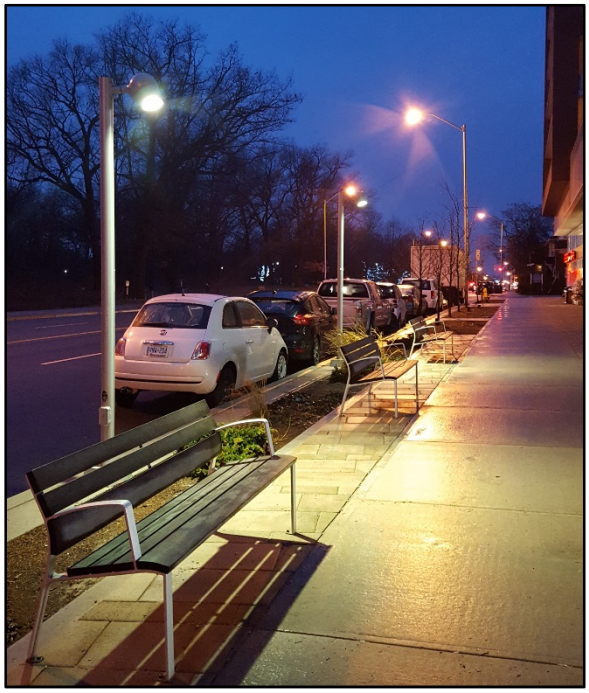
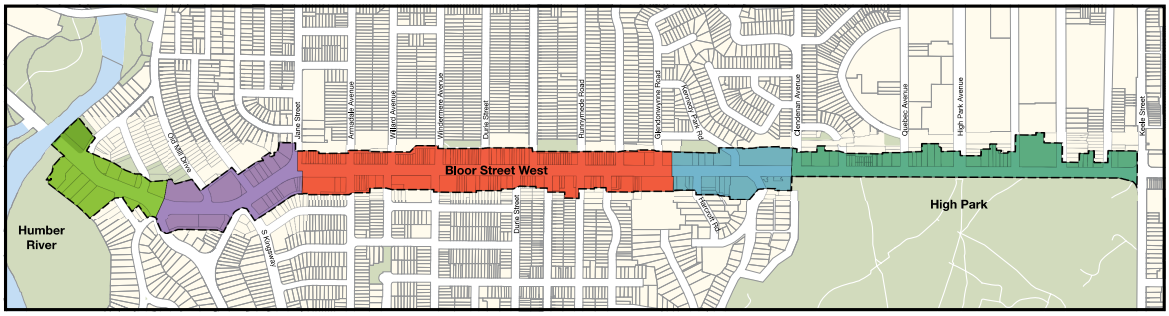


Bloor West Village Avenue Study

Future Transportation Conditions Report

Prepared for: CITY OF TORONTO

16M-00553-01-T01 | March 2018



PROJECT TEAM

Transportation Planning

Jim Gough, P.Eng

Brett Sears, MCIP RPP

Ubaid Ali, EIT

BLOOR WEST VILLAGE

FUTURE TRANSPORTATION CONDITIONS REPORT

CITY OF TORONTO

PROJECT NO.: 16M-00553-01-T01
DATE: MARCH 2018

WSP
100 COMMERCE VALLEY DRIVE WEST
THORNHILL, ON, CANADA L3T 0A1

T F +1 905 882-0055
WSP.COM

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EXECUTIVE SUMMARY

WSP has been retained by City of Toronto to assist with the Bloor West Village Avenue Study. The purpose of this report is to assess transportation needs and options in relation to transportation as development continues, with the underlying goal of creating a “complete street”.

The proposed development consists of an additional 926 residential units, 70 additional jobs, and 141,600 square metres of gross floor area. The study area is shown in **Figure** 1.

The analysis contained in this report is based on the site statistics prepared by DTAH provided to WSP on November 16, 2017.

The analysis assesses the transportation impacts associated with the proposed development and configuration alternatives for Bloor Street West.

Based on the study, the following conclusions can be made:

- The proposed developments are estimated to generate 187 outbound trips and 222 inbound trips during the weekday a.m. and p.m. peak hours, respectively;
- Approximately half of the proposed development-generated trips are non-vehicular trips based on the TTS modal split analysis for both peak hours;
- The major arterial roads, such as Jane Street, Runnymede Road, South Kingsway, and Keele Street, are the primary inflow and outflow points to Bloor West Village as they provide connection to Highway 401, the Gardiner Expressway and Queen Elizabeth Way depending on the travel direction;
- Four cross-section options have been assessed:
  - Existing Condition (Option Zero): Maintains the existing cross-section along Bloor Street West, of two travel lanes in each direction, with no cycling facilities on either side of the street. Off-peak parking is permitted along the north side of Bloor Street West, while some lay-by parking bays are available in select areas along the south side of Bloor Street West.
  - Option 1: Maintains the two lanes in each direction, but removes some left turn lanes at selected intersections to accommodate one-way cycle tracks on both sides of the road, and wider sidewalks. Off-peak parking will be permitted on both sides of Bloor Street West.
  - Option 2: Provides a three lane cross-section; one lane each in the eastbound and westbound directions, and a centre left turn lane. Dedicated left turn lanes will remain, with a shared through-right in both the eastbound and westbound directions. There will be lay-by parking on the south side with a one-way cycle track, and a midblock parking on the north side with a buffered bike lane.

  - Option 3: Consists of one eastbound lane and two westbound lanes. There will be off-peak parking on the north side and layby parking on the south side. The westbound direction would have a dedicated left turn lane with two through lanes while the eastbound direction would have a left turn lane and a shared through-right lane at key intersections. One-way cycle tracks will be provided on both sides of the roadway.
- The majority of intersections are projected to operate at acceptable Levels of Service with the total future traffic volumes under the existing cross-section (Option Zero) and signal timing plans. This shows that there is opportunity for change;
- The majority of intersections under Option 1 are forecast to operate within capacity at acceptable levels of service with the exception of Bloor Street West at South Kingsway/Riverview Gardens, and High Park Avenue/Colborne Lodge Drive, which are forecast to have movements operating near or over theoretical capacity;
- Option 2 has more movements, compared to Option 1, that are forecast to have V/C ratios greater than 1, in addition to the intersections of Bloor Street West at South Kingsway/Riverview Gardens and High Park Avenue/Colborne Lodge Drive both expected to operate at LOS “F” during the peak hours;
- Option 3, similarly to Option 2, would be expected to see the intersections of Bloor Street West at South Kingsway/Riverview Gardens and High Park Avenue/Colborne Lodge Drive operating at LOS “F” during the peak hours. This option has fewer movements forecast with a V/C ratio greater than 1 compared to Option 2, but more movements than Option 1;
- Based on the alternative scenarios which change the existing cross section of Bloor Street West, Option 1 is preferred, because it provides the best balance among modes within the right-of-way constraints, followed by Option 3 and Option 2;
- There are five intersections where traffic conditions are projected to operate above theoretical capacity during peak hours – Bloor Street at The Kingsway, Old Mill Trail, South Kingsway/Riverview Gardens, High Park Avenue/Colborne Lodge Drive and Keele Street /Parkside Drive. These locations need to be carefully considered if change is contemplated;
- The north side of the blocks from Jane Street to Armadale Avenue and from Runnymede Road to Kennedy Road will require special consideration in terms of design to continue to facilitate TTC bus circulation, with any change in cross-sections.

Overall, the three future options attempt to balance the available right-of-way width among the modes, to provide safe space of adequate capacity for each. The major change for all modes is provision of dedicated cycling facilities. However, a 26.0 metre right-of-way poses challenges. Sidewalk widths would essentially remain the same as the current values. The study shows that Option 1 would have the least adverse impacts to Bloor Street West in terms of traffic operations, while Option 2 and Option 3 are forecast to incur capacity constraints and delays at many intersections. In all scenarios, the intersections of Bloor Street West / South Kingsway and Bloor Street West / High Park Avenue are forecast to operate near or over capacity with the additional traffic.

These intersections can be further investigated to better accommodate the future traffic volumes in subsequent studies.

In terms of transit, on-street parking, cycling, and pedestrian facilities, all proposed options provide solutions that can be accommodated within the right-of-way of the road. Enhancements to pedestrian and cycling facilities can be further explored at key intersections, and particularly near TTC stations, to ensure that bus services can continue to function with adequate reliability.

Option 1 is expected to provide the greatest number of parking spaces (however, these would be available during off-peak periods only), and provide the safest environment for cyclists. Overall, Option 1 is seen as providing the best balance among the various modes, taking the need for parking into consideration.

That conclusion should be considered in light of ongoing changes in transportation, if and when the City decides to change the character of the street. These include the rise of autonomous vehicles, declining passenger vehicle sales in Ontario, and rising proportions of trips made by walking, cycling and transit. The City of Toronto's recently enacted Transform TO policy (intended to fight climate change) should also be noted – this includes the proviso that 75% of trips less than 5 km in length should be made on foot or by bike by 2050.

Bloor Street West is not proposed to be reconstructed in the near future. By the time it is reconstructed, transportation demands may by substantially different than they are in 2017, and more cross-section options may be considered. If significantly more trips are made by autonomous vehicles and/or ride-share services, more space will be needed for pick-up and drop-off activity along Bloor, and less will be needed for parking. That can also be seen as continuing to lend support to Option 1, as it provides the greatest amount of road space for pick-up and drop-off. There are many uncertainties with respect to transportation patterns, however, and thus all of the options should be kept in consideration.

Another initiative which should be considered to expand the multimodal environment is development of a more complete laneway system parallel to Bloor Street. This could alleviate some traffic pressure on Bloor related to circulation and loading. That idea should be considered in conjunction with the options for reconfiguration of the street, including potentially Options 2 and 3. If much less space is needed for parking, it may be that the space dedicated to off-street parking can also be reduced. In that case, some of the space now used for off-street parking could be re-oriented to expand the laneway system.

It is understood that the Toronto Transit Commission is reviewing potential improvements to the subway stations, to enhance their profile in the community and their capacity. Improved wayfinding from Bloor Street, and access enhancements for the subway stations (including wider sidewalks on north/south streets where possible) would assist in promoting greater transit use. Any changes to the Bloor Street cross-section must take into account bus access to the subway stations, to ensure that bus manoeuvrability is maintained. Capacity on the subway and the platforms was also reviewed. While the subways are busy at peak times, the amount of proposed

development does not indicate a significant potential for over-crowding. The bus platforms at the subway stations are constrained; it is understood that TTC is considering improvements to address these issues.

The subway stations in the main street retail area (Jane and Runnymede) are very constrained spatially. Some bus circulation is expected to continue to occur on street. If redevelopment proposals are put forward for the Bloor Street sites adjacent to these subway stations, consideration should be given to expanding the footprint of the stations to better accommodate pedestrian movement, bus circulation and direct access from Bloor Street.

The City should also consider initiatives that can enhance multimodal access in this area, to lessen dependence on private auto trips. These include:

- When Kennedy Avenue north of Bloor Street is reconstructed, consider creating a shared space area or other design changes to enhance the priority and safety for pedestrians crossing the street. Many pedestrians cross from the subway station to the east side of the street to access area schools and other destinations;
- Work with the Toronto Parking Authority to review parking rates and rate structures, to discourage all-day auto trips;
- As cross-streets are reconstructed, look for opportunities to widen sidewalks;
- Work with Bike Share Toronto to continue expanding the availability of rental bikes in the area; and
- Work with the BIA to promote walking, cycling and transit.

1 INTRODUCTION

1.1 Background

WSP Canada is part of a team commissioned by the City of Toronto to assess the Bloor West Village community, in order to establish clear direction and guidance for on-stream and future development in this neighbourhood. In March 2017, WSP conducted an existing conditions analysis to document the status of transportation facilities throughout the corridor, and submitted the Transportation Background Report to the City of Toronto. The report highlighted current traffic conditions, transit usage, active transportation infrastructure and user behavior, parking supply and demand, and road safety statistics. That study established baseline conditions, in order to analyze the impacts of additional traffic induced by future development of the area.

1.2 Scope of the Future Transportation Conditions Report

The scope of this report is to determine the additional traffic volumes resulting from the planned intensification of the residential and employment blocks along Bloor Street West, and to assess the impact of the additional traffic to the road network performance, along with commentary on the multimodal transportation network's ability to accommodate the future demands.

1.3 Study Area

The study area encompasses Bloor Street West between the Parkside Drive/Keele Street intersection on the east and the Jane Street/South Kingsway intersection on the west.

A map of the study area is shown in **Figure 1**. The transportation study area is extended further west of the Humber River and further east of Parkside Drive/Keele Street than the Bloor West Village study area in order to account for transportation infrastructure.

LEGEND

Transportation Study Area

Figure 1
Study Area for Existing Transportation Conditions

2 PROPOSED DEVELOPMENT

2.1 Development Blocks

The commercial and residential blocks located along Bloor Street West have been designated for expansion with additional units. Some blocks are expected to remain in their existing state, while others are proposed to have additional storeys and units constructed as part of the "soft intensification" of the area.

The overall development has been divided into four character areas; West Village, Main Street, East Village, and the High Park Frontage.

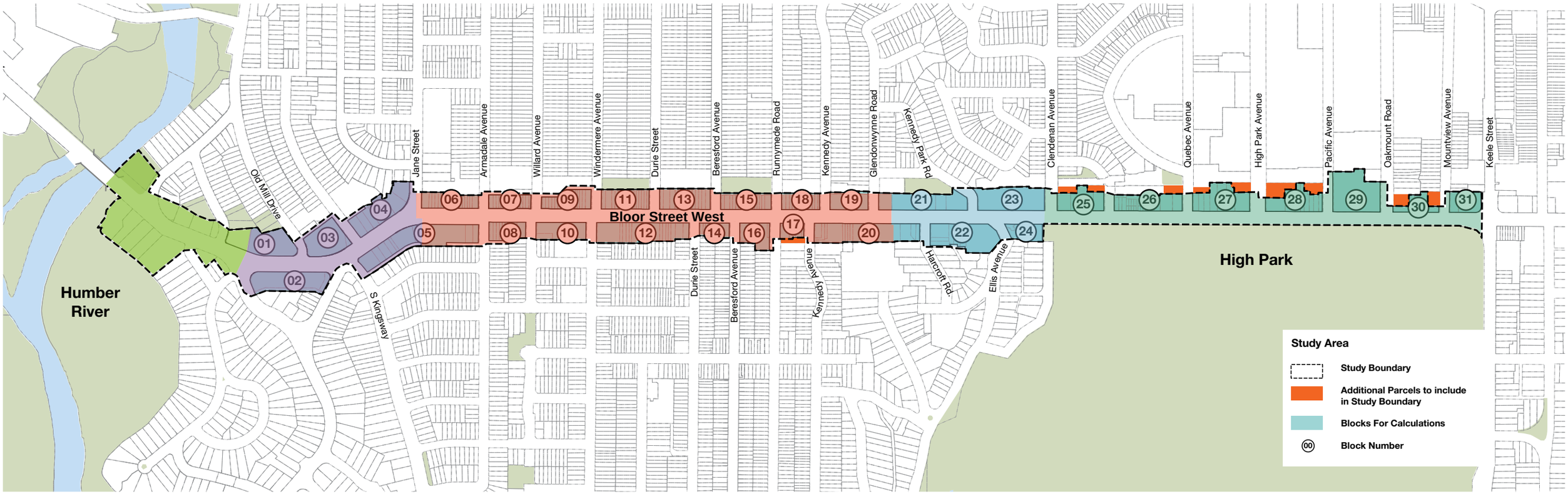
The development blocks are shown in **Figure 2**.

2.2 Development Program

The development program showing the additional units designated for each block, and the location of each block in the study area, is provided in **Appendix A**.

Blocks 2, 4, 5, 8, 9, 10, 12, 13, 14, 17, 19, 20, 21, 27, 28, and 30 have been designated for new development while the remaining blocks are proposed to remain as existing.

The population of the area is proposed to increase from 4,324 to 6,083 with the added 926 residential units, and the number of jobs is expected to increase from 3,452 to 3,522. A total of 141,600 square metres of gross floor area is expected to be added to the existing development.



Legend:

- West Village
- Main Street
- East Village
- Highpark Frontage

Figure 2
Development Blocks

3 ANALYSIS METHODOLOGY

3.1 Intersections Analyzed

Vehicle traffic conditions include an analysis of intersection performance during the weekday a.m. and p.m. peak hours.

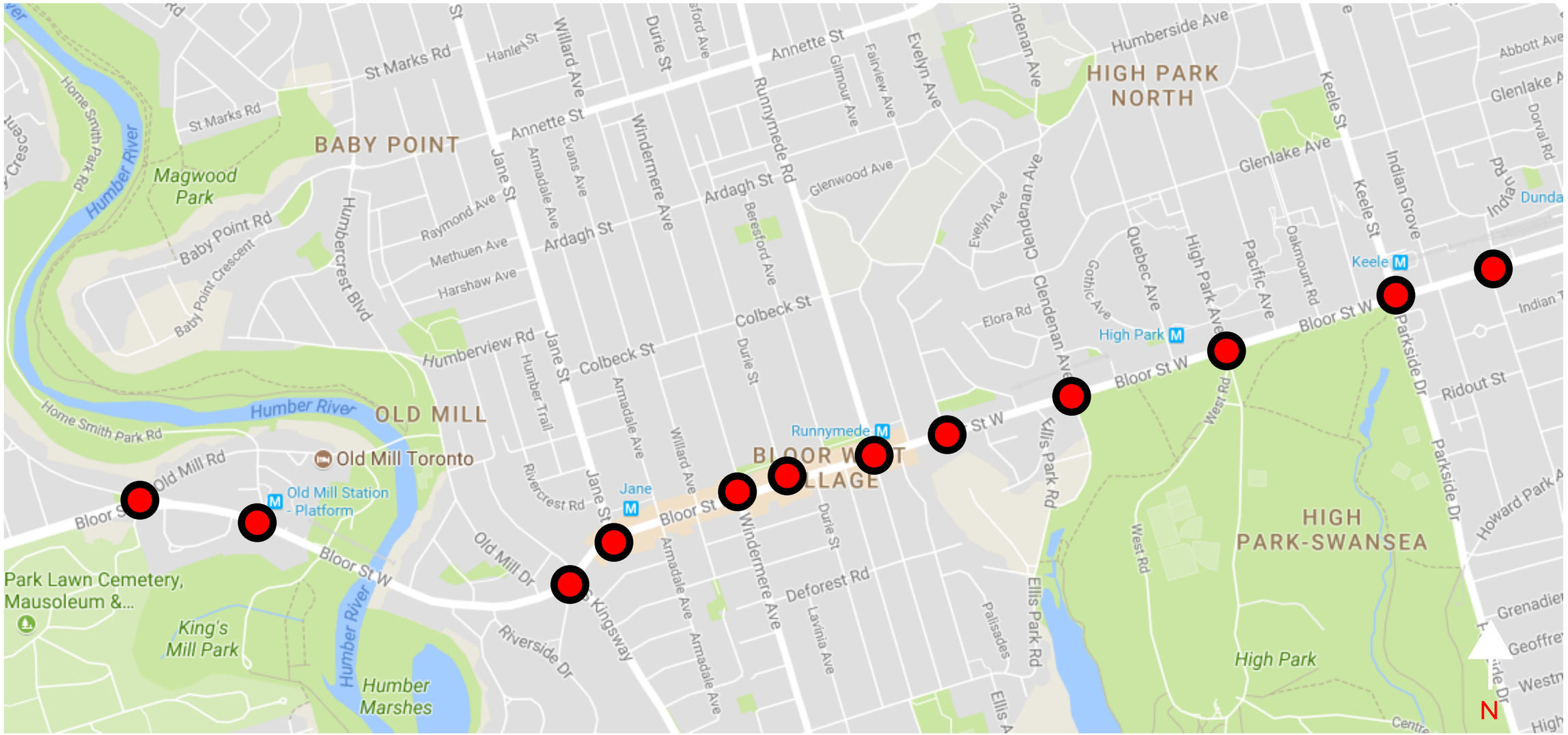
The City of Toronto provided recent traffic counts as well as signal timing plans for the signalized intersections in the study area for the Transportation Background Report. The same data is used for the future conditions analysis. However, only the signalized intersections are being analyzed. The traffic volume data and signal timing plans are provided in **Appendix B** and **Appendix C**, respectively.

The following intersections were analyzed:

- Bloor Street West & The Kingsway/Private Access Signalized;
- Bloor Street West & Old Mill Trail Signalized;
- Bloor Street West & South Kingsway/Riverview Gardens Signalized;
- Bloor Street West & Jane Street Signalized;
- Bloor Street West & Windermere Avenue Signalized;
- Bloor Street West & Durie Street (West Intersection) Signalized;
- Bloor Street West & Runnymede Road Signalized;
- Bloor Street West & Glendonwynne Road/Parking Lot Access Signalized;
- Bloor Street West & Clendenan Avenue Signalized;
- Bloor Street West & High Park Avenue/Colborne Lodge Drive Signalized;
- Bloor Street West & Keele Street/Parkside Drive Signalized; and
- Bloor Street West & Indian Road Signalized.

The study intersections are shown in **Figure 3**.

It should be noted that the intersection of Bloor Street West at Armadale Avenue was signalized after the study began, and thus is not included in the analysis.



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Signalized Intersection

Figure 3
Study Area Intersections

4 TRIP GENERATION

The trip generation associated with the proposed residential development was based on information provided in the Institute of Transportation Engineers' (ITE) Trip Generation (9th Edition). Residential Land Use code 220 (Apartment) was used to estimate the number of trips generated by the proposed additional units for the weekday a.m. and p.m. peak hours. The trip generation for the corridor is based on the four character areas. Trip generation for employment development was also considered. The employment development is envisioned primarily as ground floor retail space largely serving the surrounding local community. Thus they are expected to have high internal capture rates, and are not expected to draw any regional demand. Many of these establishments (e.g. coffee shops, dry cleaning and laundry services) open for business before the a.m. peak hour and often are open for business after the p.m. peak hour. Employees likely will arrive and depart outside of peak hours. Many employees and customers would be expected to arrive by foot or other non-auto modes as the establishments are in close proximity to residential areas. As the net increase in the number of jobs is only 70, and these jobs would be spread across the study area (not in one single building) and likely involve trips outside the peak travel hours, no trips have been added to the future conditions analysis for employment land uses.

The trip generation for the development areas is summarized in **Table 1.**

Table 1: Trip Generation

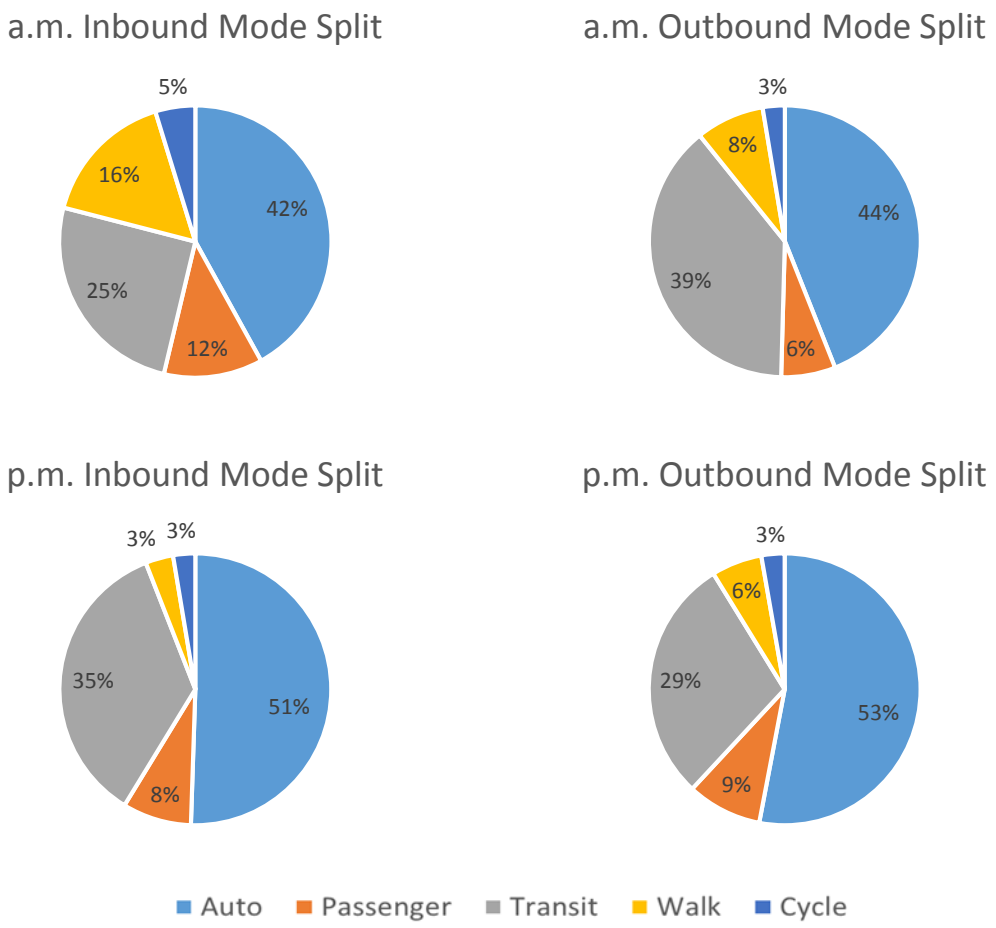
Area	ITE Category (ITE Code)	Independent Variable	Statistics					
			Weekday a.m. Peak Hour			Weekday p.m. Peak Hour		
			Inbd.	Outbd.	Total	Inbd.	Outbd.	Total
West Village Residential Development	**Apartment (220)**	**Equation (x = 247 Units)**	T = 0.49 X + 3.73			T = 0.55 X + 17.65		
		Directional Split	20%	80%	100%	65%	35%	100%
		Trips	**25**	**100**	**125**	**100**	**54**	**154**
Village Main Street Residential Development	**Apartment (220)**	**Equation (x = 428 Units)**	T = 0.49 X + 3.73			T = 0.55 X + 17.65		
		Directional Split	20%	80%	100%	65%	35%	100%
		Trips	**43**	**171**	**214**	**164**	**89**	**253**
East Village Residential Development	**Apartment (220)**	**Equation (x = 42 Units)**	T = 0.49 X + 3.73			T = 0.55 X + 17.65		
		Directional Split	20%	80%	100%	65%	35%	100%
		Trips	**5**	**19**	**24**	**26**	**14**	**40**
High Park Frontage Residential Development	**Apartment (220)**	**Equation (x = 208 Units)**	T = 0.49 X + 3.73			T = 0.55 X + 17.65		
		Directional Split	20%	80%	100%	65%	35%	100%
		Trips	**21**	**85**	**106**	**86**	**46**	**132**
Total			**94**	**375**	**460**	**377**	**203**	**570**

4.1 Mode Split Adjustment

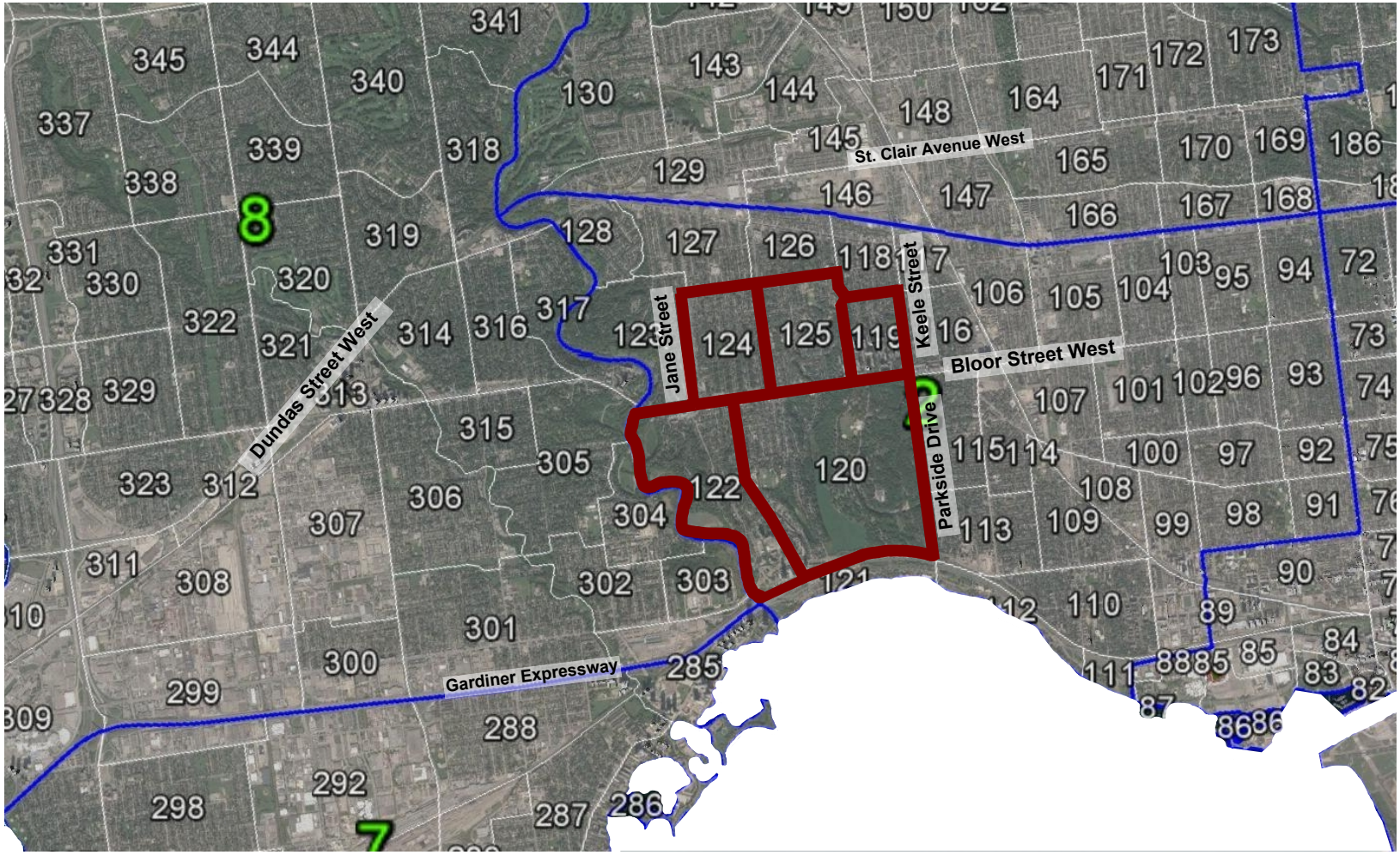
The modal split is based on Transportation Tomorrow Survey (TTS) 2011 data, using TTS zones within the study area to determine the portion of trips made using modes other than the single occupancy vehicle. The TTS is a household survey, recording travel patterns within the Greater Golden Horseshoe which is undertaken by the Transportation Information Steering Committee (TISC) once every five years. The Study Area lies within TTS Zones 119,120, 122, 124, and 125 as shown in **Figure 5**.

