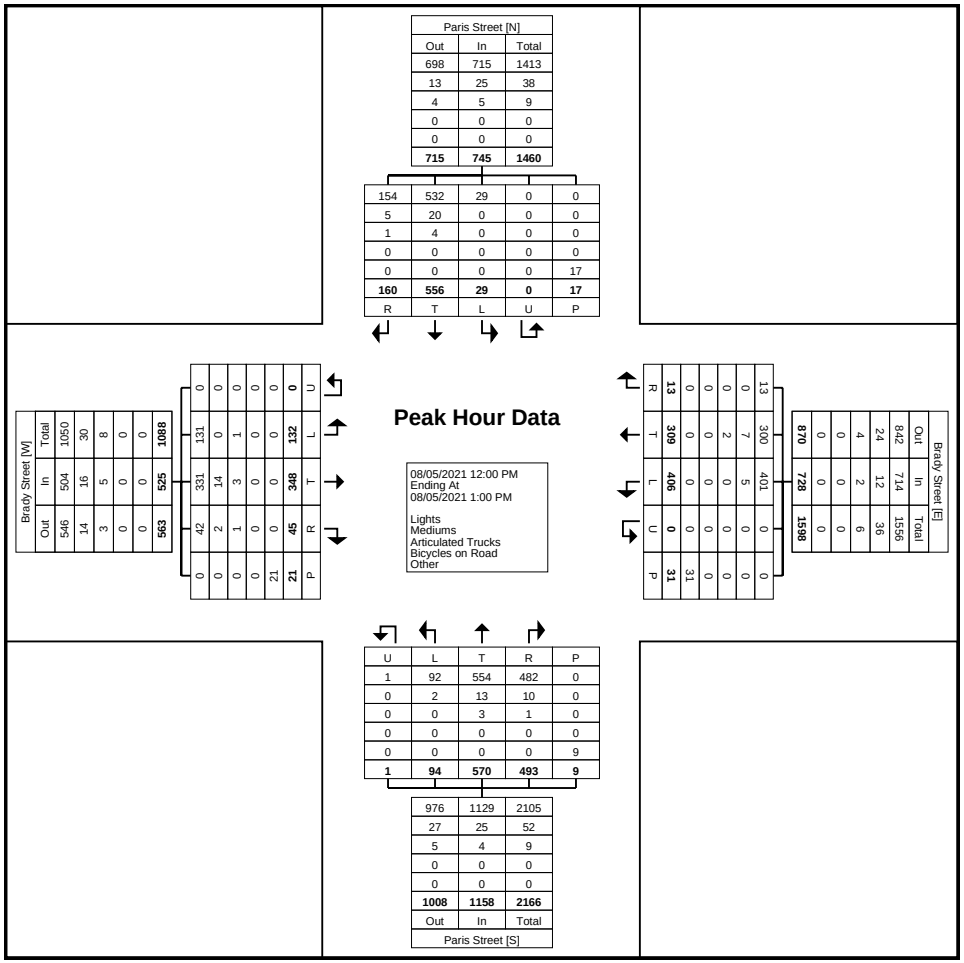
Site Code: 00911103
Start Date: 08/05/2021



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

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1800 Frobisher Street
PO Box 5000, STN A
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Count Name: Brady Street @ Paris Street
Site Code: 00911103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Paris Street Southbound						Brady Street Westbound						Paris Street Northbound						Brady Street Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:00 PM	51	155	5	0	2	211	3	93	104	0	5	200	144	209	18	0	2	371	8	116	32	0	3	156	938
4:15 PM	49	153	5	0	5	207	3	79	125	0	10	207	140	213	16	0	2	369	7	115	31	0	6	153	936
4:30 PM	49	171	2	0	2	222	4	75	93	0	12	172	134	233	25	0	2	392	13	92	50	0	3	155	941
4:45 PM	47	165	8	0	0	220	1	114	113	0	6	228	139	170	17	0	0	326	19	113	27	0	13	159	933
Total	196	644	20	0	9	860	11	361	435	0	33	807	557	825	76	0	6	1458	47	436	140	0	25	623	3748
Approach %	22.8	74.9	2.3	0.0	-	-	1.4	44.7	53.9	0.0	-	-	38.2	56.6	5.2	0.0	-	-	7.5	70.0	22.5	0.0	-	-	-
Total %	5.2	17.2	0.5	0.0	-	22.9	0.3	9.6	11.6	0.0	-	21.5	14.9	22.0	2.0	0.0	-	38.9	1.3	11.6	3.7	0.0	-	16.6	-
PHF	0.961	0.942	0.625	0.000	-	0.968	0.688	0.792	0.870	0.000	-	0.885	0.967	0.885	0.760	0.000	-	0.930	0.618	0.940	0.700	0.000	-	0.980	0.996
Lights	195	629	20	0	-	844	11	351	429	0	-	791	555	811	74	0	-	1440	47	426	138	0	-	611	3686
% Lights	99.5	97.7	100.0	-	-	98.1	100.0	97.2	98.6	-	-	98.0	99.6	98.3	97.4	-	-	98.8	100.0	97.7	98.6	-	-	98.1	98.3
Mediums	1	10	0	0	-	11	0	8	6	0	-	14	1	13	1	0	-	15	0	10	2	0	-	12	52
% Mediums	0.5	1.6	0.0	-	-	1.3	0.0	2.2	1.4	-	-	1.7	0.2	1.6	1.3	-	-	1.0	0.0	2.3	1.4	-	-	1.9	1.4
Articulated Trucks	0	5	0	0	-	5	0	2	0	0	-	2	1	1	1	0	-	3	0	0	0	0	-	0	10
% Articulated Trucks	0.0	0.8	0.0	-	-	0.6	0.0	0.6	0.0	-	-	0.2	0.2	0.1	1.3	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.3
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	-	-	-	-	-	9	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	27.3	-	-	-	-	-	16.7	-	-	-	-	-	8.0	-	-
Pedestrians	-	-	-	-	9	-	-	-	-	-	24	-	-	-	-	-	5	-	-	-	-	-	23	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	72.7	-	-	-	-	-	83.3	-	-	-	-	-	92.0	-	-

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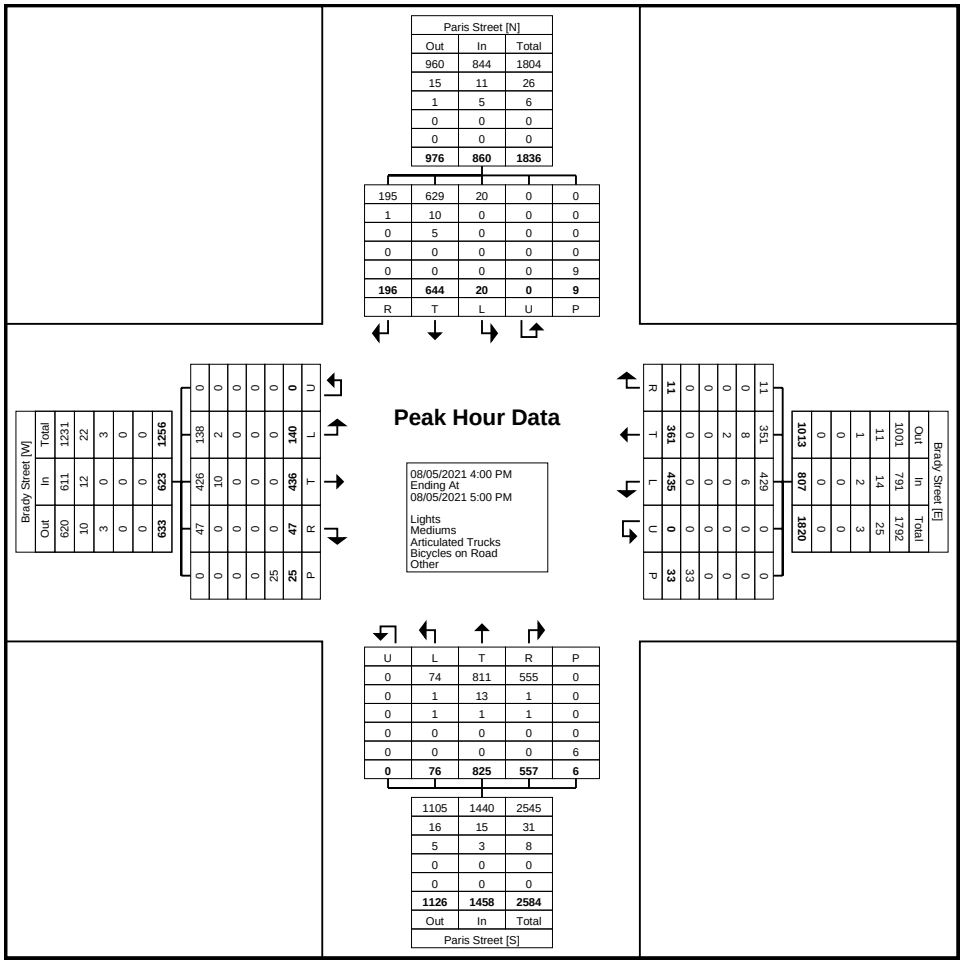

Turning Movement Peak Hour Data Plot (4:00 PM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Brady Street @ Paris Street
Site Code: 00911103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Paris Street Southbound						Brady Street Westbound						Paris Street Northbound						Brady Street Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
7:30 AM	24	155	1	0	2	180	4	76	83	0	1	163	83	94	5	0	0	182	7	69	22	0	5	98	623
7:45 AM	47	158	3	0	3	208	1	77	85	0	4	163	73	82	26	0	1	181	10	88	40	0	5	138	690
8:00 AM	43	114	9	0	2	166	2	56	74	0	3	132	56	104	9	0	0	169	9	59	20	0	4	88	555
8:15 AM	54	146	6	0	0	206	0	53	101	0	2	154	65	110	13	0	3	188	5	76	35	0	5	116	664
Total	168	573	19	0	7	760	7	262	343	0	10	612	277	390	53	0	4	720	31	292	117	0	19	440	2532
Approach %	22.1	75.4	2.5	0.0	-	-	1.1	42.8	56.0	0.0	-	-	38.5	54.2	7.4	0.0	-	-	7.0	66.4	26.6	0.0	-	-	-
Total %	6.6	22.6	0.8	0.0	-	30.0	0.3	10.3	13.5	0.0	-	24.2	10.9	15.4	2.1	0.0	-	28.4	1.2	11.5	4.6	0.0	-	17.4	-
PHF	0.778	0.907	0.528	0.000	-	0.913	0.438	0.851	0.849	0.000	-	0.939	0.834	0.886	0.510	0.000	-	0.957	0.775	0.830	0.731	0.000	-	0.797	0.917
Lights	164	541	18	0	-	723	7	251	331	0	-	589	270	373	49	0	-	692	28	277	109	0	-	414	2418
% Lights	97.6	94.4	94.7	-	-	95.1	100.0	95.8	96.5	-	-	96.2	97.5	95.6	92.5	-	-	96.1	90.3	94.9	93.2	-	-	94.1	95.5
Mediums	4	24	1	0	-	29	0	8	12	0	-	20	7	13	4	0	-	24	3	10	6	0	-	19	92
% Mediums	2.4	4.2	5.3	-	-	3.8	0.0	3.1	3.5	-	-	3.3	2.5	3.3	7.5	-	-	3.3	9.7	3.4	5.1	-	-	4.3	3.6
Articulated Trucks	0	8	0	0	-	8	0	3	0	0	-	3	0	3	0	0	-	3	0	5	2	0	-	7	21
% Articulated Trucks	0.0	1.4	0.0	-	-	1.1	0.0	1.1	0.0	-	-	0.5	0.0	0.8	0.0	-	-	0.4	0.0	1.7	1.7	-	-	1.6	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	10.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	9	-	-	-	-	-	4	-	-	-	-	-	19	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	90.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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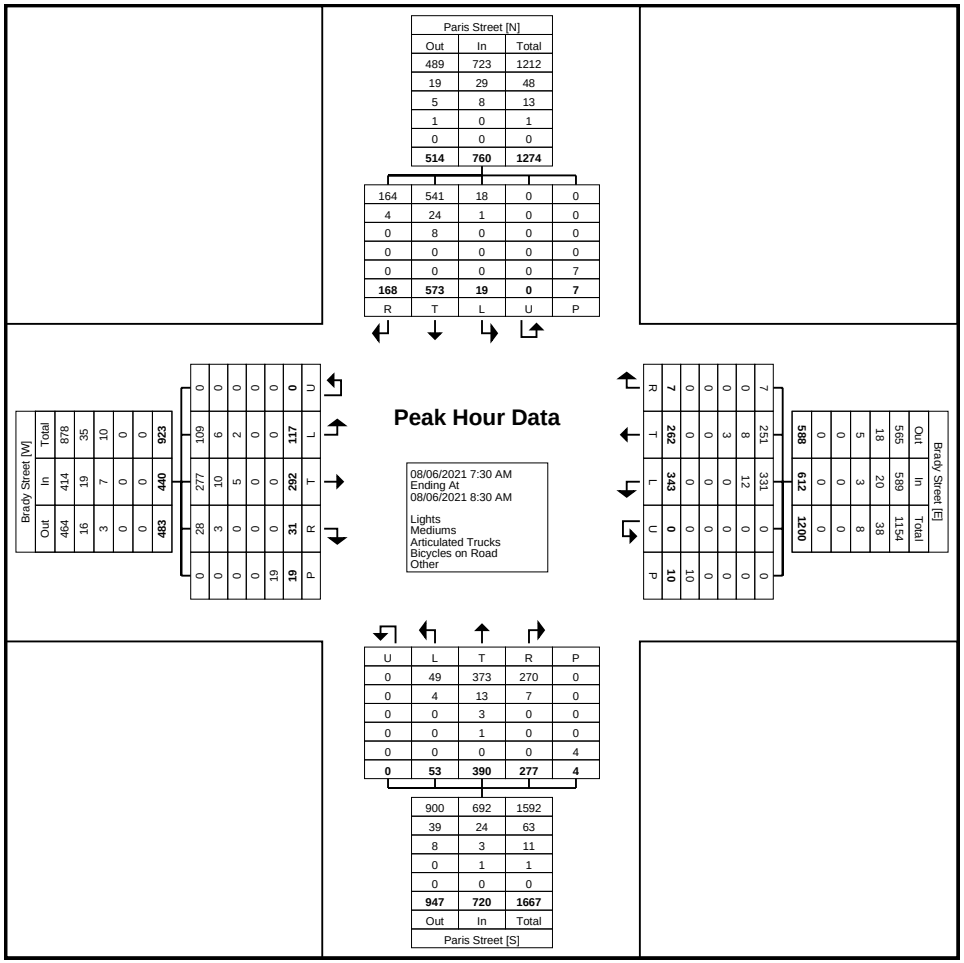

Turning Movement Peak Hour Data Plot (7:30 AM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021

Turning Movement Data

Start Time	Paris Street Southbound						Van Horne St Westbound						Paris Street Northbound						Van Horne St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:00 PM	9	241	19	0	1	269	24	12	35	0	5	71	58	321	23	0	0	402	22	5	6	0	1	33	775
3:15 PM	8	247	20	0	0	275	28	7	47	0	2	82	56	310	22	0	1	388	27	10	6	0	4	43	788
3:30 PM	12	278	17	0	4	307	24	13	46	0	3	83	69	333	30	1	1	433	26	9	9	0	4	44	867
3:45 PM	7	216	25	0	6	248	29	9	56	0	1	94	54	318	30	0	1	402	37	6	9	0	3	52	796
Hourly Total	36	982	81	0	11	1099	105	41	184	0	11	330	237	1282	105	1	3	1625	112	30	30	0	12	172	3226
4:00 PM	2	255	22	0	1	279	22	22	51	0	6	95	77	345	32	0	0	454	40	12	13	0	2	65	893
4:15 PM	11	267	23	0	5	301	21	10	41	0	4	72	71	329	27	0	3	427	32	13	8	0	0	53	853
4:30 PM	5	275	32	0	2	312	31	14	38	0	4	83	69	325	15	1	0	410	32	9	9	0	1	50	855
4:45 PM	11	248	31	0	5	290	37	12	50	0	3	99	61	273	23	0	0	357	43	14	10	0	0	67	813
Hourly Total	29	1045	108	0	13	1182	111	58	180	0	17	349	278	1272	97	1	3	1648	147	48	40	0	3	235	3414
5:00 PM	8	236	28	0	6	272	28	13	35	0	5	76	61	327	20	0	1	408	36	11	7	0	3	54	810
5:15 PM	6	269	26	0	5	301	37	11	31	0	4	79	57	269	16	0	2	342	31	3	3	0	6	37	759
5:30 PM	6	218	21	0	4	245	24	7	35	0	2	66	56	249	18	0	6	323	26	6	7	0	2	39	673
5:45 PM	10	210	22	0	4	242	25	9	36	0	2	70	30	207	25	0	4	262	28	7	5	0	1	40	614
Hourly Total	30	933	97	0	19	1060	114	40	137	0	13	291	204	1052	79	0	13	1335	121	27	22	0	12	170	2856
6:00 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 AM	0	50	4	0	1	54	9	2	9	0	0	20	1	49	2	0	0	52	3	2	2	0	0	7	133
6:15 AM	4	72	6	0	0	82	16	3	12	0	0	31	3	58	3	0	0	64	5	1	2	0	0	8	185
6:30 AM	2	146	10	0	0	158	22	2	30	0	2	54	10	102	4	0	0	116	6	0	0	0	0	6	334
6:45 AM	2	210	5	0	1	217	14	5	32	0	2	51	6	91	13	0	0	110	8	3	1	0	0	12	390
Hourly Total	8	478	25	0	2	511	61	12	83	0	4	156	20	300	22	0	0	342	22	6	5	0	0	33	1042
7:00 AM	7	217	6	0	2	230	17	5	31	0	1	53	8	107	9	0	0	124	10	2	1	0	2	13	420
7:15 AM	9	166	3	0	2	178	21	0	33	0	2	54	12	124	13	0	0	149	12	4	0	0	1	16	397
7:30 AM	7	241	12	0	3	260	29	8	43	0	1	80	19	149	17	0	1	185	12	3	6	0	3	21	546
7:45 AM	4	239	8	0	3	251	32	11	54	0	0	97	26	152	23	0	1	201	13	3	4	0	3	20	569
Hourly Total	27	863	29	0	10	919	99	24	161	0	4	284	65	532	62	0	2	659	47	12	11	0	9	70	1932
8:00 AM	3	206	11	0	5	220	22	8	29	0	5	59	15	156	9	0	0	180	10	3	3	0	3	16	475
8:15 AM	7	208	8	0	0	223	19	4	45	0	3	68	19	171	24	0	0	214	17	4	1	0	2	22	527
8:30 AM	2	192	18	0	0	212	30	11	48	0	2	89	24	171	22	0	0	217	14	6	3	0	1	23	541
8:45 AM	8	186	20	0	1	214	23	4	45	0	4	72	24	206	25	0	1	255	17	6	4	0	0	27	568
Hourly Total	20	792	57	0	6	869	94	27	167	0	14	288	82	704	80	0	1	866	58	19	11	0	6	88	2111
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	3	190	11	0	1	204	21	9	34	0	0	64	35	234	23	0	0	292	22	3	8	0	4	33	593
11:15 AM	7	190	10	0	1	207	24	7	39	0	1	70	26	219	16	0	2	261	26	4	6	0	1	36	574
11:30 AM	9	254	17	0	0	280	27	8	23	0	1	58	40	247	13	0	3	300	24	7	5	0	2	36	674
11:45 AM	8	214	13	0	1	235	21	6	39	0	0	66	40	269	22	0	3	331	26	5	7	0	3	38	670
Hourly Total	27	848	51	0	3	926	93	30	135	0	2	258	141	969	74	0	8	1184	98	19	26	0	10	143	2511
12:00 PM	7	235	18	0	1	260	23	6	42	0	2	71	39	270	22	0	2	331	34	3	7	0	2	44	706
12:15 PM	5	204	19	0	0	228	30	8	32	0	5	70	21	216	25	0	0	262	25	7	9	0	2	41	601
12:30 PM	9	240	14	0	3	263	23	10	61	0	1	94	33	266	22	0	2	321	28	3	2	0	1	33	711
12:45 PM	2	259	18	0	2	279	20	8	32	0	3	60	45	213	21	0	1	279	34	7	6	0	1	47	665
Hourly Total	23	938	69	0	6	1030	96	32	167	0	11	295	138	965	90	0	5	1193	121	20	24	0	6	165	2683
1:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
Grand Total	200	6881	517	0	70	7598	774	264	1214	0	76	2252	1165	7077	609	2	35	8853	726	181	169	0	58	1076	19779
Approach %	2.6	90.6	6.8	0.0	-	-	34.4	11.7	53.9	0.0	-	-	13.2	79.9	6.9	0.0	-	-	67.5	16.8	15.7	0.0	-	-	-
Total %	1.0	34.8	2.6	0.0	-	38.4	3.9	1.3	6.1	0.0	-	11.4	5.9	35.8	3.1	0.0	-	44.8	3.7	0.9	0.9	0.0	-	5.4	-
Lights	188	6673	506	0	-	7367	765	260	1202	0	-	2227	1149	6896	595	2	-	8642	710	177	161	0	-	1048	19284
% Lights	94.0	97.0	97.9	-	-	97.0	98.8	98.5	99.0	-	-	98.9	98.6	97.4	97.7	100.0	-	97.6	97.8	97.8	95.3	-	-	97.4	97.5
Mediums	10	173	11	0	-	194	8	4	12	0	-	24	16	151	13	0	-	180	15	4	7	0	-	26	424
% Mediums	5.0	2.5	2.1	-	-	2.6	1.0	1.5	1.0	-	-	1.1	1.4	2.1	2.1	0.0	-	2.0	2.1	2.2	4.1	-	-	2.4	2.1
Articulated Trucks	2	35	0	0	-	37	1	0	0	0	-	1	0	29	1	0	-	30	1	0	1	0	-	2	70
% Articulated Trucks	1.0	0.5	0.0	-	-	0.5	0.1	0.0	0.0	-	-	0.0	0.0	0.4	0.2	0.0	-	0.3	0.1	0.0	0.6	-	-	0.2	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% 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	-	-	-	-	6	-	-	-	-	-	15	-	-	-	-	-	0	-	-	-	-	-	6	-	-
% Bicycles on Crosswalk	-	-	-	-	8.6	-	-	-	-	-	19.7	-	-	-	-	-	0.0	-	-	-	-	-	10.3	-	-
Pedestrians	-	-	-	-	64	-	-	-	-	-	61	-	-	-	-	-	35	-	-	-	-	-	52	-	-
% Pedestrians	-	-	-	-	91.4	-	-	-	-	-	80.3	-	-	-	-	-	100.0	-	-	-	-	-	89.7	-	-

Traffic and Transportation Engineering Services
1800 Frobisher Street
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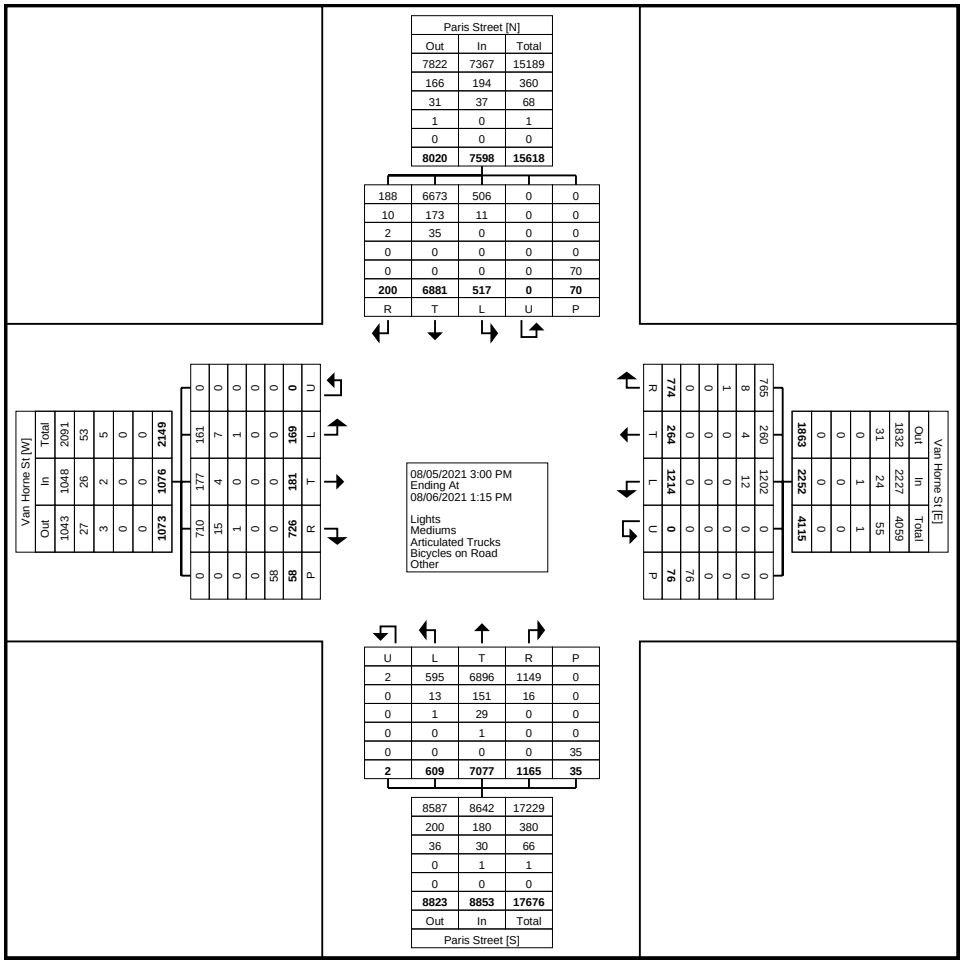
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021



Turning Movement Data Plot

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Paris Street Southbound						Van Horne St Westbound						Paris Street Northbound						Van Horne St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	2	255	22	0	1	279	22	22	51	0	6	95	77	345	32	0	0	454	40	12	13	0	2	65	893
4:15 PM	11	267	23	0	5	301	21	10	41	0	4	72	71	329	27	0	3	427	32	13	8	0	0	53	853
4:30 PM	5	275	32	0	2	312	31	14	38	0	4	83	69	325	15	1	0	410	32	9	9	0	1	50	855
4:45 PM	11	248	31	0	5	290	37	12	50	0	3	99	61	273	23	0	0	357	43	14	10	0	0	67	813
Total	29	1045	108	0	13	1182	111	58	180	0	17	349	278	1272	97	1	3	1648	147	48	40	0	3	235	3414
Approach %	2.5	88.4	9.1	0.0	-	-	31.8	16.6	51.6	0.0	-	-	16.9	77.2	5.9	0.1	-	-	62.6	20.4	17.0	0.0	-	-	-
Total %	0.8	30.6	3.2	0.0	-	34.6	3.3	1.7	5.3	0.0	-	10.2	8.1	37.3	2.8	0.0	-	48.3	4.3	1.4	1.2	0.0	-	6.9	-
PHF	0.659	0.950	0.844	0.000	-	0.947	0.750	0.659	0.882	0.000	-	0.881	0.903	0.922	0.758	0.250	-	0.907	0.855	0.857	0.769	0.000	-	0.877	0.956
Lights	28	1026	107	0	-	1161	110	58	179	0	-	347	276	1255	95	1	-	1627	146	48	39	0	-	233	3368
% Lights	96.6	98.2	99.1	-	-	98.2	99.1	100.0	99.4	-	-	99.4	99.3	98.7	97.9	100.0	-	98.7	99.3	100.0	97.5	-	-	99.1	98.7
Mediums	1	14	1	0	-	16	0	0	1	0	-	1	2	15	2	0	-	19	1	0	1	0	-	2	38
% Mediums	3.4	1.3	0.9	-	-	1.4	0.0	0.0	0.6	-	-	0.3	0.7	1.2	2.1	0.0	-	1.2	0.7	0.0	2.5	-	-	0.9	1.1
Articulated Trucks	0	5	0	0	-	5	1	0	0	0	-	1	0	2	0	0	-	2	0	0	0	0	-	0	8
% Articulated Trucks	0.0	0.5	0.0	-	-	0.4	0.9	0.0	0.0	-	-	0.3	0.0	0.2	0.0	0.0	-	0.1	0.0	0.0	0.0	-	-	0.0	0.2
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	0.0
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	7.7	-	-	-	-	-	35.3	-	-	-	-	-	0.0	-	-	-	-	-	33.3	-	-
Pedestrians	-	-	-	-	12	-	-	-	-	-	11	-	-	-	-	-	3	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	92.3	-	-	-	-	-	64.7	-	-	-	-	-	100.0	-	-	-	-	-	66.7	-	-

Traffic and Transportation Engineering Services
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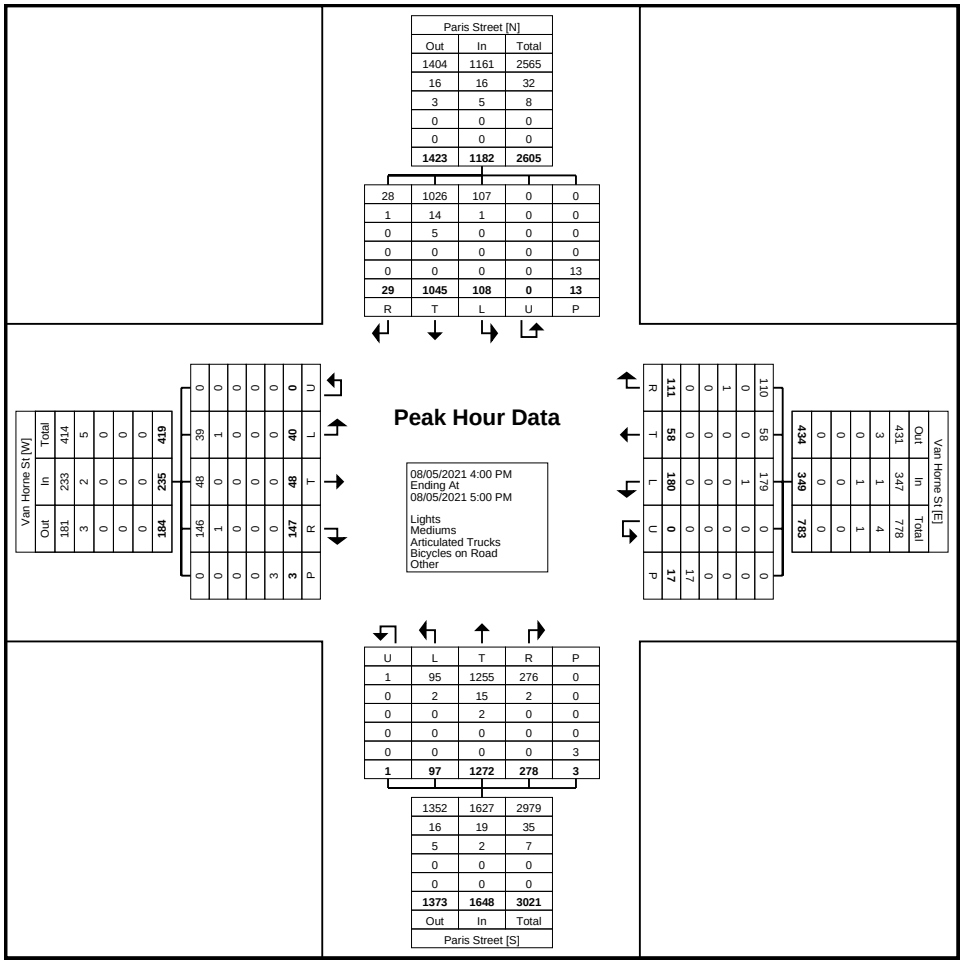
Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021



Turning Movement Peak Hour Data Plot (4:00 PM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Paris Street Southbound						Van Horne St Westbound						Paris Street Northbound						Van Horne St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:30 AM	7	241	12	0	3	260	29	8	43	0	1	80	19	149	17	0	1	185	12	3	6	0	3	21	546
7:45 AM	4	239	8	0	3	251	32	11	54	0	0	97	26	152	23	0	1	201	13	3	4	0	3	20	569
8:00 AM	3	206	11	0	5	220	22	8	29	0	5	59	15	156	9	0	0	180	10	3	3	0	3	16	475
8:15 AM	7	208	8	0	0	223	19	4	45	0	3	68	19	171	24	0	0	214	17	4	1	0	2	22	527
Total	21	894	39	0	11	954	102	31	171	0	9	304	79	628	73	0	2	780	52	13	14	0	11	79	2117
Approach %	2.2	93.7	4.1	0.0	-	-	33.6	10.2	56.3	0.0	-	-	10.1	80.5	9.4	0.0	-	-	65.8	16.5	17.7	0.0	-	-	-
Total %	1.0	42.2	1.8	0.0	-	45.1	4.8	1.5	8.1	0.0	-	14.4	3.7	29.7	3.4	0.0	-	36.8	2.5	0.6	0.7	0.0	-	3.7	-
PHF	0.750	0.927	0.813	0.000	-	0.917	0.797	0.705	0.792	0.000	-	0.784	0.760	0.918	0.760	0.000	-	0.911	0.765	0.813	0.583	0.000	-	0.898	0.930
Lights	20	856	37	0	-	913	99	31	170	0	-	300	77	607	70	0	-	754	48	13	13	0	-	74	2041
% Lights	95.2	95.7	94.9	-	-	95.7	97.1	100.0	99.4	-	-	98.7	97.5	96.7	95.9	-	-	96.7	92.3	100.0	92.9	-	-	93.7	96.4
Mediums	1	30	2	0	-	33	3	0	1	0	-	4	2	18	3	0	-	23	3	0	1	0	-	4	64
% Mediums	4.8	3.4	5.1	-	-	3.5	2.9	0.0	0.6	-	-	1.3	2.5	2.9	4.1	-	-	2.9	5.8	0.0	7.1	-	-	5.1	3.0
Articulated Trucks	0	8	0	0	-	8	0	0	0	0	-	0	0	3	0	0	-	3	1	0	0	0	-	1	12
% Articulated Trucks	0.0	0.9	0.0	-	-	0.8	0.0	0.0	0.0	-	-	0.0	0.0	0.5	0.0	-	-	0.4	1.9	0.0	0.0	-	-	1.3	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
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	22.2	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	11	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	11	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	77.8	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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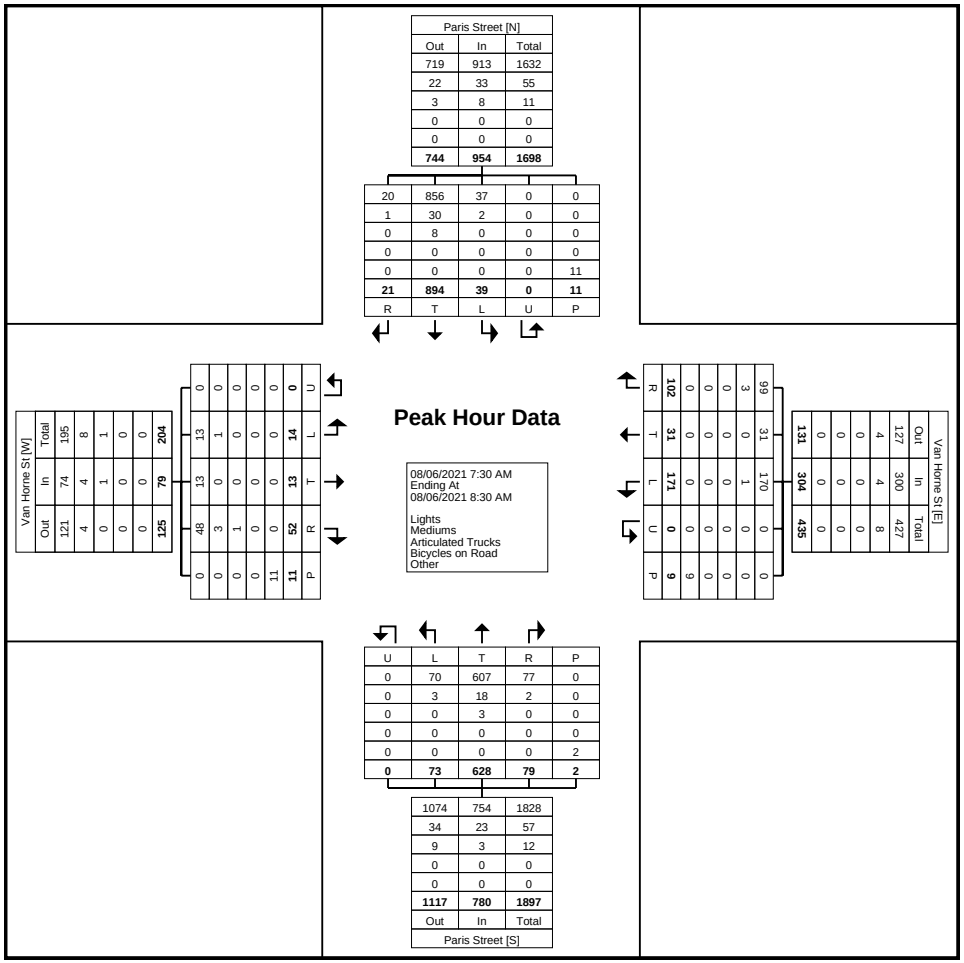
Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021



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

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

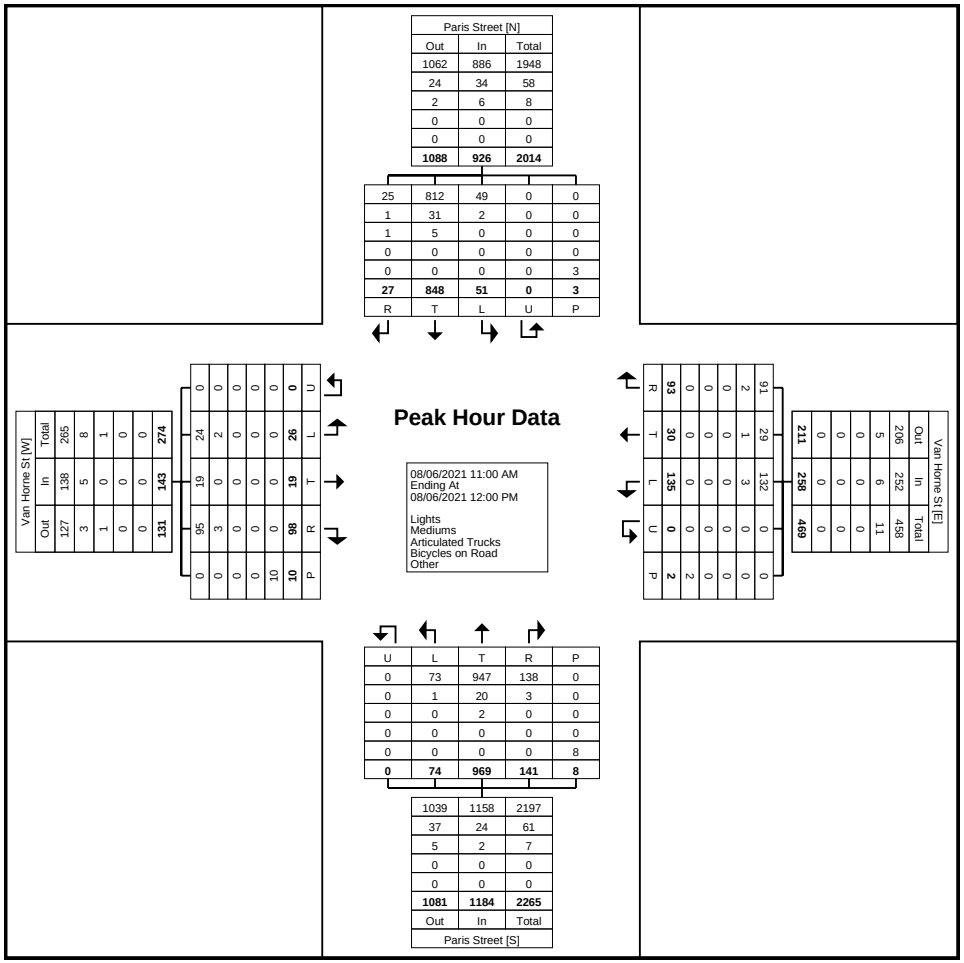
Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Paris Street Southbound						Van Horne St Westbound						Paris Street Northbound						Van Horne St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	3	190	11	0	1	204	21	9	34	0	0	64	35	234	23	0	0	292	22	3	8	0	4	33	593
11:15 AM	7	190	10	0	1	207	24	7	39	0	1	70	26	219	16	0	2	261	26	4	6	0	1	36	574
11:30 AM	9	254	17	0	0	280	27	8	23	0	1	58	40	247	13	0	3	300	24	7	5	0	2	36	674
11:45 AM	8	214	13	0	1	235	21	6	39	0	0	66	40	269	22	0	3	331	26	5	7	0	3	38	670
Total	27	848	51	0	3	926	93	30	135	0	2	258	141	969	74	0	8	1184	98	19	26	0	10	143	2511
Approach %	2.9	91.6	5.5	0.0	-	-	36.0	11.6	52.3	0.0	-	-	11.9	81.8	6.3	0.0	-	-	68.5	13.3	18.2	0.0	-	-	-
Total %	1.1	33.8	2.0	0.0	-	36.9	3.7	1.2	5.4	0.0	-	10.3	5.6	38.6	2.9	0.0	-	47.2	3.9	0.8	1.0	0.0	-	5.7	-
PHF	0.750	0.835	0.750	0.000	-	0.827	0.861	0.833	0.865	0.000	-	0.921	0.881	0.901	0.804	0.000	-	0.894	0.942	0.679	0.813	0.000	-	0.941	0.931
Lights	25	812	49	0	-	886	91	29	132	0	-	252	138	947	73	0	-	1158	95	19	24	0	-	138	2434
% Lights	92.6	95.8	96.1	-	-	95.7	97.8	96.7	97.8	-	-	97.7	97.9	97.7	98.6	-	-	97.8	96.9	100.0	92.3	-	-	96.5	96.9
Mediums	1	31	2	0	-	34	2	1	3	0	-	6	3	20	1	0	-	24	3	0	2	0	-	5	69
% Mediums	3.7	3.7	3.9	-	-	3.7	2.2	3.3	2.2	-	-	2.3	2.1	2.1	1.4	-	-	2.0	3.1	0.0	7.7	-	-	3.5	2.7
Articulated Trucks	1	5	0	0	-	6	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	8
% Articulated Trucks	3.7	0.6	0.0	-	-	0.6	0.0	0.0	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.3
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	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	10.0	-	-
Pedestrians	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	8	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	90.0	-	-

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021



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

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Paris Street Southbound						Van Horne St Westbound						Paris Street Northbound						Van Horne St Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:00 PM	7	235	18	0	1	260	23	6	42	0	2	71	39	270	22	0	2	331	34	3	7	0	2	44	706
12:15 PM	5	204	19	0	0	228	30	8	32	0	5	70	21	216	25	0	0	262	25	7	9	0	2	41	601
12:30 PM	9	240	14	0	3	263	23	10	61	0	1	94	33	266	22	0	2	321	28	3	2	0	1	33	711
12:45 PM	2	259	18	0	2	279	20	8	32	0	3	60	45	213	21	0	1	279	34	7	6	0	1	47	665
Total	23	938	69	0	6	1030	96	32	167	0	11	295	138	965	90	0	5	1193	121	20	24	0	6	165	2683
Approach %	2.2	91.1	6.7	0.0	-	-	32.5	10.8	56.6	0.0	-	-	11.6	80.9	7.5	0.0	-	-	73.3	12.1	14.5	0.0	-	-	-
Total %	0.9	35.0	2.6	0.0	-	38.4	3.6	1.2	6.2	0.0	-	11.0	5.1	36.0	3.4	0.0	-	44.5	4.5	0.7	0.9	0.0	-	6.1	-
PHF	0.639	0.905	0.908	0.000	-	0.923	0.800	0.800	0.684	0.000	-	0.785	0.767	0.894	0.900	0.000	-	0.901	0.890	0.714	0.667	0.000	-	0.878	0.943
Lights	21	916	66	0	-	1003	96	30	165	0	-	291	137	938	87	0	-	1162	119	20	23	0	-	162	2618
% Lights	91.3	97.7	95.7	-	-	97.4	100.0	93.8	98.8	-	-	98.6	99.3	97.2	96.7	-	-	97.4	98.3	100.0	95.8	-	-	98.2	97.6
Mediums	2	18	3	0	-	23	0	2	2	0	-	4	1	23	2	0	-	26	2	0	0	0	-	2	55
% Mediums	8.7	1.9	4.3	-	-	2.2	0.0	6.3	1.2	-	-	1.4	0.7	2.4	2.2	-	-	2.2	1.7	0.0	0.0	-	-	1.2	2.0
Articulated Trucks	0	4	0	0	-	4	0	0	0	0	-	0	0	4	1	0	-	5	0	0	1	0	-	1	10
% Articulated Trucks	0.0	0.4	0.0	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	0.4	1.1	-	-	0.4	0.0	0.0	4.2	-	-	0.6	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	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	9.1	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	6	-	-	-	-	-	10	-	-	-	-	-	5	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	90.9	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Traffic and Transportation Engineering Services
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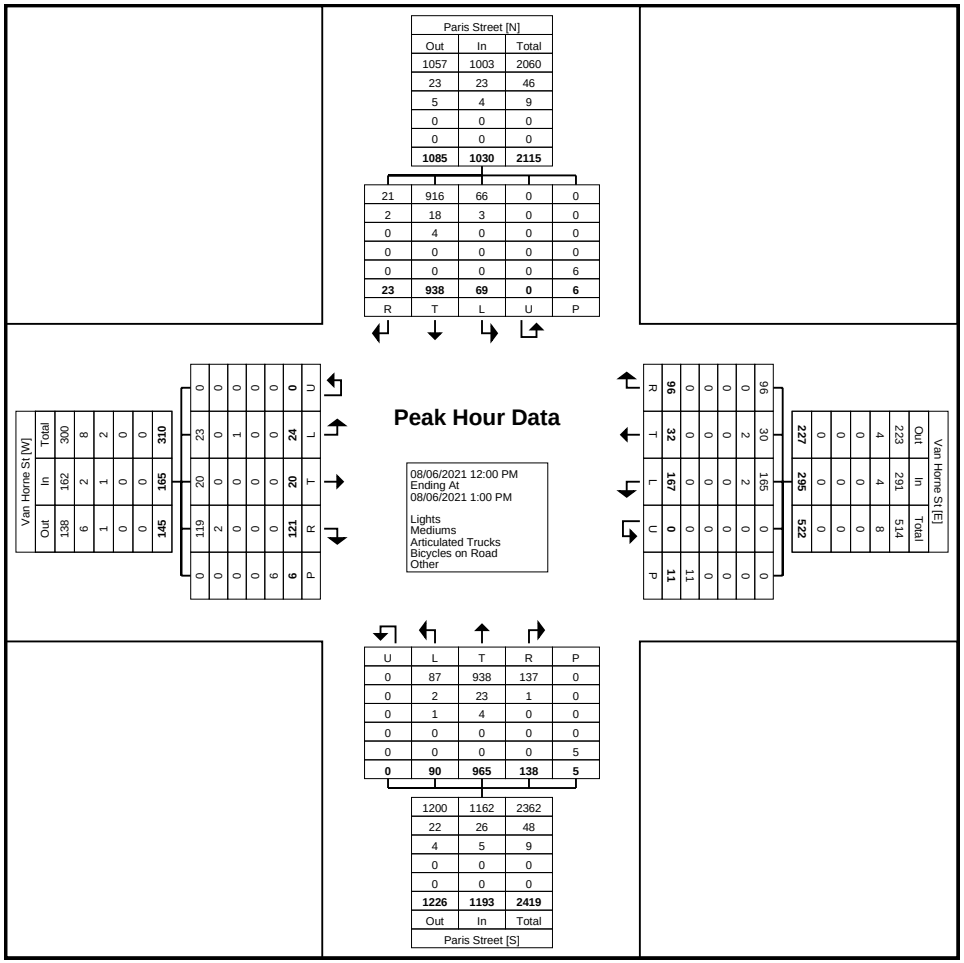
Count Name: Paris Street @ Van Horne Street
Site Code: 00912103
Start Date: 08/05/2021



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

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Morning Peak Diagram

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

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

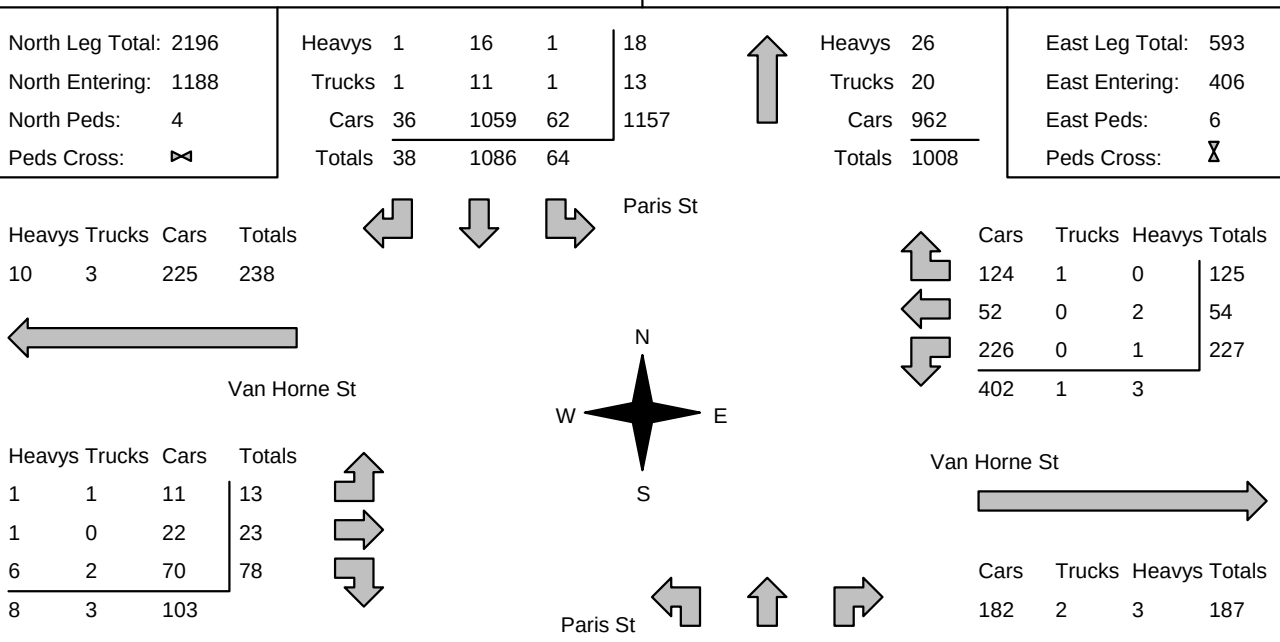
Municipality: Sudbury
Site #: 2206300001
Intersection: Paris St & Van Horne St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Afternoon Peak Diagram

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

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

Municipality: Sudbury
Site #: 2206300001
Intersection: Paris St & Van Horne St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Paris St runs N/S

North Leg Total: 2573
North Entering: 1142
North Peds: 8
Peds Cross: ⋈

Heavys	0	16	0	16
Trucks	1	6	0	7
Cars	32	995	92	1119
Totals	33	1017	92	

Heavys	16
Trucks	17
Cars	1398
Totals	1431

East Leg Total: 762
East Entering: 337
East Peds: 7
Peds Cross: ⧗

Paris St

Heavys	Trucks	Cars	Totals
2	2	208	212

Van Horne St

Heavys	Trucks	Cars	Totals
0	2	33	35
1	0	54	55
1	0	168	169
2	2	255	

Cars	Trucks	Heavys	Totals
112	2	3	117
53	0	0	53
163	1	3	167
328	3	6	

N
W E
S

Van Horne St

Cars	Trucks	Heavys	Totals
422	1	2	425

Paris St

Peds Cross: ⧗
West Peds: 6
West Entering: 259
West Leg Total: 471

Cars	1326
Trucks	7
Heavys	20
Totals	1353

Cars	123	1253	276	1652
Trucks	1	13	1	15
Heavys	2	13	1	16
Totals	126	1279	278	

Peds Cross: ⋈
South Peds: 10
South Entering: 1683
South Leg Total: 3036

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Total Count Diagram

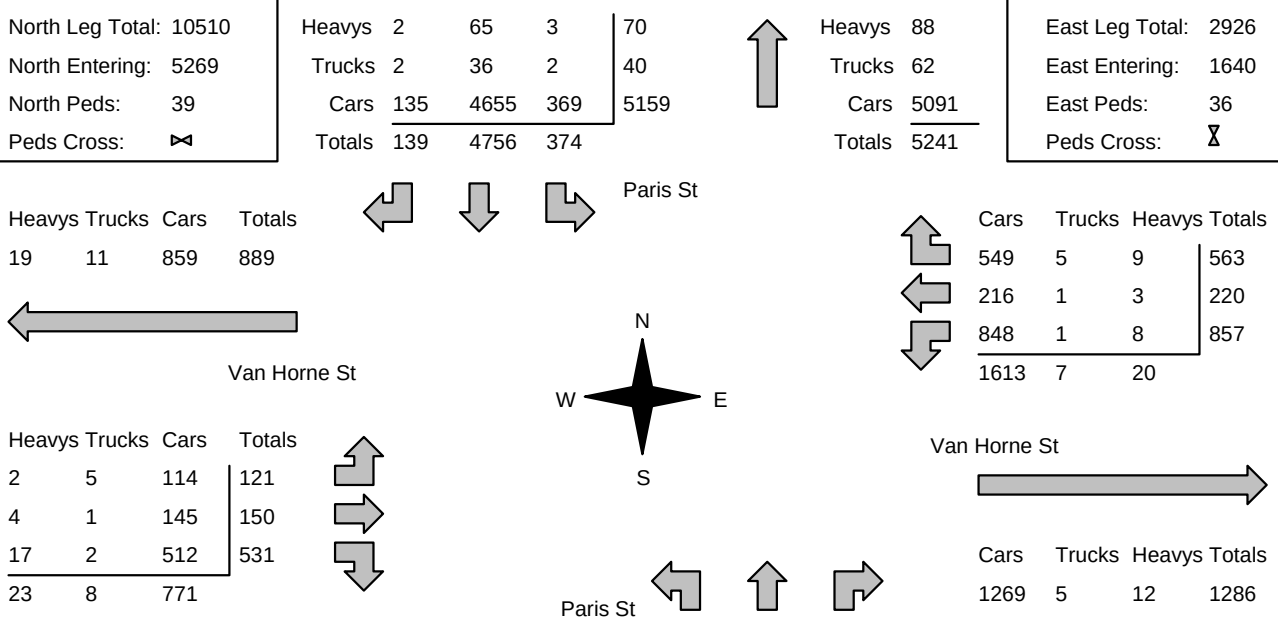
Municipality: Sudbury
Site #: 2206300001
Intersection: Paris St & Van Horne St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Traffic Count Summary

Intersection: Paris St & Van Horne St | **Count Date:** 20-Apr-22 | **Municipality:** Sudbury

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*45*	*959*	*24*	*1028*	*6*	*1866*
9:00:00	*60*	*1039*	*34*	*1133*	*8*	*2247*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*92*	*1017*	*33*	*1142*	*8*	*2825*
18:00:00	*102*	*919*	*27*	*1048*	*12*	*2383*
19:00:00	*75*	*822*	*21*	*918*	*5*	*1797*
Totals:	374	4756	139	5269	39	11118

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*80*	*691*	*67*	*838*	*2*
9:00:00	*155*	*853*	*106*	*1114*	*4*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*126*	*1279*	*278*	*1683*	*10*
18:00:00	*89*	*1041*	*205*	*1335*	*6*
19:00:00	*80*	*693*	*106*	*879*	*15*
S Totals:	530	4557	762	5849	37

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*219*	*47*	*119*	*385*	*3*	*469*
9:00:00	*211*	*44*	*121*	*376*	*5*	*490*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*167*	*53*	*117*	*337*	*7*	*596*
18:00:00	*136*	*43*	*100*	*279*	*9*	*484*
19:00:00	*124*	*33*	*106*	*263*	*12*	*403*
Totals:	857	220	563	1640	36	2442

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*7*	*10*	*67*	*84*	*5*
9:00:00	*15*	*22*	*77*	*114*	*4*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*35*	*55*	*169*	*259*	*6*
18:00:00	*29*	*41*	*135*	*205*	*12*
19:00:00	*35*	*22*	*83*	*140*	*8*
W Totals:	121	150	531	802	35

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*19:00*	*0:00*
Crossing Values:	*0*	*281*	*282*	*0*	*275*	*226*	*212*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300001

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	9	9	206	206	5	5	0	0	0	0	0	0	1	1	3	3	0	0	1	1
7:30:00	19	10	411	205	11	6	0	0	2	2	0	0	1	0	9	6	1	1	2	1
7:45:00	24	5	650	239	14	3	0	0	3	1	0	0	1	0	14	5	1	0	5	3
8:00:00	44	20	937	287	23	9	0	0	3	0	0	0	1	0	19	5	1	0	6	1
8:15:00	53	9	1200	263	32	9	1	1	7	4	0	0	1	0	25	6	1	0	7	1
8:30:00	73	20	1458	258	41	9	1	0	10	3	1	1	2	1	27	2	2	1	8	1
8:45:00	86	13	1709	251	50	9	1	0	14	4	1	0	2	0	30	3	2	0	9	1
9:00:00	101	15	1946	237	55	5	1	0	19	5	1	0	3	1	33	3	2	0	14	5
9:15:00	101	0	1946	0	55	0	1	0	19	0	1	0	3	0	33	0	2	0	14	0
16:00:00	101	0	1946	0	55	0	1	0	19	0	1	0	3	0	33	0	2	0	14	0
16:15:00	125	24	2172	226	59	4	1	0	20	1	1	0	3	0	38	5	2	0	15	1
16:30:00	147	22	2442	270	68	9	1	0	22	2	1	0	3	0	40	2	2	0	18	3
16:45:00	174	27	2676	234	75	7	1	0	23	1	1	0	3	0	45	5	2	0	19	1
17:00:00	193	19	2941	265	87	12	1	0	25	2	2	1	3	0	49	4	2	0	22	3
17:15:00	225	32	3177	236	93	6	1	0	26	1	2	0	3	0	50	1	2	0	28	6
17:30:00	256	31	3443	266	102	9	1	0	27	1	2	0	3	0	53	3	2	0	31	3
17:45:00	277	21	3621	178	106	4	1	0	28	1	2	0	3	0	54	1	2	0	32	1
18:00:00	294	17	3845	224	114	8	2	1	29	1	2	0	3	0	60	6	2	0	34	2
18:15:00	317	23	4064	219	122	8	2	0	32	3	2	0	3	0	61	1	2	0	35	1
18:30:00	335	18	4284	220	128	6	2	0	34	2	2	0	3	0	63	2	2	0	39	4
18:45:00	353	18	4464	180	131	3	2	0	35	1	2	0	3	0	64	1	2	0	39	0
19:00:00	369	16	4655	191	135	4	2	0	36	1	2	0	3	0	65	1	2	0	39	0
19:15:00	369	0	4655	0	135	0	2	0	36	0	2	0	3	0	65	0	2	0	39	0
19:15:15	369	0	4655	0	135	0	2	0	36	0	2	0	3	0	65	0	2	0	39	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300001

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	48	48	7	7	19	19	0	0	0	0	0	0	1	1	0	0	0	0	0	0
7:30:00	92	44	18	11	47	28	0	0	0	0	0	0	2	1	0	0	0	0	2	2
7:45:00	142	50	26	8	84	37	0	0	1	1	0	0	3	1	0	0	3	3	2	0
8:00:00	216	74	46	20	116	32	0	0	1	0	0	0	3	0	0	0	3	0	3	1
8:15:00	266	50	54	8	143	27	0	0	1	0	0	0	3	0	0	0	3	0	3	0
8:30:00	311	45	69	15	177	34	0	0	1	0	0	0	4	1	1	1	3	0	4	1
8:45:00	368	57	78	9	208	31	0	0	1	0	1	1	4	0	2	1	3	0	8	4
9:00:00	426	58	87	9	234	26	0	0	1	0	1	0	4	0	3	1	5	2	8	0
9:15:00	426	0	87	0	234	0	0	0	1	0	1	0	4	0	3	0	5	0	8	0
16:00:00	426	0	87	0	234	0	0	0	1	0	1	0	4	0	3	0	5	0	8	0
16:15:00	467	41	103	16	263	29	0	0	1	0	1	0	6	2	3	0	8	3	11	3
16:30:00	504	37	117	14	297	34	0	0	1	0	1	0	7	1	3	0	8	0	12	1
16:45:00	552	48	128	11	318	21	1	1	1	0	3	2	7	0	3	0	8	0	13	1
17:00:00	589	37	140	12	346	28	1	0	1	0	3	0	7	0	3	0	8	0	15	2
17:15:00	643	54	155	15	372	26	1	0	1	0	3	0	7	0	3	0	8	0	19	4
17:30:00	666	23	163	8	392	20	1	0	1	0	3	0	8	1	3	0	9	1	20	1
17:45:00	700	34	175	12	418	26	1	0	1	0	3	0	8	0	3	0	9	0	23	3
18:00:00	724	24	183	8	444	26	1	0	1	0	4	1	8	0	3	0	9	0	24	1
18:15:00	747	23	190	7	471	27	1	0	1	0	4	0	8	0	3	0	9	0	26	2
18:30:00	780	33	195	5	499	28	1	0	1	0	5	1	8	0	3	0	9	0	28	2
18:45:00	818	38	205	10	517	18	1	0	1	0	5	0	8	0	3	0	9	0	34	6
19:00:00	848	30	216	11	549	32	1	0	1	0	5	0	8	0	3	0	9	0	36	2
19:15:00	848	0	216	0	549	0	1	0	1	0	5	0	8	0	3	0	9	0	36	0
19:15:15	848	0	216	0	549	0	1	0	1	0	5	0	8	0	3	0	9	0	36	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300001

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	7	7	91	91	11	11	0	0	1	1	0	0	0	0	1	1	0	0	0	0
7:30:00	22	15	229	138	21	10	0	0	3	2	0	0	1	1	5	4	0	0	1	1
7:45:00	42	20	436	207	41	20	0	0	5	2	0	0	5	4	11	6	2	2	1	0
8:00:00	74	32	663	227	65	24	1	1	9	4	0	0	5	0	19	8	2	0	2	1
8:15:00	109	35	864	201	88	23	1	0	13	4	0	0	10	5	23	4	3	1	3	1
8:30:00	149	40	1053	189	110	22	1	0	19	6	0	0	10	0	28	5	3	0	5	2
8:45:00	179	30	1263	210	139	29	2	1	23	4	1	1	12	2	36	8	3	0	5	0
9:00:00	221	42	1474	211	169	30	2	0	25	2	1	0	12	0	45	9	3	0	6	1
9:15:00	221	0	1474	0	169	0	2	0	25	0	1	0	12	0	45	0	3	0	6	0
16:00:00	221	0	1474	0	169	0	2	0	25	0	1	0	12	0	45	0	3	0	6	0
16:15:00	249	28	1817	343	223	54	3	1	30	5	1	0	13	1	47	2	3	0	7	1
16:30:00	285	36	2127	310	291	68	3	0	34	4	1	0	14	1	51	4	3	0	9	2
16:45:00	312	27	2435	308	371	80	3	0	38	4	2	1	14	0	54	3	4	1	9	0
17:00:00	344	32	2727	292	445	74	3	0	38	0	2	0	14	0	58	4	4	0	16	7
17:15:00	359	15	3025	298	511	66	3	0	40	2	2	0	14	0	60	2	4	0	17	1
17:30:00	380	21	3317	292	570	59	3	0	43	3	2	0	14	0	62	2	5	1	17	0
17:45:00	406	26	3552	235	610	40	4	1	45	2	2	0	14	0	65	3	5	0	18	1
18:00:00	432	26	3750	198	649	39	4	0	47	2	2	0	14	0	67	2	5	0	22	4
18:15:00	459	27	3923	173	673	24	4	0	48	1	2	0	14	0	69	2	5	0	27	5
18:30:00	480	21	4101	178	704	31	6	2	48	0	2	0	14	0	72	3	5	0	28	1
18:45:00	491	11	4261	160	731	27	6	0	50	2	2	0	14	0	76	4	5	0	34	6
19:00:00	508	17	4428	167	755	24	8	2	52	2	2	0	14	0	77	1	5	0	37	3
19:15:00	508	0	4428	0	755	0	8	0	52	0	2	0	14	0	77	0	5	0	37	0
19:15:15	508	0	4428	0	755	0	8	0	52	0	2	0	14	0	77	0	5	0	37	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300001