The percentage of trips assumed to be by various modes that was used in the analysis of future total traffic conditions is shown in **Figure 4**.

Figure 4: a.m. and p.m. Mode Split in TTS Study Area



The single occupant vehicle is not the primary mode of travel during the a.m. peak period in the TTS Study Area, with the other sustainable modes of travel accounting for 56-58% of the peak hour trips. During the p.m. peak period, single occupant vehicle is the primary mode of travel, accounting for 51-53% of the trips. The single occupant vehicle proportion (42-53%) is relatively lower in this GTA zone due to the close proximity of TTC subway and bus services.



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X TTS Zones
X TTS Planning Districts

TTS Zones Considered in Study Area

Figure 5
TTS ZONES

ITE trip rates are based on vehicle count surveys conducted in primarily automobile-centric and suburban areas. Since vehicle counts may not account for passenger trips, it is assumed that all ITE trips are single occupancy vehicle trips. The vehicle occupancy rate is derived by dividing the auto-passenger split by the auto-vehicle split. The ITE vehicular trips were then multiplied by the vehicle occupancy rate to obtain the total person trips for the study area. The total person trips were then split into their respective modes as per **Figure 4**, and the net number of vehicle trips were recalculated by dividing the auto person trips by the occupancy rate. **Table 2** summarizes the mode split and computation of the net vehicular trips.

Table 2: Net New Vehicular Trips

Primary Travel Mode	Modal Split Percentage			
	a.m. Peak Hour		p.m. Peak Hour	
	Inbound	Outbound	Inbound	Outbound
Auto – Driver	42%	44%	51%	53%
Auto – Passenger	12%	6%	8%	9%
Transit	25%	39%	35%	29%
Walking and Cycling	21%	11%	6%	9%
	Computation			
Equivalent Average Auto	1.29	1.14	1.16	1.17
ITE Trip Generation Raw Trips	**94**	**375**	**377**	**203**
Total Person Trips	120	426	435	237
Auto Person Trips	65	213	257	147
Transit Person Trips	30	166	152	69
Active Person Trips	25	47	26	21
Net Vehicular Trips	**51**	**187**	**222**	**126**

5 TRIP DISTRIBUTION AND ASSIGNMENT

5.1 Proposed Trip Distribution

The projected distribution for the trips generated by the proposed development is based on the 2011 TTS data. The trip distribution derived from the TTS data was adjusted based on the considerations relating to the local road network, specific land uses in the area and planned connections to the area road network.

The following conclusions are drawn from the TTS, with the resulting trip distribution summarized in **Table 3**.

- In the a.m. period, 50% of the inflow of trips to the study area arrive from northern neighbourhoods of Toronto;
- The existing a.m. outflow has 55% of trips going east;
- During the p.m. peak period, the TTS indicates that the majority of inbound trips arrive from the east (50%); and
- The p.m. outflow consists of 39% going east, 33% going north, 20% going west and 12% going south.

Table 3: Site Trip Distribution

Direction	a.m.		p.m.	
	Inbound	Outbound	Inbound	Outbound
North	50%	25%	26%	32%
South	12%	3%	3%	11%
East	33%	55%	50%	38%
West	5%	17%	21%	19%
Total	**100%**	**100%**	**100%**	**100%**

5.2 Trip Assignment

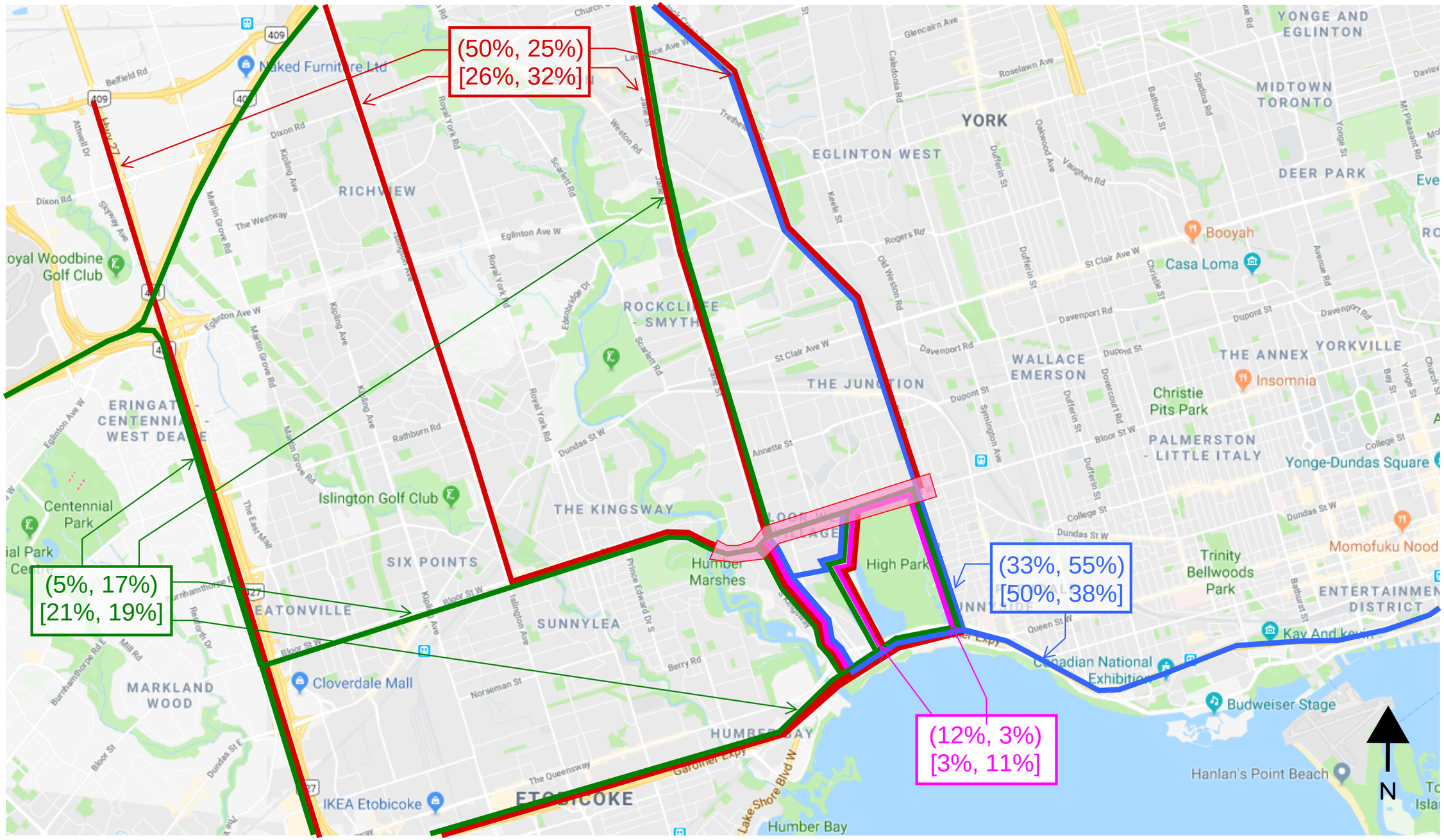
The resulting site trips were then assigned to individual roads in the road network based on the distribution described in **Section 5.1**.

For this study, artificial accesses to each character area were assumed for trip origins and destinations instead of assigning trips to each minor street and residential driveway.

Vehicular traffic would search out the most appropriate path. The major arterial roads such as Jane Street, Runnymede Road, South Kingsway, and Keele Street are the primary inflow and outflow points to Bloor West Village as these arterials provide connections to other areas of the City, Highway 401, the Gardiner Expressway and Queen Elizabeth Way depending on the travel direction. Trips related to each character area were assigned to the arterial road closest to the character area. For example, trips

related to the West Village and Main Street are more likely to use Jane Street and South Kingsway, while trips related to the High Park Frontage would use Keele Street/Parkside Drive. A small fraction of external trips destined eastward may travel along Bloor Street West. However, most of these trips are expected to be via transit and are therefore considered negligible in this analysis. The inbound and outbound routes for the study area related trips are shown in **Figure 6**.

Trips for each character area were assigned to the road network as per the above description and then superimposed to produce the overall trip assignment for the study area. The trip assignment is shown in **Figure 7.**



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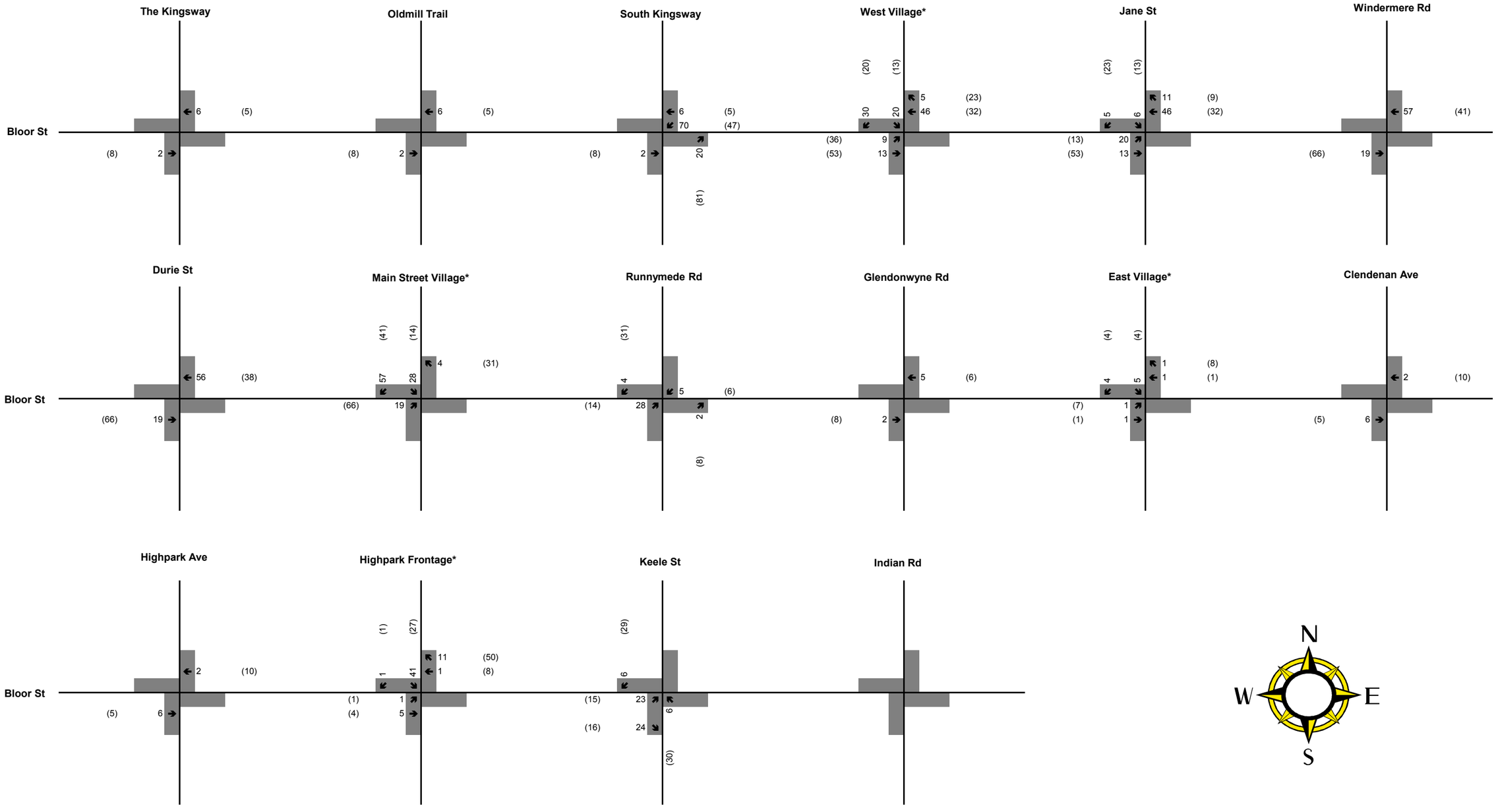
A.M. (Inbound%, Outbound%)
P.M. [Inbound%, Outbound%]

Study Area

North
East
South
West

Figure 6
Trip Assignment Routes



* Artificial node created to represent trip assignment to character area

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xx AM Peak Hour Volumes

(xx) PM Peak Hour Volumes

Figure 7
Trip Assignment for Proposed Developments

6 ALTERNATIVE SCENARIOS

Multiple alternatives were developed to explore cross sections possible within a 26.0m right-of-way based on the City's Complete Street Guidelines and other City standards. Bloor Street West is not proposed for modification by the City in the near future, and no alternative has been selected. The following alternative scenarios have been considered for the lane configurations along Bloor Street West. It should be noted that all three options require reconstruction with relocation of curbs.

Assumptions

The street cross section options were developed for the narrowest segment of the corridor with an existing 26.0m public right-of-way. Any option that fits within that dimension will also fit within the wider 30.0m segment. Options that maintain the existing curb locations would result in further lane reductions than shown, and thus were not considered based on traffic operations considerations and the role of this section of Bloor Street in the network, where only very limited crossings of the Humber River exist (the traffic implications are discussed further below). It is acknowledged that the City has implemented bike lanes on Bloor Street east of Shaw Street; the City may at some future point study the extension of the bike lanes further west, but that concept was beyond the scope of this study.

The preferred cycling infrastructure would be a protected bike lane/cycle track given the existing and future anticipated traffic volume and speed, and arrangement adjacent to parking lay-bys or off-peak parking lanes. However, the choices for bike facilities must recognize the constrained right-of-way.

The vehicle lanes widths and cycling infrastructure dimensions used in each option are in accordance with the City of Toronto Lane Width Guidelines (2017), On-Street Bikeway Design Guidelines (draft in-progress) and Complete Street Guidelines (2017). Sidewalk dimensions used in each section meet the minimum requirements as defined in the Mid-Rise Performance Standards, specific to the public right-of-way segments. The sidewalk dimensions can be a combination of public right-of-way and private setbacks. The existing private setbacks are typically 0.8m within the 26.0m segment. The minimum dimensions for all cross section elements are:

- Thru and turn lanes: 3.0m
- Curb lane with bus transit: 3.3m
- Parking layby: 2.4m
- Protected bike lane: 2.3m min (1.8m lane plus 0.5m buffer or, against parking, 1.5 m lane plus 0.8m buffer)
- Sidewalks: 4.8m in 26.0m ROW segment (combination of public right-of-way and setback)
- Sidewalks: 6.0m in 30.0m segment (combination of public right-of-way and setback)

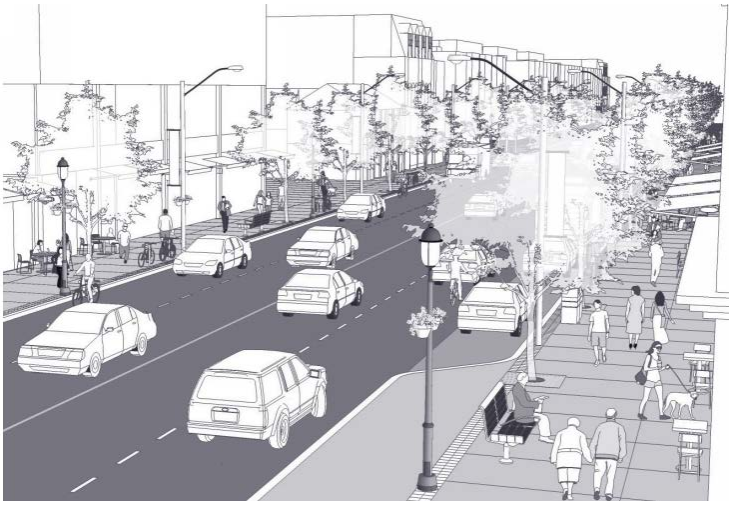
It is noted that the above dimensions for **cycling infrastructure** are minimum-width facilities that do not meet desirable minimum widths for cycle tracks. A 1.8m lane cannot accommodate overtaking within the cycle track unless the lane and buffer are raised to sidewalk level and there are clear zones on either side of the 1.8 m lane. A 1.5 m lane cannot accommodate overtaking in any scenario. A minimum width of 2.0 m + buffer is required to accommodate overtaking if the facility is bound by a raised curb(s).

6.1 Option Zero – Do Nothing

Option Zero ("Do Nothing") maintains the existing cross-section along Bloor Street West. The existing cross section consists of two vehicle travel lanes in the eastbound and westbound directions, no dedicated cycling facilities along the roadway, and boulevards exceeding 5 metres in width in some areas. Off-peak parking is permitted along the north side of Bloor Street West while some lay-by parking bays are available in select areas along the south side of Bloor Street West.

A typical section of Bloor Street West is shown in **Figure 8**, and some advantages and disadvantages of this Option are summarized below.

Figure 8: Option Zero Rendering of Bloor Street West (Mid-Block Conditions)



Advantages

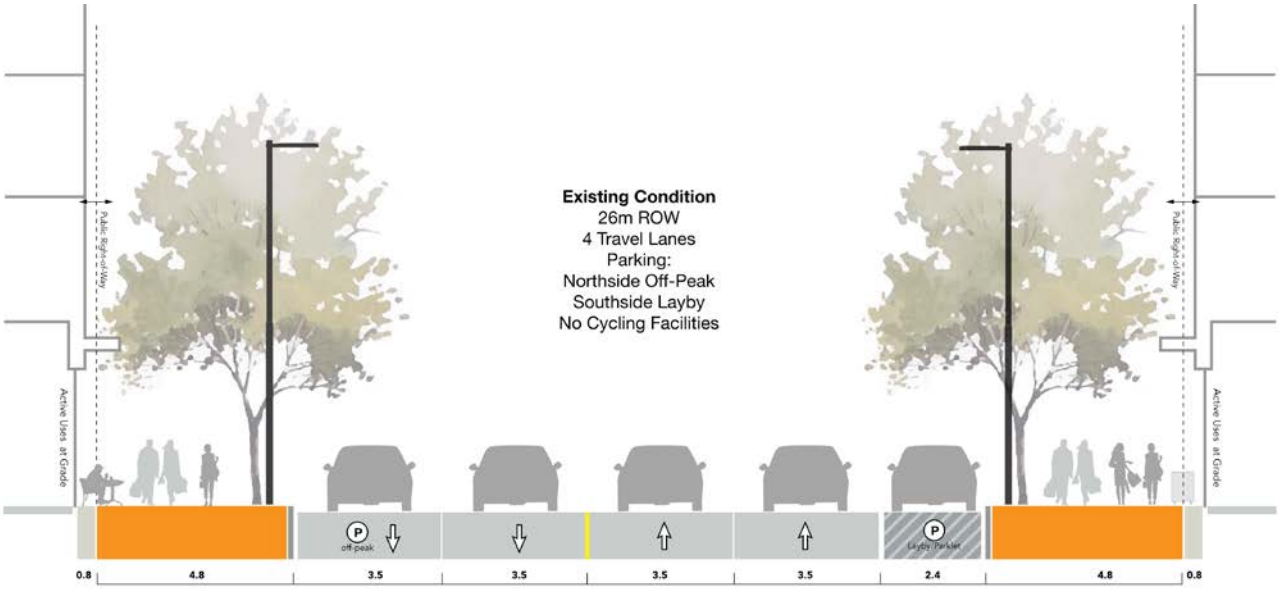
- wider sidewalk widths than minimum standards
- south side parking full time
- parking north side off-peak

Disadvantages

- no designated cycling infrastructure
- inconsistent lanes and curbside in eastbound direction, potentially impacting safety

A cross-section showing the existing boulevard and lane widths is shown in **Figure 9**.

Figure 9: Existing Bloor Street Cross Section (Mid-Block Conditions)

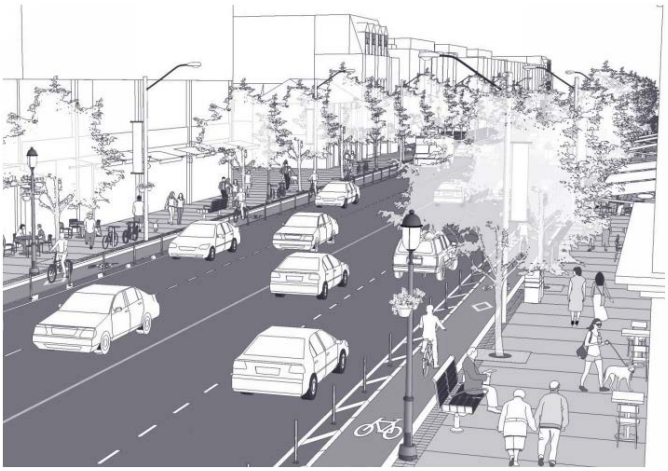


6.2 Option 1 – 2 Lanes In Each Direction

Option 1 maintains the two lane cross-section eastbound and westbound, but removes some left turn lanes at selected intersections to accommodate bike facilities and wider sidewalks. Some intersections in this scenario will have a shared through-left lane and a shared through-right lane in both the eastbound and westbound directions. There will also be off-peak parking permitted on both sides of Bloor Street West. One-way cycle tracks would be provided on each side of the street.

A typical section of Bloor Street West is shown in **Figure 10**, and some advantages and disadvantages of this Option are summarized on the following page.

Figure 10: Option 1 Rendering of Bloor Street West (Mid-Block Conditions)



Advantages

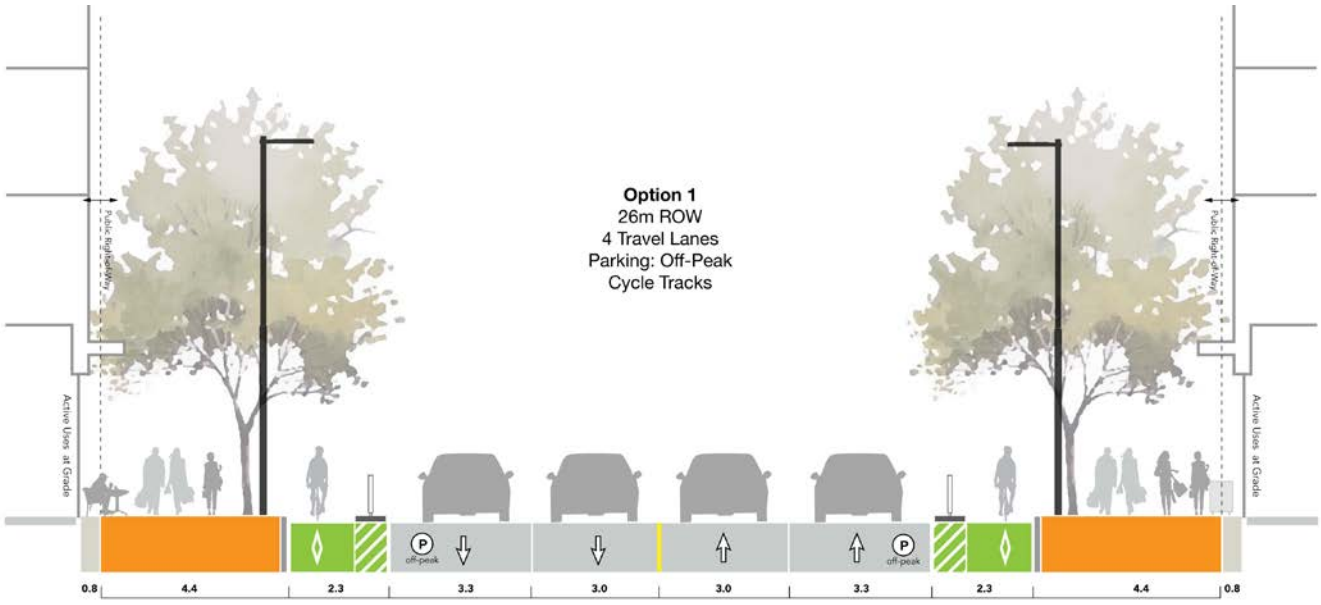
- maintain two travel lanes in each direction during peak hours
- maintain parking both sides (during off-peak)
- addition of protected cycle facilities
- consistent cross section improves predictability

Disadvantages

- reduces eastbound off-peak travel lanes (-1)
- removal of south side full-time parking
- minor reduction of sidewalks but still exceed target of 4.8, (4.4m in ROW plus 0.8m setback = 5.2m)
- removal of some left hand turn lanes in 26.0m ROW
- cycle track must have 0.8m buffer along parking which may still result in a chance of dooring, though much lower than a driver-side bike lane
- resulting bike lane of 1.5m can only accommodate single-file cycling with no possibility of overtaking

A cross-section showing the boulevard and lane widths for Option 1 is shown in **Figure 11**.

Figure 11: Option 1 Bloor Street Cross Section (Mid-Block Conditions)



6.3 Option 2 – 1 Lane Per Direction

Option 2 is proposed to provide a three lane cross-section; one lane in the eastbound and westbound directions, and a centre two-way left turn lane. In this option, dedicated left turn lanes remain with a shared through-right in both the eastbound and westbound directions. In this scenario, there will be layby parking on the south side with a buffered bike lane, and midblock parking on the north side with a cycle track.

A typical section of Bloor Street West is shown in **Figure 12**, and some advantages and disadvantages of this option are summarized below.

Figure 12: Option 2 Rendering of Bloor Street West (Mid-Block Conditions)

Advantages

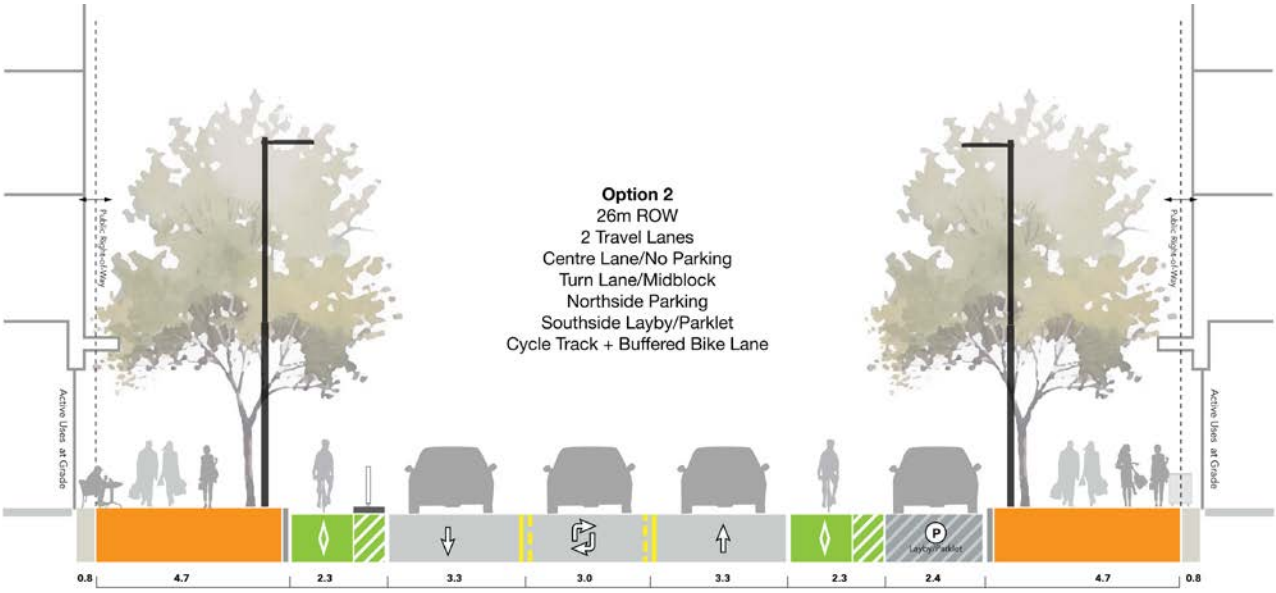
- turn lane at each intersection improves predictability
- maintains some parking both sides
- addition of cycling facilities
- consistent cross section improves predictability

Disadvantages

- reduces peak hour travel lanes in both directions
- minor reduction of sidewalks but still exceeds target of 4.8m (4.7m in ROW plus 0.8m setback = 5.5m)
- cars accessing parking bays must cross bike lane, potentially impacting cyclist safety due to high turnover rates
- no pick-up/drop-off area on north side

A cross-section showing the boulevard and lane widths for Option 2 is shown in **Figure 13.**

Figure 13: Option 2 Cross Section (Mid-Block Conditions)



6.4 Option 3 – 1 Lane Eastbound, 2 Lanes Westbound

Option 3 consists of one eastbound lane and two westbound lanes. This is based on the observed traffic volumes in each direction, which are consistently heavier westbound. There would be off-peak parking on the north side and layby parking on the south side. The westbound direction would have a dedicated left turn lane with two through lanes while the eastbound direction will have a left turn lane and a shared through-right lane at key intersections. Cycle tracks will be provided on both sides of the roadway.

A typical section of Bloor Street West is shown in **Figure 14**, and some advantages and disadvantages of this option are summarized below.

Figure 14: Option 3 Rendering of Bloor Street West (Mid-Block Conditions)

Advantages

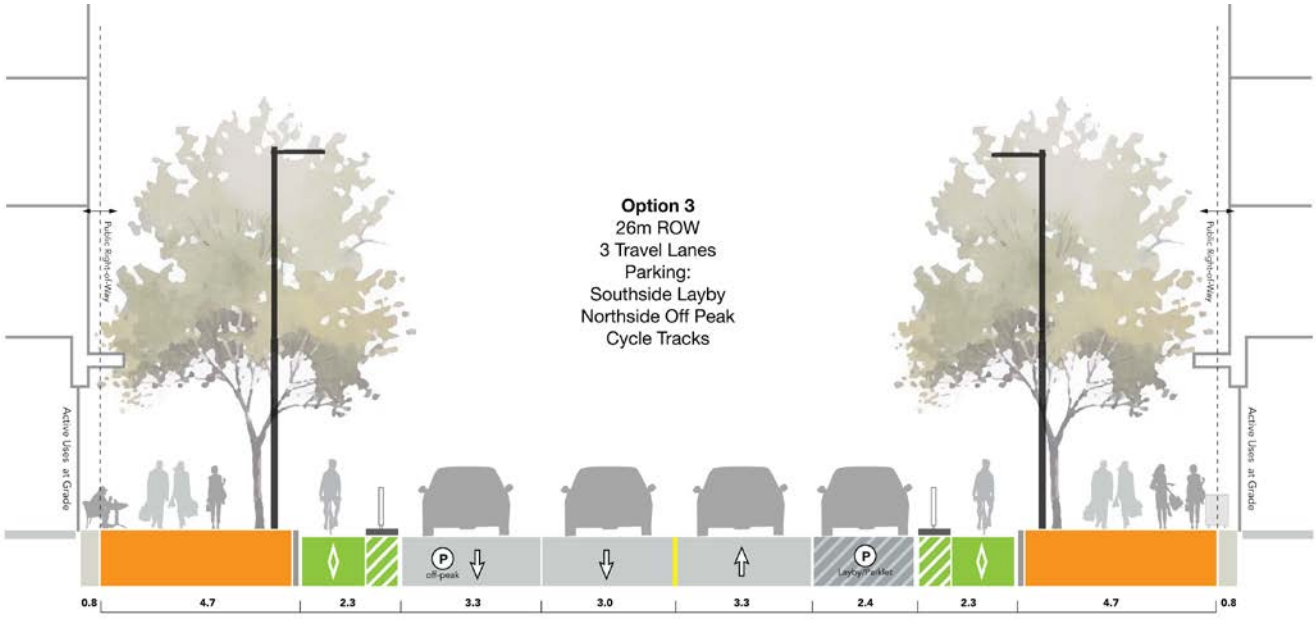
- maintains two travel lanes in westbound direction
- turn lane at key intersections
- south side parking full time
- parking north side off-peak
- addition of protected cycling facilities

Disadvantages

- reduces eastbound off-peak travel lanes (-1)
- minor reduction of sidewalks but still exceed target of 4.8m (4.7m in ROW plus 0.4m setback = 5.5m)
- may need to reconfigure the street in future if vehicle demand patterns change significantly
- no pick-up/drop-off area on south side

A cross-section showing the boulevard and lane widths for Option 3 is shown in **Figure 15.**

Figure 15: Option 3 Cross Section (Mid-Block Conditions)



6.5 Streetscape

The intent of the Avenue Study street design exercise was to establish a preferred cross section with sidewalk and roadway zones, not to define a specific design character. Each of the options but include the same sidewalk zone components and streetscape elements:

- Curb and Edge Zone: 0.2m
- Furnishing Zone for trees in trench detail, street lighting and amenities: minimum 1.5m
- Pedestrian Clearway Zone: minimum 2.1m
- Frontage and Marketing Zone: dimension depends on width of Pedestrian Clearway Zone and Furnishing Zone.

7 TOTAL FUTURE TRAFFIC CONDITIONS

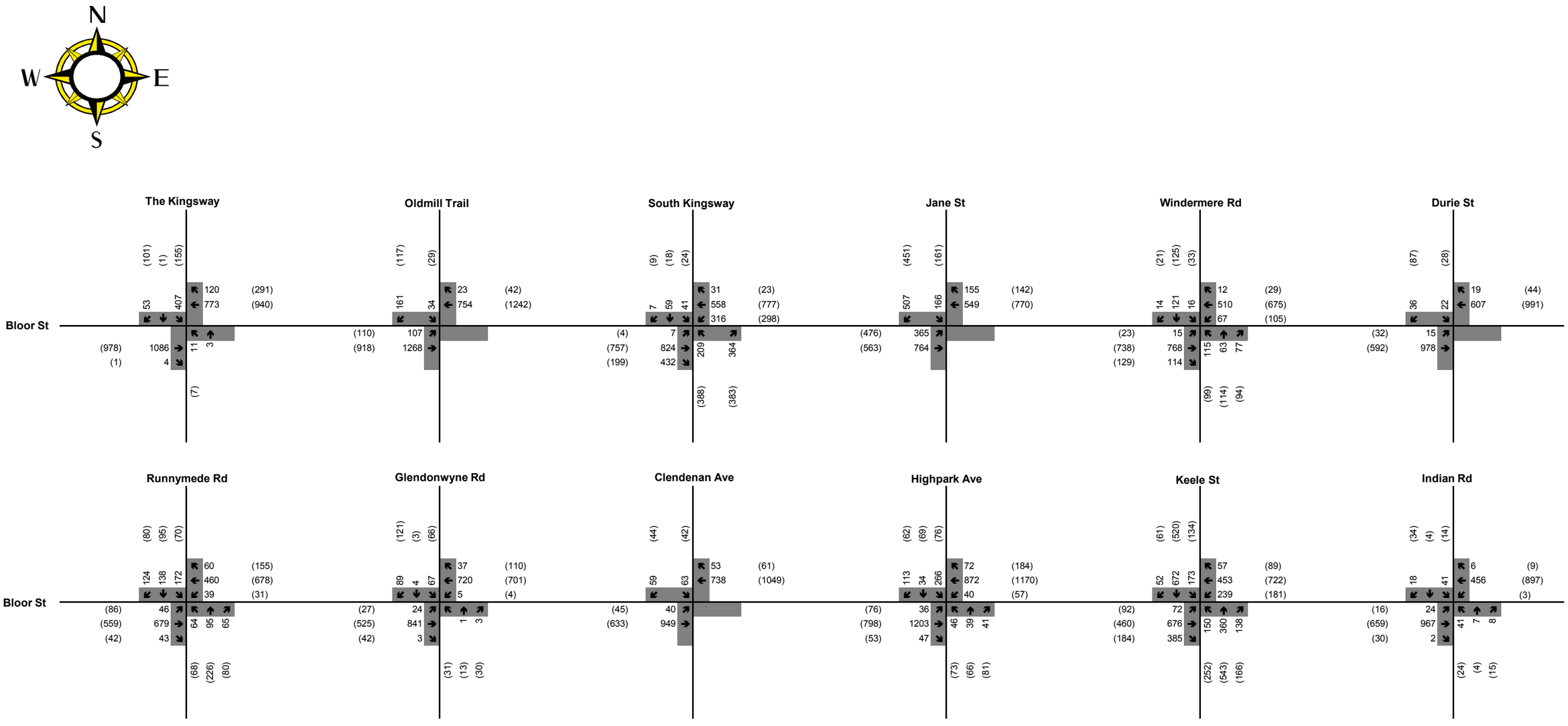
The existing traffic volumes of the studied intersections are provided in **Figure 16**. The total future traffic volumes, shown in **Figure 17**, were determined by adding the net site generated trips to the existing traffic volumes. The total traffic conditions also includes existing traffic volumes grown by an annual rate of 0.25% to the horizon year 2027, to reflect traffic growth due to development outside the study area. This rate has been accepted by the City to apply a modest conservative background growth rate for the Bloor Street West Corridor while historical traffic data has shown 0% (or slightly below) growth along the corridor.

7.1 Intersection Capacity Analysis

Capacity analyses were undertaken using the Synchro 9 traffic analysis software to analyze future (year 2027) traffic conditions in the study area for each of the four options for Bloor Street West. An intersection capacity analysis provides an indication of traffic operations based on calculations of volume-to-capacity (v/c) and delays for individual movements at an intersection. Level of Service (LOS) denoted by letters 'A' through 'D', represent satisfactory traffic operations. LOS denoted by the letters 'E' and 'F' represent congested traffic operations. The Level of Service definitions for signalized and unsignalized intersections are included in **Appendix D**.

Each alternative was modelled in Synchro to conduct an intersection capacity analysis using the projected residential growth volumes. The existing signal timing plan at the intersections were optimized to accommodate the growth in volumes and change in lane configurations.

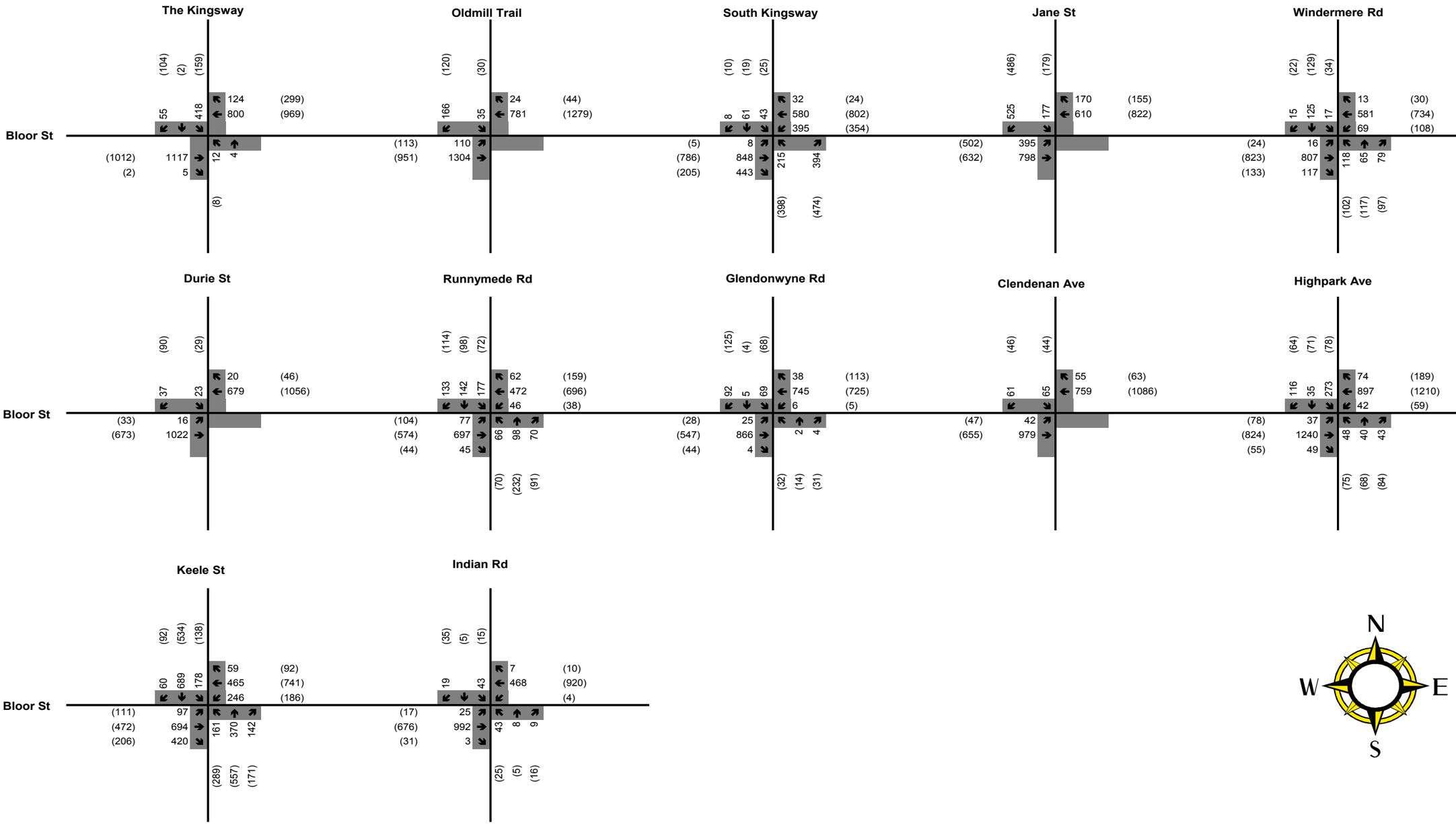
The overall level of service has been reported for each intersection and individual turning movements with volume to capacity ratios of 0.85 or greater have been identified.



xx AM Peak Hour Volumes
(xx) PM Peak Hour Volumes

LEGEND

Figure 16
Existing Traffic Volumes



LEGEND

xx AM Peak Hour Volumes

(xx) PM Peak Hour Volumes

Figure 17

Future Total Traffic Volumes

7.1.1 Option Zero – Do Nothing

The analysis of future total traffic conditions on the existing network during the weekday peak hours is summarized in **Table 4**, and detailed intersection capacity analysis sheets are included in **Appendix E**. The lane configuration of this option is shown in **Figure 18**.

Table 4: Analysis of Future Conditions for Option Zero

Intersection	Control Type	a.m. Peak Hour		a.m. Peak Hour	
		LOS Delay in Seconds	Critical Movements[1] (v/c)	LOS Delay in Seconds	Critical Movements[1] (v/c)
Bloor Street West/ The Kingsway/Private Access	Signalized	C (27)	SB-L (0.98)	B (16)	--
Bloor Street West/ Old Mill Trail	Signalized	A (9)	--	B (12)	--
Bloor Street West / South Kingsway/ Riverview Gardens	Signalized	D (38)	EB-T (0.94) WB-L (0.96)	C (35)	WB-L (0.92) NB-L (0.93)
Bloor Street West/ Jane Street	Signalized	B (18)	--	C (27)	EB-L (0.85)
Bloor Street West / Windermere Avenue	Signalized	B (13)	--	B (16)	--
Bloor Street West / Durie Street (West Intersection)	Signalized	A (5)	--	B (15)	--
Bloor Street West / Runnymede Road	Signalized	C (21)	--	C (20)	--
Bloor Street West / Glendonwynne Road/ Parking Lot Access	Signalized	B (10)	--	B (12)	--
Bloor Street West / Clendenan Avenue/ Wendigo Way	Signalized	A (7)	--	A (5)	--
Bloor Street West / High Park Avenue/ Colborne Lodge Drive	Signalized	D (35)	SB-LTR (0.93)	B (19)	--
Bloor Street West / Keele/Parkside Drive	Signalized	D (36)	--	C (31)	--
Bloor Street West / Indian Road	Signalized	B (10)	--	B (13)	--

Notes: 1. Critical movements are those with a volume-to-capacity ratio exceeding 0.85 for a signalized intersection.
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L= left; T = through; R = right

All of the study intersections are forecast to operate at acceptable levels of service with minimal delay during the weekday a.m. and p.m. peak hours.

The intersections of Bloor Street West at The Kingsway, South Kingsway/Riverview Gardens, Jane Street, and High Park Avenue / Colborne Lodge Drive are forecast to operate near capacity on select movements during the weekday a.m. and p.m. peak hours.

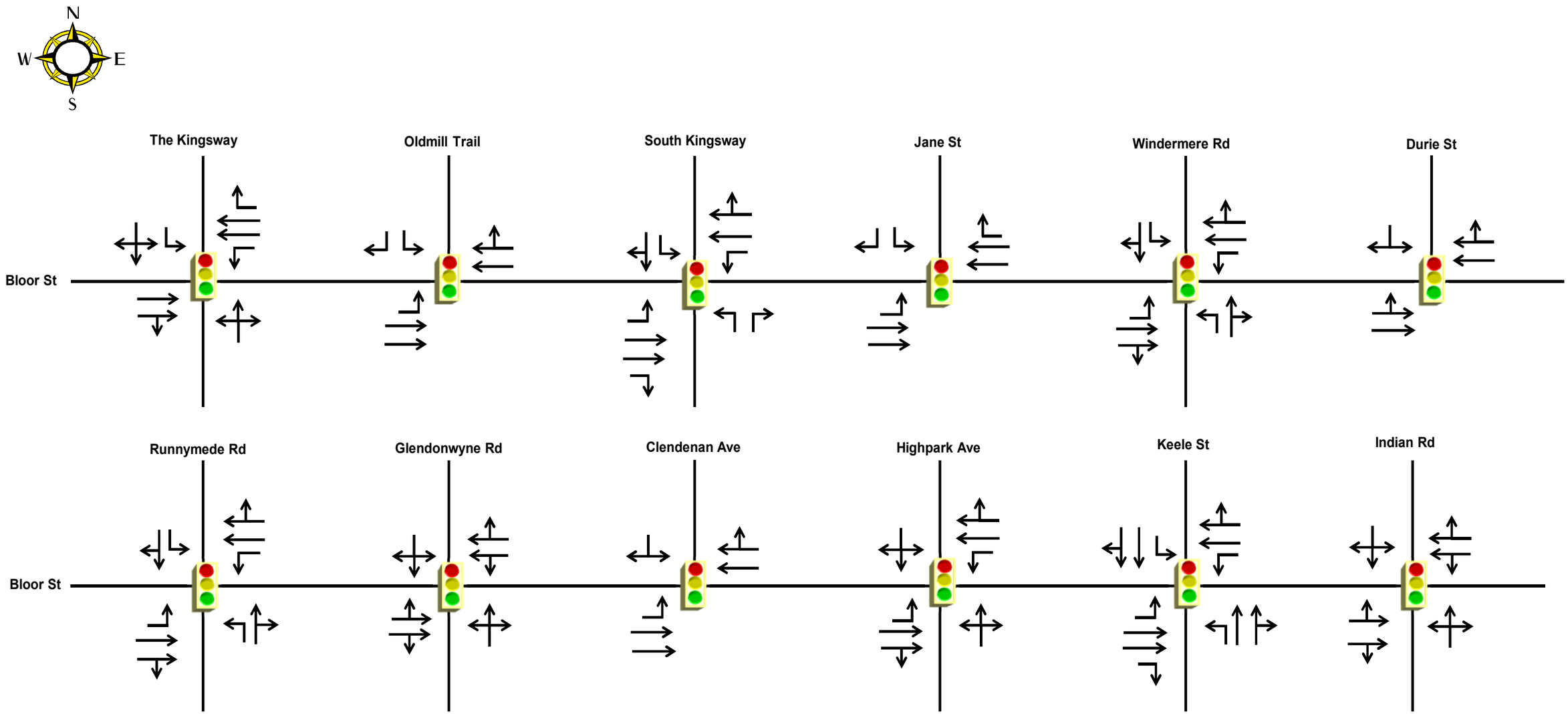


Figure 18
Existing Lane Configurations

7.1.2 Option 1 – 2 Lanes In Each Direction

The analyses of future total traffic conditions for Option 1 during the weekday peak hours are summarized in **Table 5**, and detailed intersection capacity analysis sheets are included in **Appendix F**. The lane configuration of this option is shown in **Figure 19**. Signal timing plans were optimized to account for the change in lane configuration.

Table 5: Analysis of Future Conditions with Option 1

Intersection	Control Type	a.m. Peak Hour		p.m. Peak Hour	
		LOS Delay in Seconds	Critical Movements[1] (v/c)	LOS Delay in Seconds	Critical Movements[1] (v/c)
Bloor Street West/ The Kingsway /Private Access	Signalized	C (24)	SB-L (0.98)	A (9)	
Bloor Street West/ Old Mill Trail	Signalized	A (8)		A (6)	
Bloor Street West / South Kingsway/ Riverview Gardens	Signalized	E (65)	EB-LTR (0.99) WB-LTR (3.55dl) NB-R (0.86)	F (96)	WB-LTR (3.56dl) NB-L (0.93) NB-R (0.85)
Bloor Street West / Jane Street	Signalized	B (18)		D (36)	EB-L (0.85)
Bloor Street West / Windermere Avenue	Signalized	B (13)		B (17)	
Bloor Street West / Durie Street (West Intersection)	Signalized	A (6)		B (13)	
Bloor Street West / Runnymede Road	Signalized	C (22)		C (21)	
Bloor Street West / Glendonwynne Road/ Parking Lot Access	Signalized	A (9)		B (11)	
Bloor Street West / Clendenan Avenue/ Wendigo Way	Signalized	A (7)		A (5)	
Bloor Street West / High Park Avenue/ Colborne Lodge Drive	Signalized	D (48)	EB-LTR (0.93) WB-TR (0.94) SB-LTR (0.96)	C (22)	
Bloor Street West / Keele/Parkside Drive	Signalized	D (36)		C (30)	
Bloor Street West / Indian Road	Signalized	A (9)		B (11)	

Notes: 1. Critical movements are those with a volume-to-capacity ratio exceeding 0.85 for a signalized intersection.
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L= left; T = through; R = right

The analysis shows that the majority of the intersections are forecast to operate within capacity at acceptable levels of service during the weekday a.m. and p.m. peak hours in this scenario. Select intersections that are operating with capacity constraints are discussed below.

The intersection of Bloor Street West and South Kingsway/Riverview Gardens is projected to operate at LOS “E” during the a.m. peak hour and LOS “F” during p.m. peak hour. The westbound movements are forecast to operate over capacity, while the eastbound and northbound movements are approaching capacity. Sufficient space is however available within the existing right-of-way to accommodate an exclusive westbound left-turn lane, which is expected to improve the intersection operation.

The intersection of Bloor Street West at High Park Avenue/Colborne Lodge Drive is projected to operate at a LOS “D” during the a.m. peak hour, with the eastbound and southbound through left movement and westbound through movements approaching capacity during the a.m. peak hour.

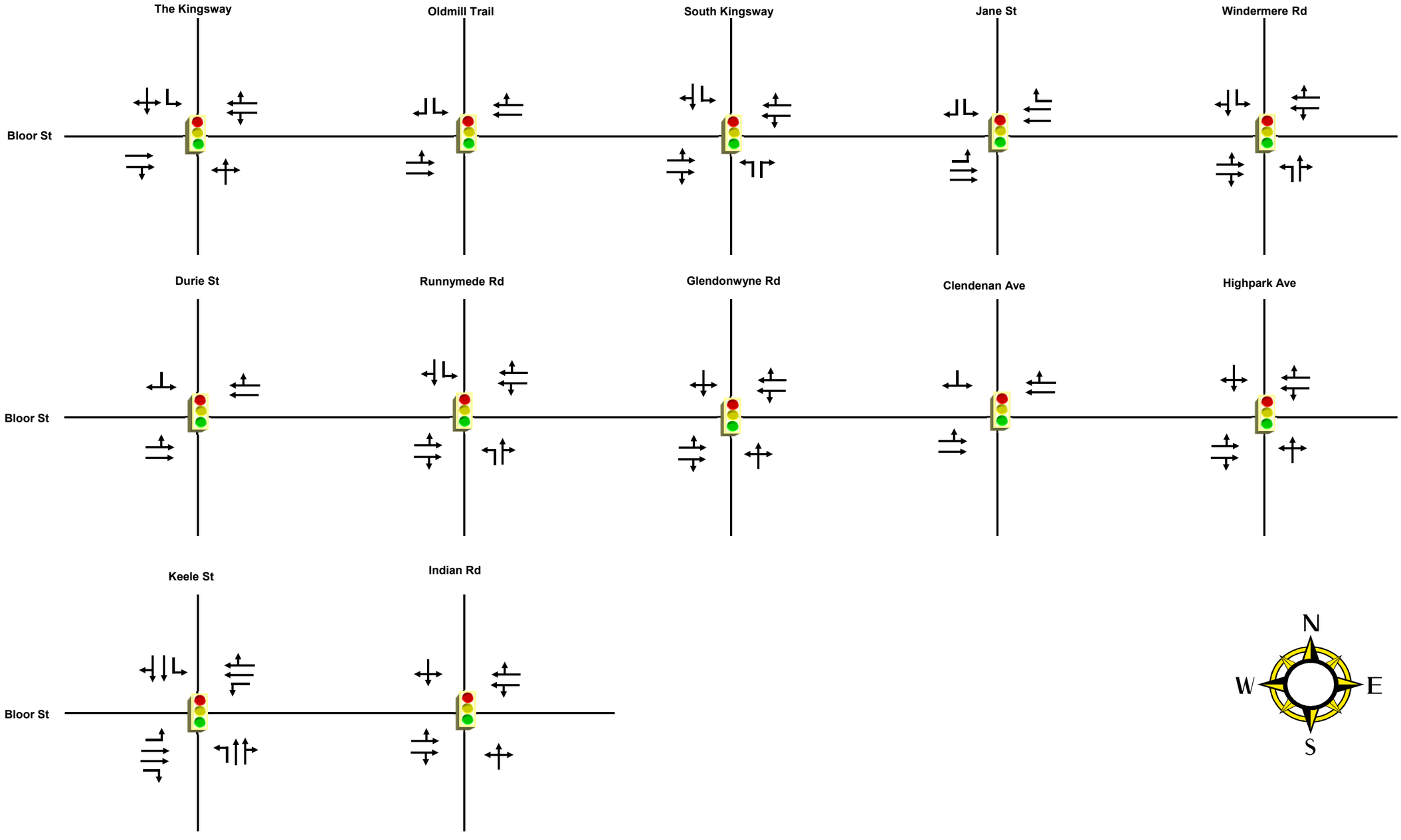


Figure 19
Option 1 - Lane Configuration

7.1.3 Option 2 – 1 Lane Per Direction

The analyses of future total traffic conditions for Option 2 during the weekday peak hours are summarized in **Table 6**, and detailed intersection capacity analysis sheets are included in **Appendix G**. The lane configuration of this option is shown in **Figure 20**. Signal timing plans were modified and optimized to accommodate the change in lane configuration.

Table 6: Analysis of Future Conditions with Option 2

Intersections	Control Type	a.m. Peak Hour		p.m. Peak Hour	
		LOS Delay in Seconds	Critical Movements[1] (v/c)	LOS Delay in Seconds	Critical Movements[1] (v/c)
Bloor Street West / The Kingsway/Private Access	Signalized	E (63)	EB-TR (0.95) SB-L (1.60) SB-LTR (0.97)	D (35)	WB-TR (1.02) SB-L (1.25)
Bloor Street West / Old Mill Trail	Signalized	B (18)	EB-T (0.93)	D (50)	WB-TR (1.12)
Bloor Street West / South Kingsway / Riverview Gardens	Signalized	F (303)	EB-TR (2.15) WB-L (1.87)	F (200)	EB-TR (2.01) WB-L (1.00) WB-TR (0.93) NB-L (0.91)
Bloor Street West / Jane Street	Signalized	C (24)		C (27)	EB-L (0.85)
Bloor Street West / Windermere Avenue	Signalized	C (26)	EB-TR (0.95)	D (37)	EB-TR (0.91) WB-L (0.89)
Bloor Street West / Durie Street (West Intersection)	Signalized	C (22)	EB-TL (0.96)	C (24)	EB-TL (0.92) WB-TR (0.91)
Bloor Street West / Runnymede Road	Signalized	C (29)	SB-L (0.91)	D (38)	WB-TR (0.98) NB-TR (0.90)
Bloor Street West / Glendonwynne Road/Parking Lot Access	Signalized	B (17)		C (22)	
Bloor Street West / Clendenan Avenue/ Wendigo Way	Signalized	B (13)		D (38)	WB-TR (1.09)

Intersections	Control Type	a.m. Peak Hour		p.m. Peak Hour	
		LOS Delay in Seconds	Critical Movements[1] (v/c)	LOS Delay in Seconds	Critical Movements[1] (v/c)
Bloor Street West / High Park Avenue/ Colborne Lodge Drive	Signalized	F (127)	EB-TR (1.28) WB-TR (1.09) SB-LTR (1.26)	F (95)	EB-L (1.23) WB-TR (1.26) NB-LTR (0.90) SB-LTR (0.86)
Bloor Street West / Keele/Parkside Drive	Signalized	D (40)	WB-LTR (1.67dl) SB-TR (0.97)	D (49)	WB-LTR (1.00) NB-L (1.09) SB-L (1.05)
Bloor Street West / Indian Road	Signalized	C (26)	EB-LTR (0.96)	C (26)	WB-LTR (0.89)

Notes: 1. *Critical movements are those with a volume-to-capacity ratio exceeding 0.85 for a signalized intersection.*
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L= left; T = through; R = right

The analysis shows that the majority of the intersections are forecast to operate with acceptable Level of Service during the weekday a.m. and p.m. peak hours. Select intersections that are operating with capacity constraints are discussed below.