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	3	3	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	5	2	20	12	0	0	0	0	0	0	0	0	0	0	5	5	0	0
7:45:00	5	5	6	1	36	16	0	0	0	0	0	0	0	0	0	0	6	1	2	2
8:00:00	6	1	10	4	57	21	0	0	0	0	0	0	1	1	0	0	10	4	5	3
8:15:00	10	4	17	7	70	13	0	0	0	0	1	1	1	0	0	0	10	0	6	1
8:30:00	14	4	20	3	90	20	0	0	0	0	1	0	1	0	0	0	12	2	7	1
8:45:00	16	2	28	8	106	16	1	1	0	0	2	1	1	0	1	1	12	0	8	1
9:00:00	20	4	29	1	128	22	1	0	0	0	2	0	1	0	3	2	14	2	9	1
9:15:00	20	0	29	0	128	0	1	0	0	0	2	0	1	0	3	0	14	0	9	0
16:00:00	20	0	29	0	128	0	1	0	0	0	2	0	1	0	3	0	14	0	9	0
16:15:00	29	9	48	19	170	42	1	0	0	0	2	0	1	0	4	1	15	1	11	2
16:30:00	35	6	59	11	209	39	1	0	0	0	2	0	1	0	4	0	15	0	11	0
16:45:00	48	13	72	13	257	48	3	2	0	0	2	0	1	0	4	0	15	0	12	1
17:00:00	53	5	83	11	296	39	3	0	0	0	2	0	1	0	4	0	15	0	15	3
17:15:00	59	6	95	12	347	51	3	0	0	0	2	0	1	0	4	0	16	1	17	2
17:30:00	64	5	110	15	379	32	3	0	0	0	2	0	1	0	4	0	16	0	18	1
17:45:00	72	8	117	7	405	26	3	0	0	0	2	0	1	0	4	0	17	1	23	5
18:00:00	82	10	124	7	429	24	3	0	0	0	2	0	1	0	4	0	17	0	27	4
18:15:00	89	7	127	3	451	22	3	0	0	0	2	0	1	0	4	0	17	0	31	4
18:30:00	95	6	135	8	470	19	3	0	1	1	2	0	1	0	4	0	17	0	32	1
18:45:00	106	11	143	8	494	24	4	1	1	0	2	0	1	0	4	0	17	0	35	3
19:00:00	114	8	145	2	512	18	5	1	1	0	2	0	2	1	4	0	17	0	35	0
19:15:00	114	0	145	0	512	0	5	0	1	0	2	0	2	0	4	0	17	0	35	0
19:15:15	114	0	145	0	512	0	5	0	1	0	2	0	2	0	4	0	17	0	35	0

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019

Turning Movement Data

Start Time	Paris St. Southbound						John St. Westbound						Paris St. Northbound						John St. Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:00 PM	1	279	19	0	0	299	27	0	14	0	2	41	12	358	0	0	0	370	1	0	0	0	0	1	711
3:15 PM	2	355	12	0	1	369	18	0	17	0	2	35	15	371	0	0	0	386	0	0	1	0	3	1	791
3:30 PM	1	332	11	0	0	344	24	0	16	0	4	40	12	375	0	0	0	387	1	0	1	0	1	2	773
3:45 PM	0	347	28	0	0	375	23	1	12	0	0	36	9	379	0	0	3	388	0	1	1	0	1	2	801
Hourly Total	4	1313	70	0	1	1387	92	1	59	0	8	152	48	1483	0	0	3	1531	2	1	3	0	5	6	3076
4:00 PM	0	391	18	0	3	409	42	0	22	0	0	64	11	437	2	0	1	450	0	0	2	0	2	2	925
4:15 PM	0	385	18	1	0	404	19	0	11	0	0	30	18	461	4	0	2	483	0	1	3	0	5	4	921
4:30 PM	3	374	23	0	0	400	23	0	13	0	0	36	10	449	1	0	1	460	1	1	1	0	4	3	899
4:45 PM	2	344	20	0	0	366	22	0	17	0	2	39	5	429	1	0	0	435	1	1	4	0	3	6	846
Hourly Total	5	1494	79	1	3	1579	106	0	63	0	2	169	44	1776	8	0	4	1828	2	3	10	0	14	15	3591
5:00 PM	1	322	23	0	5	346	19	0	22	0	4	41	20	377	0	0	2	397	0	0	3	0	2	3	787
5:15 PM	3	349	27	0	0	379	22	0	23	0	2	45	14	355	0	0	3	369	0	0	2	0	7	2	795
5:30 PM	1	268	19	0	1	288	17	0	14	0	0	31	15	330	0	0	2	345	0	0	1	0	1	1	665
5:45 PM	0	286	16	1	0	303	18	0	10	0	0	28	11	281	0	0	0	292	0	0	0	0	0	0	623
Hourly Total	5	1225	85	1	6	1316	76	0	69	0	6	145	60	1343	0	0	7	1403	0	0	6	0	10	6	2870
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
6:30 AM	0	176	3	0	0	179	6	0	4	0	0	10	1	140	0	0	0	141	0	0	1	0	0	1	331
6:45 AM	0	196	7	0	0	203	4	0	6	0	0	10	3	150	0	0	1	153	0	0	0	0	0	0	366
Hourly Total	0	372	10	0	0	382	10	0	10	0	0	20	4	290	0	0	1	294	0	0	1	0	0	1	697
7:00 AM	0	231	6	0	0	237	5	0	4	0	0	9	4	128	0	0	0	132	0	0	1	0	0	1	379
7:15 AM	0	313	11	0	1	324	8	0	10	0	0	18	2	157	1	0	1	160	0	0	0	0	2	0	502
7:30 AM	3	284	11	0	0	298	17	0	2	0	0	19	3	236	1	0	0	240	1	0	1	0	0	2	559
7:45 AM	0	352	11	0	1	363	16	0	10	0	1	26	6	236	0	0	0	242	0	0	1	0	1	1	632
Hourly Total	3	1180	39	0	2	1222	46	0	26	0	1	72	15	757	2	0	1	774	1	0	3	0	3	4	2072
8:00 AM	0	297	13	0	3	310	14	2	13	0	1	29	12	243	0	0	0	255	0	0	0	0	1	0	594
8:15 AM	3	347	11	0	0	361	18	0	7	0	1	25	6	279	2	0	1	287	0	0	2	0	0	2	675
8:30 AM	5	345	9	0	1	359	15	0	4	0	0	19	7	269	1	0	1	277	2	0	6	0	3	8	663
8:45 AM	1	338	13	0	1	352	16	0	16	0	2	32	9	271	1	0	3	281	4	0	0	0	4	4	669
Hourly Total	9	1327	46	0	5	1382	63	2	40	0	4	105	34	1062	4	0	5	1100	6	0	8	0	8	14	2601
9:00 AM	2	238	9	0	1	249	15	0	11	0	2	26	8	234	2	0	2	244	2	0	3	0	1	5	524
9:15 AM	3	242	13	0	0	258	12	0	12	0	2	24	11	218	0	0	2	229	1	0	1	0	1	2	513
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hourly Total	5	480	22	0	1	507	27	0	23	0	4	50	19	452	2	0	4	473	3	0	4	0	2	7	1037
11:30 AM	0	241	13	0	1	254	16	0	15	0	0	31	6	302	0	0	0	308	3	0	1	0	2	4	597
11:45 AM	0	303	16	0	1	319	19	0	18	0	1	37	7	282	0	0	0	289	2	0	0	0	3	2	647
Hourly Total	0	544	29	0	2	573	35	0	33	0	1	68	13	584	0	0	0	597	5	0	1	0	5	6	1244
12:00 PM	1	355	19	0	0	375	17	0	18	0	0	35	6	305	0	0	0	311	2	0	0	0	2	2	723
12:15 PM	0	285	18	0	0	303	19	0	16	0	2	35	12	302	1	0	0	315	0	0	0	0	2	0	653
12:30 PM	2	286	16	0	2	304	18	0	14	0	1	32	14	310	1	0	0	325	2	1	1	0	0	4	665
12:45 PM	0	299	18	0	0	317	12	0	13	0	0	25	18	298	0	1	3	317	0	0	0	0	1	0	659
Hourly Total	3	1225	71	0	2	1299	66	0	61	0	3	127	50	1215	2	1	3	1268	4	1	1	0	5	6	2700
1:00 PM	0	276	16	0	0	292	24	1	18	0	0	43	11	296	1	0	5	308	1	1	1	0	1	3	646
1:15 PM	1	295	18	0	0	314	25	1	15	0	0	41	12	314	0	0	1	326	0	1	0	0	0	1	682
Grand Total	35	9731	485	2	22	10253	570	5	417	0	29	992	310	9573	19	1	34	9903	24	7	38	0	53	69	21217
Approach %	0.3	94.9	4.7	0.0	-	-	57.5	0.5	42.0	0.0	-	-	3.1	96.7	0.2	0.0	-	-	34.8	10.1	55.1	0.0	-	-	-
Total %	0.2	45.9	2.3	0.0	-	48.3	2.7	0.0	2.0	0.0	-	4.7	1.5	45.1	0.1	0.0	-	46.7	0.1	0.0	0.2	0.0	-	0.3	-
Lights	35	9527	464	2	-	10028	551	5	417	0	-	973	308	9365	19	1	-	9693	23	7	38	0	-	68	20762
% Lights	100.0	97.9	95.7	100.0	-	97.8	96.7	100.0	100.0	-	-	98.1	99.4	97.8	100.0	100.0	-	97.9	95.8	100.0	100.0	-	-	98.6	97.9
Mediums	0	185	18	0	-	203	18	0	0	0	-	18	2	182	0	0	-	184	1	0	0	0	-	1	406
% Mediums	0.0	1.9	3.7	0.0	-	2.0	3.2	0.0	0.0	-	-	1.8	0.6	1.9	0.0	0.0	-	1.9	4.2	0.0	0.0	-	-	1.4	1.9
Articulated Trucks	0	19	2	0	-	21	1	0	0	0	-	1	0	26	0	0	-	26	0	0	0	0	-	0	48
% Articulated Trucks	0.0	0.2	0.4	0.0	-	0.2	0.2	0.0	0.0	-	-	0.1	0.0	0.3	0.0	0.0	-	0.3	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.2	0.0	-	0.0	0.0	0.0	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	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	3	-	-	-	-	-	12	-	-
% Bicycles on Crosswalk	-	-	-	-	9.1	-	-	-	-	-	31.0	-	-	-	-	-	8.8	-	-	-	-	-	22.6	-	-
Pedestrians	-	-	-	-	20	-	-	-	-	-	20	-	-	-	-	-	31	-	-	-	-	-	41	-	-
% Pedestrians	-	-	-	-	90.9	-	-	-	-	-	69.0	-	-	-	-	-	91.2	-	-	-	-	-	77.4	-	-

Traffic and Transportation Engineering Services
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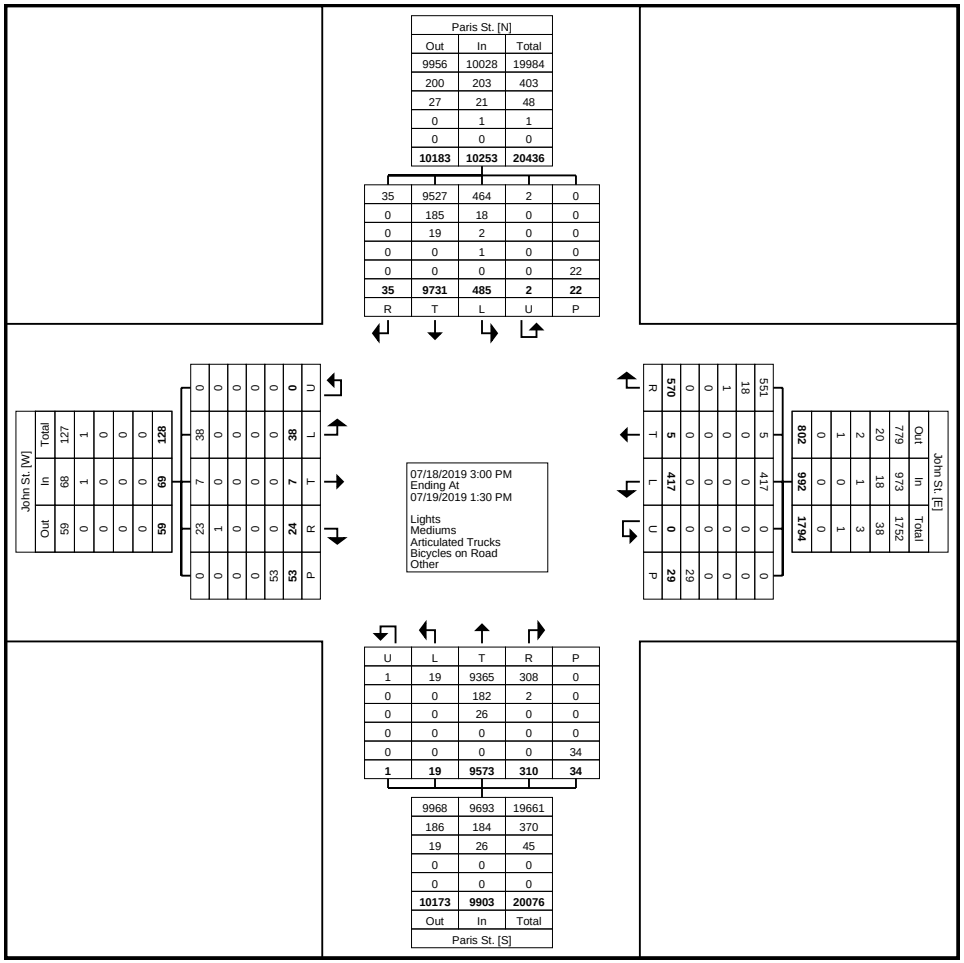
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019



Turning Movement Data Plot

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Paris St. Southbound						John St. Westbound						Paris St. Northbound						John St. Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:00 PM	0	391	18	0	3	409	42	0	22	0	0	64	11	437	2	0	1	450	0	0	2	0	2	2	925
4:15 PM	0	385	18	1	0	404	19	0	11	0	0	30	18	461	4	0	2	483	0	1	3	0	5	4	921
4:30 PM	3	374	23	0	0	400	23	0	13	0	0	36	10	449	1	0	1	460	1	1	1	0	4	3	899
4:45 PM	2	344	20	0	0	366	22	0	17	0	2	39	5	429	1	0	0	435	1	1	4	0	3	6	846
Total	5	1494	79	1	3	1579	106	0	63	0	2	169	44	1776	8	0	4	1828	2	3	10	0	14	15	3591
Approach %	0.3	94.6	5.0	0.1	-	-	62.7	0.0	37.3	0.0	-	-	2.4	97.2	0.4	0.0	-	-	13.3	20.0	66.7	0.0	-	-	-
Total %	0.1	41.6	2.2	0.0	-	44.0	3.0	0.0	1.8	0.0	-	4.7	1.2	49.5	0.2	0.0	-	50.9	0.1	0.1	0.3	0.0	-	0.4	-
PHF	0.417	0.955	0.859	0.250	-	0.965	0.631	0.000	0.716	0.000	-	0.660	0.611	0.963	0.500	0.000	-	0.946	0.500	0.750	0.625	0.000	-	0.625	0.971
Lights	5	1471	76	1	-	1553	100	0	63	0	-	163	44	1748	8	0	-	1800	2	3	10	0	-	15	3531
% Lights	100.0	98.5	96.2	100.0	-	98.4	94.3	-	100.0	-	-	96.4	100.0	98.4	100.0	-	-	98.5	100.0	100.0	100.0	-	-	100.0	98.3
Mediums	0	19	1	0	-	20	6	0	0	0	-	6	0	26	0	0	-	26	0	0	0	0	-	0	52
% Mediums	0.0	1.3	1.3	0.0	-	1.3	5.7	-	0.0	-	-	3.6	0.0	1.5	0.0	-	-	1.4	0.0	0.0	0.0	-	-	0.0	1.4
Articulated Trucks	0	4	1	0	-	5	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	7
% Articulated Trucks	0.0	0.3	1.3	0.0	-	0.3	0.0	-	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	1.3	0.0	-	0.1	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	-	-	-	-	-	4	-	-	-	-	-	14	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Traffic and Transportation Engineering Services
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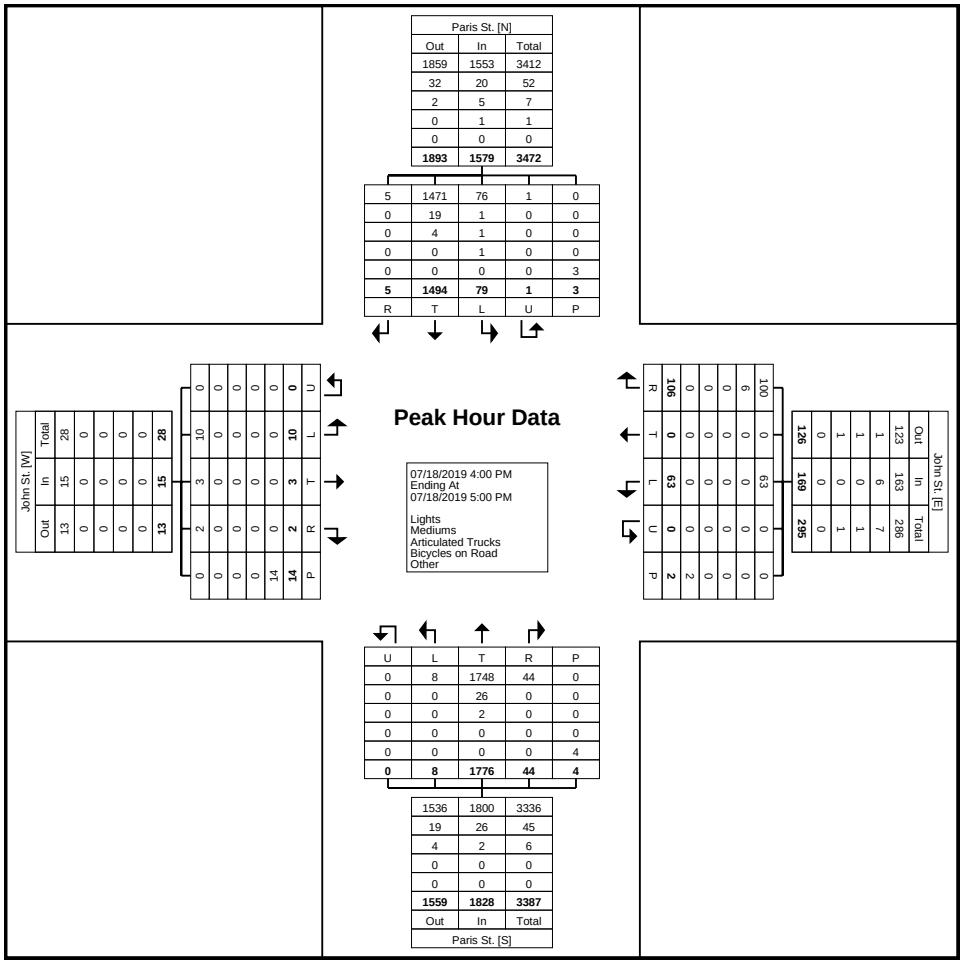
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019



Turning Movement Peak Hour Data Plot (4:00 PM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Paris St. Southbound						John St. Westbound						Paris St. Northbound						John St. Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
8:00 AM	0	297	13	0	3	310	14	2	13	0	1	29	12	243	0	0	0	255	0	0	0	0	1	0	594
8:15 AM	3	347	11	0	0	361	18	0	7	0	1	25	6	279	2	0	1	287	0	0	2	0	0	2	675
8:30 AM	5	345	9	0	1	359	15	0	4	0	0	19	7	269	1	0	1	277	2	0	6	0	3	8	663
8:45 AM	1	338	13	0	1	352	16	0	16	0	2	32	9	271	1	0	3	281	4	0	0	0	4	4	669
Total	9	1327	46	0	5	1382	63	2	40	0	4	105	34	1062	4	0	5	1100	6	0	8	0	8	14	2601
Approach %	0.7	96.0	3.3	0.0	-	-	60.0	1.9	38.1	0.0	-	-	3.1	96.5	0.4	0.0	-	-	42.9	0.0	57.1	0.0	-	-	-
Total %	0.3	51.0	1.8	0.0	-	53.1	2.4	0.1	1.5	0.0	-	4.0	1.3	40.8	0.2	0.0	-	42.3	0.2	0.0	0.3	0.0	-	0.5	-
PHF	0.450	0.956	0.885	0.000	-	0.957	0.875	0.250	0.625	0.000	-	0.820	0.708	0.952	0.500	0.000	-	0.958	0.375	0.000	0.333	0.000	-	0.438	0.963
Lights	9	1297	45	0	-	1351	63	2	40	0	-	105	34	1029	4	0	-	1067	6	0	8	0	-	14	2537
% Lights	100.0	97.7	97.8	-	-	97.8	100.0	100.0	100.0	-	-	100.0	100.0	96.9	100.0	-	-	97.0	100.0	-	100.0	-	-	100.0	97.5
Mediums	0	26	1	0	-	27	0	0	0	0	-	0	0	32	0	0	-	32	0	0	0	0	-	0	59
% Mediums	0.0	2.0	2.2	-	-	2.0	0.0	0.0	0.0	-	-	0.0	0.0	3.0	0.0	-	-	2.9	0.0	-	0.0	-	-	0.0	2.3
Articulated Trucks	0	4	0	0	-	4	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	5
% Articulated Trucks	0.0	0.3	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.2
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
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	20.0	-	-	-	-	-	50.0	-	-	-	-	-	0.0	-	-	-	-	-	25.0	-	-
Pedestrians	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	5	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	80.0	-	-	-	-	-	50.0	-	-	-	-	-	100.0	-	-	-	-	-	75.0	-	-

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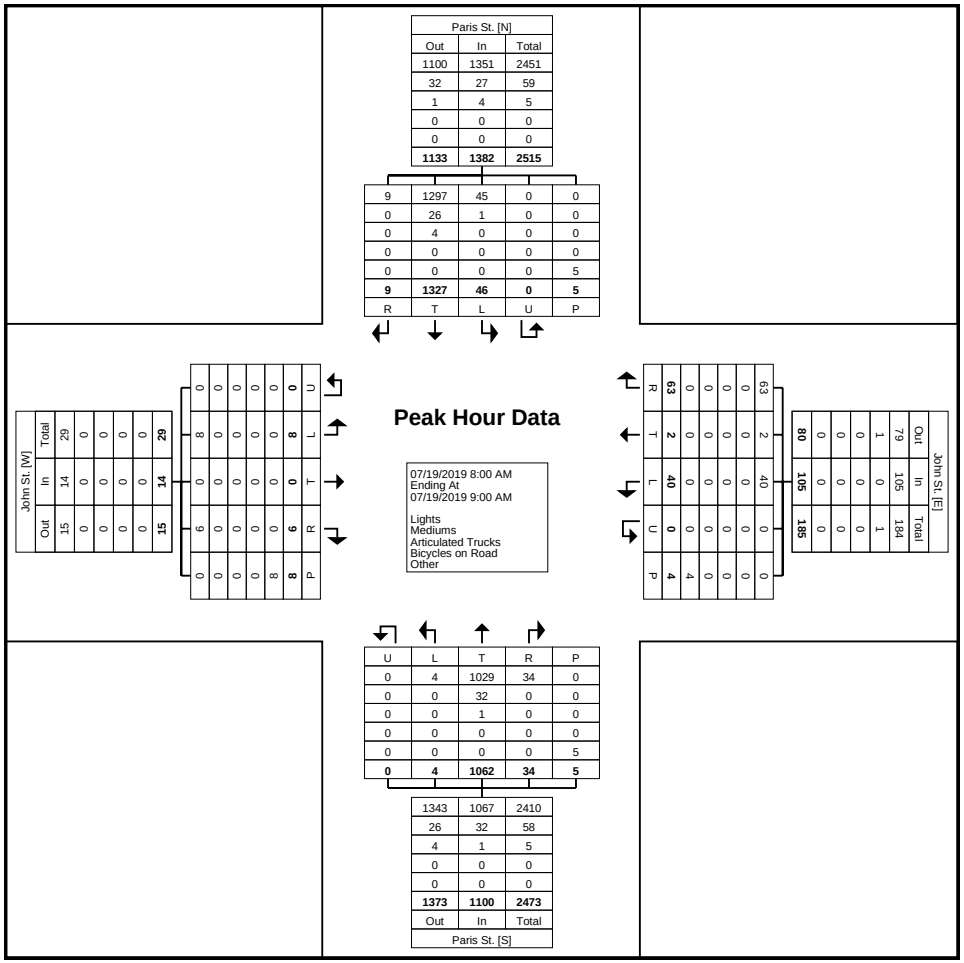
Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019



Turning Movement Peak Hour Data Plot (8:00 AM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Paris St. Southbound						John St. Westbound						Paris St. Northbound						John St. Eastbound						
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
12:00 PM	1	355	19	0	0	375	17	0	18	0	0	35	6	305	0	0	0	311	2	0	0	0	2	2	723
12:15 PM	0	285	18	0	0	303	19	0	16	0	2	35	12	302	1	0	0	315	0	0	0	0	2	0	653
12:30 PM	2	286	16	0	2	304	18	0	14	0	1	32	14	310	1	0	0	325	2	1	1	0	0	4	665
12:45 PM	0	299	18	0	0	317	12	0	13	0	0	25	18	298	0	1	3	317	0	0	0	0	1	0	659
Total	3	1225	71	0	2	1299	66	0	61	0	3	127	50	1215	2	1	3	1268	4	1	1	0	5	6	2700
Approach %	0.2	94.3	5.5	0.0	-	-	52.0	0.0	48.0	0.0	-	-	3.9	95.8	0.2	0.1	-	-	66.7	16.7	16.7	0.0	-	-	-
Total %	0.1	45.4	2.6	0.0	-	48.1	2.4	0.0	2.3	0.0	-	4.7	1.9	45.0	0.1	0.0	-	47.0	0.1	0.0	0.0	0.0	-	0.2	-
PHF	0.375	0.863	0.934	0.000	-	0.866	0.868	0.000	0.847	0.000	-	0.907	0.694	0.980	0.500	0.250	-	0.975	0.500	0.250	0.250	0.000	-	0.375	0.934
Lights	3	1199	66	0	-	1268	65	0	61	0	-	126	49	1183	2	1	-	1235	4	1	1	0	-	6	2635
% Lights	100.0	97.9	93.0	-	-	97.6	98.5	-	100.0	-	-	99.2	98.0	97.4	100.0	100.0	-	97.4	100.0	100.0	100.0	-	-	100.0	97.6
Mediums	0	23	5	0	-	28	1	0	0	0	-	1	1	30	0	0	-	31	0	0	0	0	-	0	60
% Mediums	0.0	1.9	7.0	-	-	2.2	1.5	-	0.0	-	-	0.8	2.0	2.5	0.0	0.0	-	2.4	0.0	0.0	0.0	-	-	0.0	2.2
Articulated Trucks	0	3	0	0	-	3	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	5
% Articulated Trucks	0.0	0.2	0.0	-	-	0.2	0.0	-	0.0	-	-	0.0	0.0	0.2	0.0	0.0	-	0.2	0.0	0.0	0.0	-	-	0.0	0.2
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	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	33.3	-	-	-	-	-	0.0	-	-	-	-	-	80.0	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	66.7	-	-	-	-	-	100.0	-	-	-	-	-	20.0	-	-

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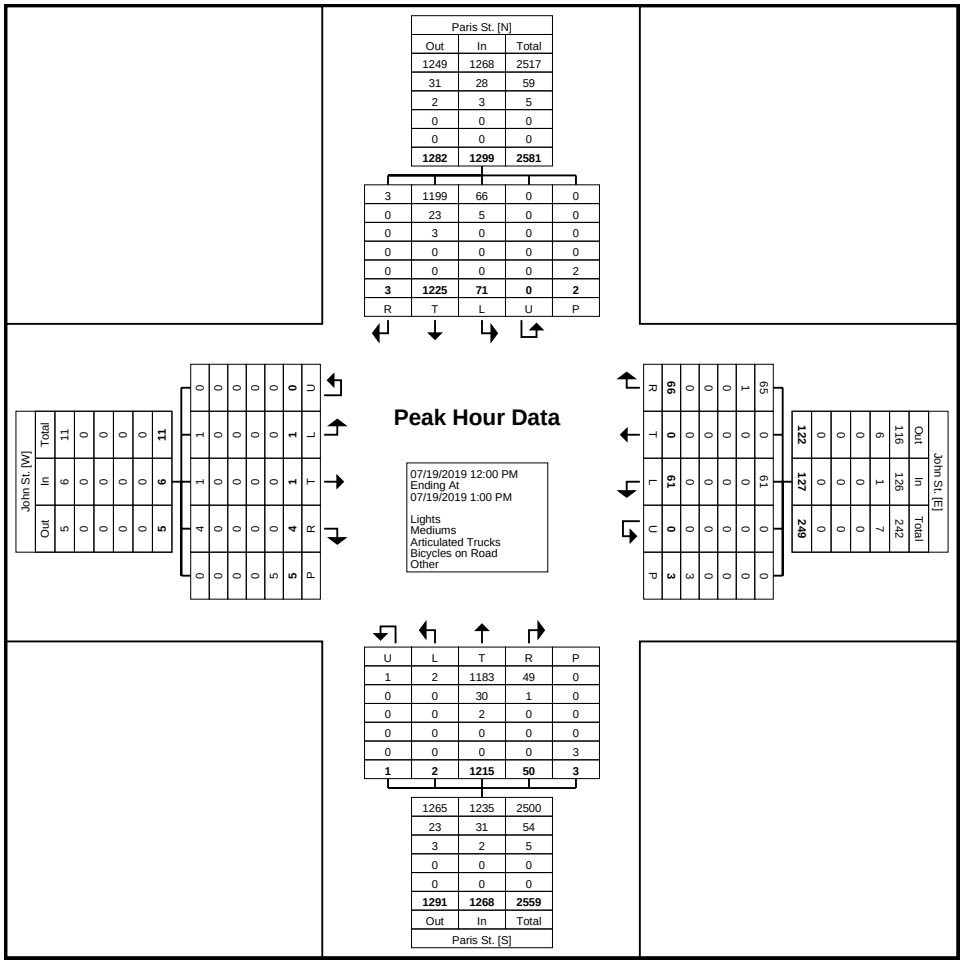
Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019



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

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: John St. @ Paris St.
Site Code: 00829103
Start Date: 07/18/2019

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Morning Peak Diagram

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

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

Municipality: Sudbury
Site #: 2206300002
Intersection: Paris St & McNaughton St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Paris St runs N/S

North Leg Total: 2485
North Entering: 1402
North Peds: 0
Peds Cross: ⋈

Heavys	2	19	0	21
Trucks	0	12	0	12
Cars	4	1365	0	1369
Totals	6	1396	0	

Heavys	29
Trucks	15
Cars	1039
Totals	1083

East Leg Total: 4
East Entering: 4
East Peds: 1
Peds Cross: ⧗

Paris St

Heavys	Trucks	Cars	Totals
2	0	5	7

McNaughton St

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

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	3	3
0	0	0	0
0	0	8	8
0	0	11	

McNaughton St

Cars	Trucks	Heavys	Totals
0	0	0	0

Paris St

Peds Cross: ⧗
West Peds: 2
West Entering: 11
West Leg Total: 18

Cars	1375
Trucks	12
Heavys	19
Totals	1406

Cars	1	1035	0	1036
Trucks	0	15	0	15
Heavys	0	28	0	28
Totals	1	1078	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 1079
South Leg Total: 2485

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Afternoon Peak Diagram

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

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

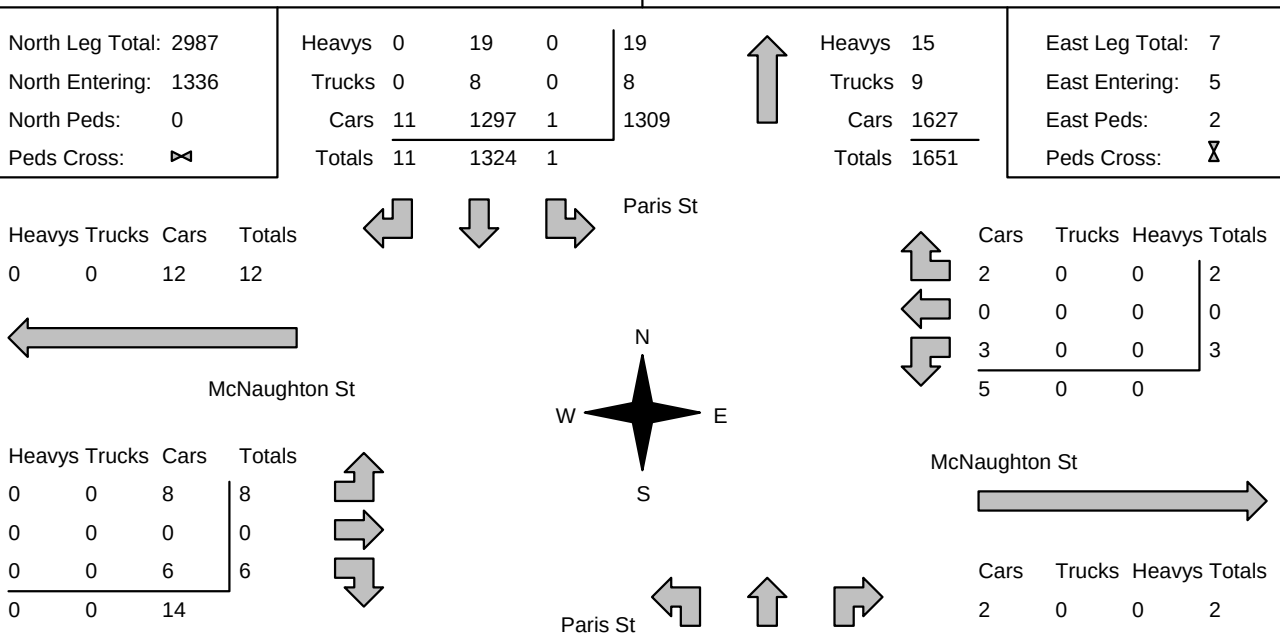
Municipality: Sudbury
Site #: 2206300002
Intersection: Paris St & McNaughton St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Total Count Diagram

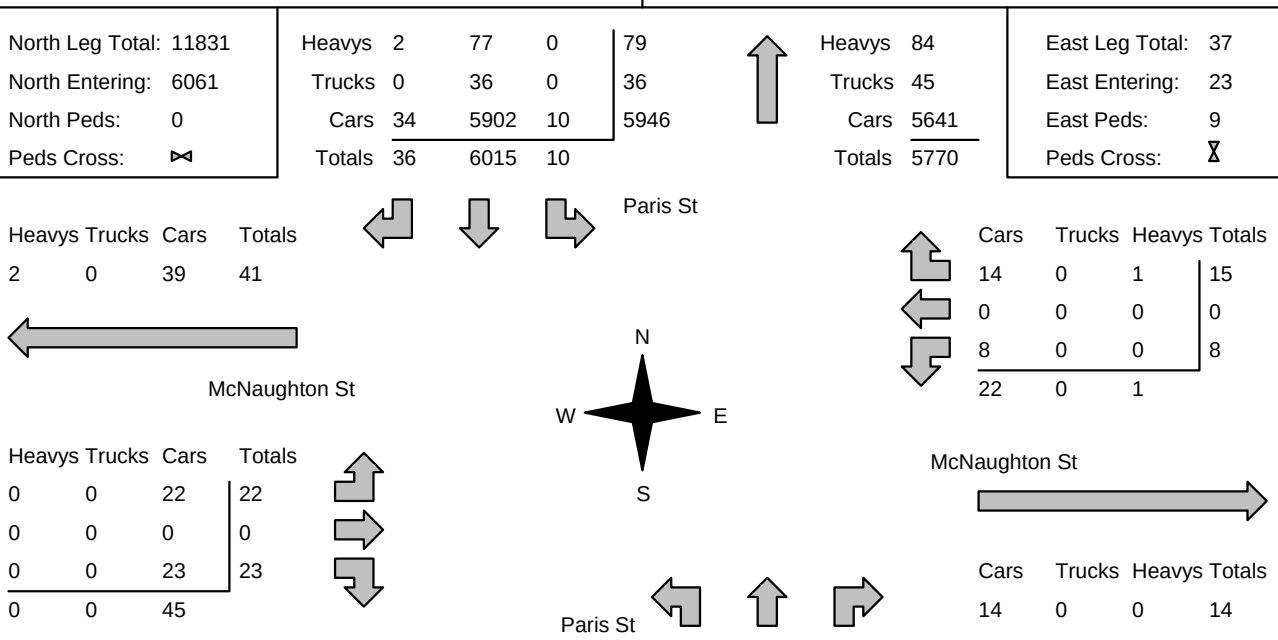
Municipality: Sudbury
Site #: 2206300002
Intersection: Paris St & McNaughton St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Traffic Count Summary

Intersection: Paris St & McNaughton St | **Count Date:** 20-Apr-22 | **Municipality:** Sudbury

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*1204*	*2*	*1207*	*0*
9:00:00	*1*	*1339*	*5*	*1345*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*1*	*1324*	*11*	*1336*	*0*
18:00:00	*3*	*1149*	*8*	*1160*	*0*
19:00:00	*4*	*999*	*10*	*1013*	*0*
Totals:	10	6015	36	6061	0

North/South Total Approaches: 11803

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*808*	*0*	*809*	*0*
9:00:00	*2*	*1055*	*0*	*1057*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*1*	*1641*	*1*	*1643*	*0*
18:00:00	*0*	*1336*	*3*	*1339*	*0*
19:00:00	*1*	*893*	*0*	*894*	*1*
S Totals:	5	5733	4	5742	1

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*3*	*0*	*1*	*4*	*1*
9:00:00	*0*	*0*	*2*	*2*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*3*	*0*	*2*	*5*	*2*
18:00:00	*1*	*0*	*4*	*5*	*3*
19:00:00	*1*	*0*	*6*	*7*	*2*
Totals:	8	0	15	23	9

East/West Total Approaches: 68

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*3*	*0*	*6*	*9*	*1*
9:00:00	*1*	*0*	*6*	*7*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*8*	*0*	*6*	*14*	*3*
18:00:00	*2*	*0*	*2*	*4*	*3*
19:00:00	*8*	*0*	*3*	*11*	*3*
W Totals:	22	0	23	45	11

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*19:00*	*0:00*
Crossing Values:	*0*	*6*	*1*	*0*	*11*	*3*	*10*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300002

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	244	244	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0
7:30:00	1	0	517	273	1	0	0	0	2	2	0	0	0	0	11	7	0	0	0	0
7:45:00	1	0	796	279	1	0	0	0	2	0	0	0	0	0	15	4	0	0	0	0
8:00:00	1	0	1180	384	2	1	0	0	2	0	0	0	0	0	22	7	0	0	0	0
8:15:00	1	0	1516	336	3	1	0	0	7	5	0	0	0	0	28	6	1	1	0	0
8:30:00	1	0	1845	329	5	2	0	0	10	3	0	0	0	0	31	3	2	1	0	0
8:45:00	1	0	2161	316	5	0	0	0	14	4	0	0	0	0	34	3	2	0	0	0
9:00:00	2	1	2485	324	5	0	0	0	19	5	0	0	0	0	39	5	2	0	0	0
9:15:00	2	0	2485	0	5	0	0	0	19	0	0	0	0	0	39	0	2	0	0	0
16:00:00	2	0	2485	0	5	0	0	0	19	0	0	0	0	0	39	0	2	0	0	0
16:15:00	2	0	2791	306	8	3	0	0	22	3	0	0	0	0	47	8	2	0	0	0
16:30:00	3	1	3131	340	10	2	0	0	24	2	0	0	0	0	50	3	2	0	0	0
16:45:00	3	0	3453	322	14	4	0	0	26	2	0	0	0	0	54	4	2	0	0	0
17:00:00	3	0	3782	329	16	2	0	0	27	1	0	0	0	0	58	4	2	0	0	0
17:15:00	3	0	4100	318	19	3	0	0	28	1	0	0	0	0	60	2	2	0	0	0
17:30:00	4	1	4423	323	22	3	0	0	29	1	0	0	0	0	64	4	2	0	0	0
17:45:00	4	0	4653	230	24	2	0	0	30	1	0	0	0	0	66	2	2	0	0	0
18:00:00	6	2	4914	261	24	0	0	0	31	1	0	0	0	0	71	5	2	0	0	0
18:15:00	8	2	5152	238	25	1	0	0	33	2	0	0	0	0	73	2	2	0	0	0
18:30:00	9	1	5417	265	28	3	0	0	35	2	0	0	0	0	75	2	2	0	0	0
18:45:00	9	0	5672	255	31	3	0	0	36	1	0	0	0	0	76	1	2	0	0	0
19:00:00	10	1	5902	230	34	3	0	0	36	0	0	0	0	0	77	1	2	0	0	0
19:15:00	10	0	5902	0	34	0	0	0	36	0	0	0	0	0	77	0	2	0	0	0
19:15:15	10	0	5902	0	34	0	0	0	36	0	0	0	0	0	77	0	2	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300002

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30:00	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00:00	3	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15:00	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30:00	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
8:45:00	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	1	1	2	0
9:00:00	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
9:15:00	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
16:00:00	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
16:15:00	4	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	1	0	2	0
16:30:00	4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0
16:45:00	6	2	0	0	4	1	0	0	0	0	0	0	0	0	0	0	1	0	2	0
17:00:00	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	4	2
17:15:00	6	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	1	0	4	0
17:30:00	6	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	1	0	6	2
17:45:00	6	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	1	0	6	0
18:00:00	7	1	0	0	8	1	0	0	0	0	0	0	0	0	0	0	1	0	7	1
18:15:00	7	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	8	1
18:30:00	8	1	0	0	11	3	0	0	0	0	0	0	0	0	0	0	1	0	8	0
18:45:00	8	0	0	0	12	1	0	0	0	0	0	0	0	0	0	0	1	0	9	1
19:00:00	8	0	0	0	14	2	0	0	0	0	0	0	0	0	0	0	1	0	9	0
19:15:00	8	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	0	9	0
19:15:15	8	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	0	9	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300002

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	104	104	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
7:30:00	1	1	267	163	0	0	0	0	3	2	0	0	0	0	5	4	0	0	0	0
7:45:00	1	0	500	233	0	0	0	0	3	0	0	0	0	0	15	10	0	0	0	0
8:00:00	1	0	778	278	0	0	0	0	7	4	0	0	0	0	23	8	0	0	0	0
8:15:00	2	1	1029	251	0	0	0	0	9	2	0	0	0	0	29	6	0	0	0	0
8:30:00	2	0	1275	246	0	0	0	0	12	3	0	0	0	0	35	6	0	0	0	0
8:45:00	2	0	1535	260	0	0	0	0	18	6	0	0	0	0	43	8	0	0	0	0
9:00:00	3	1	1793	258	0	0	0	0	20	2	0	0	0	0	50	7	0	0	0	0
9:15:00	3	0	1793	0	0	0	0	0	20	0	0	0	0	0	50	0	0	0	0	0
16:00:00	3	0	1793	0	0	0	0	0	20	0	0	0	0	0	50	0	0	0	0	0
16:15:00	3	0	2246	453	0	0	0	0	24	4	0	0	0	0	52	2	0	0	0	0
16:30:00	3	0	2626	380	0	0	0	0	28	4	0	0	0	0	57	5	0	0	0	0
16:45:00	4	1	3048	422	1	1	0	0	29	1	0	0	0	0	62	5	0	0	0	0
17:00:00	4	0	3410	362	1	0	0	0	29	0	0	0	0	0	65	3	0	0	0	0
17:15:00	4	0	3811	401	1	0	0	0	30	1	0	0	0	0	67	2	0	0	0	0
17:30:00	4	0	4164	353	3	2	0	0	32	2	0	0	0	0	69	2	0	0	0	0
17:45:00	4	0	4461	297	4	1	0	0	35	3	0	0	0	0	72	3	0	0	0	0
18:00:00	4	0	4729	268	4	0	0	0	37	2	0	0	0	0	74	2	0	0	0	0
18:15:00	4	0	4946	217	4	0	0	0	39	2	0	0	0	0	76	2	0	0	0	0
18:30:00	4	0	5178	232	4	0	0	0	40	1	0	0	0	0	79	3	0	0	0	0
18:45:00	4	0	5399	221	4	0	0	0	42	2	0	0	0	0	82	3	0	0	1	1
19:00:00	5	1	5605	206	4	0	0	0	45	3	0	0	0	0	83	1	0	0	1	0
19:15:00	5	0	5605	0	4	0	0	0	45	0	0	0	0	0	83	0	0	0	1	0
19:15:15	5	0	5605	0	4	0	0	0	45	0	0	0	0	0	83	0	0	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300002

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	3	2	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15:00	3	0	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1
8:30:00	4	1	0	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45:00	4	0	0	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00:00	4	0	0	0	12	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:15:00	4	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00:00	4	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15:00	4	0	0	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	3	1
16:30:00	6	2	0	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
16:45:00	10	4	0	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0
17:00:00	12	2	0	0	18	1	0	0	0	0	0	0	0	0	0	0	0	0	5	2
17:15:00	12	0	0	0	19	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
17:30:00	13	1	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1
17:45:00	14	1	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1
18:00:00	14	0	0	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	8	1
18:15:00	15	1	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
18:30:00	16	1	0	0	21	1	0	0	0	0	0	0	0	0	0	0	0	0	9	1
18:45:00	19	3	0	0	23	2	0	0	0	0	0	0	0	0	0	0	0	0	9	0
19:00:00	22	3	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2
19:15:00	22	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
19:15:15	22	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Morning Peak Diagram

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

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

Municipality: Sudbury
Site #: 2206300003
Intersection: Paris St & Facer St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

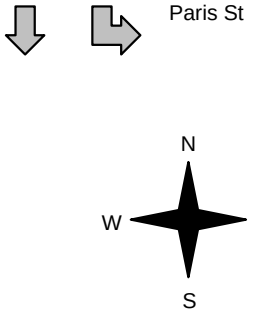
Major Road: Paris St runs N/S

North Leg Total: 2477
North Entering: 1408
North Peds: 1
Peds Cross: ⋈

Heavys	18	1	19
Trucks	12	0	12
Cars	1377	0	1377
Totals	1407	1	

Heavys	28
Trucks	15
Cars	1026
Totals	1069

East Leg Total: 4
East Entering: 2
East Peds: 0
Peds Cross: ⋈



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

Facer St

	Cars	Trucks	Heavys	Totals
	1	0	1	2

Paris St

Cars	1379		
Trucks	12		
Heavys	18		
Totals	1409		

Cars	1026	1	1027
Trucks	15	0	15
Heavys	28	0	28
Totals	1069	1	

Peds Cross: ⋈
South Peds: 0
South Entering: 1070
South Leg Total: 2479

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Afternoon Peak Diagram

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

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

Municipality: Sudbury
Site #: 2206300003
Intersection: Paris St & Facer St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Paris St runs N/S

North Leg Total: 2963
North Entering: 1328
North Peds: 0
Peds Cross: ⋈

Heavys	19	0	19
Trucks	8	0	8
Cars	1301	0	1301
Totals	1328	0	

Heavys	15
Trucks	9
Cars	1611
Totals	1635

East Leg Total: 7
East Entering: 2
East Peds: 1
Peds Cross: ⋈

Paris St

Cars	Trucks	Heavys	Totals
1	0	0	1
1	0	0	1
2	0	0	

N
W E
S

Facer St

Cars	Trucks	Heavys	Totals
5	0	0	5

Paris St

Cars	1302
Trucks	8
Heavys	19
Totals	1329

Cars	1610	5	1615
Trucks	9	0	9
Heavys	15	0	15
Totals	1634	5	

Peds Cross: ⋈
South Peds: 0
South Entering: 1639
South Leg Total: 2968

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Total Count Diagram

Municipality: Sudbury
Site #: 2206300003
Intersection: Paris St & Facer St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Paris St runs N/S

North Leg Total: 11753
North Entering: 6041
North Peds: 1
Peds Cross: ⋈

Heavys	75	1	76
Trucks	38	0	38
Cars	5926	1	5927
Totals	6039	2	

Heavys	83
Trucks	47
Cars	5582
Totals	5712

East Leg Total: 31
East Entering: 11
East Peds: 9
Peds Cross: ⋈

Paris St

	Cars	Trucks	Heavys	Totals
	4	0	0	4
	7	0	0	7
	11	0	0	

N
W E
S

Facer St

	Cars	Trucks	Heavys	Totals
	19	0	1	20

Paris St

Cars	5933		
Trucks	38		
Heavys	75		
Totals	6046		

Cars	5578	18	5596
Trucks	47	0	47
Heavys	83	0	83
Totals	5708	18	

Peds Cross: ⋈
South Peds: 0
South Entering: 5726
South Leg Total: 11772

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Traffic Count Summary

Intersection:	Count Date:	Municipality:
Paris St & Facer St	20-Apr-22	Sudbury

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*1215*	*0*	*1215*	*0*
9:00:00	*2*	*1341*	*0*	*1343*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1328*	*0*	*1328*	*0*
18:00:00	*0*	*1148*	*0*	*1148*	*0*
19:00:00	*0*	*1007*	*0*	*1007*	*0*
Totals:	2	6039	0	6041	1

North/South Total Approaches: 11767

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*807*	*0*	*807*	*0*
9:00:00	*0*	*1047*	*1*	*1048*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1634*	*5*	*1639*	*0*
18:00:00	*0*	*1331*	*5*	*1336*	*0*
19:00:00	*0*	*889*	*7*	*896*	*0*
S Totals:	0	5708	18	5726	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*0*	*0*	*1*	*2*
9:00:00	*3*	*0*	*0*	*3*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*1*	*0*	*1*	*2*	*1*
18:00:00	*0*	*0*	*1*	*1*	*3*
19:00:00	*2*	*0*	*2*	*4*	*3*
Totals:	7	0	4	11	9

East/West Total Approaches: 11

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
19:00:00	*0*	*0*	*0*	*0*	*0*
W Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*19:00*	*0:00*
Crossing Values:	*0*	*1*	*4*	*0*	*1*	*0*	*2*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300003

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	244	244	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0
7:30:00	0	0	519	275	0	0	0	0	3	3	0	0	0	0	11	7	0	0	0	0
7:45:00	0	0	797	278	0	0	0	0	3	0	0	0	0	0	15	4	0	0	0	0
8:00:00	0	0	1190	393	0	0	0	0	3	0	0	0	0	0	22	7	0	0	0	0
8:15:00	0	0	1529	339	0	0	0	0	8	5	0	0	0	0	28	6	0	0	1	1
8:30:00	0	0	1860	331	0	0	0	0	11	3	0	0	1	1	30	2	0	0	1	0
8:45:00	0	0	2174	314	0	0	0	0	15	4	0	0	1	0	33	3	0	0	1	0
9:00:00	1	1	2499	325	0	0	0	0	20	5	0	0	1	0	37	4	0	0	1	0
9:15:00	1	0	2499	0	0	0	0	0	20	0	0	0	1	0	37	0	0	0	1	0
16:00:00	1	0	2499	0	0	0	0	0	20	0	0	0	1	0	37	0	0	0	1	0
16:15:00	1	0	2807	308	0	0	0	0	23	3	0	0	1	0	45	8	0	0	1	0
16:30:00	1	0	3147	340	0	0	0	0	25	2	0	0	1	0	48	3	0	0	1	0
16:45:00	1	0	3473	326	0	0	0	0	27	2	0	0	1	0	52	4	0	0	1	0
17:00:00	1	0	3800	327	0	0	0	0	28	1	0	0	1	0	56	4	0	0	1	0
17:15:00	1	0	4118	318	0	0	0	0	29	1	0	0	1	0	58	2	0	0	1	0
17:30:00	1	0	4439	321	0	0	0	0	30	1	0	0	1	0	62	4	0	0	1	0
17:45:00	1	0	4672	233	0	0	0	0	31	1	0	0	1	0	64	2	0	0	1	0
18:00:00	1	0	4930	258	0	0	0	0	33	2	0	0	1	0	69	5	0	0	1	0
18:15:00	1	0	5168	238	0	0	0	0	35	2	0	0	1	0	71	2	0	0	1	0
18:30:00	1	0	5437	269	0	0	0	0	37	2	0	0	1	0	73	2	0	0	1	0
18:45:00	1	0	5695	258	0	0	0	0	38	1	0	0	1	0	74	1	0	0	1	0
19:00:00	1	0	5926	231	0	0	0	0	38	0	0	0	1	0	75	1	0	0	1	0
19:15:00	1	0	5926	0	0	0	0	0	38	0	0	0	1	0	75	0	0	0	1	0
19:15:15	1	0	5926	0	0	0	0	0	38	0	0	0	1	0	75	0	0	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300003

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:45:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:30:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:15:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30:00	5	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:45:00	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:00:00	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
17:15:00	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
17:30:00	5	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5	2
17:45:00	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
18:00:00	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1
18:15:00	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2
18:30:00	5	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
18:45:00	7	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	1
19:00:00	7	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	9	0
19:15:00	7	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
19:15:15	7	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300003

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	102	102	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
7:30:00	0	0	266	164	0	0	0	0	4	3	0	0	0	0	5	4	0	0	0	0
7:45:00	0	0	500	234	0	0	0	0	4	0	0	0	0	0	15	10	0	0	0	0
8:00:00	0	0	776	276	0	0	0	0	8	4	0	0	0	0	23	8	0	0	0	0
8:15:00	0	0	1027	251	0	0	0	0	10	2	0	0	0	0	29	6	0	0	0	0
8:30:00	0	0	1267	240	1	1	0	0	13	3	0	0	0	0	35	6	0	0	0	0
8:45:00	0	0	1526	259	1	0	0	0	19	6	0	0	0	0	43	8	0	0	0	0
9:00:00	0	0	1783	257	1	0	0	0	21	2	0	0	0	0	50	7	0	0	0	0
9:15:00	0	0	1783	0	1	0	0	0	21	0	0	0	0	0	50	0	0	0	0	0
16:00:00	0	0	1783	0	1	0	0	0	21	0	0	0	0	0	50	0	0	0	0	0
16:15:00	0	0	2239	456	1	0	0	0	25	4	0	0	0	0	52	2	0	0	0	0
16:30:00	0	0	2614	375	2	1	0	0	28	3	0	0	0	0	57	5	0	0	0	0
16:45:00	0	0	3035	421	5	3	0	0	29	1	0	0	0	0	62	5	0	0	0	0
17:00:00	0	0	3393	358	6	1	0	0	30	1	0	0	0	0	65	3	0	0	0	0
17:15:00	0	0	3791	398	7	1	0	0	31	1	0	0	0	0	67	2	0	0	0	0
17:30:00	0	0	4145	354	8	1	0	0	33	2	0	0	0	0	69	2	0	0	0	0
17:45:00	0	0	4441	296	10	2	0	0	36	3	0	0	0	0	72	3	0	0	0	0
18:00:00	0	0	4707	266	11	1	0	0	38	2	0	0	0	0	74	2	0	0	0	0
18:15:00	0	0	4923	216	12	1	0	0	40	2	0	0	0	0	76	2	0	0	0	0
18:30:00	0	0	5152	229	13	1	0	0	41	1	0	0	0	0	79	3	0	0	0	0
18:45:00	0	0	5373	221	15	2	0	0	44	3	0	0	0	0	82	3	0	0	0	0
19:00:00	0	0	5578	205	18	3	0	0	47	3	0	0	0	0	83	1	0	0	0	0
19:15:00	0	0	5578	0	18	0	0	0	47	0	0	0	0	0	83	0	0	0	0	0
19:15:15	0	0	5578	0	18	0	0	0	47	0	0	0	0	0	83	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300003

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

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Morning Peak Diagram

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

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

Municipality: Sudbury
Site #: 2206300005
Intersection: Facer St & Bell Park Rd
TFR File #: 1
Count date: 20-Apr-22

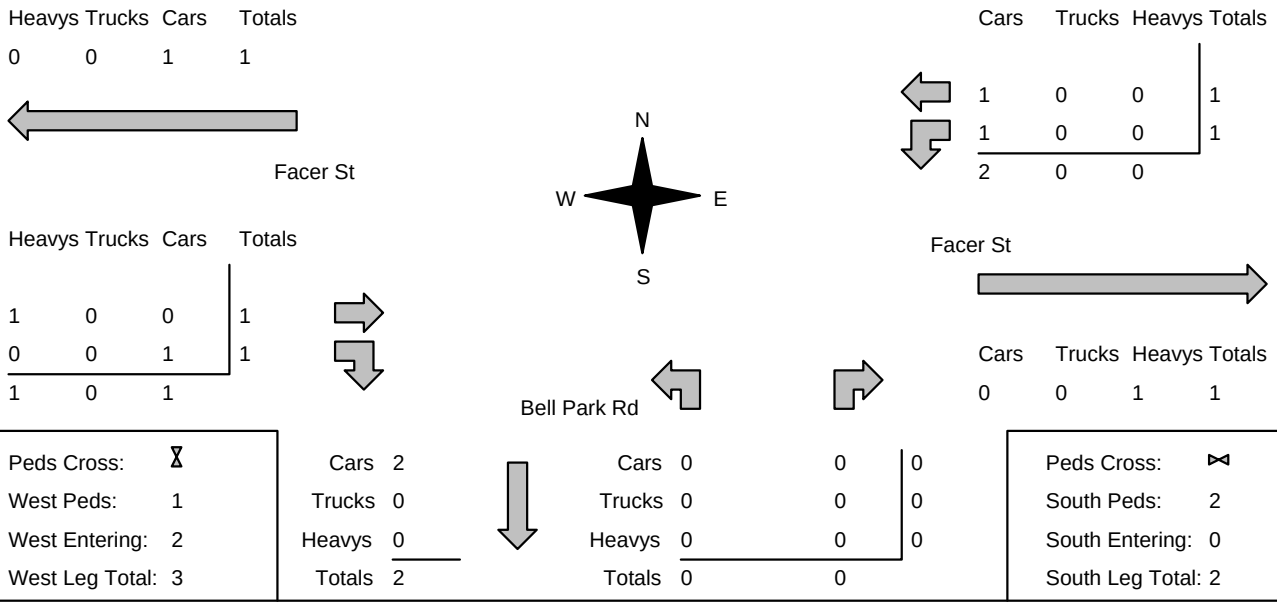
Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Facer St runs W/E

East Leg Total: 3
East Entering: 2
East Peds: 2
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 1
West Entering: 2
West Leg Total: 3

Cars 2
Trucks 0
Heavys 0
Totals 2

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

Peds Cross: ⋈
South Peds: 2
South Entering: 0
South Leg Total: 2

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Afternoon Peak Diagram

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

One Hour Peak
From: 16:15:00
To: 17:15:00

Municipality: Sudbury
Site #: 2206300005
Intersection: Facer St & Bell Park Rd
TFR File #: 1
Count date: 20-Apr-22

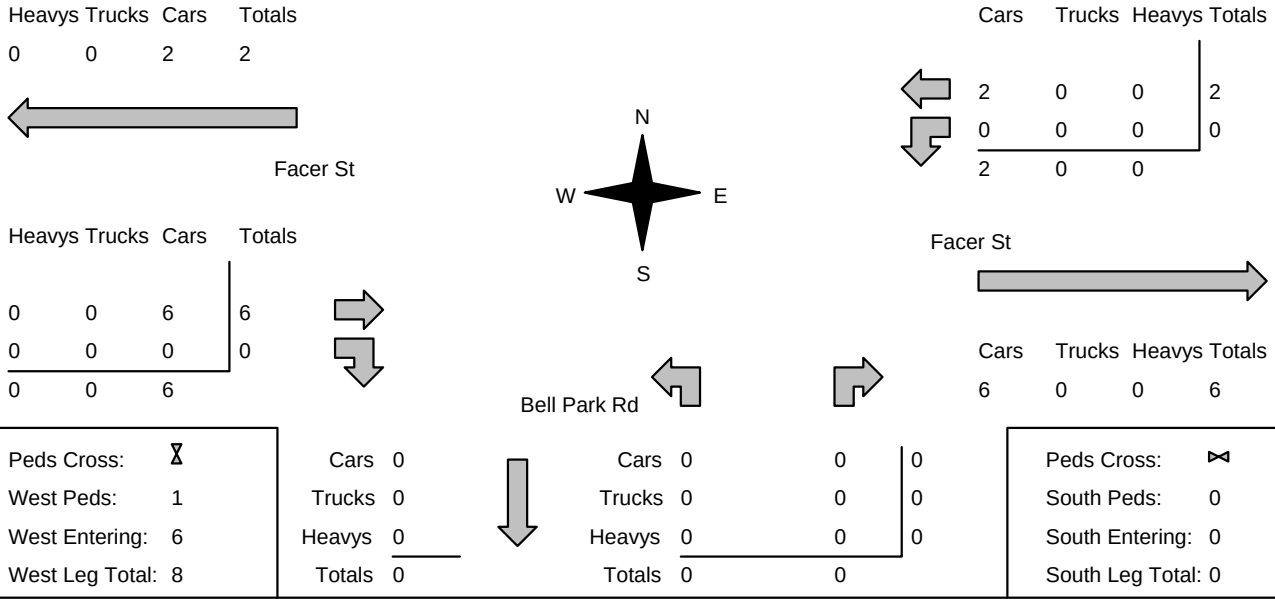
Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Facer St runs W/E

East Leg Total: 8
East Entering: 2
East Peds: 2
Peds Cross: ⧗



Peds Cross: ⧗
West Peds: 1
West Entering: 6
West Leg Total: 8

Cars 0
Trucks 0
Heavys 0
Totals 0

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

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

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Total Count Diagram

Municipality: Sudbury
Site #: 2206300005
Intersection: Facer St & Bell Park Rd
TFR File #: 1
Count date: 20-Apr-22

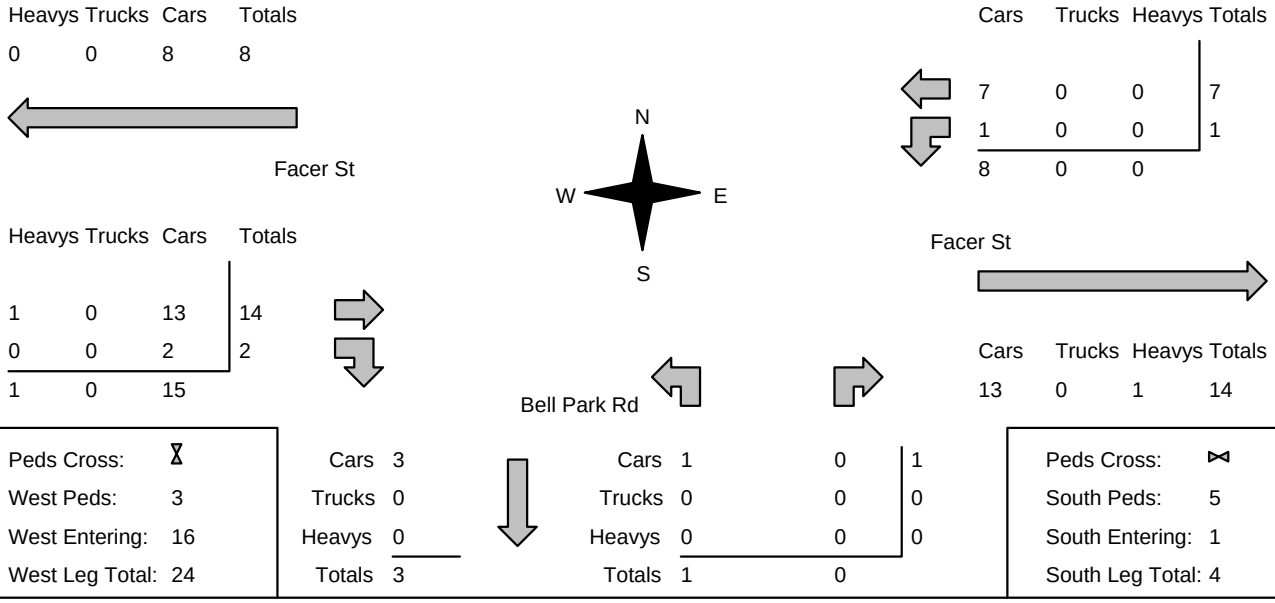
Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Facer St runs W/E

East Leg Total: 22
East Entering: 8
East Peds: 6
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 3
West Entering: 16
West Leg Total: 24

Cars 3
Trucks 0
Heavys 0
Totals 3

Cars 1 0 1
Trucks 0 0 0
Heavys 0 0 0
Totals 1 0

Peds Cross: ⋈
South Peds: 5
South Entering: 1
South Leg Total: 4

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Traffic Count Summary

Intersection: Facer St & Bell Park Rd | **Count Date:** 20-Apr-22 | **Municipality:** Sudbury

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
19:00:00	*0*	*0*	*0*	*0*	*0*
Totals:	0	0	0	0	0

North/South Total Approaches: 1

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*2*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
19:00:00	*1*	*0*	*0*	*1*	*3*
S Totals:	1	0	0	1	5

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*1*	*0*	*1*	*0*
9:00:00	*1*	*1*	*0*	*2*	*2*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*2*	*0*	*2*	*2*
18:00:00	*0*	*1*	*0*	*1*	*1*
19:00:00	*0*	*2*	*0*	*2*	*1*
Totals:	1	7	0	8	6

East/West Total Approaches: 24

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*1*	*1*	*2*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*5*	*0*	*5*	*1*
18:00:00	*0*	*4*	*1*	*5*	*0*
19:00:00	*0*	*4*	*0*	*4*	*1*
W Totals:	0	14	2	16	3

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*19:00*	*0:00*
Crossing Values:	*0*	*0*	*3*	*0*	*3*	*1*	*3*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300005

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300005

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
8:45:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:15:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30:00	1	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2
16:45:00	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:00:00	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:15:00	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:30:00	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:45:00	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1
18:00:00	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
18:15:00	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
18:30:00	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
18:45:00	1	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1
19:00:00	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
19:15:00	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
19:15:15	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300005

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
18:30:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
18:45:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2
19:00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
19:15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
19:15:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300005

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0
9:00:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0
9:15:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:00:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:15:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:30:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:45:00	0	0	4	3	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
17:00:00	0	0	5	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1
17:15:00	0	0	6	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
17:30:00	0	0	7	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
17:45:00	0	0	9	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
18:00:00	0	0	9	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0
18:15:00	0	0	10	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
18:30:00	0	0	10	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	1
18:45:00	0	0	11	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
19:00:00	0	0	13	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
19:15:00	0	0	13	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
19:15:15	0	0	13	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021