The intersection of Bloor Street West at South Kingsway/Riverview Gardens and High Park Avenue/Colborne Lodge Drive are both projected operate at LOS “F” during the a.m. and p.m. peak hour with substantial delay and several movements operating over capacity.

Other intersections that are forecast to theoretically exhibit movements with a V/C ratio greater than 1 include Bloor Street West at The Kingsway, Old Mill Trail, Clendenan Avenue, and Keele Street/Parkside Drive.

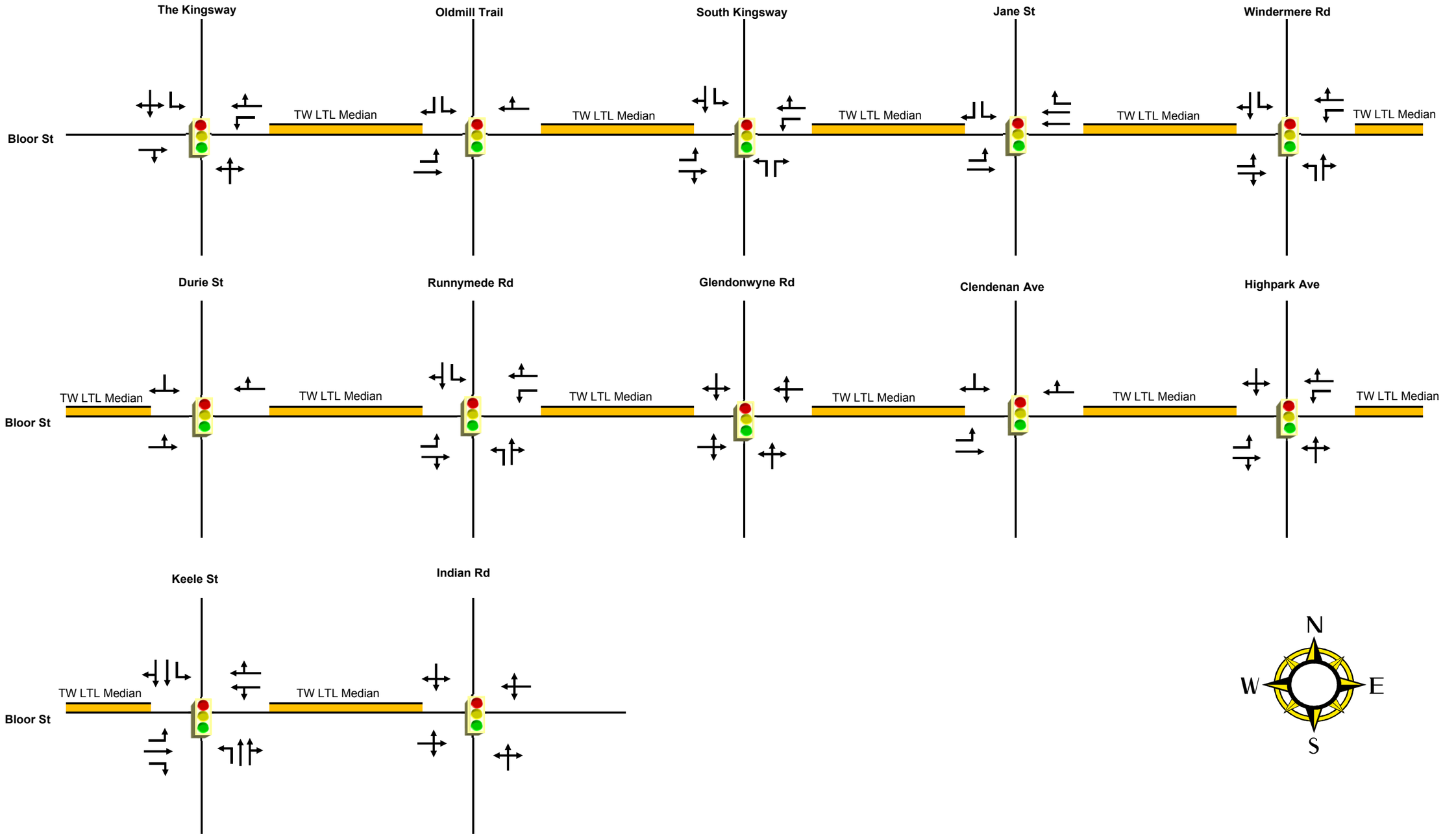


Figure 20
Option 2 - Lane Configuration

7.1.4 Option 3 – 1 Lane Eastbound, 2 Lanes Westbound

The analysis of future total traffic conditions for Option 3 during the weekday peak hours are summarized in **Table 7**, and detailed intersection capacity analysis sheets are included in **Appendix H**. The lane configuration of this option is shown in **Figure 21**. Signal timing plans have been modified to accommodate the change in lane configuration.

Table 7: Analysis of Future Conditions with Option 3

Intersection	Control Type	a.m. Peak Hour		p.m. Peak Hour	
		LOS Delay in Seconds	Critical Movements[1] (v/c)	LOS[1] Delay in Seconds	Critical Movements[1] (v/c)
Bloor Street West / The Kingsway / Private Access	Signalized	D (48)	EB-TR (1.06) SB-L (0.98)	C (21)	
Bloor Street West / Old Mill Trail	Signalized	E (65)	EB-TL (1.20)	E (68)	EB-TL (1.27)
Bloor Street West / South Kingsway / Riverview Gardens	Signalized	F (434)	EB-TR (3.12) WB-L (0.96)	F (145)	EB-TR (1.58) WB-L (1.51) NB-L (0.93)
Bloor Street West / Jane Street	Signalized	C (24)		C (27)	EB-L (0.85)
Bloor Street West / Windermere Avenue	Signalized	C (26)	EB-TR (0.95)	C (27)	EB-TR (0.91) WB-LTR (0.89dl)
Bloor Street West / Durie Street (West Intersection)	Signalized	B (20)	EB-TL (0.97)	B (18)	EB-TL (0.89)
Bloor Street West / Runnymede Road	Signalized	C (29)	SB-L (0.86)	C (25)	
Bloor Street West / Glendonwynne Road / Parking Lot Access	Signalized	B (14)		B (13)	
Bloor Street West / Clendenan Avenue/Wendigo Way	Signalized	B (12)		A (7)	
Bloor Street West / High Park Avenue /	Signalized	F (110)	EB-TR (1.26) WB-LTR	C (34)	WB-LTR (0.95) NB-LTR (0.89)

Intersection	Control Type	a.m. Peak Hour		p.m. Peak Hour	
		LOS Delay in Seconds	Critical Movements[1] (v/c)	LOS[1] Delay in Seconds	Critical Movements[1] (v/c)
Colborne Lodge Drive			(0.98) SB-LTR (1.27)		
Bloor Street West / Keel/Parkside Drive	Signalized	D (40)	WB-LTR (1.73dl) SB-TR (0.95)	D (49)	EB-L (0.85) WB-LTR (1.03) NB-L (1.03) SB-L (1.05)
Bloor Street West / Indian Road	Signalized	C (26)	EB-LTR (0.97)	B (16)	

Notes: 1. Critical movements are those with a volume-to-capacity ratio exceeding 0.85 for a signalized intersection.
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L= left; T = through; R = right

The analysis shows that the majority of the intersections are forecast to operate at acceptable Levels of Service with some capacity constraints during the weekday a.m. and p.m. peak hours. In this scenario, more intersections compared to Option 2 are operating below capacity. Select intersections that are projected to operate with capacity constraints are discussed below.

The intersection of Bloor Street West at the South Kingsway and High Park Avenue, are both projected to operate at LOS “F” during the a.m. and p.m. peak hours, with several movements over capacity.

Other intersections that are projected to have movements with a V/C ratio greater than 1 include Bloor Street West at The Kingsway, Old Mill Trail, and Keele Street.

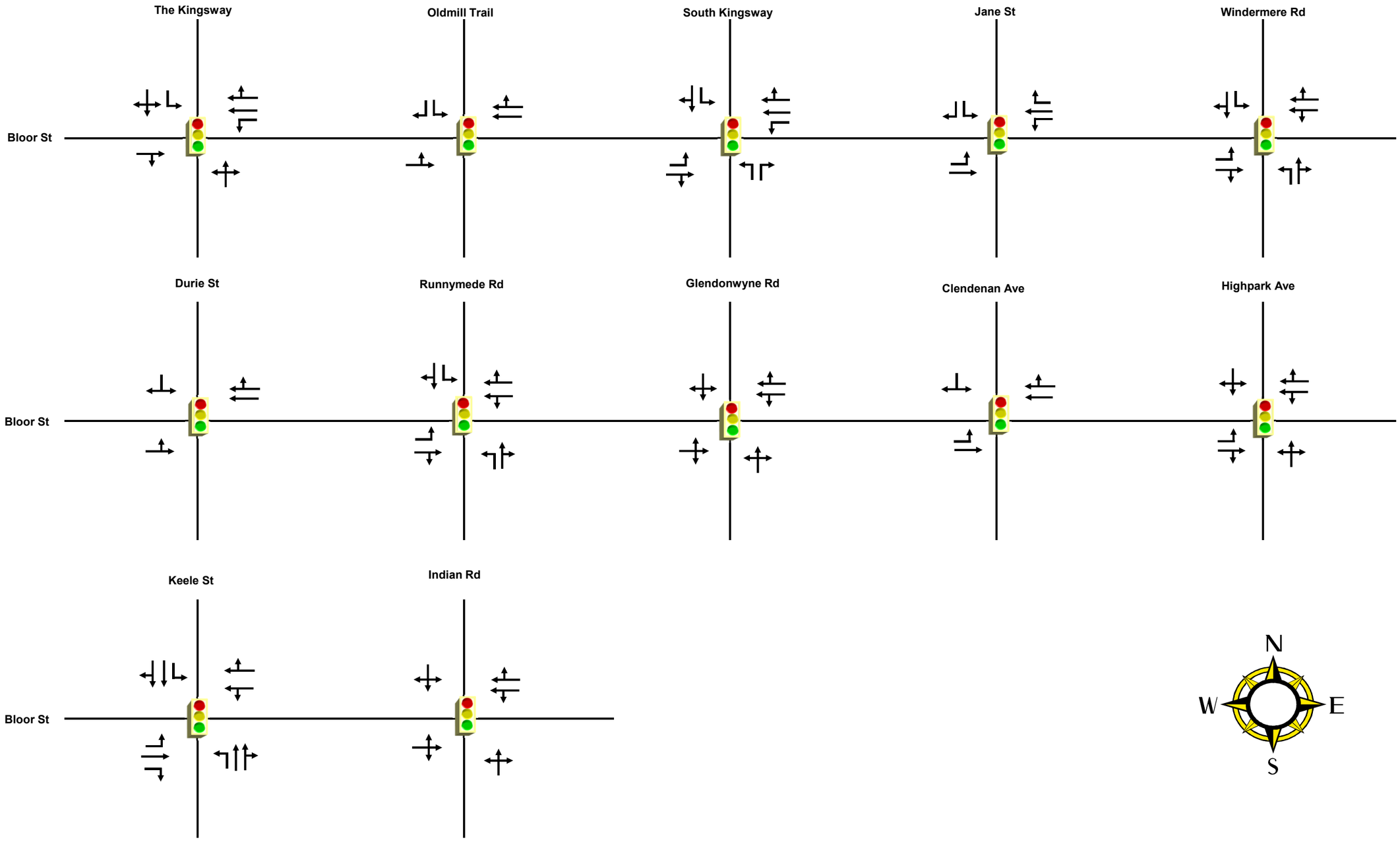


Figure 21

Option 3 - Lane Configuration

8 SUMMARY OF ALTERNATIVES

Given the project objectives and available space within the public right-of-way, none of the options as presented are possible without street reconstruction. Option 2 could potentially fit within the existing curb-to-curb dimensions but only if vehicle lanes, cycling facilities, and/or parking layby are reduced to less than the recommended guideline widths.

Option 3 would have the least impact on the cross-section at major intersections where turning lanes would be required.

Option 1 is the preferred cross-section following the transportation analysis in **Section 7**, and is also the most suitable option for the 30.0m segment west of Armadale Avenue. The additional 3.0 metres in the public right-of-way allows for a dedicated left turn lane. All other elements remain the same, providing rational and predictable transition between segments. It is observed to provide the best balance among the various modes, taking the need for parking and pick-up/drop-off into consideration.

The designs show what is achievable with a balanced approach in a constrained cross-section, and is based on current transportation patterns. As noted in **Chapter 10**, this may change over time.

Minimum sidewalk dimensions as defined by the Mid-rise Performance Standards are possible to fit in the 26.0m ROW segment and with the existing typical setbacks of 0.8m, but not within the 30m ROW segment without larger setbacks as part of redevelopment. Incremental redevelopment is most likely in the 26.0m segment, so it is important to achieve as much of the minimum sidewalks in the ROW. For the 30.0m segment, which is largely in the West Village character area, comprehensive redevelopment is more likely, with additional setbacks more possible to achieve the minimum 6.0m sidewalk width from curb to building face.

While a formal multimodal analysis has not been conducted, the proposed alternatives achieve a balance between all modes in accordance with City policies such as TransformTO.

9 PUBLIC CONSULTATION

On December 4th 2017, a public consultation session was held with City Staff and residents of Bloor West Village and the surrounding area, as part of the ongoing program of community consultation and engagement. The Bloor Street West options contained in this future conditions report were presented at the meeting. Comments and concerns raised by motorists, cyclists, and pedestrians were noted for each option and will be considered in the overall evaluation and eventual recommendation of a preferred cross-section for Bloor Street West.

Comments regarding the street designs included concerns of the increasing traffic congestion at Jane Street and South Kingsway/ Riverview Gardens, as well as speeding along Bloor Street West. Participants expressed interest in improving the pedestrian realm by having planters at grade along sidewalks as opposed to raised planters. There were also comments regarding the cycling network and the need for more protected lanes, as opposed to buffered lanes, to provide protection from open traffic and parked vehicles. Other topics such as, winter maintenance and the impacts to off-street parking lots with the removal or “shifting” of on-street parking, were also discussed.

10 CONCLUSIONS

The transportation component of this Avenue Study has been fundamentally about assessing opportunities for re-imagining Bloor Street West as a complete street with safe and secure access for each mode of transport.

Today, Bloor West Village has some foundational elements on which to build a more complete street:

- It has excellent transit access, by subway and bus.
  - The subway stations are crowded at peak times with limited space for buses and their passengers at Jane and Runnymede Stations. This may pose a constraint for future balancing of demand among modes. There are limited opportunities to enhance bus access, but it is understood that the TTC is reviewing options for improvement. The limited opportunities for enhanced bus access suggests that further balancing among modes will need to rely on getting people to the subway by walking and cycling;

- Generally, pedestrians are adequately served in terms of the space for walking.
  - However, Jane Street and Runnymede Road, two streets leading to subway stations, have very narrow sidewalks which are below the City guidelines for pedestrian clearways. Some sections of sidewalks on Bloor Street are also of inadequate width, as a result of the placement of planters and other street furnishings. As the street becomes more multimodal, there may be a need to enhance pedestrian access to the Jane and Runnymede subway stations and also along Bloor Street;

- There are no dedicated cycling facilities on Bloor Street.
  - This leaves cyclists in a precarious state, navigating between parked cars and moving vehicles, or riding on the sidewalk, posing a hazard to pedestrians. It is noted that there are four cycling shops on Bloor Street in this area, indicating that there is a cycling community present in the area. Observations at various times of the year indicate that cyclists are using Bloor Street. To create a multimodal street with less reliance on cars, a dedicated cycling facility is needed; and

- Traffic operations during peak times are generally acceptable according to City guidelines; outside of these times, there is typically unused capacity.
  - The section between The Kingsway and Jane Street is busy due to vehicles making the turns between these streets as part of a continuing north-south journey. This section was often cited as an issue in the stakeholder consultations. Remedying this situation would likely require acquisition of significant property, and the City continues to monitor it. The westbound section of Bloor Street approaching Runnymede Road is also typically busy during the afternoon peak period. This is primarily due to the number of bus and auto movements in the block east of Runnymede. Monitoring this situation to optimize green time for the Bloor Street movements can assist in minimizing delays.

Future Options for Bloor Street as a "Complete Street"

Overall, the three future options attempt to balance the available right-of-way width among the modes, to provide safe space of adequate capacity. The major change is provision of dedicated cycling facilities. However, a 26.0 metre right-of-way poses challenges. Sidewalk widths would essentially remain the same as the current values.

The study shows that Option 1 would have the least adverse impacts to Bloor Street West in terms of traffic operations, while Option 2 and Option 3 are forecast to incur capacity constraints and delays at many intersections. In all scenarios, the intersections of Bloor Street West / South Kingsway and Bloor Street West / High Park Avenue are forecast to operate near or over capacity with the additional traffic. These intersections can be further investigated to better accommodate the future traffic volumes in subsequent studies.

In terms of transit, on-street parking, cycling, and pedestrian facilities, all proposed options provide solutions that can be accommodated within the right-of-way. Enhancements to pedestrian facilities can be further explored at key intersections near TTC stations, to enhance pedestrian access to the subway while allowing bus services to continue to function with adequate reliability (for example, wider sidewalks/narrower traffic lanes on Runnymede Road).

Option 1 is expected to provide the greatest number of parking spaces (however, these would be available during off-peak periods only), and provide the safest environment for cyclists. Overall, Option 1 is seen as providing the best balance among the various modes, taking the need for parking and pick-up/drop-off into consideration.

That conclusion should also be considered in light of ongoing changes in transportation. These include the rise of autonomous vehicles, declining passenger vehicle sales in Ontario, and rising proportions of trips made by walking, cycling and transit. The City of Toronto's recently enacted Transform TO policy (intended to fight climate change) should also be noted – this includes the proviso that 75% of trips less than 5 km in length should be made on foot or by bike by 2050.

Bloor Street West is not proposed to be reconstructed in the near future. By the time it is reconstructed, transportation demands may by substantially different than they are in 2017. If significantly more trips are made by autonomous vehicles and/or ride-share services, more space will be needed for pick-up and drop-off activity along Bloor, and less will be needed for parking. That can also be seen as continuing to lend support to Option 1, as it provides the greatest amount of road space for pick-up and drop-off. Options 2 and 3 do not provide the same amount of pick-up/drop-off space on both sides of the street. There are many uncertainties with respect to evolving transportation patterns, however, and thus all of the options should be kept in consideration.

Additional Initiatives to Consider as Bloor Street Evolves

Another initiative which should be considered to expand the multimodal environment is development of a more complete laneway system parallel to Bloor Street. This could alleviate some traffic pressure on Bloor related to circulation and loading. That idea should be considered in conjunction with the options for reconfiguration of the street, including potentially Options 2 and 3. If much less space is needed for parking, it may be that the space dedicated to off-street parking can also be reduced. In that case, some of the space now used for off-street parking could be re-oriented to expand the laneway system.

It is understood that the Toronto Transit Commission is reviewing potential improvements to the subway stations, to enhance their profile in the community and their capacity. Improved wayfinding from Bloor Street, and access enhancements for the subway stations (including wider sidewalks on north/south streets where possible) would assist in promoting greater transit use. Any changes to the Bloor Street cross-section must take into account bus access to the subway stations, to ensure that bus manoeuvrability is maintained. Capacity on the subway and the platforms was also reviewed. While the subways are busy at peak times, the amount of proposed development does not indicate a significant potential for over-crowding. The bus platforms at the subway stations are constrained; it is understood that TTC is considering improvements to address these issues.

The subway stations in the main street retail area (Jane and Runnymede) are very constrained spatially. Some bus circulation is expected to continue to occur on street. If redevelopment proposals are put forward for the Bloor Street sites adjacent to these subway stations, consideration should be given to expanding the footprint of the stations to better accommodate pedestrian movement, bus circulation and direct access from Bloor Street.

The City should also consider initiatives that can enhance multimodal access in this area, to lessen dependence on private auto trips. These include:

- When Kennedy Avenue north of Bloor Street is reconstructed, consider creating a shared space area or other design changes to enhance the priority and safety for pedestrians crossing the street. Many pedestrians cross from the subway station to the east side of the street to access area schools and other destinations;
- Work with the Toronto Parking Authority to review parking rates and rate structures, to discourage all-day auto trips;
- As streets are reconstructed, look for opportunities to widen sidewalks;
- Work with Bike Share Toronto to continue expanding the availability of rental bikes in the area; and
- Work with the BIA to promote walking, cycling and transit.

APPENDIX

A BLOOR WEST VILLAGE DEVELOPMENT PROGRAM

Bloor West Village Avenue Study

Redevelopment Program

DTAH 2017-11-16_REVISED

	Existing Condition						Proposal														
	Existing Study Area						Existing to Remain						New Development from Opportunity Sites						Overall Study Area			Population and Employment		
Block	Block Area (m2)	GFA (m2)	Density (FSI)	Residential Units	Population	Employment (Jobs)	Site Area (m2)	GFA (m2)	Density (FSI)	Residential Units	Population	Employment (Jobs)	Site Area (m2)	GFA (m2)	Density (FSI)	New Residential Units	New Population	New Employment (Jobs)	Total Block GFA (m2)	Average Block Density (FSI)	Density Increase (FSI)	Total Units	Total Population	Total Employment (Jobs)
1	4,120	20,112	4.88	160	304	-	4,120	20,112	4.88	160	304	-			-	-	-	-	20,112	4.88	-	160	304	-
2	4,588	13,318	2.90	49	93	125	2,433	9,978	2.17	49	93	-	2,240	10,699	4.78	98	187	46	20,677	4.51	1.60	147	280	46
3	4,008	27,453	6.85	248	471	-	4,008	27,453	6.85	248	471	-			-	-	-	-	27,453	6.85	-	248	471	-
4	5,226	32,975	6.31	194	369	283	4,113	27,428	5.25	194	369	36	3,461	5,762	1.66	-	-	200	33,190	6.35	.04	194	369	236
5	8,537	12,333	1.44	14	27	347	4,033	7,585	.89	12	23	211	5,618	24,069	4.28	151	287	336	31,654	3.71	2.26	163	310	547
6	2,940	4,717	1.60	18	34	123	2,940	4,717	1.60	18	34	123			-	-	-	-	4,717	1.60	-	18	34	123
7	2,141	4,616	2.16	21	40	121	2,141	4,616	2.16	21	40	121			-	-	-	-	4,616	2.16	-	21	40	121
8	2,382	5,712	2.40	24	46	107	-	-	-	-	-	-	2,348	9,593	4.09	86	164	46	9,593	4.03	1.63	86	164	46
9	2,976	4,983	1.67	13	25	133	2,472	4,136	1.39	11	21	108	877	4,354	4.96	39	74	21	8,490	2.85	1.18	50	95	129
10	1,245	1,582	1.27	2	4	20	-	-	-	-	-	-	3,199	9,718	3.04	86	164	49	9,718	7.81	6.54	86	164	49
11	3,150	4,774	1.52	8	15	228	3,150	4,774	1.52	8	15	229			-	-	-	-	4,774	1.52	-	8	15	229
12	6,746	12,140	1.80	92	175	247	5,047	9,607	1.42	92	175	148	1,695	6,373	3.76	-	-	220	15,980	2.37	.57	92	175	368
13	3,766	6,873	1.82	30	57	144	1,625	2,394	.64	21	40	45	2,226	7,439	3.34	61	116	48	9,833	2.61	.79	82	156	93
14	1,638	2,371	1.45	2	4	108	844	1,511	.92	2	4	82	800	2,693	3.37	23	45	15	4,204	2.57	1.12	25	48	97
15	2,702	4,731	1.75	11	21	220	2,702	4,731	1.75	11	21	220			-	-	-	-	4,731	1.75	-	11	21	220
16	2,590	4,412	1.70	20	38	103	2,590	4,412	1.70	20	38	103			-	-	-	-	4,412	1.70	-	20	38	103
17	1,885	2,220	1.18	5	10	96	-	-	-	-	-	-	1,725	7,058	4.09	63	120	34	7,058	3.74	2.57	63	120	34
18	2,184	4,323	1.98	8	15	168	2,184	4,323	1.98	8	15	168			-	-	-	-	4,323	1.98	-	8	15	168
19	2,200	5,436	2.47	35	67	230	1,512	4,785	2.18	35	67	205	688	3,523	5.12	32	60	17	8,308	3.78	1.31	67	127	222
20	16,384	5,963	.36	28	53	187	13,675	1,793	.11	22	42	78	2,693	9,999	3.71	85	162	58	11,792	.72	.36	107	204	136
21	6,707	13,302	1.98	78	148	54	4,141	9,349	1.39	68	129	18	2,577	6,096	2.37	52	99	35	15,445	2.30	.32	120	228	53
22	5,797	12,865	2.22	120	228	7	5,797	12,865	2.22	120	228	31							12,865	2.22	-	120	228	31
23	5,637	30,242	5.36	231	439	232	5,637	30,242	5.36	231	439	232							30,242	5.36	-	231	439	232
24	2,065	7,161	3.47	43	82	17	2,065	7,161	3.47	43	82	17							7,161	3.47	-	43	82	17
25	4,969	15,403	3.10	183	348	40	4,969	15,403	3.10	183	348	28							15,403	3.10	-	183	348	28
26	4,634	8,759	1.89	66	125	38	4,634	8,759	1.89	66	125	38							8,759	1.89	-	66	125	38
27	5,800	6,701	1.16	62	118	39	3,237	4,036	.70	45	86	-	1,420	5,249	3.70	50	95	19	9,285	1.60	.45	95	180	19
28	5,965	5,650	.95	66	125	28	-	-	-	-	-	-	5,983	20,394	3.41	184	350	95	20,394	3.42	2.47	184	350	95
29	6,535	32,502	4.97	387	735	-	6,535	32,502	4.97	387	735	-			-	-	-	-	32,502	4.97	-	387	735	-
30	3,189	2,031	.64	20	38	7	-	-	-	-	-	-	3,217	8,581	2.67	77	145	42	8,581	2.69	2.05	77	145	42
31	2,459	3,721	1.51	38	72	-	2,459	3,721	1.51	38	72	-			-	-	-	-	3,721	1.51	-	38	72	-
	135,164	319,382	2.36	2,276	4,324	3,452	99,062	268,392	2.71	2,113	4,015	2,241	40,767	141,600	3.47	1,089	2,068	1,281	409,992	3.03	0.67	3,202	6,083	3,522
							73.29%	84%		93%	93%	65%	30.16%						128%	128%	28%	141%	141%	102%
								-50,990		-163	-310	-1,211							90,610	0.67		926	1,759	70

Bloor West Village Avenue Study

Redevelopment Program by Character Area

DTAH 2017-11-08

Character Area	Existing Condition						Change					Total						Notes
	Block Area (m2)	GFA (m2)	Density (FSI)	Residential Units	Population	Employment (Jobs)	GFA (m2)	Density (FSI)	Residential Units	Population	Employment (Jobs)	GFA (m2)	AVG Block GFA (m2)	Density (FSI)	Total Units	Total Population	Total Employment (Jobs)	
West Village	26,478	106,191	4.01	665	1,264	755	26,895	1.02	247	470	74	133,086	26,617	5.03	912	1,734	829	5: Blocks 1 thru 5
Village Main Street	54,929	74,854	1.36	317	602	2,235	37,695	0.69	428	814	-97	112,549	7,503	2.05	745	1416	2138	15: Blocks 6 thru 20
East Village	20,206	63,571	3.15	472	897	310	2,143	0.11	42	80	23	65,713	16,428	3.25	514	977	333	4: Blocks 21 thru 24
High Park Frontage	33,551	74,766	2.23	822	1,562	152	23,878	0.71	208	395	70	98,644	14,092	2.94	1030	1957	222	7: Blocks 25 thru 31
	135,164	**319,382**	**2.36**	**2,276**	**4,324**	**3,452**	**90,610**	**0.67**	**926**	**1,759**	**70**	**409,992**	**13,226**	**3.03**	**3,202**	**6,083**	**3,522**	

APPENDIX

B TRAFFIC VOLUME DATA

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT WINDERMERE AVE (PX 332)