Turning Movement Data

Start Time	Paris Street Southbound						Westbound Approach Westbound						Paris Street Northbound						Boland Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	4	243	3	0	0	250	0	0	4	0	1	4	5	284	1	0	0	290	3	0	5	0	1	8	552
11:15 AM	1	243	2	0	0	246	6	1	1	0	2	8	1	252	2	0	0	255	5	0	5	0	0	10	519
11:30 AM	1	279	0	0	0	280	2	0	6	0	1	8	2	303	2	0	0	307	2	0	7	0	0	9	604
11:45 AM	7	294	0	0	0	301	1	0	1	0	2	2	1	326	4	0	0	331	5	0	9	0	0	14	648
Hourly Total	13	1059	5	0	0	1077	9	1	12	0	6	22	9	1165	9	0	0	1183	15	0	26	0	1	41	2323
12:00 PM	4	277	2	0	1	283	1	0	0	0	0	1	2	286	3	0	0	291	8	0	5	0	3	13	588
12:15 PM	4	283	0	0	0	287	3	0	1	0	3	4	2	263	3	0	0	268	2	0	3	0	0	5	564
12:30 PM	5	319	1	0	1	325	1	0	0	0	1	1	3	338	4	0	0	345	4	0	9	0	2	13	684
12:45 PM	4	300	2	0	2	306	3	0	4	0	0	7	2	275	4	0	0	281	2	0	6	0	1	8	602
Hourly Total	17	1179	5	0	4	1201	8	0	5	0	4	13	9	1162	14	0	0	1185	16	0	23	0	6	39	2438
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	6	306	0	0	0	312	1	0	0	0	1	1	0	375	4	0	1	379	2	0	10	0	0	12	704
3:15 PM	7	330	1	0	1	338	0	0	0	0	5	0	2	337	3	0	0	342	1	0	7	0	1	8	688
3:30 PM	8	308	4	0	0	320	3	0	1	0	1	4	0	365	1	0	0	366	4	0	8	0	0	12	702
3:45 PM	7	304	1	0	0	312	2	0	1	0	0	3	1	391	2	0	0	394	5	0	8	0	0	13	722
Hourly Total	28	1248	6	0	1	1282	6	0	2	0	7	8	3	1468	10	0	1	1481	12	0	33	0	1	45	2816
4:00 PM	5	333	1	0	0	339	2	1	3	0	0	6	2	448	6	0	0	456	2	0	5	0	1	7	808
4:15 PM	9	330	1	0	0	340	3	0	2	0	0	5	1	375	4	0	0	380	5	0	6	0	1	11	736
4:30 PM	6	319	1	0	2	326	3	1	0	0	2	4	3	363	9	0	0	375	2	0	4	0	2	6	711
4:45 PM	9	300	1	0	0	310	1	0	0	0	1	1	1	313	5	0	0	319	6	0	11	0	2	17	647
Hourly Total	29	1282	4	0	2	1315	9	2	5	0	3	16	7	1499	24	0	0	1530	15	0	26	0	6	41	2902
5:00 PM	9	299	2	0	0	310	2	0	0	0	0	2	1	362	7	0	0	370	5	0	6	0	0	11	693
5:15 PM	5	282	1	0	0	288	2	0	0	0	1	2	0	269	2	0	0	271	3	0	2	0	1	5	566
5:30 PM	11	214	1	0	4	226	3	0	0	0	0	3	3	289	4	0	0	296	3	1	6	0	6	10	535
5:45 PM	8	251	0	0	0	259	0	1	0	0	0	1	0	279	4	0	0	283	6	0	5	0	0	11	554
Hourly Total	33	1046	4	0	4	1083	7	1	0	0	1	8	4	1199	17	0	0	1220	17	1	19	0	7	37	2348
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	79	2	0	0	81	0	0	0	0	0	0	2	45	0	0	0	47	1	0	2	0	0	3	131
6:15 AM	0	93	0	0	0	93	0	0	0	0	1	0	0	77	0	0	0	77	1	0	0	0	0	1	171
6:30 AM	0	183	0	0	0	183	0	0	0	0	2	0	0	106	0	0	0	106	0	0	1	0	0	1	290
6:45 AM	0	232	1	0	0	233	2	0	0	0	2	2	0	118	0	0	0	118	3	0	0	0	0	3	356
Hourly Total	0	587	3	0	0	590	2	0	0	0	5	2	2	346	0	0	0	348	5	0	3	0	0	8	948
7:00 AM	1	276	1	0	0	278	0	0	1	0	1	1	0	135	0	0	0	135	0	0	1	0	1	1	415

7:15 AM	2	239	1	0	0	242	0	0	0	0	0	0	1	143	0	0	0	144	0	0	2	0	0	2	388
7:30 AM	2	316	0	0	0	318	0	0	0	0	1	0	0	234	0	0	0	234	0	0	4	0	0	4	556
7:45 AM	0	338	0	0	0	338	0	0	1	0	0	1	1	216	0	0	0	217	2	0	4	0	0	6	562
Hourly Total	5	1169	2	0	0	1176	0	0	2	0	2	2	2	728	0	0	0	730	2	0	11	0	1	13	1921
8:00 AM	3	273	0	0	0	276	0	0	0	0	0	0	0	207	1	0	0	208	3	0	3	0	0	6	490
8:15 AM	3	295	0	0	1	298	2	0	1	0	1	3	0	217	3	0	0	220	3	0	7	0	3	10	531
8:30 AM	3	278	0	0	1	281	0	0	0	0	0	0	0	224	4	0	0	228	5	0	12	0	1	17	526
8:45 AM	6	260	0	0	0	266	0	0	1	0	1	1	0	230	7	0	0	237	8	0	6	0	0	14	518
Hourly Total	15	1106	0	0	2	1121	2	0	2	0	2	4	0	878	15	0	0	893	19	0	28	0	4	47	2065
9:00 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	140	8676	29	0	13	8845	43	4	28	0	30	75	36	8445	89	0	1	8570	101	1	169	0	26	271	17761
Approach %	1.6	98.1	0.3	0.0	-	-	57.3	5.3	37.3	0.0	-	-	0.4	98.5	1.0	0.0	-	-	37.3	0.4	62.4	0.0	-	-	-
Total %	0.8	48.8	0.2	0.0	-	49.8	0.2	0.0	0.2	0.0	-	0.4	0.2	47.5	0.5	0.0	-	48.3	0.6	0.0	1.0	0.0	-	1.5	-
Lights	140	8489	29	0	-	8658	42	4	28	0	-	74	35	8261	87	0	-	8383	99	1	167	0	-	267	17382
% Lights	100.0	97.8	100.0	-	-	97.9	97.7	100.0	100.0	-	-	98.7	97.2	97.8	97.8	-	-	97.8	98.0	100.0	98.8	-	-	98.5	97.9
Mediums	0	162	0	0	-	162	0	0	0	0	-	0	0	157	1	0	-	158	2	0	2	0	-	4	324
% Mediums	0.0	1.9	0.0	-	-	1.8	0.0	0.0	0.0	-	-	0.0	0.0	1.9	1.1	-	-	1.8	2.0	0.0	1.2	-	-	1.5	1.8
Articulated Trucks	0	25	0	0	-	25	0	0	0	0	-	0	0	26	0	0	-	26	0	0	0	0	-	0	51
% Articulated Trucks	0.0	0.3	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.3
Bicycles on Road	0	0	0	0	-	0	1	0	0	0	-	1	1	1	1	0	-	3	0	0	0	0	-	0	4
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	2.3	0.0	0.0	-	-	1.3	2.8	0.0	1.1	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	13	-	-	-	-	-	0	-	-	-	-	-	6	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	43.3	-	-	-	-	-	0.0	-	-	-	-	-	23.1	-	-
Pedestrians	-	-	-	-	13	-	-	-	-	-	17	-	-	-	-	-	1	-	-	-	-	-	20	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	56.7	-	-	-	-	-	100.0	-	-	-	-	-	76.9	-	-

Traffic and Transportation Engineering Services
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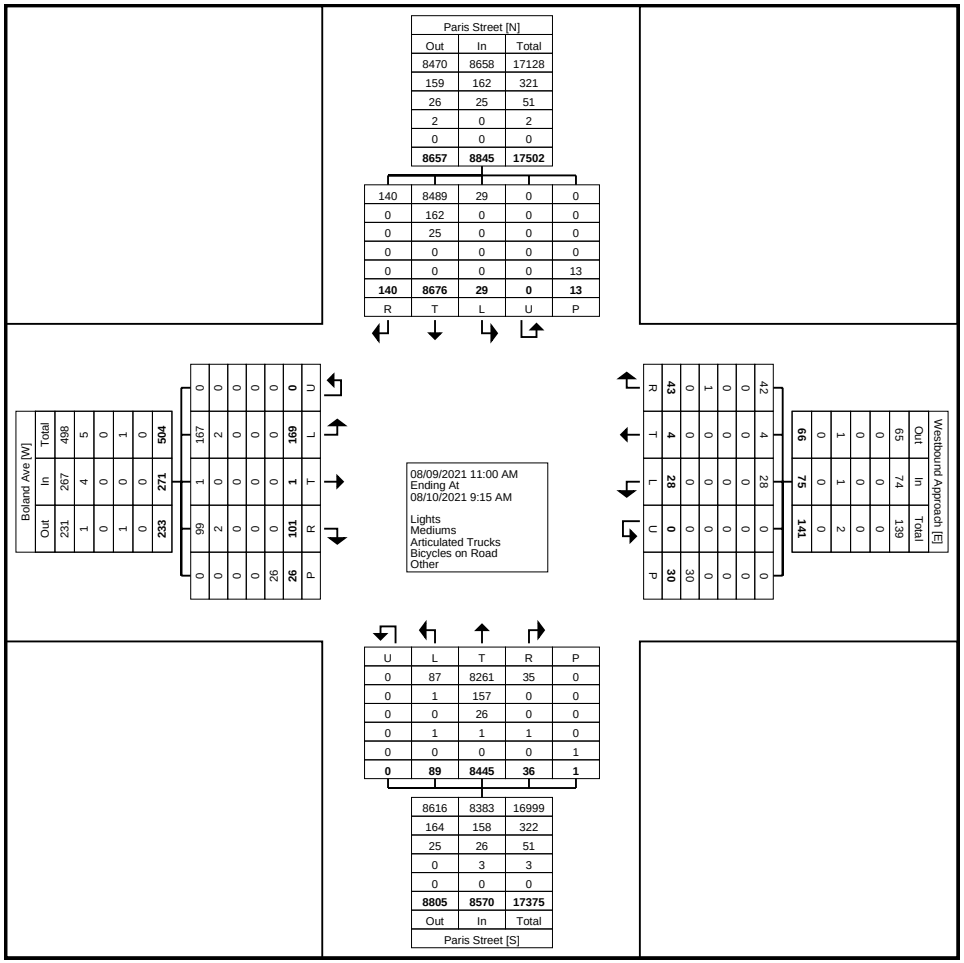
Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021



Turning Movement Data Plot

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Paris Street Southbound						Westbound Approach Westbound						Paris Street Northbound						Boland Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
11:00 AM	4	243	3	0	0	250	0	0	4	0	1	4	5	284	1	0	0	290	3	0	5	0	1	8	552
11:15 AM	1	243	2	0	0	246	6	1	1	0	2	8	1	252	2	0	0	255	5	0	5	0	0	10	519
11:30 AM	1	279	0	0	0	280	2	0	6	0	1	8	2	303	2	0	0	307	2	0	7	0	0	9	604
11:45 AM	7	294	0	0	0	301	1	0	1	0	2	2	1	326	4	0	0	331	5	0	9	0	0	14	648
Total	13	1059	5	0	0	1077	9	1	12	0	6	22	9	1165	9	0	0	1183	15	0	26	0	1	41	2323
Approach %	1.2	98.3	0.5	0.0	-	-	40.9	4.5	54.5	0.0	-	-	0.8	98.5	0.8	0.0	-	-	36.6	0.0	63.4	0.0	-	-	-
Total %	0.6	45.6	0.2	0.0	-	46.4	0.4	0.0	0.5	0.0	-	0.9	0.4	50.2	0.4	0.0	-	50.9	0.6	0.0	1.1	0.0	-	1.8	-
PHF	0.464	0.901	0.417	0.000	-	0.895	0.375	0.250	0.500	0.000	-	0.688	0.450	0.893	0.563	0.000	-	0.894	0.750	0.000	0.722	0.000	-	0.732	0.896
Lights	13	1029	5	0	-	1047	9	1	12	0	-	22	8	1138	9	0	-	1155	15	0	26	0	-	41	2265
% Lights	100.0	97.2	100.0	-	-	97.2	100.0	100.0	100.0	-	-	100.0	88.9	97.7	100.0	-	-	97.6	100.0	-	100.0	-	-	100.0	97.5
Mediums	0	24	0	0	-	24	0	0	0	0	-	0	0	26	0	0	-	26	0	0	0	0	-	0	50
% Mediums	0.0	2.3	0.0	-	-	2.2	0.0	0.0	0.0	-	-	0.0	0.0	2.2	0.0	-	-	2.2	0.0	-	0.0	-	-	0.0	2.2
Articulated Trucks	0	6	0	0	-	6	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	7
% Articulated Trucks	0.0	0.6	0.0	-	-	0.6	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	11.1	0.0	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	66.7	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	33.3	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-

Traffic and Transportation Engineering Services
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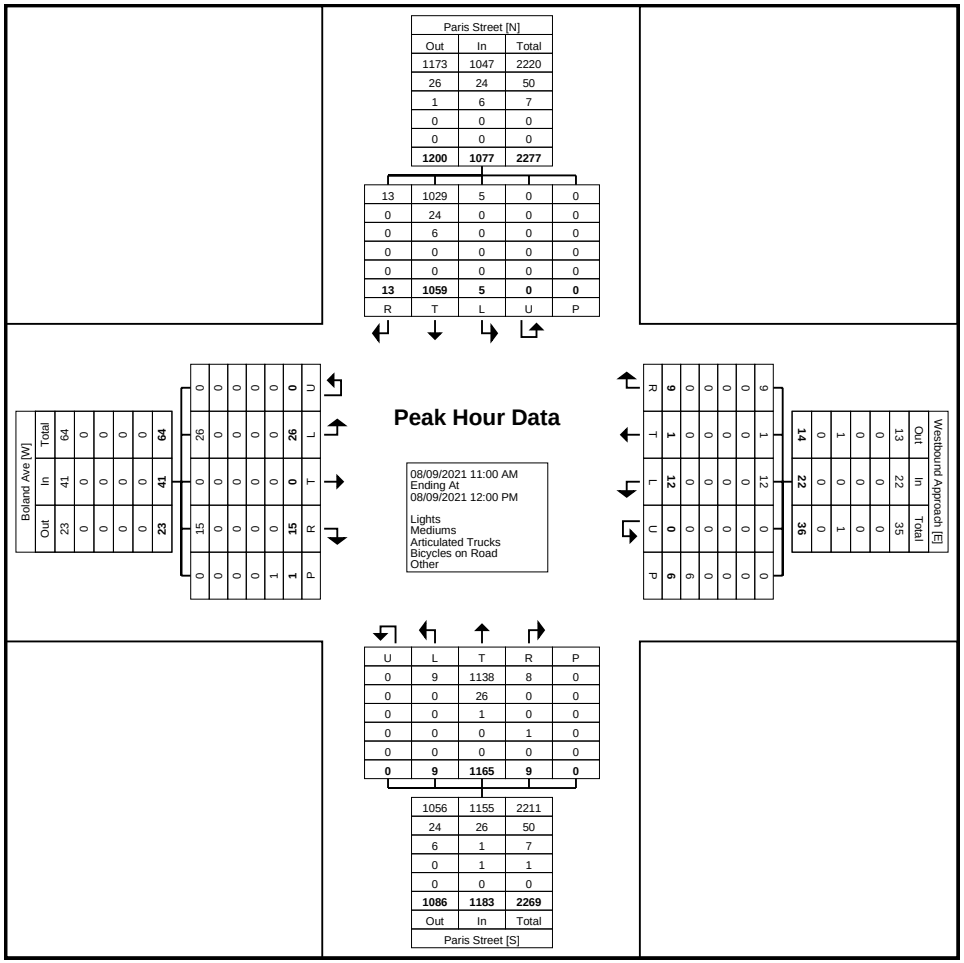
Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021



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

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Paris Street Southbound						Westbound Approach Westbound						Paris Street Northbound						Boland Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
12:00 PM	4	277	2	0	1	283	1	0	0	0	0	1	2	286	3	0	0	291	8	0	5	0	3	13	588
12:15 PM	4	283	0	0	0	287	3	0	1	0	3	4	2	263	3	0	0	268	2	0	3	0	0	5	564
12:30 PM	5	319	1	0	1	325	1	0	0	0	1	1	3	338	4	0	0	345	4	0	9	0	2	13	684
12:45 PM	4	300	2	0	2	306	3	0	4	0	0	7	2	275	4	0	0	281	2	0	6	0	1	8	602
Total	17	1179	5	0	4	1201	8	0	5	0	4	13	9	1162	14	0	0	1185	16	0	23	0	6	39	2438
Approach %	1.4	98.2	0.4	0.0	-	-	61.5	0.0	38.5	0.0	-	-	0.8	98.1	1.2	0.0	-	-	41.0	0.0	59.0	0.0	-	-	-
Total %	0.7	48.4	0.2	0.0	-	49.3	0.3	0.0	0.2	0.0	-	0.5	0.4	47.7	0.6	0.0	-	48.6	0.7	0.0	0.9	0.0	-	1.6	-
PHF	0.850	0.924	0.625	0.000	-	0.924	0.667	0.000	0.313	0.000	-	0.464	0.750	0.859	0.875	0.000	-	0.859	0.500	0.000	0.639	0.000	-	0.750	0.891
Lights	17	1154	5	0	-	1176	8	0	5	0	-	13	9	1134	14	0	-	1157	16	0	23	0	-	39	2385
% Lights	100.0	97.9	100.0	-	-	97.9	100.0	-	100.0	-	-	100.0	100.0	97.6	100.0	-	-	97.6	100.0	-	100.0	-	-	100.0	97.8
Mediums	0	21	0	0	-	21	0	0	0	0	-	0	0	27	0	0	-	27	0	0	0	0	-	0	48
% Mediums	0.0	1.8	0.0	-	-	1.7	0.0	-	0.0	-	-	0.0	0.0	2.3	0.0	-	-	2.3	0.0	-	0.0	-	-	0.0	2.0
Articulated Trucks	0	4	0	0	-	4	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	5
% Articulated Trucks	0.0	0.3	0.0	-	-	0.3	0.0	-	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.2
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
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	75.0	-	-	-	-	-	-	-	-	-	-	-	16.7	-	-
Pedestrians	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	83.3	-	-

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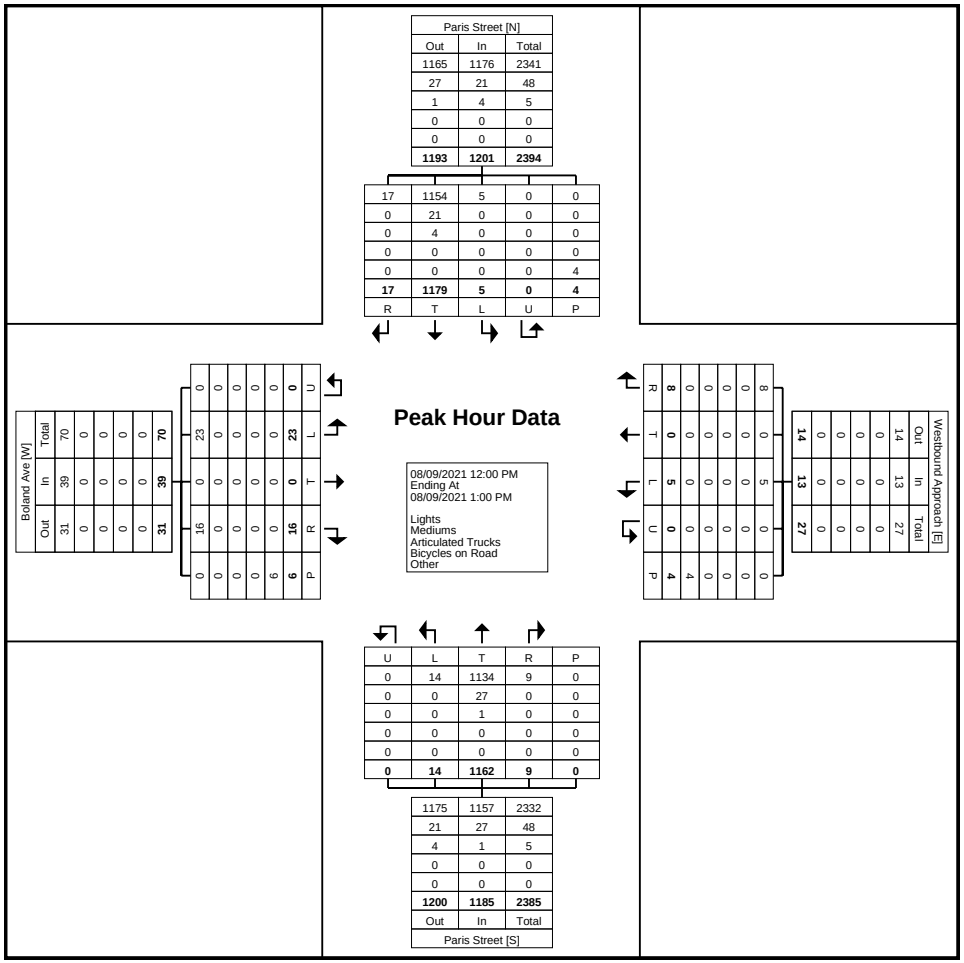
Start Date: 08/09/2021



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

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1800 Frobisher Street
PO Box 5000, STN A
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705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021

Turning Movement Peak Hour Data (3:45 PM)

Start Time	Paris Street Southbound						Westbound Approach Westbound						Paris Street Northbound						Boland Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:45 PM	7	304	1	0	0	312	2	0	1	0	0	3	1	391	2	0	0	394	5	0	8	0	0	13	722
4:00 PM	5	333	1	0	0	339	2	1	3	0	0	6	2	448	6	0	0	456	2	0	5	0	1	7	808
4:15 PM	9	330	1	0	0	340	3	0	2	0	0	5	1	375	4	0	0	380	5	0	6	0	1	11	736
4:30 PM	6	319	1	0	2	326	3	1	0	0	2	4	3	363	9	0	0	375	2	0	4	0	2	6	711
Total	27	1286	4	0	2	1317	10	2	6	0	2	18	7	1577	21	0	0	1605	14	0	23	0	4	37	2977
Approach %	2.1	97.6	0.3	0.0	-	-	55.6	11.1	33.3	0.0	-	-	0.4	98.3	1.3	0.0	-	-	37.8	0.0	62.2	0.0	-	-	-
Total %	0.9	43.2	0.1	0.0	-	44.2	0.3	0.1	0.2	0.0	-	0.6	0.2	53.0	0.7	0.0	-	53.9	0.5	0.0	0.8	0.0	-	1.2	-
PHF	0.750	0.965	1.000	0.000	-	0.968	0.833	0.500	0.500	0.000	-	0.750	0.583	0.880	0.583	0.000	-	0.880	0.700	0.000	0.719	0.000	-	0.712	0.921
Lights	27	1264	4	0	-	1295	10	2	6	0	-	18	7	1551	21	0	-	1579	12	0	22	0	-	34	2926
% Lights	100.0	98.3	100.0	-	-	98.3	100.0	100.0	100.0	-	-	100.0	100.0	98.4	100.0	-	-	98.4	85.7	-	95.7	-	-	91.9	98.3
Mediums	0	19	0	0	-	19	0	0	0	0	-	0	0	23	0	0	-	23	2	0	1	0	-	3	45
% Mediums	0.0	1.5	0.0	-	-	1.4	0.0	0.0	0.0	-	-	0.0	0.0	1.5	0.0	-	-	1.4	14.3	-	4.3	-	-	8.1	1.5
Articulated Trucks	0	3	0	0	-	3	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	6
% Articulated Trucks	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	-	0.0	-	-	0.0	0.2
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
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	50.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	50.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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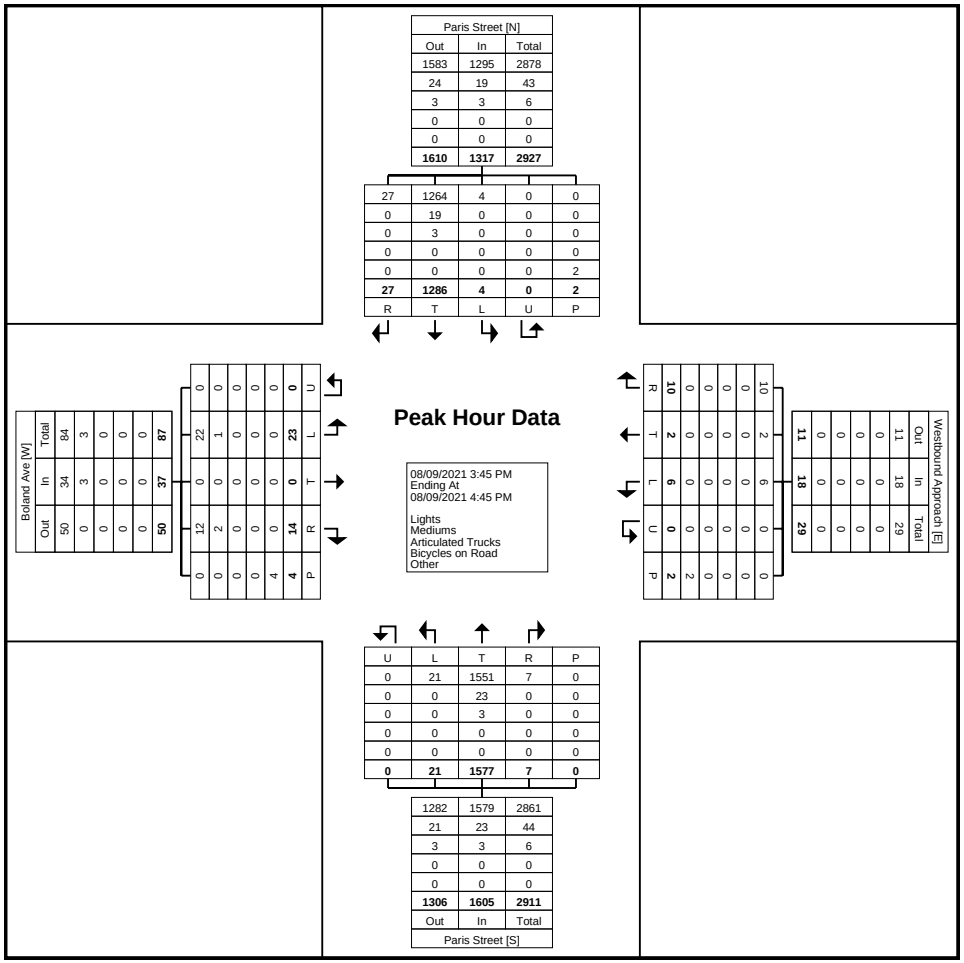
Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021



Turning Movement Peak Hour Data Plot (3:45 PM)

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Paris Street Southbound						Westbound Approach Westbound						Paris Street Northbound						Boland Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:30 AM	2	316	0	0	0	318	0	0	0	0	1	0	0	234	0	0	0	234	0	0	4	0	0	4	556
7:45 AM	0	338	0	0	0	338	0	0	1	0	0	1	1	216	0	0	0	217	2	0	4	0	0	6	562
8:00 AM	3	273	0	0	0	276	0	0	0	0	0	0	0	207	1	0	0	208	3	0	3	0	0	6	490
8:15 AM	3	295	0	0	1	298	2	0	1	0	1	3	0	217	3	0	0	220	3	0	7	0	3	10	531
Total	8	1222	0	0	1	1230	2	0	2	0	2	4	1	874	4	0	0	879	8	0	18	0	3	26	2139
Approach %	0.7	99.3	0.0	0.0	-	-	50.0	0.0	50.0	0.0	-	-	0.1	99.4	0.5	0.0	-	-	30.8	0.0	69.2	0.0	-	-	-
Total %	0.4	57.1	0.0	0.0	-	57.5	0.1	0.0	0.1	0.0	-	0.2	0.0	40.9	0.2	0.0	-	41.1	0.4	0.0	0.8	0.0	-	1.2	-
PHF	0.667	0.904	0.000	0.000	-	0.910	0.250	0.000	0.500	0.000	-	0.333	0.250	0.934	0.333	0.000	-	0.939	0.667	0.000	0.643	0.000	-	0.650	0.952
Lights	8	1191	0	0	-	1199	2	0	2	0	-	4	1	844	4	0	-	849	8	0	18	0	-	26	2078
% Lights	100.0	97.5	-	-	-	97.5	100.0	-	100.0	-	-	100.0	100.0	96.6	100.0	-	-	96.6	100.0	-	100.0	-	-	100.0	97.1
Mediums	0	26	0	0	-	26	0	0	0	0	-	0	0	23	0	0	-	23	0	0	0	0	-	0	49
% Mediums	0.0	2.1	-	-	-	2.1	0.0	-	0.0	-	-	0.0	0.0	2.6	0.0	-	-	2.6	0.0	-	0.0	-	-	0.0	2.3
Articulated Trucks	0	5	0	0	-	5	0	0	0	0	-	0	0	7	0	0	-	7	0	0	0	0	-	0	12
% Articulated Trucks	0.0	0.4	-	-	-	0.4	0.0	-	0.0	-	-	0.0	0.0	0.8	0.0	-	-	0.8	0.0	-	0.0	-	-	0.0	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
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	33.3	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	66.7	-	-

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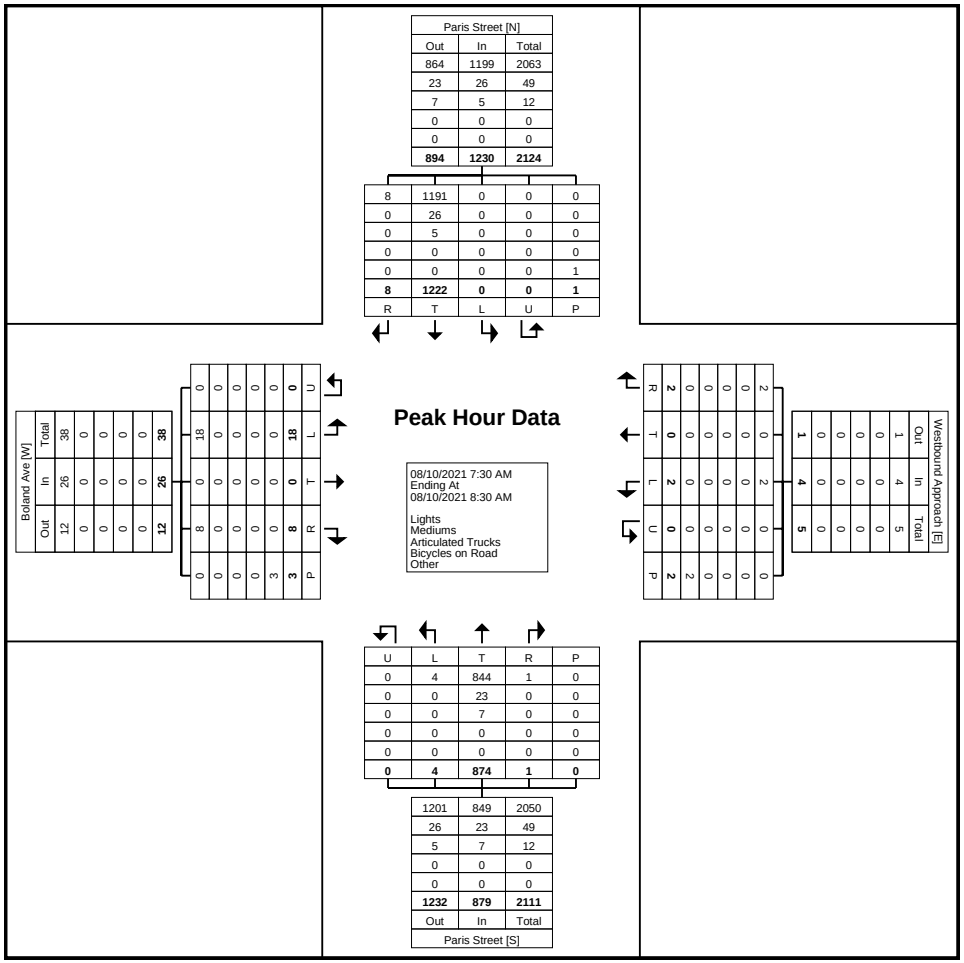
Count Name: Paris Street @ Boland Avenue
Site Code:
Start Date: 08/09/2021



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

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris @ York St.
Site Code: 00831103
Start Date: 07/23/2019

Turning Movement Data

Start Time	Paris St. Southbound					Paris St. Northbound					York St. Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
3:00 PM	40	280	0	0	320	378	16	0	6	394	24	50	0	0	74	788
3:15 PM	38	327	0	5	365	325	28	0	6	353	21	23	0	0	44	762
3:30 PM	37	309	0	3	346	392	21	0	8	413	31	38	0	2	69	828
3:45 PM	27	330	0	4	357	352	34	0	5	386	18	35	0	0	53	796
Hourly Total	142	1246	0	12	1388	1447	99	0	25	1546	94	146	0	2	240	3174
4:00 PM	50	332	0	2	382	443	42	0	6	485	21	53	0	2	74	941
4:15 PM	50	327	0	10	377	403	34	0	9	437	22	36	0	0	58	872
4:30 PM	59	355	0	7	414	419	32	0	2	451	28	57	0	1	85	950
4:45 PM	47	331	0	3	378	332	35	0	5	367	17	39	0	1	56	801
Hourly Total	206	1345	0	22	1551	1597	143	0	22	1740	88	185	0	4	273	3564
5:00 PM	41	311	0	0	352	358	24	0	6	382	16	37	0	2	53	787
5:15 PM	31	294	0	1	325	301	27	2	11	330	14	23	0	2	37	692
5:30 PM	33	282	0	1	315	321	21	0	3	342	15	32	0	0	47	704
5:45 PM	21	264	0	0	285	230	13	0	17	243	20	25	0	2	45	573
Hourly Total	126	1151	0	2	1277	1210	85	2	37	1297	65	117	0	6	182	2756
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	20	169	0	1	189	140	8	0	2	148	9	22	0	0	31	368
6:45 AM	26	207	0	0	233	119	15	0	4	134	22	14	0	1	36	403
Hourly Total	46	376	0	1	422	259	23	0	6	282	31	36	0	1	67	771
7:00 AM	26	256	0	0	282	148	14	0	0	162	29	15	0	0	44	488
7:15 AM	33	269	0	1	302	187	10	0	5	197	32	20	0	3	52	551
7:30 AM	47	268	0	0	315	244	11	0	3	255	22	32	0	0	54	624
7:45 AM	59	349	0	0	408	252	14	0	6	266	41	36	0	1	77	751
Hourly Total	165	1142	0	1	1307	831	49	0	14	880	124	103	0	4	227	2414
8:00 AM	40	270	0	0	310	245	10	0	6	255	43	47	0	3	90	655
8:15 AM	32	353	0	0	385	256	18	0	2	274	39	37	0	2	76	735
8:30 AM	22	282	0	1	304	254	17	0	1	271	41	36	0	2	77	652
8:45 AM	33	349	0	1	382	246	16	0	5	262	34	32	0	0	66	710
Hourly Total	127	1254	0	2	1381	1001	61	0	14	1062	157	152	0	7	309	2752
9:00 AM	31	245	0	0	276	229	13	0	4	242	27	24	0	0	51	569
9:15 AM	28	210	0	0	238	236	24	0	3	260	18	25	0	0	43	541
9:30 AM	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	3
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	59	457	0	0	516	466	37	0	7	503	45	49	0	0	94	1113

11:30 AM	24	294	0	0	318	298	13	0	10	311	30	30	0	6	60	689
11:45 AM	17	282	0	3	299	271	17	0	15	288	26	33	0	3	59	646
Hourly Total	41	576	0	3	617	569	30	0	25	599	56	63	0	9	119	1335
12:00 PM	35	239	1	1	275	293	13	0	4	306	20	18	0	4	38	619
12:15 PM	30	305	0	8	335	310	15	0	6	325	21	23	0	6	44	704
12:30 PM	31	265	0	3	296	296	21	0	1	317	13	23	0	0	36	649
12:45 PM	35	291	0	0	326	319	25	0	7	344	23	31	0	0	54	724
Hourly Total	131	1100	1	12	1232	1218	74	0	18	1292	77	95	0	10	172	2696
1:00 PM	37	302	0	4	339	301	16	0	6	317	31	24	0	2	55	711
1:15 PM	28	307	0	0	335	270	20	1	9	291	12	23	0	0	35	661
1:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1108	9257	1	59	10366	9169	637	3	183	9809	780	993	0	45	1773	21948
Approach %	10.7	89.3	0.0	-	-	93.5	6.5	0.0	-	-	44.0	56.0	0.0	-	-	-
Total %	5.0	42.2	0.0	-	47.2	41.8	2.9	0.0	-	44.7	3.6	4.5	0.0	-	8.1	-
Lights	1090	9090	1	-	10181	8982	615	3	-	9600	763	980	0	-	1743	21524
% Lights	98.4	98.2	100.0	-	98.2	98.0	96.5	100.0	-	97.9	97.8	98.7	-	-	98.3	98.1
Mediums	17	145	0	-	162	159	21	0	-	180	17	10	0	-	27	369
% Mediums	1.5	1.6	0.0	-	1.6	1.7	3.3	0.0	-	1.8	2.2	1.0	-	-	1.5	1.7
Articulated Trucks	1	22	0	-	23	25	1	0	-	26	0	2	0	-	2	51
% Articulated Trucks	0.1	0.2	0.0	-	0.2	0.3	0.2	0.0	-	0.3	0.0	0.2	-	-	0.1	0.2
Bicycles on Road	0	0	0	-	0	3	0	0	-	3	0	1	0	-	1	4
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	-	-	0.1	0.0
Bicycles on Crosswalk	-	-	-	6	-	-	-	-	10	-	-	-	-	12	-	-
% Bicycles on Crosswalk	-	-	-	10.2	-	-	-	-	5.5	-	-	-	-	26.7	-	-
Pedestrians	-	-	-	53	-	-	-	-	173	-	-	-	-	33	-	-
% Pedestrians	-	-	-	89.8	-	-	-	-	94.5	-	-	-	-	73.3	-	-

Traffic and Transportation Engineering Services
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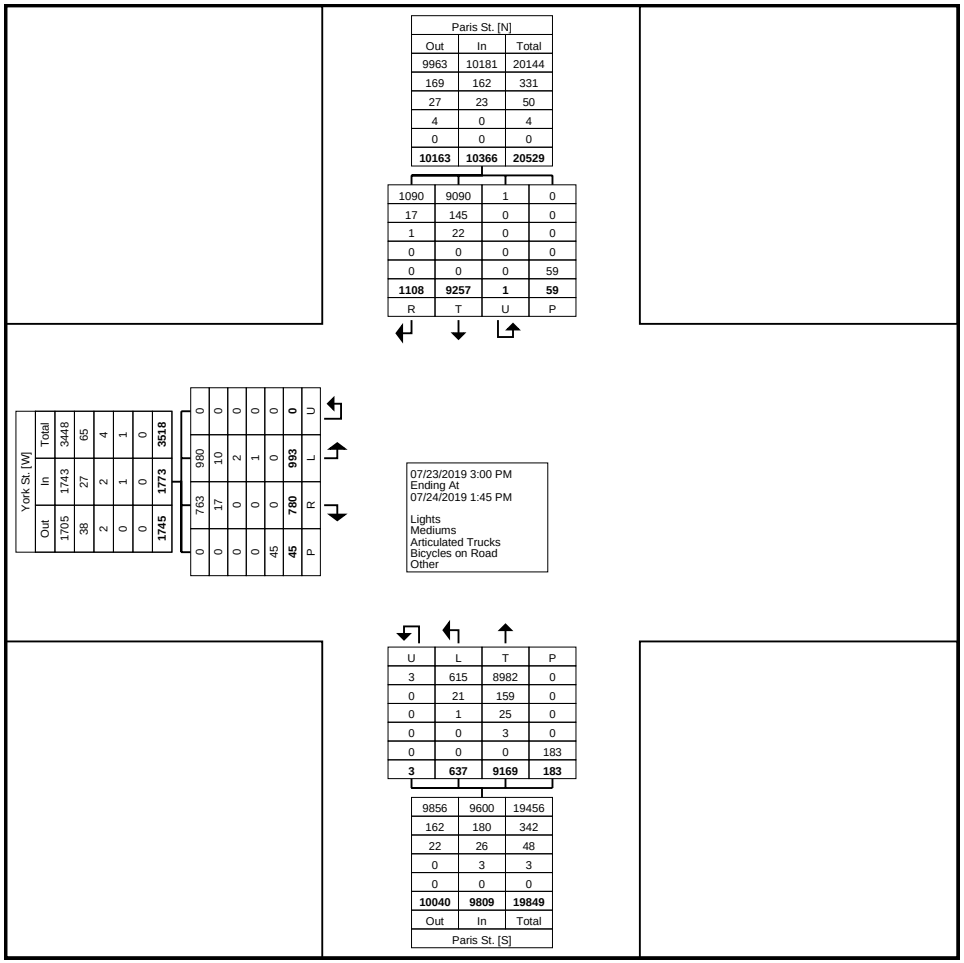
Count Name: Paris @ York St.
Site Code: 00831103
Start Date: 07/23/2019



Turning Movement Data Plot

Traffic and Transportation Engineering Services
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Count Name: Paris @ York St.
Site Code: 00831103
Start Date: 07/23/2019

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Paris St. Southbound					Paris St. Northbound					York St. Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
4:00 PM	50	332	0	2	382	443	42	0	6	485	21	53	0	2	74	941
4:15 PM	50	327	0	10	377	403	34	0	9	437	22	36	0	0	58	872
4:30 PM	59	355	0	7	414	419	32	0	2	451	28	57	0	1	85	950
4:45 PM	47	331	0	3	378	332	35	0	5	367	17	39	0	1	56	801
Total	206	1345	0	22	1551	1597	143	0	22	1740	88	185	0	4	273	3564
Approach %	13.3	86.7	0.0	-	-	91.8	8.2	0.0	-	-	32.2	67.8	0.0	-	-	-
Total %	5.8	37.7	0.0	-	43.5	44.8	4.0	0.0	-	48.8	2.5	5.2	0.0	-	7.7	-
PHF	0.873	0.947	0.000	-	0.937	0.901	0.851	0.000	-	0.897	0.786	0.811	0.000	-	0.803	0.938
Lights	206	1327	0	-	1533	1575	142	0	-	1717	84	183	0	-	267	3517
% Lights	100.0	98.7	-	-	98.8	98.6	99.3	-	-	98.7	95.5	98.9	-	-	97.8	98.7
Mediums	0	17	0	-	17	21	1	0	-	22	4	1	0	-	5	44
% Mediums	0.0	1.3	-	-	1.1	1.3	0.7	-	-	1.3	4.5	0.5	-	-	1.8	1.2
Articulated Trucks	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.1	-	-	0.1	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	1	0	0	-	1	0	1	0	-	1	2
% Bicycles on Road	0.0	0.0	-	-	0.0	0.1	0.0	-	-	0.1	0.0	0.5	-	-	0.4	0.1
Bicycles on Crosswalk	-	-	-	2	-	-	-	-	0	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	9.1	-	-	-	-	0.0	-	-	-	-	75.0	-	-
Pedestrians	-	-	-	20	-	-	-	-	22	-	-	-	-	1	-	-
% Pedestrians	-	-	-	90.9	-	-	-	-	100.0	-	-	-	-	25.0	-	-

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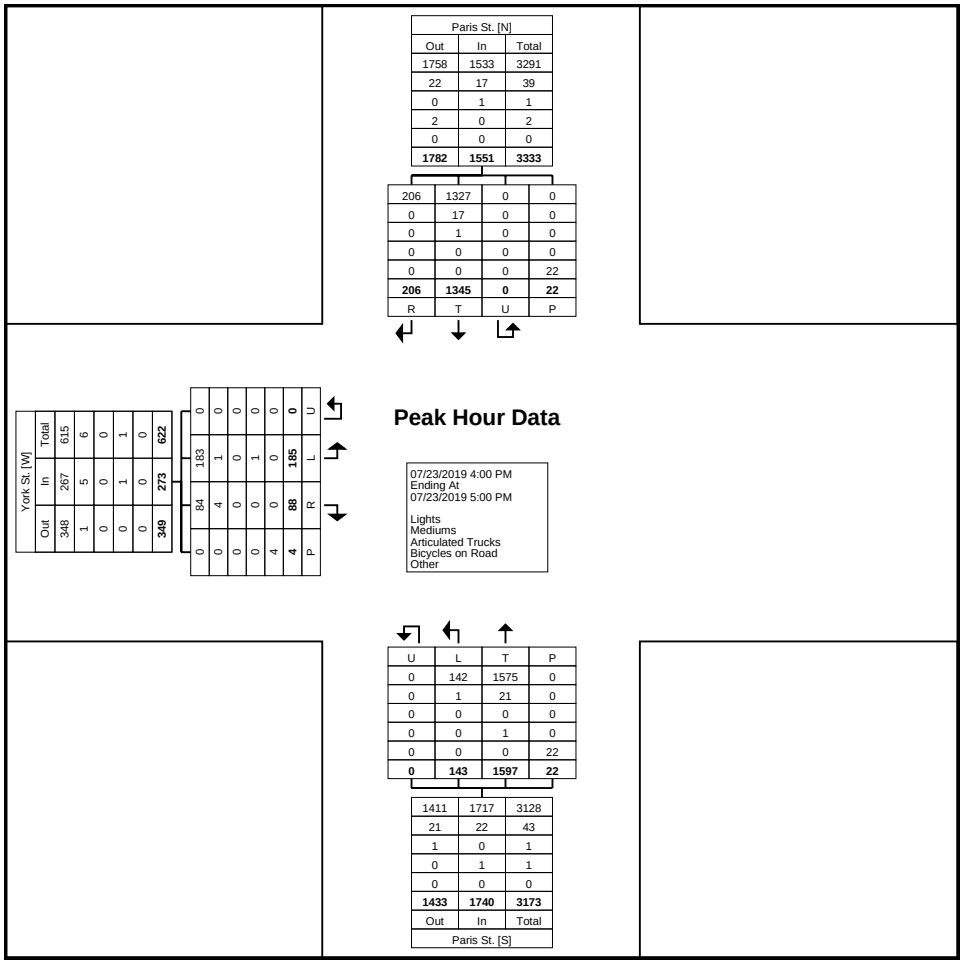
Start Date: 07/23/2019



Turning Movement Peak Hour Data Plot (4:00 PM)

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Count Name: Paris @ York St.
Site Code: 00831103
Start Date: 07/23/2019

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Paris St. Southbound					Paris St. Northbound					York St. Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
7:45 AM	59	349	0	0	408	252	14	0	6	266	41	36	0	1	77	751
8:00 AM	40	270	0	0	310	245	10	0	6	255	43	47	0	3	90	655
8:15 AM	32	353	0	0	385	256	18	0	2	274	39	37	0	2	76	735
8:30 AM	22	282	0	1	304	254	17	0	1	271	41	36	0	2	77	652
Total	153	1254	0	1	1407	1007	59	0	15	1066	164	156	0	8	320	2793
Approach %	10.9	89.1	0.0	-	-	94.5	5.5	0.0	-	-	51.3	48.8	0.0	-	-	-
Total %	5.5	44.9	0.0	-	50.4	36.1	2.1	0.0	-	38.2	5.9	5.6	0.0	-	11.5	-
PHF	0.648	0.888	0.000	-	0.862	0.983	0.819	0.000	-	0.973	0.953	0.830	0.000	-	0.889	0.930
Lights	149	1222	0	-	1371	983	55	0	-	1038	161	153	0	-	314	2723
% Lights	97.4	97.4	-	-	97.4	97.6	93.2	-	-	97.4	98.2	98.1	-	-	98.1	97.5
Mediums	4	27	0	-	31	20	3	0	-	23	3	1	0	-	4	58
% Mediums	2.6	2.2	-	-	2.2	2.0	5.1	-	-	2.2	1.8	0.6	-	-	1.3	2.1
Articulated Trucks	0	5	0	-	5	4	1	0	-	5	0	2	0	-	2	12
% Articulated Trucks	0.0	0.4	-	-	0.4	0.4	1.7	-	-	0.5	0.0	1.3	-	-	0.6	0.4
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
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	4	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	26.7	-	-	-	-	37.5	-	-
Pedestrians	-	-	-	1	-	-	-	-	11	-	-	-	-	5	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	73.3	-	-	-	-	62.5	-	-

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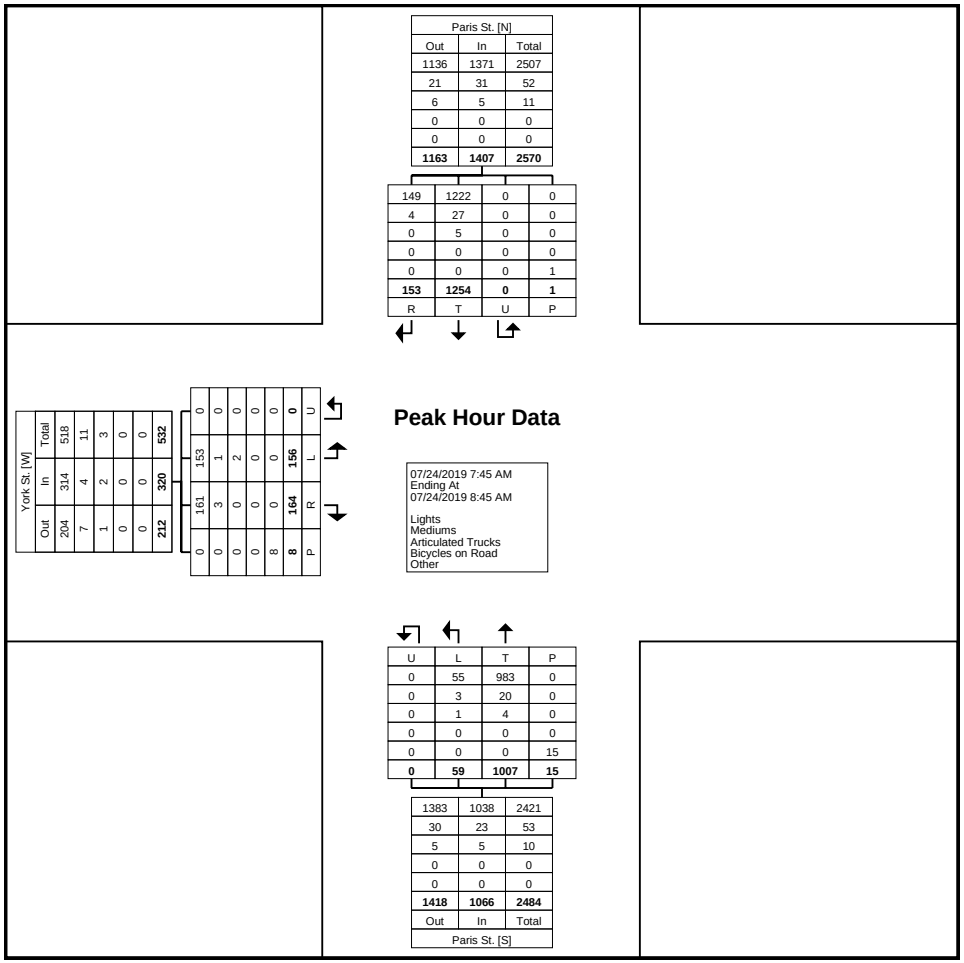
Start Date: 07/23/2019



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

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Count Name: Paris @ York St.
Site Code: 00831103
Start Date: 07/23/2019

Turning Movement Peak Hour Data (12:15 PM)

Start Time	Paris St. Southbound					Paris St. Northbound					York St. Eastbound					
	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Int. Total
12:15 PM	30	305	0	8	335	310	15	0	6	325	21	23	0	6	44	704
12:30 PM	31	265	0	3	296	296	21	0	1	317	13	23	0	0	36	649
12:45 PM	35	291	0	0	326	319	25	0	7	344	23	31	0	0	54	724
1:00 PM	37	302	0	4	339	301	16	0	6	317	31	24	0	2	55	711
Total	133	1163	0	15	1296	1226	77	0	20	1303	88	101	0	8	189	2788
Approach %	10.3	89.7	0.0	-	-	94.1	5.9	0.0	-	-	46.6	53.4	0.0	-	-	-
Total %	4.8	41.7	0.0	-	46.5	44.0	2.8	0.0	-	46.7	3.2	3.6	0.0	-	6.8	-
PHF	0.899	0.953	0.000	-	0.956	0.961	0.770	0.000	-	0.947	0.710	0.815	0.000	-	0.859	0.963
Lights	129	1143	0	-	1272	1194	76	0	-	1270	87	101	0	-	188	2730
% Lights	97.0	98.3	-	-	98.1	97.4	98.7	-	-	97.5	98.9	100.0	-	-	99.5	97.9
Mediums	4	19	0	-	23	26	1	0	-	27	1	0	0	-	1	51
% Mediums	3.0	1.6	-	-	1.8	2.1	1.3	-	-	2.1	1.1	0.0	-	-	0.5	1.8
Articulated Trucks	0	1	0	-	1	6	0	0	-	6	0	0	0	-	0	7
% Articulated Trucks	0.0	0.1	-	-	0.1	0.5	0.0	-	-	0.5	0.0	0.0	-	-	0.0	0.3
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
Bicycles on Crosswalk	-	-	-	2	-	-	-	-	1	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	13.3	-	-	-	-	5.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	13	-	-	-	-	19	-	-	-	-	8	-	-
% Pedestrians	-	-	-	86.7	-	-	-	-	95.0	-	-	-	-	100.0	-	-

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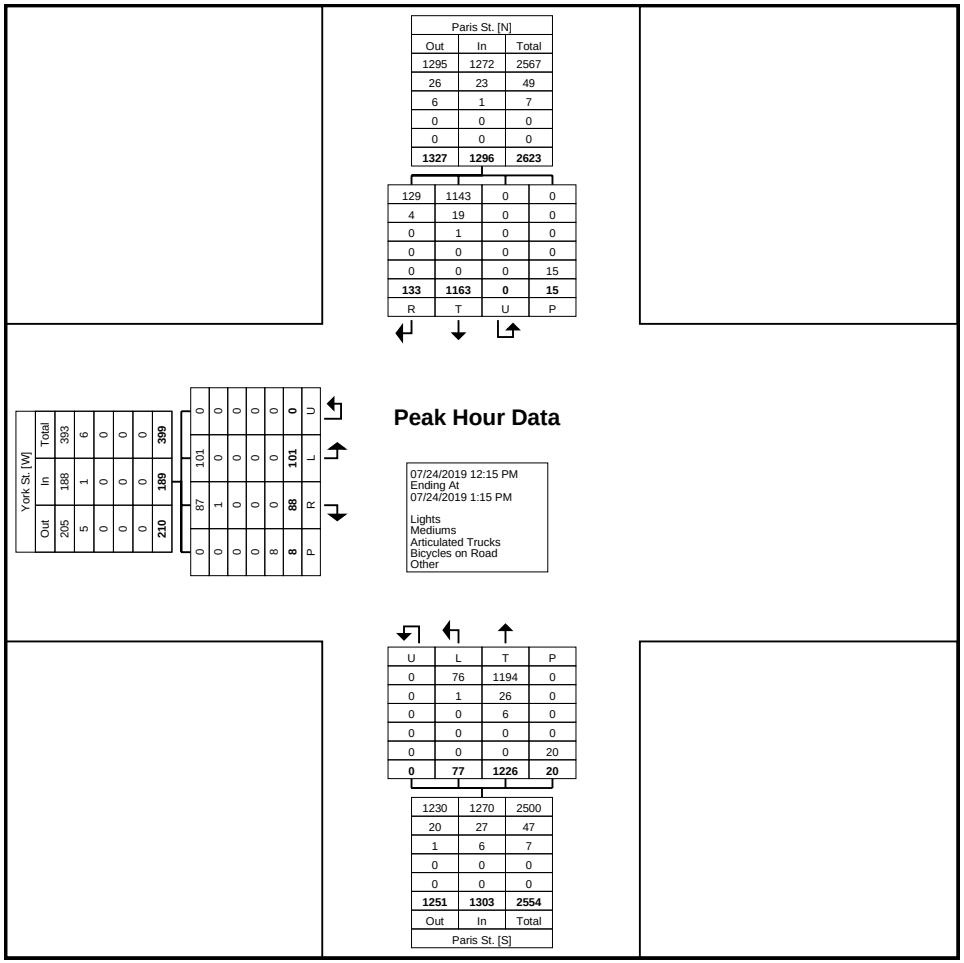
Site Code: 00831103
Start Date: 07/23/2019



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

Traffic and Transportation Engineering Services
1800 Frobisher Street
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705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris @ York St.
Site Code: 00831103
Start Date: 07/23/2019

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Morning Peak Diagram

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

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

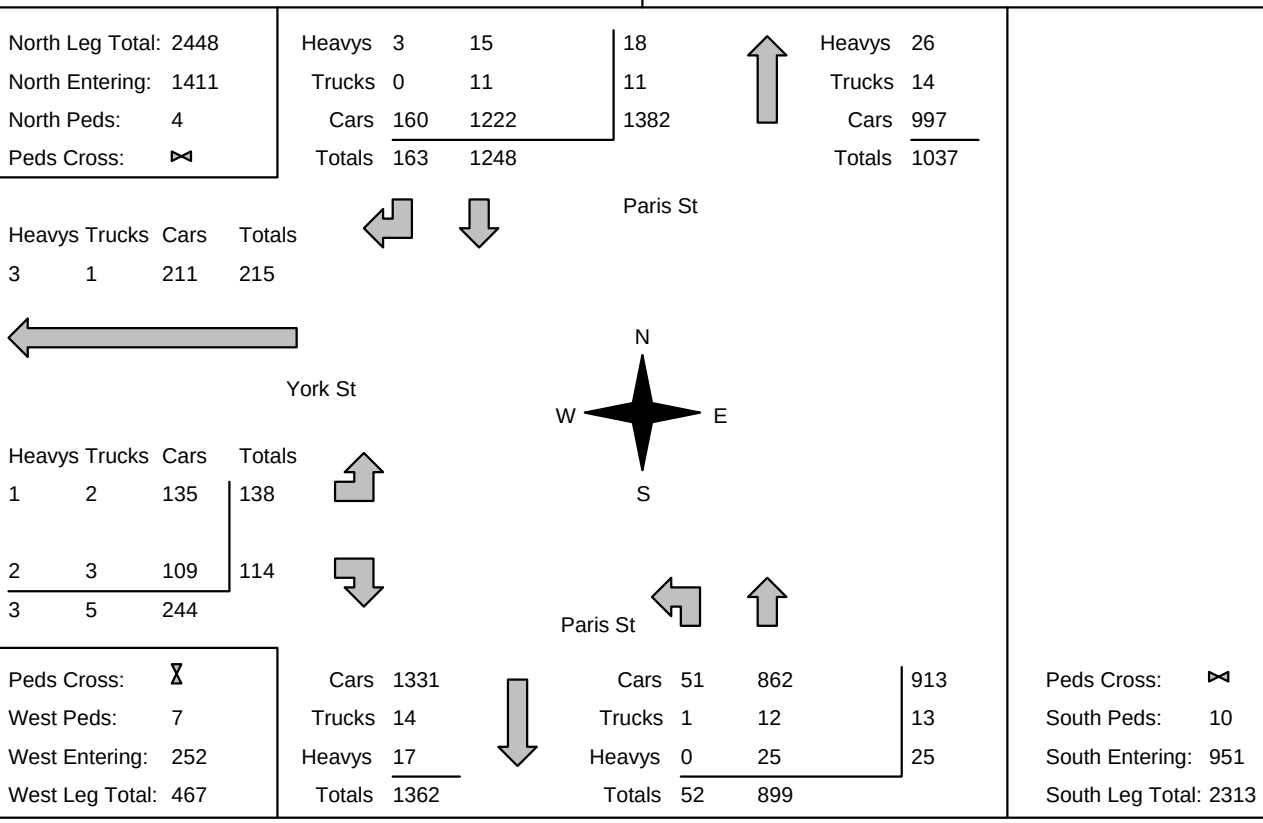
Municipality: Sudbury
Site #: 2206300004
Intersection: Paris St & York St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Afternoon Peak Diagram

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

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

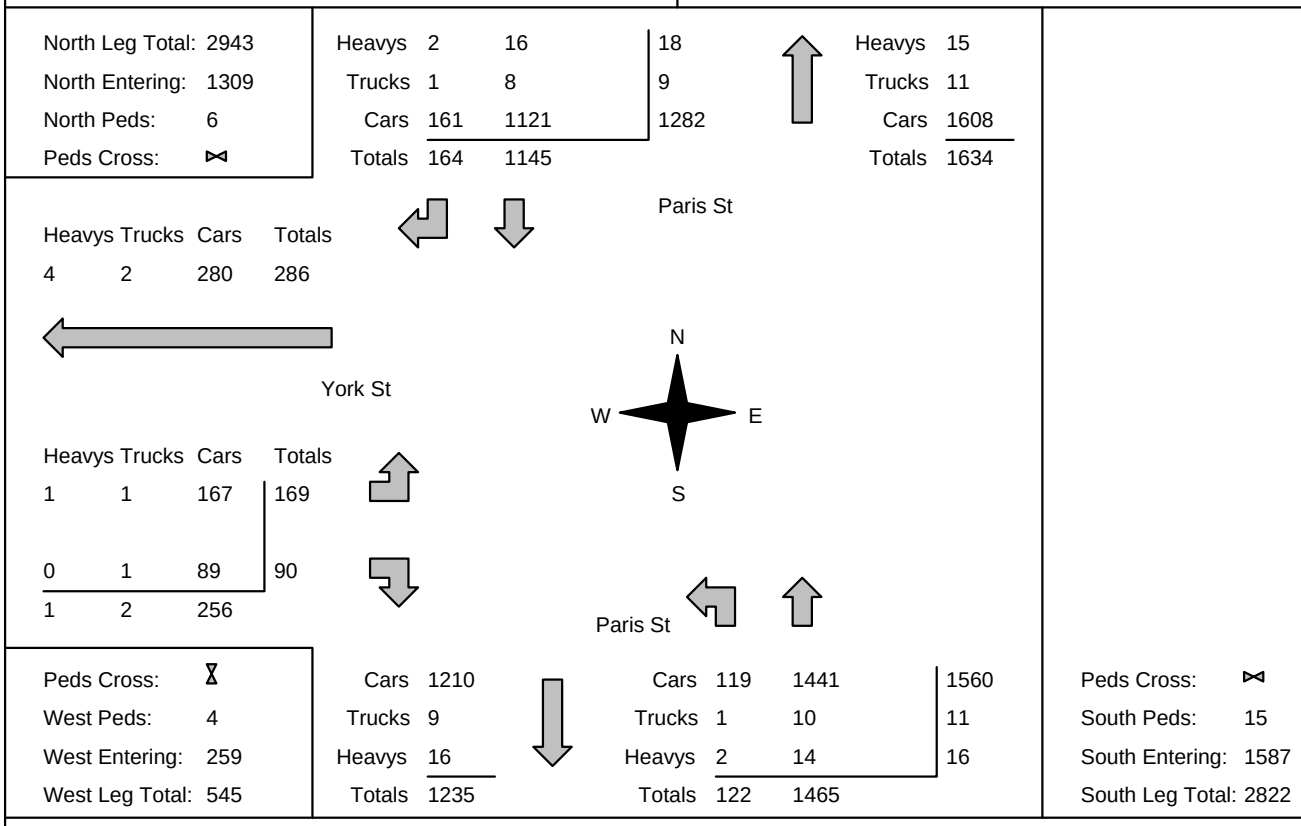
Municipality: Sudbury
Site #: 2206300004
Intersection: Paris St & York St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Total Count Diagram

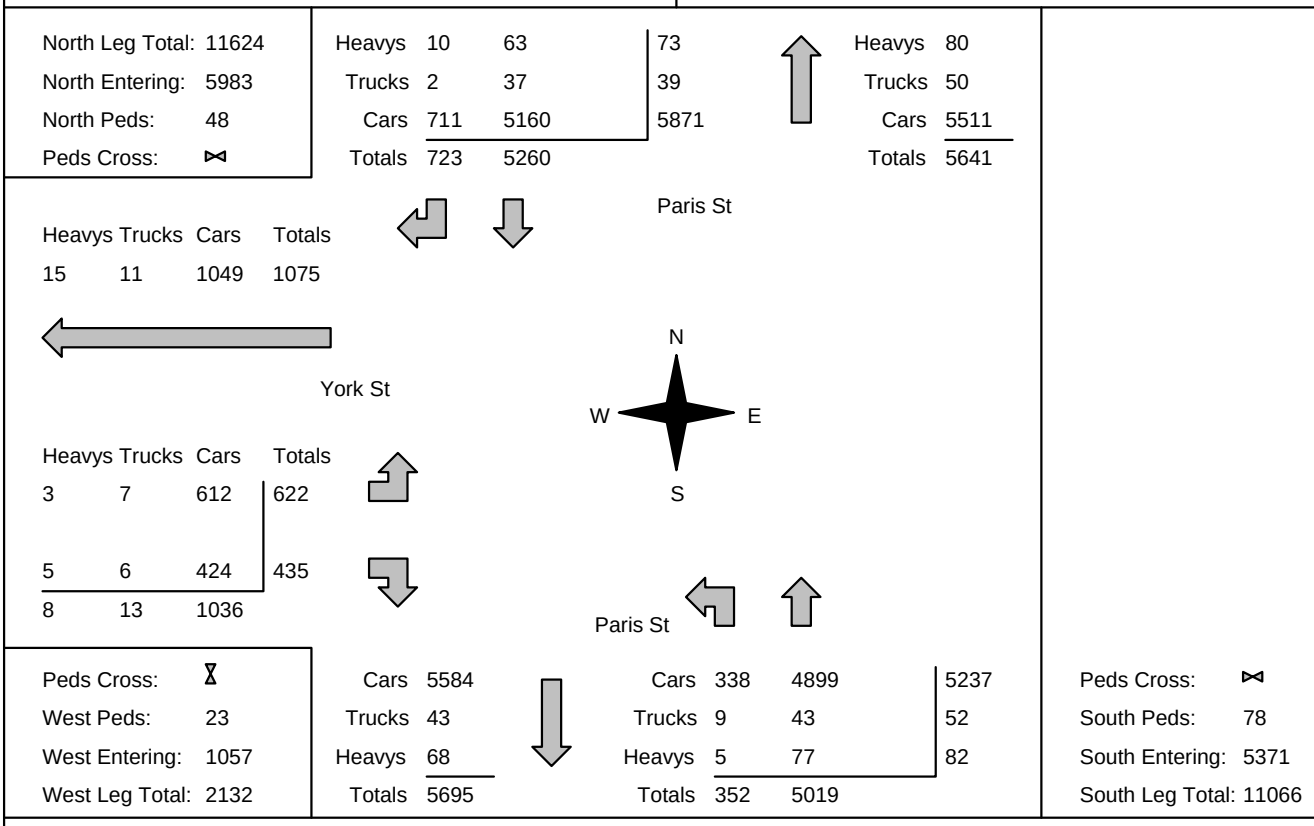
Municipality: Sudbury
Site #: 2206300004
Intersection: Paris St & York St
TFR File #: 1
Count date: 20-Apr-22

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Paris St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Traffic Count Summary

Intersection: Paris St & York St | **Count Date:** 20-Apr-22 | **Municipality:** Sudbury

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*1060*	*127*	*1187*	*3*
9:00:00	*0*	*1188*	*158*	*1346*	*7*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1145*	*164*	*1309*	*6*
18:00:00	*0*	*988*	*143*	*1131*	*14*
19:00:00	*0*	*879*	*131*	*1010*	*18*
Totals:	0	5260	723	5983	48

North/South Total Approaches: 11354

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*47*	*699*	*0*	*746*	*7*
9:00:00	*47*	*895*	*0*	*942*	*8*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*122*	*1465*	*0*	*1587*	*15*
18:00:00	*70*	*1162*	*0*	*1232*	*23*
19:00:00	*66*	*798*	*0*	*864*	*25*
S Totals:	352	5019	0	5371	78

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
19:00:00	*0*	*0*	*0*	*0*	*0*
Totals:	0	0	0	0	0

East/West Total Approaches: 1057

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*96*	*0*	*114*	*210*	*3*
9:00:00	*134*	*0*	*116*	*250*	*5*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*169*	*0*	*90*	*259*	*4*
18:00:00	*144*	*0*	*60*	*204*	*7*
19:00:00	*79*	*0*	*55*	*134*	*4*
W Totals:	622	0	435	1057	23

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*19:00*	*0:00*
Crossing Values:	*0*	*106*	*149*	*0*	*190*	*181*	*122*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300004

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	221	221	11	11	0	0	1	1	0	0	0	0	3	3	1	1	0	0
7:30:00	0	0	460	239	39	28	0	0	3	2	0	0	0	0	6	3	5	4	2	2
7:45:00	0	0	693	233	77	38	0	0	4	1	0	0	0	0	9	3	5	0	3	1
8:00:00	0	0	1041	348	121	44	0	0	4	0	0	0	0	0	15	6	6	1	3	0
8:15:00	0	0	1343	302	167	46	0	0	8	4	0	0	0	0	20	5	7	1	5	2
8:30:00	0	0	1637	294	202	35	0	0	10	2	0	0	0	0	21	1	8	1	7	2
8:45:00	0	0	1915	278	237	35	0	0	15	5	0	0	0	0	24	3	8	0	7	0
9:00:00	0	0	2200	285	277	40	0	0	20	5	0	0	0	0	28	4	8	0	10	3
9:15:00	0	0	2200	0	277	0	0	0	20	0	0	0	0	0	28	0	8	0	10	0
16:00:00	0	0	2200	0	277	0	0	0	20	0	0	0	0	0	28	0	8	0	10	0
16:15:00	0	0	2469	269	309	32	0	0	24	4	0	0	0	0	33	5	9	1	13	3
16:30:00	0	0	2760	291	348	39	0	0	25	1	0	0	0	0	36	3	10	1	13	0
16:45:00	0	0	3035	275	397	49	0	0	27	2	1	1	0	0	40	4	10	0	14	1
17:00:00	0	0	3321	286	438	41	0	0	28	1	1	0	0	0	44	4	10	0	16	2
17:15:00	0	0	3608	287	484	46	0	0	30	2	1	0	0	0	46	2	10	0	16	0
17:30:00	0	0	3876	268	521	37	0	0	31	1	1	0	0	0	50	4	10	0	19	3
17:45:00	0	0	4084	208	546	25	0	0	31	0	2	1	0	0	52	2	10	0	26	7
18:00:00	0	0	4293	209	580	34	0	0	33	2	2	0	0	0	55	3	10	0	30	4
18:15:00	0	0	4507	214	609	29	0	0	35	2	2	0	0	0	59	4	10	0	33	3
18:30:00	0	0	4734	227	644	35	0	0	36	1	2	0	0	0	61	2	10	0	37	4
18:45:00	0	0	4949	215	676	32	0	0	37	1	2	0	0	0	62	1	10	0	39	2
19:00:00	0	0	5160	211	711	35	0	0	37	0	2	0	0	0	63	1	10	0	48	9
19:15:00	0	0	5160	0	711	0	0	0	37	0	2	0	0	0	63	0	10	0	48	0
19:15:15	0	0	5160	0	711	0	0	0	37	0	2	0	0	0	63	0	10	0	48	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300004

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

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300004

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	5	5	87	87	0	0	1	1	2	2	0	0	0	0	1	1	0	0	1	1
7:30:00	11	6	230	143	0	0	1	0	5	3	0	0	2	2	5	4	0	0	4	3
7:45:00	31	20	439	209	0	0	1	0	5	0	0	0	3	1	13	8	0	0	4	0
8:00:00	42	11	668	229	0	0	2	1	9	4	0	0	3	0	22	9	0	0	7	3
8:15:00	55	13	888	220	0	0	2	0	10	1	0	0	3	0	28	6	0	0	10	3
8:30:00	66	11	1087	199	0	0	2	0	13	3	0	0	3	0	32	4	0	0	12	2
8:45:00	82	16	1301	214	0	0	2	0	17	4	0	0	3	0	38	6	0	0	14	2
9:00:00	89	7	1530	229	0	0	2	0	19	2	0	0	3	0	45	7	0	0	15	1
9:15:00	89	0	1530	0	0	0	2	0	19	0	0	0	3	0	45	0	0	0	15	0
16:00:00	89	0	1530	0	0	0	2	0	19	0	0	0	3	0	45	0	0	0	15	0
16:15:00	124	35	1945	415	0	0	2	0	22	3	0	0	5	2	47	2	0	0	21	6
16:30:00	153	29	2271	326	0	0	3	1	25	3	0	0	5	0	51	4	0	0	25	4
16:45:00	182	29	2641	370	0	0	3	0	28	3	0	0	5	0	56	5	0	0	30	5
17:00:00	208	26	2971	330	0	0	3	0	29	1	0	0	5	0	59	3	0	0	30	0
17:15:00	228	20	3326	355	0	0	5	2	30	1	0	0	5	0	61	2	0	0	35	5
17:30:00	243	15	3631	305	0	0	6	1	32	2	0	0	5	0	63	2	0	0	40	5
17:45:00	263	20	3894	263	0	0	6	0	35	3	0	0	5	0	66	3	0	0	49	9
18:00:00	275	12	4117	223	0	0	6	0	36	1	0	0	5	0	68	2	0	0	53	4
18:15:00	293	18	4327	210	0	0	8	2	37	1	0	0	5	0	70	2	0	0	59	6
18:30:00	309	16	4525	198	0	0	8	0	38	1	0	0	5	0	73	3	0	0	65	6
18:45:00	324	15	4718	193	0	0	9	1	40	2	0	0	5	0	76	3	0	0	70	5
19:00:00	338	14	4899	181	0	0	9	0	43	3	0	0	5	0	77	1	0	0	78	8
19:15:00	338	0	4899	0	0	0	9	0	43	0	0	0	5	0	77	0	0	0	78	0
19:15:15	338	0	4899	0	0	0	9	0	43	0	0	0	5	0	77	0	0	0	78	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Count Date: 20-Apr-22 Site #: 2206300004

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	12	12	0	0	27	27	0	0	0	0	0	0	0	0	0	0	1	1	0	0
7:30:00	33	21	0	0	52	25	1	1	0	0	1	1	0	0	0	0	3	2	0	0
7:45:00	59	26	0	0	75	23	1	0	0	0	1	0	1	1	0	0	3	0	0	0
8:00:00	94	35	0	0	110	35	1	0	0	0	1	0	1	0	0	0	3	0	3	3
8:15:00	122	28	0	0	140	30	1	0	0	0	1	0	2	1	0	0	3	0	3	0
8:30:00	153	31	0	0	160	20	1	0	0	0	4	3	2	0	0	0	3	0	5	2
8:45:00	194	41	0	0	184	24	3	2	0	0	4	0	2	0	0	0	5	2	7	2
9:00:00	225	31	0	0	221	37	3	0	0	0	4	0	2	0	0	0	5	0	8	1
9:15:00	225	0	0	0	221	0	3	0	0	0	4	0	2	0	0	0	5	0	8	0
16:00:00	225	0	0	0	221	0	3	0	0	0	4	0	2	0	0	0	5	0	8	0
16:15:00	268	43	0	0	243	22	4	1	0	0	4	0	2	0	0	0	5	0	9	1
16:30:00	311	43	0	0	273	30	4	0	0	0	4	0	3	1	0	0	5	0	11	2
16:45:00	358	47	0	0	289	16	4	0	0	0	5	1	3	0	0	0	5	0	12	1
17:00:00	392	34	0	0	310	21	4	0	0	0	5	0	3	0	0	0	5	0	12	0
17:15:00	433	41	0	0	326	16	4	0	0	0	5	0	3	0	0	0	5	0	16	4
17:30:00	470	37	0	0	341	15	4	0	0	0	5	0	3	0	0	0	5	0	17	1
17:45:00	505	35	0	0	360	19	5	1	0	0	5	0	3	0	0	0	5	0	17	0
18:00:00	534	29	0	0	370	10	6	1	0	0	5	0	3	0	0	0	5	0	19	2
18:15:00	546	12	0	0	382	12	6	0	0	0	5	0	3	0	0	0	5	0	19	0
18:30:00	573	27	0	0	397	15	6	0	0	0	5	0	3	0	0	0	5	0	20	1
18:45:00	592	19	0	0	409	12	7	1	0	0	6	1	3	0	0	0	5	0	20	0
19:00:00	612	20	0	0	424	15	7	0	0	0	6	0	3	0	0	0	5	0	23	3
19:15:00	612	0	0	0	424	0	7	0	0	0	6	0	3	0	0	0	5	0	23	0
19:15:15	612	0	0	0	424	0	7	0	0	0	6	0	3	0	0	0	5	0	23	0

Traffic and Transportation Engineering Services
1800 Frobisher Street
PO Box 5000, STN A
Sudbury, Ontario, Canada P3A 5P3
705-674-4455 David.Knutson@greatersudbury.ca

Count Name: Paris @ Ramsey Lake Rd. (Redo)
Site Code:
Start Date: 08/06/2019

Turning Movement Data

Start Time	Southbound St. Southbound					Westbound St. Westbound					Northbound St. Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
11:30 AM	222	67	0	2	289	69	43	0	0	112	52	257	0	0	309	710
11:45 AM	280	66	0	0	346	57	59	0	2	116	53	260	0	0	313	775
Hourly Total	502	133	0	2	635	126	102	0	2	228	105	517	0	0	622	1485
12:00 PM	252	74	0	1	326	59	62	0	1	121	31	303	1	0	335	782
12:15 PM	232	67	0	5	299	61	59	0	0	120	65	265	0	0	330	749
12:30 PM	227	87	0	3	314	71	34	0	3	105	59	281	0	0	340	759
12:45 PM	267	83	1	0	351	53	41	0	3	94	63	277	0	0	340	785
Hourly Total	978	311	1	9	1290	244	196	0	7	440	218	1126	1	0	1345	3075
1:00 PM	257	87	0	0	344	64	52	0	0	116	64	269	0	0	333	793
1:15 PM	277	69	0	0	346	73	52	0	4	125	44	289	0	0	333	804
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	534	156	0	0	690	137	104	0	4	241	108	558	0	0	666	1597
3:00 PM	22	1	0	1	23	91	74	0	0	165	40	264	0	0	304	492
3:15 PM	0	0	0	0	0	84	56	0	1	140	73	216	0	0	289	429
3:30 PM	302	110	0	3	412	101	66	0	1	167	60	246	0	0	306	885
3:45 PM	272	100	0	2	372	119	84	0	1	203	57	302	0	0	359	934
Hourly Total	596	211	0	6	807	395	280	0	3	675	230	1028	0	0	1258	2740
4:00 PM	293	80	0	6	373	176	147	0	2	323	69	321	0	0	390	1086
4:15 PM	268	69	0	6	337	148	133	0	2	281	58	263	0	0	321	939
4:30 PM	281	65	0	2	346	146	108	0	0	254	49	295	0	0	344	944
4:45 PM	295	74	0	3	369	74	61	0	3	135	41	248	0	0	289	793
Hourly Total	1137	288	0	17	1425	544	449	0	7	993	217	1127	0	0	1344	3762
5:00 PM	262	55	0	1	317	76	56	0	2	132	41	332	0	0	373	822
5:15 PM	219	50	0	1	269	60	53	0	0	113	34	263	0	0	297	679
5:30 PM	213	38	0	3	251	77	51	0	1	128	47	227	0	0	274	653
5:45 PM	197	50	1	0	248	62	50	0	3	112	38	212	0	0	250	610
Hourly Total	891	193	1	5	1085	275	210	0	6	485	160	1034	0	0	1194	2764
6:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	3
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	3
6:30 AM	117	68	0	0	185	8	7	0	1	15	18	121	0	0	139	339
6:45 AM	110	92	0	2	202	22	11	0	0	33	41	110	0	0	151	386
Hourly Total	227	160	0	2	387	30	18	0	1	48	59	231	0	0	290	725
7:00 AM	164	127	0	0	291	26	16	0	1	42	31	118	0	0	149	482
7:15 AM	153	123	0	3	276	53	15	0	1	68	48	175	0	0	223	567

7:30 AM	180	108	0	3	288	59	23	0	2	82	56	216	0	0	272	642
7:45 AM	188	152	0	5	340	55	21	0	1	76	78	197	0	0	275	691
Hourly Total	685	510	0	11	1195	193	75	0	5	268	213	706	0	0	919	2382
8:00 AM	174	148	0	3	322	46	22	0	1	68	82	216	0	0	298	688
8:15 AM	202	170	0	3	372	56	40	0	4	96	97	199	0	0	296	764
8:30 AM	206	123	0	5	329	47	47	0	4	94	77	222	0	0	299	722
8:45 AM	228	127	0	2	355	50	51	0	5	101	71	234	0	0	305	761
Hourly Total	810	568	0	13	1378	199	160	0	14	359	327	871	0	0	1198	2935
9:00 AM	181	87	0	1	268	50	29	0	2	79	66	196	0	0	262	609
9:15 AM	152	79	0	4	231	38	40	0	2	78	57	181	0	0	238	547
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	6693	2696	2	70	9391	2232	1665	0	53	3897	1760	7575	1	0	9336	22624
Approach %	71.3	28.7	0.0	-	-	57.3	42.7	0.0	-	-	18.9	81.1	0.0	-	-	-
Total %	29.6	11.9	0.0	-	41.5	9.9	7.4	0.0	-	17.2	7.8	33.5	0.0	-	41.3	-
Lights	6540	2639	2	-	9181	2169	1632	0	-	3801	1731	7403	1	-	9135	22117
% Lights	97.7	97.9	100.0	-	97.8	97.2	98.0	-	-	97.5	98.4	97.7	100.0	-	97.8	97.8
Mediums	131	51	0	-	182	53	31	0	-	84	28	132	0	-	160	426
% Mediums	2.0	1.9	0.0	-	1.9	2.4	1.9	-	-	2.2	1.6	1.7	0.0	-	1.7	1.9
Articulated Trucks	20	3	0	-	23	3	1	0	-	4	1	26	0	-	27	54
% Articulated Trucks	0.3	0.1	0.0	-	0.2	0.1	0.1	-	-	0.1	0.1	0.3	0.0	-	0.3	0.2
Bicycles on Road	2	3	0	-	5	7	1	0	-	8	0	14	0	-	14	27
% Bicycles on Road	0.0	0.1	0.0	-	0.1	0.3	0.1	-	-	0.2	0.0	0.2	0.0	-	0.1	0.1
Bicycles on Crosswalk	-	-	-	21	-	-	-	-	22	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	30.0	-	-	-	-	41.5	-	-	-	-	-	-	-
Pedestrians	-	-	-	49	-	-	-	-	31	-	-	-	-	0	-	-
% Pedestrians	-	-	-	70.0	-	-	-	-	58.5	-	-	-	-	-	-	-

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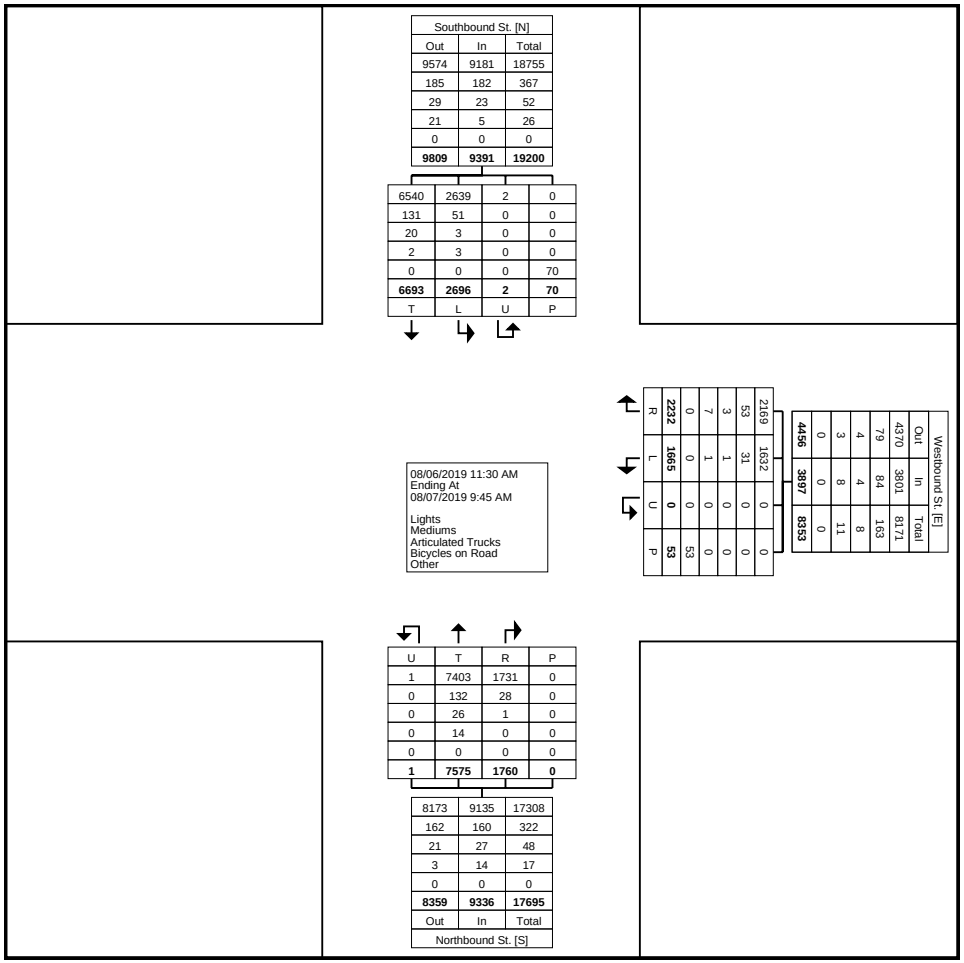
Site Code:
Start Date: 08/06/2019



Turning Movement Data Plot

Traffic and Transportation Engineering Services
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Count Name: Paris @ Ramsey Lake Rd. (Redo)
Site Code:
Start Date: 08/06/2019

Turning Movement Peak Hour Data (12:30 PM)

Start Time	Southbound St. Southbound					Westbound St. Westbound					Northbound St. Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
12:30 PM	227	87	0	3	314	71	34	0	3	105	59	281	0	0	340	759
12:45 PM	267	83	1	0	351	53	41	0	3	94	63	277	0	0	340	785
1:00 PM	257	87	0	0	344	64	52	0	0	116	64	269	0	0	333	793
1:15 PM	277	69	0	0	346	73	52	0	4	125	44	289	0	0	333	804
Total	1028	326	1	3	1355	261	179	0	10	440	230	1116	0	0	1346	3141
Approach %	75.9	24.1	0.1	-	-	59.3	40.7	0.0	-	-	17.1	82.9	0.0	-	-	-
Total %	32.7	10.4	0.0	-	43.1	8.3	5.7	0.0	-	14.0	7.3	35.5	0.0	-	42.9	-
PHF	0.928	0.937	0.250	-	0.965	0.894	0.861	0.000	-	0.880	0.898	0.965	0.000	-	0.990	0.977
Lights	1008	310	1	-	1319	250	173	0	-	423	227	1095	0	-	1322	3064
% Lights	98.1	95.1	100.0	-	97.3	95.8	96.6	-	-	96.1	98.7	98.1	-	-	98.2	97.5
Mediums	17	15	0	-	32	11	6	0	-	17	3	19	0	-	22	71
% Mediums	1.7	4.6	0.0	-	2.4	4.2	3.4	-	-	3.9	1.3	1.7	-	-	1.6	2.3
Articulated Trucks	3	1	0	-	4	0	0	0	-	0	0	2	0	-	2	6
% Articulated Trucks	0.3	0.3	0.0	-	0.3	0.0	0.0	-	-	0.0	0.0	0.2	-	-	0.1	0.2
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	-	-	-	2	-	-	-	-	6	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	66.7	-	-	-	-	60.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	1	-	-	-	-	4	-	-	-	-	0	-	-
% Pedestrians	-	-	-	33.3	-	-	-	-	40.0	-	-	-	-	-	-	-

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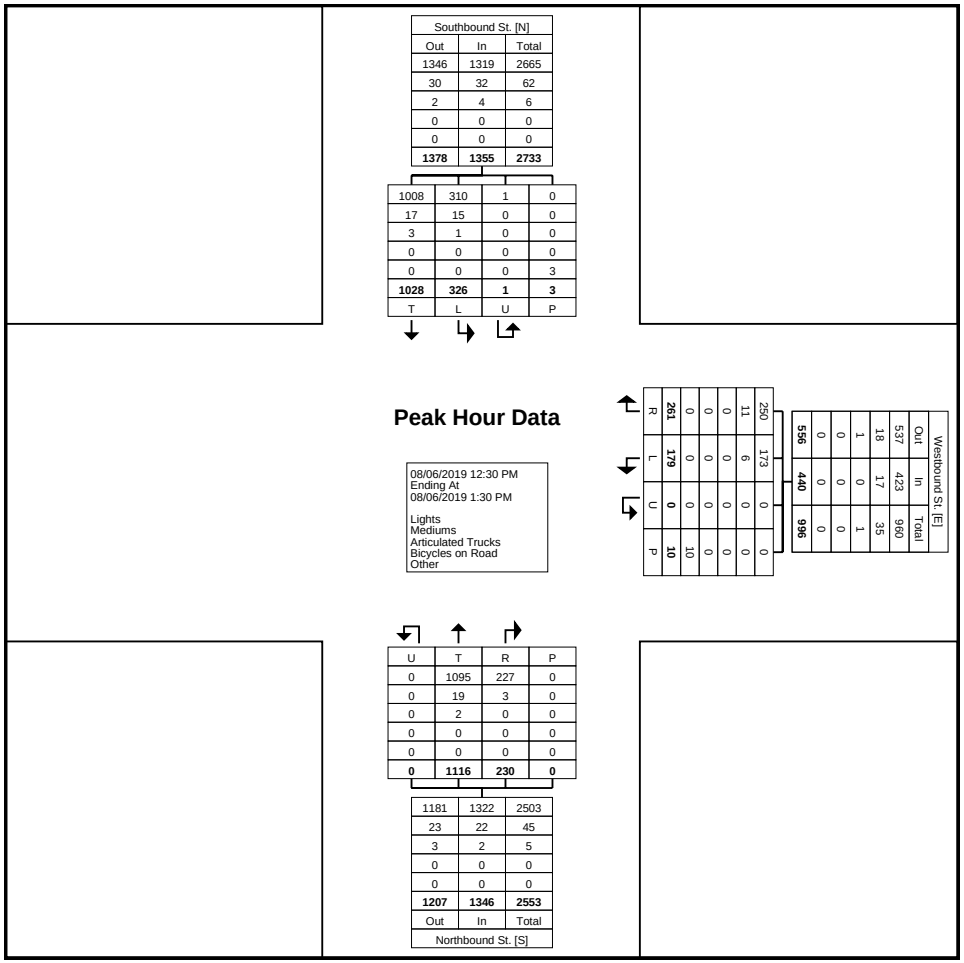

Turning Movement Peak Hour Data Plot (12:30 PM)

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Count Name: Paris @ Ramsey Lake Rd. (Redo)
Site Code:
Start Date: 08/06/2019

Turning Movement Peak Hour Data (3:45 PM)

Start Time	Southbound St. Southbound					Westbound St. Westbound					Northbound St. Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
3:45 PM	272	100	0	2	372	119	84	0	1	203	57	302	0	0	359	934
4:00 PM	293	80	0	6	373	176	147	0	2	323	69	321	0	0	390	1086
4:15 PM	268	69	0	6	337	148	133	0	2	281	58	263	0	0	321	939
4:30 PM	281	65	0	2	346	146	108	0	0	254	49	295	0	0	344	944
Total	1114	314	0	16	1428	589	472	0	5	1061	233	1181	0	0	1414	3903
Approach %	78.0	22.0	0.0	-	-	55.5	44.5	0.0	-	-	16.5	83.5	0.0	-	-	-
Total %	28.5	8.0	0.0	-	36.6	15.1	12.1	0.0	-	27.2	6.0	30.3	0.0	-	36.2	-
PHF	0.951	0.785	0.000	-	0.957	0.837	0.803	0.000	-	0.821	0.844	0.920	0.000	-	0.906	0.898
Lights	1102	308	0	-	1410	577	469	0	-	1046	232	1159	0	-	1391	3847
% Lights	98.9	98.1	-	-	98.7	98.0	99.4	-	-	98.6	99.6	98.1	-	-	98.4	98.6
Mediums	12	6	0	-	18	7	2	0	-	9	1	18	0	-	19	46
% Mediums	1.1	1.9	-	-	1.3	1.2	0.4	-	-	0.8	0.4	1.5	-	-	1.3	1.2
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	0	0	-	0	5	1	0	-	6	0	4	0	-	4	10
% Bicycles on Road	0.0	0.0	-	-	0.0	0.8	0.2	-	-	0.6	0.0	0.3	-	-	0.3	0.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	40.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	16	-	-	-	-	3	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	60.0	-	-	-	-	-	-	-

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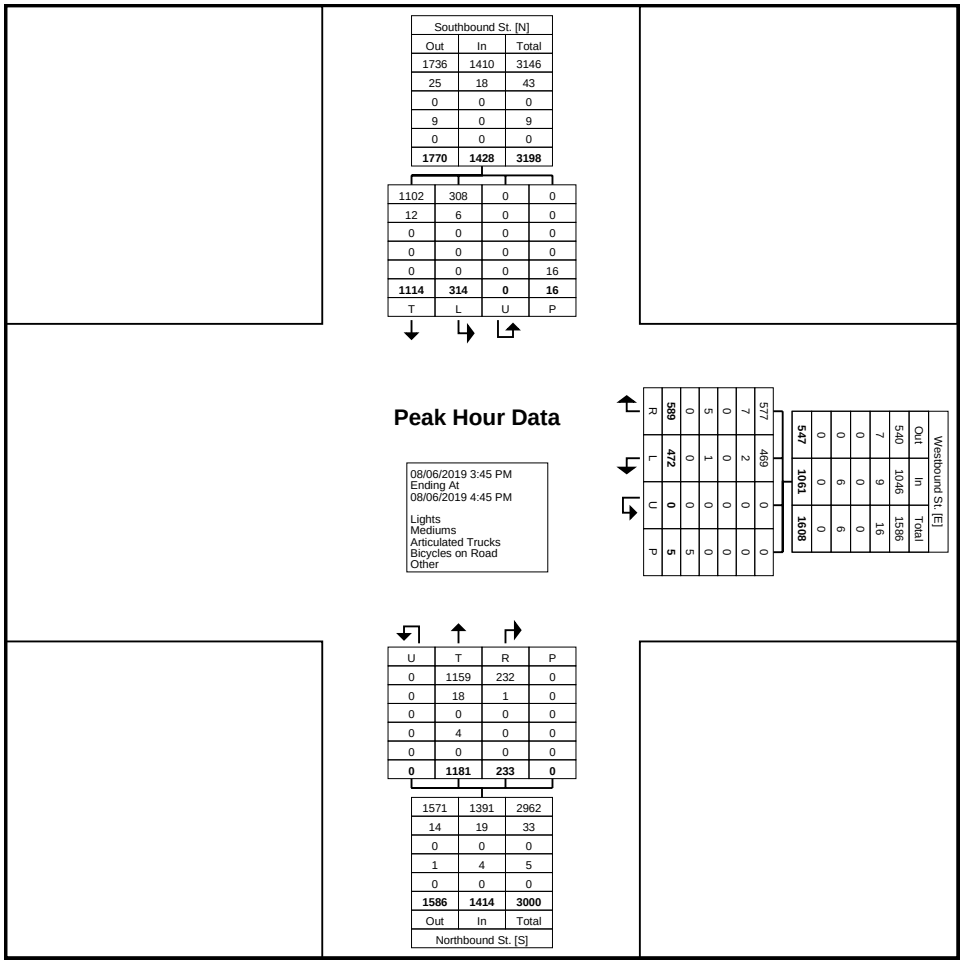

Turning Movement Peak Hour Data Plot (3:45 PM)

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Count Name: Paris @ Ramsey Lake Rd. (Redo)
Site Code:
Start Date: 08/06/2019

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Southbound St. Southbound					Westbound St. Westbound					Northbound St. Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
8:00 AM	174	148	0	3	322	46	22	0	1	68	82	216	0	0	298	688
8:15 AM	202	170	0	3	372	56	40	0	4	96	97	199	0	0	296	764
8:30 AM	206	123	0	5	329	47	47	0	4	94	77	222	0	0	299	722
8:45 AM	228	127	0	2	355	50	51	0	5	101	71	234	0	0	305	761
Total	810	568	0	13	1378	199	160	0	14	359	327	871	0	0	1198	2935
Approach %	58.8	41.2	0.0	-	-	55.4	44.6	0.0	-	-	27.3	72.7	0.0	-	-	-
Total %	27.6	19.4	0.0	-	47.0	6.8	5.5	0.0	-	12.2	11.1	29.7	0.0	-	40.8	-
PHF	0.888	0.835	0.000	-	0.926	0.888	0.784	0.000	-	0.889	0.843	0.931	0.000	-	0.982	0.960
Lights	777	562	0	-	1339	193	157	0	-	350	320	842	0	-	1162	2851
% Lights	95.9	98.9	-	-	97.2	97.0	98.1	-	-	97.5	97.9	96.7	-	-	97.0	97.1
Mediums	28	6	0	-	34	6	3	0	-	9	6	21	0	-	27	70
% Mediums	3.5	1.1	-	-	2.5	3.0	1.9	-	-	2.5	1.8	2.4	-	-	2.3	2.4
Articulated Trucks	4	0	0	-	4	0	0	0	-	0	1	7	0	-	8	12
% Articulated Trucks	0.5	0.0	-	-	0.3	0.0	0.0	-	-	0.0	0.3	0.8	-	-	0.7	0.4
Bicycles on Road	1	0	0	-	1	0	0	0	-	0	0	1	0	-	1	2
% Bicycles on Road	0.1	0.0	-	-	0.1	0.0	0.0	-	-	0.0	0.0	0.1	-	-	0.1	0.1
Bicycles on Crosswalk	-	-	-	3	-	-	-	-	7	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	23.1	-	-	-	-	50.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	10	-	-	-	-	7	-	-	-	-	0	-	-
% Pedestrians	-	-	-	76.9	-	-	-	-	50.0	-	-	-	-	-	-	-

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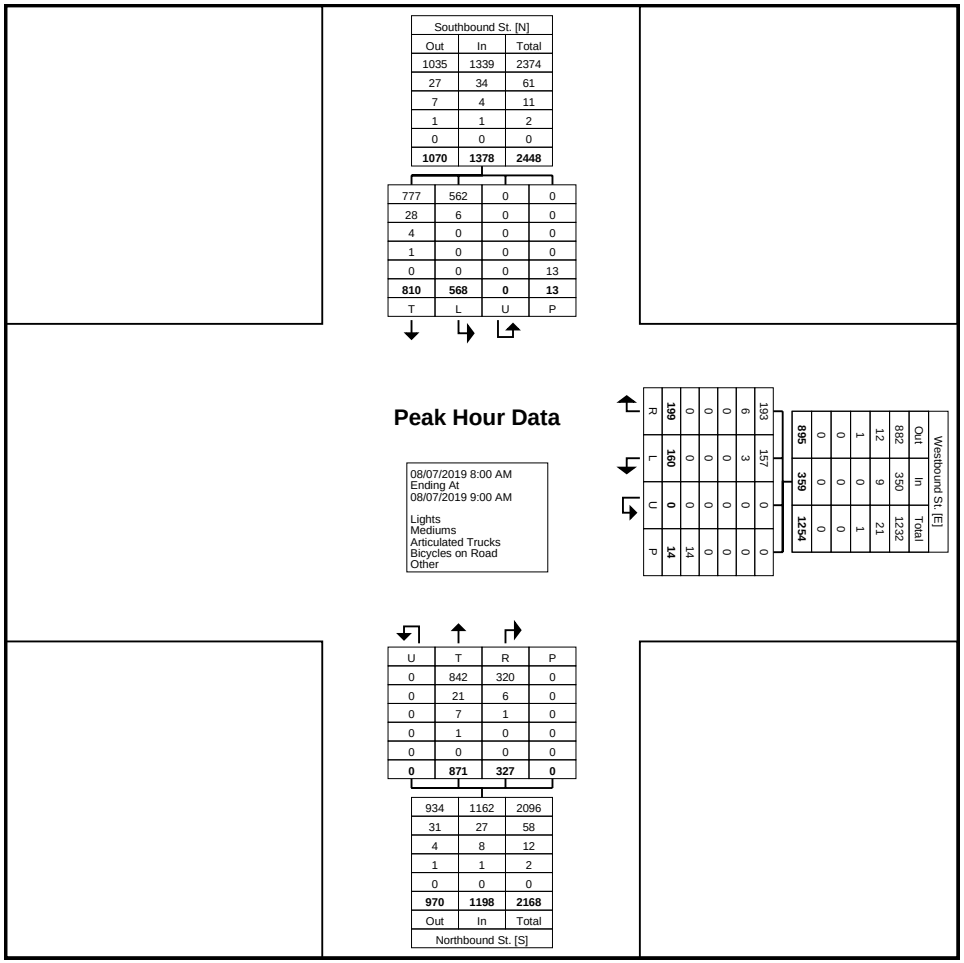

Turning Movement Peak Hour Data Plot (8:00 AM)

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Count Name: Paris @ Ramsey Lake Rd. (Redo)
Site Code:
Start Date: 08/06/2019

Programmed EPAC Data

4/6/2022
10:09:17AM

Intersection Name: Paris & Brady
Intersection Alias: Brady

Access Code: 9999 Channel: 7 Address: 0 Revision: 3.32n

Access Data

Port 2 Comm :19200 Baud
Port 3 Comm :4800 Baud

Phase Data

Vehical Basic Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red
1	5	2.0	12	14	3.0	2.0
2	15	5.0	40	45	3.7	2.4
3	5	2.0	20	28	3.0	2.0
4	10	3.5	25	25	3.7	2.5
5	5	2.0	15	17	3.0	2.0
6	15	5.0	40	45	3.7	2.4
7	5	2.0	16	20	3.0	2.0
8	10	3.5	25	25	3.7	2.5

Vehical Density Timings

Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0

Pedestrian Timing

Phase	Walk	Ped Clear	Flashing Walk	Extended Actuated Ped Clear	Rest in Walk
1	0	0	No	0	No
2	7	27	No	0	No
3	0	0	No	0	No
4	7	30	No	0	No
5	0	0	No	0	No
6	7	27	No	0	No
7	0	0	No	0	No
8	7	30	No	0	No

General Control

Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay
Inactive	None	None	None	0
Yellow	NonActI	Min	None	0
Inactive	None	None	None	0
Inactive	NonActII	None	None	0
Inactive	None	None	None	0
Yellow	NonActI	Min	None	0
Inactive	None	None	None	0
Inactive	NonActII	None	None	0

Miscellaneous

Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
Yes	No	No	No	No
Yes	Yes	No	No	No
Yes	No	No	No	No
Yes	Yes	No	No	No
Yes	No	No	No	No
Yes	Yes	No	No	No
Yes	No	No	No	No
Yes	Yes	No	No	No

Special Sequence

Default Data

Vehical Detector Phase Assignment

Assigned Phase	Mode	Switched Phase	Extend	Delay

Default Data

Pedestrian Detector

Default Data

Special Detector Phase Assignment

Assign Phase	Mode	Switched Phase	Extend	Delay

:

Default Data

Unit Data

General Control

Startup Time: 5sec Startup State: Flash Red Revert: 4sec

Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0

ABC connector Input Modes: 0

ABC connector Output Modes: 0

D connector Input Modes: 0

D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash

Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
3	1	4
4	1	1
5	2	6
6	2	7
7	2	8
8	2	5

Phase(s)

Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

Alternate Sequences

No Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message
		40

Default Data

Phase Pair(s)

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

General Coordination Data

Operation Mode: 0=Free

Coordination Mode: 2=Permissive Yield

Maximun Mode: 0=Inhibit

Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn

Force Mode: 1=Cycle

Max Dwell Time: 15

Yield Period: 0

Manual Dial: 1

Manual Split: 1

Manual Offset: 1

Dial/Split	Cycle
1/1	120
2/1	130
3/1	130

Split Times and Phase Mode

Dial 1 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	11	0=Actuated	2	47	1=Coordinate	3	24	0=Actuated	4	38	0=Actuated
5	14	0=Actuated	6	45	1=Coordinate	7	22	0=Actuated	8	39	0=Actuated

Dial 2 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	10	0=Actuated	2	59	1=Coordinate	3	26	0=Actuated	4	35	0=Actuated
5	17	0=Actuated	6	48	1=Coordinate	7	20	0=Actuated	8	45	0=Actuated

Dial 3 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	10	0=Actuated	2	62	1=Coordinate	3	22	0=Actuated	4	36	0=Actuated
5	15	0=Actuated	6	57	1=Coordinate	7	22	0=Actuated	8	36	0=Actuated

Traffic Plan Data

Plan: **1/1/1**	Offset Time: 16	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/1/1**	Offset Time: 17	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/1/1**	Offset Time: 12	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4																	
2	1	9:0	1/0/1			X	X	X		X		X								
3	1	20:0	0/0/4																	
4	2	0:1	0/0/4																	
5	2	6:30	1/0/1			X	X	X	X	X	X	X								
6	2	9:30	1/0/1			X	X	X		X		X								
7	2	15:0	1/0/1			X	X	X	X	X		X								
8	2	16:0	1/0/1		X	X	X	X	X	X	X	X								
9	2	18:0	1/0/1			X	X	X		X		X								
10	2	21:0	0/0/4																	
11	7	0:1	0/0/4																	
12	7	8:30	1/0/1			X	X	X		X		X								
13	7	19:0	0/0/4																	

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8
1	1	0	0					X										
2	2	0	0					X										
3	7	0	0					X										

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	5
2	5
3	5
4	5

Flash > Preepmt 1 Preepmt 2 = Preempt 3 Preepmt 4 = Preempt 5
Preepmt 1 = Preempt 2 Preepmt 3 = Preempt 4 Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	8	4.0	2.0	0	0	4.0	2.0	5	0	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0

Preempt 1

Phase	Exit Phase	Exit Calls
1	No	Yes
2	No	Yes
3	Yes	Yes
4	No	Yes
5	No	Yes
6	No	Yes
7	Yes	Yes
8	No	Yes

Preempt 2

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 3

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 4

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 5

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 6

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1

Phase	Exit Phase	Exit Calls

Priority 2

Phase	Exit Phase	Exit Calls

Priority 3

Phase	Exit Phase	Exit Calls

Priority 4

Phase	Exit Phase	Exit Calls

Priority 5

Phase	Exit Phase	Exit Calls

Priority 6

Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Red	Green	No
6	Red	Green	No

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle

Default Data

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Red	Green	No
7	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle
3	Green	Red	No
4	Red	Green	No
8	Green	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
2	Red	Grn	No
3	Grn	Red	No
4	Grn	Grn	No

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 6

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %
1	65	900	4	1	98
2	66	900	4	1	98
3	67	900	4	1	98
4	68	900	4	1	98
5	69	900	4	1	98
6	70	900	4	1	98
7	71	900	4	1	98

Queue 1 Detectors	System Detectors	Weight Factor	Queue 2 Detectors	System Detectors	Weight Factor

Default Data **Default Data**

Sample Interval:

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue:

Level	Enter	Leave	Dial / Split / Offset
			/ /

Default Data

Vehical Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - Diag 0 Values

Vehical Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Valu

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1	Detector_2	Distance :

Speed Trap Low Treshold	Speed Trap High Treshold

Dial/Split/Offset

//

Default Data

Default Data

Volume Detector Data

Report Interval

Volume Detector Number	Controller Detector Channel

Default Data

Programmed EPAC Data

4/6/2022
10:06:18AM

Intersection Name: Paris & Van Horne
Intersection Alias: Van Horne

Access Code: 9999 Channel: 1 Address: 14 Revision: 3.13b

Access Data

Port 2 Comm :19200 Baud
Port 3 Comm :19200 Baud

Phase Data

Vehical Basic Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red
1	5	2.0	15	15	3.0	1.0
2	15	3.5	35	35	3.7	2.4
4	7	2.5	25	25	3.7	3.0
5	5	2.0	6	6	3.0	1.0
6	15	3.5	35	35	3.7	2.4
8	7	2.5	25	25	3.7	3.0

Vehical Density Timings

Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0

Pedestrian Timing

Phase	Walk	Ped Clear	Flashing Walk	Extended Actuated Ped Clear	Rest in Walk
1	0	0	No	0	No
2	7	25	No	0	No
4	7	35	No	0	No
5	0	0	No	0	No
6	7	25	No	0	No
8	7	35	No	0	No

General Control

Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay
Inactive	None	None	None	0
Yellow	NonActI	Max	None	0
Inactive	NonActII	None	None	0
Inactive	None	None	None	0
Yellow	NonActI	Max	None	0
Inactive	NonActII	None	None	0

Miscellaneous

Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
Yes	No	No	No	No
No	Yes	No	No	No
Yes	Yes	No	No	No
Yes	No	No	No	No
No	Yes	No	No	No
Yes	Yes	No	No	No

Special Sequence
Default Data

Vehical Detector Phase Assignment

	Assigned Phase	Mode	Switched Phase	Extend	Delay
Vehical Detector Channel :3	4	Veh	0	0.0	0
Vehical Detector Channel :6	4	Veh	0	0.0	0
Vehical Detector Channel :7	4	Veh	0	0.0	0

Default Data

Pedestrian Detector
Default Data

Special Detector Phase Assignment

	Assign Phase	Mode	Switched Phase	Extend	Delay
:					

Default Data

Unit Data

General Control

Startup Time: 5sec Startup State: Flash Red Revert: 4sec
Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0
ABC connector Input Modes: 0
ABC connector Output Modes: 0
D connector Input Modes: 0
D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash
Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
4	1	1
5	2	6
6	2	7
8	2	5

Phase(s)

Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

Alternate Sequences

Phase Pair(s)

No Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message 40

Default Data

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

General Coordination Data

Operation Mode: 1=Auto

Coordination Mode: 0=Permissive

Maximun Mode: 0=Inhibit

Correction Mode: 3=Short Way Plus

Offset Mode: 0=Beg Grn

Force Mode: 0=Plan

Max Dwell Time: 15

Yield Period: 0

Manual Dial: 1

Manual Split: 1

Manual Offset: 1

Dial/Split	Cycle
1/1	120
2/1	120
3/1	120

Split Times and Phase Mode

Dial 1 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	11	0=Actuated	2	57	1=Coordinate	4	52	0=Actuated	5	18	0=Actuated
6	50	1=Coordinate	8	52	0=Actuated						

Dial 2 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	14	0=Actuated	2	55	1=Coordinate	4	51	0=Actuated	5	14	0=Actuated
6	55	1=Coordinate	8	51	0=Actuated						

Dial 3 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	14	0=Actuated	2	55	1=Coordinate	4	51	0=Actuated	5	14	0=Actuated
6	55	1=Coordinate	8	51	0=Actuated						

Traffic Plan Data

Plan: **4/1/1** Offset Time: 100 Alt. Sequence: 0 Mode: 0=Normal Rg 2 Lag Time: 0 Rg 3 Lag Time: 0 Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4																	
2	1	9:0	1/1/1																	
3	1	21:30	0/0/4																	
4	2	0:1	0/0/4																	
5	2	6:30	1/1/1																	
6	2	21:30	0/0/4																	
7	7	0:1	0/0/4																	
8	7	8:0	1/1/1																	
9	7	21:30	0/0/4																	

AUX. Events

Event	Program Day	Hour	Min.	Aux 1	Ouputs 2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	5
2	5
3	5
4	5

Flash > Preepmt 1	Preepmt 2 = Preempt 3	Preepmt 4 = Preempt 5
Preepmt 1 = Preempt 2	Preepmt 3 = Preempt 4	Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	0	0	4.0	2.0	5	0	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0

Preempt 1

Phase	Exit Phase	Exit Calls
1	No	Yes
2	No	Yes
3	No	Yes
4	Yes	Yes
5	No	Yes
6	No	Yes
7	No	Yes
8	Yes	Yes

Preempt 2

Phase	Exit Phase	Exit Calls
2	Yes	No
6	Yes	No

Preempt 3

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 4

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 5

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 6

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1

Phase	Exit Phase	Exit Calls

Priority 2

Phase	Exit Phase	Exit Calls

Priority 3

Phase	Exit Phase	Exit Calls

Priority 4

Phase	Exit Phase	Exit Calls

Priority 5

Phase	Exit Phase	Exit Calls

Priority 6

Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Red	Green	No
6	Red	Green	No

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle
C	Red	Green	No
D	Red	Green	No

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Red	Green	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle
3	Green	Red	No
4	Red	Green	No
8	Green	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
2	Red	Grn	No
3	Grn	Red	No
4	Grn	Grn	No

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 6

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %	Queue 1 Detectors	System Detectors	Weight Factor	Queue 2 Detectors	System Detectors	Weight Factor

Default Data

Sample Interval:

Default Data

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Default Data

Queue:

Level	Enter	Leave	Dial / Split / Offset
			/ /

Default Data

Vehical Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - Diag 0 Values

Vehical Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Valu

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1	Detector_2	Distance :

Default Data

Dial/Split/Offset	Speed Trap Low Treshold	Speed Trap High Treshold
//		

Default Data

Volume Detector Data

Volume Detector Number	Report Interval Controller Detector Channel

Default Data

Programmed EPAC Data

4/6/2022
10:10:05AM

Intersection Name: Paris & John
Intersection Alias: John

Access Code: 9999 Channel: 7 Address: 16 Revision: 3.13

Access Data

Port 2 Comm :1200 Baud
Port 3 Comm :1200 Baud

Phase Data

Vehical Basic Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red
1	5	2.5	10	10	3.0	1.0
2	20	4.0	45	45	3.7	2.1
4	8	3.5	20	20	3.7	2.0
6	20	4.0	45	45	3.7	2.1
8	8	3.5	20	20	3.7	2.0

Vehical Density Timings

Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0

Pedestrian Timing

Phase	Walk	Ped Clear	Flashing Walk	Extended Actuated Ped Clear	Rest in Walk
1	0	0	No	0	No
2	7	13	No	0	No
4	7	22	No	0	No
6	7	13	No	0	No
8	7	22	No	0	No

General Control

Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay
Inactive	None	None	None	0
Yellow	NonActI	Min	None	0
Inactive	NonActII	None	None	0
Yellow	NonActI	Min	None	0
Inactive	NonActII	None	None	0

Miscellaneous

Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
Yes	No	No	No	No
Yes	Yes	No	No	No
Yes	Yes	No	No	No
Yes	Yes	No	No	No
Yes	Yes	No	No	No

Special Sequence

Default Data

Vehical Detector Phase Assignment

	Assigned Phase	Mode	Switched Phase	Extend	Delay
Vehical Detector Channel :1	1	Veh	0	0.0	0
Vehical Detector Channel :2	2	Veh	0	0.0	0
Vehical Detector Channel :3	4	Veh	0	0.0	0
Vehical Detector Channel :4	4	Veh	0	0.0	3
Vehical Detector Channel :5	5	Veh	0	0.0	0
Vehical Detector Channel :6	6	Veh	0	0.0	0
Vehical Detector Channel :7	7	Veh	0	0.0	0
Vehical Detector Channel :8	8	Veh	0	0.0	0

Pedestrian Detector

Default Data

Special Detector Phase Assignment

	Assign Phase	Mode	Switched Phase	Extend	Delay
:					

Default Data

Unit Data

General Control

Startup Time: 5sec Startup State: Flash Red Revert: 4sec
Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0
ABC connector Input Modes: 0
ABC connector Output Modes: 0
D connector Input Modes: 0
D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash

Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1																
2																

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
4	1	1
6	2	7
8	2	5

Phase(s)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Concurrent Phases	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

Alternate Sequences

Phase Pair(s)

No Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message
		40

Default Data

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

General Coordination Data

Operation Mode: 1=Auto
Coordination Mode: 0=Permissive
Maximun Mode: 0=Inhibit
Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn
Force Mode: 0=Plan
Max Dwell Time: 15
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Dial/Split	Cycle
1/1	110
2/1	110
3/1	110

Split Times and Phase Mode

Dial 1 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	11	0=Actuated	2	62	1=Coordinate	4	37	0=Actuated	6	73	1=Coordinate
8	37	0=Actuated									

Dial 2 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	13	0=Actuated	2	60	1=Coordinate	4	37	0=Actuated	6	73	1=Coordinate
8	37	0=Actuated									

Dial 3 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	13	0=Actuated	2	60	1=Coordinate	4	37	0=Actuated	6	73	1=Coordinate
8	37	0=Actuated									

Traffic Plan Data

Plan: **1/1/1**	Offset Time: 55	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/2/1**	Offset Time: 71	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/3/1**	Offset Time: 71	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/1/1**	Offset Time: 43	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/2/1**	Offset Time: 71	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/1/1**	Offset Time: 8	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/2/1**	Offset Time: 71	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2	1	8:30	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3	1	9:30	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4	2	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5	2	6:30	1/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6	2	9:30	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7	2	15:30	3/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8	2	18:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9	2	21:30	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10	7	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
11	7	8:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
12	7	21:0	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	5
2	5
3	5
4	5

Flash > Preepmt 1 Preepmt 2 = Preempt 3 Preepmt 4 = Preempt 5
Preepmt 1 = Preempt 2 Preepmt 3 = Preempt 4 Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0

Preempt 1

Phase	Exit Phase	Exit Calls
4	Yes	No
8	Yes	No

Preempt 2

Phase	Exit Phase	Exit Calls
1	No	Yes
2	No	Yes
3	No	Yes
4	Yes	Yes
5	No	Yes
6	No	Yes
7	No	Yes
8	Yes	Yes

Preempt 3

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 4

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 5

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 6

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1

Phase	Exit Phase	Exit Calls

Priority 2

Phase	Exit Phase	Exit Calls

Priority 3

Phase	Exit Phase	Exit Calls

Priority 4

Phase	Exit Phase	Exit Calls

Priority 5

Phase	Exit Phase	Exit Calls

Priority 6

Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Red	Green	No
6	Red	Green	No

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle

Default Data

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Green	Green	No
5	Green	Red	No
6	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
1	Red	Grn	No
2	Grn	Red	No
3	Grn	Grn	No

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle
3	Green	Red	No
4	Red	Green	No
8	Green	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
2	Red	Grn	No
3	Grn	Red	No
4	Grn	Grn	No

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 6

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %
1	71	100	1	10	0
2	72	100	1	10	0

Sample Interval:

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue 1 Detectors	System Detectors	Weight Factor

Default Data

Queue 2 Detectors	System Detectors	Weight Factor

Default Data

Queue: 1

Level	Enter	Leave	Dial / Split / Offset
1	1	1	2 / 2 / 1
2	1	1	2 / 2 / 1

Queue: 2

Level	Enter	Leave	Dial / Split / Offset
1	1	1	3 / 2 / 1
2	1	1	3 / 2 / 1

Vehical Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
4	60	0	0

Vehical Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
2	60	0	0

Default Data - No Diag 0 Valu

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
4	60	0	0

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1	Detector_2	Distance :

Speed Trap Low Treshold	Speed Trap High Treshold

Dial/Split/Offset

//

Default Data

Default Data

Volume Detector Data

Volume Detector Number	Controller Detector Channel	Report Interval

Default Data

Programmed EPAC Data

4/6/2022
10:10:51AM

Intersection Name: Paris & Boland **Intersection Alias: Boland**

Access Code: 9999 Channel: 7 Address: 17 Revision: 3.13

Access Data

Port 2 Comm :1200 Baud
Port 3 Comm :1200 Baud

Phase Data

Vehical Basic Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red
2	30	5.0	50	50	3.7	2.2
4	8	3.5	20	20	3.5	2.5
6	30	5.0	50	50	3.7	2.2
8	8	3.5	20	20	3.5	2.5

Vehical Density Timings

Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0

Pedestrian Timing

Phase	Walk	Ped Clear	Flashing Walk	Extended Actuated Ped Clear	Rest in Walk
2	7	20	No	0	No
4	7	18	No	0	No
6	7	20	No	0	No
8	7	18	No	0	No

General Control

Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay
Yellow	NonActI	Min	None	0
Inactive	NonActII	None	None	0
Yellow	NonActI	Min	None	0
Inactive	NonActII	None	None	0

Miscellaneous

Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
Yes	Yes	No	No	No
Yes	Yes	No	No	No
Yes	Yes	No	No	No
Yes	Yes	No	No	No

Special Sequence
Default Data

Vehical Detector Phase Assignment

Assigned Phase	Mode	Switched Phase	Extend	Delay

Default Data

Pedestrian Detector
Default Data

Special Detector Phase Assignment

Assign Phase	Mode	Switched Phase	Extend	Delay

:
Default Data

Unit Data

General Control

Startup Time: 5sec Startup State: Flash Red Revert: 4sec
Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0
ABC connector Input Modes: 0
ABC connector Output Modes: 0
D connector Input Modes: 0
D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash
Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring			Phase(s)													
Phase	Ring	Next Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	1	3	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
4	1	1	5	5	7	7	2	2	4	4								
6	2	7	6	6	8	8	5	6	7	8								
8	2	5																

Concurrent Phases

Alternate Sequences

Alternate Sequences

No Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message 40

Default Data

Phase Pair(s)

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

General Coordination Data

Operation Mode: 1=Auto
Coordination Mode: 0=Permissive
Maximun Mode: 0=Inhibit
Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn
Force Mode: 0=Plan
Max Dwell Time: 15
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Dial/Split	Cycle
1/1	110
2/1	110
3/1	110

Split Times and Phase Mode

Dial 1 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	10	0=Actuated	2	67	1=Coordinate	4	33	0=Actuated	6	77	1=Coordinate
8	33	0=Actuated									

Dial 2 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	10	0=Actuated	2	67	1=Coordinate	4	33	0=Actuated	6	77	1=Coordinate
8	33	0=Actuated									

Dial 3 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	12	0=Actuated	2	65	1=Coordinate	4	33	0=Actuated	6	77	1=Coordinate
8	33	0=Actuated									

Traffic Plan Data

Plan: **1/1/1**	Offset Time: 8	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/2/1**	Offset Time: 16	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/3/1**	Offset Time: 16	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/4/1**	Offset Time: 6	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/1/1**	Offset Time: 104	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/2/1**	Offset Time: 12	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/3/1**	Offset Time: 16	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/4/1**	Offset Time: 6	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/1/1**	Offset Time: 63	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/2/1**	Offset Time: 12	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **4/1/1**	Offset Time: 6	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4																	
2	1	8:30	2/1/1																	
3	1	21:30	0/0/4																	
4	2	0:1	0/0/4																	
5	2	6:30	1/1/1																	
6	2	9:30	2/1/1																	
7	2	15:30	3/1/1																	
8	2	18:0	2/1/1																	
9	2	21:30	0/0/4																	
10	7	0:1	0/0/4																	
11	7	8:0	2/1/1																	
12	7	21:30	0/0/4																	

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	5
2	5
3	5
4	5

Flash > Preepmt 1	Preepmt 2 = Preempt 3	Preepmt 4 = Preempt 5
Preepmt 1 = Preempt 2	Preepmt 3 = Preempt 4	Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	17	4.0	2.0	0	0	4.0	2.0	5	0	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0

Preempt 1

Phase	Exit Phase	Exit Calls
4	Yes	No
8	Yes	No

Preempt 2

Phase	Exit Phase	Exit Calls
1	No	Yes
2	No	Yes
3	No	Yes
4	Yes	Yes
5	No	Yes
6	No	Yes
7	No	Yes
8	Yes	Yes

Preempt 3

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 4

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 5

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 6

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1

Phase	Exit Phase	Exit Calls

Priority 2

Phase	Exit Phase	Exit Calls

Priority 3

Phase	Exit Phase	Exit Calls

Priority 4

Phase	Exit Phase	Exit Calls

Priority 5

Phase	Exit Phase	Exit Calls

Priority 6

Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Red	Green	No
6	Red	Green	No

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle

Default Data

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Green	Green	No
5	Green	Red	No
6	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
1	Red	Grn	No
2	Grn	Red	No
3	Grn	Grn	No

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle
3	Green	Red	No
4	Red	Green	No
8	Green	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
2	Red	Grn	No
3	Grn	Red	No
4	Grn	Grn	No

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 6

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %	Queue 1 Detectors	Queue 1 System Detectors	Queue 1 Weight Factor	Queue 2 Detectors	Queue 2 System Detectors	Queue 2 Weight Factor
1	71	100	1	10	0						
2	72	100	1	10	0						

Default Data **Default Data**

Sample Interval:

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 1

Level	Enter	Leave	Dial / Split / Offset
1	1	1	2 / 2 / 1
2	1	1	2 / 2 / 1

Queue: 2

Level	Enter	Leave	Dial / Split / Offset
1	1	1	3 / 2 / 1
2	1	1	3 / 2 / 1

Vehical Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
4	60	0	0

Vehical Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
2	60	0	0

Default Data - No Diag 0 Valı

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
4	60	0	0

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1 Detector_2 Distance :

Default Data

Volume Detector Data

Report Interval

Volume Detector Number

Controller Detector Channel

Default Data

Dial/Split/Offset //

Speed Trap Low Treshold

Speed Trap High Treshold

Default Data

Programmed EPAC Data

4/6/2022
10:12:08AM

Intersection Name: Paris & York
Intersection Alias: York

Access Code: 9999 Channel: 7 Address: 18 Revision: 3.13

Access Data

Port 2 Comm :1200 Baud
Port 3 Comm :1200 Baud

Phase Data

Vehical Basic Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red
2	30	4.0	45	45	4.2	2.0
4	8	3.0	20	20	3.3	2.2
5	5	2.5	12	12	3.0	1.0
6	30	4.0	45	45	4.2	2.0

Vehical Density Timings

Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0

Pedestrian Timing

Phase	Walk	Ped Clear	Flashing Walk	Extended Actuated Ped Clear	Rest in Walk
2	7	16	No	0	No
4	7	22	No	0	No
5	0	0	No	0	No
6	7	16	No	0	No

General Control

Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay
Yellow	NonActI	Min	None	0
Inactive	NonActII	None	None	0
Inactive	None	None	None	0
Yellow	None	Min	None	0

Miscellaneous

Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
Yes	Yes	No	No	No
Yes	No	No	No	No
Yes	No	No	No	No
Yes	Yes	No	No	No

Special Sequence
Default Data

Vehical Detector Phase Assignment

Assigned Phase	Mode	Switched Phase	Extend	Delay

Default Data

Pedestrian Detector

Pedestrian Detector Channel :8	4	Ped	0	0.0	0

Special Detector Phase Assignment

Assign Phase	Mode	Switched Phase	Extend	Delay

:
Default Data

Unit Data

General Control

Startup Time: 5sec Startup State: Flash Red Revert: 4sec
Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0
ABC connector Input Modes: 0
ABC connector Output Modes: 0
D connector Input Modes: 0
D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash
Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	1															
	2															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
2	1	3
4	1	1
5	2	6
6	2	7

Phase(s)

Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

Alternate Sequences

Phase Pair(s)

No Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message 40

Default Data

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

General Coordination Data

Operation Mode: 1=Auto
Coordination Mode: 0=Permissive
Maximun Mode: 0=Inhibit
Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn
Force Mode: 0=Plan
Max Dwell Time: 15
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Dial/Split	Cycle
1/1	110
2/1	110
3/1	110

Split Times and Phase Mode

Dial 1 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
2	73	1=Coordinate	4	37	0=Actuated	5	15	0=Actuated	6	58	1=Coordinate

Dial 2 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
2	73	1=Coordinate	4	37	0=Actuated	5	15	0=Actuated	6	58	1=Coordinate

Dial 3 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
2	73	1=Coordinate	4	37	0=Actuated	5	15	0=Actuated	6	58	1=Coordinate

Traffic Plan Data

Plan: **1/1/1**	Offset Time: 44	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/2/1**	Offset Time: 45	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/3/1**	Offset Time: 45	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/4/1**	Offset Time: 45	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/1/1**	Offset Time: 46	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/2/1**	Offset Time: 38	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/1/1**	Offset Time: 60	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/2/1**	Offset Time: 45	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4																	
2	1	9:0	1/1/1																	
3	1	12:0	2/1/1																	
4	1	21:0	0/0/4																	
5	2	0:1	0/0/4																	
6	2	6:30	1/1/1																	
7	2	12:0	2/1/1																	
8	2	16:0	3/1/1																	
9	2	18:0	2/1/1																	
10	2	21:0	0/0/4																	
11	7	0:1	0/0/4																	
12	7	8:30	2/1/1																	
13	7	12:0	2/1/1																	
14	7	21:30	0/0/4																	

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	0
2	0
3	0
4	0

Flash > Preepmt 1	Preepmt 2 = Preempt 3	Preepmt 4 = Preempt 5
Preepmt 1 > Preempt 2	Preepmt 3 = Preempt 4	Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0

Preempt 1

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 2

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 3

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 4

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 5

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 6

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1

Phase	Exit Phase	Exit Calls

Priority 2

Phase	Exit Phase	Exit Calls

Priority 3

Phase	Exit Phase	Exit Calls

Priority 4

Phase	Exit Phase	Exit Calls

Priority 5

Phase	Exit Phase	Exit Calls

Priority 6

Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Red	Green	No
6	Red	Green	No

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle

Default Data

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 6

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %
1	71	100	1	10	0
2	72	100	1	10	0

Sample Interval:

Queue 1 Detectors	System Detectors	Weight Factor

Default Data

Queue 2 Detectors	System Detectors	Weight Factor

Default Data

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 1

Level	Enter	Leave	Dial / Split / Offset
1	1	1	2 / 2 / 1
2	1	1	2 / 2 / 1

Queue: 2

Level	Enter	Leave	Dial / Split / Offset
1	1	1	3 / 2 / 1
2	1	1	3 / 2 / 1

Vehical Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
4	60	0	0

Vehical Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
2	60	0	0

Default Data - No Diag 0 Valı

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
4	60	0	0

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1	Detector_2	Distance :