Survey Date: 2017-Jan-19 (Thursday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
08:00-09:00	CAR	86	115	62	77	254	843	14	750	113	877	300	16	121	14	151	624	66	495	10	571	N	112	3	0
	TRK	3	0	0	0	0	17	1	17	1	19	1	0	0	0	0	12	0	12	2	14	S	81	3	0
AM PEAK	BUS	1	0	1	0	1	1	0	1	0	1	1	0	0	0	0	3	1	3	0	4	E	48	5	0
																						W	68	5	0
	TOTAL:	**90**	**115**	**63**	**77**	**255**	**861**	**15**	**768**	**114**	**897**	**302**	**16**	**121**	**14**	**151**	**639**	**67**	**510**	**12**	**589**				
17:00-18:00	CAR	166	97	114	94	305	863	23	736	129	888	359	33	125	21	179	788	105	670	29	804	N	428	0	0
	TRK	0	2	0	0	2	2	0	2	0	2	0	0	0	0	0	6	0	4	0	4	S	161	1	0
PM PEAK	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	E	144	10	0
																						W	120	2	0
	TOTAL:	**166**	**99**	**114**	**94**	**307**	**865**	**23**	**738**	**129**	**890**	**359**	**33**	**125**	**21**	**179**	**795**	**105**	**675**	**29**	**809**				
OFF HR AVG	CAR	103	76	59	77	212	637	25	538	62	625	161	22	41	25	88	538	58	437	19	514	N	347	0	0
	TRK	2	2	0	1	3	14	1	12	2	15	2	1	0	1	2	20	0	17	1	18	S	148	2	0
	BUS	0	0	0	1	1	2	0	1	0	1	1	0	0	0	0	1	1	1	0	2	E	108	3	0
																						W	121	2	0
	TOTAL:	**105**	**78**	**59**	**79**	**216**	**653**	**26**	**551**	**64**	**641**	**164**	**23**	**41**	**26**	**90**	**559**	**59**	**455**	**20**	**534**				
07:30-09:30	CAR	167	210	120	145	475	1,621	26	1,441	212	1,679	553	35	229	27	291	1,141	112	904	21	1,037	N	218	5	0
	TRK	6	0	0	0	0	37	3	36	2	41	2	1	0	1	2	26	0	25	3	28	S	136	3	0
2 HR AM	BUS	1	1	1	0	2	3	0	3	0	3	1	0	0	0	0	4	1	3	0	4	E	102	6	0
																						W	130	10	0
	TOTAL:	**174**	**211**	**121**	**145**	**477**	**1,661**	**29**	**1,480**	**214**	**1,723**	**556**	**36**	**229**	**28**	**293**	**1,171**	**113**	**932**	**24**	**1,069**				
16:00-18:00	CAR	339	194	219	190	603	1,607	59	1,358	218	1,635	598	59	198	51	308	1,594	182	1,349	61	1,592	N	856	0	0
	TRK	1	4	0	0	4	9	0	9	0	9	3	0	0	0	0	19	3	15	1	19	S	323	1	0
2 HR PM	BUS	3	0	3	0	3	1	0	1	0	1	0	0	0	0	0	1	0	1	0	1	E	236	17	0
																						W	241	6	0
	TOTAL:	**343**	**198**	**222**	**190**	**610**	**1,617**	**59**	**1,368**	**218**	**1,645**	**601**	**59**	**198**	**51**	**308**	**1,614**	**185**	**1,365**	**62**	**1,612**				
07:30-18:00	CAR	918	708	575	643	1,926	5,774	185	4,951	677	5,813	1,793	180	589	177	946	4,886	527	4,001	158	4,686	N	2,461	5	0
	TRK	14	10	0	4	14	98	6	91	9	106	12	3	0	5	8	122	3	107	8	118	S	1,050	12	0
8 HR SUM	BUS	5	1	5	2	8	8	0	6	0	6	3	0	0	0	0	7	3	6	0	9	E	769	35	0
																						W	855	25	0
	TOTAL:	**937**	**719**	**580**	**649**	**1,948**	**5,880**	**191**	**5,048**	**686**	**5,925**	**1,808**	**183**	**589**	**182**	**954**	**5,015**	**533**	**4,114**	**166**	**4,813**				

Total 8 Hour Vehicle Volume: 13,640

Total 8 Hour Bicycle Volume: 77

Total 8 Hour Intersection Volume: 13,717

Comment:

Printed On: 30 Mar, 2017 2:44:20PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT SOUTH KINGSWAY & RIVERVIEW GARDENS (PX 334)

Survey Date: 2017-Feb-22 (Wednesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
08:00-09:00	CAR	38	209	2	349	560	1,193	6	803	427	1,236	788	41	59	7	107	763	302	547	30	879	N	95	1	0
	TRK	2	0	0	13	13	33	1	20	4	25	17	0	0	0	0	10	13	10	1	24	S	98	1	0
AM PEAK	BUS	0	0	0	2	2	3	0	1	1	2	2	0	0	0	0	1	1	1	0	2	E	27	5	20
																						W	0	3	38
	TOTAL:	**40**	**209**	**2**	**364**	**575**	**1,229**	**7**	**824**	**432**	**1,263**	**807**	**41**	**59**	**7**	**107**	**774**	**316**	**558**	**31**	**905**				
17:00-18:00	CAR	27	387	0	381	768	1,159	4	755	199	958	513	23	18	9	50	1,163	296	767	23	1,086	N	121	3	0
	TRK	0	1	0	2	3	5	0	2	0	2	2	1	0	0	1	10	2	9	0	11	S	92	0	0
PM PEAK	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	E	34	11	17
																						W	0	8	7
	TOTAL:	**27**	**388**	**0**	**383**	**771**	**1,164**	**4**	**757**	**199**	**960**	**515**	**24**	**18**	**9**	**51**	**1,174**	**298**	**777**	**23**	**1,098**				
OFF HR AVG	CAR	25	167	1	294	462	835	7	521	139	667	400	20	16	8	44	627	245	452	17	714	N	83	1	0
	TRK	1	4	0	14	18	29	0	15	6	21	16	0	0	0	0	18	10	14	1	25	S	75	0	0
	BUS	0	1	0	2	3	2	0	0	0	0	1	0	0	0	0	2	1	1	0	2	E	33	3	21
																						W	0	4	9
	TOTAL:	**26**	**172**	**1**	**310**	**483**	**866**	**7**	**536**	**145**	**688**	**417**	**20**	**16**	**8**	**44**	**647**	**256**	**467**	**18**	**741**				
07:30-09:30	CAR	66	390	4	680	1,074	2,303	10	1,553	804	2,367	1,466	70	97	11	178	1,365	565	964	52	1,581	N	169	1	0
	TRK	4	1	0	21	22	65	1	44	11	56	31	0	0	0	0	26	20	25	3	48	S	166	1	0
2 HR AM	BUS	0	0	0	3	3	7	0	4	6	10	7	0	0	0	0	2	1	2	0	3	E	54	8	41
																						W	0	4	49
	TOTAL:	**70**	**391**	**4**	**704**	**1,099**	**2,375**	**11**	**1,601**	**821**	**2,433**	**1,504**	**70**	**97**	**11**	**178**	**1,393**	**586**	**991**	**55**	**1,632**				
16:00-18:00	CAR	56	692	0	760	1,452	2,167	8	1,363	352	1,723	955	44	41	31	116	2,201	562	1,478	48	2,088	N	227	4	0
	TRK	0	1	0	6	7	11	0	4	2	6	11	1	0	1	2	19	9	17	0	26	S	203	1	0
2 HR PM	BUS	1	2	0	2	4	3	1	1	0	2	3	0	0	0	0	4	3	2	0	5	E	61	14	47
																						W	0	16	14
	TOTAL:	**57**	**695**	**0**	**768**	**1,463**	**2,181**	**9**	**1,368**	**354**	**1,731**	**969**	**45**	**41**	**32**	**118**	**2,224**	**574**	**1,497**	**48**	**2,119**				
07:30-18:00	CAR	223	1,750	9	2,616	4,375	7,810	46	4,999	1,713	6,758	4,021	195	202	75	472	6,074	2,106	4,249	168	6,523	N	726	9	0
	TRK	7	18	0	82	100	192	1	108	36	145	107	2	1	1	4	115	70	96	6	172	S	669	2	0
8 HR SUM	BUS	1	5	0	13	18	19	1	6	7	14	15	0	0	0	0	11	8	6	0	14	E	245	32	170
																						W	0	34	98
	TOTAL:	**231**	**1,773**	**9**	**2,711**	**4,493**	**8,021**	**48**	**5,113**	**1,756**	**6,917**	**4,143**	**197**	**203**	**76**	**476**	**6,200**	**2,184**	**4,351**	**174**	**6,709**				

Total 8 Hour Vehicle Volume: 18,595

Total 8 Hour Bicycle Volume: 77

Total 8 Hour Intersection Volume: 18,672

Comment: E Other = EB Right to Mossom Rd.; W Other = WB Left to Mossom Rd.

Printed On: 30 Mar, 2017 2:41:39PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT INDIAN RD (PX 1717)

Survey Date: 2012-May-24 (Thursday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
07:30-08:30	CAR	37	41	7	8	56	1,016	24	967	2	993	2	41	0	18	59	515	0	456	6	462	N	45	3	0
	TRK	4	1	0	0	1	152	3	150	0	153	0	2	0	1	3	64	0	62	1	63	S	11	3	0
AM PEAK	BUS	0	3	0	2	5	14	0	10	2	12	2	2	0	0	2	9	0	6	0	6	E	31	18	0
																						W	16	36	0
	TOTAL:	**41**	**45**	**7**	**10**	**62**	**1,182**	**27**	**1,127**	**4**	**1,158**	**4**	**45**	**0**	**19**	**64**	**588**	**0**	**524**	**7**	**531**				
16:30-17:30	CAR	29	24	4	15	43	688	16	659	30	705	37	14	4	34	52	955	3	897	9	909	N	74	4	0
	TRK	6	3	1	0	4	63	4	63	3	70	3	0	0	1	1	123	0	119	1	120	S	39	0	0
PM PEAK	BUS	2	1	1	1	3	7	1	5	2	8	2	1	0	0	1	3	0	2	0	2	E	26	38	0
																						W	19	24	0
	TOTAL:	**37**	**28**	**6**	**16**	**50**	**758**	**21**	**727**	**35**	**783**	**42**	**15**	**4**	**35**	**54**	**1,081**	**3**	**1,018**	**10**	**1,031**				
OFF HR AVG	CAR	30	31	8	15	54	555	14	533	27	574	41	7	4	18	29	481	10	432	8	450	N	51	1	0
	TRK	8	4	1	3	8	103	5	99	5	109	6	1	0	3	4	96	1	89	2	92	S	60	4	0
	BUS	1	1	0	0	1	9	0	8	1	9	1	1	0	0	1	3	0	2	1	3	E	24	15	0
																						W	22	18	0
	TOTAL:	**39**	**36**	**9**	**18**	**63**	**667**	**19**	**640**	**33**	**692**	**48**	**9**	**4**	**21**	**34**	**580**	**11**	**523**	**11**	**545**				
07:30-09:30	CAR	88	96	22	17	135	1,952	48	1,867	6	1,921	12	68	2	31	101	1,055	4	928	18	950	N	71	12	0
	TRK	15	7	0	0	7	288	10	283	0	293	1	5	0	2	7	131	1	122	5	128	S	26	4	0
2 HR AM	BUS	3	4	1	2	7	19	0	14	3	17	4	3	1	0	4	25	0	21	2	23	E	60	30	0
																						W	39	62	0
	TOTAL:	**106**	**107**	**23**	**19**	**149**	**2,259**	**58**	**2,164**	**9**	**2,231**	**17**	**76**	**3**	**33**	**112**	**1,211**	**5**	**1,071**	**25**	**1,101**				
16:00-18:00	CAR	57	51	11	28	90	1,336	34	1,279	69	1,382	89	29	11	66	106	1,819	9	1,702	12	1,723	N	132	7	0
	TRK	11	7	1	1	9	122	8	120	4	132	5	1	0	3	4	227	1	217	2	220	S	77	3	0
2 HR PM	BUS	3	2	1	1	4	16	2	14	4	20	4	1	0	1	2	9	0	6	0	6	E	55	65	0
																						W	42	54	0
	TOTAL:	**71**	**60**	**13**	**30**	**103**	**1,474**	**44**	**1,413**	**77**	**1,534**	**98**	**31**	**11**	**70**	**112**	**2,055**	**10**	**1,925**	**14**	**1,949**				
07:30-18:00	CAR	267	269	66	106	441	5,507	139	5,276	183	5,598	261	125	27	169	321	4,796	51	4,358	62	4,471	N	406	24	0
	TRK	55	28	6	11	45	818	36	797	24	857	31	10	0	15	25	736	7	693	13	713	S	342	22	0
8 HR SUM	BUS	9	8	3	4	15	68	2	58	9	69	11	6	2	1	9	43	0	34	4	38	E	211	156	0
																						W	169	186	0
	TOTAL:	**331**	**305**	**75**	**121**	**501**	**6,393**	**177**	**6,131**	**216**	**6,524**	**303**	**141**	**29**	**185**	**355**	**5,575**	**58**	**5,085**	**79**	**5,222**				

Total 8 Hour Vehicle Volume: 12,602

Total 8 Hour Bicycle Volume: 388

Total 8 Hour Intersection Volume: 12,990

Comment:

Printed On: 14 Dec, 2016 3:44:16PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT KEELE ST & PARKSIDE DR (PX 328)

Survey Date: 2012-May-29 (Tuesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
08:00-09:00	CAR	489	150	360	138	648	987	72	676	385	1,133	1,296	173	672	52	897	655	239	453	57	749	N	193	8	0
	TRK	25	3	20	7	30	46	3	25	9	37	51	14	37	4	55	16	5	9	2	16	S	55	7	0
AM PEAK	BUS	9	2	7	1	10	7	1	6	3	10	11	0	7	1	8	14	1	11	1	13	E	107	20	0
																						W	30	42	0
	TOTAL:	**523**	**155**	**387**	**146**	**688**	**1,040**	**76**	**707**	**397**	**1,180**	**1,358**	**187**	**716**	**57**	**960**	**685**	**245**	**473**	**60**	**778**				
17:00-18:00	CAR	724	252	543	166	961	760	92	460	184	736	885	134	520	61	715	1,035	181	722	89	992	N	220	19	0
	TRK	11	2	9	2	13	3	0	0	2	2	11	1	7	1	9	12	2	9	2	13	S	68	9	0
PM PEAK	BUS	3	0	2	1	3	4	0	2	0	2	4	1	3	1	5	4	1	3	1	5	E	189	73	0
																						W	42	48	0
	TOTAL:	**738**	**254**	**554**	**169**	**977**	**767**	**92**	**462**	**186**	**740**	**900**	**136**	**530**	**63**	**729**	**1,051**	**184**	**734**	**92**	**1,010**				
OFF HR AVG	CAR	449	120	316	115	551	558	63	342	136	541	603	101	329	53	483	515	138	342	70	550	N	98	6	0
	TRK	27	5	19	14	38	35	4	15	7	26	38	6	22	4	32	25	9	16	4	29	S	42	3	0
	BUS	7	1	6	1	8	2	0	1	1	2	6	0	5	0	5	3	0	2	1	3	E	91	11	0
																						W	21	25	0
	TOTAL:	**483**	**126**	**341**	**130**	**597**	**595**	**67**	**358**	**144**	**569**	**647**	**107**	**356**	**57**	**520**	**543**	**147**	**360**	**75**	**582**				
07:30-09:30	CAR	955	261	672	300	1,233	1,924	148	1,312	638	2,098	2,334	312	1,283	96	1,691	1,185	413	828	135	1,376	N	349	17	0
	TRK	39	5	27	13	45	85	6	44	14	64	89	28	67	6	101	31	8	20	6	34	S	82	12	0
2 HR AM	BUS	17	3	12	3	18	18	3	12	5	20	21	3	13	2	18	23	3	18	2	23	E	189	31	0
																						W	62	74	0
	TOTAL:	**1,011**	**269**	**711**	**316**	**1,296**	**2,027**	**157**	**1,368**	**657**	**2,182**	**2,444**	**343**	**1,363**	**104**	**1,810**	**1,239**	**424**	**866**	**143**	**1,433**				
16:00-18:00	CAR	1,513	505	1,165	314	1,984	1,430	150	858	321	1,329	1,599	258	916	111	1,285	2,078	362	1,462	198	2,022	N	412	25	0
	TRK	32	3	25	6	34	14	3	6	4	13	19	2	11	2	15	28	4	23	4	31	S	141	13	0
2 HR PM	BUS	11	4	9	1	14	8	0	3	1	4	12	4	10	1	15	14	1	9	2	12	E	344	106	0
																						W	65	83	0
	TOTAL:	**1,556**	**512**	**1,199**	**321**	**2,032**	**1,452**	**153**	**867**	**326**	**1,346**	**1,630**	**264**	**937**	**114**	**1,315**	**2,120**	**367**	**1,494**	**204**	**2,065**				
07:30-18:00	CAR	4,261	1,246	3,099	1,075	5,420	5,584	550	3,537	1,504	5,591	6,346	972	3,516	420	4,908	5,322	1,326	3,656	612	5,594	N	1,151	65	0
	TRK	176	29	128	74	231	235	23	108	46	177	258	53	164	23	240	160	48	108	25	181	S	391	35	0
8 HR SUM	BUS	53	10	43	6	59	30	4	17	8	29	55	7	42	4	53	50	5	36	6	47	E	896	181	0
																						W	211	258	0
	TOTAL:	**4,490**	**1,285**	**3,270**	**1,155**	**5,710**	**5,849**	**577**	**3,662**	**1,558**	**5,797**	**6,659**	**1,032**	**3,722**	**447**	**5,201**	**5,532**	**1,379**	**3,800**	**643**	**5,822**				

Total 8 Hour Vehicle Volume: 22,530

Total 8 Hour Bicycle Volume: 539

Total 8 Hour Intersection Volume: 23,069

Comment:

Printed On: 14 Dec, 2016 3:49:57PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT COLBORNE LODGE DR & HIGH PARK (PX 329)

Survey Date: 2012-Mar-06 (Tuesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
08:00-09:00	CAR	147	46	39	41	126	1,510	36	1,203	47	1,286	121	266	34	113	413	1,031	40	872	72	984	N	42	0	0
	TRK	1	0	0	0	0	27	0	27	0	27	0	0	0	0	0	30	0	30	1	31	S	79	0	0
AM PEAK	BUS	0	0	0	0	0	3	0	3	0	3	0	0	0	0	0	5	0	5	0	5	E	48	0	0
																						W	62	0	0
	TOTAL:	**148**	**46**	**39**	**41**	**126**	**1,540**	**36**	**1,233**	**47**	**1,316**	**121**	**266**	**34**	**113**	**413**	**1,066**	**40**	**907**	**73**	**1,020**				
16:00-17:00	CAR	326	73	66	81	220	955	76	798	53	927	179	76	69	62	207	1,305	57	1,170	184	1,411	N	95	0	0
	TRK	1	0	1	0	1	37	0	37	0	37	0	0	0	0	0	29	0	29	0	29	S	89	0	0
PM PEAK	BUS	0	0	0	0	0	8	0	8	0	8	0	0	0	0	0	6	0	6	0	6	E	74	0	0
																						W	44	0	0
	TOTAL:	**327**	**73**	**67**	**81**	**221**	**1,000**	**76**	**843**	**53**	**972**	**179**	**76**	**69**	**62**	**207**	**1,340**	**57**	**1,205**	**184**	**1,446**				
OFF HR AVG	CAR	142	55	38	54	147	906	36	767	42	845	150	85	54	48	187	753	54	650	68	772	N	76	0	0
	TRK	0	0	0	0	0	29	0	29	0	29	0	0	0	0	0	26	0	26	0	26	S	33	0	0
	BUS	0	0	0	0	0	2	0	2	0	2	0	0	0	0	0	3	0	3	0	3	E	53	1	0
																						W	35	0	0
	TOTAL:	**142**	**55**	**38**	**54**	**147**	**937**	**36**	**798**	**42**	**876**	**150**	**85**	**54**	**48**	**187**	**782**	**54**	**679**	**68**	**801**				
07:30-09:30	CAR	252	92	71	74	237	2,843	62	2,291	58	2,411	206	478	74	194	746	1,905	74	1,619	119	1,812	N	99	0	0
	TRK	1	0	0	0	0	43	0	43	0	43	0	0	0	0	0	56	0	56	1	57	S	112	0	0
2 HR AM	BUS	0	0	0	0	0	5	0	5	0	5	0	0	0	0	0	8	0	8	0	8	E	90	1	0
																						W	101	0	0
	TOTAL:	**253**	**92**	**71**	**74**	**237**	**2,891**	**62**	**2,339**	**58**	**2,459**	**206**	**478**	**74**	**194**	**746**	**1,969**	**74**	**1,683**	**120**	**1,877**				
16:00-18:00	CAR	590	142	115	142	399	1,908	150	1,604	104	1,858	383	162	149	109	420	2,546	130	2,295	325	2,750	N	185	0	0
	TRK	1	0	1	0	1	65	0	65	0	65	0	0	0	0	0	50	0	50	0	50	S	173	0	0
2 HR PM	BUS	0	0	0	0	0	11	0	11	0	11	0	0	0	0	0	8	0	8	0	8	E	136	0	0
																						W	90	0	0
	TOTAL:	**591**	**142**	**116**	**142**	**400**	**1,984**	**150**	**1,680**	**104**	**1,934**	**383**	**162**	**149**	**109**	**420**	**2,604**	**130**	**2,353**	**325**	**2,808**				
07:30-18:00	CAR	1,407	455	336	431	1,222	8,373	357	6,962	331	7,650	1,191	980	439	496	1,915	7,463	421	6,512	714	7,647	N	588	0	0
	TRK	2	0	1	0	1	224	0	223	1	224	2	1	1	0	2	211	0	211	1	212	S	417	1	0
8 HR SUM	BUS	0	0	0	0	0	23	0	23	0	23	0	0	0	0	0	29	0	29	0	29	E	437	4	0
																						W	331	0	0
	TOTAL:	**1,409**	**455**	**337**	**431**	**1,223**	**8,620**	**357**	**7,208**	**332**	**7,897**	**1,193**	**981**	**440**	**496**	**1,917**	**7,703**	**421**	**6,752**	**715**	**7,888**				

Total 8 Hour Vehicle Volume: 18,925

Total 8 Hour Bicycle Volume: 5

Total 8 Hour Intersection Volume: 18,930

Comment:

Printed On: 14 Dec, 2016 3:51:58PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT CLENDENAN AVE (PX 330)

Survey Date: 2012-May-28 (Monday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
07:45-08:45	CAR	93	0	0	0	0	1,012	40	949	0	989	0	63	0	59	122	797	0	738	53	791	N	71	20	0
	TRK	0	0	0	0	0	18	0	17	0	17	0	1	0	2	3	14	0	12	0	12	S	0	29	0
AM PEAK	BUS	2	0	0	0	0	9	0	9	0	9	0	0	0	1	1	9	0	8	2	10	E	40	2	0
																						W	44	7	0
	TOTAL:	**95**	**0**	**0**	**0**	**0**	**1,039**	**40**	**975**	**0**	**1,015**	**0**	**64**	**0**	**62**	**126**	**820**	**0**	**758**	**55**	**813**				
16:45-17:45	CAR	106	0	0	0	0	675	45	633	0	678	0	42	0	44	86	1,093	0	1,049	61	1,110	N	186	26	0
	TRK	2	0	0	0	0	12	0	12	0	12	0	0	0	1	1	12	0	11	2	13	S	2	24	0
PM PEAK	BUS	0	0	0	0	0	3	0	3	0	3	0	0	0	0	0	1	0	1	0	1	E	15	3	0
																						W	22	1	0
	TOTAL:	**108**	**0**	**0**	**0**	**0**	**690**	**45**	**648**	**0**	**693**	**0**	**42**	**0**	**45**	**87**	**1,106**	**0**	**1,061**	**63**	**1,124**				
OFF HR AVG	CAR	61	0	0	0	0	564	34	538	0	572	0	26	0	45	71	513	0	468	27	495	N	182	21	0
	TRK	2	0	0	0	0	19	1	18	0	19	0	1	0	0	1	22	0	22	1	23	S	0	18	0
	BUS	0	0	0	0	0	2	0	2	0	2	0	0	0	0	0	3	0	3	0	3	E	37	2	0
																						W	8	3	0
	TOTAL:	**63**	**0**	**0**	**0**	**0**	**585**	**35**	**558**	**0**	**593**	**0**	**27**	**0**	**45**	**72**	**538**	**0**	**493**	**28**	**521**				
07:30-09:30	CAR	175	0	0	0	0	1,853	86	1,743	0	1,829	0	110	0	119	229	1,359	0	1,240	89	1,329	N	163	34	0
	TRK	0	0	0	0	0	38	0	36	0	36	0	2	0	4	6	41	0	37	0	37	S	0	45	0
2 HR AM	BUS	4	0	0	0	0	15	2	15	0	17	0	0	0	2	2	19	0	17	2	19	E	66	4	0
																						W	71	11	0
	TOTAL:	**179**	**0**	**0**	**0**	**0**	**1,906**	**88**	**1,794**	**0**	**1,882**	**0**	**112**	**0**	**125**	**237**	**1,419**	**0**	**1,294**	**91**	**1,385**				
16:00-18:00	CAR	192	0	0	0	0	1,317	83	1,243	0	1,326	0	74	0	82	156	1,990	0	1,908	109	2,017	N	344	50	0
	TRK	2	0	0	0	0	19	0	18	0	18	0	1	0	1	2	32	0	31	2	33	S	2	48	0
2 HR PM	BUS	0	0	0	0	0	6	0	6	0	6	0	0	0	1	1	9	0	8	0	8	E	48	5	0
																						W	26	4	0
	TOTAL:	**194**	**0**	**0**	**0**	**0**	**1,342**	**83**	**1,267**	**0**	**1,350**	**0**	**75**	**0**	**84**	**159**	**2,031**	**0**	**1,947**	**111**	**2,058**				
07:30-18:00	CAR	610	0	0	0	0	5,426	305	5,138	0	5,443	0	288	0	380	668	5,400	0	5,020	305	5,325	N	1,234	169	0
	TRK	10	0	0	0	0	131	4	125	0	129	0	6	0	6	12	163	0	157	6	163	S	2	166	0
8 HR SUM	BUS	6	0	0	0	0	27	3	27	0	30	0	0	0	4	4	40	0	36	3	39	E	261	16	0
																						W	130	26	0
	TOTAL:	**626**	**0**	**0**	**0**	**0**	**5,584**	**312**	**5,290**	**0**	**5,602**	**0**	**294**	**0**	**390**	**684**	**5,603**	**0**	**5,213**	**314**	**5,527**				

Total 8 Hour Vehicle Volume: 11,813

Total 8 Hour Bicycle Volume: 377

Total 8 Hour Intersection Volume: 12,190

Comment:

Printed On: 14 Dec, 2016 3:53:25PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT GLENDONWYNNE RD (PX 1688)

Survey Date: 2012-May-01 (Tuesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
07:30-08:30	CAR	62	0	1	3	4	911	24	841	3	868	12	67	4	89	160	809	5	720	37	762	N	69	0	0
	TRK	1	0	0	0	0	37	1	37	0	38	0	0	0	0	0	38	0	38	0	38	S	46	0	0
AM PEAK	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	0	8	E	48	0	0
																						W	31	0	0
	TOTAL:	**63**	**0**	**1**	**3**	**4**	**948**	**25**	**878**	**3**	**906**	**12**	**67**	**4**	**89**	**160**	**855**	**5**	**766**	**37**	**808**				
16:45-17:45	CAR	150	31	13	30	74	621	27	525	42	594	49	66	3	121	190	853	4	701	110	815	N	225	0	0
	TRK	0	0	0	0	0	12	0	12	0	12	0	0	0	0	0	25	0	25	0	25	S	163	0	0
PM PEAK	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	E	54	0	0
																						W	141	0	0
	TOTAL:	**150**	**31**	**13**	**30**	**74**	**633**	**27**	**537**	**42**	**606**	**49**	**66**	**3**	**121**	**190**	**880**	**4**	**728**	**110**	**842**				
OFF HR AVG	CAR	95	17	8	20	45	534	27	455	24	506	32	59	3	63	125	524	5	444	60	509	N	230	0	0
	TRK	2	0	0	0	0	21	2	21	0	23	0	0	0	0	0	21	0	21	0	21	S	157	0	0
	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	3	E	64	0	0
																						W	132	0	0
	TOTAL:	**97**	**17**	**8**	**20**	**45**	**555**	**29**	**476**	**24**	**529**	**32**	**59**	**3**	**63**	**125**	**548**	**5**	**468**	**60**	**533**				
07:30-09:30	CAR	132	5	1	9	15	1,786	59	1,648	18	1,725	37	129	10	165	304	1,408	9	1,238	72	1,319	N	199	0	0
	TRK	4	0	0	0	0	64	4	64	0	68	0	0	0	0	0	60	0	60	0	60	S	123	0	0
2 HR AM	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	0	14	E	112	2	0
																						W	76	0	0
	TOTAL:	**136**	**5**	**1**	**9**	**15**	**1,850**	**63**	**1,712**	**18**	**1,793**	**37**	**129**	**10**	**165**	**304**	**1,482**	**9**	**1,312**	**72**	**1,393**				
16:00-18:00	CAR	276	48	24	51	123	1,168	49	1,003	69	1,121	90	114	14	216	344	1,667	7	1,403	203	1,613	N	426	0	0
	TRK	3	0	0	0	0	22	3	22	0	25	0	0	0	0	0	55	0	55	0	55	S	344	0	0
2 HR PM	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	0	9	E	95	0	0
																						W	299	0	0
	TOTAL:	**279**	**48**	**24**	**51**	**123**	**1,190**	**52**	**1,025**	**69**	**1,146**	**90**	**114**	**14**	**216**	**344**	**1,731**	**7**	**1,467**	**203**	**1,677**				
07:30-18:00	CAR	790	120	58	141	319	5,087	216	4,469	184	4,869	256	477	36	633	1,146	5,171	36	4,418	516	4,970	N	1,544	1	0
	TRK	16	0	0	0	0	169	16	169	0	185	0	0	0	0	0	197	0	197	0	197	S	1,095	1	0
8 HR SUM	BUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	35	0	35	E	462	3	0
																						W	901	0	0
	TOTAL:	**806**	**120**	**58**	**141**	**319**	**5,256**	**232**	**4,638**	**184**	**5,054**	**256**	**477**	**36**	**633**	**1,146**	**5,403**	**36**	**4,650**	**516**	**5,202**				

Total 8 Hour Vehicle Volume: 11,721

Total 8 Hour Bicycle Volume: 5

Total 8 Hour Intersection Volume: 11,726

Comment:

Printed On: 14 Dec, 2016 3:57:57PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT RUNNYMEDE RD (PX 331)

Survey Date: 2010-May-19 (Wednesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
08:00-09:00	CAR	201	64	95	65	224	916	46	679	43	768	220	172	138	124	434	648	39	460	60	559	N	388	0	0
	TRK	11	0	3	0	3	23	0	19	0	19	17	4	12	9	25	35	5	26	8	39	S	113	0	0
AM PEAK	BUS	21	0	5	0	5	0	0	0	0	0	11	0	2	0	2	0	9	0	16	25	E	387	0	0
																						W	72	0	0
	TOTAL:	**233**	**64**	**103**	**65**	**232**	**939**	**46**	**698**	**43**	**787**	**248**	**176**	**152**	**133**	**461**	**683**	**53**	**486**	**84**	**623**				
16:30-17:30	CAR	467	68	226	80	374	709	86	559	42	687	168	70	95	80	245	826	31	678	155	864	N	596	0	0
	TRK	8	0	2	0	2	28	0	23	0	23	3	5	1	5	11	26	2	21	6	29	S	290	0	0
PM PEAK	BUS	19	0	6	0	6	4	0	4	0	4	10	0	2	0	2	1	8	1	13	22	E	354	0	0
																						W	231	0	0
	TOTAL:	**494**	**68**	**234**	**80**	**382**	**741**	**86**	**586**	**42**	**714**	**181**	**75**	**98**	**85**	**258**	**853**	**41**	**700**	**174**	**915**				
OFF HR AVG	CAR	261	64	131	62	257	657	73	492	48	613	172	103	92	89	284	540	32	387	57	476	N	722	0	0
	TRK	13	0	2	0	2	22	0	17	0	17	7	5	5	8	18	30	2	22	11	35	S	223	0	0
	BUS	18	0	5	0	5	2	0	2	0	2	8	0	0	0	0	0	8	0	13	21	E	491	0	0
																						W	170	0	0
	TOTAL:	**292**	**64**	**138**	**62**	**264**	**681**	**73**	**511**	**48**	**632**	**187**	**108**	**97**	**97**	**302**	**570**	**42**	**409**	**81**	**532**				
07:30-09:30	CAR	412	113	209	130	452	1,726	95	1,291	83	1,469	390	305	249	195	749	1,118	58	810	108	976	N	720	0	0
	TRK	20	0	5	0	5	53	0	44	0	44	25	9	18	15	42	57	7	42	15	64	S	192	0	0
2 HR AM	BUS	47	0	13	0	13	3	0	3	0	3	20	0	3	0	3	0	17	0	34	51	E	644	0	0
																						W	191	0	0
	TOTAL:	**479**	**113**	**227**	**130**	**470**	**1,782**	**95**	**1,338**	**83**	**1,516**	**435**	**314**	**270**	**210**	**794**	**1,175**	**82**	**852**	**157**	**1,091**				
16:00-18:00	CAR	849	132	398	154	684	1,407	194	1,130	93	1,417	314	123	168	140	431	1,505	53	1,233	257	1,543	N	1,145	0	0
	TRK	12	0	2	0	2	50	0	39	0	39	9	11	4	6	21	39	5	33	10	48	S	603	0	0
2 HR PM	BUS	42	0	13	0	13	5	0	5	0	5	20	0	3	1	4	2	17	1	29	47	E	663	0	0
																						W	424	0	0
	TOTAL:	**903**	**132**	**413**	**154**	**699**	**1,462**	**194**	**1,174**	**93**	**1,461**	**343**	**134**	**175**	**147**	**456**	**1,546**	**75**	**1,267**	**296**	**1,638**				
07:30-18:00	CAR	2,303	500	1,131	532	2,163	5,759	579	4,389	366	5,334	1,387	838	784	691	2,313	4,783	237	3,592	593	4,422	N	4,753	0	0
	TRK	82	0	15	0	15	189	0	150	1	151	64	39	43	51	133	213	20	162	67	249	S	1,685	0	0
8 HR SUM	BUS	159	0	46	0	46	14	0	14	0	14	70	0	6	1	7	2	64	1	113	178	E	3,270	0	0
																						W	1,295	0	0
	TOTAL:	**2,544**	**500**	**1,192**	**532**	**2,224**	**5,962**	**579**	**4,553**	**367**	**5,499**	**1,521**	**877**	**833**	**743**	**2,453**	**4,998**	**321**	**3,755**	**773**	**4,849**				

Total 8 Hour Vehicle Volume: 15,025

Total 8 Hour Bicycle Volume: 0

Total 8 Hour Intersection Volume: 15,025

Comment: PX0331

Printed On: 14 Dec, 2016 4:01:39PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT DURIE ST (PX 1479)

Survey Date: 2010-Apr-14 (Wednesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
08:00-09:00	CAR	34	0	0	0	0	1,000	15	978	0	993	0	22	0	36	58	643	0	607	19	626	N	163	0	0
	TRK	1	0	0	0	0	18	0	18	0	18	0	0	0	2	2	12	0	10	1	11	S	0	0	0
AM PEAK	BUS	0	0	0	0	0	4	0	4	0	4	0	0	0	0	0	0	0	0	0	0	E	36	0	0
																						W	9	0	0
	TOTAL:	**35**	**0**	**0**	**0**	**0**	**1,022**	**15**	**1,000**	**0**	**1,015**	**0**	**22**	**0**	**38**	**60**	**655**	**0**	**617**	**20**	**637**				
16:30-17:30	CAR	76	0	0	0	0	620	32	592	0	624	0	28	0	87	115	1,078	0	991	44	1,035	N	361	0	0
	TRK	2	0	0	0	0	16	0	16	0	16	0	0	0	0	0	29	0	29	2	31	S	0	0	0
PM PEAK	BUS	0	0	0	0	0	8	0	8	0	8	0	0	0	0	0	0	0	0	0	0	E	96	0	0
																						W	31	0	0
	TOTAL:	**78**	**0**	**0**	**0**	**0**	**644**	**32**	**616**	**0**	**648**	**0**	**28**	**0**	**87**	**115**	**1,107**	**0**	**1,020**	**46**	**1,066**				
OFF HR AVG	CAR	42	0	0	0	0	620	9	591	0	600	0	29	0	64	93	584	0	520	33	553	N	435	0	0
	TRK	2	0	0	0	0	14	0	13	0	13	0	1	0	0	1	39	0	39	2	41	S	0	0	0
	BUS	0	0	0	0	0	7	0	7	0	7	0	0	0	0	0	0	0	0	0	0	E	118	0	0
																						W	21	0	0
	TOTAL:	**44**	**0**	**0**	**0**	**0**	**641**	**9**	**611**	**0**	**620**	**0**	**30**	**0**	**64**	**94**	**623**	**0**	**559**	**35**	**594**				
07:30-09:30	CAR	60	0	0	0	0	1,749	28	1,712	0	1,740	0	37	0	66	103	1,207	0	1,141	32	1,173	N	308	0	0
	TRK	1	0	0	0	0	30	0	30	0	30	0	0	0	2	2	22	0	20	1	21	S	0	0	0
2 HR AM	BUS	0	0	0	0	0	10	0	10	0	10	0	0	0	0	0	0	0	0	0	0	E	62	0	0
																						W	20	0	0
	TOTAL:	**61**	**0**	**0**	**0**	**0**	**1,789**	**28**	**1,752**	**0**	**1,780**	**0**	**37**	**0**	**68**	**105**	**1,229**	**0**	**1,161**	**33**	**1,194**				
16:00-18:00	CAR	140	0	0	0	0	1,182	61	1,138	0	1,199	0	44	0	140	184	1,997	0	1,857	79	1,936	N	694	0	0
	TRK	3	0	0	0	0	37	0	37	0	37	0	0	0	0	0	56	0	56	3	59	S	0	0	0
2 HR PM	BUS	0	0	0	0	0	21	0	21	0	21	0	0	0	0	0	0	0	0	0	0	E	184	0	0
																						W	80	0	0
	TOTAL:	**143**	**0**	**0**	**0**	**0**	**1,240**	**61**	**1,196**	**0**	**1,257**	**0**	**44**	**0**	**140**	**184**	**2,053**	**0**	**1,913**	**82**	**1,995**				
07:30-18:00	CAR	369	0	0	0	0	5,408	126	5,212	0	5,338	0	196	0	463	659	5,542	0	5,079	243	5,322	N	2,740	0	0
	TRK	11	0	0	0	0	122	1	119	0	120	0	3	0	3	6	233	0	230	10	240	S	0	0	0
8 HR SUM	BUS	0	0	0	0	0	60	0	60	0	60	0	0	0	0	0	0	0	0	0	0	E	716	0	0
																						W	183	0	0
	TOTAL:	**380**	**0**	**0**	**0**	**0**	**5,590**	**127**	**5,391**	**0**	**5,518**	**0**	**199**	**0**	**466**	**665**	**5,775**	**0**	**5,309**	**253**	**5,562**				

Total 8 Hour Vehicle Volume: 11,745

Total 8 Hour Bicycle Volume: 0

Total 8 Hour Intersection Volume: 11,745

Comment:

Printed On: 14 Dec, 2016 3:59:32PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT JANE ST (PX 333)

Survey Date: 2012-Mar-05 (Monday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
07:45-08:45	CAR	520	0	0	0	0	930	365	764	0	1,129	0	166	0	507	673	1,056	0	549	155	704	N	142	0	0
	TRK	22	0	0	0	0	35	14	22	0	36	0	13	0	33	46	48	0	15	8	23	S	0	0	0
AM PEAK	BUS	31	0	0	0	0	2	3	2	0	5	0	0	0	0	0	0	0	0	28	28	E	132	0	0
																						W	48	0	0
	TOTAL:	**573**	**0**	**0**	**0**	**0**	**967**	**382**	**788**	**0**	**1,170**	**0**	**179**	**0**	**540**	**719**	**1,104**	**0**	**564**	**191**	**755**				
16:30-17:30	CAR	618	0	0	0	0	724	476	563	0	1,039	0	161	0	451	612	1,221	0	770	142	912	N	152	0	0
	TRK	32	0	0	0	0	23	27	15	0	42	0	8	0	5	13	17	0	12	5	17	S	0	0	0
PM PEAK	BUS	31	0	0	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	30	31	E	131	0	0
																						W	64	0	0
	TOTAL:	**681**	**0**	**0**	**0**	**0**	**748**	**504**	**579**	**0**	**1,083**	**0**	**169**	**0**	**456**	**625**	**1,239**	**0**	**783**	**177**	**960**				
OFF HR AVG	CAR	414	0	0	0	0	648	293	520	0	813	0	128	0	329	457	740	0	411	121	532	N	139	0	0
	TRK	33	0	0	0	0	29	23	21	0	44	0	8	0	21	29	34	0	13	10	23	S	0	0	0
	BUS	24	0	0	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	23	24	E	130	0	0
																						W	49	0	0
	TOTAL:	**471**	**0**	**0**	**0**	**0**	**678**	**317**	**542**	**0**	**859**	**0**	**136**	**0**	**350**	**486**	**775**	**0**	**425**	**154**	**579**				
07:30-09:30	CAR	960	0	0	0	0	1,792	661	1,481	0	2,142	0	311	0	893	1,204	1,829	0	936	299	1,235	N	241	0	0
	TRK	45	0	0	0	0	58	29	38	0	67	0	20	0	45	65	72	0	27	16	43	S	0	0	0
2 HR AM	BUS	63	0	0	0	0	3	3	3	0	6	0	0	0	0	0	1	0	1	60	61	E	283	0	0
																						W	94	0	0
	TOTAL:	**1,068**	**0**	**0**	**0**	**0**	**1,853**	**693**	**1,522**	**0**	**2,215**	**0**	**331**	**0**	**938**	**1,269**	**1,902**	**0**	**964**	**375**	**1,339**				
16:00-18:00	CAR	1,154	0	0	0	0	1,381	911	1,088	0	1,999	0	293	0	814	1,107	2,275	0	1,461	243	1,704	N	273	0	0
	TRK	53	0	0	0	0	38	43	25	0	68	0	13	0	15	28	34	0	19	10	29	S	0	0	0
2 HR PM	BUS	64	0	0	0	0	1	2	1	0	3	0	0	0	0	0	1	0	1	62	63	E	246	0	0
																						W	106	0	0
	TOTAL:	**1,271**	**0**	**0**	**0**	**0**	**1,420**	**956**	**1,114**	**0**	**2,070**	**0**	**306**	**0**	**829**	**1,135**	**2,310**	**0**	**1,481**	**315**	**1,796**				
07:30-18:00	CAR	3,766	0	0	0	0	5,762	2,742	4,648	0	7,390	0	1,114	0	3,024	4,138	7,066	0	4,042	1,024	5,066	N	1,071	0	0
	TRK	230	0	0	0	0	208	163	145	0	308	0	63	0	144	207	240	0	96	67	163	S	0	0	0
8 HR SUM	BUS	225	0	0	0	0	6	10	6	0	16	0	0	0	0	0	4	0	4	215	219	E	1,050	0	0
																						W	395	0	0
	TOTAL:	**4,221**	**0**	**0**	**0**	**0**	**5,976**	**2,915**	**4,799**	**0**	**7,714**	**0**	**1,177**	**0**	**3,168**	**4,345**	**7,310**	**0**	**4,142**	**1,306**	**5,448**				

Total 8 Hour Vehicle Volume: 17,507

Total 8 Hour Bicycle Volume: 0

Total 8 Hour Intersection Volume: 17,507

Comment:

Printed On: 14 Dec, 2016 4:09:25PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT OLD MILL TRAIL (PX 335)

Survey Date: 2012-May-28 (Monday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
07:45-08:45	CAR	130	0	0	0	0	1,302	107	1,268	0	1,375	0	34	0	161	195	915	0	754	23	777	N	32	1	0
	TRK	1	0	0	0	0	17	0	16	0	16	0	1	0	3	4	19	0	16	1	17	S	0	0	0
AM PEAK	BUS	8	0	0	0	0	3	8	3	0	11	0	0	0	8	8	8	0	0	0	0	E	58	11	0
																						W	6	7	0
	TOTAL:	**139**	**0**	**0**	**0**	**0**	**1,322**	**115**	**1,287**	**0**	**1,402**	**0**	**35**	**0**	**172**	**207**	**942**	**0**	**770**	**24**	**794**				
17:00-18:00	CAR	152	0	0	0	0	947	110	918	0	1,028	0	29	0	117	146	1,359	0	1,242	42	1,284	N	26	2	0
	TRK	0	0	0	0	0	2	0	2	0	2	0	0	0	1	1	14	0	13	0	13	S	0	0	0
PM PEAK	BUS	6	0	0	0	0	0	6	0	0	6	0	0	0	7	7	8	0	1	0	1	E	37	17	0
																						W	13	15	0
	TOTAL:	**158**	**0**	**0**	**0**	**0**	**949**	**116**	**920**	**0**	**1,036**	**0**	**29**	**0**	**125**	**154**	**1,381**	**0**	**1,256**	**42**	**1,298**				
OFF HR AVG	CAR	115	0	0	0	0	632	77	590	0	667	0	42	0	91	133	696	0	605	38	643	N	16	2	0
	TRK	4	0	0	0	0	21	2	19	0	21	0	2	0	3	5	27	0	24	2	26	S	0	0	0
	BUS	6	0	0	0	0	1	6	1	0	7	0	0	0	6	6	6	0	0	0	0	E	15	7	0
																						W	9	8	0
	TOTAL:	**125**	**0**	**0**	**0**	**0**	**654**	**85**	**610**	**0**	**695**	**0**	**44**	**0**	**100**	**144**	**729**	**0**	**629**	**40**	**669**				
07:30-09:30	CAR	239	0	0	0	0	2,350	200	2,281	0	2,481	0	69	0	225	294	1,590	0	1,365	39	1,404	N	57	2	0
	TRK	5	0	0	0	0	40	2	38	0	40	0	2	0	7	9	46	0	39	3	42	S	0	0	0
2 HR AM	BUS	15	0	0	0	0	4	15	4	0	19	0	0	0	15	15	18	0	3	0	3	E	91	19	0
																						W	15	17	0
	TOTAL:	**259**	**0**	**0**	**0**	**0**	**2,394**	**217**	**2,323**	**0**	**2,540**	**0**	**71**	**0**	**247**	**318**	**1,654**	**0**	**1,407**	**42**	**1,449**				
16:00-18:00	CAR	267	0	0	0	0	1,687	195	1,636	0	1,831	0	51	0	231	282	2,578	0	2,347	72	2,419	N	54	3	0
	TRK	0	0	0	0	0	9	0	9	0	9	0	0	0	3	3	35	0	32	0	32	S	0	0	0
2 HR PM	BUS	12	0	0	0	0	1	12	1	0	13	0	0	0	14	14	17	0	3	0	3	E	72	34	0
																						W	22	35	0
	TOTAL:	**279**	**0**	**0**	**0**	**0**	**1,697**	**207**	**1,646**	**0**	**1,853**	**0**	**51**	**0**	**248**	**299**	**2,630**	**0**	**2,382**	**72**	**2,454**				
07:30-18:00	CAR	964	0	0	0	0	6,565	703	6,276	0	6,979	0	289	0	821	1,110	6,952	0	6,131	261	6,392	N	173	11	0
	TRK	21	0	0	0	0	130	10	121	0	131	0	9	0	22	31	187	0	165	11	176	S	0	0	0
8 HR SUM	BUS	51	0	0	0	0	7	51	7	0	58	0	0	0	52	52	59	0	7	0	7	E	223	82	0
																						W	71	83	0
	TOTAL:	**1,036**	**0**	**0**	**0**	**0**	**6,702**	**764**	**6,404**	**0**	**7,168**	**0**	**298**	**0**	**895**	**1,193**	**7,198**	**0**	**6,303**	**272**	**6,575**				

Total 8 Hour Vehicle Volume: 14,936

Total 8 Hour Bicycle Volume: 176

Total 8 Hour Intersection Volume: 15,112

Comment:

Printed On: 14 Dec, 2016 4:23:56PM

City of Toronto - Traffic Safety Unit

Turning Movement Count Summary Report

BLOOR ST AT OLD MILL RD & THE KINGSWAY (PX 336)

Survey Date: 2012-Sep-19 (Wednesday)

Survey Type: Routine Hours

Time Period	Vehicle Type	NORTHBOUND Exits	Left	Thru	Right	Total	EASTBOUND Exits	Left	Thru	Right	Total	SOUTHBOUND Exits	Left	Thru	Right	Total	WESTBOUND Exits	Left	Thru	Right	Total		Peds	Bike	Other
07:45-08:45	CAR	123	11	3	0	14	1,493	0	1,086	4	1,090	4	407	0	53	460	837	0	773	120	893	N	37	12	30
	TRK	2	0	0	0	0	28	0	27	0	27	0	1	0	0	1	20	0	20	2	22	S	8	0	0
AM PEAK	BUS	0	0	0	0	0	19	0	19	0	19	0	0	0	1	1	10	0	9	0	9	E	8	10	2
																						W	0	0	52
	TOTAL:	**125**	**11**	**3**	**0**	**14**	**1,540**	**0**	**1,132**	**4**	**1,136**	**4**	**408**	**0**	**54**	**462**	**867**	**0**	**802**	**122**	**924**				
17:00-18:00	CAR	291	7	0	0	7	1,133	0	978	1	979	2	155	1	101	257	1,048	0	940	291	1,231	N	68	8	58
	TRK	3	0	0	0	0	7	0	6	0	6	0	1	0	1	2	14	0	13	3	16	S	15	0	0
PM PEAK	BUS	0	0	0	0	0	7	0	7	0	7	0	0	0	0	0	7	0	7	0	7	E	2	14	0
																						W	3	0	55
	TOTAL:	**294**	**7**	**0**	**0**	**7**	**1,147**	**0**	**991**	**1**	**992**	**2**	**156**	**1**	**102**	**259**	**1,069**	**0**	**960**	**294**	**1,254**				
OFF HR AVG	CAR	93	6	0	1	7	668	0	556	4	560	5	111	1	57	169	625	0	562	93	655	N	25	7	25
	TRK	2	0	0	0	0	18	0	16	0	16	0	2	0	2	4	22	0	20	2	22	S	8	0	0
	BUS	0	0	0	0	0	12	0	11	0	11	0	1	0	0	1	9	0	9	0	9	E	3	4	2
																						W	3	0	38
	TOTAL:	**95**	**6**	**0**	**1**	**7**	**698**	**0**	**583**	**4**	**587**	**5**	**114**	**1**	**59**	**174**	**656**	**0**	**591**	**95**	**686**				
07:30-09:30	CAR	192	21	3	0	24	2,712	0	2,006	44	2,050	47	706	3	98	807	1,500	0	1,381	189	1,570	N	60	23	82
	TRK	4	0	0	0	0	56	0	54	0	54	0	2	0	0	2	39	0	39	4	43	S	16	0	0
2 HR AM	BUS	0	0	0	0	0	32	0	31	0	31	0	1	0	2	3	25	0	23	0	23	E	14	19	3
																						W	5	0	88
	TOTAL:	**196**	**21**	**3**	**0**	**24**	**2,800**	**0**	**2,091**	**44**	**2,135**	**47**	**709**	**3**	**100**	**812**	**1,564**	**0**	**1,443**	**193**	**1,636**				
16:00-18:00	CAR	532	16	1	2	19	2,000	0	1,735	1	1,736	4	263	3	197	463	2,047	0	1,834	531	2,365	N	123	15	107
	TRK	4	0	0	0	0	20	0	18	0	18	0	2	0	2	4	39	0	37	4	41	S	28	0	0
2 HR PM	BUS	0	0	0	0	0	20	0	18	0	18	0	2	0	0	2	19	0	19	0	19	E	10	27	5
																						W	8	0	117
	TOTAL:	**536**	**16**	**1**	**2**	**19**	**2,040**	**0**	**1,771**	**1**	**1,772**	**4**	**267**	**3**	**199**	**469**	**2,105**	**0**	**1,890**	**535**	**2,425**				
07:30-18:00	CAR	1,098	61	5	7	73	7,386	0	5,966	59	6,025	68	1,413	9	524	1,946	6,047	0	5,462	1,093	6,555	N	284	66	289
	TRK	17	0	0	1	1	148	0	135	0	135	0	12	0	11	23	166	0	155	17	172	S	75	0	0
8 HR SUM	BUS	0	0	0	0	0	96	0	91	0	91	0	5	0	3	8	79	0	76	0	76	E	35	63	17
																						W	25	0	357
	TOTAL:	**1,115**	**61**	**5**	**8**	**74**	**7,630**	**0**	**6,192**	**59**	**6,251**	**68**	**1,430**	**9**	**538**	**1,977**	**6,292**	**0**	**5,693**	**1,110**	**6,803**				

Total 8 Hour Vehicle Volume: 15,105

Total 8 Hour Bicycle Volume: 129

Total 8 Hour Intersection Volume: 15,234

Comment: N OTR = THE KINGSWAY SB L TO OLD MILL, E OTR=BLOOR WB RTS TO OLD MILL, W OTR = OLD MILL RTS TO THE KINGSWAY

Printed On: 14 Dec, 2016 4:24:54PM

APPENDIX

C SIGNAL TIMING PLANS

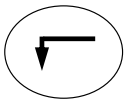
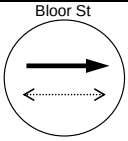
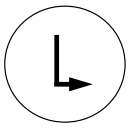
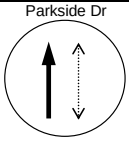
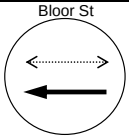
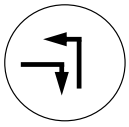
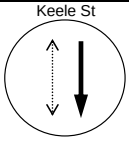
CITY OF TORONTO - TRANSPORTATION SERVICES
ITS OPERATIONS - TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City of Toronto (Garvin S. Tom) **OUR REF: 2016_0196**
DATE: December 15, 2016 **STAFF: TC/RI**

LOCATION:	**Bloor St W & Keele St/Parkside Dr**	***DISTRICT:***	**Toronto & East York**
TCS:	**328**	***COMPUTER SYSTEM:***	**TransSuite**
MODE/COMMENT:	**FXT with 2-Wire Polara APS**	***CONTROLLER/CABINET TYPE:***	**PEEK ATC-1000/TS2T1**
PREPARED/CHECKED BY:	**SS/DS**	***CONFLICT FLASH:***	**Red & Red**
PREPERATION DATE:	**October 8, 2015**	***DESIGN WALK SPEED:***	**1.0m/s (FDW based on full crossing @ 1.2m/s)**
IMPLEMENTATION DATE:	**November 25, 2015**	***CHANNEL/DROP:***	**4019/77**
		CONTROLLER FIRMWARE:	**3.018.1.2976**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:15-18:30 M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded/Callable)	Remarks
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
	Split Table	Split 1	Split 2	Split 3	Split 4	Split 5		
1 	WLK FDW MIN 6 MAX 1 7 AMB 3 ALR 1 SPLIT	11	17	11		11	WBLA Callable/Extendable by 5 m long set-back loop all times except 22:00-06:00 Daily	Pedestrian Minimums: EWWK = 7 sec., EWFD = 20 sec. NSWK = 7 sec., NSFD = 20 sec. NBLA and EBRA are displayed simultaneously Left-Turn passage = 2 sec. APS on during WALK periods when no arrows are displayed. Extended Push Activation = 3secs.
2 Bloor St 	WLK 7 FDW 20 MIN 27 MAX 1 28 AMB 4 ALR 2 SPLIT	34	38	42	41	51	Fixed	Equipped with 8 system detectors (see loop drawing).
3 	WLK FDW MIN 6 MAX 1 7 AMB 3 ALR 1 SPLIT		16				Callable/Extendable by set-back loop	
4 Parkside Dr 	WLK 7 FDW 20 MIN 27 MAX 1 39 AMB 4 ALR 2 SPLIT	45	39	57	34	48	Fixed	
5 NOT USED	WLK FDW MIN MAX 1 AMB ALR SPLIT							
6 Bloor St 	WLK 7 FDW 20 MIN 27 MAX 1 39 AMB 4 ALR 2 SPLIT	45	55	53	41	62	Fixed	
7 	WLK FDW MIN 6 MAX 1 7 AMB 3 ALR 1 SPLIT	11	16	15		14	NBLA Callable/Extendable by 5m long set-back loop all times except 22:00-06:00 Daily	
8 Keele St 	WLK 7 FDW 20 MIN 27 MAX 1 28 AMB 4 ALR 2 SPLIT	34	39	42	34	34	Fixed	
	CL OF	90 84	110 59	110 57	75 44	110 84		

NOTES:

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: ***City of Toronto,City Planning(Garvin S. Tom)*** **OUR REF:2016_0196**
DATE: **December 22, 2016** **STAFF:ND/RI**

LOCATION:	**Bloor St W & High Park Ave / Colbourne Lodge Dr**	***DISTRICT:***	**Etobicoke York** **N**
MODE/COMMENT:	**SAP with WRM & 2-Wire Polara APS**	***COMPUTER SYSTEM:***	**TransSuite**
PX:	**329**	***CONTROLLER/CABINET TYPE:***	**Peek ATC-1000 / TS2 T1**
PREPARED/CHECKED BY:	**SA/PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing at 1.2 m/s)**
IMPLEMENTATION DATE:	**February 17, 2015**	***CHANNEL/DROP:***	

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:15-18:30 M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded or Callable)	Remarks
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
	Split Table	Split 1	Split 2	Split 3	Split 4	Split 5		
1 NOT USED	WLK FDW MIN MAX 1 AMB ALR SPLIT							Pedestrian Minimums: EWWK = 7 sec, EWFD = 16 sec NSWK = 7 sec, NSFD = 17 sec
2 Bloor St	WLK 7 FDW 16 MIN 23 MAX 1 54 AMB 4 ALR 2 SPLIT	59	68	79	44	79	Fixed	NS phase is callable by vehicle or pedestrian actuation. If a vehicle and/or pedestrian call is received, the maximum SBG is served. The NSWK & NSFD are displayed on the pedestrian signal heads if a vehicle and/or pedestrian call is received. EWFD reverts to EWWK if there is no side street demand at the end of the EWFD. The signal constantly cycles through main street FDW to improve response to main street APS and side street vehicle and pedestrian demand. Side street decision point is at the end of EWFD.
3 NOT USED	WLK FDW MIN MAX 1 AMB ALR SPLIT							Actuated EW and NS APS on for 7 seconds during walk periods only. Extended Push Activation = 3 sec
4 Colbourne Lodge Dr	WLK 7 FDW 17 MIN 24 MAX 1 24 AMB 3 ALR 3 SPLIT	31	42	31	31	31	Callable by TrafiCam and/or pushbutton;	
5 NOT USED	WLK FDW MIN MAX 1 AMB ALR SPLIT							
6 Bloor St	WLK 7 FDW 16 MIN 23 MAX 1 54 AMB 4 ALR 2 SPLIT	59	68	79	44	79	Fixed	
7 NOT USED	WLK FDW MIN MAX 1 AMB ALR SPLIT							
8 High Park Ave	WLK 7 FDW 17 MIN 24 MAX 1 24 AMB 3 ALR 3 SPLIT	31	42	31	31	31	Callable by TrafiCam and/or pushbutton;	
	CL OF	90 25	110 42	110 82	75 12	110 87		

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City of Toronto,City Planning(Garvin S. Tom) **OUR REF:2016_0196**
DATE: **December 22, 2016** **STAFF:ND/RI**

LOCATION:	**Bloor St W & Clendenan Av**	***DISTRICT:***	**Etobicoke York**
MODE/COMMENT:	**SAP with WRM & 2-Wire Polara APS**	***COMPUTER SYSTEM:***	**TransSuite**
PX:	**330**	***CONTROLLER/CABINET TYPE:***	**EPAC 3668 M51 / TS2T1**
PREPARED/CHECKED BY:	**SA/PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	***DESIGN WALK SPEED:***	**1.0m/s (FDW bases on full crossing @ 1.2m/s)**
IMPLEMENTATION DATE:	**February 17, 2015**	***CHANNEL/DROP:***	**2070/14**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:15-18:30 M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded or Callable)	Remarks
	Local Plan	C1S1O1	C1S2O1	C1S3O1	C1S4O1	C1S5O1		
	System	(Plan 1)	(Plan 4)	(Plan 7)	(Plan 10)	(Plan 13)		
1 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							Pedestrian Minimums: EWWK = 7 sec, EWFD = 10 sec NSWK = 7 sec, NSFD = 14 sec
2 Bloor St W	WLK 7 FDW 10 MIN 17 MAX1 57 AMB 4 ALR 2 SPLIT	62	82	82	47	82	Fixed	SB phase is callable by vehicle and/or pedestrian actuation. If a vehicle and/or pedestrian call is received, the maximum SBG is served. The NSWK & NSFD are displayed on the pedestrian signal heads if a vehicle and/or pedestrian call is received. The signal constantly cycles through main street FDW to improve response to main street APS and side street vehicle and pedestrian demand. Side street decision point is at the end of EWFD.
3 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							Actuated EW and NS APS on for 7 seconds during walk periods only. Extended Push Activation = 3 sec EWFD reverts to EWWK if there is no side street demand at the end of the EWFD.
4 NOT USED	WLK 7 FDW 14 MIN 21 MAX1 21 AMB 3 ALR 3 SPLIT	28	28	28	28	28		
5 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							
6 Bloor St W	WLK 7 FDW 10 MIN 17 MAX1 57 AMB 4 ALR 2 SPLIT	62	82	82	47	82	Fixed	
7 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							
8 Clendanan Av	WLK 7 FDW 14 MIN 21 MAX1 21 AMB 3 ALR 3 SPLIT	28	28	28	28	28	Callable by stopbar loop and/or pushbutton	
	CL OF	90 65	110 18	110 107	75 56	110 3		

NOTES: Picked up on TransSuite Apr 4, 2012 at 3:06 pm.