Default Data

Dial/Split/Offset

//

Default Data

Speed Trap Low Treshold	Speed Trap High Treshold

Volume Detector Data

Volume Detector Number	Report Interval Controller Detector Channel

Default Data

Programmed EPAC Data

4/6/2022
10:20:08AM

Intersection Name: Paris & Ramsey Lake **Intersection Alias:** Ramsey Lak

Access Code: 9999 Channel: 7 Address: 19 Revision: 3.13

Access Data

Port 2 Comm :1200 Baud
Port 3 Comm :19200 Baud

Phase Data

Vehical Basic Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red
1	10	3.0	19	28	3.0	2.0
2	15	5.0	50	50	4.2	2.0
4	8	2.5	25	25	3.3	2.5
6	15	3.0	50	50	4.2	2.0

Vehical Density Timings

Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0
0.0	0	0	0	0	0.0

Pedestrian Timing

Phase	Walk	Ped Clear	Flashing Walk	Extended Actuated Ped Clear	Rest in Walk
1	0	0	No	0	No
2	7	24	No	0	No
4	7	27	No	0	No
6	0	0	No	0	No

General Control

Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay
Inactive	None	None	None	0
Yellow	NonActI	Min	None	0
Inactive	NonActII	None	None	0
Yellow	NonActI	Min	None	0

Miscellaneous

Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
Yes	No	No	No	No
Yes	Yes	No	No	No
Yes	No	No	No	No
No	Yes	No	No	No

Special Sequence
Default Data

Vehical Detector Phase Assignment

	Assigned Phase	Mode	Switched Phase	Extend	Delay
Vehical Detector Channel :7	4	Veh	0	0.0	0

Default Data

Pedestrian Detector
Default Data

Special Detector Phase Assignment

	Assign Phase	Mode	Switched Phase	Extend	Delay
:					

Default Data

Unit Data

General Control

Startup Time: 5sec Startup State: Flash Red Revert: 2sec
Auto Ped Clear: Yes Stop Time Reset: No Alternate Sequence: 0
ABC connector Input Modes: 0
ABC connector Output Modes: 0
D connector Input Modes: 2
D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash
Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring			Phase(s)														
Phase	Ring	Next Phase		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	2	Concurrent Phases	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
2	1	3		5	5	7	7	2	2	4	4								
4	1	1		6	6	8	8	5	6	7	8								
6	2	7																	

Alternate Sequences

Alternate Sequences

Phase Pair(s)

No Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message 40

Default Data

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

General Coordination Data

Operation Mode: 1=Auto
Coordination Mode: 0=Permissive
Maximun Mode: 0=Inhibit
Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn
Force Mode: 1=Cycle
Max Dwell Time: 0
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Dial/Split	Cycle
1/1	110
2/1	110
3/1	110

Split Times and Phase Mode

Dial 1 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	30	0=Actuated	2	39	1=Coordinate	4	41	0=Actuated	6	69	1=Coordinate

Dial 2 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	28	0=Actuated	2	41	0=Actuated	4	41	0=Actuated	6	69	1=Coordinate

Dial 3 / Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	17	0=Actuated	2	45	1=Coordinate	4	48	0=Actuated	6	72	1=Coordinate

Traffic Plan Data

Plan: **1/1/1**	Offset Time: 2	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/2/1**	Offset Time: 2	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **1/3/1**	Offset Time: 2	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/1/1**	Offset Time: 18	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **2/2/1**	Offset Time: 2	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/1/1**	Offset Time: 102	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: **3/2/1**	Offset Time: 2	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2	1	9:0	1/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3	1	12:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4	1	21:30	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5	2	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6	2	6:30	1/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7	2	12:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8	2	16:0	3/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9	2	18:0	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10	2	21:0	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
11	7	0:1	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
12	7	8:30	2/1/1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
13	7	21:0	0/0/4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	5
2	5
3	5
4	5

Flash > Preepmt 1 Preepmt 2 = Preempt 3 Preepmt 4 = Preempt 5
Preepmt 1 = Preempt 2 Preepmt 3 = Preempt 4 Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	5	0	4.0	2.0	5	0	4.0	2.0

Preempt 1

Phase	Exit Phase	Exit Calls
1	No	Yes
2	No	Yes
3	No	Yes
4	Yes	Yes
5	No	Yes
6	No	Yes
7	No	Yes
8	Yes	Yes

Preempt 2

Phase	Exit Phase	Exit Calls
1	No	Yes
2	No	Yes
3	No	Yes
4	Yes	Yes
5	No	Yes
6	No	Yes
7	No	Yes
8	Yes	Yes

Preempt 3

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 4

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 5

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Preempt 6

Phase	Exit Phase	Exit Calls
1	No	Yes
2	Yes	Yes
3	No	Yes
4	No	Yes
5	No	Yes
6	Yes	Yes
7	No	Yes
8	No	Yes

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1

Phase	Exit Phase	Exit Calls

Priority 2

Phase	Exit Phase	Exit Calls

Priority 3

Phase	Exit Phase	Exit Calls

Priority 4

Phase	Exit Phase	Exit Calls

Priority 5

Phase	Exit Phase	Exit Calls

Priority 6

Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle
1	Red	Green	No
6	Red	Green	No

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle
C	Red	Green	No
D	Red	Green	No

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle
2	Green	Green	No
5	Green	Red	No
6	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
1	Red	Grn	No
2	Grn	Red	No
3	Grn	Grn	No

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle
3	Green	Red	No
4	Red	Green	No
8	Green	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
2	Red	Grn	No
3	Grn	Red	No
4	Grn	Grn	No

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

Preempt 6

Vehical Phases

Ph.	Track	Dwell	Cycle
4	Green	Green	No
7	Green	Red	No
8	Red	Green	No

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle
4	Red	Grn	No
1	Grn	Red	No
2	Grn	Grn	No

System/Detectors Data

Local Critical Alarms

Revert to Backup: 20 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %	Queue 1 Detectors	Queue 1 System Detectors	Queue 1 Weight Factor	Queue 2 Detectors	Queue 2 System Detectors	Queue 2 Weight Factor
1	71	2,000	1	10	0	1	1	1	1	2	1
2	72	2,000	1	10	0	2	1	1	2	2	1

Sample Interval:

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 1

Level	Enter	Leave	Dial / Split / Offset
1	1	1	2 / 2 / 1
2	1	1	2 / 2 / 1

Queue: 2

Level	Enter	Leave	Dial / Split / Offset
1	1	1	3 / 2 / 1
2	1	1	3 / 2 / 1

Vehical Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
4	60	0	0

Vehical Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
1	60	0	0
2	60	0	0

Default Data - No Diag 0 Valu

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count
4	60	0	0

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1 Detector_2 Distance :

Default Data

Volume Detector Data

Report Interval

Volume Detector Number

Controller Detector Channel

Default Data

Dial/Split/Offset //

Speed Trap Low Treshold

Speed Trap High Treshold

Default Data

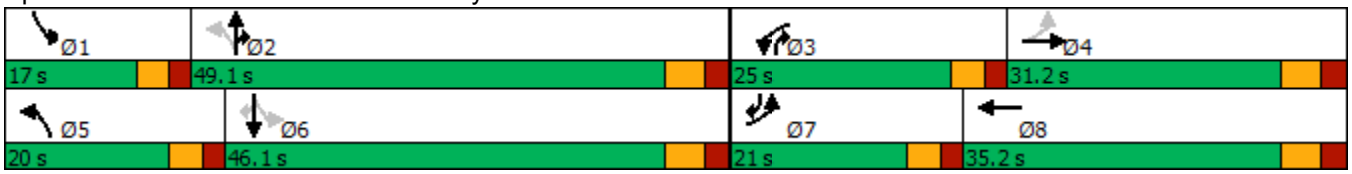
Appendix D –
Synchro Analysis Output –
Existing Traffic Volumes

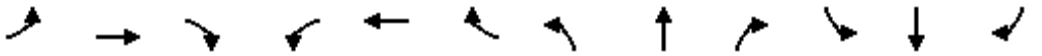
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	156	390	458	349	71	520	370	25	764	224
Future Volume (vph)	156	390	458	349	71	520	370	25	764	224
Lane Group Flow (vph)	170	469	498	389	77	565	402	27	830	243
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	10.0
Total Split (s)	21.0	31.2	25.0	35.2	20.0	49.1		17.0	46.1	21.0
Total Split (%)	17.2%	25.5%	20.4%	28.8%	16.4%	40.1%		13.9%	37.7%	17.2%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		None	Min	None
v/c Ratio	0.40	0.68	0.70	0.40	0.29	0.35	0.39	0.08	0.67	0.37
Control Delay	18.5	38.6	40.2	28.5	20.3	24.2	6.0	17.9	33.8	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	38.6	40.2	28.5	20.3	24.2	6.0	17.9	33.8	13.1
Queue Length 50th (m)	17.2	42.0	43.5	29.8	8.6	25.4	10.6	2.9	51.4	18.9
Queue Length 95th (m)	35.6	65.9	#77.5	52.0	19.2	46.4	41.0	8.7	73.8	38.5
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	526	1023	813	1212	372	2590	1084	420	2363	753
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.46	0.61	0.32	0.21	0.22	0.37	0.06	0.35	0.32

Intersection Summary

Cycle Length: 122.3
Actuated Cycle Length: 86.9
Natural Cycle: 95
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	390	41	458	349	9	71	520	370	25	764	224
Future Volume (vph)	156	390	41	458	349	9	71	520	370	25	764	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1684	3368		3367	3460		1670	4988	1568	1717	4893	1555
Flt Permitted	0.52	1.00		0.95	1.00		0.19	1.00	1.00	0.43	1.00	1.00
Satd. Flow (perm)	925	3368		3367	3460		337	4988	1568	776	4893	1555
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)	170	424	45	498	379	10	77	565	402	27	830	243
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	92	0	0	47
Lane Group Flow (vph)	170	463	0	498	388	0	77	565	310	27	830	196
Confl. Peds. (#/hr)	7		4	4		7	19		10	10		19
Heavy Vehicles (%)	7%	5%	10%	4%	4%	0%	8%	4%	3%	5%	6%	2%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	29.1	17.7		18.4	24.7		35.6	28.5	53.0	26.4	23.9	35.3
Effective Green, g (s)	29.1	17.7		18.4	24.7		35.6	28.5	53.0	26.4	23.9	35.3
Actuated g/C Ratio	0.33	0.20		0.21	0.28		0.40	0.32	0.59	0.30	0.27	0.39
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	397	666		692	955		240	1590	929	255	1308	613
v/s Ratio Prot	0.05	c0.14		c0.15	0.11		c0.03	0.11	0.20	0.00	c0.17	0.04
v/s Ratio Perm	0.08						0.10			0.03		0.09
v/c Ratio	0.43	0.69		0.72	0.41		0.32	0.36	0.33	0.11	0.63	0.32
Uniform Delay, d1	22.6	33.3		33.1	26.4		17.9	23.4	9.2	22.6	28.9	18.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	3.1		3.6	0.3		0.8	0.1	0.2	0.2	1.0	0.3
Delay (s)	23.4	36.5		36.7	26.7		18.6	23.5	9.5	22.7	29.9	19.0
Level of Service	C	D		D	C		B	C	A	C	C	B
Approach Delay (s)		33.0			32.3			17.8			27.3	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	22.3
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

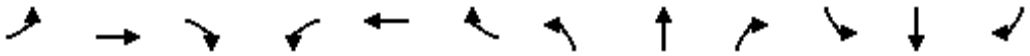
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	13	23	227	54	125	146	870	68	1155
Future Volume (vph)	13	23	227	54	125	146	870	68	1155
Lane Group Flow (vph)	14	111	249	59	137	160	1066	75	1313
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	31.7	31.7	31.7	31.7	31.7	10.0	41.1	19.0	50.1
Total Split (%)	34.5%	34.5%	34.5%	34.5%	34.5%	10.9%	44.8%	20.7%	54.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.05	0.15	0.80	0.13	0.28	0.62	0.40	0.21	0.48
Control Delay	24.1	8.9	49.6	25.2	6.2	20.5	12.9	7.9	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	8.9	49.6	25.2	6.2	20.5	12.9	7.9	13.8
Queue Length 50th (m)	1.9	1.7	40.2	7.9	0.0	9.6	38.1	4.2	49.4
Queue Length 95th (m)	6.5	8.0	67.7	17.4	13.2	#26.6	58.0	10.7	70.6
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		132.0		62.0	34.0		48.0	
Base Capacity (vph)	378	986	413	583	596	258	2690	507	2708
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11	0.60	0.10	0.23	0.62	0.40	0.15	0.48

Intersection Summary

Cycle Length: 91.8
Actuated Cycle Length: 85.5
Natural Cycle: 85
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Paris St & Van Horne St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	23	78	227	54	125	146	870	100	68	1155	40
Future Volume (vph)	13	23	78	227	54	125	146	870	100	68	1155	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.99	1.00	1.00		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	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1566	2904		1801	1827	1576	1703	4869		1752	5050	
Flt Permitted	0.72	1.00		0.68	1.00	1.00	0.15	1.00		0.22	1.00	
Satd. Flow (perm)	1184	2904		1293	1827	1576	277	4869		411	5050	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	14	25	86	249	59	137	160	956	110	75	1269	44
RTOR Reduction (vph)	0	65	0	0	0	104	0	12	0	0	4	0
Lane Group Flow (vph)	14	46	0	249	59	33	160	1054	0	75	1309	0
Confl. Peds. (#/hr)	4		4	4		4	6		6	6		6
Heavy Vehicles (%)	15%	4%	10%	0%	4%	1%	6%	5%	2%	3%	2%	5%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	20.6	20.6		20.6	20.6	20.6	52.5	47.0		52.4	46.7	
Effective Green, g (s)	20.6	20.6		20.6	20.6	20.6	52.5	47.0		52.4	46.7	
Actuated g/C Ratio	0.24	0.24		0.24	0.24	0.24	0.61	0.54		0.61	0.54	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	282	693		308	436	376	259	2651		338	2732	
v/s Ratio Prot		0.02			0.03		c0.04	0.22		0.01	0.26	
v/s Ratio Perm	0.01			c0.19		0.02	c0.34			0.12		
v/c Ratio	0.05	0.07		0.81	0.14	0.09	0.62	0.40		0.22	0.48	
Uniform Delay, d1	25.3	25.4		31.0	25.8	25.5	8.4	11.4		7.2	12.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		14.4	0.1	0.1	4.3	0.4		0.3	0.6	
Delay (s)	25.4	25.4		45.4	26.0	25.6	12.8	11.9		7.5	12.9	
Level of Service	C	C		D	C	C	B	B		A	B	
Approach Delay (s)		25.4			36.7			12.0			12.6	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	86.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	0	40	2	4	1111	46	1388
Future Volume (vph)	8	0	40	2	4	1111	46	1388
Lane Group Flow (vph)	0	14	0	110	4	1192	48	1455
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	50.8	50.8	14.0	64.8
Total Split (%)	28.4%	28.4%	28.4%	28.4%	56.1%	56.1%	15.5%	71.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.04		0.35	0.02	0.57	0.13	0.59
Control Delay		0.2		15.9	8.8	11.3	4.0	6.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		0.2		15.9	8.8	11.3	4.0	6.9
Queue Length 50th (m)		0.0		4.1	0.2	49.2	1.3	39.2
Queue Length 95th (m)		0.0		19.1	1.6	81.1	4.4	68.9
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		628		622	283	2933	492	3395
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.02		0.18	0.01	0.41	0.10	0.43

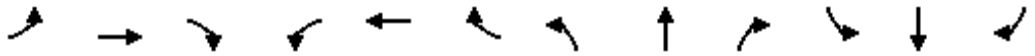
Intersection Summary
Cycle Length: 90.5
Actuated Cycle Length: 53.9
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	6	40	2	63	4	1111	34	46	1388	9
Future Volume (vph)	8	0	6	40	2	63	4	1111	34	46	1388	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1727			1696		1802	3490		1769	3536	
Flt Permitted		0.84			0.87		0.18	1.00		0.15	1.00	
Satd. Flow (perm)		1492			1502		337	3490		288	3536	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	8	0	6	42	2	66	4	1157	35	48	1446	9
RTOR Reduction (vph)	0	12	0	0	58	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	52	0	4	1190	0	48	1455	0
Confl. Peds. (#/hr)	5		5	5		5	8		4	4		8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.1			7.1		30.9	30.9		38.2	38.2	
Effective Green, g (s)		7.1			7.1		30.9	30.9		38.2	38.2	
Actuated g/C Ratio		0.12			0.12		0.54	0.54		0.67	0.67	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		186			187		183	1898		279	2378	
v/s Ratio Prot								0.34		0.01	c0.41	
v/s Ratio Perm		0.00			c0.03		0.01			0.11		
v/c Ratio		0.01			0.28		0.02	0.63		0.17	0.61	
Uniform Delay, d1		21.8			22.5		6.0	9.0		4.6	5.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.8		0.0	0.7		0.3	0.5	
Delay (s)		21.8			23.3		6.0	9.6		4.9	5.6	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		21.8			23.3			9.6			5.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	56.8	Sum of lost time (s)	15.5
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	9	2	0	2	1	1264	0	0	1456	7
Future Volume (Veh/h)	3	0	9	2	0	2	1	1264	0	0	1456	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	10	2	0	2	1	1404	0	0	1618	8
Pedestrians		2			1							
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)								347			199	
pX, platoon unblocked	0.79	0.79	0.74	0.79	0.79	0.89	0.74			0.89		
vC, conflicting volume	2330	3031	815	2226	3035	703	1628			1405		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1555	2437	54	1424	2442	429	1150			1215		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	7.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.8	2.2			2.2		
p0 queue free %	95	100	99	97	100	100	100			100		
cM capacity (veh/h)	62	25	746	76	25	410	455			519		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	4	703	702	809	817
Volume Left	3	2	1	0	0	0
Volume Right	10	2	0	0	0	8
cSH	209	129	455	1700	519	1700
Volume to Capacity	0.06	0.03	0.00	0.41	0.00	0.48
Queue Length 95th (m)	1.6	0.8	0.1	0.0	0.0	0.0
Control Delay (s)	23.4	33.9	0.1	0.0	0.0	0.0
Lane LOS	C	D	A			
Approach Delay (s)	23.4	33.9	0.0		0.0	
Approach LOS	C	D				

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	0	1253	1	1	1467
Future Volume (Veh/h)	2	0	1253	1	1	1467
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	1392	1	1	1630
Pedestrians						1
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)			226			321
pX, platoon unblocked	0.82	0.85			0.85	
vC, conflicting volume	2210	698			1393	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1231	298			1114	
tC, single (s)	6.8	6.9			6.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	141	599			229	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	928	465	544	1087
Volume Left	2	0	0	1	0
Volume Right	0	0	1	0	0
cSH	141	1700	1700	229	1700
Volume to Capacity	0.01	0.55	0.27	0.00	0.64
Queue Length 95th (m)	0.3	0.0	0.0	0.1	0.0
Control Delay (s)	30.9	0.0	0.0	0.2	0.0
Lane LOS	D			A	
Approach Delay (s)	30.9	0.0		0.1	
Approach LOS	D				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1	1	1	1	0	0
Future Volume (Veh/h)	1	1	1	1	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.50	0.50	0.50	0.50
Hourly flow rate (vph)	2	2	2	2	0	0
Pedestrians	1			2	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	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			6		12	7
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			6		12	7
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		100	100
cM capacity (veh/h)			1625		1009	1078

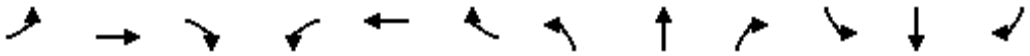
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	4	4	0
Volume Left	0	2	0
Volume Right	2	0	0
cSH	1700	1625	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	3.6	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.6	0.0
Approach LOS			A

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	24	0	2	0	5	1208	1476
Future Volume (vph)	24	0	2	0	5	1208	1476
Lane Group Flow (vph)	0	37	2	2	5	1273	1566
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		8		2		
Detector Phase	4	4	8	8	2	2	6
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	55.9	55.9	55.9
Total Split (%)	31.7%	31.7%	31.7%	31.7%	68.3%	68.3%	68.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	Min	Min	Min
v/c Ratio		0.12	0.01	0.01	0.02	0.42	0.52
Control Delay		9.5	21.0	0.0	3.6	3.4	4.2
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		9.5	21.0	0.0	3.6	3.4	4.2
Queue Length 50th (m)		0.0	0.2	0.0	0.0	0.0	0.0
Queue Length 95th (m)		6.9	1.9	0.0	1.1	45.5	64.7
Internal Link Dist (m)		198.2		192.5		314.0	201.8
Turn Bay Length (m)					40.0		
Base Capacity (vph)		711	719	653	244	3316	3313
Starvation Cap Reductn		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0
Reduced v/c Ratio		0.05	0.00	0.00	0.02	0.38	0.47

Intersection Summary
Cycle Length: 81.9
Actuated Cycle Length: 53.1
Natural Cycle: 65
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



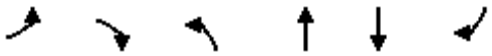
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	11	2	0	2	5	1208	1	0	1476	11
Future Volume (vph)	24	0	11	2	0	2	5	1208	1	0	1476	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9			5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95			0.95	
Frt		0.96		1.00	0.85		1.00	1.00			1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1757		1805	1615		1805	3505			3502	
Flt Permitted		1.00		1.00	1.00		0.14	1.00			1.00	
Satd. Flow (perm)		1817		1900	1615		259	3505			3502	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	25	0	12	2	0	2	5	1272	1	0	1554	12
RTOR Reduction (vph)	0	35	0	0	2	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	2	0	2	0	0	5	1273	0	0	1565	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		3.0		3.0	3.0		41.8	41.8			41.8	
Effective Green, g (s)		3.0		3.0	3.0		41.8	41.8			41.8	
Actuated g/C Ratio		0.05		0.05	0.05		0.74	0.74			0.74	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9			5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		96		100	85		190	2583			2581	
v/s Ratio Prot					0.00			0.36			c0.45	
v/s Ratio Perm		c0.00		0.00			0.02					
v/c Ratio		0.02		0.02	0.00		0.03	0.49			0.61	
Uniform Delay, d1		25.5		25.5	25.4		2.0	3.1			3.5	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.1		0.1	0.0		0.1	0.1			0.4	
Delay (s)		25.5		25.5	25.4		2.1	3.2			3.9	
Level of Service		C		C	C		A	A			A	
Approach Delay (s)		25.5			25.5			3.2			3.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	56.7	Sum of lost time (s)	11.9
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	160	132	60	1054	1301	188
Future Volume (vph)	160	132	60	1054	1301	188
Lane Group Flow (vph)	178	147	67	1171	1446	209
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	16.0	67.2	51.2	51.2
Total Split (%)	27.5%	27.5%	17.3%	72.5%	55.2%	55.2%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.56	0.37	0.24	0.52	0.77	0.23
Control Delay	36.9	8.7	6.2	7.7	18.5	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.9	8.7	6.2	7.7	18.5	2.6
Queue Length 50th (m)	24.5	0.0	2.6	39.3	87.0	0.2
Queue Length 95th (m)	48.7	15.2	7.5	66.1	140.5	10.9
Internal Link Dist (m)	376.5			775.4	314.0	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	508	539	394	2883	2287	1060
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.27	0.17	0.41	0.63	0.20

Intersection Summary
Cycle Length: 92.7
Actuated Cycle Length: 72.8
Natural Cycle: 75
Control Type: Semi Act-Uncoord

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	160	132	60	1054	1301	188
Future Volume (vph)	160	132	60	1054	1301	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1517	1770	3471	3539	1532
Flt Permitted	0.95	1.00	0.09	1.00	1.00	1.00
Satd. Flow (perm)	1770	1517	175	3471	3539	1532
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	178	147	67	1171	1446	209
RTOR Reduction (vph)	0	121	0	0	0	98
Lane Group Flow (vph)	178	26	67	1171	1446	111
Confl. Peds. (#/hr)	1	15	8			8
Heavy Vehicles (%)	2%	4%	2%	4%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	13.1	13.1	48.4	48.4	38.5	38.5
Effective Green, g (s)	13.1	13.1	48.4	48.4	38.5	38.5
Actuated g/C Ratio	0.18	0.18	0.66	0.66	0.53	0.53
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	316	271	244	2295	1861	805
v/s Ratio Prot	c0.10		0.02	c0.34	c0.41	
v/s Ratio Perm		0.02	0.16			0.07
v/c Ratio	0.56	0.10	0.27	0.51	0.78	0.14
Uniform Delay, d1	27.4	25.1	8.8	6.3	13.9	8.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	0.2	0.6	0.2	2.1	0.1
Delay (s)	29.7	25.3	9.4	6.5	16.0	8.9
Level of Service	C	C	A	A	B	A
Approach Delay (s)	27.7			6.7	15.1	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	73.2	Sum of lost time (s)	15.7
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	167	208	911	342	594	847
Future Volume (vph)	167	208	911	342	594	847
Lane Group Flow (vph)	174	217	949	356	619	882
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	24.0	80.2
Total Split (%)	27.7%		50.6%	50.6%	21.6%	72.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.35	0.28	0.73	0.50	0.70	0.37
Control Delay	32.3	11.0	24.2	8.7	32.4	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.3	11.0	24.2	8.7	32.4	5.4
Queue Length 50th (m)	11.9	12.7	60.7	11.4	41.0	22.0
Queue Length 95th (m)	24.2	34.0	91.8	34.7	#86.9	40.6
Internal Link Dist (m)	679.1		533.6			775.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	1160	765	2369	1118	890	3288
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.28	0.40	0.32	0.70	0.27

Intersection Summary

Cycle Length: 111
Actuated Cycle Length: 75.2
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	167	208	911	342	594	847
Future Volume (vph)	167	208	911	342	594	847
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1568	3505	1549	3467	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1568	3505	1549	3467	3471
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	174	217	949	356	619	882
RTOR Reduction (vph)	0	31	0	149	0	0
Lane Group Flow (vph)	174	186	949	207	619	882
Confl. Peds. (#/hr)		13		14	14	
Heavy Vehicles (%)	2%	3%	3%	2%	1%	4%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	10.8	35.9	27.9	27.9	19.3	52.2
Effective Green, g (s)	10.8	35.9	27.9	27.9	19.3	52.2
Actuated g/C Ratio	0.14	0.48	0.37	0.37	0.26	0.70
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	494	750	1303	576	892	2415
v/s Ratio Prot	c0.05	0.12	c0.27		c0.18	0.25
v/s Ratio Perm				0.13		
v/c Ratio	0.35	0.25	0.73	0.36	0.69	0.37
Uniform Delay, d1	28.9	11.6	20.3	17.1	25.2	4.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.2	2.1	0.4	2.4	0.1
Delay (s)	29.4	11.7	22.4	17.5	27.5	4.7
Level of Service	C	B	C	B	C	A
Approach Delay (s)	19.6		21.0			14.1
Approach LOS	B		C			B

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

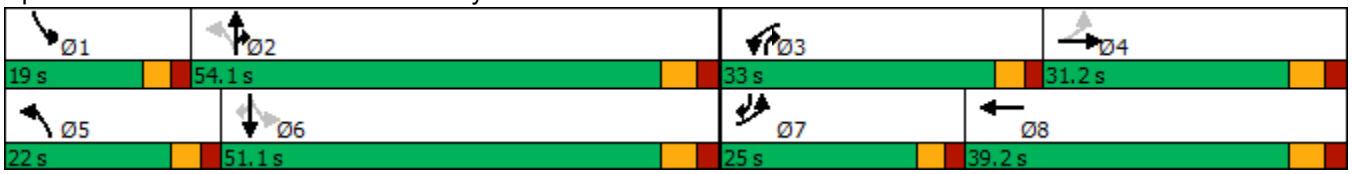
c Critical Lane Group

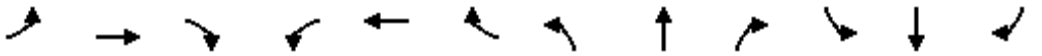
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	168	523	521	433	91	989	668	24	772	235
Future Volume (vph)	168	523	521	433	91	989	668	24	772	235
Lane Group Flow (vph)	168	579	521	446	91	989	668	24	772	235
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	10.0
Total Split (s)	25.0	31.2	33.0	39.2	22.0	54.1		19.0	51.1	25.0
Total Split (%)	18.2%	22.7%	24.0%	28.6%	16.0%	39.4%		13.8%	37.2%	18.2%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		None	Min	None
v/c Ratio	0.44	0.76	0.70	0.42	0.31	0.58	0.63	0.11	0.53	0.32
Control Delay	23.2	48.2	45.9	33.1	22.5	31.0	12.5	20.2	33.4	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	23.2	48.2	45.9	33.1	22.5	31.0	13.0	20.2	33.4	11.0
Queue Length 50th (m)	21.6	65.1	58.0	42.0	12.5	71.1	69.8	3.2	54.7	17.3
Queue Length 95th (m)	43.8	#108.5	88.1	71.5	24.0	91.5	110.5	8.6	73.5	33.6
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	506	901	984	1214	401	2474	1150	352	2319	843
Starvation Cap Reductn	0	0	0	0	0	0	179	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.64	0.53	0.37	0.23	0.40	0.69	0.07	0.33	0.28

Intersection Summary

Cycle Length: 137.3
Actuated Cycle Length: 104.7
Natural Cycle: 95
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	523	56	521	433	13	91	989	668	24	772	235
Future Volume (vph)	168	523	56	521	433	13	91	989	668	24	772	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1580	3538		3467	3491		1750	5085	1615	1785	5085	1575
Flt Permitted	0.49	1.00		0.95	1.00		0.23	1.00	1.00	0.21	1.00	1.00
Satd. Flow (perm)	822	3538		3467	3491		429	5085	1615	389	5085	1575
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	168	523	56	521	433	13	91	989	668	24	772	235
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	82	0	0	61
Lane Group Flow (vph)	168	573	0	521	445	0	91	989	586	24	772	174
Confl. Peds. (#/hr)	9		6	6		9	25		33	33		25
Heavy Vehicles (%)	14%	0%	4%	1%	3%	0%	3%	2%	0%	1%	2%	0%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	35.6	22.5		22.5	31.9		42.6	35.2	63.8	35.0	31.4	44.5
Effective Green, g (s)	35.6	22.5		22.5	31.9		42.6	35.2	63.8	35.0	31.4	44.5
Actuated g/C Ratio	0.34	0.21		0.21	0.30		0.40	0.33	0.60	0.33	0.30	0.42
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	369	750		735	1049		264	1687	971	175	1504	660
v/s Ratio Prot	0.06	c0.16		c0.15	0.13		c0.02	0.19	c0.36	0.00	0.15	0.03
v/s Ratio Perm	0.10						0.11			0.04		0.08
v/c Ratio	0.46	0.76		0.71	0.42		0.34	0.59	0.60	0.14	0.51	0.26
Uniform Delay, d1	26.2	39.3		38.8	29.7		20.8	29.4	13.2	24.5	31.0	20.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	4.7		3.1	0.3		0.8	0.5	1.1	0.4	0.3	0.2
Delay (s)	27.1	44.0		41.9	30.0		21.6	29.9	14.3	24.8	31.3	20.3
Level of Service	C	D		D	C		C	C	B	C	C	C
Approach Delay (s)		40.2			36.4			23.5			28.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	106.1	Sum of lost time (s)	22.3
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

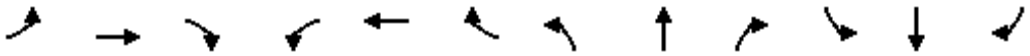
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	41	65	197	63	138	149	1511	109	1201
Future Volume (vph)	41	65	197	63	138	149	1511	109	1201
Lane Group Flow (vph)	42	270	201	64	141	152	1877	111	1266
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	31.7	31.7	31.7	31.7	31.7	10.0	41.1	19.0	50.1
Total Split (%)	34.5%	34.5%	34.5%	34.5%	34.5%	10.9%	44.8%	20.7%	54.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.14	0.31	0.82	0.14	0.30	0.54	0.69	0.45	0.47
Control Delay	25.6	11.4	56.0	25.2	6.3	15.8	17.7	14.3	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	11.4	56.0	25.2	6.3	15.8	17.7	14.3	13.6
Queue Length 50th (m)	5.7	7.7	32.6	8.6	0.0	9.1	85.2	6.3	47.1
Queue Length 95th (m)	13.8	17.3	#60.3	18.3	13.4	#20.5	127.0	18.8	67.5
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		132.0		62.0	34.0		48.0	
Base Capacity (vph)	406	1110	329	607	582	280	2707	396	2714
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.24	0.61	0.11	0.24	0.54	0.69	0.28	0.47

Intersection Summary

Cycle Length: 91.8
Actuated Cycle Length: 85.4
Natural Cycle: 85
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Paris St & Van Horne St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	65	200	197	63	138	149	1511	328	109	1201	39
Future Volume (vph)	41	65	200	197	63	138	149	1511	328	109	1201	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1690	3129		1767	1900	1522	1769	4935		1805	5056	
Flt Permitted	0.72	1.00		0.55	1.00	1.00	0.17	1.00		0.09	1.00	
Satd. Flow (perm)	1273	3129		1029	1900	1522	313	4935		162	5056	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	42	66	204	201	64	141	152	1542	335	111	1226	40
RTOR Reduction (vph)	0	123	0	0	0	108	0	29	0	0	3	0
Lane Group Flow (vph)	42	147	0	201	64	33	152	1848	0	111	1263	0
Confl. Peds. (#/hr)	13		3	3		13	3		17	17		3
Heavy Vehicles (%)	6%	2%	1%	2%	0%	4%	2%	2%	1%	0%	2%	3%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	20.5	20.5		20.5	20.5	20.5	51.9	46.4		53.2	46.8	
Effective Green, g (s)	20.5	20.5		20.5	20.5	20.5	51.9	46.4		53.2	46.8	
Actuated g/C Ratio	0.24	0.24		0.24	0.24	0.24	0.60	0.54		0.62	0.54	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	302	743		244	451	361	281	2653		221	2741	
v/s Ratio Prot		0.05			0.03		0.03	c0.37		c0.04	0.25	
v/s Ratio Perm	0.03			c0.20		0.02	0.29			0.27		
v/c Ratio	0.14	0.20		0.82	0.14	0.09	0.54	0.70		0.50	0.46	
Uniform Delay, d1	25.9	26.3		31.2	26.0	25.7	8.2	14.7		10.7	12.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.1		19.7	0.1	0.1	2.1	1.5		1.8	0.6	
Delay (s)	26.2	26.5		50.9	26.1	25.8	10.4	16.3		12.5	12.6	
Level of Service	C	C		D	C	C	B	B		B	B	
Approach Delay (s)		26.4			38.2			15.8			12.6	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	86.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	3	63	0	8	1857	80	1513
Future Volume (vph)	10	3	63	0	8	1857	80	1513
Lane Group Flow (vph)	0	15	0	174	8	1959	82	1565
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	50.8	50.8	14.0	64.8
Total Split (%)	28.4%	28.4%	28.4%	28.4%	56.1%	56.1%	15.5%	71.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.07		0.62	0.05	0.93	0.34	0.62
Control Delay		27.1		26.9	10.1	25.8	8.5	7.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		27.1		26.9	10.1	25.8	8.5	7.8
Queue Length 50th (m)		1.8		12.7	0.5	135.3	2.7	51.8
Queue Length 95th (m)		6.9		32.8	3.0	#244.8	10.3	96.8
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		372		435	169	2114	310	2688
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.04		0.40	0.05	0.93	0.26	0.58

Intersection Summary

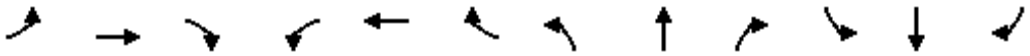
Cycle Length: 90.5
Actuated Cycle Length: 78
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	3	2	63	0	106	8	1857	44	80	1513	5
Future Volume (vph)	10	3	2	63	0	106	8	1857	44	80	1513	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1800			1629		1800	3527		1736	3537	
Flt Permitted		0.77			0.87		0.15	1.00		0.08	1.00	
Satd. Flow (perm)		1441			1445		281	3527		144	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	3	2	65	0	109	8	1914	45	82	1560	5
RTOR Reduction (vph)	0	2	0	0	74	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	13	0	0	100	0	8	1957	0	82	1565	0
Confl. Peds. (#/hr)	3		4	4		3	14		2	2		14
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	2%	0%	4%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		11.2			11.2		46.7	46.7		56.1	56.1	
Effective Green, g (s)		11.2			11.2		46.7	46.7		56.1	56.1	
Actuated g/C Ratio		0.14			0.14		0.59	0.59		0.71	0.71	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		204			205		166	2090		211	2518	
v/s Ratio Prot								c0.56		0.03	c0.44	
v/s Ratio Perm		0.01			c0.07		0.03			0.25		
v/c Ratio		0.07			0.49		0.05	0.94		0.39	0.62	
Uniform Delay, d1		29.3			31.2		6.7	14.7		15.5	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.8		0.1	8.7		1.2	0.5	
Delay (s)		29.4			33.0		6.9	23.4		16.7	6.3	
Level of Service		C			C		A	C		B	A	
Approach Delay (s)		29.4			33.0			23.3			6.9	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	15.5
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	7	3	0	2	1	1881	1	1	1640	13
Future Volume (Veh/h)	9	0	7	3	0	2	1	1881	1	1	1640	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	9	0	7	3	0	2	1	1959	1	1	1708	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)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								347			199	
pX, platoon unblocked	0.60	0.60	0.74	0.60	0.60	0.47	0.74			0.47		
vC, conflicting volume	2704	3684	864	2826	3690	982	1725			1962		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	532	2171	105	737	2182	0	1272			778		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	99	98	100	100	100			100		
cM capacity (veh/h)	257	28	689	182	28	509	407			395		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	5	980	980	855	868
Volume Left	9	3	1	0	1	0
Volume Right	7	2	0	1	0	14
cSH	354	245	407	1700	395	1700
Volume to Capacity	0.05	0.02	0.00	0.58	0.00	0.51
Queue Length 95th (m)	1.1	0.5	0.1	0.0	0.1	0.0
Control Delay (s)	15.7	20.0	0.1	0.0	0.1	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	15.7	20.0	0.0		0.0	
Approach LOS	C	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	62.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	1	1873	6	0	1645
Future Volume (Veh/h)	1	1	1873	6	0	1645
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	1	1972	6	0	1732
Pedestrians	1					
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)			225			321
pX, platoon unblocked	0.64	0.51			0.51	
vC, conflicting volume	2842	990			1979	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	869	0			987	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	189	553			359	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	1315	663	577	1155
Volume Left	1	0	0	0	0
Volume Right	1	0	6	0	0
cSH	282	1700	1700	359	1700
Volume to Capacity	0.01	0.77	0.39	0.00	0.68
Queue Length 95th (m)	0.2	0.0	0.0	0.0	0.0
Control Delay (s)	17.9	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	17.9	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	0	0	2	0	0
Future Volume (Veh/h)	7	0	0	2	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	10	0	0	3	0	0
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			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			10		14	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			10		14	12
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		100	100
cM capacity (veh/h)			1623		1009	1073

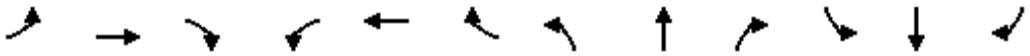
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	10	3	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1623	1700
Volume to Capacity	0.01	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	0	6	2	21	1848	4	1589
Future Volume (vph)	23	0	6	2	21	1848	4	1589
Lane Group Flow (vph)	0	40	7	13	23	2017	4	1756
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	55.9	55.9	55.9	55.9
Total Split (%)	31.7%	31.7%	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.19	0.03	0.06	0.14	0.69	0.03	0.60
Control Delay		13.4	28.3	17.8	5.6	6.4	3.8	5.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.4	28.3	17.8	5.6	6.4	3.8	5.1
Queue Length 50th (m)		0.1	0.9	0.3	0.8	76.5	0.1	56.6
Queue Length 95th (m)		8.5	4.3	5.0	3.5	106.7	0.9	77.7
Internal Link Dist (m)		192.5		282.1		313.9		201.2
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		462	574	540	161	2918	125	2915
Starvation Cap Reductn		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.09	0.01	0.02	0.14	0.69	0.03	0.60

Intersection Summary
Cycle Length: 81.9
Actuated Cycle Length: 63.2
Natural Cycle: 80
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	0	14	6	2	10	21	1848	7	4	1589	27
Future Volume (vph)	23	0	14	6	2	10	21	1848	7	4	1589	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.95		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1622		1805	1640		1804	3537		1805	3530	
Flt Permitted		0.80		0.93	1.00		0.10	1.00		0.08	1.00	
Satd. Flow (perm)		1342		1767	1640		196	3537		153	3530	
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	0	15	7	2	11	23	2009	8	4	1727	29
RTOR Reduction (vph)	0	36	0	0	10	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	4	0	7	3	0	23	2017	0	4	1755	0
Confl. Peds. (#/hr)	2					2	4		2	2		4
Heavy Vehicles (%)	4%	0%	14%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.3		4.3	4.3		49.7	49.7		49.7	49.7	
Effective Green, g (s)		4.3		4.3	4.3		49.7	49.7		49.7	49.7	
Actuated g/C Ratio		0.07		0.07	0.07		0.75	0.75		0.75	0.75	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		87		115	107		147	2667		115	2662	
v/s Ratio Prot					0.00			c0.57			0.50	
v/s Ratio Perm		0.00		c0.00			0.12			0.03		
v/c Ratio		0.04		0.06	0.03		0.16	0.76		0.03	0.66	
Uniform Delay, d1		28.9		28.9	28.8		2.3	4.6		2.0	4.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		0.2	0.1		0.5	1.3		0.1	0.6	
Delay (s)		29.1		29.1	28.9		2.8	5.9		2.2	4.6	
Level of Service		C		C	C		A	A		A	A	
Approach Delay (s)		29.1			29.0			5.9			4.6	
Approach LOS		C			C			A			A	

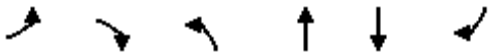
Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.9	Sum of lost time (s)	11.9
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	196	104	141	1680	1419	190
Future Volume (vph)	196	104	141	1680	1419	190
Lane Group Flow (vph)	206	109	148	1768	1494	200
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	16.0	67.2	51.2	51.2
Total Split (%)	27.5%	27.5%	17.3%	72.5%	55.2%	55.2%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.64	0.29	0.49	0.75	0.84	0.23
Control Delay	41.2	8.8	14.4	11.6	23.5	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	8.8	14.4	11.6	23.5	3.0
Queue Length 50th (m)	31.8	0.0	6.6	84.4	101.4	0.6
Queue Length 95th (m)	57.4	13.3	25.0	135.0	159.8	12.0
Internal Link Dist (m)	376.5			774.4	313.9	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	461	483	366	2787	2058	975
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.23	0.40	0.63	0.73	0.21

Intersection Summary
Cycle Length: 92.7
Actuated Cycle Length: 79.2
Natural Cycle: 75
Control Type: Semi Act-Uncoord

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	196	104	141	1680	1419	190
Future Volume (vph)	196	104	141	1680	1419	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1787	1561	1770	3539	3539	1541
Flt Permitted	0.95	1.00	0.09	1.00	1.00	1.00
Satd. Flow (perm)	1787	1561	170	3539	3539	1541
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	206	109	148	1768	1494	200
RTOR Reduction (vph)	0	89	0	0	0	95
Lane Group Flow (vph)	206	20	148	1768	1494	105
Confl. Peds. (#/hr)	6	15	4			4
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	14.3	14.3	53.0	53.0	39.8	39.8
Effective Green, g (s)	14.3	14.3	53.0	53.0	39.8	39.8
Actuated g/C Ratio	0.18	0.18	0.67	0.67	0.50	0.50
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	323	282	300	2374	1782	776
v/s Ratio Prot	c0.12		0.06	c0.50	c0.42	
v/s Ratio Perm		0.01	0.27			0.07
v/c Ratio	0.64	0.07	0.49	0.74	0.84	0.13
Uniform Delay, d1	30.0	26.8	12.0	8.6	16.8	10.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.1	0.1	1.3	1.3	3.6	0.1
Delay (s)	34.0	26.9	13.2	9.9	20.5	10.5
Level of Service	C	C	B	A	C	B
Approach Delay (s)	31.6			10.1	19.3	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	494	616	1235	244	328	1165
Future Volume (vph)	494	616	1235	244	328	1165
Lane Group Flow (vph)	549	684	1372	271	364	1294
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	33.0	89.2
Total Split (%)	25.7%		46.8%	46.8%	27.5%	74.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.72	0.90	0.93	0.37	0.50	0.54
Control Delay	48.9	43.7	44.7	15.4	42.1	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.9	43.7	44.7	15.4	42.1	10.4
Queue Length 50th (m)	66.4	147.4	167.9	26.1	40.1	74.1
Queue Length 95th (m)	86.8	#227.3	#216.5	48.1	55.2	89.8
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	764	815	1561	760	848	2591
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.84	0.88	0.36	0.43	0.50

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 114.5
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	494	616	1235	244	328	1165
Future Volume (vph)	494	616	1235	244	328	1165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	1583	3539	1587	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	1583	3539	1587	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	549	684	1372	271	364	1294
RTOR Reduction (vph)	0	6	0	64	0	0
Lane Group Flow (vph)	549	678	1372	207	364	1294
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	25.3	55.5	47.7	47.7	24.4	77.1
Effective Green, g (s)	25.3	55.5	47.7	47.7	24.4	77.1
Actuated g/C Ratio	0.22	0.49	0.42	0.42	0.21	0.67
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	766	767	1475	661	732	2385
v/s Ratio Prot	0.16	c0.43	c0.39		0.11	0.37
v/s Ratio Perm				0.13		
v/c Ratio	0.72	0.88	0.93	0.31	0.50	0.54
Uniform Delay, d1	41.2	26.6	31.8	22.4	39.6	9.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	11.8	10.8	0.3	0.5	0.3
Delay (s)	44.4	38.4	42.5	22.6	40.1	9.8
Level of Service	D	D	D	C	D	A
Approach Delay (s)	41.1		39.2			16.5
Approach LOS	D		D			B

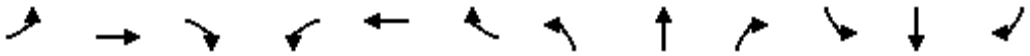
Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	114.4	Sum of lost time (s)	17.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	3	63	0	8	1857	80	1513
Future Volume (vph)	10	3	63	0	8	1857	80	1513
Lane Group Flow (vph)	0	15	0	174	8	1959	82	1565
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	85.3	85.3	9.0	94.3
Total Split (%)	21.4%	21.4%	21.4%	21.4%	71.1%	71.1%	7.5%	78.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.07		0.65	0.05	0.87	0.45	0.62
Control Delay		38.1		40.0	7.8	18.8	15.3	7.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		38.1		40.0	7.8	18.8	15.3	7.8
Queue Length 50th (m)		2.2		20.5	0.5	144.0	3.3	62.4
Queue Length 95th (m)		9.3		50.7	2.6	214.6	15.0	101.0
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		359		393	224	2961	183	3151
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.04		0.44	0.04	0.66	0.45	0.50

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 91.6
Natural Cycle: 90
Control Type: Semi Act-Uncoord

Splits and Phases: 3: Paris St & John St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	3	2	63	0	106	8	1857	44	80	1513	5
Future Volume (vph)	10	3	2	63	0	106	8	1857	44	80	1513	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799			1628		1800	3527		1736	3537	
Flt Permitted		0.80			0.87		0.14	1.00		0.06	1.00	
Satd. Flow (perm)		1488			1444		266	3527		117	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	3	2	65	0	109	8	1914	45	82	1560	5
RTOR Reduction (vph)	0	2	0	0	53	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	13	0	0	121	0	8	1958	0	82	1565	0
Confl. Peds. (#/hr)	3		4	4		3	14		2	2		14
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	2%	0%	4%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		13.8			13.8		58.6	58.6		66.3	66.3	
Effective Green, g (s)		13.8			13.8		58.6	58.6		66.3	66.3	
Actuated g/C Ratio		0.15			0.15		0.64	0.64		0.72	0.72	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		224			217		170	2256		150	2560	
v/s Ratio Prot								c0.56		0.02	c0.44	
v/s Ratio Perm		0.01			c0.08		0.03			0.37		
v/c Ratio		0.06			0.56		0.05	0.87		0.55	0.61	
Uniform Delay, d1		33.3			36.1		6.1	13.4		16.4	6.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			3.1		0.1	3.8		4.0	0.4	
Delay (s)		33.4			39.2		6.2	17.2		20.4	6.7	
Level of Service		C			D		A	B		C	A	
Approach Delay (s)		33.4			39.2			17.1			7.4	
Approach LOS		C			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	91.6	Sum of lost time (s)	15.5
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	494	616	1235	244	328	1165
Future Volume (vph)	494	616	1235	244	328	1165
Lane Group Flow (vph)	549	684	1372	271	364	1294
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	36.0		62.0	62.0	22.0	84.0
Total Split (%)	30.0%		51.7%	51.7%	18.3%	70.0%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.60	0.93	0.89	0.36	0.71	0.58
Control Delay	41.0	50.9	37.4	12.6	56.0	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	50.9	37.4	12.6	56.0	13.4
Queue Length 50th (m)	61.0	154.9	152.6	22.0	44.2	86.5
Queue Length 95th (m)	81.7	#245.0	184.6	41.9	62.3	104.8
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	916	734	1729	835	511	2410
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.93	0.79	0.32	0.71	0.54

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 114.6
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	494	616	1235	244	328	1165
Future Volume (vph)	494	616	1235	244	328	1165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	1583	3539	1587	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	1583	3539	1587	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	549	684	1372	271	364	1294
RTOR Reduction (vph)	0	10	0	66	0	0
Lane Group Flow (vph)	549	674	1372	205	364	1294
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	30.3	53.2	50.2	50.2	17.1	72.3
Effective Green, g (s)	30.3	53.2	50.2	50.2	17.1	72.3
Actuated g/C Ratio	0.26	0.46	0.44	0.44	0.15	0.63
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	916	734	1550	695	512	2232
v/s Ratio Prot	0.16	c0.43	c0.39		0.11	0.37
v/s Ratio Perm				0.13		
v/c Ratio	0.60	0.92	0.89	0.29	0.71	0.58
Uniform Delay, d1	36.8	28.7	29.6	20.8	46.4	12.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	16.3	6.4	0.2	4.6	0.4
Delay (s)	37.9	45.0	36.0	21.0	51.0	12.7
Level of Service	D	D	D	C	D	B
Approach Delay (s)	41.8		33.5			21.1
Approach LOS	D		C			C

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	114.6	Sum of lost time (s)	17.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

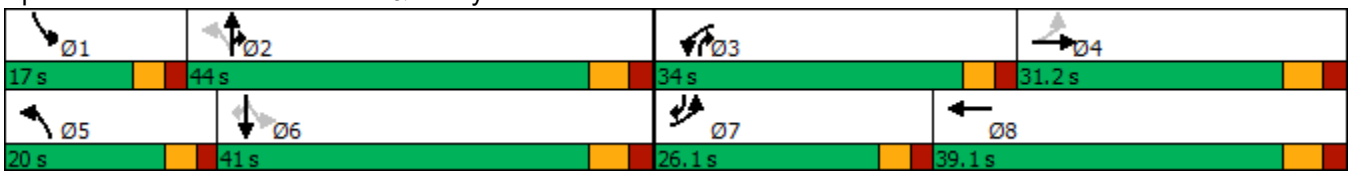
c Critical Lane Group

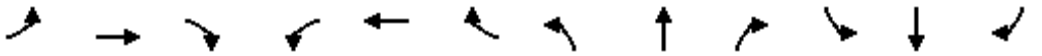
Appendix E –
Synchro Analysis Output –
Background Traffic Volumes

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	168	424	534	393	76	560	415	27	823	241
Future Volume (vph)	168	424	534	393	76	560	415	27	823	241
Lane Group Flow (vph)	183	509	580	438	83	609	451	29	895	262
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	10.0
Total Split (s)	26.1	31.2	34.0	39.1	20.0	44.0		17.0	41.0	26.1
Total Split (%)	20.7%	24.7%	26.9%	31.0%	15.8%	34.9%		13.5%	32.5%	20.7%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		None	Min	None
v/c Ratio	0.45	0.73	0.73	0.41	0.34	0.40	0.44	0.09	0.71	0.38
Control Delay	20.9	45.5	43.1	29.8	24.5	29.5	6.9	21.2	38.5	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	20.9	45.5	43.1	29.8	24.5	29.5	7.1	21.2	38.5	13.0
Queue Length 50th (m)	20.6	51.8	57.8	37.2	10.7	38.3	21.8	3.6	63.1	18.9
Queue Length 95th (m)	41.2	83.8	91.7	63.3	23.2	56.0	48.5	10.3	90.2	41.1
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	571	921	1060	1295	335	2059	1121	393	1855	831
Starvation Cap Reductn	0	0	0	0	0	0	154	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.55	0.55	0.34	0.25	0.30	0.47	0.07	0.48	0.32

Intersection Summary
Cycle Length: 126.2
Actuated Cycle Length: 98.5
Natural Cycle: 95
Control Type: Semi Act-Uncoord

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	424	44	534	393	10	76	560	415	27	823	241
Future Volume (vph)	168	424	44	534	393	10	76	560	415	27	823	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1684	3369		3367	3460		1671	4988	1568	1717	4893	1553
Flt Permitted	0.50	1.00		0.95	1.00		0.16	1.00	1.00	0.41	1.00	1.00
Satd. Flow (perm)	883	3369		3367	3460		288	4988	1568	742	4893	1553
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)	183	461	48	580	427	11	83	609	451	29	895	262
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	95	0	0	69
Lane Group Flow (vph)	183	503	0	580	437	0	83	609	356	29	895	193
Confl. Peds. (#/hr)	7		4	4		7	19		10	10		19
Heavy Vehicles (%)	7%	5%	10%	4%	4%	0%	8%	4%	3%	5%	6%	2%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	32.8	20.2		23.2	30.8		37.8	30.2	59.5	30.2	26.4	39.0
Effective Green, g (s)	32.8	20.2		23.2	30.8		37.8	30.2	59.5	30.2	26.4	39.0
Actuated g/C Ratio	0.33	0.20		0.23	0.31		0.38	0.30	0.60	0.30	0.26	0.39
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	391	682		783	1068		214	1510	935	261	1295	607
v/s Ratio Prot	0.06	c0.15		c0.17	0.13		c0.03	0.12	0.23	0.00	c0.18	0.04
v/s Ratio Perm	0.09						0.12			0.03		0.08
v/c Ratio	0.47	0.74		0.74	0.41		0.39	0.40	0.38	0.11	0.69	0.32
Uniform Delay, d1	25.2	37.3		35.5	27.2		21.4	27.6	10.5	24.6	33.0	21.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	4.2		3.8	0.3		1.2	0.2	0.3	0.2	1.6	0.3
Delay (s)	26.1	41.4		39.3	27.5		22.6	27.8	10.8	24.8	34.6	21.4
Level of Service	C	D		D	C		C	C	B	C	C	C
Approach Delay (s)		37.4			34.2			20.7			31.4	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	22.3
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

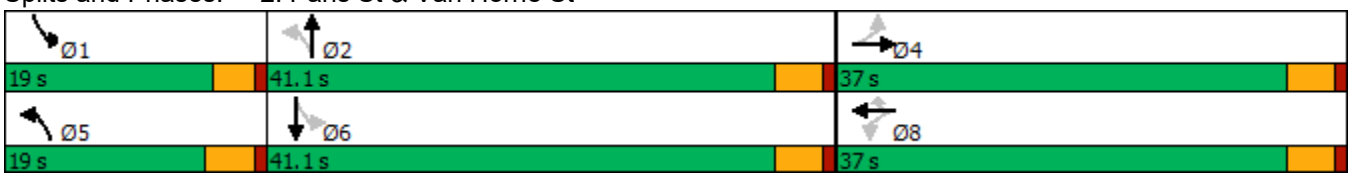
c Critical Lane Group

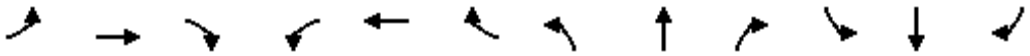
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	25	245	58	138	157	949	76	1278
Future Volume (vph)	15	25	245	58	138	157	949	76	1278
Lane Group Flow (vph)	16	119	269	64	152	173	1162	84	1456
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	37.0	37.0	37.0	37.0	37.0	19.0	41.1	19.0	41.1
Total Split (%)	38.1%	38.1%	38.1%	38.1%	38.1%	19.6%	42.3%	19.6%	42.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.05	0.14	0.79	0.13	0.29	0.60	0.46	0.26	0.64
Control Delay	22.5	8.1	45.4	23.4	5.6	22.8	15.2	10.1	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	8.1	45.4	23.4	5.6	22.8	15.2	10.1	21.0
Queue Length 50th (m)	1.9	1.7	40.6	7.9	0.0	11.9	44.1	4.9	65.0
Queue Length 95th (m)	6.8	8.0	73.0	18.2	13.3	37.6	73.2	13.5	108.6
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	468	1209	509	725	717	377	2521	489	2262
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.10	0.53	0.09	0.21	0.46	0.46	0.17	0.64

Intersection Summary

Cycle Length: 97.1
Actuated Cycle Length: 82.9
Natural Cycle: 85
Control Type: Semi Act-Uncoord

Splits and Phases: 2: Paris St & Van Horne St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	25	84	245	58	138	157	949	108	76	1278	47
Future Volume (vph)	15	25	84	245	58	138	157	949	108	76	1278	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.99	1.00	1.00		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	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1566	2905		1801	1827	1576	1703	4870		1752	5048	
Flt Permitted	0.72	1.00		0.68	1.00	1.00	0.09	1.00		0.21	1.00	
Satd. Flow (perm)	1179	2905		1283	1827	1576	169	4870		388	5048	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	16	27	92	269	64	152	173	1043	119	84	1404	52
RTOR Reduction (vph)	0	68	0	0	0	112	0	11	0	0	3	0
Lane Group Flow (vph)	16	51	0	269	64	40	173	1151	0	84	1453	0
Confl. Peds. (#/hr)	4		4	4		4	6		6	6		6
Heavy Vehicles (%)	15%	4%	10%	0%	4%	1%	6%	5%	2%	3%	2%	5%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	22.1	22.1		22.1	22.1	22.1	52.6	42.7		43.9	38.0	
Effective Green, g (s)	22.1	22.1		22.1	22.1	22.1	52.6	42.7		43.9	38.0	
Actuated g/C Ratio	0.26	0.26		0.26	0.26	0.26	0.63	0.51		0.52	0.45	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	311	767		338	482	416	291	2484		299	2291	
v/s Ratio Prot		0.02			0.04		c0.07	0.24		0.02	c0.29	
v/s Ratio Perm	0.01			c0.21		0.03	0.30			0.13		
v/c Ratio	0.05	0.07		0.80	0.13	0.10	0.59	0.46		0.28	0.63	
Uniform Delay, d1	23.0	23.1		28.7	23.5	23.3	11.9	13.1		10.0	17.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		12.2	0.1	0.1	3.2	0.6		0.5	1.4	
Delay (s)	23.0	23.1		40.9	23.6	23.4	15.1	13.8		10.5	18.9	
Level of Service	C	C		D	C	C	B	B		B	B	
Approach Delay (s)		23.1			33.1			14.0			18.4	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	83.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	0	40	2	4	1209	46	1529
Future Volume (vph)	8	0	40	2	4	1209	46	1529
Lane Group Flow (vph)	0	14	0	110	4	1294	48	1602
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	50.8	50.8	14.0	64.8
Total Split (%)	28.4%	28.4%	28.4%	28.4%	56.1%	56.1%	15.5%	71.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.04		0.36	0.02	0.60	0.14	0.63
Control Delay		0.2		16.9	8.5	11.4	4.0	7.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		0.2		16.9	8.5	11.4	4.0	7.3
Queue Length 50th (m)		0.0		4.3	0.2	56.1	1.3	46.3
Queue Length 95th (m)		0.0		19.8	1.7	91.0	4.3	80.5
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		610		601	218	2854	463	3321
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.02		0.18	0.02	0.45	0.10	0.48

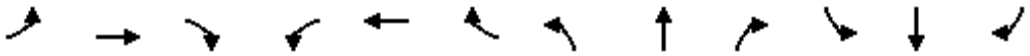
Intersection Summary
Cycle Length: 90.5
Actuated Cycle Length: 56.5
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	6	40	2	63	4	1209	34	46	1529	9
Future Volume (vph)	8	0	6	40	2	63	4	1209	34	46	1529	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1727			1696		1803	3491		1770	3536	
Flt Permitted		0.84			0.87		0.14	1.00		0.13	1.00	
Satd. Flow (perm)		1498			1501		267	3491		250	3536	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	8	0	6	42	2	66	4	1259	35	48	1593	9
RTOR Reduction (vph)	0	12	0	0	58	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	52	0	4	1292	0	48	1602	0
Confl. Peds. (#/hr)	5		5	5		5	8		4	4		8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.1			7.1		33.5	33.5		40.8	40.8	
Effective Green, g (s)		7.1			7.1		33.5	33.5		40.8	40.8	
Actuated g/C Ratio		0.12			0.12		0.56	0.56		0.69	0.69	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179			179		150	1968		256	2428	
v/s Ratio Prot								0.37		0.01	c0.45	
v/s Ratio Perm		0.00			c0.03		0.01			0.12		
v/c Ratio		0.01			0.29		0.03	0.66		0.19	0.66	
Uniform Delay, d1		23.1			23.9		5.7	9.0		4.9	5.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.9		0.1	0.8		0.4	0.7	
Delay (s)		23.1			24.8		5.8	9.8		5.2	6.0	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		23.1			24.8			9.8			6.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	59.4	Sum of lost time (s)	15.5
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	9	2	0	2	1	1374	0	0	1603	7
Future Volume (Veh/h)	3	0	9	2	0	2	1	1374	0	0	1603	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	10	2	0	2	1	1527	0	0	1781	8
Pedestrians		2			1							
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)								347			199	
pX, platoon unblocked	0.78	0.78	0.69	0.78	0.78	0.84	0.69			0.84		
vC, conflicting volume	2554	3317	896	2430	3321	764	1791			1528		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1471	2454	0	1312	2459	324	1257			1238		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	7.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.8	2.2			2.2		
p0 queue free %	96	100	99	98	100	100	100			100		
cM capacity (veh/h)	69	24	755	90	24	459	388			475		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	4	764	764	890	898
Volume Left	3	2	1	0	0	0
Volume Right	10	2	0	0	0	8
cSH	230	151	388	1700	475	1700
Volume to Capacity	0.06	0.03	0.00	0.45	0.00	0.53
Queue Length 95th (m)	1.4	0.7	0.1	0.0	0.0	0.0
Control Delay (s)	21.6	29.5	0.1	0.0	0.0	0.0
Lane LOS	C	D	A			
Approach Delay (s)	21.6	29.5	0.0		0.0	
Approach LOS	C	D				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	54.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	0	1362	1	1	1614
Future Volume (Veh/h)	2	0	1362	1	1	1614
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	1513	1	1	1793
Pedestrians						1
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)			226			321
pX, platoon unblocked	0.78	0.81			0.81	
vC, conflicting volume	2412	758			1514	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1169	244			1173	
tC, single (s)	6.8	6.9			6.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	147	620			202	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	1009	505	599	1195
Volume Left	2	0	0	1	0
Volume Right	0	0	1	0	0
cSH	147	1700	1700	202	1700
Volume to Capacity	0.01	0.59	0.30	0.00	0.70
Queue Length 95th (m)	0.3	0.0	0.0	0.1	0.0
Control Delay (s)	29.9	0.0	0.0	0.2	0.0
Lane LOS	D			A	
Approach Delay (s)	29.9	0.0		0.1	
Approach LOS	D				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1	1	1	1	0	0
Future Volume (Veh/h)	1	1	1	1	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.50	0.50	0.50	0.50
Hourly flow rate (vph)	2	2	2	2	0	0
Pedestrians	1			2	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	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			6		12	7
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			6		12	7
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		100	100
cM capacity (veh/h)			1625		1009	1078

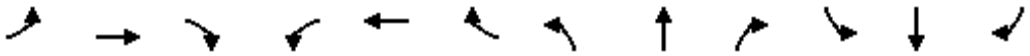
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	4	4	0
Volume Left	0	2	0
Volume Right	2	0	0
cSH	1700	1625	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	3.6	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.6	0.0
Approach LOS			A

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	26	0	2	0	5	1313	1624
Future Volume (vph)	26	0	2	0	5	1313	1624
Lane Group Flow (vph)	0	40	2	2	5	1383	1722
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		8		2		
Detector Phase	4	4	8	8	2	2	6
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	55.9	55.9	55.9
Total Split (%)	31.7%	31.7%	31.7%	31.7%	68.3%	68.3%	68.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	Min	Min	Min
v/c Ratio		0.17	0.01	0.01	0.03	0.48	0.60
Control Delay		12.1	25.5	0.0	3.8	4.4	5.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		12.1	25.5	0.0	3.8	4.4	5.5
Queue Length 50th (m)		0.1	0.3	0.0	0.2	37.1	55.0
Queue Length 95th (m)		8.2	2.1	0.0	1.0	50.5	75.5
Internal Link Dist (m)		198.2		192.5		314.0	201.8
Turn Bay Length (m)					40.0		
Base Capacity (vph)		522	591	587	172	3004	3001
Starvation Cap Reductn		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0
Reduced v/c Ratio		0.08	0.00	0.00	0.03	0.46	0.57

Intersection Summary
Cycle Length: 81.9
Actuated Cycle Length: 59.3
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