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City of Toronto,City Planning(Garvin S. Tom) **OUR REF:2016_0196**
DATE: **December 22, 2016** **STAFF:ND/RI**

LOCATION:	**Bloor St W & Runneymede Rd**	***DISTRICT:***	**Etobicoke-York**
MODE/COMMENT:	**FXT with 2-Wire Polara APS**	***COMPUTER SYSTEM:***	**TransSuite**
PX:	**331**	***CONTROLLER/CABINET TYPE:***	**EPAC 3668 M51 / TS2T1**
PREPARED/CHECKED BY:	**BS/PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing at 1.2 m/s)**
IMPLEMENTATION DATE:	**February 10, 2015**	***CHANNEL/DROP:***	**2014/8**

N

NEMA Phase		OFF All Other Times	AM 06:30 - 09:30, M-F	PM 15:15 - 18:30, M-F	NIGHT 22:00-06:00	Grdnr Clsr Times to be	Phase Mode (Fixed/Demanded or Callable)	Remarks
	Local Plan	C1/S1/01	C1/S2/01	C1/S3/01	C1/S4/01	C1/S5/01		
	System Plan	Plan 1	Plan 4	Plan 7	Plan 10	Plan 13		
1 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							Pedestrian Minimums: EWWK = 7 seconds, EWFD = 15 seconds NSWK = 7 seconds, NSFD = 18 seconds APS on during EWWK and NSWK periods when activated by push button. Extended Push Activation = 3 seconds
2 Bloor St W	WLK 7 FDW 15 MIN 22 MAX1 43 AMB 4 ALR 2 SPLIT	49	67	73	42	73	Fixed.	
3 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							
4 Runnymede Rd	WLK 7 FDW 18 MIN 25 MAX1 35 AMB 4 ALR 2 SPLIT	41	43	37	33	37	Fixed.	
5 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							
6 Bloor St W	WLK 7 FDW 15 MIN 22 MAX1 43 AMB 4 ALR 2 SPLIT	49	67	73	42	73	Fixed.	
7 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT							
8 Runnymede Rd	WLK 7 FDW 18 MIN 25 MAX1 35 AMB 4 ALR 2 SPLIT	41	43	37	33	37	Fixed.	
	CL OF	90 6	110 88	110 10	75 23	110 30		

Notes: Picked up on TransSuite for the first time on April 27, 2011

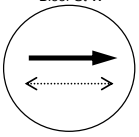
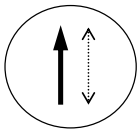
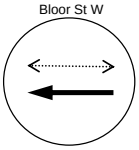
CITY OF TORONTO - TRANSPORTATION SERVICES
ITS OPERATIONS - TRAFFIC SIGNALS
703 Don Mills Rd, Toronto ON, M3C 3N3
Phone: (416) 397 5770, Fax (416) 397 5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City Planning (Garvin S. Tom) ***OUR REF: 2016_0196***
DATE: December 19, 2016 ***STAFF: VZ/SQ***

LOCATION:	**Bloor St W & Windermere Ave**	***DISTRICT:***	**Toronto & East York**
MODE/COMMENT:	**SAP with WRM & 2-Wire Polara APS**	***COMPUTER SYSTEM:***	**TransSuite**
TCS:	**332**	***ITROLLER/CABINET TYPE:***	**PEEK ATC-1000/TS2T1**
PREPARED/CHECKED BY:	**BS / PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing @ 1.2 m/s)**
IMPLEMENTATION DATE:	**February 6, 2015**	***CHANNEL/DROP:***	**4005/34**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:15-18:30 M-F	NIGHT 22:00 - 06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded/ Callable)	Remarks
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
	Split Table	Split 1	Split 2	Split 3	Split 4	Split 5		
1 NOT USED	WLK							Pedestrian Minimums: EWWK = 7 sec, EWFD = 12 sec NSWK = 7 sec, NSFD = 19 sec
	FDW							EWFD reverts to EWWK if there is no side street vehicle demand at the end of EWFD.
	MIN							NS phase is callable by vehicle or pedestrian actuation. If a vehicle and/or pedestrian call is received, the maximum NSG is served. The NSWK & NSFD are displayed on the pedestrian signal heads if a vehicle and/or pedestrian call is received.
	MAX1							
	AMB							
	ALR							
	SPLIT							
2 Bloor St W 	WLK 7						Fixed	This signal constantly cycles through main street FDW to improve response to main street APS and side street vehicle and pedestrian demand. The side street decision point is at the end of EWFD.
	FDW 12							
	MIN 19							
	MAX1 52							
	AMB 4							
	ALR 2							
	SPLIT	57	71	77	42	77		
3 NOT USED	WLK							APS on during 7 seconds of EWWK & NSWK when activated by push button.
	FDW							
	MIN							Extended Push Activation = 3 secs.
	MAX1							
	AMB							
	ALR							
	SPLIT							
4 Windermere Ave 	WLK 7						Callable by stopbar loop and/or pushbutton	
	FDW 19							
	MIN 26							
	MAX1 26							
	AMB 4							
	ALR 2							
	SPLIT	33	39	33	33	33		
5 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
6 Bloor St W 	WLK 7						Fixed	
	FDW 12							
	MIN 19							
	MAX1 52							
	AMB 4							
	ALR 2							
	SPLIT	57	71	77	42	77		
7 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
8 Windermere Ave 	WLK 7						Callable by stopbar loop and/or pushbutton	
	FDW 19							
	MIN 26							
	MAX1 26							
	AMB 4							
	ALR 2							
	SPLIT	33	39	33	33	33		
	CL	90	110	110	75	110		
	OF	2	66	2	68	47		

NOTES:

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO **: City Planning (Garvin S. Tom)** ***OUR REF*** **: 2016_0196**
DATE **: December 16, 2016** ***STAFF*** **: JG/SQ**

LOCATION:	**Bloor St W & Jane St**	***DISTRICT:***	**Etobicoke York**
MODE/COMMENT:	**FXT with 2-Wire Polara APS**	***COMPUTER SYSTEM:***	**TransSuite**
TCS:	**333**	***CONTROLLER/CABINET TYPE:***	**Econolite ASC/3-2100 / TS2 T1**
PREPARED/CHECKED BY:	**BS/PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 27, 2015**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing at 1.2 m/s)**
IMPLEMENTATION DATE:	**February 6, 2015**	***CHANNEL/DROP:***	**2070 / 22**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30, M-F	PM 15:15-18:30, M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded or Callable)	Remarks
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
	System Plan	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5		
1 NOT USED	WLK							Pedestrian Minimums: EWWK = 7 secs; EWFD = 13 secs NSWK = 7 secs; NSFD = 19 secs Left-Turn Passage Time = 2 sec. APS on during walk periods when no arrows are displayed. Extended Push Activation = 3 secs.
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
2 Bloor St W	WLK	7					Fixed.	
	FDW	13						
	MIN	20						
	MAX1	52						
	AMB	4						
	ALR	2						
	SPLIT	68	78	78	68	78		
3 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
4 NOT USED	WLK	7						
	FDW	19						
	MIN	26						
	MAX1	27						
	AMB	3						
	ALR	2						
	SPLIT	32	32	32	32	32		
5	WLK						Callable & Extendable by 5 m Setback Loop 24 hours. SBRA on concurrently with EBLA.	
	FDW							
	MIN	6						
	MAX1	19						
	AMB	3						
	ALR	1						
	SPLIT	27	40	40	23	23		
6 Bloor St W	WLK	7					Fixed.	
	FDW	13						
	MIN	20						
	MAX1	29						
	AMB	4						
	ALR	2						
	SPLIT	41	38	38	45	55		
7 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
8 Jane St	WLK	7					Fixed.	
	FDW	19						
	MIN	26						
	MAX1	27						
	AMB	3						
	ALR	2						
	SPLIT	32	32	32	32	32		
	CL	100	110	110	100	110		
	OF	53	87	51	12	56		

Notes: T-intersection (no south leg)
Signals picked up on TransSuite system control on January 27, 2012 at approximately 2:11 p.m.

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO **: City Planning (Garvin S. Tom)** ***OUR REF*** **: 2016_0196**
DATE **: December 16, 2016** ***STAFF*** **: JG/SQ**

LOCATION:	**Bloor St W & South Kingsway/Riverview Gardens**	***DISTRICT:***	**Etobicoke York**
MODE/COMMENT:	**FXT**	***COMPUTER SYSTEM:***	**TransSuite**
TCS:	**334**	***CONTROLLER/CABINET TYPE:***	**Peek ATC-1000 / TS2 T1**
PREPARED/CHECKED BY:	**AD / DS**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**June 1, 2015**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing at 1.2 m/s)**
IMPLEMENTATION DATE:	**June 2, 2015**	***CHANNEL/DROP:***	**4005/44**
		CONTROLLER FIRMWARE:	**3.08.1315**

N

NEMA Phase		**OFF**	**AM**	**PM**	**AMI**	**NIGHT**	**Grdnr Clsr**	**Phase Mode**	**Remarks**
		All Other Times	**07:00-09:00 M-F**	**15:15-18:30 M-F**	**06:30-07:00 & 09:00-09:30 M-F**	**22:00-06:00 Daily**	**Times to be determined**	**(Fixed/Demanded or Callable)**	
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 16		
	Split Table	Split 1	Split 2	Split 3	Split 4	Split 5	Split 16		
1	WLK							Callable/Extendable 24 hours by 9 m set-back loop	Pedestrian Minimums: EWWK = 7 sec, EWFD = 22 sec NSWK = 7 sec, NSFD = 21 sec
	FDW								NS ped crossing on east leg only.
	MIN 6								WBLA and NBRA are displayed simultaneously
	MAX1 8								No northbound left turns to Mossom Rd 07:00-09:00 M-F.
	AMB 3								EBRA enabled 07:00-09:00 M-F and displayed concurrently with phase 4. Not enabled all times due to permitted left turns to Mossom Rd.
	ALR 2								*Time programmed in Phase 7 even when EBRA not enabled (required to maintain coordination); however, Phase Omit applied in Coord Split Tables and in Time of Day Action Plan
	SPLIT	13	18	20	18	13	20		Ring structure: 1 2 | 4 | 6 | 7 | 8
2 Bloor St W	WLK 7							Fixed	Side Street Passage Time (Phase 8) = 3 secs
	FDW 22								Left-turn Passage Time = 2 secs
	MIN 29								
	MAX1 30								
	AMB 4								
	ALR 4								
	SPLIT	38	43	41	43	38	41		
3 NOT USED	WLK								
	FDW								
	MIN								
	MAX1								
	AMB								
	ALR								
	SPLIT								
4 South Kingsway	WLK 7							Fixed	
	FDW 21								
	MIN 28								
	MAX1 29								
	AMB 3								
	ALR 2								
	SPLIT	34	34	34	34	34	34		
5 NOT USED	WLK								
	FDW								
	MIN								
	MAX1								
	AMB								
	ALR								
	SPLIT								
6 Bloor St W	WLK 7							Fixed	
	FDW 22								
	MIN 29								
	MAX1 43								
	AMB 4								
	ALR 4								
	SPLIT	51	61	61	61	51	61		
7	WLK 7							Concurrently displayed with phase 4 Enabled 07:00-09:00 M-F	
	FDW 21								
	MIN 28								
	MAX1 29								
	AMB 3								
	ALR 2								
	SPLIT	34	34	34	34	34	34		
8 Riverview Gardens	WLK							Callable/Extendable 24 hours by Overhead detector	
	FDW								
	MIN 7								
	MAX1 8								
	AMB 4								
	ALR 3								
	SPLIT	15	15	15	15	15	15		
	CL	100	110	110	110	100	110		
	OF	1	31	108	31	2	2		

Notes:

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO **: City of Toronto, City Planning (Garvin S. Tom)** ***OUR REF*** **: 2016_0196**
DATE **: December 16, 2016** ***STAFF*** **: NA/SQ**

LOCATION:	**Bloor St W & Old Mill Trail**	***DISTRICT:***	**Etobicoke York**
MODE/COMMENT:	**SA2-VMG with WRM**	***COMPUTER SYSTEM:***	**TransSuite**
PX:	**335**	***CONTROLLER/CABINET TYPE:***	**Econolite ASC/2S-1000/TS2T1**
PREPARED/CHECKED BY:	**PV/HL**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**September 9, 2013**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing @ 1.2 m/s)**
IMPLEMENTATION DATE:	**September 20, 2013**	***CHANNEL/DROP:***	**2011 / 3**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:15 M-F	PM 15:45-18:15 M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded or Callable)	Remarks
	System Plan	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5		
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
1 NOT USED	WLK							Pedestrian Minimums: EWWK = 7 sec, EWFD = 22 sec NSWK = 7 sec, NSFD = 18 sec
	FDW							SB phase is callable by vehicle or pedestrian actuation. If a vehicle call is received, the minimum SBG is 7 seconds. If ongoing vehicle demand exists on the stopbar loop, the SBG is capable of providing vehicle extensions up to the maximum. If a pedestrian call is received, the pedestrian minimums will be served. The NSWK & NSFD are only displayed on the pedestrian signal heads if a pedestrian call is received. Extension time is based on vehicle demand. Unused extension time is allocated to the EWG.
	MIN							
	MAX 1							
	AMB							
	ALR							
	SPLIT							
2 Bloor St W →	WLK	7					Fixed	
	FDW	22						
	MIN	29						
	MAX 1	67						
	AMB	4						
	ALR	3						
	SPLIT	73	78	73	68	78		
3 NOT USED	WLK							EWFD reverts to EWWK if there is no side street demand at the end of the EWFD.
	FDW							Side Street Passage Time = 3 sec
	MIN							Left Turn Passage Time = 2 sec
	MAX 1							Signal serves EWFD every cycle. Side street decision point at the end of EWFD.
	AMB							
	ALR							
	SPLIT							
4 Old Mill Trail Dr ↑↓	WLK	7					Callable by stopbar loop and/or pushbutton; Extendable by stopbar loop. Auto Perm Min Grn = TBD	
	FDW	18						
	MIN	7						
	MAX 1	25						
	AMB	3						
	ALR	3						
	SPLIT	32	32	32	32	32		
5 ↱	WLK						Callable 24 hours by 9.0 m long setback loop	
	FDW							
	MIN	6						
	MAX 1	8						
	AMB	3						
	ALR	1						
	SPLIT	12	11	16	11	11		
6 Bloor St W ←→	WLK	7					Fixed	
	FDW	22						
	MIN	29						
	MAX 1	55						
	AMB	4						
	ALR	3						
	SPLIT	61	67	57	57	67		
7 NOT USED	WLK							
	FDW							
	MIN							
	MAX 1							
	AMB							
	ALR							
	SPLIT							
8 NOT USED	WLK	7						
	FDW	18						
	MIN	7						
	MAX 1	25						
	AMB	3						
	ALR	3						
	SPLIT	32	32	32	32	32		
	CL	105	110	105	100	110		
	OF	58	96	59	93	63		
	Veh Perm	Auto (0)	Auto (0)	Auto (0)	Auto (0)	Auto (0)		

NOTES T intersection - no south leg.
Signals picked up on TransSuite system control on June 14, 2011 @ apprioximately 2:06 p.m.

CITY OF TORONTO – TRANSPORTATION SERVICES
ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO **: City of Toronto, City Planning (Garvin S. Tom)** ***OUR REF*** **: 2016_0196**
DATE **: December 16, 2016** ***STAFF*** **: NA/SQ**

LOCATION:	**Bloor St W & The Kingsway / Private Access**	***DISTRICT:***	**Etobicoke-York**
PX:	**336**	***COMPUTER SYSTEM:***	**TransSuite**
MODE/COMMENT:	**SA2-VMG with WRM & 2-Wire Polara APS**	***CONTROLLER/CABINET TYPE:***	**Econolite ASC/3-2100 / TS2T1**
PREPARED/CHECKED BY:	**IK / DS**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**October 21, 2014**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing at 1.2 m/s)**
IMPLEMENTATION DATE:	**December 3, 2014**	***CHANNEL/DROP:***	**4005/6**

N

NEMA Phase		**OFF**	**AM**	**PM**	**NIGHT**	**Grdnr Clsr**	**Phase Mode**
		All Other Times	**06:30-09:15 M-F**	**15:45-18:15 M-F**	**22:00-06:00 Daily**	**Times to be determined**	**(Fixed/Demanded/Callable)**
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	
	System Plan	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	
1 NOT USED	WLK						
	FDW						
	MIN						
	MAX1						
	AMB						
	ALR						
	SPLIT						
2 Bloor St W	WLK	7					Fixed
	FDW	15					
	MIN	22					
	MAX1	36					
	AMB	4					
	ALR	3					
	SPLIT	42	47	42	37	47	
3 The Kingsway	WLK						Callable by Traficam Overhead Detector Extendable by Traficam Overhead Detector
	FDW						
	MIN	7					
	MAX1	20					
	AMB	4					
	ALR	3					
	SPLIT	28	28	28	28	28	
4 Private Access	WLK	7					Callable by Traficam Overhead Detector and/or Push Button. Extendable by Traficam Overhead Detector
	FDW	20					
	MIN	7					
	MAX1	27					
	AMB	4					
	ALR	3					
	SPLIT	35	35	35	35	35	
5 NOT USED	WLK						
	FDW						
	MIN						
	MAX1						
	AMB						
	ALR						
	SPLIT						
6 Bloor St W	WLK	7					Fixed
	FDW	15					
	MIN	22					
	MAX1	36					
	AMB	4					
	ALR	3					
	SPLIT	42	47	42	37	47	
7 ACTIVATED	WLK						
	FDW						
	MIN	7					
	MAX1	20					
	AMB	4					
	ALR	3					
	SPLIT	28	28	28	28	28	
8 ACTIVATED	WLK	7					
	FDW	20					
	MIN	7					
	MAX1	27					
	AMB	4					
	ALR	3					
	SPLIT	35	35	35	35	35	
	CL	105	110	105	100	110	
	OF	99	105	97	2	85	
	VP	15	15	15	15	15	

Remarks

Pedestrian Minimums:
EWWK = 7 secs; EWFD = 15 secs
NSWK = 7 secs; NSFD = 20 secs

NB phase is callable by vehicle or pedestrian actuation. SB phase is callable by vehicle actuation. If a vehicle call is received, the minimum NSG is 7 seconds. If ongoing vehicle demand exists in the vehicle detection zone, the NSG is capable of providing vehicle extensions up to the maximum green split. If a pedestrian call is received, the pedestrian mimimum will be served. The NSWK & NSFD are only displayed on the pedestrian signal heads if a pedestrian call is received. Extension time is based on vehicle demand. Unused extension time is given to the EWG.

EWFD reverts to EWWK if there is no side street demand at the end of the EWFD.

Side Street Passage Time = 3 secs

APS on during 7 sec of NSWK & 7 sec of EWWK when activated by push button.

Extended Push Activation = 3 sec

The signal constantly cycles through main street FDW to improve response to main street APS, side street vehicle and pedestrian demand.

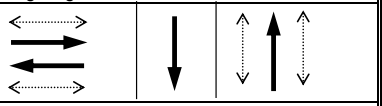
Turn Restrictions:

No NB Right-Turns on Red from Private Access
No WB Right-Turns on Red from Bloor St W
No EB Left-Turns Anytime from Bloor St W

Ring Structure:

2	3	4
6	7	8

Phasing Diagram:



NOTES:

CITY OF TORONTO - TRANSPORTATION SERVICES
ITS OPERATIONS - TRAFFIC SIGNALS
703 Don Mills Rd, Toronto ON, M3C 3N3
Phone: (416) 397 5770, Fax (416) 397 5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City Planning (Garvin S. Tom) ***OUR REF: 2016_0196***
DATE: December 19, 2016 ***STAFF: VZ/SQ***

LOCATION:	**Bloor St W & Durie St**	***DISTRICT:***	**Toronto & East York**
MODE/COMMENT:	**SAP with WRM & 2-Wire Polara APS**	***COMPUTER SYSTEM:***	**TransSuite**
TCS:	**1479**	***CONTROLLER/CABINET TYPE:***	**Econolite ASC/2S-1000 / TS2T1**
PREPARED/CHECKED BY:	**BS/PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	***DESIGN WALK SPEED:***	**1.0m/s (FDW based on full crossing @ 1.2m/s)**
IMPLEMENTATION DATE:	**February 6, 2015**	***CHANNEL/DROP:***	**2014 / 2**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:15-18:30 M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded or Callable)	Remarks
	System Plan	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5		
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
1 NOT USED	WLK							Pedestrian Minimums: EWWK = 7 sec, EWFD = 10 sec NSWK = 7 sec, NSFD = 15 sec
	FDW							SB phase is callable by vehicle or pedestrian actuation. If a vehicle and/or pedestrian call is received, the maximum SBG is served. The NSWK & NSFD are displayed on the pedestrian signal heads if a vehicle and/or pedestrian call is received.
	MIN							
	MAX 1							
	AMB							
	ALR							
	SPLIT							
2 Bloor St W	WLK 7						Fixed	
	FDW 10							The signal constantly cycles through main street FDW to improve response to main street APS and side street vehicle and pedestrian demand.
	MIN 17							
	MAX 1 57							
	AMB 4							EWFD reverts to EWWK if there is no side street demand at the end of the EWFD.
	ALR 2							
	SPLIT	62	82	82	47	82		
3 NOT USED	WLK							Actuated NS and EW APS on for 7 seconds during WALK periods only.
	FDW							Extended Push Activation = 3secs.
	MIN							
	MAX 1							
	AMB							
	ALR							
	SPLIT							
4 NOT USED	WLK 7							
	FDW 15							
	MIN 22							
	MAX 1 22							
	AMB 3							
	ALR 2							
	SPLIT	28	28	28	28	28		
5 NOT USED	WLK							
	FDW							
	MIN							
	MAX 1							
	AMB							
	ALR							
	SPLIT							
6 Bloor St W	WLK 7						Fixed	
	FDW 10							
	MIN 17							
	MAX 1 57							
	AMB 4							
	ALR 2							
	SPLIT	62	82	82	47	82		
7 NOT USED	WLK							
	FDW							
	MIN							
	MAX 1							
	AMB							
	ALR							
	SPLIT							
8 Durie St	WLK 7						Callable by stopbar loop and/or pushbutton;	
	FDW 15							
	MIN 22							
	MAX 1 22							
	AMB 3							
	ALR 2							
	SPLIT	28	28	28	28	28		
	CL	90	110	110	75	110		
	OF	88	57	22	62	42		
	VP	10	10	10	10	10		

NOTES:

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ITS OPERATIONS – TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City of Toronto,City Planning (Garvin S. Tom) **OUR REF:2016_0196**
DATE: **December 22, 2016** **STAFF:ND/RI**

LOCATION:	**Bloor St W & Glendonwynne / Parking Lot Acc**	***DISTRICT:***	**Etobicoke York**
PX:	**1688**	***COMPUTER SYSTEM:***	**TransSuite**
MODE / COMMENT:	**SAP with 2- Wire Polara APS and WRM**	***CONTROLLER/CABINET TYPE:***	**Econolite ASC/3-2100 / TS2 T1**
PREPARED / CHECKED BY:	**SA/PV**	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing @ 1.2 m/s)**
IMPLEMENTATION DATE:	**February 17, 2015**	***CHANNEL/DROP:***	**4005 / 38**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:15-18:30 M-F	NIGHT 22:00-06:00 Daily	Grdnr Clsr Times to be determined	Phase Mode (Fixed/Demanded/ Callable)	Remarks
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5		
	System Plan	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5		
1 NOT USED	WLK							Pedestrian Minimums: EWWK = 7 sec, EWFD = 10 sec NSWK = 7 sec, NSFD = 14 sec
	FDW							
	MIN							
	MAX1							NS phase is callable by vehicle and/or pedestrian actuation. If a vehicle and/or pedestrian call is received, the maximum NSG would be served. The NSWK & NSFD are only displayed on the pedestrian signal heads if a vehicle and/or pedestrian call is received.
	AMB							
	ALR							
	SPLIT							
Bloor St W 2	WLK 17						Fixed	EWFD reverts to EWWK if there is no side street vehicle demand at the end of the EWFD.
	WLK MAX							
	FDW 10							Extended Push Activation = 3 sec
	MIN 27							The signal constantly cycles through main street FDW to improve response to main street APS and side street vehicle and pedestrian demand.
	MAX1 57							
	AMB 4							Signals serves 8 seconds of NSWK (WLK MAX value for phase 4 & 8).
	ALR 2							
	SPLIT	62	82	82	47	82		
3 NOT USED	WLK							NS pushbuttons monitored on local detector # 2
	FDW							EW pushbuttons monitored on local detector # 6
	MIN							APS on during 17 seconds of EWWK and 10 seconds of NSWK when activated by APS pushbuttons.
	MAX1							
	AMB							
	ALR							
	SPLIT							
Parking Lot Acc 4	WLK 7						Callable by Stopbar Loop and/or Push Button	
	WLK MAX 8							
	FDW 14							
	MIN 21							
	MAX1 22							
	AMB 4							
	ALR 2							
	SPLIT	28	28	28	28	28		
5 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
Bloor St W 6	WLK 17						Fixed	
	WLK MAX							
	FDW 10							
	MIN 27							
	MAX1 57							
	AMB 4							
	ALR 2							
	SPLIT	62	82	82	47	82		
7 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
Glendonwynne Rd 8	WLK 7						Callable by Stopbar Loop and/or Push Button	
	WLK MAX 8							
	FDW 14							
	MIN 21							
	MAX1 22							
	AMB 4							
	ALR 2							
	SPLIT	28	28	28	28	28		
	CL	90	110	110	75	110		
	OF	60	102	18	18	30		
	VP	10	10	10	10	10		

NOTES: Transferred to wireless system control on October 18, 2013 at approximately 11:20.