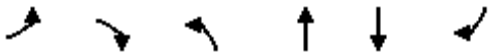
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	0	12	2	0	2	5	1313	1	0	1624	12
Future Volume (vph)	26	0	12	2	0	2	5	1313	1	0	1624	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9			5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95			0.95	
Frt		0.96		1.00	0.85		1.00	1.00			1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1757		1805	1615		1805	3505			3502	
Flt Permitted		0.80		0.91	1.00		0.11	1.00			1.00	
Satd. Flow (perm)		1447		1727	1615		201	3505			3502	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	27	0	13	2	0	2	5	1382	1	0	1709	13
RTOR Reduction (vph)	0	36	0	0	2	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	4	0	2	0	0	5	1383	0	0	1721	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.4		4.4	4.4		45.6	45.6			45.6	
Effective Green, g (s)		4.4		4.4	4.4		45.6	45.6			45.6	
Actuated g/C Ratio		0.07		0.07	0.07		0.74	0.74			0.74	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9			5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		102		122	114		148	2582			2579	
v/s Ratio Prot					0.00			0.39			c0.49	
v/s Ratio Perm		c0.00		0.00			0.02					
v/c Ratio		0.04		0.02	0.00		0.03	0.54			0.67	
Uniform Delay, d1		26.8		26.7	26.7		2.2	3.5			4.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.1		0.1	0.0		0.1	0.2			0.7	
Delay (s)		26.9		26.8	26.7		2.3	3.8			4.9	
Level of Service		C		C	C		A	A			A	
Approach Delay (s)		26.9			26.8			3.8			4.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	61.9	Sum of lost time (s)	11.9
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	174	142	65	1145	1432	207
Future Volume (vph)	174	142	65	1145	1432	207
Lane Group Flow (vph)	193	158	72	1272	1591	230
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	9.0	79.0	70.0	70.0
Total Split (%)	24.4%	24.4%	8.6%	75.6%	67.0%	67.0%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.62	0.44	0.34	0.55	0.78	0.23
Control Delay	42.6	17.4	8.4	8.0	16.5	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	17.4	8.4	8.0	16.5	1.8
Queue Length 50th (m)	28.5	6.8	3.0	46.4	97.4	0.0
Queue Length 95th (m)	61.5	28.2	7.9	75.2	145.0	9.0
Internal Link Dist (m)	376.5			775.4	314.0	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	477	486	212	3058	2847	1270
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.33	0.34	0.42	0.56	0.18

Intersection Summary
Cycle Length: 104.5
Actuated Cycle Length: 79.1
Natural Cycle: 80
Control Type: Semi Act-Uncoord

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	174	142	65	1145	1432	207
Future Volume (vph)	174	142	65	1145	1432	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1516	1770	3471	3539	1530
Flt Permitted	0.95	1.00	0.08	1.00	1.00	1.00
Satd. Flow (perm)	1770	1516	150	3471	3539	1530
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	193	158	72	1272	1591	230
RTOR Reduction (vph)	0	89	0	0	0	97
Lane Group Flow (vph)	193	69	72	1272	1591	133
Confl. Peds. (#/hr)	1	15	8			8
Heavy Vehicles (%)	2%	4%	2%	4%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	14.0	14.0	53.5	53.5	45.8	45.8
Effective Green, g (s)	14.0	14.0	53.5	53.5	45.8	45.8
Actuated g/C Ratio	0.18	0.18	0.68	0.68	0.58	0.58
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	312	267	177	2344	2046	884
v/s Ratio Prot	c0.11		0.02	c0.37	c0.45	
v/s Ratio Perm		0.05	0.26			0.09
v/c Ratio	0.62	0.26	0.41	0.54	0.78	0.15
Uniform Delay, d1	30.1	28.1	10.2	6.6	12.8	7.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	0.5	1.5	0.3	1.9	0.1
Delay (s)	33.8	28.6	11.7	6.8	14.7	7.8
Level of Service	C	C	B	A	B	A
Approach Delay (s)	31.5			7.1	13.8	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	15.7
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	226	989	368	655	927
Future Volume (vph)	180	226	989	368	655	927
Lane Group Flow (vph)	188	235	1030	383	682	966
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	33.0	89.2
Total Split (%)	25.7%		46.8%	46.8%	27.5%	74.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.37	0.31	0.75	0.53	0.75	0.39
Control Delay	38.9	14.8	27.8	12.6	38.0	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	14.8	27.8	12.6	38.0	5.7
Queue Length 50th (m)	16.0	20.7	82.3	22.0	56.5	29.0
Queue Length 95th (m)	31.4	47.5	126.7	55.9	102.3	52.7
Internal Link Dist (m)	679.1		533.6			775.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	1010	851	2064	990	1143	3104
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.28	0.50	0.39	0.60	0.31

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 88.9
Natural Cycle: 90
Control Type: Semi Act-Uncoord

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	226	989	368	655	927
Future Volume (vph)	180	226	989	368	655	927
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1568	3505	1546	3467	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1568	3505	1546	3467	3471
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	188	235	1030	383	682	966
RTOR Reduction (vph)	0	18	0	123	0	0
Lane Group Flow (vph)	188	217	1030	260	682	966
Confl. Peds. (#/hr)		13		14	14	
Heavy Vehicles (%)	2%	3%	3%	2%	1%	4%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	13.1	42.1	35.1	35.1	23.2	63.3
Effective Green, g (s)	13.1	42.1	35.1	35.1	23.2	63.3
Actuated g/C Ratio	0.15	0.48	0.40	0.40	0.26	0.72
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	508	746	1391	613	909	2485
v/s Ratio Prot	c0.05	0.14	c0.29		c0.20	0.28
v/s Ratio Perm				0.17		
v/c Ratio	0.37	0.29	0.74	0.42	0.75	0.39
Uniform Delay, d1	33.9	14.1	22.8	19.3	29.9	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2	2.2	0.5	3.5	0.1
Delay (s)	34.4	14.3	24.9	19.8	33.5	5.0
Level of Service	C	B	C	B	C	A
Approach Delay (s)	23.2		23.5			16.8
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	17.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

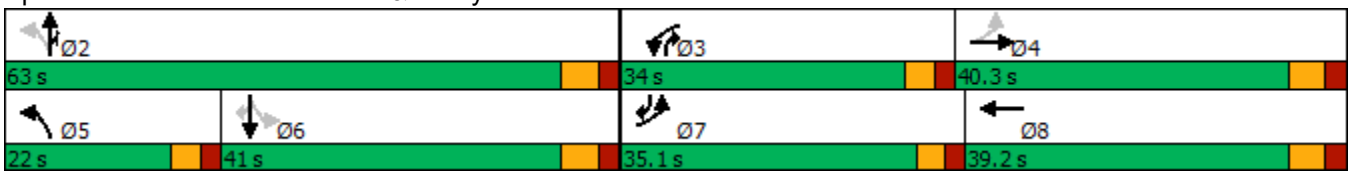
c Critical Lane Group

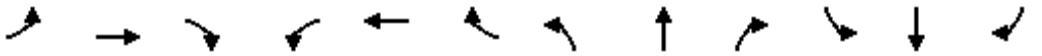
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	181	575	589	478	98	1065	762	26	832	253
Future Volume (vph)	181	575	589	478	98	1065	762	26	832	253
Lane Group Flow (vph)	181	635	589	492	98	1065	762	26	832	253
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3		6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		15.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		40.1	40.1	10.0
Total Split (s)	35.1	40.3	34.0	39.2	22.0	63.0		41.0	41.0	35.1
Total Split (%)	25.6%	29.4%	24.8%	28.6%	16.0%	45.9%		29.9%	29.9%	25.6%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.7	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.4	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		6.1	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		Min	Min	None
v/c Ratio	0.48	0.77	0.77	0.43	0.39	0.54	0.71	0.21	0.64	0.39
Control Delay	23.0	49.4	51.3	32.5	27.7	28.3	16.4	41.3	40.6	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0
Total Delay	23.0	49.4	51.3	32.5	27.7	28.3	18.6	41.3	40.6	17.4
Queue Length 50th (m)	23.4	76.6	69.0	47.7	15.1	72.7	99.5	5.0	66.0	28.1
Queue Length 95th (m)	43.9	109.2	105.4	75.5	29.3	95.7	170.2	14.7	90.5	51.4
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	605	1106	917	1225	350	2638	1145	158	1685	890
Starvation Cap Reductn	0	0	0	0	0	0	243	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.57	0.64	0.40	0.28	0.40	0.84	0.16	0.49	0.28

Intersection Summary

Cycle Length: 137.3
Actuated Cycle Length: 114.4
Natural Cycle: 95
Control Type: Semi Act-Uncoord

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	575	60	589	478	14	98	1065	762	26	832	253
Future Volume (vph)	181	575	60	589	478	14	98	1065	762	26	832	253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	6.1	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1580	3540		3467	3491		1751	5085	1615	1774	5085	1575
Flt Permitted	0.47	1.00		0.95	1.00		0.18	1.00	1.00	0.26	1.00	1.00
Satd. Flow (perm)	786	3540		3467	3491		323	5085	1615	479	5085	1575
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	181	575	60	589	478	14	98	1065	762	26	832	253
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	15	0	0	45
Lane Group Flow (vph)	181	629	0	589	491	0	98	1065	747	26	832	208
Confl. Peds. (#/hr)	9		6	6		9	25		33	33		25
Heavy Vehicles (%)	14%	0%	4%	1%	3%	0%	3%	2%	0%	1%	2%	0%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3		6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	40.1	26.3		25.4	37.9		44.6	44.6	76.1	29.6	29.6	43.4
Effective Green, g (s)	40.1	26.3		25.4	37.9		44.6	44.6	76.1	29.6	29.6	43.4
Actuated g/C Ratio	0.35	0.23		0.22	0.33		0.39	0.39	0.67	0.26	0.26	0.38
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		6.1	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	373	819		775	1164		252	1996	1081	124	1324	601
v/s Ratio Prot	0.06	c0.18		c0.17	0.14		0.03	0.21	c0.46		0.16	0.04
v/s Ratio Perm	0.11						0.12			0.05		0.09
v/c Ratio	0.49	0.77		0.76	0.42		0.39	0.53	0.69	0.21	0.63	0.35
Uniform Delay, d1	26.9	40.8		41.2	29.3		23.5	26.5	11.5	32.9	37.1	25.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	4.4		4.4	0.2		1.0	0.3	1.9	0.8	0.9	0.3
Delay (s)	27.8	45.2		45.7	29.6		24.5	26.8	13.4	33.7	38.1	25.3
Level of Service	C	D		D	C		C	C	B	C	D	C
Approach Delay (s)		41.3			38.3			21.4			35.1	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	113.6	Sum of lost time (s)	22.3
Intersection Capacity Utilization	98.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	48	70	212	68	154	161	1661	121	1315
Future Volume (vph)	48	70	212	68	154	161	1661	121	1315
Lane Group Flow (vph)	49	290	216	69	157	164	2055	123	1387
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	45.0	45.0	45.0	45.0	45.0	12.0	55.0	9.0	52.0
Total Split (%)	41.3%	41.3%	41.3%	41.3%	41.3%	11.0%	50.5%	8.3%	47.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.15	0.32	0.82	0.14	0.33	0.62	0.76	0.69	0.54
Control Delay	25.9	16.0	57.0	25.4	10.8	21.2	20.2	35.4	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	16.0	57.0	25.4	10.8	21.2	20.2	35.4	17.7
Queue Length 50th (m)	7.1	13.3	38.4	10.0	6.7	11.1	101.3	7.9	61.1
Queue Length 95th (m)	15.8	23.3	65.8	19.9	21.2	#40.2	166.8	#42.4	100.4
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	549	1426	429	825	722	266	2699	178	2579
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.20	0.50	0.08	0.22	0.62	0.76	0.69	0.54

Intersection Summary

Cycle Length: 109
Actuated Cycle Length: 94
Natural Cycle: 85
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Paris St & Van Horne St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	70	215	212	68	154	161	1661	353	121	1315	44
Future Volume (vph)	48	70	215	212	68	154	161	1661	353	121	1315	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3128		1767	1900	1521	1770	4937		1805	5055	
Flt Permitted	0.71	1.00		0.53	1.00	1.00	0.12	1.00		0.08	1.00	
Satd. Flow (perm)	1266	3128		987	1900	1521	230	4937		159	5055	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	49	71	219	216	69	157	164	1695	360	123	1342	45
RTOR Reduction (vph)	0	87	0	0	0	81	0	26	0	0	3	0
Lane Group Flow (vph)	49	203	0	216	69	76	164	2029	0	123	1384	0
Confl. Peds. (#/hr)	13		3	3		13	3		17	17		3
Heavy Vehicles (%)	6%	2%	1%	2%	0%	4%	2%	2%	1%	0%	2%	3%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	24.9	24.9		24.9	24.9	24.9	58.4	50.9		52.9	47.9	
Effective Green, g (s)	24.9	24.9		24.9	24.9	24.9	58.4	50.9		52.9	47.9	
Actuated g/C Ratio	0.27	0.27		0.27	0.27	0.27	0.62	0.54		0.56	0.51	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	336	830		262	504	403	266	2679		177	2581	
v/s Ratio Prot		0.06			0.04		c0.05	c0.41		0.04	0.27	
v/s Ratio Perm	0.04			c0.22		0.05	0.33			0.35		
v/c Ratio	0.15	0.24		0.82	0.14	0.19	0.62	0.76		0.69	0.54	
Uniform Delay, d1	26.3	27.1		32.4	26.3	26.6	10.2	16.7		14.4	15.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		18.6	0.1	0.2	4.2	2.1		11.2	0.8	
Delay (s)	26.5	27.2		51.0	26.4	26.9	14.4	18.7		25.6	16.3	
Level of Service	C	C		D	C	C	B	B		C	B	
Approach Delay (s)		27.1			38.6			18.4			17.0	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	93.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		

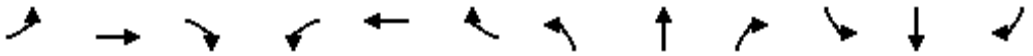
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	3	63	0	8	2034	80	1651
Future Volume (vph)	10	3	63	0	8	2034	80	1651
Lane Group Flow (vph)	0	15	0	174	8	2142	82	1707
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	85.3	85.3	9.0	94.3
Total Split (%)	21.4%	21.4%	21.4%	21.4%	71.1%	71.1%	7.5%	78.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.07		0.68	0.06	0.91	0.50	0.66
Control Delay		39.6		44.0	7.9	21.5	20.8	8.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		39.6		44.0	7.9	21.5	20.8	8.1
Queue Length 50th (m)		2.7		25.0	0.6	184.5	3.5	77.3
Queue Length 95th (m)		9.3		50.7	2.7	267.4	#19.7	118.4
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		311		359	169	2748	164	2988
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.05		0.48	0.05	0.78	0.50	0.57

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 100.3
Natural Cycle: 100
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

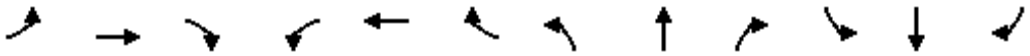
Splits and Phases: 3: Paris St & John St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	3	2	63	0	106	8	2034	44	80	1651	5
Future Volume (vph)	10	3	2	63	0	106	8	2034	44	80	1651	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799			1628		1801	3528		1736	3537	
Flt Permitted		0.77			0.87		0.12	1.00		0.06	1.00	
Satd. Flow (perm)		1437			1444		218	3528		103	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	3	2	65	0	109	8	2097	45	82	1702	5
RTOR Reduction (vph)	0	2	0	0	53	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	13	0	0	121	0	8	2141	0	82	1707	0
Confl. Peds. (#/hr)	3		4	4		3	14		2	2		14
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	2%	0%	4%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.1			14.1		67.2	67.2		74.8	74.8	
Effective Green, g (s)		14.1			14.1		67.2	67.2		74.8	74.8	
Actuated g/C Ratio		0.14			0.14		0.67	0.67		0.75	0.75	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		201			202		145	2361		135	2635	
v/s Ratio Prot								c0.61		0.02	c0.48	
v/s Ratio Perm		0.01			c0.08		0.04			0.43		
v/c Ratio		0.07			0.60		0.06	0.91		0.61	0.65	
Uniform Delay, d1		37.4			40.5		5.7	14.0		21.4	6.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			4.7		0.2	5.5		7.5	0.6	
Delay (s)		37.6			45.2		5.9	19.5		28.9	6.9	
Level of Service		D			D		A	B		C	A	
Approach Delay (s)		37.6			45.2			19.4			7.9	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	100.4	Sum of lost time (s)	15.5
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	7	3	0	2	1	2059	1	1	1788	13
Future Volume (Veh/h)	9	0	7	3	0	2	1	2059	1	1	1788	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	9	0	7	3	0	2	1	2145	1	1	1862	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)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								347			199	
pX, platoon unblocked	0.43	0.43	0.72	0.43	0.43	0.29	0.72			0.29		
vC, conflicting volume	2950	4024	941	3090	4030	1075	1879			2148		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	2464	147	269	2480	0	1447			27		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	99	100	99	100			100		
cM capacity (veh/h)	431	13	633	278	13	312	342			458		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	5	1074	1074	932	945
Volume Left	9	3	1	0	1	0
Volume Right	7	2	0	1	0	14
cSH	501	291	342	1700	458	1700
Volume to Capacity	0.03	0.02	0.00	0.63	0.00	0.56
Queue Length 95th (m)	0.8	0.4	0.1	0.0	0.1	0.0
Control Delay (s)	12.4	17.6	0.1	0.0	0.1	0.0
Lane LOS	B	C	A		A	
Approach Delay (s)	12.4	17.6	0.1		0.0	
Approach LOS	B	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	67.6%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	1	2051	6	0	1793
Future Volume (Veh/h)	1	1	2051	6	0	1793
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	1	2159	6	0	1887
Pedestrians	1					
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)			225			321
pX, platoon unblocked	0.41	0.26			0.26	
vC, conflicting volume	3106	1084			2166	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	24	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	405	284			427	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	1439	726	629	1258
Volume Left	1	0	0	0	0
Volume Right	1	0	6	0	0
cSH	334	1700	1700	427	1700
Volume to Capacity	0.01	0.85	0.43	0.00	0.74
Queue Length 95th (m)	0.1	0.0	0.0	0.0	0.0
Control Delay (s)	15.8	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	15.8	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	0	0	2	0	0
Future Volume (Veh/h)	7	0	0	2	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	10	0	0	3	0	0
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			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			10		14	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			10		14	12
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		100	100
cM capacity (veh/h)			1623		1009	1073

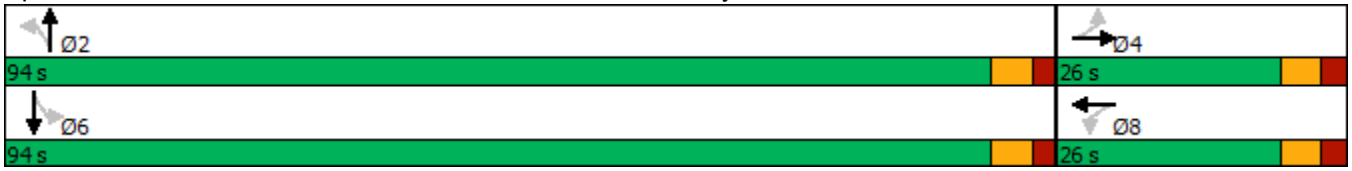
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	10	3	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1623	1700
Volume to Capacity	0.01	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

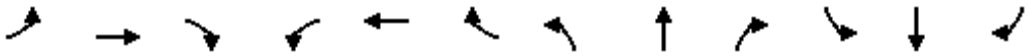
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	0	6	2	23	2024	4	1733
Future Volume (vph)	25	0	6	2	23	2024	4	1733
Lane Group Flow (vph)	0	43	7	13	25	2208	4	1916
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	94.0	94.0	94.0	94.0
Total Split (%)	21.7%	21.7%	21.7%	21.7%	78.3%	78.3%	78.3%	78.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.23	0.03	0.06	0.18	0.73	0.04	0.63
Control Delay		26.4	40.3	24.3	6.1	6.4	3.2	4.9
Queue Delay		0.0	0.0	0.0	0.0	0.5	0.0	0.0
Total Delay		26.4	40.3	24.3	6.1	6.9	3.2	4.9
Queue Length 50th (m)		2.4	1.0	0.3	0.9	95.9	0.1	68.1
Queue Length 95th (m)		15.1	6.1	6.6	3.9	140.2	0.9	98.2
Internal Link Dist (m)		192.5		282.1		313.9		201.2
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		410	504	486	156	3396	120	3389
Starvation Cap Reductn		0	0	0	0	657	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.10	0.01	0.03	0.16	0.81	0.03	0.57

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 74.8
Natural Cycle: 90
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	15	6	2	10	23	2024	7	4	1733	29
Future Volume (vph)	25	0	15	6	2	10	23	2024	7	4	1733	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.95		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1622		1805	1639		1804	3537		1805	3530	
Flt Permitted		0.80		0.91	1.00		0.09	1.00		0.07	1.00	
Satd. Flow (perm)		1341		1727	1639		163	3537		125	3530	
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)	27	0	16	7	2	11	25	2200	8	4	1884	32
RTOR Reduction (vph)	0	25	0	0	10	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	18	0	7	3	0	25	2208	0	4	1915	0
Confl. Peds. (#/hr)	2					2	4		2	2		4
Heavy Vehicles (%)	4%	0%	14%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.4		4.4	4.4		60.9	60.9		60.9	60.9	
Effective Green, g (s)		4.4		4.4	4.4		60.9	60.9		60.9	60.9	
Actuated g/C Ratio		0.06		0.06	0.06		0.79	0.79		0.79	0.79	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		76		98	93		128	2790		98	2784	
v/s Ratio Prot					0.00			c0.62			0.54	
v/s Ratio Perm		c0.01		0.00			0.15			0.03		
v/c Ratio		0.24		0.07	0.03		0.20	0.79		0.04	0.69	
Uniform Delay, d1		34.8		34.5	34.4		2.0	4.6		1.8	3.8	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.7		0.3	0.1		0.7	1.6		0.2	0.7	
Delay (s)		36.5		34.8	34.5		2.8	6.2		1.9	4.5	
Level of Service		D		C	C		A	A		A	A	
Approach Delay (s)		36.5			34.6			6.1			4.5	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	77.2	Sum of lost time (s)	11.9
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

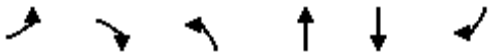
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	214	112	152	1840	1547	208
Future Volume (vph)	214	112	152	1840	1547	208
Lane Group Flow (vph)	225	118	160	1937	1628	219
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	12.0	94.5	82.5	82.5
Total Split (%)	21.3%	21.3%	10.0%	78.8%	68.8%	68.8%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.71	0.32	0.67	0.79	0.82	0.23
Control Delay	51.8	10.1	30.8	12.7	20.6	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	10.1	30.8	12.7	20.6	2.1
Queue Length 50th (m)	40.4	0.0	12.0	116.3	124.2	0.6
Queue Length 95th (m)	#85.3	16.3	#47.2	156.6	161.2	9.8
Internal Link Dist (m)	376.5			774.4	313.9	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	401	439	242	3228	2932	1308
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.27	0.66	0.60	0.56	0.17

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 92.3
Natural Cycle: 80
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	214	112	152	1840	1547	208
Future Volume (vph)	214	112	152	1840	1547	208
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1787	1557	1770	3539	3539	1539
Flt Permitted	0.95	1.00	0.07	1.00	1.00	1.00
Satd. Flow (perm)	1787	1557	134	3539	3539	1539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	225	118	160	1937	1628	219
RTOR Reduction (vph)	0	97	0	0	0	92
Lane Group Flow (vph)	225	21	160	1937	1628	127
Confl. Peds. (#/hr)	6	15	4			4
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	16.3	16.3	63.8	63.8	51.7	51.7
Effective Green, g (s)	16.3	16.3	63.8	63.8	51.7	51.7
Actuated g/C Ratio	0.18	0.18	0.69	0.69	0.56	0.56
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	317	276	237	2459	1993	866
v/s Ratio Prot	c0.13		0.06	c0.55	0.46	
v/s Ratio Perm		0.01	0.41			0.08
v/c Ratio	0.71	0.08	0.68	0.79	0.82	0.15
Uniform Delay, d1	35.5	31.5	19.3	9.4	16.2	9.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.1	0.1	7.4	1.7	2.7	0.1
Delay (s)	42.6	31.6	26.6	11.2	18.9	9.6
Level of Service	D	C	C	B	B	A
Approach Delay (s)	38.8			12.4	17.8	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	91.8	Sum of lost time (s)	15.7
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

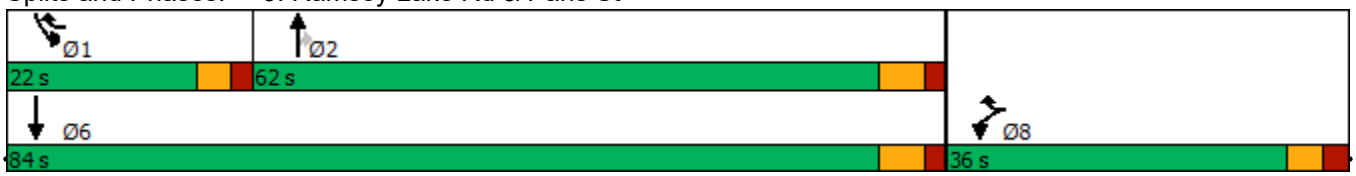
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	532	677	1347	263	358	1268
Future Volume (vph)	532	677	1347	263	358	1268
Lane Group Flow (vph)	591	752	1497	292	398	1409
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	36.0		62.0	62.0	22.0	84.0
Total Split (%)	30.0%		51.7%	51.7%	18.3%	70.0%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.67	1.06	0.93	0.37	0.81	0.62
Control Delay	44.1	84.9	41.4	13.4	62.9	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	84.9	41.4	13.4	62.9	14.0
Queue Length 50th (m)	68.4	~206.9	176.7	25.9	50.0	99.1
Queue Length 95th (m)	88.6	#284.0	#216.9	47.1	#73.6	119.9
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	887	707	1673	812	494	2333
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	1.06	0.89	0.36	0.81	0.60

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 118.1
Natural Cycle: 100
Control Type: Semi Act-Uncoord

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

Splits and Phases: 9: Ramsey Lake Rd & Paris St



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	532	677	1347	263	358	1268
Future Volume (vph)	532	677	1347	263	358	1268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	1583	3539	1587	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	1583	3539	1587	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	591	752	1497	292	398	1409
RTOR Reduction (vph)	0	7	0	64	0	0
Lane Group Flow (vph)	591	745	1497	228	398	1409
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	30.2	53.0	53.9	53.9	17.0	75.9
Effective Green, g (s)	30.2	53.0	53.9	53.9	17.0	75.9
Actuated g/C Ratio	0.26	0.45	0.46	0.46	0.14	0.64
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	886	710	1615	724	494	2274
v/s Ratio Prot	0.17	c0.47	c0.42		0.12	0.40
v/s Ratio Perm				0.14		
v/c Ratio	0.67	1.05	0.93	0.32	0.81	0.62
Uniform Delay, d1	39.4	32.5	30.2	20.4	49.0	12.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	47.4	9.6	0.3	9.3	0.5
Delay (s)	41.4	79.9	39.8	20.6	58.2	13.0
Level of Service	D	E	D	C	E	B
Approach Delay (s)	62.9		36.7			23.0
Approach LOS	E		D			C

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	118.1	Sum of lost time (s)	17.0
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		

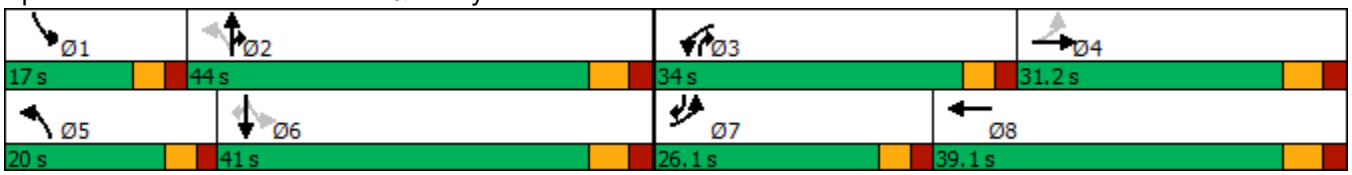
c Critical Lane Group

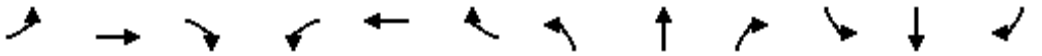
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	181	457	573	422	82	603	445	29	887	260
Future Volume (vph)	181	457	573	422	82	603	445	29	887	260
Lane Group Flow (vph)	197	549	623	470	89	655	484	32	964	283
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	10.0
Total Split (s)	26.1	31.2	34.0	39.1	20.0	44.0		17.0	41.0	26.1
Total Split (%)	20.7%	24.7%	26.9%	31.0%	15.8%	34.9%		13.5%	32.5%	20.7%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		None	Min	None
v/c Ratio	0.49	0.77	0.77	0.42	0.39	0.42	0.47	0.11	0.74	0.41
Control Delay	22.3	48.9	46.7	31.4	26.1	30.5	7.7	21.7	40.5	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	22.3	48.9	46.7	31.4	26.1	30.5	8.0	21.7	40.5	13.8
Queue Length 50th (m)	24.5	62.3	69.4	43.6	12.8	45.4	29.3	4.4	75.6	24.7
Queue Length 95th (m)	45.3	92.1	100.7	70.0	24.4	60.5	56.5	11.0	98.3	45.7
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	543	845	973	1211	308	1903	1095	370	1702	816
Starvation Cap Reductn	0	0	0	0	0	0	189	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.65	0.64	0.39	0.29	0.34	0.53	0.09	0.57	0.35

Intersection Summary

Cycle Length: 126.2
Actuated Cycle Length: 104.9
Natural Cycle: 105
Control Type: Semi Act-Uncoord

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	457	48	573	422	10	82	603	445	29	887	260
Future Volume (vph)	181	457	48	573	422	10	82	603	445	29	887	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1684	3369		3367	3461		1671	4988	1568	1717	4893	1551
Flt Permitted	0.48	1.00		0.95	1.00		0.14	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	856	3369		3367	3461		245	4988	1568	681	4893	1551
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)	197	497	52	623	459	11	89	655	484	32	964	283
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	93	0	0	69
Lane Group Flow (vph)	197	543	0	623	469	0	89	655	391	32	964	214
Confl. Peds. (#/hr)	7		4	4		7	19		10	10		19
Heavy Vehicles (%)	7%	5%	10%	4%	4%	0%	8%	4%	3%	5%	6%	2%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	35.4	22.0		25.1	33.7		41.2	33.1	64.3	33.0	29.0	42.4
Effective Green, g (s)	35.4	22.0		25.1	33.7		41.2	33.1	64.3	33.0	29.0	42.4
Actuated g/C Ratio	0.33	0.21		0.24	0.32		0.39	0.31	0.60	0.31	0.27	0.40
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	388	695		793	1095		203	1550	946	249	1332	617
v/s Ratio Prot	0.06	c0.16		c0.19	0.14		c0.03	0.13	0.25	0.00	c0.20	0.04
v/s Ratio Perm	0.10						0.14			0.03		0.09
v/c Ratio	0.51	0.78		0.79	0.43		0.44	0.42	0.41	0.13	0.72	0.35
Uniform Delay, d1	26.9	40.0		38.2	28.8		22.8	29.1	11.1	25.9	35.1	22.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	5.7		5.1	0.3		1.5	0.2	0.3	0.2	2.0	0.3
Delay (s)	27.9	45.7		43.3	29.0		24.3	29.3	11.4	26.1	37.1	22.7
Level of Service	C	D		D	C		C	C	B	C	D	C
Approach Delay (s)		41.0			37.2			21.9			33.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	106.5	Sum of lost time (s)	22.3
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

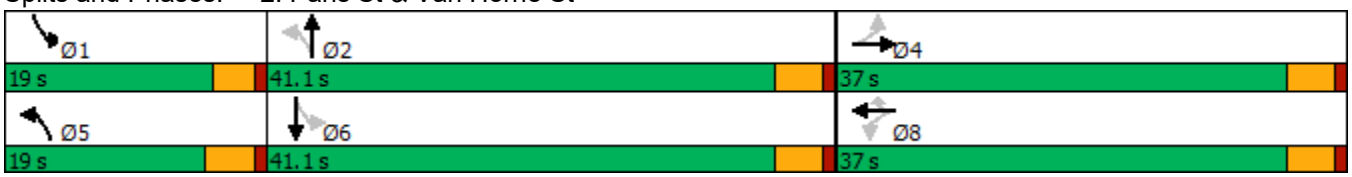
c Critical Lane Group

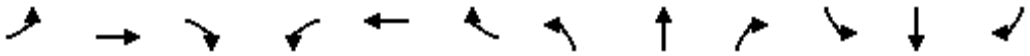
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	16	27	263	63	148	169	1022	82	1374
Future Volume (vph)	16	27	263	63	148	169	1022	82	1374
Lane Group Flow (vph)	18	130	289	69	163	186	1250	90	1565
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	37.0	37.0	37.0	37.0	37.0	19.0	41.1	19.0	41.1
Total Split (%)	38.1%	38.1%	38.1%	38.1%	38.1%	19.6%	42.3%	19.6%	42.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.06	0.15	0.82	0.14	0.29	0.63	0.50	0.30	0.71
Control Delay	22.6	8.0	48.2	23.4	5.4	25.4	16.5	11.2	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	8.0	48.2	23.4	5.4	25.4	16.5	11.2	23.3
Queue Length 50th (m)	2.2	1.9	45.2	8.7	0.0	14.9	51.6	5.6	77.2
Queue Length 95th (m)	7.4	8.5	79.7	19.3	13.8	41.3	80.7	14.4	119.8
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	454	1188	492	708	710	368	2481	457	2208
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11	0.59	0.10	0.23	0.51	0.50	0.20	0.71

Intersection Summary

Cycle Length: 97.1
Actuated Cycle Length: 84.9
Natural Cycle: 85
Control Type: Semi Act-Uncoord

Splits and Phases: 2: Paris St & Van Horne St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	27	91	263	63	148	169	1022	116	82	1374	50
Future Volume (vph)	16	27	91	263	63	148	169	1022	116	82	1374	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.99	1.00	1.00		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	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1566	2908		1801	1827	1576	1703	4871		1752	5048	
Flt Permitted	0.71	1.00		0.67	1.00	1.00	0.09	1.00		0.18	1.00	
Satd. Flow (perm)	1174	2908		1270	1827	1576	168	4871		338	5048	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	18	30	100	289	69	163	186	1123	127	90	1510	55
RTOR Reduction (vph)	0	72	0	0	0	118	0	11	0	0	3	0
Lane Group Flow (vph)	18	58	0	289	69	45	186	1239	0	90	1562	0
Confl. Peds. (#/hr)	4		4	4		4	6		6	6		6
Heavy Vehicles (%)	15%	4%	10%	0%	4%	1%	6%	5%	2%	3%	2%	5%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	23.6	23.6		23.6	23.6	23.6	53.2	43.1		44.2	38.1	
Effective Green, g (s)	23.6	23.6		23.6	23.6	23.6	53.2	43.1		44.2	38.1	
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.62	0.50		0.52	0.44	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	322	799		349	502	433	293	2446		274	2241	
v/s Ratio Prot		0.02			0.04		c0.08	0.25		0.02	c0.31	
v/s Ratio Perm	0.02			c0.23		0.03	0.31			0.15		
v/c Ratio	0.06	0.07		0.83	0.14	0.10	0.63	0.51		0.33	0.70	
Uniform Delay, d1	22.9	23.0		29.2	23.4	23.2	14.7	14.2		10.8	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		14.8	0.1	0.1	4.5	0.8		0.7	1.8	
Delay (s)	23.0	23.0		44.0	23.6	23.3	19.2	15.0		11.5	21.0	
Level of Service	C	C		D	C	C	B	B		B	C	
Approach Delay (s)		23.0			34.8			15.5			20.5	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	85.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	0	40	2	4	1301	46	1645
Future Volume (vph)	8	0	40	2	4	1301	46	1645
Lane Group Flow (vph)	0	14	0	110	4	1390	48	1723
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	50.8	50.8	14.0	64.8
Total Split (%)	28.4%	28.4%	28.4%	28.4%	56.1%	56.1%	15.5%	71.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.05		0.38	0.03	0.62	0.15	0.67
Control Delay		0.3		18.0	8.2	11.4	4.0	7.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		0.3		18.0	8.2	11.4	4.0	7.6
Queue Length 50th (m)		0.0		4.7	0.2	63.0	1.3	53.1
Queue Length 95th (m)		0.0		20.6	1.6	101.7	4.4	92.8
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		586		578	172	2735	437	3245
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.02		0.19	0.02	0.51	0.11	0.53

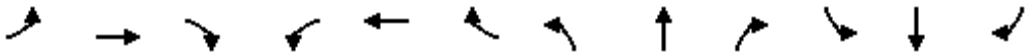
Intersection Summary
Cycle Length: 90.5
Actuated Cycle Length: 59.3
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	6	40	2	63	4	1301	34	46	1645	9
Future Volume (vph)	8	0	6	40	2	63	4	1301	34	46	1645	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1726			1696		1803	3492		1770	3536	
Flt Permitted		0.84			0.87		0.12	1.00		0.12	1.00	
Satd. Flow (perm)		1496			1501		220	3492		218	3536	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	8	0	6	42	2	66	4	1355	35	48	1714	9
RTOR Reduction (vph)	0	12	0	0	58	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	52	0	4	1388	0	48	1723	0
Confl. Peds. (#/hr)	5		5	5		5	8		4	4		8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.1			7.1		36.3	36.3		43.6	43.6	
Effective Green, g (s)		7.1			7.1		36.3	36.3		43.6	43.6	
Actuated g/C Ratio		0.11			0.11		0.58	0.58		0.70	0.70	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		170			171		128	2037		235	2478	
v/s Ratio Prot								0.40		0.01	c0.49	
v/s Ratio Perm		0.00			c0.03		0.02			0.13		
v/c Ratio		0.01			0.30		0.03	0.68		0.20	0.70	
Uniform Delay, d1		24.4			25.3		5.5	9.0		5.2	5.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			1.0		0.1	1.0		0.4	0.9	
Delay (s)		24.5			26.3		5.6	9.9		5.6	6.3	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		24.5			26.3			9.9			6.3	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	62.2	Sum of lost time (s)	15.5
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	9	2	0	2	1	1479	0	0	1724	7
Future Volume (Veh/h)	3	0	9	2	0	2	1	1479	0	0	1724	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	10	2	0	2	1	1643	0	0	1916	8
Pedestrians		2			1							
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)								347			199	
pX, platoon unblocked	0.75	0.75	0.65	0.75	0.75	0.80	0.65			0.80		
vC, conflicting volume	2748	3568	964	2614	3572	822	1926			1644		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1465	2559	0	1287	2564	279	1348			1306		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	7.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.8	2.2			2.2		
p0 queue free %	96	100	99	98	100	100	100			100		
cM capacity (veh/h)	68	20	708	91	20	474	336			429		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	4	822	822	958	966
Volume Left	3	2	1	0	0	0
Volume Right	10	2	0	0	0	8
cSH	222	152	336	1700	429	1700
Volume to Capacity	0.06	0.03	0.00	0.48	0.00	0.57
Queue Length 95th (m)	1.5	0.6	0.1	0.0	0.0	0.0
Control Delay (s)	22.2	29.2	0.1	0.0	0.0	0.0
Lane LOS	C	D	A			
Approach Delay (s)	22.2	29.2	0.1		0.0	
Approach LOS	C	D				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	0	1466	1	1	1737
Future Volume (Veh/h)	2	0	1466	1	1	1737
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	1629	1	1	1930
Pedestrians						1
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)			226			321
pX, platoon unblocked	0.74	0.79			0.79	
vC, conflicting volume	2596	816			1630	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1157	231			1263	
tC, single (s)	6.8	6.9			6.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.2	
p0 queue free %	99	100			99	
cM capacity (veh/h)	141	613			174	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	1086	544	644	1287
Volume Left	2	0	0	1	0
Volume Right	0	0	1	0	0
cSH	141	1700	1700	174	1700
Volume to Capacity	0.01	0.64	0.32	0.01	0.76
Queue Length 95th (m)	0.3	0.0	0.0	0.1	0.0
Control Delay (s)	31.0	0.0	0.0	0.3	0.0
Lane LOS	D			A	
Approach Delay (s)	31.0	0.0		0.1	
Approach LOS	D				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1	1	1	1	0	0
Future Volume (Veh/h)	1	1	1	1	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.50	0.50	0.50	0.50
Hourly flow rate (vph)	2	2	2	2	0	0
Pedestrians	1			2	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	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			6		12	7
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			6		12	7
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		100	100
cM capacity (veh/h)			1625		1009	1078

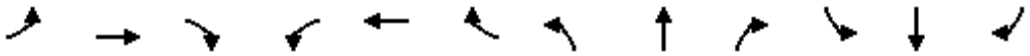
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	4	4	0
Volume Left	0	2	0
Volume Right	2	0	0
cSH	1700	1625	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	3.6	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.6	0.0
Approach LOS			A

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	28	0	2	0	6	1414	1747
Future Volume (vph)	28	0	2	0	6	1414	1747
Lane Group Flow (vph)	0	43	2	2	6	1489	1853
Turn Type	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases		4		8		2	6
Permitted Phases	4		8		2		
Detector Phase	4	4	8	8	2	2	6
Switch Phase							
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	55.9	55.9	55.9
Total Split (%)	31.7%	31.7%	31.7%	31.7%	68.3%	68.3%	68.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	Min	Min	Min
v/c Ratio		0.19	0.01	0.01	0.04	0.51	0.64
Control Delay		13.8	27.0	0.0	4.0	4.4	5.8
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.8	27.0	0.0	4.0	4.4	5.8
Queue Length 50th (m)		0.6	0.3	0.0	0.2	42.0	64.0
Queue Length 95th (m)		9.0	2.1	0.0	1.3	57.8	89.2
Internal Link Dist (m)		198.2		192.5		314.0	201.8
Turn Bay Length (m)					40.0		
Base Capacity (vph)		502	581	559	139	2927	2924
Starvation Cap Reductn		0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0
Reduced v/c Ratio		0.09	0.00	0.00	0.04	0.51	0.63

Intersection Summary
Cycle Length: 81.9
Actuated Cycle Length: 62.4
Natural Cycle: 75
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



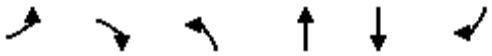
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	0	13	2	0	2	6	1414	1	0	1747	13
Future Volume (vph)	28	0	13	2	0	2	6	1414	1	0	1747	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9			5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95			0.95	
Frt		0.96		1.00	0.85		1.00	1.00			1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)		1757		1805	1615		1805	3505			3502	
Flt Permitted		0.80		0.93	1.00		0.09	1.00			1.00	
Satd. Flow (perm)		1448		1767	1615		167	3505			3502	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	29	0	14	2	0	2	6	1488	1	0	1839	14
RTOR Reduction (vph)	0	36	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	7	0	2	0	0	6	1489	0	0	1853	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.3		4.3	4.3		48.8	48.8			48.8	
Effective Green, g (s)		4.3		4.3	4.3		48.8	48.8			48.8	
Actuated g/C Ratio		0.07		0.07	0.07		0.75	0.75			0.75	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9			5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		95		116	106		125	2631			2629	
v/s Ratio Prot					0.00			0.42			c0.53	
v/s Ratio Perm		c0.00		0.00			0.04					
v/c Ratio		0.07		0.02	0.00		0.05	0.57			0.70	
Uniform Delay, d1		28.5		28.4	28.3		2.1	3.5			4.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.3		0.1	0.0		0.2	0.3			0.9	
Delay (s)		28.8		28.4	28.3		2.3	3.8			5.2	
Level of Service		C		C	C		A	A			A	
Approach Delay (s)		28.8			28.4			3.8			5.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	11.9
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	188	153	70	1233	1540	222
Future Volume (vph)	188	153	70	1233	1540	222
Lane Group Flow (vph)	209	170	78	1370	1711	247
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	9.0	79.0	70.0	70.0
Total Split (%)	24.4%	24.4%	8.6%	75.6%	67.0%	67.0%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.66	0.48	0.39	0.59	0.82	0.25
Control Delay	46.4	21.1	10.6	8.6	18.1	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.4	21.1	10.6	8.6	18.1	1.9
Queue Length 50th (m)	35.2	10.8	3.5	57.3	118.7	0.3
Queue Length 95th (m)	66.6	33.3	9.9	84.6	166.4	9.8
Internal Link Dist (m)	376.5			775.4	314.0	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	449	458	200	2897	2676	1211
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.37	0.39	0.47	0.64	0.20

Intersection Summary
Cycle Length: 104.5
Actuated Cycle Length: 84.7
Natural Cycle: 80
Control Type: Semi Act-Uncoord

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	188	153	70	1233	1540	222
Future Volume (vph)	188	153	70	1233	1540	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1514	1770	3471	3539	1529
Flt Permitted	0.95	1.00	0.07	1.00	1.00	1.00
Satd. Flow (perm)	1770	1514	137	3471	3539	1529
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	209	170	78	1370	1711	247
RTOR Reduction (vph)	0	83	0	0	0	99
Lane Group Flow (vph)	209	87	78	1370	1711	148
Confl. Peds. (#/hr)	1	15	8			8
Heavy Vehicles (%)	2%	4%	2%	4%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	15.2	15.2	57.9	57.9	50.2	50.2
Effective Green, g (s)	15.2	15.2	57.9	57.9	50.2	50.2
Actuated g/C Ratio	0.18	0.18	0.68	0.68	0.59	0.59
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	317	271	164	2369	2095	905
v/s Ratio Prot	c0.12		0.02	c0.39	c0.48	
v/s Ratio Perm		0.06	0.30			0.10
v/c Ratio	0.66	0.32	0.48	0.58	0.82	0.16
Uniform Delay, d1	32.4	30.3	12.5	7.1	13.7	7.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	0.7	2.2	0.3	2.6	0.1
Delay (s)	37.3	31.0	14.7	7.4	16.2	7.9
Level of Service	D	C	B	A	B	A
Approach Delay (s)	34.5			7.8	15.2	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	84.8	Sum of lost time (s)	15.7
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	243	1065	397	704	998
Future Volume (vph)	194	243	1065	397	704	998
Lane Group Flow (vph)	202	253	1109	414	733	1040
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	33.0	89.2
Total Split (%)	25.7%		46.8%	46.8%	27.5%	74.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.39	0.34	0.79	0.56	0.80	0.42
Control Delay	40.9	16.7	30.5	14.3	42.4	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	16.7	30.5	14.3	42.4	6.2
Queue Length 50th (m)	19.2	26.8	101.2	30.2	68.9	35.3
Queue Length 95th (m)	33.2	53.0	144.4	66.5	#122.5	62.1
Internal Link Dist (m)	679.1		533.6			775.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	920	796	1879	920	1040	2959
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.32	0.59	0.45	0.70	0.35

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 96.5
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	243	1065	397	704	998
Future Volume (vph)	194	243	1065	397	704	998
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1568	3505	1544	3467	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1568	3505	1544	3467	3471
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	202	253	1109	414	733	1040
RTOR Reduction (vph)	0	14	0	122	0	0
Lane Group Flow (vph)	202	239	1109	292	733	1040
Confl. Peds. (#/hr)		13		14	14	
Heavy Vehicles (%)	2%	3%	3%	2%	1%	4%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	14.6	46.0	38.8	38.8	25.6	69.4
Effective Green, g (s)	14.6	46.0	38.8	38.8	25.6	69.4
Actuated g/C Ratio	0.15	0.48	0.40	0.40	0.27	0.72
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	522	751	1416	624	924	2509
v/s Ratio Prot	0.06	c0.15	c0.32		c0.21	0.30
v/s Ratio Perm				0.19		
v/c Ratio	0.39	0.32	0.78	0.47	0.79	0.41
Uniform Delay, d1	36.7	15.4	24.9	21.0	32.7	5.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2	2.9	0.6	4.7	0.1
Delay (s)	37.1	15.6	27.8	21.6	37.5	5.4
Level of Service	D	B	C	C	D	A
Approach Delay (s)	25.2		26.1			18.6
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	96.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

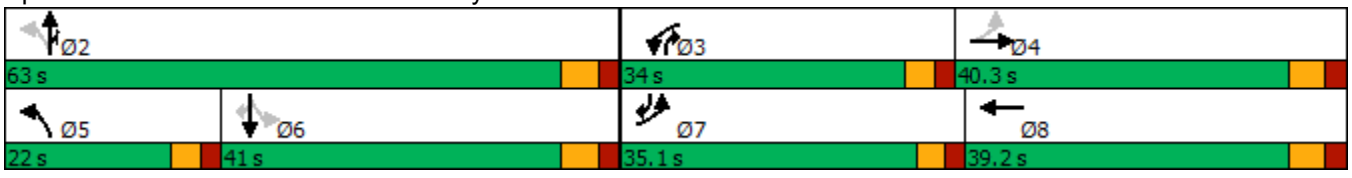
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	195	619	633	515	106	1148	817	28	896	273
Future Volume (vph)	195	619	633	515	106	1148	817	28	896	273
Lane Group Flow (vph)	195	684	633	530	106	1148	817	28	896	273
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3		6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		15.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		40.1	40.1	10.0
Total Split (s)	35.1	40.3	34.0	39.2	22.0	63.0		41.0	41.0	35.1
Total Split (%)	25.6%	29.4%	24.8%	28.6%	16.0%	45.9%		29.9%	29.9%	25.6%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.7	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.4	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		6.1	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		Min	Min	None
v/c Ratio	0.52	0.82	0.83	0.45	0.44	0.56	0.76	0.24	0.65	0.41
Control Delay	25.0	53.8	57.8	34.8	29.6	29.9	19.4	43.6	42.3	18.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0
Total Delay	25.0	53.8	57.8	34.8	29.6	29.9	25.9	43.6	42.3	18.4
Queue Length 50th (m)	30.7	95.2	88.5	60.5	17.7	86.6	132.1	5.8	77.2	34.0
Queue Length 95th (m)	47.3	118.9	#120.6	82.8	31.5	104.7	199.6	16.2	98.7	56.1
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	577	1021	845	1195	326	2434	1118	134	1600	878
Starvation Cap Reductn	0	0	0	0	0	0	251	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.67	0.75	0.44	0.33	0.47	0.94	0.21	0.56	0.31

Intersection Summary

Cycle Length: 137.3
Actuated Cycle Length: 122.4
Natural Cycle: 105
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	619	65	633	515	15	106	1148	817	28	896	273
Future Volume (vph)	195	619	65	633	515	15	106	1148	817	28	896	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	6.1	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1580	3539		3467	3491		1751	5085	1615	1774	5085	1572
Flt Permitted	0.46	1.00		0.95	1.00		0.16	1.00	1.00	0.23	1.00	1.00
Satd. Flow (perm)	757	3539		3467	3491		290	5085	1615	430	5085	1572
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	195	619	65	633	515	15	106	1148	817	28	896	273
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	11	0	0	45
Lane Group Flow (vph)	195	678	0	633	529	0	106	1148	806	28	896	228
Confl. Peds. (#/hr)	9		6	6		9	25		33	33		25
Heavy Vehicles (%)	14%	0%	4%	1%	3%	0%	3%	2%	0%	1%	2%	0%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3		6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	43.6	28.8		26.9	40.9		48.9	48.9	81.9	33.4	33.4	48.2
Effective Green, g (s)	43.6	28.8		26.9	40.9		48.9	48.9	81.9	33.4	33.4	48.2
Actuated g/C Ratio	0.36	0.24		0.22	0.34		0.40	0.40	0.67	0.27	0.27	0.40
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		6.1	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	370	836		765	1171		242	2039	1085	117	1393	621
v/s Ratio Prot	0.06	c0.19		c0.18	0.15		0.04	0.23	c0.50		0.18	0.04
v/s Ratio Perm	0.12						0.14			0.07		0.10
v/c Ratio	0.53	0.81		0.83	0.45		0.44	0.56	0.74	0.24	0.64	0.37
Uniform Delay, d1	28.7	44.0		45.3	31.7		25.0	28.2	13.1	34.4	39.0	26.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	6.0		7.3	0.3		1.3	0.4	2.8	1.1	1.0	0.4
Delay (s)	30.0	50.0		52.6	32.0		26.3	28.6	15.9	35.4	40.0	26.4
Level of Service	C	D		D	C		C	C	B	D	D	C
Approach Delay (s)		45.6			43.2			23.5			36.8	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	121.9	Sum of lost time (s)	22.3
Intersection Capacity Utilization	102.7%	ICU Level of Service	G
Analysis Period (min)	15		

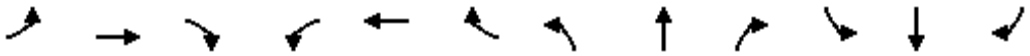
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	52	75	229	73	165	173	1787	130	1415
Future Volume (vph)	52	75	229	73	165	173	1787	130	1415
Lane Group Flow (vph)	53	314	234	74	168	177	2212	133	1492
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	31.7	31.7	31.7	31.7	31.7	12.0	55.0	9.0	52.0
Total Split (%)	33.1%	33.1%	33.1%	33.1%	33.1%	12.5%	57.5%	9.4%	54.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.16	0.34	0.92	0.14	0.34	0.73	0.82	0.75	0.58
Control Delay	27.2	17.3	74.5	26.6	12.3	31.0	20.9	40.9	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	17.3	74.5	26.6	12.3	31.0	20.9	40.9	17.6
Queue Length 50th (m)	7.7	14.9	43.2	10.7	8.1	13.2	123.0	9.5	72.3
Queue Length 95th (m)	17.2	26.4	#87.7	21.8	24.7	#44.1	145.9	#39.1	87.2
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	365	994	273	551	520	245	2693	178	2565
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.32	0.86	0.13	0.32	0.72	0.82	0.75	0.58

Intersection Summary

Cycle Length: 95.7
Actuated Cycle Length: 93.9
Natural Cycle: 85
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Paris St & Van Horne St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	75	232	229	73	165	173	1787	381	130	1415	47
Future Volume (vph)	52	75	232	229	73	165	173	1787	381	130	1415	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3129		1767	1900	1521	1770	4936		1805	5055	
Flt Permitted	0.71	1.00		0.51	1.00	1.00	0.10	1.00		0.08	1.00	
Satd. Flow (perm)	1261	3129		943	1900	1521	192	4936		160	5055	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	53	77	237	234	74	168	177	1823	389	133	1444	48
RTOR Reduction (vph)	0	89	0	0	0	82	0	34	0	0	3	0
Lane Group Flow (vph)	53	225	0	234	74	86	177	2178	0	133	1489	0
Confl. Peds. (#/hr)	13		3	3		13	3		17	17		3
Heavy Vehicles (%)	6%	2%	1%	2%	0%	4%	2%	2%	1%	0%	2%	3%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	25.3	25.3		25.3	25.3	25.3	58.1	50.6		52.6	47.6	
Effective Green, g (s)	25.3	25.3		25.3	25.3	25.3	58.1	50.6		52.6	47.6	
Actuated g/C Ratio	0.27	0.27		0.27	0.27	0.27	0.62	0.54		0.56	0.51	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	339	843		254	511	409	244	2659		177	2562	
v/s Ratio Prot		0.07			0.04		c0.06	c0.44		0.04	0.29	
v/s Ratio Perm	0.04			c0.25		0.06	0.39			0.38		
v/c Ratio	0.16	0.27		0.92	0.14	0.21	0.73	0.82		0.75	0.58	
Uniform Delay, d1	26.2	27.0		33.3	26.1	26.6	12.0	17.9		16.1	16.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		35.9	0.1	0.3	10.2	3.0		16.4	1.0	
Delay (s)	26.4	27.2		69.2	26.2	26.8	22.2	20.8		32.5	17.1	
Level of Service	C	C		E	C	C	C	C		C	B	
Approach Delay (s)		27.1			47.6			20.9			18.4	
Approach LOS		C			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	93.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	3	63	0	8	2188	80	1777
Future Volume (vph)	10	3	63	0	8	2188	80	1777
Lane Group Flow (vph)	0	15	0	174	8	2301	82	1837
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	85.3	85.3	9.0	94.3
Total Split (%)	21.4%	21.4%	21.4%	21.4%	71.1%	71.1%	7.5%	78.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.08		0.72	0.06	0.93	0.55	0.68
Control Delay		40.1		47.5	8.2	24.4	27.1	8.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		40.1		47.5	8.2	24.4	27.1	8.4
Queue Length 50th (m)		2.8		25.7	0.6	224.2	3.5	89.4
Queue Length 95th (m)		9.3		50.7	2.8	#350.8	#23.9	137.4
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		264		325	136	2643	149	2870
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.06		0.54	0.06	0.87	0.55	0.64

Intersection Summary

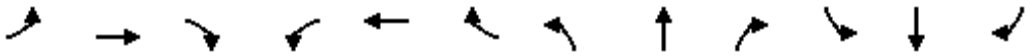
Cycle Length: 120
Actuated Cycle Length: 108
Natural Cycle: 110
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	3	2	63	0	106	8	2188	44	80	1777	5
Future Volume (vph)	10	3	2	63	0	106	8	2188	44	80	1777	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799			1627		1802	3528		1736	3537	
Flt Permitted		0.74			0.87		0.10	1.00		0.05	1.00	
Satd. Flow (perm)		1377			1443		183	3528		92	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	3	2	65	0	109	8	2256	45	82	1832	5
RTOR Reduction (vph)	0	2	0	0	54	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	13	0	0	120	0	8	2300	0	82	1837	0
Confl. Peds. (#/hr)	3		4	4		3	14		2	2		14
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	2%	0%	4%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.1			14.1		75.3	75.3		83.0	83.0	
Effective Green, g (s)		14.1			14.1		75.3	75.3		83.0	83.0	
Actuated g/C Ratio		0.13			0.13		0.69	0.69		0.76	0.76	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		178			187		126	2446		126	2703	
v/s Ratio Prot								c0.65		0.02	c0.52	
v/s Ratio Perm		0.01			c0.08		0.04			0.47		
v/c Ratio		0.07			0.64		0.06	0.94		0.65	0.68	
Uniform Delay, d1		41.5			44.9		5.3	14.7		27.0	6.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			7.3		0.2	8.1		11.4	0.7	
Delay (s)		41.7			52.2		5.6	22.7		38.4	7.0	
Level of Service		D			D		A	C		D	A	
Approach Delay (s)		41.7			52.2			22.7			8.3	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	108.6	Sum of lost time (s)	15.5
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	7	3	0	2	1	2216	1	1	1924	13
Future Volume (Veh/h)	9	0	7	3	0	2	1	2216	1	1	1924	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	9	0	7	3	0	2	1	2308	1	1	2004	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)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								347			199	
pX, platoon unblocked	0.41	0.41	0.69	0.41	0.41	0.26	0.69			0.26		
vC, conflicting volume	3174	4329	1012	3324	4336	1156	2021			2311		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	39	2827	114	400	2843	0	1579			336		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	99	100	99	100			100		
cM capacity (veh/h)	393	7	635	219	7	282	290			319		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	5	1155	1155	1003	1016
Volume Left	9	3	1	0	1	0
Volume Right	7	2	0	1	0	14
cSH	472	240	290	1700	319	1700
Volume to Capacity	0.03	0.02	0.00	0.68	0.00	0.60
Queue Length 95th (m)	0.8	0.5	0.1	0.0	0.1	0.0
Control Delay (s)	12.9	20.3	0.2	0.0	0.1	0.0
Lane LOS	B	C	A		A	
Approach Delay (s)	12.9	20.3	0.1		0.1	
Approach LOS	B	C				

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	72.0%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	1	2207	6	0	1930
Future Volume (Veh/h)	1	1	2207	6	0	1930
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	1	2323	6	0	2032
Pedestrians	1					
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)			225			321
pX, platoon unblocked	0.41	0.24			0.24	
vC, conflicting volume	3343	1166			2330	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	135	0			194	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	345	260			332	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	2	1549	780	677	1355
Volume Left	1	0	0	0	0
Volume Right	1	0	6	0	0
cSH	297	1700	1700	332	1700
Volume to Capacity	0.01	0.91	0.46	0.00	0.80
Queue Length 95th (m)	0.2	0.0	0.0	0.0	0.0
Control Delay (s)	17.2	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	17.2	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	0	0	2	0	0
Future Volume (Veh/h)	7	0	0	2	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	10	0	0	3	0	0
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			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			10		14	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			10		14	12
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		100	100
cM capacity (veh/h)			1623		1009	1073

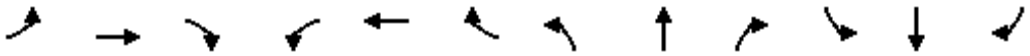
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	10	3	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1623	1700
Volume to Capacity	0.01	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	27	0	6	2	24	2178	4	1865
Future Volume (vph)	27	0	6	2	24	2178	4	1865
Lane Group Flow (vph)	0	46	7	13	26	2375	4	2061
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	94.0	94.0	94.0	94.0
Total Split (%)	21.7%	21.7%	21.7%	21.7%	78.3%	78.3%	78.3%	78.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.29	0.05	0.07	0.24	0.81	0.05	0.70
Control Delay		30.0	44.8	25.9	8.9	8.8	3.5	6.2
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		30.0	44.8	25.9	8.9	8.8	3.5	6.2
Queue Length 50th (m)		3.4	1.2	0.3	1.0	117.6	0.1	80.5
Queue Length 95th (m)		16.1	6.2	6.6	5.2	179.8	1.0	120.1
Internal Link Dist (m)		192.5		282.1		313.9		201.2
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		340	330	400	117	3223	94	3219
Starvation Cap Reductn		0	0	0	0	21	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.14	0.02	0.03	0.22	0.74	0.04	0.64

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 90.1
Natural Cycle: 90
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	16	6	2	10	24	2178	7	4	1865	31
Future Volume (vph)	27	0	16	6	2	10	24	2178	7	4	1865	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.95		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1623		1805	1639		1805	3537		1805	3530	
Flt Permitted		0.80		0.73	1.00		0.07	1.00		0.05	1.00	
Satd. Flow (perm)		1341		1381	1639		130	3537		104	3530	
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)	29	0	17	7	2	11	26	2367	8	4	2027	34
RTOR Reduction (vph)	0	24	0	0	10	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	22	0	7	3	0	26	2375	0	4	2060	0
Confl. Peds. (#/hr)	2					2	4		2	2		4
Heavy Vehicles (%)	4%	0%	14%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		6.4		6.4	6.4		73.0	73.0		73.0	73.0	
Effective Green, g (s)		6.4		6.4	6.4		73.0	73.0		73.0	73.0	
Actuated g/C Ratio		0.07		0.07	0.07		0.80	0.80		0.80	0.80	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		94		96	114		103	2828		83	2822	
v/s Ratio Prot					0.00			c0.67			0.58	
v/s Ratio Perm		c0.02		0.01			0.20			0.04		
v/c Ratio		0.23		0.07	0.02		0.25	0.84		0.05	0.73	
Uniform Delay, d1		40.1		39.7	39.5		2.3	5.6		1.9	4.4	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.3		0.3	0.1		1.3	2.4		0.2	1.0	
Delay (s)		41.4		40.0	39.6		3.6	7.9		2.1	5.4	
Level of Service		D		D	D		A	A		A	A	
Approach Delay (s)		41.4			39.8			7.9			5.4	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	11.9
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

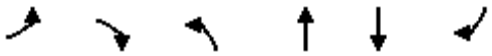
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	121	164	1980	1665	224
Future Volume (vph)	230	121	164	1980	1665	224
Lane Group Flow (vph)	242	127	173	2084	1753	236
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	12.0	94.5	82.5	82.5
Total Split (%)	21.3%	21.3%	10.0%	78.8%	68.8%	68.8%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.77	0.34	0.78	0.84	0.85	0.24
Control Delay	59.3	10.3	45.9	14.4	22.0	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.3	10.3	45.9	14.4	22.0	2.4
Queue Length 50th (m)	48.2	0.0	18.8	152.6	153.2	2.1
Queue Length 95th (m)	#100.6	17.4	#62.9	185.0	184.4	11.5
Internal Link Dist (m)	376.5			774.4	313.9	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	365	418	221	3074	2752	1241
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.30	0.78	0.68	0.64	0.19

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 100.4
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	121	164	1980	1665	224
Future Volume (vph)	230	121	164	1980	1665	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1787	1556	1770	3539	3539	1538
Flt Permitted	0.95	1.00	0.06	1.00	1.00	1.00
Satd. Flow (perm)	1787	1556	119	3539	3539	1538
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	242	127	173	2084	1753	236
RTOR Reduction (vph)	0	105	0	0	0	88
Lane Group Flow (vph)	242	22	173	2084	1753	148
Confl. Peds. (#/hr)	6	15	4			4
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	17.6	17.6	70.7	70.7	58.5	58.5
Effective Green, g (s)	17.6	17.6	70.7	70.7	58.5	58.5
Actuated g/C Ratio	0.18	0.18	0.71	0.71	0.58	0.58
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	273	219	2502	2070	899
v/s Ratio Prot	c0.14		0.06	c0.59	0.50	
v/s Ratio Perm		0.01	0.49			0.10
v/c Ratio	0.77	0.08	0.79	0.83	0.85	0.17
Uniform Delay, d1	39.3	34.4	26.3	10.4	17.1	9.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.1	0.1	17.1	2.5	3.4	0.1
Delay (s)	50.4	34.6	43.3	13.0	20.5	9.6
Level of Service	D	C	D	B	C	A
Approach Delay (s)	44.9			15.3	19.2	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		

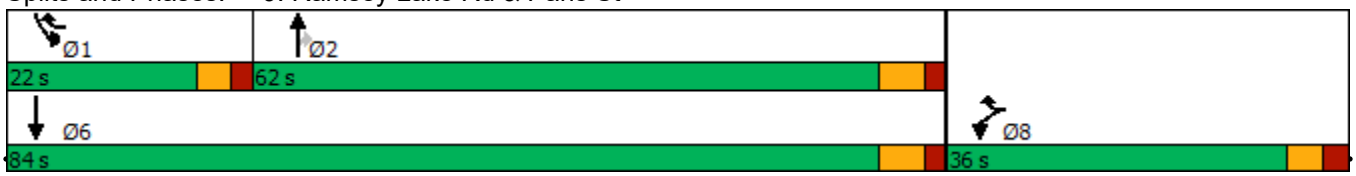
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	573	728	1450	283	386	1365
Future Volume (vph)	573	728	1450	283	386	1365
Lane Group Flow (vph)	637	809	1611	314	429	1517
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	36.0		62.0	62.0	22.0	84.0
Total Split (%)	30.0%		51.7%	51.7%	18.3%	70.0%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.73	1.17	0.98	0.39	0.88	0.66
Control Delay	46.9	122.4	49.7	14.3	71.0	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	122.4	49.7	14.3	71.0	14.8
Queue Length 50th (m)	75.0	~238.0	201.3	29.8	54.5	112.4
Queue Length 95th (m)	96.2	#316.7	#258.7	52.7	#82.6	135.5
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	872	693	1645	800	486	2294
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	1.17	0.98	0.39	0.88	0.66

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Natural Cycle: 120
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	573	728	1450	283	386	1365
Future Volume (vph)	573	728	1450	283	386	1365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	1583	3539	1586	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	1583	3539	1586	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	637	809	1611	314	429	1517
RTOR Reduction (vph)	0	5	0	63	0	0
Lane Group Flow (vph)	637	804	1611	251	429	1517
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	30.2	53.0	55.8	55.8	17.0	77.8
Effective Green, g (s)	30.2	53.0	55.8	55.8	17.0	77.8
Actuated g/C Ratio	0.25	0.44	0.46	0.46	0.14	0.65
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	872	699	1645	737	486	2294
v/s Ratio Prot	0.18	c0.51	c0.46		0.12	0.43
v/s Ratio Perm				0.16		
v/c Ratio	0.73	1.15	0.98	0.34	0.88	0.66
Uniform Delay, d1	41.2	33.5	31.5	20.4	50.5	13.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	83.5	17.3	0.3	17.0	0.7
Delay (s)	44.3	117.0	48.8	20.7	67.6	13.7
Level of Service	D	F	D	C	E	B
Approach Delay (s)	85.0		44.2			25.6
Approach LOS	F		D			C

Intersection Summary			
HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		

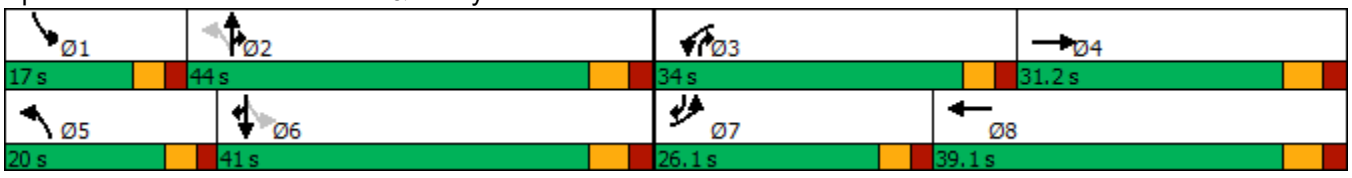
c Critical Lane Group

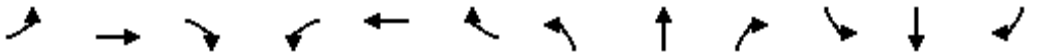
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	181	457	573	422	82	603	445	29	887	260
Future Volume (vph)	181	457	573	422	82	603	445	29	887	260
Lane Group Flow (vph)	197	549	623	470	89	655	484	32	964	283
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pt+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	6 7
Permitted Phases					2			6		
Detector Phase	7	4	3	8	5	2	2 3	1	6	6 7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	
Total Split (s)	26.1	31.2	34.0	39.1	20.0	44.0		17.0	41.0	
Total Split (%)	20.7%	24.7%	26.9%	31.0%	15.8%	34.9%		13.5%	32.5%	
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	Min		None	Min	
v/c Ratio	0.52	0.78	0.78	0.41	0.38	0.41	0.46	0.11	0.73	0.38
Control Delay	52.7	49.7	47.4	30.6	25.8	30.3	7.7	21.5	40.0	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	52.7	49.7	47.4	30.6	25.8	30.3	8.0	21.5	40.0	14.3
Queue Length 50th (m)	22.9	63.3	70.6	43.6	12.9	45.6	29.4	4.5	76.0	25.8
Queue Length 95th (m)	37.1	92.1	100.7	67.9	24.4	60.5	56.5	11.0	98.3	48.6
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	682	838	965	1230	308	1900	1105	371	1688	875
Starvation Cap Reductn	0	0	0	0	0	0	195	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.66	0.65	0.38	0.29	0.34	0.53	0.09	0.57	0.32

Intersection Summary

Cycle Length: 126.2
Actuated Cycle Length: 106
Natural Cycle: 105
Control Type: Semi Act-Uncoord

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	457	48	573	422	10	82	603	445	29	887	260
Future Volume (vph)	181	457	48	573	422	10	82	603	445	29	887	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	6.1
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	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
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3273	3369		3367	3461		1671	4988	1568	1717	4893	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.14	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	3273	3369		3367	3461		250	4988	1568	681	4893	1583
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)	197	497	52	623	459	11	89	655	484	32	964	283
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	92	0	0	63
Lane Group Flow (vph)	197	543	0	623	469	0	89	655	392	32	964	220
Confl. Peds. (#/hr)	7		4	4		7	19		10	10		19
Heavy Vehicles (%)	7%	5%	10%	4%	4%	0%	8%	4%	3%	5%	6%	2%
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pt+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	6 7
Permitted Phases							2			6		
Actuated Green, G (s)	12.2	22.1		25.2	35.1		42.0	33.9	65.2	33.8	29.8	48.1
Effective Green, g (s)	12.2	22.1		25.2	35.1		42.0	33.9	65.2	33.8	29.8	48.1
Actuated g/C Ratio	0.11	0.21		0.23	0.33		0.39	0.32	0.61	0.31	0.28	0.45
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	371	692		789	1130		204	1572	951	252	1356	708
v/s Ratio Prot	0.06	c0.16		c0.19	0.14		c0.03	0.13	0.25	0.00	c0.20	0.14
v/s Ratio Perm							0.14			0.04		
v/c Ratio	0.53	0.78		0.79	0.41		0.44	0.42	0.41	0.13	0.71	0.31
Uniform Delay, d1	45.0	40.4		38.7	28.2		22.7	29.0	11.1	25.7	35.0	19.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	5.8		5.3	0.2		1.5	0.2	0.3	0.2	1.8	0.3
Delay (s)	46.4	46.3		43.9	28.4		24.2	29.2	11.4	26.0	36.8	19.3
Level of Service	D	D		D	C		C	C	B	C	D	B
Approach Delay (s)		46.3			37.3			21.8			32.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	107.5	Sum of lost time (s)	22.3
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	243	1065	397	704	998
Future Volume (vph)	194	243	1065	397	704	998
Lane Group Flow (vph)	202	253	1109	414	733	1040
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	33.0	89.2
Total Split (%)	25.7%		46.8%	46.8%	27.5%	74.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.48	0.20	0.77	0.55	0.77	0.40
Control Delay	43.8	13.4	27.7	13.0	37.9	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	13.4	27.7	13.0	37.9	4.8
Queue Length 50th (m)	18.8	12.2	95.4	28.2	63.8	30.0
Queue Length 95th (m)	33.7	25.2	127.4	58.9	#104.8	45.3
Internal Link Dist (m)	679.1		533.6			775.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	962	1383	1964	952	1088	3090
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.18	0.56	0.43	0.67	0.34

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 91.5
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	243	1065	397	704	998
Future Volume (vph)	194	243	1065	397	704	998
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	0.88	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2760	3505	1545	3467	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2760	3505	1545	3467	3471
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	202	253	1109	414	733	1040
RTOR Reduction (vph)	0	26	0	120	0	0
Lane Group Flow (vph)	202	227	1109	294	733	1040
Confl. Peds. (#/hr)		13		14	14	
Heavy Vehicles (%)	2%	3%	3%	2%	1%	4%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	11.2	42.3	37.7	37.7	25.3	68.0
Effective Green, g (s)	11.2	42.3	37.7	37.7	25.3	68.0
Actuated g/C Ratio	0.12	0.46	0.41	0.41	0.28	0.75
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	421	1280	1448	638	961	2588
v/s Ratio Prot	c0.06	0.08	c0.32		c0.21	0.30
v/s Ratio Perm				0.19		
v/c Ratio	0.48	0.18	0.77	0.46	0.76	0.40
Uniform Delay, d1	37.3	14.3	23.0	19.4	30.2	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	2.5	0.5	3.6	0.1
Delay (s)	38.1	14.4	25.4	19.9	33.8	4.3
Level of Service	D	B	C	B	C	A
Approach Delay (s)	24.9		23.9			16.5
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	91.2	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

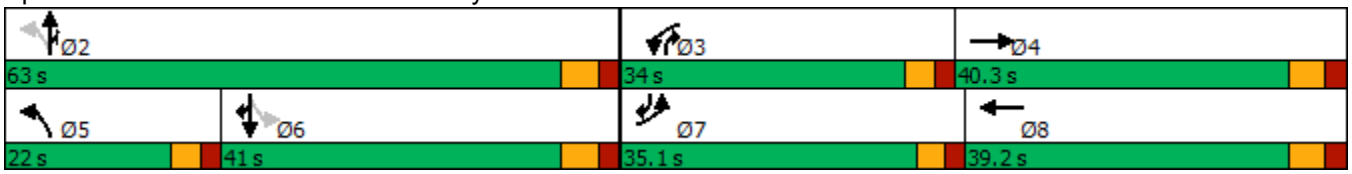
c Critical Lane Group

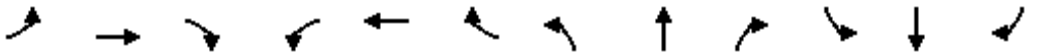
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	195	619	633	515	106	1148	817	28	896	273
Future Volume (vph)	195	619	633	515	106	1148	817	28	896	273
Lane Group Flow (vph)	195	684	633	530	106	1148	817	28	896	273
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pt+ov	Perm	NA	pt+ov
Protected Phases	7	4	3	8	5	2	2 3		6	6 7
Permitted Phases					2			6		
Detector Phase	7	4	3	8	5	2	2 3	6	6	6 7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		15.0	15.0	
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		40.1	40.1	
Total Split (s)	35.1	40.3	34.0	39.2	22.0	63.0		41.0	41.0	
Total Split (%)	25.6%	29.4%	24.8%	28.6%	16.0%	45.9%		29.9%	29.9%	
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.7	3.7	
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.4	2.4	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		6.1	6.1	
Lead/Lag	Lead	Lag	Lead	Lag	Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Recall Mode	None	None	None	None	None	Min		Min	Min	
v/c Ratio	0.58	0.82	0.83	0.44	0.44	0.56	0.76	0.24	0.65	0.37
Control Delay	61.4	53.8	57.8	33.6	29.6	29.9	19.4	43.6	42.3	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0
Total Delay	61.4	53.8	57.8	33.6	29.6	29.9	25.9	43.6	42.3	18.7
Queue Length 50th (m)	27.3	95.2	88.5	59.7	17.7	86.6	132.1	5.8	77.2	34.4
Queue Length 95th (m)	40.2	118.9	#120.6	80.6	31.5	104.7	199.6	16.2	98.7	58.3
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	777	1021	845	1226	326	2434	1118	134	1600	946
Starvation Cap Reductn	0	0	0	0	0	0	251	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.67	0.75	0.43	0.33	0.47	0.94	0.21	0.56	0.29

Intersection Summary

Cycle Length: 137.3
Actuated Cycle Length: 122.4
Natural Cycle: 105
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	619	65	633	515	15	106	1148	817	28	896	273
Future Volume (vph)	195	619	65	633	515	15	106	1148	817	28	896	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	6.1	6.1	6.1
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3072	3539		3467	3491		1751	5085	1615	1774	5085	1615
Flt Permitted	0.95	1.00		0.95	1.00		0.16	1.00	1.00	0.23	1.00	1.00
Satd. Flow (perm)	3072	3539		3467	3491		290	5085	1615	430	5085	1615
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	195	619	65	633	515	15	106	1148	817	28	896	273
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	11	0	0	44
Lane Group Flow (vph)	195	678	0	633	529	0	106	1148	806	28	896	229
Confl. Peds. (#/hr)	9		6	6		9	25		33	33		25
Heavy Vehicles (%)	14%	0%	4%	1%	3%	0%	3%	2%	0%	1%	2%	0%
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pt+ov	Perm	NA	pt+ov
Protected Phases	7	4		3	8		5	2	2 3		6	6 7
Permitted Phases							2			6		
Actuated Green, G (s)	13.5	28.8		26.9	42.2		48.9	48.9	81.9	33.4	33.4	53.0
Effective Green, g (s)	13.5	28.8		26.9	42.2		48.9	48.9	81.9	33.4	33.4	53.0
Actuated g/C Ratio	0.11	0.24		0.22	0.35		0.40	0.40	0.67	0.27	0.27	0.43
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		6.1	6.1	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	340	836		765	1208		242	2039	1085	117	1393	702
v/s Ratio Prot	0.06	c0.19		c0.18	0.15		0.04	0.23	c0.50		0.18	0.14
v/s Ratio Perm							0.14			0.07		
v/c Ratio	0.57	0.81		0.83	0.44		0.44	0.56	0.74	0.24	0.64	0.33
Uniform Delay, d1	51.5	44.0		45.3	30.7		25.0	28.2	13.1	34.4	39.0	22.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	6.0		7.3	0.3		1.3	0.4	2.8	1.1	1.0	0.3
Delay (s)	53.8	50.0		52.6	31.0		26.3	28.6	15.9	35.4	40.0	23.0
Level of Service	D	D		D	C		C	C	B	D	D	C
Approach Delay (s)		50.8			42.8			23.5			36.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	35.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	121.9	Sum of lost time (s)	22.3
Intersection Capacity Utilization	102.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	573	728	1450	283	386	1365
Future Volume (vph)	573	728	1450	283	386	1365
Lane Group Flow (vph)	637	809	1611	314	429	1517
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	32.0		64.5	64.5	23.5	88.0
Total Split (%)	26.7%		53.8%	53.8%	19.6%	73.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.84	0.69	0.94	0.38	0.82	0.63
Control Delay	55.5	31.5	41.2	12.8	62.1	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	31.5	41.2	12.8	62.1	12.1
Queue Length 50th (m)	78.5	90.1	192.6	27.6	53.6	100.0
Queue Length 95th (m)	#106.2	116.1	#248.7	49.5	#76.9	120.6
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	778	1168	1770	854	545	2483
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.69	0.91	0.37	0.79	0.61

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 116.9
Natural Cycle: 100
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	573	728	1450	283	386	1365
Future Volume (vph)	573	728	1450	283	386	1365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	0.88	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	2787	3539	1587	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	2787	3539	1587	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	637	809	1611	314	429	1517
RTOR Reduction (vph)	0	12	0	63	0	0
Lane Group Flow (vph)	637	797	1611	251	429	1517
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	25.6	49.3	56.4	56.4	17.9	79.3
Effective Green, g (s)	25.6	49.3	56.4	56.4	17.9	79.3
Actuated g/C Ratio	0.22	0.42	0.48	0.48	0.15	0.68
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	759	1175	1707	765	525	2400
v/s Ratio Prot	c0.18	0.29	c0.46		c0.12	0.43
v/s Ratio Perm				0.16		
v/c Ratio	0.84	0.68	0.94	0.33	0.82	0.63
Uniform Delay, d1	43.7	27.4	28.7	18.6	47.9	10.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	1.6	11.1	0.3	9.6	0.5
Delay (s)	51.8	29.0	39.9	18.9	57.5	11.1
Level of Service	D	C	D	B	E	B
Approach Delay (s)	39.0		36.4			21.4
Approach LOS	D		D			C

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	17.0
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

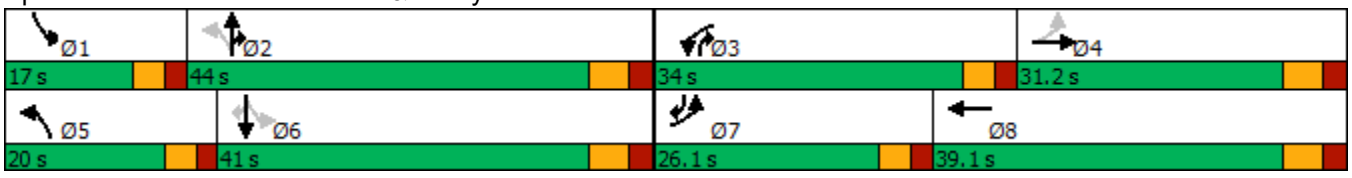
Appendix F –
Synchro Analysis Output –
Total Traffic Volumes

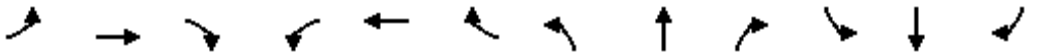
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	168	424	547	393	93	578	435	27	840	241
Future Volume (vph)	168	424	547	393	93	578	435	27	840	241
Lane Group Flow (vph)	183	519	595	438	101	628	473	29	913	262
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	10.0
Total Split (s)	26.1	31.2	34.0	39.1	20.0	44.0		17.0	41.0	26.1
Total Split (%)	20.7%	24.7%	26.9%	31.0%	15.8%	34.9%		13.5%	32.5%	20.7%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		None	Min	None
v/c Ratio	0.47	0.77	0.77	0.41	0.40	0.37	0.45	0.10	0.74	0.40
Control Delay	22.3	48.9	46.8	31.3	25.4	29.0	7.1	21.2	41.1	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	22.3	48.9	46.8	31.3	25.4	29.0	7.4	21.2	41.1	13.3
Queue Length 50th (m)	21.5	55.1	62.2	38.4	13.6	40.8	25.1	3.8	67.4	20.0
Queue Length 95th (m)	42.8	87.4	96.5	65.0	27.2	57.7	52.5	10.1	93.5	42.0
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	535	834	962	1188	318	1888	1110	393	1683	791
Starvation Cap Reductn	0	0	0	0	0	0	173	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.62	0.62	0.37	0.32	0.33	0.50	0.07	0.54	0.33

Intersection Summary

Cycle Length: 126.2
Actuated Cycle Length: 104.5
Natural Cycle: 95
Control Type: Semi Act-Uncoord

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	424	53	547	393	10	93	578	435	27	840	241
Future Volume (vph)	168	424	53	547	393	10	93	578	435	27	840	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1684	3357		3367	3460		1671	4988	1568	1717	4893	1551
Flt Permitted	0.50	1.00		0.95	1.00		0.15	1.00	1.00	0.40	1.00	1.00
Satd. Flow (perm)	882	3357		3367	3460		269	4988	1568	727	4893	1551
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)	183	461	58	595	427	11	101	628	473	29	913	262
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	92	0	0	70
Lane Group Flow (vph)	183	511	0	595	437	0	101	628	381	29	913	192
Confl. Peds. (#/hr)	7		4	4		7	19		10	10		19
Heavy Vehicles (%)	7%	5%	10%	4%	4%	0%	8%	4%	3%	5%	6%	2%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	33.5	20.8		23.9	32.0		44.4	35.4	65.4	32.8	28.8	41.5
Effective Green, g (s)	33.5	20.8		23.9	32.0		44.4	35.4	65.4	32.8	28.8	41.5
Actuated g/C Ratio	0.31	0.20		0.22	0.30		0.42	0.33	0.61	0.31	0.27	0.39
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	373	656		756	1040		251	1659	963	261	1324	604
v/s Ratio Prot	0.06	c0.15		c0.18	0.13		c0.04	0.13	0.24	0.00	c0.19	0.04
v/s Ratio Perm	0.10						0.13			0.03		0.09
v/c Ratio	0.49	0.78		0.79	0.42		0.40	0.38	0.40	0.11	0.69	0.32
Uniform Delay, d1	28.0	40.6		38.9	29.8		20.8	27.1	10.4	25.9	34.8	22.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	5.8		5.4	0.3		1.1	0.1	0.3	0.2	1.5	0.3
Delay (s)	29.0	46.4		44.3	30.0		21.9	27.2	10.7	26.1	36.3	22.9
Level of Service	C	D		D	C		C	C	B	C	D	C
Approach Delay (s)		41.9			38.2			20.3			33.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	106.4	Sum of lost time (s)	22.3
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

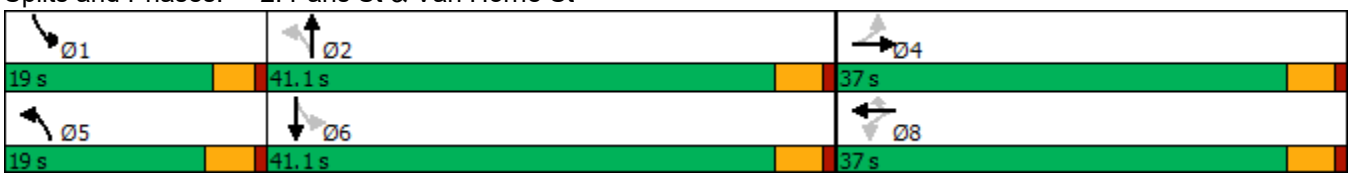
c Critical Lane Group

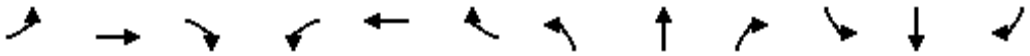
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	25	251	58	138	163	1004	76	1317
Future Volume (vph)	15	25	251	58	138	163	1004	76	1317
Lane Group Flow (vph)	16	122	276	64	152	179	1227	84	1499
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	37.0	37.0	37.0	37.0	37.0	19.0	41.1	19.0	41.1
Total Split (%)	38.1%	38.1%	38.1%	38.1%	38.1%	19.6%	42.3%	19.6%	42.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.05	0.14	0.80	0.13	0.28	0.62	0.49	0.27	0.67
Control Delay	22.5	8.0	46.4	23.3	5.6	23.9	15.8	10.6	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	8.0	46.4	23.3	5.6	23.9	15.8	10.6	21.8
Queue Length 50th (m)	2.0	1.7	42.2	7.9	0.0	13.2	48.3	5.0	69.5
Queue Length 95th (m)	6.8	8.2	75.2	18.2	13.3	39.2	78.5	13.5	113.1
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	463	1199	503	719	712	374	2509	470	2242
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.10	0.55	0.09	0.21	0.48	0.49	0.18	0.67

Intersection Summary

Cycle Length: 97.1
Actuated Cycle Length: 83.7
Natural Cycle: 85
Control Type: Semi Act-Uncoord

Splits and Phases: 2: Paris St & Van Horne St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	25	86	251	58	138	163	1004	113	76	1317	47
Future Volume (vph)	15	25	86	251	58	138	163	1004	113	76	1317	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.99	1.00	1.00		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	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1566	2901		1801	1827	1576	1703	4871		1752	5049	
Flt Permitted	0.72	1.00		0.67	1.00	1.00	0.09	1.00		0.19	1.00	
Satd. Flow (perm)	1179	2901		1279	1827	1576	169	4871		353	5049	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	16	27	95	276	64	152	179	1103	124	84	1447	52
RTOR Reduction (vph)	0	70	0	0	0	111	0	11	0	0	3	0
Lane Group Flow (vph)	16	52	0	276	64	41	179	1216	0	84	1496	0
Confl. Peds. (#/hr)	4		4	4		4	6		6	6		6
Heavy Vehicles (%)	15%	4%	10%	0%	4%	1%	6%	5%	2%	3%	2%	5%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	22.6	22.6		22.6	22.6	22.6	52.8	42.9		43.9	38.0	
Effective Green, g (s)	22.6	22.6		22.6	22.6	22.6	52.8	42.9		43.9	38.0	
Actuated g/C Ratio	0.27	0.27		0.27	0.27	0.27	0.63	0.51		0.52	0.45	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	315	776		342	489	422	292	2475		281	2273	
v/s Ratio Prot		0.02			0.04		c0.07	0.25		0.02	c0.30	
v/s Ratio Perm	0.01			c0.22		0.03	0.31			0.13		
v/c Ratio	0.05	0.07		0.81	0.13	0.10	0.61	0.49		0.30	0.66	
Uniform Delay, d1	22.9	23.0		28.9	23.4	23.2	13.1	13.6		10.4	18.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		13.0	0.1	0.1	3.8	0.7		0.6	1.5	
Delay (s)	23.0	23.1		41.9	23.6	23.3	16.9	14.3		11.0	19.6	
Level of Service	C	C		D	C	C	B	B		B	B	
Approach Delay (s)		23.1			33.8			14.6			19.2	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	84.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	0	40	2	4	1275	46	1576
Future Volume (vph)	8	0	40	2	4	1275	46	1576
Lane Group Flow (vph)	0	14	0	110	4	1363	48	1651
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	50.8	50.8	14.0	64.8
Total Split (%)	28.4%	28.4%	28.4%	28.4%	56.1%	56.1%	15.5%	71.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.05		0.37	0.03	0.61	0.15	0.64
Control Delay		0.3		17.8	8.2	11.3	4.0	7.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		0.3		17.8	8.2	11.3	4.0	7.2
Queue Length 50th (m)		0.0		4.6	0.2	61.0	1.3	48.9
Queue Length 95th (m)		0.0		20.6	1.6	98.2	4.3	85.2
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		592		583	197	2766	444	3261
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.02		0.19	0.02	0.49	0.11	0.51

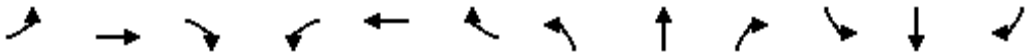
Intersection Summary
Cycle Length: 90.5
Actuated Cycle Length: 58.7
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	6	40	2	63	4	1275	34	46	1576	9
Future Volume (vph)	8	0	6	40	2	63	4	1275	34	46	1576	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1726			1696		1803	3492		1770	3536	
Flt Permitted		0.84			0.87		0.13	1.00		0.12	1.00	
Satd. Flow (perm)		1497			1501		248	3492		227	3536	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	8	0	6	42	2	66	4	1328	35	48	1642	9
RTOR Reduction (vph)	0	12	0	0	58	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	52	0	4	1361	0	48	1651	0
Confl. Peds. (#/hr)	5		5	5		5	8		4	4		8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.1			7.1		35.7	35.7		43.0	43.0	
Effective Green, g (s)		7.1			7.1		35.7	35.7		43.0	43.0	
Actuated g/C Ratio		0.12			0.12		0.58	0.58		0.70	0.70	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		172			173		143	2023		241	2468	
v/s Ratio Prot								0.39		0.01	c0.47	
v/s Ratio Perm		0.00			c0.03		0.02			0.13		
v/c Ratio		0.01			0.30		0.03	0.67		0.20	0.67	
Uniform Delay, d1		24.1			25.0		5.5	8.9		5.1	5.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			1.0		0.1	0.9		0.4	0.7	
Delay (s)		24.2			25.9		5.6	9.8		5.5	6.0	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		24.2			25.9			9.8			6.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	15.5
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	9	2	0	2	1	1440	0	0	1650	7
Future Volume (Veh/h)	3	0	9	2	0	2	1	1440	0	0	1650	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	10	2	0	2	1	1600	0	0	1833	8
Pedestrians		2			1							
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)								347			199	
pX, platoon unblocked	0.79	0.79	0.68	0.79	0.79	0.78	0.68			0.78		
vC, conflicting volume	2643	3442	922	2530	3446	801	1843			1601		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1295	2302	0	1152	2307	176	1305			1203		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	7.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.8	2.2			2.2		
p0 queue free %	97	100	99	98	100	100	100			100		
cM capacity (veh/h)	96	31	744	121	31	549	366			457		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	4	801	800	916	924
Volume Left	3	2	1	0	0	0
Volume Right	10	2	0	0	0	8
cSH	290	198	366	1700	457	1700
Volume to Capacity	0.04	0.02	0.00	0.47	0.00	0.54
Queue Length 95th (m)	1.1	0.5	0.1	0.0	0.0	0.0
Control Delay (s)	18.0	23.5	0.1	0.0	0.0	0.0
Lane LOS	C	C	A			
Approach Delay (s)	18.0	23.5	0.0		0.0	
Approach LOS	C	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	55.8%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	20	1408	1	16	1646
Future Volume (Veh/h)	2	20	1408	1	16	1646
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	22	1564	1	18	1829
Pedestrians						1
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)			226			321
pX, platoon unblocked	0.79	0.76			0.76	
vC, conflicting volume	2515	784			1565	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1038	99			1122	
tC, single (s)	6.8	6.9			6.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.2	
p0 queue free %	99	97			91	
cM capacity (veh/h)	165	720			203	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	24	1043	522	628	1219
Volume Left	2	0	0	18	0
Volume Right	22	0	1	0	0
cSH	563	1700	1700	203	1700
Volume to Capacity	0.04	0.61	0.31	0.09	0.72
Queue Length 95th (m)	1.1	0.0	0.0	2.3	0.0
Control Delay (s)	11.7	0.0	0.0	4.0	0.0
Lane LOS	B			A	
Approach Delay (s)	11.7	0.0		1.4	
Approach LOS	B				

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1	16	1	1	20	0
Future Volume (Veh/h)	1	16	1	1	20	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.50	0.50	0.50	0.50
Hourly flow rate (vph)	2	32	2	2	40	0
Pedestrians	1			2	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	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			36		27	22
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			36		27	22
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		96	100
cM capacity (veh/h)			1585		990	1057

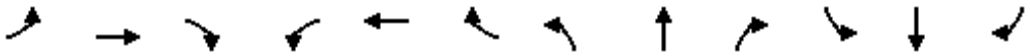
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	34	4	40
Volume Left	0	2	40
Volume Right	32	0	0
cSH	1700	1585	990
Volume to Capacity	0.02	0.00	0.04
Queue Length 95th (m)	0.0	0.0	1.0
Control Delay (s)	0.0	3.6	8.8
Lane LOS		A	A
Approach Delay (s)	0.0	3.6	8.8
Approach LOS			A

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	26	0	60	0	5	1313	32	1624
Future Volume (vph)	26	0	60	0	5	1313	32	1624
Lane Group Flow (vph)	0	40	63	51	5	1416	34	1722
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	55.9	55.9	55.9	55.9
Total Split (%)	31.7%	31.7%	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.16	0.29	0.17	0.04	0.57	0.16	0.69
Control Delay		11.5	28.0	10.0	4.8	6.8	6.7	8.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		11.5	28.0	10.0	4.8	6.8	6.7	8.5
Queue Length 50th (m)		0.1	5.9	0.0	0.2	39.3	1.2	56.2
Queue Length 95th (m)		8.2	19.2	8.8	1.3	66.6	5.3	95.8
Internal Link Dist (m)		198.2		192.5		314.0		201.8
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		510	484	597	164	3047	253	3055
Starvation Cap Reductn		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.08	0.13	0.09	0.03	0.46	0.13	0.56

Intersection Summary
Cycle Length: 81.9
Actuated Cycle Length: 58.6
Natural Cycle: 70
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



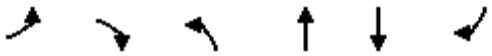
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	0	12	60	0	48	5	1313	32	32	1624	12
Future Volume (vph)	26	0	12	60	0	48	5	1313	32	32	1624	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.96		1.00	0.85		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1757		1805	1615		1805	3495		1805	3502	
Flt Permitted		0.77		0.73	1.00		0.10	1.00		0.15	1.00	
Satd. Flow (perm)		1392		1389	1615		188	3495		290	3502	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	27	0	13	63	0	51	5	1382	34	34	1709	13
RTOR Reduction (vph)	0	34	0	0	45	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	6	0	63	6	0	5	1414	0	34	1721	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.4		7.4	7.4		40.4	40.4		40.4	40.4	
Effective Green, g (s)		7.4		7.4	7.4		40.4	40.4		40.4	40.4	
Actuated g/C Ratio		0.12		0.12	0.12		0.68	0.68		0.68	0.68	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		172		172	200		127	2365		196	2369	
v/s Ratio Prot					0.00			0.40			c0.49	
v/s Ratio Perm		0.00		c0.05			0.03			0.12		
v/c Ratio		0.03		0.37	0.03		0.04	0.60		0.17	0.73	
Uniform Delay, d1		23.0		24.0	23.0		3.2	5.2		3.5	6.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1		1.3	0.1		0.1	0.4		0.4	1.1	
Delay (s)		23.1		25.3	23.1		3.3	5.7		4.0	7.3	
Level of Service		C		C	C		A	A		A	A	
Approach Delay (s)		23.1			24.3			5.6			7.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	59.7	Sum of lost time (s)	11.9
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	179	142	65	1171	1484	213
Future Volume (vph)	179	142	65	1171	1484	213
Lane Group Flow (vph)	199	158	72	1301	1649	237
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	9.0	79.0	70.0	70.0
Total Split (%)	24.4%	24.4%	8.6%	75.6%	67.0%	67.0%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.63	0.45	0.35	0.56	0.80	0.24
Control Delay	44.2	18.4	8.7	8.1	17.2	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.2	18.4	8.7	8.1	17.2	1.8
Queue Length 50th (m)	31.3	7.8	3.1	50.1	106.9	0.0
Queue Length 95th (m)	63.5	29.1	7.9	78.0	155.2	9.2
Internal Link Dist (m)	376.5			775.4	314.0	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	464	473	206	2995	2769	1243
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.33	0.35	0.43	0.60	0.19

Intersection Summary
Cycle Length: 104.5
Actuated Cycle Length: 81.5
Natural Cycle: 80
Control Type: Semi Act-Uncoord

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	179	142	65	1171	1484	213
Future Volume (vph)	179	142	65	1171	1484	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1515	1770	3471	3539	1530
Flt Permitted	0.95	1.00	0.08	1.00	1.00	1.00
Satd. Flow (perm)	1770	1515	144	3471	3539	1530
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	199	158	72	1301	1649	237
RTOR Reduction (vph)	0	86	0	0	0	98
Lane Group Flow (vph)	199	72	72	1301	1649	139
Confl. Peds. (#/hr)	1	15	8			8
Heavy Vehicles (%)	2%	4%	2%	4%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	14.5	14.5	55.5	55.5	47.8	47.8
Effective Green, g (s)	14.5	14.5	55.5	55.5	47.8	47.8
Actuated g/C Ratio	0.18	0.18	0.68	0.68	0.59	0.59
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	268	171	2357	2070	895
v/s Ratio Prot	c0.11		0.02	c0.37	c0.47	
v/s Ratio Perm		0.05	0.27			0.09
v/c Ratio	0.63	0.27	0.42	0.55	0.80	0.15
Uniform Delay, d1	31.1	29.0	11.1	6.7	13.2	7.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.1	0.5	1.7	0.3	2.2	0.1
Delay (s)	35.3	29.6	12.8	7.0	15.4	7.8
Level of Service	D	C	B	A	B	A
Approach Delay (s)	32.8			7.3	14.4	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	15.7
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	232	1009	368	680	954
Future Volume (vph)	180	232	1009	368	680	954
Lane Group Flow (vph)	188	242	1051	383	708	994
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	33.0	89.2
Total Split (%)	25.7%		46.8%	46.8%	27.5%	74.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.37	0.32	0.77	0.53	0.77	0.40
Control Delay	39.4	15.3	28.8	13.0	39.2	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	15.3	28.8	13.0	39.2	5.9
Queue Length 50th (m)	16.6	22.4	88.4	23.7	60.8	31.0
Queue Length 95th (m)	31.3	49.4	131.6	57.6	#113.6	56.1
Internal Link Dist (m)	679.1		533.6			775.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	980	832	2003	965	1109	3069
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.29	0.52	0.40	0.64	0.32

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 91.2
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	232	1009	368	680	954
Future Volume (vph)	180	232	1009	368	680	954
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1568	3505	1545	3467	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1568	3505	1545	3467	3471
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	188	242	1051	383	708	994
RTOR Reduction (vph)	0	17	0	121	0	0
Lane Group Flow (vph)	188	225	1051	262	708	994
Confl. Peds. (#/hr)		13		14	14	
Heavy Vehicles (%)	2%	3%	3%	2%	1%	4%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	13.5	43.6	35.9	35.9	24.3	65.2
Effective Green, g (s)	13.5	43.6	35.9	35.9	24.3	65.2
Actuated g/C Ratio	0.15	0.48	0.40	0.40	0.27	0.72
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	510	753	1387	611	928	2495
v/s Ratio Prot	0.05	c0.14	c0.30		c0.20	0.29
v/s Ratio Perm				0.17		
v/c Ratio	0.37	0.30	0.76	0.43	0.76	0.40
Uniform Delay, d1	34.8	14.3	23.6	19.9	30.5	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2	2.4	0.5	3.8	0.1
Delay (s)	35.2	14.5	26.1	20.4	34.3	5.1
Level of Service	D	B	C	C	C	A
Approach Delay (s)	23.6		24.6			17.3
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.7	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		

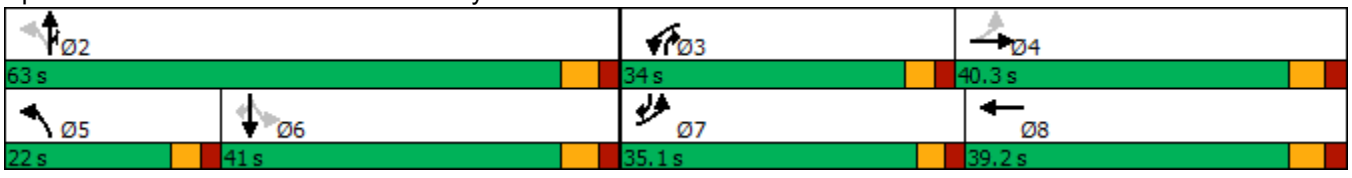
c Critical Lane Group

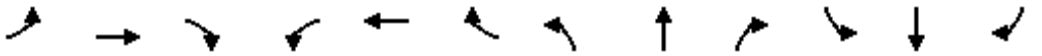
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	181	575	608	478	108	1080	778	26	852	253
Future Volume (vph)	181	575	608	478	108	1080	778	26	852	253
Lane Group Flow (vph)	181	649	608	492	108	1080	778	26	852	253
Turn Type	pm+pt	NA	Prot	NA	pm+pt	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	7	4	3	8	5	2	2 3		6	7
Permitted Phases	4				2			6		6
Detector Phase	7	4	3	8	5	2	2 3	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		15.0	15.0	5.0
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		40.1	40.1	10.0
Total Split (s)	35.1	40.3	34.0	39.2	22.0	63.0		41.0	41.0	35.1
Total Split (%)	25.6%	29.4%	24.8%	28.6%	16.0%	45.9%		29.9%	29.9%	25.6%
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.7	3.7	3.0
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.4	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		6.1	6.1	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead			Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min		Min	Min	None
v/c Ratio	0.48	0.79	0.79	0.42	0.43	0.54	0.72	0.22	0.65	0.39
Control Delay	23.4	50.6	53.0	32.7	28.9	28.8	17.1	42.2	41.8	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
Total Delay	23.4	50.6	53.0	32.7	28.9	28.8	20.2	42.2	41.8	18.0
Queue Length 50th (m)	24.8	82.2	75.2	49.7	17.3	76.6	107.6	5.2	70.1	29.5
Queue Length 95th (m)	43.9	111.9	#109.5	75.5	31.9	97.3	177.4	14.9	93.5	52.1
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	599	1076	894	1227	340	2573	1134	151	1635	878
Starvation Cap Reductn	0	0	0	0	0	0	249	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.60	0.68	0.40	0.32	0.42	0.88	0.17	0.52	0.29

Intersection Summary

Cycle Length: 137.3
Actuated Cycle Length: 116.8
Natural Cycle: 95
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	575	74	608	478	14	108	1080	778	26	852	253
Future Volume (vph)	181	575	74	608	478	14	108	1080	778	26	852	253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	6.1	6.1	5.0
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1580	3525		3467	3491		1751	5085	1615	1774	5085	1574
Flt Permitted	0.47	1.00		0.95	1.00		0.17	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)	786	3525		3467	3491		306	5085	1615	471	5085	1574
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	181	575	74	608	478	14	108	1080	778	26	852	253
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	15	0	0	45
Lane Group Flow (vph)	181	641	0	608	491	0	108	1080	763	26	852	208
Confl. Peds. (#/hr)	9		6	6		9	25		33	33		25
Heavy Vehicles (%)	14%	0%	4%	1%	3%	0%	3%	2%	0%	1%	2%	0%
Turn Type	pm+pt	NA		Prot	NA		pm+pt	NA	pt+ov	Perm	NA	pm+ov
Protected Phases	7	4		3	8		5	2	2 3		6	7
Permitted Phases	4						2			6		6
Actuated Green, G (s)	41.0	27.1		26.1	39.3		45.7	45.7	77.9	30.2	30.2	44.1
Effective Green, g (s)	41.0	27.1		26.1	39.3		45.7	45.7	77.9	30.2	30.2	44.1
Actuated g/C Ratio	0.35	0.23		0.22	0.34		0.39	0.39	0.67	0.26	0.26	0.38
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		6.1	6.1	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	372	822		778	1180		250	1999	1082	122	1321	597
v/s Ratio Prot	0.06	c0.18		c0.18	0.14		0.04	0.21	c0.47		0.17	0.04
v/s Ratio Perm	0.11						0.13			0.06		0.09
v/c Ratio	0.49	0.78		0.78	0.42		0.43	0.54	0.71	0.21	0.64	0.35
Uniform Delay, d1	27.5	41.8		42.4	29.6		24.3	27.2	12.0	33.7	38.2	25.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	4.8		5.1	0.2		1.2	0.3	2.1	0.9	1.1	0.4
Delay (s)	28.5	46.6		47.5	29.8		25.5	27.5	14.1	34.6	39.3	26.1
Level of Service	C	D		D	C		C	C	B	C	D	C
Approach Delay (s)		42.6			39.6			22.1			36.3	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	116.2	Sum of lost time (s)	22.3
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		

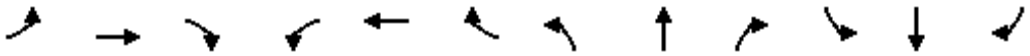
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	48	70	219	68	154	164	1702	121	1368
Future Volume (vph)	48	70	219	68	154	164	1702	121	1368
Lane Group Flow (vph)	49	297	223	69	157	167	2103	123	1441
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	45.0	45.0	45.0	45.0	45.0	12.0	55.0	9.0	52.0
Total Split (%)	41.3%	41.3%	41.3%	41.3%	41.3%	11.0%	50.5%	8.3%	47.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.14	0.32	0.84	0.13	0.32	0.66	0.79	0.69	0.56
Control Delay	25.6	16.3	58.5	25.1	10.7	25.8	21.5	36.2	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	16.3	58.5	25.1	10.7	25.8	21.5	36.2	18.6
Queue Length 50th (m)	7.1	14.0	40.2	10.0	6.9	11.8	108.8	8.2	66.3
Queue Length 95th (m)	15.8	24.2	68.6	19.9	21.4	#47.7	176.7	#43.3	107.4
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	543	1410	419	817	715	252	2673	177	2552
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.21	0.53	0.08	0.22	0.66	0.79	0.69	0.56

Intersection Summary

Cycle Length: 109
Actuated Cycle Length: 95
Natural Cycle: 85
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Paris St & Van Horne St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	70	221	219	68	154	164	1702	359	121	1368	44
Future Volume (vph)	48	70	221	219	68	154	164	1702	359	121	1368	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3125		1767	1900	1521	1770	4938		1805	5056	
Flt Permitted	0.71	1.00		0.52	1.00	1.00	0.11	1.00		0.08	1.00	
Satd. Flow (perm)	1266	3125		977	1900	1521	207	4938		159	5056	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	49	71	226	223	69	157	167	1737	366	123	1396	45
RTOR Reduction (vph)	0	84	0	0	0	79	0	26	0	0	2	0
Lane Group Flow (vph)	49	213	0	223	69	78	167	2077	0	123	1439	0
Confl. Peds. (#/hr)	13		3	3		13	3		17	17		3
Heavy Vehicles (%)	6%	2%	1%	2%	0%	4%	2%	2%	1%	0%	2%	3%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	25.9	25.9		25.9	25.9	25.9	58.6	51.0		52.9	47.9	
Effective Green, g (s)	25.9	25.9		25.9	25.9	25.9	58.6	51.0		52.9	47.9	
Actuated g/C Ratio	0.27	0.27		0.27	0.27	0.27	0.62	0.54		0.56	0.50	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	345	852		266	518	415	252	2653		175	2551	
v/s Ratio Prot		0.07			0.04		c0.05	c0.42		0.04	0.28	
v/s Ratio Perm	0.04			c0.23		0.05	0.35			0.35		
v/c Ratio	0.14	0.25		0.84	0.13	0.19	0.66	0.78		0.70	0.56	
Uniform Delay, d1	26.1	26.9		32.5	26.0	26.4	11.3	17.5		15.3	16.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		20.0	0.1	0.2	6.4	2.4		12.1	0.9	
Delay (s)	26.3	27.1		52.6	26.1	26.7	17.7	19.9		27.3	17.2	
Level of Service	C	C		D	C	C	B	B		C	B	
Approach Delay (s)		27.0			39.4			19.8			18.0	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	94.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

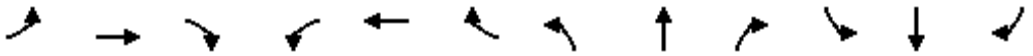
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	3	63	0	8	2084	80	1717
Future Volume (vph)	10	3	63	0	8	2084	80	1717
Lane Group Flow (vph)	0	15	0	174	8	2193	82	1775
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	85.3	85.3	9.0	94.3
Total Split (%)	21.4%	21.4%	21.4%	21.4%	71.1%	71.1%	7.5%	78.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.08		0.69	0.06	0.91	0.51	0.67
Control Delay		39.8		45.1	8.1	22.3	22.4	8.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		39.8		45.1	8.1	22.3	22.4	8.4
Queue Length 50th (m)		2.8		25.7	0.6	196.4	3.5	83.3
Queue Length 95th (m)		9.3		50.7	2.7	#291.7	#20.8	128.0
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		296		347	150	2700	160	2935
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.05		0.50	0.05	0.81	0.51	0.60

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 102.8
Natural Cycle: 100
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

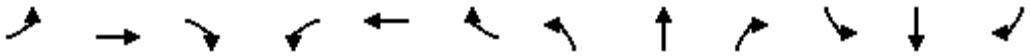
Splits and Phases: 3: Paris St & John St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	3	2	63	0	106	8	2084	44	80	1717	5
Future Volume (vph)	10	3	2	63	0	106	8	2084	44	80	1717	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799			1627		1801	3528		1736	3537	
Flt Permitted		0.76			0.87		0.10	1.00		0.05	1.00	
Satd. Flow (perm)		1422			1444		198	3528		99	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	3	2	65	0	109	8	2148	45	82	1770	5
RTOR Reduction (vph)	0	2	0	0	53	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	13	0	0	121	0	8	2192	0	82	1775	0
Confl. Peds. (#/hr)	3		4	4		3	14		2	2		14
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	2%	0%	4%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.2			14.2		69.8	69.8		77.5	77.5	
Effective Green, g (s)		14.2			14.2		69.8	69.8		77.5	77.5	
Actuated g/C Ratio		0.14			0.14		0.68	0.68		0.75	0.75	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		195			198		133	2386		133	2656	
v/s Ratio Prot								c0.62		0.02	c0.50	
v/s Ratio Perm		0.01			c0.08		0.04			0.44		
v/c Ratio		0.07			0.61		0.06	0.92		0.62	0.67	
Uniform Delay, d1		38.7			41.9		5.6	14.3		23.1	6.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			5.2		0.2	6.2		8.2	0.6	
Delay (s)		38.9			47.1		5.8	20.5		31.4	7.1	
Level of Service		D			D		A	C		C	A	
Approach Delay (s)		38.9			47.1			20.4			8.1	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	103.2	Sum of lost time (s)	15.5
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	7	3	0	2	1	2109	1	1	1854	13
Future Volume (Veh/h)	9	0	7	3	0	2	1	2109	1	1	1854	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	9	0	7	3	0	2	1	2197	1	1	1931	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)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								347			199	
pX, platoon unblocked	0.39	0.39	0.70	0.39	0.39	0.24	0.70			0.24		
vC, conflicting volume	3046	4145	976	3176	4152	1101	1948			2200		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	2488	112	17	2505	0	1499			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	99	100	99	100			100		
cM capacity (veh/h)	396	12	648	384	11	264	317			396		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	5	1100	1100	966	980
Volume Left	9	3	1	0	1	0
Volume Right	7	2	0	1	0	14
cSH	477	325	317	1700	396	1700
Volume to Capacity	0.03	0.02	0.00	0.65	0.00	0.58
Queue Length 95th (m)	0.8	0.4	0.1	0.0	0.1	0.0
Control Delay (s)	12.8	16.2	0.2	0.0	0.1	0.0
Lane LOS	B	C	A		A	
Approach Delay (s)	12.8	16.2	0.1		0.0	
Approach LOS	B	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	69.0%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	16	2086	6	21	1838
Future Volume (Veh/h)	1	16	2086	6	21	1838
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	17	2196	6	22	1935
Pedestrians	1					
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)			225			321
pX, platoon unblocked	0.38	0.22			0.22	
vC, conflicting volume	3212	1102			2203	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			94	
cM capacity (veh/h)	369	243			364	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	18	1464	738	667	1290
Volume Left	1	0	0	22	0
Volume Right	17	0	6	0	0
cSH	248	1700	1700	364	1700
Volume to Capacity	0.07	0.86	0.43	0.06	0.76
Queue Length 95th (m)	1.9	0.0	0.0	1.5	0.0
Control Delay (s)	20.7	0.0	0.0	2.0	0.0
Lane LOS	C			A	
Approach Delay (s)	20.7	0.0		0.7	
Approach LOS	C				

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	21	0	2	15	0
Future Volume (Veh/h)	7	21	0	2	15	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	10	31	0	3	22	0
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			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			41		30	28
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			41		30	28
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		98	100
cM capacity (veh/h)			1581		989	1052

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	41	3	22
Volume Left	0	0	22
Volume Right	31	0	0
cSH	1700	1581	989
Volume to Capacity	0.02	0.00	0.02
Queue Length 95th (m)	0.0	0.0	0.5
Control Delay (s)	0.0	0.0	8.7
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.7
Approach LOS			A

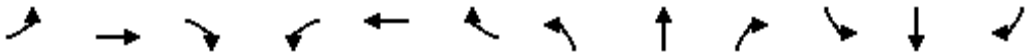
Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	1	44	3	23	2020	54	1728
Future Volume (vph)	25	1	44	3	23	2020	54	1728
Lane Group Flow (vph)	0	44	48	56	25	2268	59	1910
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	94.0	94.0	94.0	94.0
Total Split (%)	21.7%	21.7%	21.7%	21.7%	78.3%	78.3%	78.3%	78.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.33	0.38	0.34	0.18	0.77	0.76	0.65
Control Delay		39.8	55.8	40.2	6.1	8.0	68.1	5.6
Queue Delay		0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay		39.8	55.8	40.2	6.1	8.1	68.1	5.6
Queue Length 50th (m)		6.0	10.4	8.1	1.0	111.6	5.4	73.0
Queue Length 95th (m)		17.6	22.7	21.1	4.4	177.3	#22.2	113.5
Internal Link Dist (m)		192.5		282.1		313.9		201.2
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		262	263	320	141	2955	77	2961
Starvation Cap Reductn		0	0	0	0	86	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.17	0.18	0.17	0.18	0.79	0.77	0.65

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 105.9
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1	15	44	3	49	23	2020	66	54	1728	29
Future Volume (vph)	25	1	15	44	3	49	23	2020	66	54	1728	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.95		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1628		1805	1608		1804	3522		1805	3530	
Flt Permitted		0.78		0.73	1.00		0.09	1.00		0.05	1.00	
Satd. Flow (perm)		1308		1384	1608		169	3522		93	3530	
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)	27	1	16	48	3	53	25	2196	72	59	1878	32
RTOR Reduction (vph)	0	15	0	0	17	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	29	0	48	39	0	25	2267	0	59	1909	0
Confl. Peds. (#/hr)	2					2	4		2	2		4
Heavy Vehicles (%)	4%	0%	14%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.9		7.9	7.9		87.4	87.4		87.4	87.4	
Effective Green, g (s)		7.9		7.9	7.9		87.4	87.4		87.4	87.4	
Actuated g/C Ratio		0.07		0.07	0.07		0.82	0.82		0.82	0.82	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		96		101	118		137	2871		75	2878	
v/s Ratio Prot					0.02			c0.64			0.54	
v/s Ratio Perm		0.02		c0.03			0.15			0.64		
v/c Ratio		0.30		0.48	0.33		0.18	0.79		0.79	0.66	
Uniform Delay, d1		47.0		47.7	47.1		2.1	5.1		5.1	4.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.8		3.5	1.7		0.6	1.5		40.6	0.6	
Delay (s)		48.8		51.2	48.8		2.8	6.6		45.7	4.6	
Level of Service		D		D	D		A	A		D	A	
Approach Delay (s)		48.8			49.9			6.6			5.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	107.2	Sum of lost time (s)	11.9
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	220	112	152	1889	1576	212
Future Volume (vph)	220	112	152	1889	1576	212
Lane Group Flow (vph)	232	118	160	1988	1659	223
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	12.0	94.5	82.5	82.5
Total Split (%)	21.3%	21.3%	10.0%	78.8%	68.8%	68.8%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.74	0.32	0.68	0.81	0.83	0.23
Control Delay	54.4	10.2	33.3	13.2	20.8	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.4	10.2	33.3	13.2	20.8	2.2
Queue Length 50th (m)	42.6	0.0	13.1	127.5	131.4	1.1
Queue Length 95th (m)	#92.8	16.5	#50.6	165.3	166.3	10.2
Internal Link Dist (m)	376.5			774.4	313.9	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	389	430	236	3184	2875	1286
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.27	0.68	0.62	0.58	0.17

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 94.9
Natural Cycle: 80
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Paris St & York St

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	220	112	152	1889	1576	212
Future Volume (vph)	220	112	152	1889	1576	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1787	1557	1770	3539	3539	1539
Flt Permitted	0.95	1.00	0.07	1.00	1.00	1.00
Satd. Flow (perm)	1787	1557	129	3539	3539	1539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	232	118	160	1988	1659	223
RTOR Reduction (vph)	0	97	0	0	0	90
Lane Group Flow (vph)	232	21	160	1988	1659	133
Confl. Peds. (#/hr)	6	15	4			4
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	16.8	16.8	66.0	66.0	53.8	53.8
Effective Green, g (s)	16.8	16.8	66.0	66.0	53.8	53.8
Actuated g/C Ratio	0.18	0.18	0.70	0.70	0.57	0.57
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	317	276	232	2471	2014	876
v/s Ratio Prot	c0.13		0.06	c0.56	0.47	
v/s Ratio Perm		0.01	0.42			0.09
v/c Ratio	0.73	0.08	0.69	0.80	0.82	0.15
Uniform Delay, d1	36.7	32.4	20.9	9.8	16.5	9.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.4	0.1	8.3	2.0	2.9	0.1
Delay (s)	45.2	32.5	29.1	11.8	19.4	9.7
Level of Service	D	C	C	B	B	A
Approach Delay (s)	40.9			13.1	18.2	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	94.5	Sum of lost time (s)	15.7
Intersection Capacity Utilization	82.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

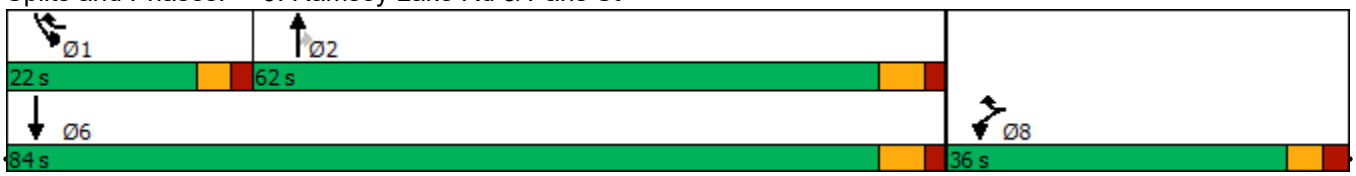
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	532	698	1375	263	365	1290
Future Volume (vph)	532	698	1375	263	365	1290
Lane Group Flow (vph)	591	776	1528	292	406	1433
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	36.0		62.0	62.0	22.0	84.0
Total Split (%)	30.0%		51.7%	51.7%	18.3%	70.0%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.67	1.10	0.94	0.37	0.83	0.63
Control Delay	44.4	97.9	43.3	13.6	64.6	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	97.9	43.3	13.6	64.6	14.1
Queue Length 50th (m)	68.4	~219.8	183.1	26.2	51.1	102.0
Queue Length 95th (m)	88.6	#297.5	#235.9	47.5	#75.9	123.3
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	883	704	1666	808	492	2323
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	1.10	0.92	0.36	0.83	0.62

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 118.6
Natural Cycle: 110
Control Type: Semi Act-Uncoord

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

Splits and Phases: 9: Ramsey Lake Rd & Paris St



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	532	698	1375	263	365	1290
Future Volume (vph)	532	698	1375	263	365	1290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	1583	3539	1587	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	1583	3539	1587	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	591	776	1528	292	406	1433
RTOR Reduction (vph)	0	7	0	62	0	0
Lane Group Flow (vph)	591	769	1528	230	406	1433
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	30.2	53.0	54.4	54.4	17.0	76.4
Effective Green, g (s)	30.2	53.0	54.4	54.4	17.0	76.4
Actuated g/C Ratio	0.25	0.45	0.46	0.46	0.14	0.64
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	882	707	1623	727	492	2279
v/s Ratio Prot	0.17	c0.49	c0.43		0.12	0.40
v/s Ratio Perm				0.14		
v/c Ratio	0.67	1.09	0.94	0.32	0.83	0.63
Uniform Delay, d1	39.7	32.8	30.6	20.3	49.4	12.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	60.4	11.3	0.3	10.8	0.5
Delay (s)	41.7	93.2	41.9	20.6	60.2	13.2
Level of Service	D	F	D	C	E	B
Approach Delay (s)	70.9		38.5			23.5
Approach LOS	E		D			C

Intersection Summary			
HCM 2000 Control Delay	41.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	17.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		

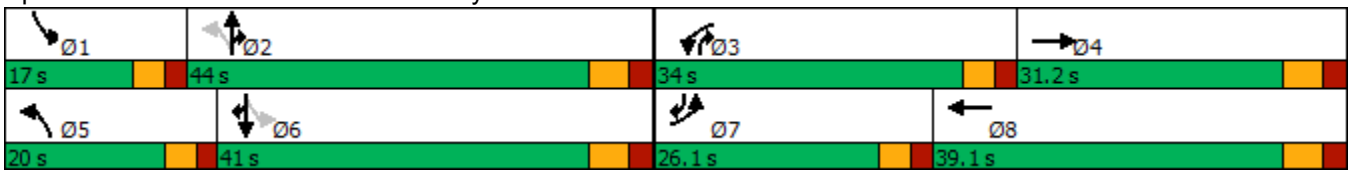
c Critical Lane Group

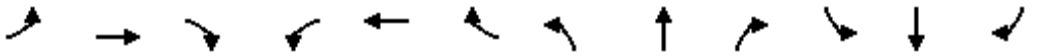
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	181	457	586	422	99	621	465	29	904	260
Future Volume (vph)	181	457	586	422	99	621	465	29	904	260
Lane Group Flow (vph)	197	559	637	470	108	675	505	32	983	283
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pt+ov	pm+pt	NA	pt+ov
Protected Phases	7	4	3	8	5	2	2 3	1	6	6 7
Permitted Phases					2			6		
Detector Phase	7	4	3	8	5	2	2 3	1	6	6 7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		5.0	15.0	
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		10.0	40.1	
Total Split (s)	26.1	31.2	34.0	39.1	20.0	44.0		17.0	41.0	
Total Split (%)	20.7%	24.7%	26.9%	31.0%	15.8%	34.9%		13.5%	32.5%	
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.0	3.7	
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.0	2.4	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		5.0	6.1	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	Min		None	Min	
v/c Ratio	0.55	0.82	0.81	0.42	0.45	0.39	0.47	0.11	0.76	0.39
Control Delay	55.2	54.2	51.1	32.0	27.3	30.0	7.9	21.6	42.9	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay	55.2	54.2	51.1	32.0	27.3	30.0	8.2	21.6	42.9	15.0
Queue Length 50th (m)	23.9	67.2	75.0	44.8	16.5	48.9	33.2	4.7	81.5	27.5
Queue Length 95th (m)	37.5	#99.3	104.3	68.8	28.6	62.3	61.0	11.0	101.8	49.3
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	631	774	892	1167	294	1804	1099	378	1560	832
Starvation Cap Reductn	0	0	0	0	0	0	210	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.72	0.71	0.40	0.37	0.37	0.57	0.08	0.63	0.34

Intersection Summary

Cycle Length: 126.2
Actuated Cycle Length: 111.6
Natural Cycle: 105
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	457	57	586	422	10	99	621	465	29	904	260
Future Volume (vph)	181	457	57	586	422	10	99	621	465	29	904	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	5.0	6.1	6.1
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	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
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3273	3357		3367	3461		1671	4988	1568	1717	4893	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.13	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	3273	3357		3367	3461		233	4988	1568	693	4893	1583
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)	197	497	62	637	459	11	108	675	505	32	983	283
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	89	0	0	64
Lane Group Flow (vph)	197	551	0	637	469	0	108	675	416	32	983	219
Confl. Peds. (#/hr)	7		4	4		7	19		10	10		19
Heavy Vehicles (%)	7%	5%	10%	4%	4%	0%	8%	4%	3%	5%	6%	2%
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pt+ov	pm+pt	NA	pt+ov
Protected Phases	7	4		3	8		5	2	2 3	1	6	6 7
Permitted Phases							2			6		
Actuated Green, G (s)	12.2	22.4		26.0	36.2		47.9	38.8	70.9	35.9	31.8	50.1
Effective Green, g (s)	12.2	22.4		26.0	36.2		47.9	38.8	70.9	35.9	31.8	50.1
Actuated g/C Ratio	0.11	0.20		0.23	0.32		0.42	0.34	0.62	0.32	0.28	0.44
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		5.0	6.1	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	351	661		770	1102		238	1703	978	255	1369	698
v/s Ratio Prot	0.06	c0.16		c0.19	0.14		c0.04	0.14	0.27	0.00	c0.20	0.14
v/s Ratio Perm							0.15			0.03		
v/c Ratio	0.56	0.83		0.83	0.43		0.45	0.40	0.43	0.13	0.72	0.31
Uniform Delay, d1	48.2	43.8		41.7	30.5		22.4	28.5	10.9	27.1	36.9	20.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	8.9		7.3	0.3		1.4	0.2	0.3	0.2	1.8	0.3
Delay (s)	50.2	52.7		49.0	30.8		23.8	28.6	11.2	27.3	38.7	20.9
Level of Service	D	D		D	C		C	C	B	C	D	C
Approach Delay (s)		52.0			41.2			21.4			34.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	113.6	Sum of lost time (s)	22.3
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

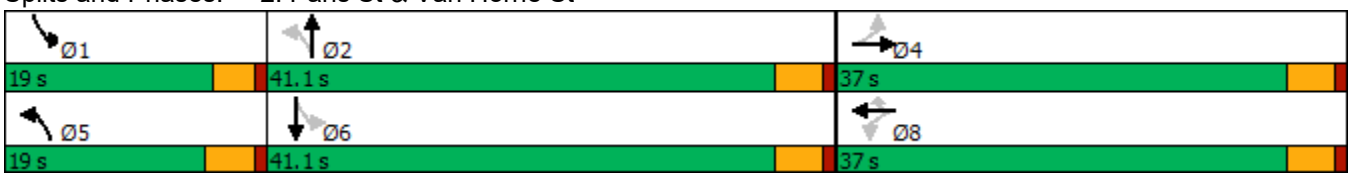
c Critical Lane Group

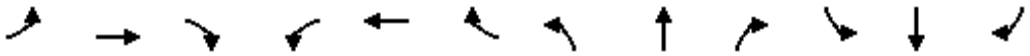
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	16	27	269	63	148	175	1077	82	1413
Future Volume (vph)	16	27	269	63	148	175	1077	82	1413
Lane Group Flow (vph)	18	132	296	69	163	192	1317	90	1608
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	37.0	37.0	37.0	37.0	37.0	19.0	41.1	19.0	41.1
Total Split (%)	38.1%	38.1%	38.1%	38.1%	38.1%	19.6%	42.3%	19.6%	42.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.05	0.15	0.83	0.13	0.29	0.65	0.53	0.31	0.74
Control Delay	22.6	7.9	49.1	23.3	5.4	26.6	17.2	11.9	24.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	7.9	49.1	23.3	5.4	26.6	17.2	11.9	24.4
Queue Length 50th (m)	2.2	1.9	47.1	8.7	0.0	16.3	56.8	5.9	82.9
Queue Length 95th (m)	7.4	8.5	82.1	19.3	13.8	42.9	86.9	14.4	124.6
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	449	1176	485	700	704	365	2465	438	2183
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11	0.61	0.10	0.23	0.53	0.53	0.21	0.74

Intersection Summary

Cycle Length: 97.1
Actuated Cycle Length: 85.9
Natural Cycle: 85
Control Type: Semi Act-Uncoord

Splits and Phases: 2: Paris St & Van Horne St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	27	93	269	63	148	175	1077	121	82	1413	50
Future Volume (vph)	16	27	93	269	63	148	175	1077	121	82	1413	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.99	1.00	1.00		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	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1566	2905		1801	1827	1576	1703	4871		1752	5049	
Flt Permitted	0.71	1.00		0.67	1.00	1.00	0.09	1.00		0.16	1.00	
Satd. Flow (perm)	1174	2905		1267	1827	1576	168	4871		304	5049	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	18	30	102	296	69	163	192	1184	133	90	1553	55
RTOR Reduction (vph)	0	74	0	0	0	118	0	12	0	0	3	0
Lane Group Flow (vph)	18	58	0	296	69	45	192	1305	0	90	1605	0
Confl. Peds. (#/hr)	4		4	4		4	6		6	6		6
Heavy Vehicles (%)	15%	4%	10%	0%	4%	1%	6%	5%	2%	3%	2%	5%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	24.2	24.2		24.2	24.2	24.2	53.5	43.3		44.3	38.1	
Effective Green, g (s)	24.2	24.2		24.2	24.2	24.2	53.5	43.3		44.3	38.1	
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.62	0.50		0.51	0.44	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	327	810		353	509	439	296	2432		258	2218	
v/s Ratio Prot		0.02			0.04		c0.08	0.27		0.02	c0.32	
v/s Ratio Perm	0.02			c0.23		0.03	0.32			0.15		
v/c Ratio	0.06	0.07		0.84	0.14	0.10	0.65	0.54		0.35	0.72	
Uniform Delay, d1	22.9	23.0		29.4	23.4	23.2	15.8	14.8		11.2	20.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		15.8	0.1	0.1	4.8	0.9		0.8	2.1	
Delay (s)	22.9	23.0		45.2	23.5	23.3	20.7	15.7		12.0	22.1	
Level of Service	C	C		D	C	C	C	B		B	C	
Approach Delay (s)		23.0			35.6			16.3			21.5	
Approach LOS		C			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	86.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	0	40	2	4	1367	46	1692
Future Volume (vph)	8	0	40	2	4	1367	46	1692
Lane Group Flow (vph)	0	14	0	110	4	1459	48	1772
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	50.8	50.8	14.0	64.8
Total Split (%)	28.4%	28.4%	28.4%	28.4%	56.1%	56.1%	15.5%	71.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.05		0.38	0.03	0.64	0.16	0.68
Control Delay		0.3		18.4	8.2	11.6	4.0	7.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		0.3		18.4	8.2	11.6	4.0	7.7
Queue Length 50th (m)		0.0		4.9	0.2	68.5	1.3	56.2
Queue Length 95th (m)		0.0		20.6	1.7	110.6	4.4	98.5
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		574		566	157	2673	421	3198
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.02		0.19	0.03	0.55	0.11	0.55

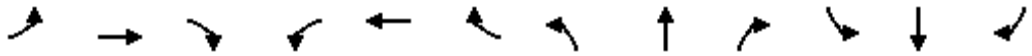
Intersection Summary
Cycle Length: 90.5
Actuated Cycle Length: 60.6
Natural Cycle: 75
Control Type: Semi Act-Uncoord

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	6	40	2	63	4	1367	34	46	1692	9
Future Volume (vph)	8	0	6	40	2	63	4	1367	34	46	1692	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1726			1696		1803	3492		1770	3536	
Flt Permitted		0.84			0.87		0.11	1.00		0.11	1.00	
Satd. Flow (perm)		1493			1501		204	3492		197	3536	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	8	0	6	42	2	66	4	1424	35	48	1762	9
RTOR Reduction (vph)	0	12	0	0	59	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	51	0	4	1457	0	48	1772	0
Confl. Peds. (#/hr)	5		5	5		5	8		4	4		8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.0			7.0		37.8	37.8		45.1	45.1	
Effective Green, g (s)		7.0			7.0		37.8	37.8		45.1	45.1	
Actuated g/C Ratio		0.11			0.11		0.59	0.59		0.71	0.71	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		164			165		121	2075		221	2507	
v/s Ratio Prot								0.42		0.01	c0.50	
v/s Ratio Perm		0.00			c0.03		0.02			0.14		
v/c Ratio		0.01			0.31		0.03	0.70		0.22	0.71	
Uniform Delay, d1		25.2			26.1		5.3	9.0		5.5	5.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			1.1		0.1	1.1		0.5	0.9	
Delay (s)		25.2			27.2		5.4	10.1		6.0	6.3	
Level of Service		C			C		A	B		A	A	
Approach Delay (s)		25.2			27.2			10.1			6.3	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	63.6	Sum of lost time (s)	15.5
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	9	2	0	2	1	1545	0	0	1771	7
Future Volume (Veh/h)	3	0	9	2	0	2	1	1545	0	0	1771	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	10	2	0	2	1	1717	0	0	1968	8
Pedestrians		2			1							
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)								347			199	
pX, platoon unblocked	0.76	0.76	0.63	0.76	0.76	0.74	0.63			0.74		
vC, conflicting volume	2836	3694	990	2714	3698	860	1978			1718		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1259	2384	0	1098	2389	113	1385			1271		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	7.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.8	2.2			2.2		
p0 queue free %	97	100	99	98	100	100	100			100		
cM capacity (veh/h)	98	26	689	127	26	581	316			410		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	4	860	858	984	992
Volume Left	3	2	1	0	0	0
Volume Right	10	2	0	0	0	8
cSH	288	208	316	1700	410	1700
Volume to Capacity	0.05	0.02	0.00	0.51	0.00	0.58
Queue Length 95th (m)	1.1	0.5	0.1	0.0	0.0	0.0
Control Delay (s)	18.1	22.6	0.1	0.0	0.0	0.0
Lane LOS	C	C	A			
Approach Delay (s)	18.1	22.6	0.1		0.0	
Approach LOS	C	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	59.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	20	1512	1	16	1769
Future Volume (Veh/h)	2	20	1512	1	16	1769
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	22	1680	1	18	1966
Pedestrians						1
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)			226			321
pX, platoon unblocked	0.74	0.74			0.74	
vC, conflicting volume	2700	842			1681	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	988	72			1211	
tC, single (s)	6.8	6.9			6.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.2	
p0 queue free %	99	97			90	
cM capacity (veh/h)	164	724			174	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	24	1120	561	673	1311
Volume Left	2	0	0	18	0
Volume Right	22	0	1	0	0
cSH	563	1700	1700	174	1700
Volume to Capacity	0.04	0.66	0.33	0.10	0.77
Queue Length 95th (m)	1.1	0.0	0.0	2.7	0.0
Control Delay (s)	11.7	0.0	0.0	5.3	0.0
Lane LOS	B			A	
Approach Delay (s)	11.7	0.0		1.8	
Approach LOS	B				

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1	16	1	1	20	0
Future Volume (Veh/h)	1	16	1	1	20	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.50	0.50	0.50	0.50
Hourly flow rate (vph)	2	32	2	2	40	0
Pedestrians	1			2	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	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			36		27	22
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			36		27	22
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		96	100
cM capacity (veh/h)			1585		990	1057

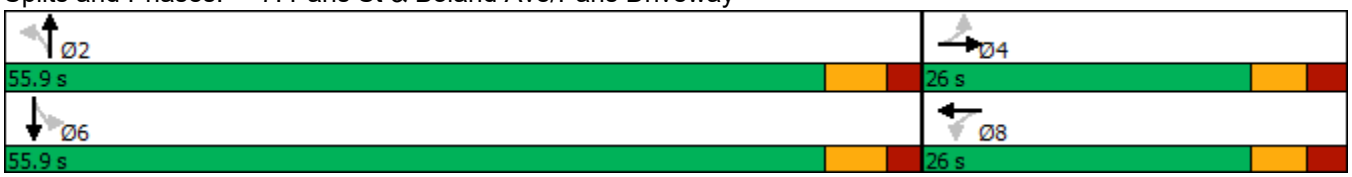
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	34	4	40
Volume Left	0	2	40
Volume Right	32	0	0
cSH	1700	1585	990
Volume to Capacity	0.02	0.00	0.04
Queue Length 95th (m)	0.0	0.0	1.0
Control Delay (s)	0.0	3.6	8.8
Lane LOS		A	A
Approach Delay (s)	0.0	3.6	8.8
Approach LOS			A

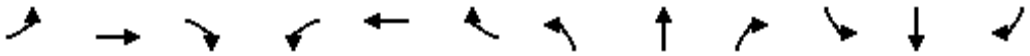
Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	28	0	60	0	6	1414	32	1747
Future Volume (vph)	28	0	60	0	6	1414	32	1747
Lane Group Flow (vph)	0	43	63	51	6	1522	34	1853
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	55.9	55.9	55.9	55.9
Total Split (%)	31.7%	31.7%	31.7%	31.7%	68.3%	68.3%	68.3%	68.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.18	0.30	0.18	0.05	0.59	0.18	0.72
Control Delay		12.9	30.4	13.7	5.0	6.8	7.2	8.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		12.9	30.4	13.7	5.0	6.8	7.2	8.9
Queue Length 50th (m)		0.4	6.8	1.0	0.2	45.2	1.3	66.1
Queue Length 95th (m)		8.7	19.2	10.3	1.5	75.6	5.7	112.2
Internal Link Dist (m)		198.2		192.5		314.0		201.8
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		484	456	560	142	2883	208	2887
Starvation Cap Reductn		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.09	0.14	0.09	0.04	0.53	0.16	0.64

Intersection Summary
Cycle Length: 81.9
Actuated Cycle Length: 62
Natural Cycle: 75
Control Type: Semi Act-Uncoord

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway





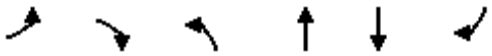
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	0	13	60	0	48	6	1414	32	32	1747	13
Future Volume (vph)	28	0	13	60	0	48	6	1414	32	32	1747	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.96		1.00	0.85		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1757		1805	1615		1805	3495		1805	3502	
Flt Permitted		0.77		0.73	1.00		0.09	1.00		0.13	1.00	
Satd. Flow (perm)		1392		1385	1615		173	3495		252	3502	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	29	0	14	63	0	51	6	1488	34	34	1839	14
RTOR Reduction (vph)	0	34	0	0	36	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	9	0	63	15	0	6	1520	0	34	1852	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.4		7.4	7.4		43.9	43.9		43.9	43.9	
Effective Green, g (s)		7.4		7.4	7.4		43.9	43.9		43.9	43.9	
Actuated g/C Ratio		0.12		0.12	0.12		0.69	0.69		0.69	0.69	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		162		162	189		120	2427		175	2432	
v/s Ratio Prot					0.01			0.43			c0.53	
v/s Ratio Perm		0.01		c0.05			0.03			0.13		
v/c Ratio		0.05		0.39	0.08		0.05	0.63		0.19	0.76	
Uniform Delay, d1		24.8		25.8	24.9		3.1	5.2		3.4	6.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1		1.5	0.2		0.2	0.5		0.5	1.5	
Delay (s)		24.9		27.4	25.0		3.2	5.7		4.0	7.7	
Level of Service		C		C	C		A	A		A	A	
Approach Delay (s)		24.9			26.3			5.7			7.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	11.9
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	193	153	70	1259	1592	228
Future Volume (vph)	193	153	70	1259	1592	228
Lane Group Flow (vph)	214	170	78	1399	1769	253
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	9.0	79.0	70.0	70.0
Total Split (%)	24.4%	24.4%	8.6%	75.6%	67.0%	67.0%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.67	0.48	0.40	0.60	0.84	0.25
Control Delay	47.5	21.9	11.4	8.8	19.1	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	21.9	11.4	8.8	19.1	2.1
Queue Length 50th (m)	37.7	11.7	3.7	61.2	129.6	0.9
Queue Length 95th (m)	68.2	34.0	10.6	87.7	178.2	10.6
Internal Link Dist (m)	376.5			775.4	314.0	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	440	449	195	2840	2625	1191
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.38	0.40	0.49	0.67	0.21

Intersection Summary
Cycle Length: 104.5
Actuated Cycle Length: 86.4
Natural Cycle: 90
Control Type: Semi Act-Uncoord

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	193	153	70	1259	1592	228
Future Volume (vph)	193	153	70	1259	1592	228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1514	1770	3471	3539	1528
Flt Permitted	0.95	1.00	0.07	1.00	1.00	1.00
Satd. Flow (perm)	1770	1514	134	3471	3539	1528
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	214	170	78	1399	1769	253
RTOR Reduction (vph)	0	80	0	0	0	97
Lane Group Flow (vph)	214	90	78	1399	1769	156
Confl. Peds. (#/hr)	1	15	8			8
Heavy Vehicles (%)	2%	4%	2%	4%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	15.6	15.6	59.3	59.3	51.6	51.6
Effective Green, g (s)	15.6	15.6	59.3	59.3	51.6	51.6
Actuated g/C Ratio	0.18	0.18	0.68	0.68	0.60	0.60
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	318	272	161	2376	2108	910
v/s Ratio Prot	c0.12		0.02	c0.40	c0.50	
v/s Ratio Perm		0.06	0.31			0.10
v/c Ratio	0.67	0.33	0.48	0.59	0.84	0.17
Uniform Delay, d1	33.1	30.9	13.6	7.2	14.1	7.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.5	0.7	2.3	0.4	3.1	0.1
Delay (s)	38.6	31.7	15.9	7.6	17.3	8.0
Level of Service	D	C	B	A	B	A
Approach Delay (s)	35.6			8.0	16.1	
Approach LOS	D			A	B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	86.6	Sum of lost time (s)	15.7
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	249	1085	397	729	1025
Future Volume (vph)	194	249	1085	397	729	1025
Lane Group Flow (vph)	202	259	1130	414	759	1068
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	30.8		56.2	56.2	33.0	89.2
Total Split (%)	25.7%		46.8%	46.8%	27.5%	74.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.49	0.20	0.78	0.55	0.78	0.41
Control Delay	44.4	13.9	28.4	13.3	38.8	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	13.9	28.4	13.3	38.8	4.8
Queue Length 50th (m)	19.0	13.1	97.8	28.9	67.5	31.1
Queue Length 95th (m)	33.7	26.2	130.4	59.8	#115.1	47.1
Internal Link Dist (m)	679.1		533.6			775.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	942	1356	1924	935	1066	3059
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.19	0.59	0.44	0.71	0.35

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 93
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	194	249	1085	397	729	1025
Future Volume (vph)	194	249	1085	397	729	1025
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	0.88	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2760	3505	1545	3467	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2760	3505	1545	3467	3471
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	202	259	1130	414	759	1068
RTOR Reduction (vph)	0	24	0	118	0	0
Lane Group Flow (vph)	202	235	1130	296	759	1068
Confl. Peds. (#/hr)		13		14	14	
Heavy Vehicles (%)	2%	3%	3%	2%	1%	4%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	11.2	43.1	38.4	38.4	26.1	69.5
Effective Green, g (s)	11.2	43.1	38.4	38.4	26.1	69.5
Actuated g/C Ratio	0.12	0.46	0.41	0.41	0.28	0.75
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	414	1283	1451	640	976	2602
v/s Ratio Prot	c0.06	0.09	c0.32		c0.22	0.31
v/s Ratio Perm				0.19		
v/c Ratio	0.49	0.18	0.78	0.46	0.78	0.41
Uniform Delay, d1	38.1	14.5	23.5	19.7	30.6	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	2.7	0.5	4.0	0.1
Delay (s)	39.0	14.6	26.2	20.2	34.6	4.3
Level of Service	D	B	C	C	C	A
Approach Delay (s)	25.3		24.6			16.9
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

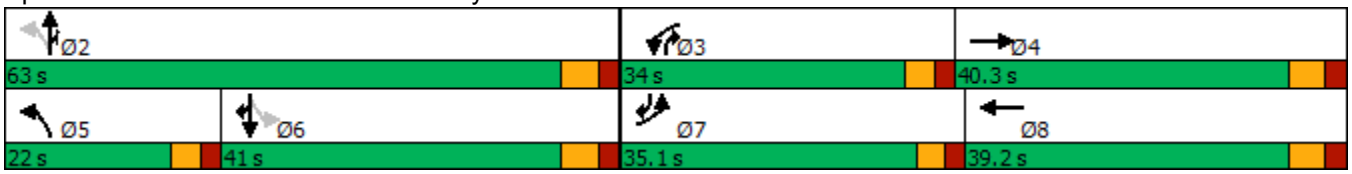
c Critical Lane Group

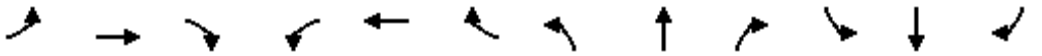
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	195	619	652	515	116	1163	833	28	916	273
Future Volume (vph)	195	619	652	515	116	1163	833	28	916	273
Lane Group Flow (vph)	195	698	652	530	116	1163	833	28	916	273
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pt+ov	Perm	NA	pt+ov
Protected Phases	7	4	3	8	5	2	2 3		6	6 7
Permitted Phases					2			6		
Detector Phase	7	4	3	8	5	2	2 3	6	6	6 7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	15.0		15.0	15.0	
Minimum Split (s)	10.0	31.2	10.0	31.2	10.0	40.1		40.1	40.1	
Total Split (s)	35.1	40.3	34.0	39.2	22.0	63.0		41.0	41.0	
Total Split (%)	25.6%	29.4%	24.8%	28.6%	16.0%	45.9%		29.9%	29.9%	
Yellow Time (s)	3.0	3.7	3.0	3.7	3.0	3.7		3.7	3.7	
All-Red Time (s)	2.0	2.5	2.0	2.5	2.0	2.4		2.4	2.4	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	6.2	5.0	6.2	5.0	6.1		6.1	6.1	
Lead/Lag	Lead	Lag	Lead	Lag	Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes			Yes	Yes	
Recall Mode	None	None	None	None	None	Min		Min	Min	
v/c Ratio	0.59	0.83	0.84	0.43	0.48	0.57	0.77	0.25	0.67	0.38
Control Delay	62.3	55.2	58.9	33.5	31.1	30.5	20.2	44.6	43.6	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0
Total Delay	62.3	55.2	58.9	33.5	31.1	30.5	29.1	44.6	43.6	19.4
Queue Length 50th (m)	27.5	97.4	92.3	59.7	19.7	88.9	140.3	5.9	80.4	35.4
Queue Length 95th (m)	40.2	121.6	#126.4	80.6	33.9	106.3	208.2	16.4	102.0	59.3
Internal Link Dist (m)		364.5		324.4		160.9			177.4	
Turn Bay Length (m)	57.0		85.0		70.0		6.0	24.0		6.0
Base Capacity (vph)	761	996	827	1224	317	2381	1107	128	1554	927
Starvation Cap Reductn	0	0	0	0	0	0	244	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.70	0.79	0.43	0.37	0.49	0.97	0.22	0.59	0.29

Intersection Summary

Cycle Length: 137.3
Actuated Cycle Length: 124.3
Natural Cycle: 105
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Paris St & Brady St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	619	79	652	515	15	116	1163	833	28	916	273
Future Volume (vph)	195	619	79	652	515	15	116	1163	833	28	916	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.2		5.0	6.2		5.0	6.1	6.1	6.1	6.1	6.1
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3072	3526		3467	3491		1751	5085	1615	1774	5085	1615
Flt Permitted	0.95	1.00		0.95	1.00		0.15	1.00	1.00	0.22	1.00	1.00
Satd. Flow (perm)	3072	3526		3467	3491		271	5085	1615	420	5085	1615
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	195	619	79	652	515	15	116	1163	833	28	916	273
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	11	0	0	43
Lane Group Flow (vph)	195	690	0	652	529	0	116	1163	822	28	916	230
Confl. Peds. (#/hr)	9		6	6		9	25		33	33		25
Heavy Vehicles (%)	14%	0%	4%	1%	3%	0%	3%	2%	0%	1%	2%	0%
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pt+ov	Perm	NA	pt+ov
Protected Phases	7	4		3	8		5	2	2 3		6	6 7
Permitted Phases							2			6		
Actuated Green, G (s)	13.5	29.3		27.8	43.6		49.6	49.6	83.5	33.6	33.6	53.2
Effective Green, g (s)	13.5	29.3		27.8	43.6		49.6	49.6	83.5	33.6	33.6	53.2
Actuated g/C Ratio	0.11	0.24		0.22	0.35		0.40	0.40	0.67	0.27	0.27	0.43
Clearance Time (s)	5.0	6.2		5.0	6.2		5.0	6.1		6.1	6.1	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	334	833		777	1227		239	2034	1087	113	1377	692
v/s Ratio Prot	0.06	c0.20		c0.19	0.15		0.04	0.23	c0.51		0.18	0.14
v/s Ratio Perm							0.15			0.07		
v/c Ratio	0.58	0.83		0.84	0.43		0.49	0.57	0.76	0.25	0.67	0.33
Uniform Delay, d1	52.6	45.0		46.0	30.7		25.9	28.9	13.5	35.3	40.2	23.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	6.8		7.9	0.2		1.6	0.4	3.0	1.2	1.2	0.3
Delay (s)	55.2	51.8		53.9	31.0		27.4	29.3	16.5	36.5	41.4	23.9
Level of Service	E	D		D	C		C	C	B	D	D	C
Approach Delay (s)		52.5			43.6			24.2			37.4	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	124.0	Sum of lost time (s)	22.3
Intersection Capacity Utilization	104.0%	ICU Level of Service	G
Analysis Period (min)	15		

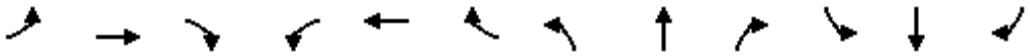
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	52	75	236	73	165	176	1828	130	1468
Future Volume (vph)	52	75	236	73	165	176	1828	130	1468
Lane Group Flow (vph)	53	320	241	74	168	180	2260	133	1546
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0
Minimum Split (s)	31.7	31.7	31.7	31.7	31.7	9.0	41.1	9.0	41.1
Total Split (s)	31.7	31.7	31.7	31.7	31.7	12.0	55.0	9.0	52.0
Total Split (%)	33.1%	33.1%	33.1%	33.1%	33.1%	12.5%	57.5%	9.4%	54.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
v/c Ratio	0.15	0.34	0.94	0.14	0.34	0.77	0.85	0.76	0.61
Control Delay	27.1	17.7	77.6	26.5	12.4	38.0	22.1	41.7	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	17.7	77.6	26.5	12.4	38.0	22.1	41.7	18.2
Queue Length 50th (m)	7.7	15.6	45.1	10.7	8.2	15.0	128.2	9.5	76.1
Queue Length 95th (m)	17.2	27.2	#91.8	21.8	24.9	#50.0	151.7	#39.1	91.5
Internal Link Dist (m)		187.2		465.5			478.0		160.9
Turn Bay Length (m)	21.0		133.0		62.0	34.0		48.0	
Base Capacity (vph)	363	985	269	547	516	233	2673	176	2544
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.32	0.90	0.14	0.33	0.77	0.85	0.76	0.61

Intersection Summary

Cycle Length: 95.7
Actuated Cycle Length: 94.5
Natural Cycle: 85
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Paris St & Van Horne St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	75	238	236	73	165	176	1828	387	130	1468	47
Future Volume (vph)	52	75	238	236	73	165	176	1828	387	130	1468	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3126		1767	1900	1521	1770	4937		1805	5056	
Flt Permitted	0.71	1.00		0.50	1.00	1.00	0.09	1.00		0.08	1.00	
Satd. Flow (perm)	1261	3126		935	1900	1521	173	4937		160	5056	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	53	77	243	241	74	168	180	1865	395	133	1498	48
RTOR Reduction (vph)	0	87	0	0	0	80	0	34	0	0	3	0
Lane Group Flow (vph)	53	233	0	241	74	88	180	2226	0	133	1543	0
Confl. Peds. (#/hr)	13		3	3		13	3		17	17		3
Heavy Vehicles (%)	6%	2%	1%	2%	0%	4%	2%	2%	1%	0%	2%	3%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	26.0	26.0		26.0	26.0	26.0	58.0	50.5		52.5	47.5	
Effective Green, g (s)	26.0	26.0		26.0	26.0	26.0	58.0	50.5		52.5	47.5	
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.61	0.53		0.56	0.50	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.0	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	346	860		257	522	418	232	2638		175	2541	
v/s Ratio Prot		0.07			0.04		c0.06	c0.45		0.04	0.31	
v/s Ratio Perm	0.04			c0.26		0.06	0.41			0.38		
v/c Ratio	0.15	0.27		0.94	0.14	0.21	0.78	0.84		0.76	0.61	
Uniform Delay, d1	25.9	26.8		33.5	25.8	26.3	14.3	18.7		16.9	16.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		39.1	0.1	0.3	14.9	3.5		17.5	1.1	
Delay (s)	26.1	27.0		72.6	26.0	26.6	29.3	22.2		34.4	17.9	
Level of Service	C	C		E	C	C	C	C		C	B	
Approach Delay (s)		26.9			49.4			22.7			19.2	
Approach LOS		C			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	94.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	3	63	0	8	2238	80	1843
Future Volume (vph)	10	3	63	0	8	2238	80	1843
Lane Group Flow (vph)	0	15	0	174	8	2352	82	1905
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	20.0	20.0	5.0	20.0
Minimum Split (s)	25.7	25.7	25.7	25.7	34.8	34.8	9.0	34.8
Total Split (s)	25.7	25.7	25.7	25.7	85.3	85.3	9.0	94.3
Total Split (%)	21.4%	21.4%	21.4%	21.4%	71.1%	71.1%	7.5%	78.6%
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.7
All-Red Time (s)	2.0	2.0	2.0	2.0	2.1	2.1	1.0	2.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.7		5.7	5.8	5.8	4.0	5.8
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	Min	Min	None	Min
v/c Ratio		0.09		0.74	0.07	0.94	0.57	0.70
Control Delay		40.2		49.1	8.5	25.4	29.4	8.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		40.2		49.1	8.5	25.4	29.4	8.7
Queue Length 50th (m)		2.8		25.7	0.6	239.6	3.5	96.5
Queue Length 95th (m)		9.3		50.7	2.8	#364.6	#25.0	148.3
Internal Link Dist (m)		561.8		431.0		175.2		478.0
Turn Bay Length (m)					33.0		23.0	
Base Capacity (vph)		245		311	119	2531	143	2825
Starvation Cap Reductn		0		0	0	0	0	0
Spillback Cap Reductn		0		0	0	0	0	0
Storage Cap Reductn		0		0	0	0	0	0
Reduced v/c Ratio		0.06		0.56	0.07	0.93	0.57	0.67

Intersection Summary

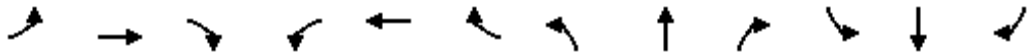
Cycle Length: 120
Actuated Cycle Length: 111.7
Natural Cycle: 120
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Paris St & John St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	3	2	63	0	106	8	2238	44	80	1843	5
Future Volume (vph)	10	3	2	63	0	106	8	2238	44	80	1843	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.92		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799			1627		1802	3529		1736	3537	
Flt Permitted		0.73			0.87		0.09	1.00		0.05	1.00	
Satd. Flow (perm)		1349			1443		166	3529		88	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	3	2	65	0	109	8	2307	45	82	1900	5
RTOR Reduction (vph)	0	2	0	0	54	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	13	0	0	120	0	8	2351	0	82	1905	0
Confl. Peds. (#/hr)	3		4	4		3	14		2	2		14
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	2%	0%	4%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.1			14.1		79.0	79.0		86.9	86.9	
Effective Green, g (s)		14.1			14.1		79.0	79.0		86.9	86.9	
Actuated g/C Ratio		0.13			0.13		0.70	0.70		0.77	0.77	
Clearance Time (s)		5.7			5.7		5.8	5.8		4.0	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		169			180		116	2478		125	2732	
v/s Ratio Prot								c0.67		0.02	c0.54	
v/s Ratio Perm		0.01			c0.08		0.05			0.48		
v/c Ratio		0.08			0.67		0.07	0.95		0.66	0.70	
Uniform Delay, d1		43.5			46.9		5.2	14.9		29.3	6.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			8.9		0.3	8.8		11.7	0.8	
Delay (s)		43.7			55.9		5.5	23.7		41.1	7.1	
Level of Service		D			E		A	C		D	A	
Approach Delay (s)		43.7			55.9			23.7			8.5	
Approach LOS		D			E			C			A	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	112.5	Sum of lost time (s)	15.5
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	7	3	0	2	1	2266	1	1	1990	13
Future Volume (Veh/h)	9	0	7	3	0	2	1	2266	1	1	1990	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	9	0	7	3	0	2	1	2360	1	1	2073	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)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								347			199	
pX, platoon unblocked	0.41	0.41	0.66	0.41	0.41	0.24	0.66			0.24		
vC, conflicting volume	3269	4450	1046	3410	4456	1182	2090			2363		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	2826	49	261	2842	0	1625			308		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	99	100	99	100			100		
cM capacity (veh/h)	409	7	670	268	7	258	268			299		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	5	1181	1181	1038	1050
Volume Left	9	3	1	0	1	0
Volume Right	7	2	0	1	0	14
cSH	493	264	268	1700	299	1700
Volume to Capacity	0.03	0.02	0.00	0.69	0.00	0.62
Queue Length 95th (m)	0.8	0.5	0.1	0.0	0.1	0.0
Control Delay (s)	12.5	18.9	0.2	0.0	0.2	0.0
Lane LOS	B	C	A		A	
Approach Delay (s)	12.5	18.9	0.1		0.1	
Approach LOS	B	C				

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	73.4%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	16	2242	6	21	1975
Future Volume (Veh/h)	1	16	2242	6	21	1975
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	17	2360	6	22	2079
Pedestrians	1					
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)			225			321
pX, platoon unblocked	0.40	0.22			0.22	
vC, conflicting volume	3448	1184			2367	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			103	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			93	
cM capacity (veh/h)	386	238			328	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	18	1573	793	715	1386
Volume Left	1	0	0	22	0
Volume Right	17	0	6	0	0
cSH	243	1700	1700	328	1700
Volume to Capacity	0.07	0.93	0.47	0.07	0.82
Queue Length 95th (m)	1.9	0.0	0.0	1.7	0.0
Control Delay (s)	21.0	0.0	0.0	2.4	0.0
Lane LOS	C			A	
Approach Delay (s)	21.0	0.0		0.8	
Approach LOS	C				

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	7	21	0	2	15	0
Future Volume (Veh/h)	7	21	0	2	15	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	10	31	0	3	22	0
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			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			41		30	28
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			41		30	28
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		98	100
cM capacity (veh/h)			1581		989	1052

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	41	3	22
Volume Left	0	0	22
Volume Right	31	0	0
cSH	1700	1581	989
Volume to Capacity	0.02	0.00	0.02
Queue Length 95th (m)	0.0	0.0	0.5
Control Delay (s)	0.0	0.0	8.7
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.7
Approach LOS			A

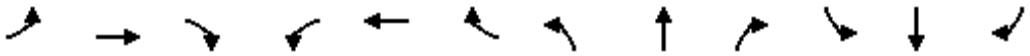
Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	27	1	44	3	24	2174	54	1860
Future Volume (vph)	27	1	44	3	24	2174	54	1860
Lane Group Flow (vph)	0	47	48	56	26	2435	59	2056
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	30.0	30.0	30.0	30.0
Minimum Split (s)	26.0	26.0	26.0	26.0	35.9	35.9	35.9	35.9
Total Split (s)	26.0	26.0	26.0	26.0	94.0	94.0	94.0	94.0
Total Split (%)	21.7%	21.7%	21.7%	21.7%	78.3%	78.3%	78.3%	78.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.7	3.7	3.7	3.7
All-Red Time (s)	2.5	2.5	2.5	2.5	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0	5.9	5.9	5.9	5.9
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
v/c Ratio		0.35	0.38	0.35	0.23	0.82	0.81	0.69
Control Delay		40.5	55.9	44.2	8.6	9.9	81.6	6.4
Queue Delay		0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay		40.5	55.9	44.2	8.6	10.1	81.6	6.4
Queue Length 50th (m)		6.4	10.4	9.2	1.1	137.7	6.1	86.1
Queue Length 95th (m)		18.5	22.8	22.3	5.5	222.5	#24.6	135.0
Internal Link Dist (m)		192.5		282.1		313.9		201.2
Turn Bay Length (m)					40.0		100.0	
Base Capacity (vph)		261	261	315	112	2943	72	2948
Starvation Cap Reductn		0	0	0	0	74	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0
Reduced v/c Ratio		0.18	0.18	0.18	0.23	0.85	0.82	0.70

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 106.3
Natural Cycle: 100
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Paris St & Boland Ave/Paris Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	1	16	44	3	49	24	2174	66	54	1860	31
Future Volume (vph)	27	1	16	44	3	49	24	2174	66	54	1860	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.95		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1628		1805	1608		1805	3523		1805	3530	
Flt Permitted		0.78		0.73	1.00		0.07	1.00		0.05	1.00	
Satd. Flow (perm)		1307		1380	1608		135	3523		87	3530	
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)	29	1	17	48	3	53	26	2363	72	59	2022	34
RTOR Reduction (vph)	0	16	0	0	12	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	31	0	48	44	0	26	2434	0	59	2055	0
Confl. Peds. (#/hr)	2					2	4		2	2		4
Heavy Vehicles (%)	4%	0%	14%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.9		7.9	7.9		87.8	87.8		87.8	87.8	
Effective Green, g (s)		7.9		7.9	7.9		87.8	87.8		87.8	87.8	
Actuated g/C Ratio		0.07		0.07	0.07		0.82	0.82		0.82	0.82	
Clearance Time (s)		6.0		6.0	6.0		5.9	5.9		5.9	5.9	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		95		101	118		110	2874		70	2880	
v/s Ratio Prot					0.03			c0.69			0.58	
v/s Ratio Perm		0.02		c0.03			0.19			0.68		
v/c Ratio		0.33		0.48	0.37		0.24	0.85		0.84	0.71	
Uniform Delay, d1		47.3		47.9	47.5		2.3	5.9		5.8	4.4	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.0		3.5	2.0		1.1	2.5		56.9	0.9	
Delay (s)		49.4		51.4	49.5		3.4	8.4		62.7	5.2	
Level of Service		D		D	D		A	A		E	A	
Approach Delay (s)		49.4			50.3			8.3			6.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	11.9
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		

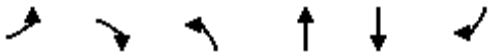
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	236	121	164	2029	1694	228
Future Volume (vph)	236	121	164	2029	1694	228
Lane Group Flow (vph)	248	127	173	2136	1783	240
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	8.0	8.0	5.0	30.0	30.0	30.0
Minimum Split (s)	25.5	25.5	9.0	36.2	36.2	36.2
Total Split (s)	25.5	25.5	12.0	94.5	82.5	82.5
Total Split (%)	21.3%	21.3%	10.0%	78.8%	68.8%	68.8%
Yellow Time (s)	3.3	3.3	3.0	4.2	4.2	4.2
All-Red Time (s)	2.2	2.2	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
v/c Ratio	0.79	0.34	0.80	0.85	0.86	0.24
Control Delay	62.1	10.7	49.7	15.3	22.2	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	10.7	49.7	15.3	22.2	2.4
Queue Length 50th (m)	50.6	0.4	19.7	162.2	158.5	2.5
Queue Length 95th (m)	#104.2	17.9	#64.3	197.0	191.1	12.0
Internal Link Dist (m)	376.5			774.4	313.9	
Turn Bay Length (m)	21.0		123.0			72.0
Base Capacity (vph)	356	409	215	3022	2691	1218
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.31	0.80	0.71	0.66	0.20

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 102.7
Natural Cycle: 90
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Paris St & York St



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	236	121	164	2029	1694	228
Future Volume (vph)	236	121	164	2029	1694	228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1787	1555	1770	3539	3539	1538
Flt Permitted	0.95	1.00	0.06	1.00	1.00	1.00
Satd. Flow (perm)	1787	1555	116	3539	3539	1538
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	248	127	173	2136	1783	240
RTOR Reduction (vph)	0	103	0	0	0	86
Lane Group Flow (vph)	248	24	173	2136	1783	154
Confl. Peds. (#/hr)	6	15	4			4
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	18.0	18.0	72.7	72.7	60.5	60.5
Effective Green, g (s)	18.0	18.0	72.7	72.7	60.5	60.5
Actuated g/C Ratio	0.18	0.18	0.71	0.71	0.59	0.59
Clearance Time (s)	5.5	5.5	4.0	6.2	6.2	6.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	273	214	2512	2090	908
v/s Ratio Prot	c0.14		0.06	c0.60	0.50	
v/s Ratio Perm		0.02	0.51			0.10
v/c Ratio	0.79	0.09	0.81	0.85	0.85	0.17
Uniform Delay, d1	40.4	35.3	27.8	10.9	17.3	9.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.4	0.1	19.7	3.0	3.6	0.1
Delay (s)	52.8	35.5	47.4	13.8	20.9	9.6
Level of Service	D	D	D	B	C	A
Approach Delay (s)	46.9			16.3	19.6	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	15.7
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	573	749	1478	283	393	1387
Future Volume (vph)	573	749	1478	283	393	1387
Lane Group Flow (vph)	637	832	1642	314	437	1541
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Detector Phase	8	8 1	2	2	1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0	15.0	10.0	15.0
Minimum Split (s)	30.8		40.2	40.2	15.0	40.2
Total Split (s)	32.0		64.5	64.5	23.5	88.0
Total Split (%)	26.7%		53.8%	53.8%	19.6%	73.3%
Yellow Time (s)	3.3		4.2	4.2	3.0	4.2
All-Red Time (s)	2.5		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8		6.2	6.2	5.0	6.2
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Min	Min	None	Min
v/c Ratio	0.84	0.71	0.96	0.38	0.84	0.64
Control Delay	55.5	32.5	43.8	13.0	63.8	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	32.5	43.8	13.0	63.8	12.3
Queue Length 50th (m)	78.5	94.0	199.8	28.2	54.7	102.8
Queue Length 95th (m)	#106.2	120.9	#256.8	50.0	#79.3	124.2
Internal Link Dist (m)	679.1		533.6			774.4
Turn Bay Length (m)	158.0			37.0	175.0	
Base Capacity (vph)	768	1153	1746	842	537	2450
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.72	0.94	0.37	0.81	0.63

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 118.2
Natural Cycle: 100
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Ramsey Lake Rd & Paris St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	573	749	1478	283	393	1387
Future Volume (vph)	573	749	1478	283	393	1387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.8	5.8	6.2	6.2	5.0	6.2
Lane Util. Factor	0.97	0.88	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3467	2787	3539	1587	3433	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3467	2787	3539	1587	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	637	832	1642	314	437	1541
RTOR Reduction (vph)	0	10	0	61	0	0
Lane Group Flow (vph)	637	822	1642	253	437	1541
Confl. Peds. (#/hr)		16		5	5	
Heavy Vehicles (%)	1%	2%	2%	0%	2%	2%
Turn Type	Prot	pt+ov	NA	Perm	Prot	NA
Protected Phases	8	8 1	2		1	6
Permitted Phases				2		
Actuated Green, G (s)	25.9	49.7	57.3	57.3	18.0	80.3
Effective Green, g (s)	25.9	49.7	57.3	57.3	18.0	80.3
Actuated g/C Ratio	0.22	0.42	0.48	0.48	0.15	0.68
Clearance Time (s)	5.8		6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	759	1171	1715	769	522	2404
v/s Ratio Prot	c0.18	0.29	c0.46		c0.13	0.44
v/s Ratio Perm				0.16		
v/c Ratio	0.84	0.70	0.96	0.33	0.84	0.64
Uniform Delay, d1	44.2	28.2	29.3	18.7	48.7	10.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	1.9	13.0	0.3	11.2	0.6
Delay (s)	52.3	30.1	42.2	18.9	59.9	11.4
Level of Service	D	C	D	B	E	B
Approach Delay (s)	39.7		38.5			22.1
Approach LOS	D		D			C

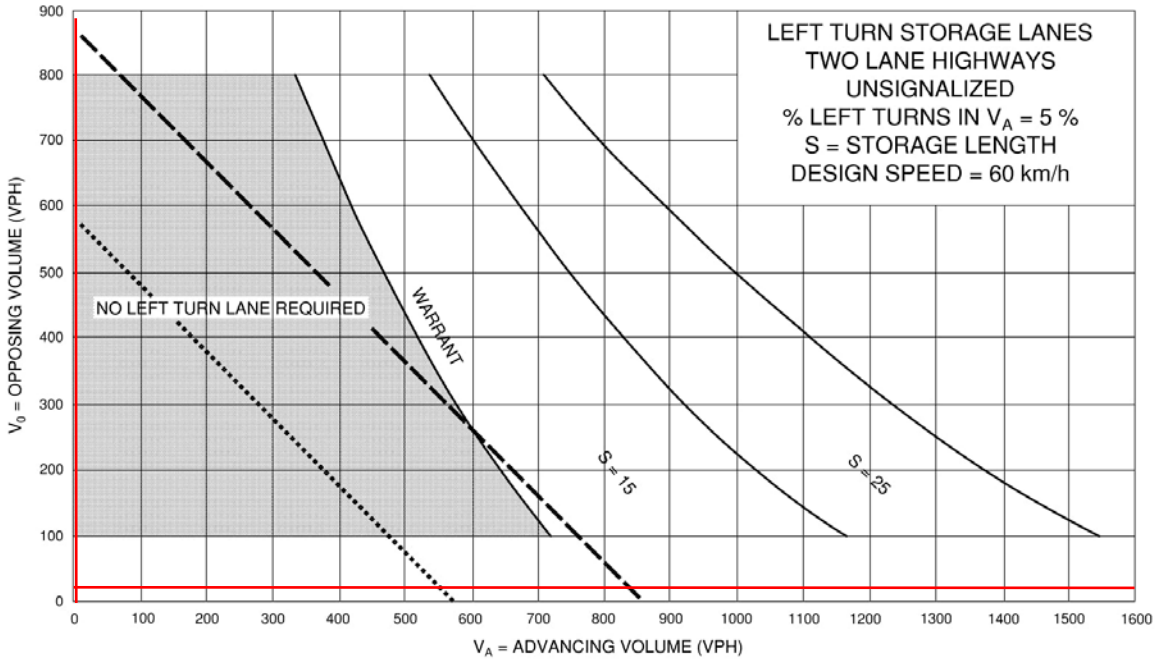
Intersection Summary			
HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	118.2	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Appendix G –
MTO Left Turn Analysis

Bell Park Road / Facer Street
2032 Total - Westbound
Critical Case - AM Peak Hour

Exhibit 9A-6



TRAFFIC SIGNALS MAY BE WARRANTED IN RURAL AREAS OR URBAN AREAS WITH RESTRICTED FLOW

TRAFFIC SIGNALS MAY BE WARRANTED IN "FREE FLOW" URBAN AREAS

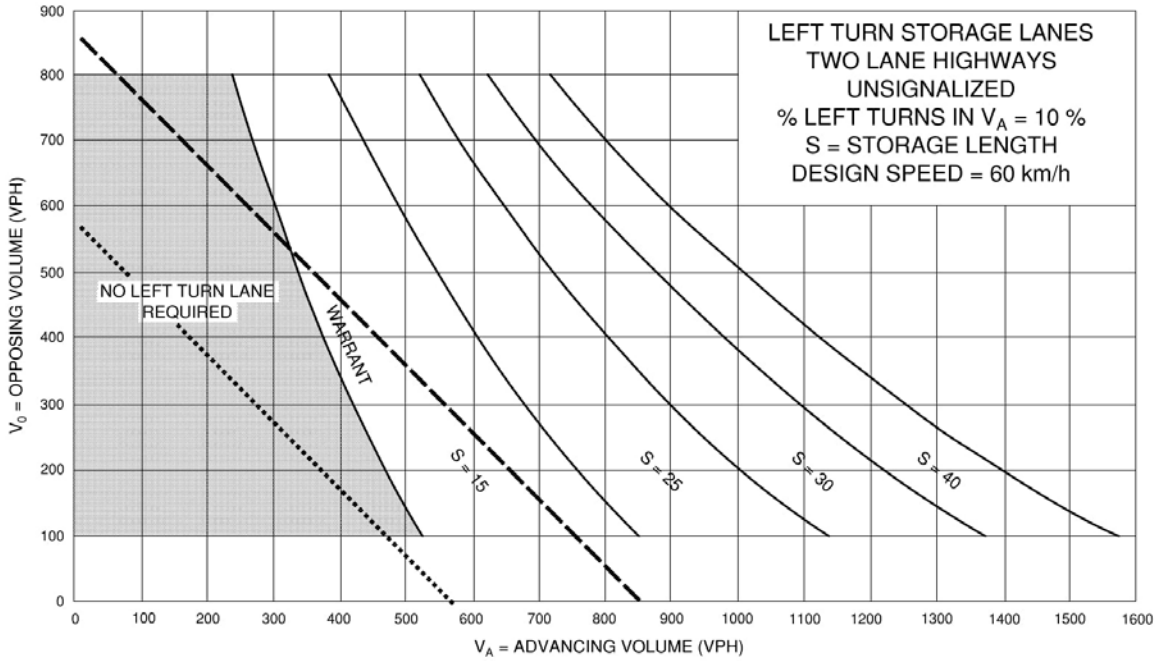
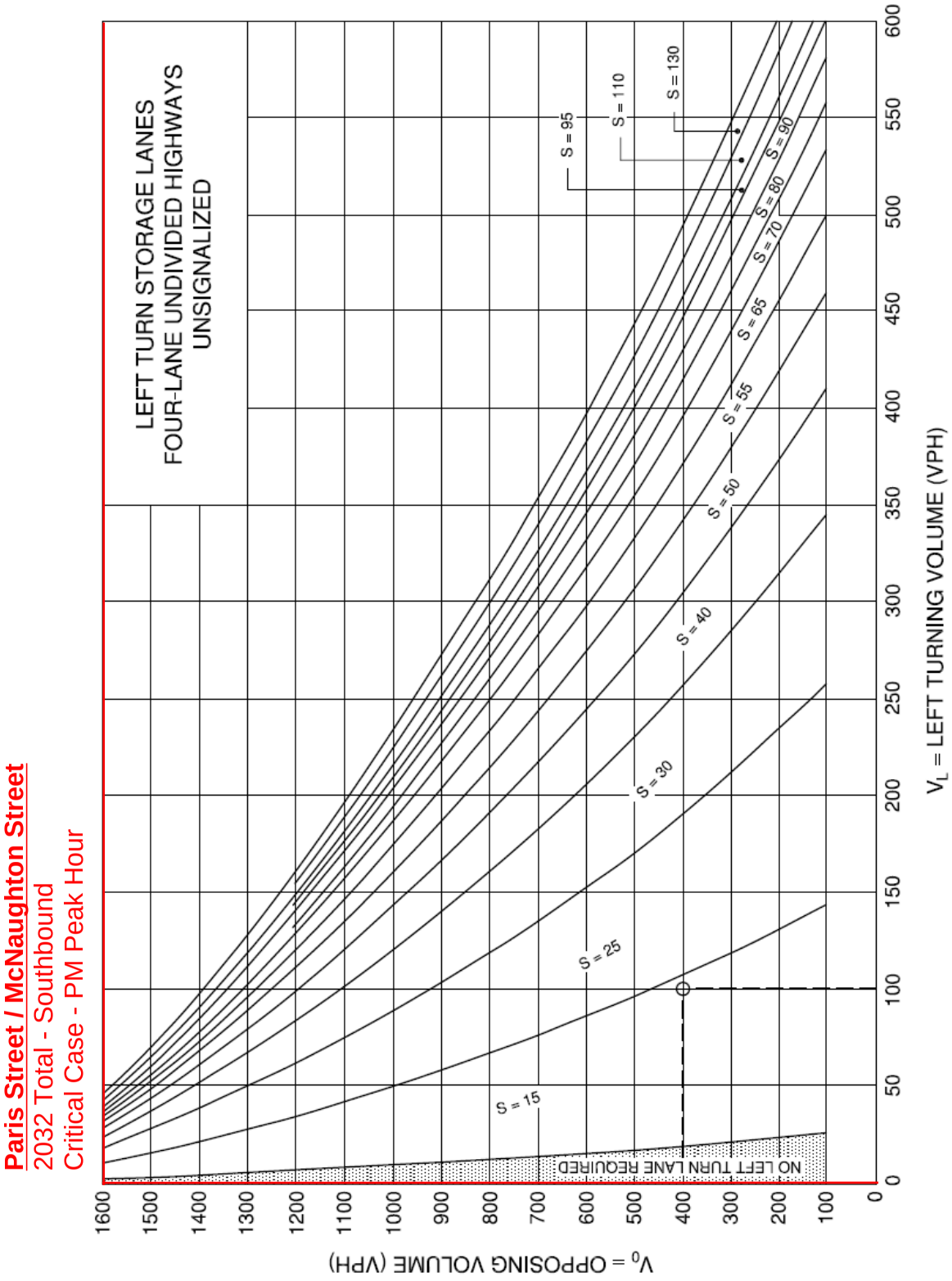


Exhibit 9A-30



Paris Street / McNaughton Street
2032 Total - Southbound
Critical Case - PM Peak Hour

Exhibit 9A-30

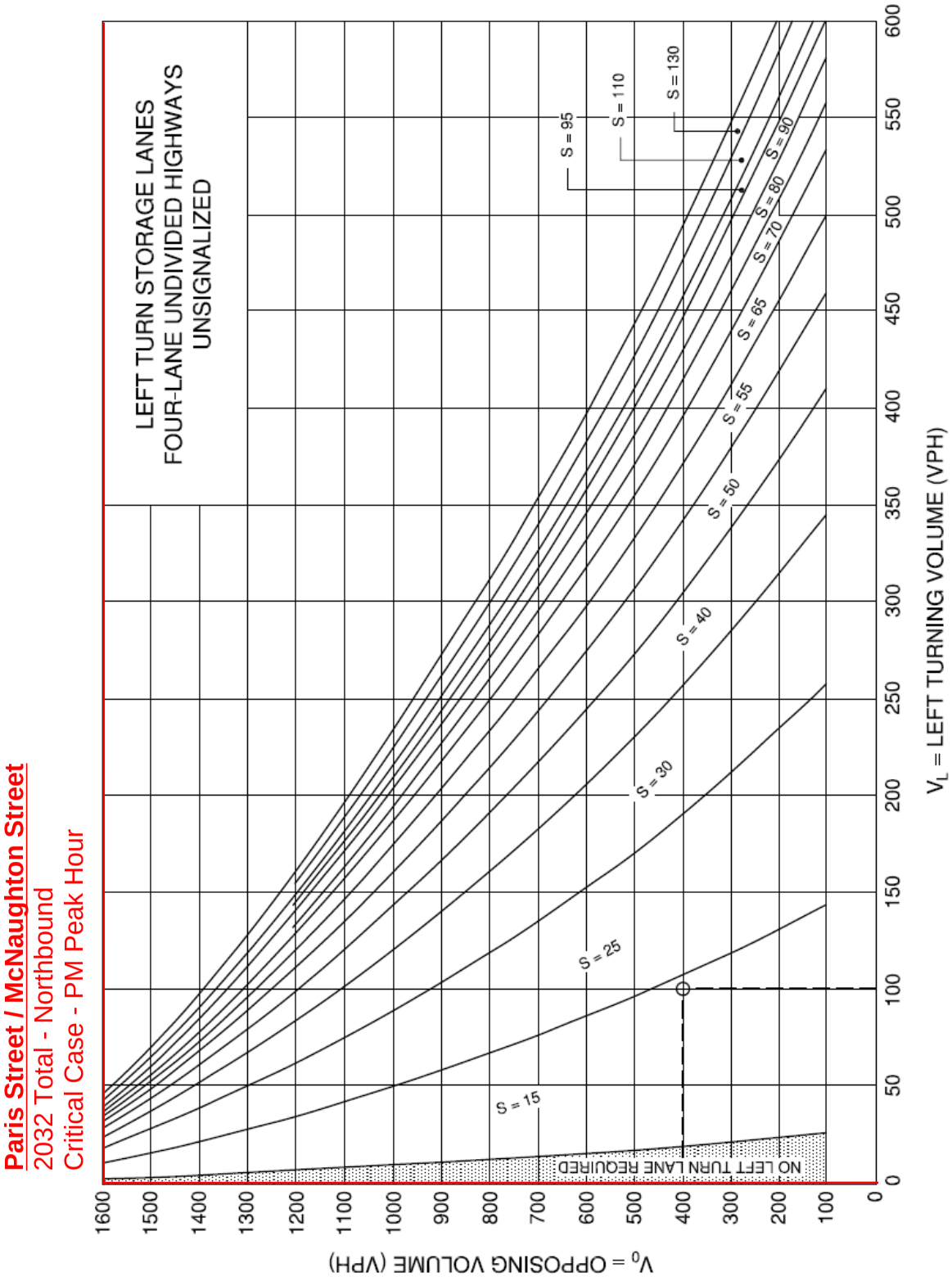


Exhibit 9A-30

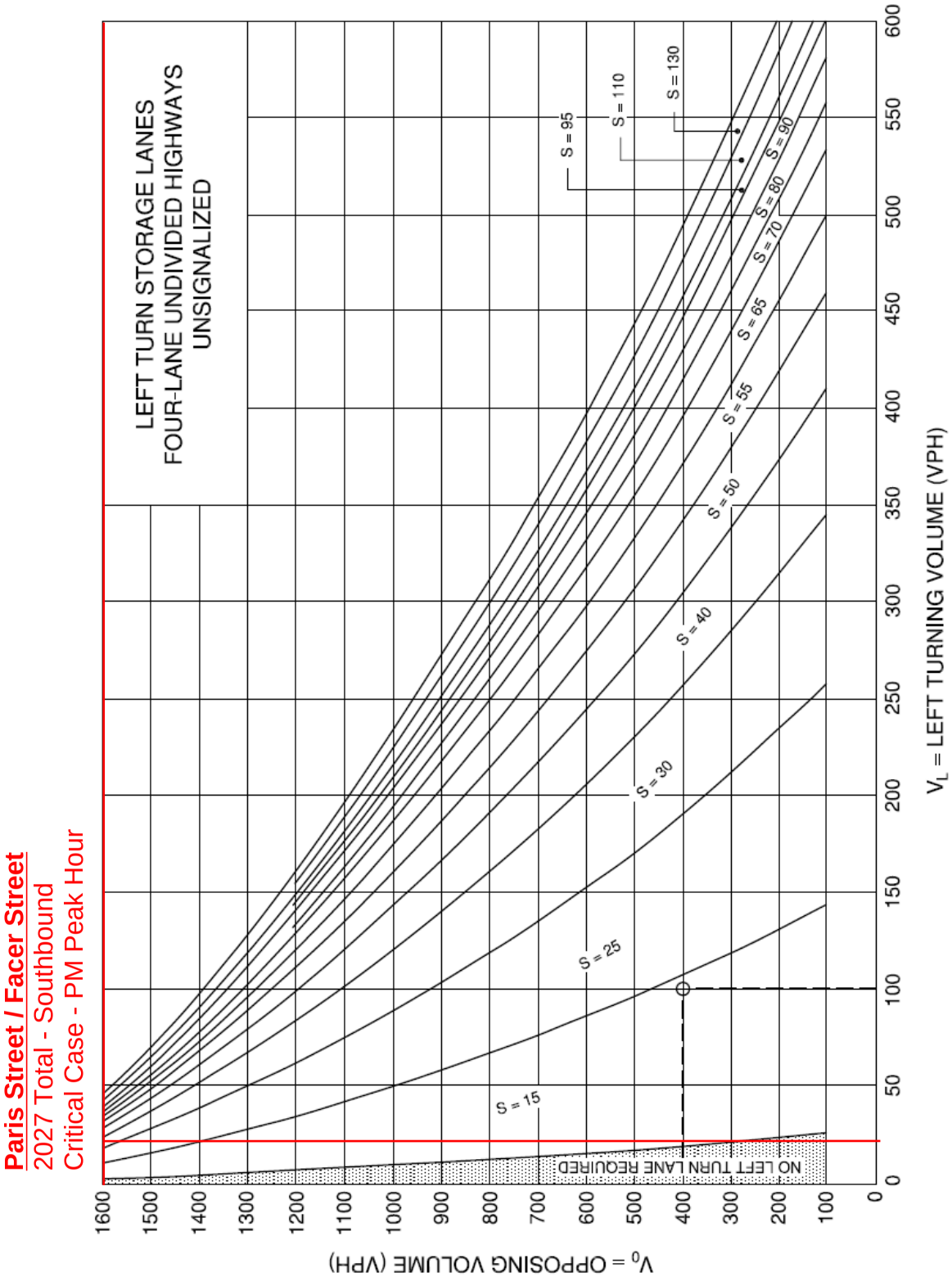
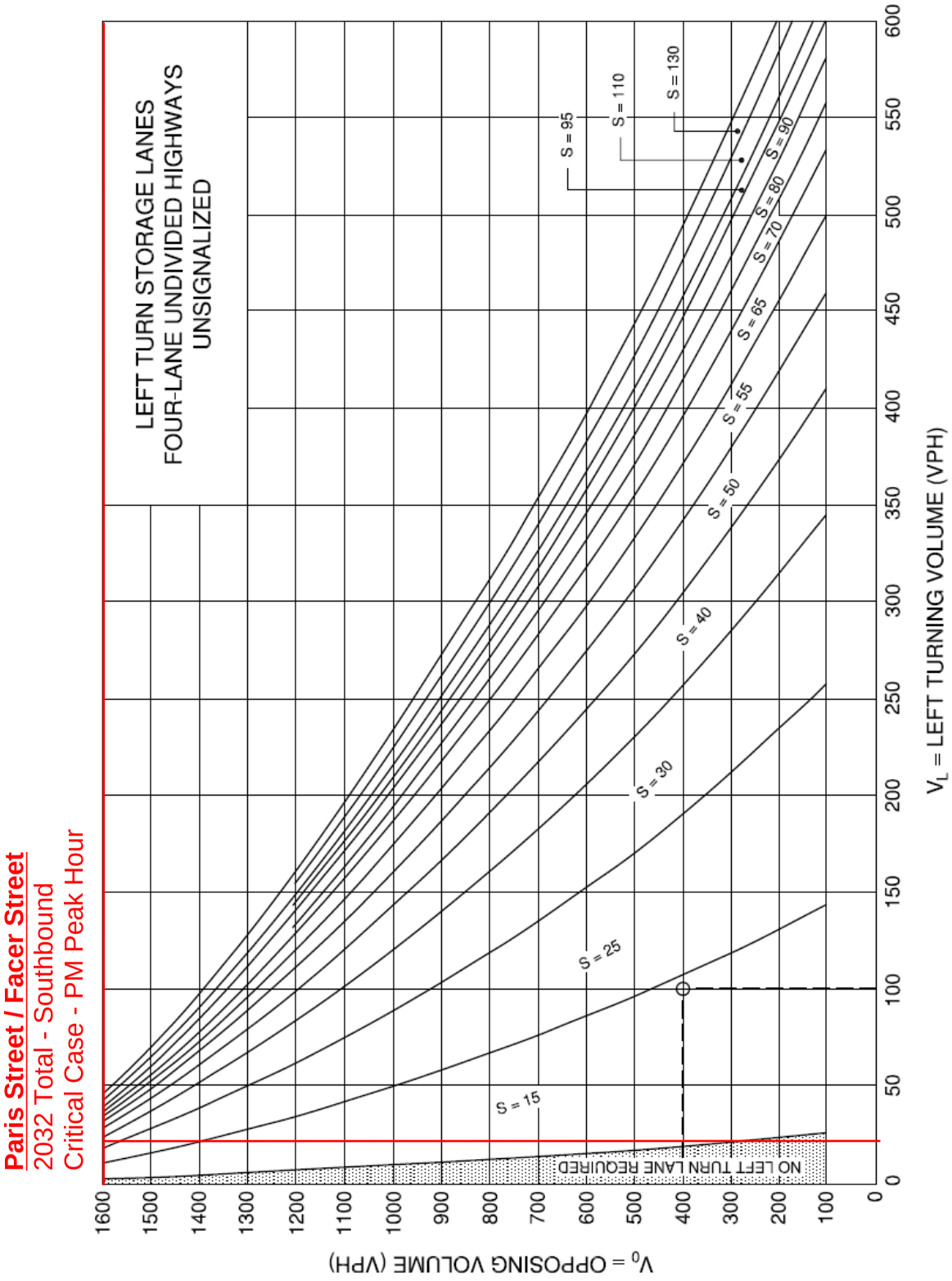


Exhibit 9A-30



Appendix H –
OTM Signal Justification Sheets

Justification No. 7 - 2032 Total Traffic (Critical Case)

Paris Street / McNaughton Street

Justification	Description		Compliance			Signal Warrant	Underground Provisions Warrant
			Sectional		Entire %		
		Rest. Flow	Numerical	%			
1. Minimum Vehicluar Volume	A. Vehicle volume, all aproaches (average hour)	900	1908	212%	5%	YES	YES
	B. Vehicle volume, along minor streets (average hour)	170	9	5%		NO	NO
2. Delay to cross traffic	A. Vehicle volume, major street (average hour)	900	1894	210%	2%	YES	YES
	B. Combined vehicle and pedestrian volume crossing artery from minor streets (average hour)	170	4	3%		NO	NO

Justification No. 7 - 2032 Total Traffic (Critical Case)

Paris Street / Facer Street

Justification	Description		Compliance			Signal Warrant	Underground Provisions Warrant
			Sectional		Entire %		
		Rest. Flow	Numerical	%			
1. Minimum Vehicluar Volume	A. Vehicle volume, all aproaches (average hour)	900	1895	211%	3%	YES	YES
	B. Vehicle volume, along minor streets (average hour)	255	10	4%		NO	NO
2. Delay to cross traffic	A. Vehicle volume, major street (average hour)	900	1884	209%	0%	YES	YES
	B. Combined vehicle and pedestrian volume crossing artery from minor streets (average hour)	170	1	1%		NO	NO

Justification No. 7 - 2032 Total Traffic (Critical Case)

Bell Park Road / Facer Street

Justification	Description		Compliance			Signal Warrant	Underground Provisions Warrant
			Sectional		Entire %		
		Rest. Flow	Numerical	%			
1. Minimum Vehicluar Volume	A. Vehicle volume, all aproaches (average hour)	720	21	3%	2%	NO	NO
	B. Vehicle volume, along minor streets (average hour)	255	9	3%		NO	NO
2. Delay to cross traffic	A. Vehicle volume, major street (average hour)	720	3	0%	0%	NO	NO
	B. Combined vehicle and pedestrian volume crossing artery from minor streets (average hour)	75	10	14%		NO	NO

Appendix I –
NCHRP Internal Capture Reports

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	700 Paris Street	**Organization:**	JD Engineering
Project Location:	City of Greater Sudbury	**Performed By:**	Allister Aresta
Scenario Description:	Build-Out	**Date:**	Friday, December 23 / 2022
Analysis Year:	2027	**Checked By:**	John Northcote
Analysis Period:	**AM Street Peak Hour**	**Date:**	Friday, December 23 / 2022

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant				84	43	41
Cinema/Entertainment				0		
Residential				36	9	27
Hotel				0		
All Other Land Uses[2]				0		
				120	52	68

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment						
Residential	1.00	0%	0%	1.00	0%	0%
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	5	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	120	52	68
Internal Capture Percentage	8%	10%	7%
External Vehicle-Trips[5]	110	47	63
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	12%	0%
Cinema/Entertainment	N/A	N/A
Residential	0%	19%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	700 Paris Street
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	43	43	1.00	41	41
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	9	9	1.00	27	27
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	13	6		0	2	1
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	5	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	10	0	0	0
Retail	0		22	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	9	0		0
Hotel	0	0	3	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	5	38	43	38	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	9	9	9	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	0	41	41	41	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	22	27	22	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	700 Paris Street	**Organization:**	JD Engineering
Project Location:	City of Greater Sudbury	**Performed By:**	Allister Aresta
Scenario Description:	Build-Out	**Date:**	Friday, December 23 / 2022
Analysis Year:	2027	**Checked By:**	John Northcote
Analysis Period:	**PM Street Peak Hour**	**Date:**	Friday, December 23 / 2022

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant				62	32	30
Cinema/Entertainment				0		
Residential				38	24	14
Hotel				0		
All Other Land Uses[2]				0		
				100	56	44

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail						
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment						
Residential	1.00	0%	0%	1.00	0%	0%
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	3	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	100	56	44
Internal Capture Percentage	14%	13%	16%
External Vehicle-Trips[5]	86	49	37
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	9%	13%
Cinema/Entertainment	N/A	N/A
Residential	17%	21%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	700 Paris Street
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	32	32	1.00	30	30
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	24	24	1.00	14	14
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	1	12		2	5	2
Cinema/Entertainment	0	0	0		0	0
Residential	1	6	3	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	1	0	1	0
Retail	0		9	0	11	0
Restaurant	0	0		0	4	0
Cinema/Entertainment	0	0	1		1	0
Residential	0	0	4	0		0
Hotel	0	0	2	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	3	29	32	29	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	20	24	20	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	4	26	30	26	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	11	14	11	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.