CITY OF TORONTO - TRANSPORTATION SERVICES
ITS OPERATIONS - TRAFFIC SIGNALS
703 Don Mills Rd, Fifth Floor, Toronto ON M3C 3N3
Phone: 416-397-5770 Fax: 416-397-5777

CURRENT SIGNAL TIMING INFORMATION

ISSUED TO: City of Toronto (Garvin S. Tom) **OUR REF: 2016_0196**
DATE: December 15, 2016 **STAFF: TC/RI**

LOCATION:	**Bloor St W & Indian Rd**	*DISTRICT:*	**Toronto & East York**
TCS:	**1717**	*COMPUTER SYSTEM:*	**TransSuite**
MODE/COMMENT:	**SA2-VMG with WRM**	*CONTROLLER/CABINET TYPE:*	**PEEK 3101E / TS2T1**
PREPARED/CHECKED BY:	**SA/PV**	*CONFLICT FLASH:*	**Red & Red**
PREPARATION DATE:	**January 28, 2015**	*DESIGN WALK SPEED:*	**1.0 m/s (FDW based on full crossing distance at 1.2 m/s)**
IMPLEMENTATION DATE:	**February 17, 2015**	*CHANNEL/DROP:*	**2048 / 1**

N

NEMA Phase		OFF	AM	PM	NIGHT	Grdnr Clsr	Phase Mode	Remarks
		All Other Times	06:30-09:30 M-F	15:15-18:30 M-F	22:00-06:00 Daily	Times to be determined	(Fixed/Demanded/Callable)	
	Local Plan	C1S1O1	C1S2O1	C1S3O1	C1S4O1	C4S1O1		
	System Plan	Plan 1	Plan 6	Plan 11	Plan 16	Plan 61		
1 NOT USED	WLK							Pedestrian Minimums: EWWK = 7 sec., EWFD = 10 sec. NSWK = 7 sec., NSFD = 15 sec.
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
2 Bloor St W	WLK 7						Fixed.	NB phase is callable by vehicle or pedestrian actuation. If a vehicle call is received, the minimum is 7 seconds. If ongoing vehicle demand exists on the stopbar loop, the NBG is capable of providing vehicle extensions up to the maximum green split. If a pedestrian call is received, the pedestrian minimums will be served. The NSWK & NSFD are only displayed on the pedestrian signal heads if a pedestrian call is received. Extension time is based on vehicle demand. Unused extension time is allocated to the EWG. SB phase is callable by vehicle actuation.
	FDW 10							
	MIN 17							
	MAX1 36							
	AMB 4							
	ALR 3							
	SPLIT	42	62	42	27	62		
3 NOT USED	WLK							NB and SB phases are callable and skippable. If NB and SB detectors are both active at the end of the EW phase, the NB phase is served first followed by the SB phase. If only the SB detector is active at the end of the EW phase, only the SB phase is served (and any late NB demand will only be served the following cycle). NB and SB phases are only permitted once per cycle.
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
4 Indian Rd	WLK 7						Callable by stopbar loop and/or pushbutton; Extendable by stopbar loop.	EWFD reverts to EWWK if there is no side street demand at the end of the EWFD.
	FDW 15							Signal serves EWFD every cycle. Side street decision point at end of EWFD.
	MIN 7							
	MAX1 22							Side Street Passage Time = 3 sec.
	AMB 3							
	ALR 4							
	SPLIT	30	30	30	30	30		
5 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
6 Bloor St W	WLK 7						Fixed.	
	FDW 10							
	MIN 17							
	MAX1 36							
	AMB 4							
	ALR 3							
	SPLIT	42	62	42	27	62		
7 NOT USED	WLK							
	FDW							
	MIN							
	MAX1							
	AMB							
	ALR							
	SPLIT							
8 Indian Rd	WLK						Callable & extendable by stopbar loop.	
	FDW							
	MIN 10							
	MAX1 10							
	AMB 3							
	ALR 4							
	SPLIT	18	18	18	18	18		
	CL	90	110	90	75	110		
	OF	4	72	73	49	70		

NOTES: Eastbound right turn and Westbound left turn movements prohibited between 7:00 a.m. & 9:00 a.m., Monday to Friday.
Picked up on Transuite system control on July 05, 2011 at approximately 12:07 p.m.

APPENDIX

D LEVEL OF SERVICE DEFINITIONS

LEVEL OF SERVICE DEFINITIONS AT SIGNALIZED INTERSECTIONS[1]

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average control delay per vehicle, typically for a 15-min analysis period. The criteria are given in the table below. Delay may be measured in the field or estimated using software such as Highway Capacity Software. Delay is a complex measure and is dependent upon a number of variables, including quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

Level of Service	Features	Control Delay per vehicle (sec)
A	LOS A describes operations with very low delay, up to 5 sec per vehicle. This level of service occurs when progression is extremely favourable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	≤ 10
B	LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10 and ≤ 20
C	LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	> 20 and ≤ 35
D	LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavourable progression, long cycle lengths, of high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35 and ≤ 55
E	LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.	> 55 and ≤ 80
F	LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	> 80

(1) Highway Capacity Manual 2000

LEVEL OF SERVICE DEFINITIONS AT UNSIGNALIZED INTERSECTIONS[1]

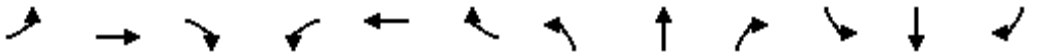
The level of service criteria for unsignalized intersections are given in the table below. As used here, total delay is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position. The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation.

Level of Service	Features	Average Total Delay (sec/veh)
A	Little or no traffic delay occurs. Approaches appear open, turning movements are easily made, and drivers have freedom of operation.	≤ 10
B	Short traffic delays occur. Many drivers begin to feel somewhat restricted in terms of freedom of operation.	> 10 and ≤ 15
C	Average traffic delays occur. Operations are generally stable, but drivers emerging from the minor street may experience difficulty in completing their movement. This may occasionally impact on the stability of flow on the major street.	> 15 and ≤ 25
D	Long traffic delays occur. Motorists emerging from the minor street experience significant restriction and frustration. Drivers on the major street will experience congestion and delay as drivers emerging from the minor street interfere with the major through movements.	> 25 and ≤ 35
E	Very long traffic delays occur. Operations approach the capacity of the intersection.	> 35 and ≤ 50
F	Saturation occurs, with vehicle demand exceeding the available capacity. Very long traffic delays occur.	> 50

(1) Highway Capacity Manual 2000.

APPENDIX

E OPTION ZERO SYNCHRO ANALYSIS SHEETS

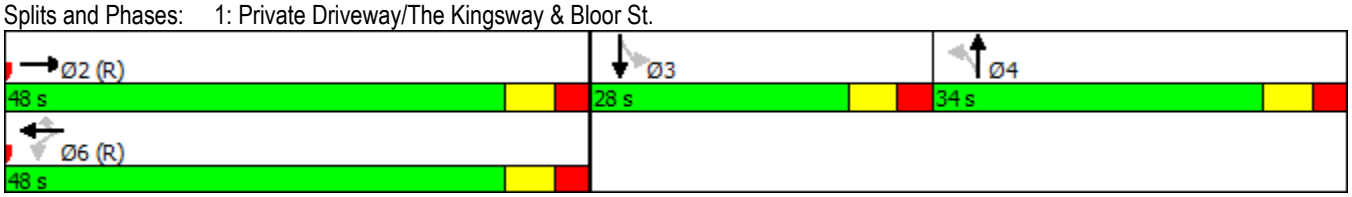


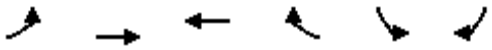
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1116	5	0	799	124	12	4	0	418	0	55
Future Volume (vph)	0	1116	5	0	799	124	12	4	0	418	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	1		0
Taper Length (m)	7.6			20.0			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00				0.89				0.99	1.00	
Frt		0.999				0.850					0.965	
Flt Protected								0.963		0.950	0.963	
Satd. Flow (prot)	0	3506	0	1921	3544	1617	0	1626	0	1734	1692	0
Flt Permitted										0.765	0.810	
Satd. Flow (perm)	0	3506	0	1921	3544	1438	0	1689	0	1388	1417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						109					109	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			96.5			98.0	
Travel Time (s)		15.3			23.5			17.4			11.8	
Confl. Peds. (#/hr)	37		8	8		37			8	8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	3%	1%	18%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	1213	5	0	868	135	13	4	0	454	0	60
Shared Lane Traffic (%)										43%		
Lane Group Flow (vph)	0	1218	0	0	868	135	0	17	0	259	255	0
Turn Type		NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6		6	4	4		3		
Detector Phase		2		6	6	6	4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0	22.0	7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0	29.0	34.0	34.0		14.0	14.0	
Total Split (s)		48.0		48.0	48.0	48.0	34.0	34.0		28.0	28.0	
Total Split (%)		43.6%		43.6%	43.6%	43.6%	30.9%	30.9%		25.5%	25.5%	
Maximum Green (s)		41.0		41.0	41.0	41.0	27.0	27.0		21.0	21.0	
Yellow Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0	15.0	20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0	0	0	0				
Act Effct Green (s)		68.7			68.7	68.7		7.7		21.0	21.0	
Actuated g/C Ratio		0.62			0.62	0.62		0.07		0.19	0.19	
v/c Ratio		0.56			0.39	0.14		0.15		0.98	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		14.4			24.5	13.3		50.4		96.2	35.7	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		14.4			24.5	13.3		50.4		96.2	35.7	
LOS		B			C	B		D		F	D	
Approach Delay		14.4			23.0			50.4			66.2	
Approach LOS		B			C			D			E	
90th %ile Green (s)		58.6		58.6	58.6	58.6	9.4	9.4		21.0	21.0	
90th %ile Term Code		Coord		Coord	Coord	Coord	Gap	Gap		Max	Max	
70th %ile Green (s)		60.1		60.1	60.1	60.1	7.9	7.9		21.0	21.0	
70th %ile Term Code		Coord		Coord	Coord	Coord	Gap	Gap		Max	Max	
50th %ile Green (s)		75.0		75.0	75.0	75.0	0.0	0.0		21.0	21.0	
50th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Max	Max	
30th %ile Green (s)		75.0		75.0	75.0	75.0	0.0	0.0		21.0	21.0	
30th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Max	Max	
10th %ile Green (s)		75.0		75.0	75.0	75.0	0.0	0.0		21.0	21.0	
10th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Max	Max	
Queue Length 50th (m)		60.3			70.6	7.4		3.5		58.7	31.0	
Queue Length 95th (m)		116.4			116.5	31.2		10.3		#111.4	#63.6	
Internal Link Dist (m)		188.8			302.4			72.5			74.0	
Turn Bay Length (m)						20.0						
Base Capacity (vph)		2190			2214	939		414		264	358	
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			0.39	0.14		0.04		0.98	0.71	

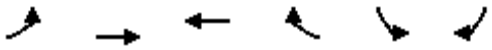
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 58.2%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	1303	780	24	35	166
Future Volume (vph)	110	1303	780	24	35	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	1			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	0.98		1.00		0.92	0.98
Frt			0.996			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1706	3614	3554	0	1789	1541
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1675	3614	3554	0	1652	1510
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4			180
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	824.1		142.8	
Travel Time (s)		23.5	59.3		12.9	
Confl. Peds. (#/hr)	32			32	58	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	7%	1%	2%	4%	2%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	120	1416	848	26	38	180
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	1416	874	0	38	180
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	6.0	29.0	29.0		7.0	7.0
Minimum Split (s)	10.5	36.0	36.0		31.0	31.0
Total Split (s)	11.0	78.0	67.0		32.0	32.0
Total Split (%)	10.0%	70.9%	60.9%		29.1%	29.1%
Maximum Green (s)	7.0	71.0	60.0		26.0	26.0
Yellow Time (s)	3.0	4.0	4.0		3.0	3.0
All-Red Time (s)	1.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	7.0	7.0		6.0	6.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)	16.4	88.2	67.8		8.8	8.8
Actuated g/C Ratio	0.15	0.80	0.62		0.08	0.08

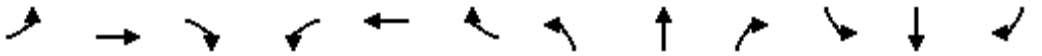


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.47	0.49	0.40		0.27	0.63
Control Delay	50.7	3.1	8.9		51.2	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	50.7	3.1	8.9		51.2	17.2
LOS	D	A	A		D	B
Approach Delay		6.8	8.9		23.1	
Approach LOS		A	A		C	
90th %ile Green (s)	17.8	83.6	61.8		13.4	13.4
90th %ile Term Code	Gap	Coord	Coord		Gap	Gap
70th %ile Green (s)	16.4	88.1	67.7		8.9	8.9
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	15.9	89.3	69.4		7.7	7.7
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	15.7	90.0	70.3		7.0	7.0
30th %ile Term Code	Gap	Coord	Coord		Min	Min
10th %ile Green (s)	16.2	90.0	69.8		7.0	7.0
10th %ile Term Code	Gap	Coord	Coord		Min	Min
Queue Length 50th (m)	19.2	46.5	32.9		7.9	0.0
Queue Length 95th (m)	m35.6	m23.3	40.0		17.3	19.5
Internal Link Dist (m)		302.4	800.1		118.8	
Turn Bay Length (m)	55.5					
Base Capacity (vph)	254	2897	2191		422	494
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.47	0.49	0.40		0.09	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 22.5 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 2: Bloor St. & Old Mill Trail

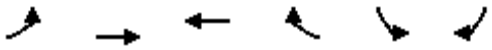


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	847	443	386	579	32	215	0	390	43	61	8
Future Volume (vph)	8	847	443	386	579	32	215	0	390	43	61	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.93		0.79	0.97	0.99					0.87		
Frt			0.850		0.992				0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1601	3579	1617	1755	3544	0	1825	0	1570	1825	1887	0
Flt Permitted	0.399			0.119			0.950			0.950		
Satd. Flow (perm)	624	3579	1279	214	3544	0	1825	0	1570	1593	1887	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					7				119		5	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		824.1			77.1			102.2			164.4	
Travel Time (s)		59.3			5.8			7.7			19.7	
Confl. Peds. (#/hr)	95		98	98		95			27	27		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	2%	1%	4%	1%	3%	0%	0%	4%	0%	0%	0%
Adj. Flow (vph)	9	921	482	420	629	35	234	0	424	47	66	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	921	482	420	664	0	234	0	424	47	75	0
Turn Type	Perm	NA	pm+ov	pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2	7	1	6		7		1 7		8	
Permitted Phases	2		2	6						8		
Detector Phase	2	2	7	1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0	28.0	6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0	33.0	11.0	37.0		33.0			14.0	14.0	
Total Split (s)	37.0	37.0	33.0	26.0	63.0		33.0			14.0	14.0	
Total Split (%)	33.6%	33.6%	30.0%	23.6%	57.3%		30.0%			12.7%	12.7%	
Maximum Green (s)	29.0	29.0	28.0	21.0	55.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0	3.0	3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0	2.0	2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0	
Total Lost Time (s)	8.0	8.0	5.0	5.0	8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max	None	None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0	7.0		7.0		7.0					
Flash Dont Walk (s)	22.0	22.0	21.0		22.0		21.0					
Pedestrian Calls (#/hr)	0	0	0		0		0					
Act Effct Green (s)	30.1	30.1	61.1	60.8	57.8		28.0		51.7	7.0	7.0	
Actuated g/C Ratio	0.27	0.27	0.56	0.55	0.53		0.25		0.47	0.06	0.06	
v/c Ratio	0.05	0.94	0.61	0.96	0.36		0.50		0.53	0.47	0.60	

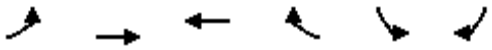
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	30.0	55.9	25.6	65.9	16.4		39.6		11.7	65.1	67.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Total Delay	30.0	55.9	25.6	65.9	16.4		39.6		11.7	65.1	67.6	
LOS	C	E	C	E	B		D		B	E	E	
Approach Delay		45.4			35.6			21.6			66.6	
Approach LOS		D			D			C			E	
90th %ile Green (s)	29.0	29.0	28.0	21.0	55.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
70th %ile Green (s)	29.0	29.0	28.0	21.0	55.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
50th %ile Green (s)	29.0	29.0	28.0	21.0	55.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
30th %ile Green (s)	29.0	29.0	28.0	21.0	55.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
10th %ile Green (s)	34.6	34.6	28.0	29.4	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord	Max	Gap	Coord		Max			Skip	Skip	
Queue Length 50th (m)	1.6	100.4	59.0	~80.3	43.9		43.1		29.7	9.9	14.9	
Queue Length 95th (m)	m3.5	#144.3	117.6	#140.5	57.0		67.1		49.3	22.1	#33.8	
Internal Link Dist (m)		800.1			53.1			78.2			140.4	
Turn Bay Length (m)	41.8		33.2	52.1						39.6		
Base Capacity (vph)	170	979	796	436	1865		464		800	101	124	
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	0.05	0.94	0.61	0.96	0.36		0.50		0.53	0.47	0.60	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 38.2		Intersection LOS: D	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.



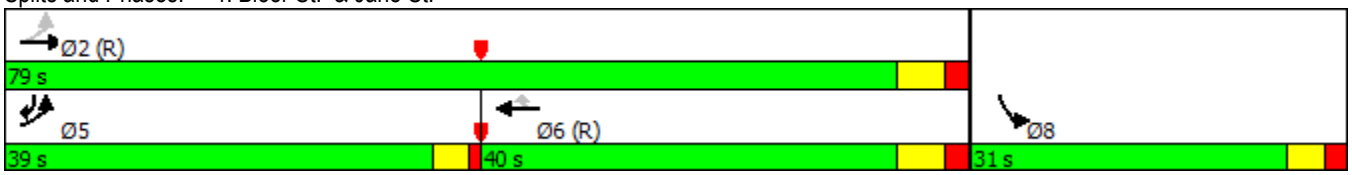
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	393	795	604	169	176	524
Future Volume (vph)	393	795	604	169	176	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	0.91			0.60	0.83	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1755	3544	3579	1328	1706	1541
Flt Permitted	0.232				0.950	
Satd. Flow (perm)	388	3544	3579	793	1420	1541
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				94		482
Link Speed (k/h)		50	50		40	
Link Distance (m)		61.8	334.6		180.8	
Travel Time (s)		4.4	24.1		16.3	
Confl. Peds. (#/hr)	142			142	132	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	2%	23%	7%	6%
Adj. Flow (vph)	427	864	657	184	191	570
Shared Lane Traffic (%)						
Lane Group Flow (vph)	427	864	657	184	191	570
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	39.0	79.0	40.0	40.0	31.0	39.0
Total Split (%)	35.5%	71.8%	36.4%	36.4%	28.2%	35.5%
Maximum Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	34.0	34.0	26.0	35.0
Actuated g/C Ratio	0.68	0.66	0.31	0.31	0.24	0.32
v/c Ratio	0.61	0.37	0.59	0.59	0.47	0.70

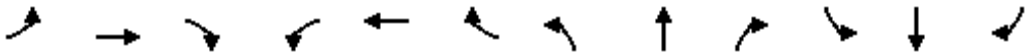


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	15.6	8.8	30.9	21.1	40.7	10.7
Queue Delay	0.4	0.6	0.0	0.0	0.0	0.0
Total Delay	16.0	9.4	30.9	21.1	40.7	10.7
LOS	B	A	C	C	D	B
Approach Delay		11.5	28.8		18.2	
Approach LOS		B	C		B	
90th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	38.9	39.4	66.4	18.5	35.4	13.6
Queue Length 95th (m)	71.4	49.7	85.3	18.8	57.3	52.4
Internal Link Dist (m)		37.8	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	699	2351	1106	310	403	818
Starvation Cap Reductn	49	1008	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	0.64	0.59	0.59	0.47	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 72.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Bloor St. & Jane St.



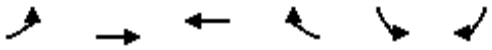


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	803	117	69	574	13	118	65	79	17	125	15
Future Volume (vph)	16	803	117	69	574	13	118	65	79	17	125	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.88	0.96		0.96	0.99		0.93	0.94		0.95	0.99	
Frt		0.981			0.997			0.918			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1722	3221	0	1807	3351	0	1825	1657	0	1825	1863	0
Flt Permitted	0.394			0.248			0.616			0.606		
Satd. Flow (perm)	630	3221	0	454	3351	0	1102	1657	0	1109	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			3			57			6	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	112		81	81		112	68		48	48		68
Confl. Bikes (#/hr)	112		81	81		112	68		48	48		68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	2%	0%	1%	2%	16%	0%	1%	0%	0%	0%	0%
Parking (#/hr)		0			0							
Adj. Flow (vph)	17	873	127	75	624	14	128	71	86	18	136	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1000	0	75	638	0	128	157	0	18	152	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	70.0	70.0		70.0	70.0		40.0	40.0		40.0	40.0	
Total Split (%)	63.6%	63.6%		63.6%	63.6%		36.4%	36.4%		36.4%	36.4%	
Maximum Green (s)	64.0	64.0		64.0	64.0		34.0	34.0		34.0	34.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	

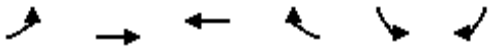
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.24	0.24		0.24	0.24	
v/c Ratio	0.04	0.47		0.25	0.29		0.49	0.36		0.07	0.34	
Control Delay	5.8	7.6		7.6	5.7		43.9	24.7		33.6	36.1	
Queue Delay	0.0	0.0		0.0	0.2		0.0	0.0		0.0	0.0	
Total Delay	5.8	7.6		7.6	5.9		43.9	24.7		33.6	36.1	
LOS	A	A		A	A		D	C		C	D	
Approach Delay		7.6			6.1			33.3			35.8	
Approach LOS		A			A			C			D	
90th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	1.0	30.1		3.3	14.6		23.9	17.5		3.0	26.1	
Queue Length 95th (m)	m2.6	35.3		6.5	19.1		43.0	36.2		9.0	44.3	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)	25.3			28.3			15.5			15.2		
Base Capacity (vph)	412	2116		297	2194		340	551		342	579	
Starvation Cap Reductn	0	0		0	675		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.47		0.25	0.42		0.38	0.28		0.05	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 105.8%		ICU Level of Service G	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Windermere Ave & Bloor St.



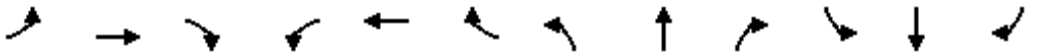
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	1018	672	20	23	37
Future Volume (vph)	16	1018	672	20	23	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.98		0.96	
Frt			0.996		0.917	
Flt Protected		0.999			0.981	
Satd. Flow (prot)	0	3397	3360	0	1642	0
Flt Permitted		0.938			0.981	
Satd. Flow (perm)	0	3182	3360	0	1608	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6		40	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	119.5		151.3	
Travel Time (s)		8.6	8.6		13.6	
Confl. Peds. (#/hr)	163			163	36	9
Confl. Bikes (#/hr)	163			163	36	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	5%	0%	5%
Parking (#/hr)		0	0	0		
Adj. Flow (vph)	17	1107	730	22	25	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1124	752	0	65	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	80.0	80.0	80.0		30.0	
Total Split (%)	72.7%	72.7%	72.7%		27.3%	
Maximum Green (s)	74.0	74.0	74.0		25.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		77.0	77.0		22.0	
Actuated g/C Ratio		0.70	0.70		0.20	
v/c Ratio		0.50	0.32		0.18	
Control Delay		3.6	6.7		19.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		0.1	0.0		0.0	
Total Delay		3.7	6.7		19.0	
LOS		A	A		B	
Approach Delay		3.7	6.7		19.0	
Approach LOS		A	A		B	
90th %ile Green (s)	77.0	77.0	77.0		22.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		22.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		22.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		22.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		22.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)		15.9	28.8		4.4	
Queue Length 95th (m)		19.5	37.1		15.9	
Internal Link Dist (m)		95.3	95.5		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		2227	2353		404	
Starvation Cap Reductn		195	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.55	0.32		0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 5.4		Intersection LOS: A	
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Bloor St. & Durie St. N

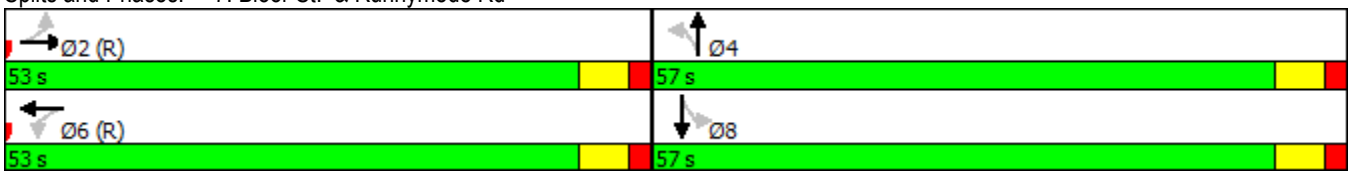


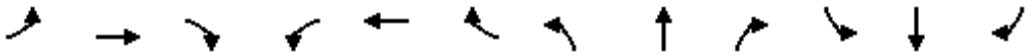
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	697	45	45	472	62	66	98	69	177	142	132
Future Volume (vph)	73	697	45	45	472	62	66	98	69	177	142	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.78	0.98		0.94	0.91		0.94	0.82		0.74	0.94	
Frt		0.991			0.983			0.938			0.928	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3471	0	1352	2859	0	1825	1418	0	1789	1536	0
Flt Permitted	0.413			0.306			0.413			0.589		
Satd. Flow (perm)	616	3471	0	408	2859	0	749	1418	0	818	1536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			16			43			18	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		114.3			188.8			215.2			259.0	
Travel Time (s)		8.2			13.6			25.8			23.3	
Confl. Peds. (#/hr)	388		113	113		388	72		387	387		72
Confl. Bikes (#/hr)	388		113	113		388	72		387	387		72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	35%	5%	40%	0%	8%	0%	2%	10%	7%
Parking (#/hr)					0	0						
Adj. Flow (vph)	79	758	49	49	513	67	72	107	75	192	154	143
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	807	0	49	580	0	72	182	0	192	297	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	53.0	53.0		53.0	53.0		57.0	57.0		57.0	57.0	
Total Split (%)	48.2%	48.2%		48.2%	48.2%		51.8%	51.8%		51.8%	51.8%	
Maximum Green (s)	47.0	47.0		47.0	47.0		51.0	51.0		51.0	51.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	65.5	65.5		65.5	65.5		32.5	32.5		32.5	32.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.60	0.60		0.60	0.60		0.30	0.30		0.30	0.30	
v/c Ratio	0.22	0.39		0.20	0.34		0.33	0.41		0.80	0.64	
Control Delay	14.9	13.6		12.5	9.9		31.9	24.4		57.9	36.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.9	13.6		12.5	9.9		31.9	24.4		57.9	36.8	
LOS	B	B		B	A		C	C		E	D	
Approach Delay		13.7			10.1			26.6			45.1	
Approach LOS		B			B			C			D	
90th %ile Green (s)	52.9	52.9		52.9	52.9		45.1	45.1		45.1	45.1	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	61.3	61.3		61.3	61.3		36.7	36.7		36.7	36.7	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	67.2	67.2		67.2	67.2		30.8	30.8		30.8	30.8	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	7.0	42.5		3.4	21.7		12.3	24.0		38.8	53.2	
Queue Length 95th (m)	20.8	75.4		8.7	30.7		20.9	35.7		55.9	66.9	
Internal Link Dist (m)		90.3			164.8			191.2			235.0	
Turn Bay Length (m)	24.4			18.9			9.1			11.0		
Base Capacity (vph)	366	2068		242	1708		347	680		379	721	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.22	0.39		0.20	0.34		0.21	0.27		0.51	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 101.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 7: Bloor St. & Runnymede Rd



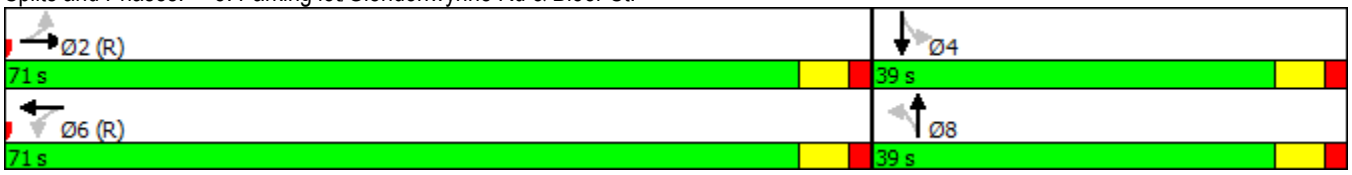


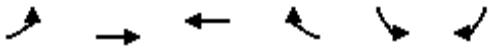
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	865	4	6	744	38	0	2	4	69	5	92
Future Volume (vph)	25	865	4	6	744	38	0	2	4	69	5	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.92			0.93	
Frt		0.999			0.993			0.910			0.925	
Flt Protected		0.999									0.980	
Satd. Flow (prot)	0	3501	0	0	3216	0	0	1612	0	0	1663	0
Flt Permitted		0.909			0.947						0.862	
Satd. Flow (perm)	0	3181	0	0	3045	0	0	1612	0	0	1417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8			4			58	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			179.8			31.3			313.4	
Travel Time (s)		13.6			12.9			2.3			28.2	
Confl. Peds. (#/hr)	69		46	46		69	31		48	48		31
Confl. Bikes (#/hr)	69		46	46		69	31		48	48		31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	27	940	4	7	809	41	0	2	4	75	5	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	971	0	0	857	0	0	6	0	0	180	0
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	71.0	71.0		71.0	71.0		39.0	39.0		39.0	39.0	
Total Split (%)	64.5%	64.5%		64.5%	64.5%		35.5%	35.5%		35.5%	35.5%	
Maximum Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		76.6			76.6			21.4			21.4	
Actuated g/C Ratio		0.70			0.70			0.19			0.19	
v/c Ratio		0.44			0.40			0.02			0.56	
Control Delay		7.5			7.7			25.7			34.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		7.5			7.7			25.7			34.1	
LOS		A			A			C			C	
Approach Delay		7.5			7.7			25.7			34.1	
Approach LOS		A			A			C			C	
90th %ile Green (s)	75.1	75.1		75.1	75.1		22.9	22.9		22.9	22.9	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		29.8			35.4			0.4			23.6	
Queue Length 95th (m)		32.8			48.7			3.8			45.2	
Internal Link Dist (m)		164.8			155.8			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		2216			2123			486			465	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.44			0.40			0.01			0.39	

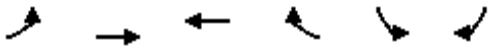
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 10.0		Intersection LOS: B	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





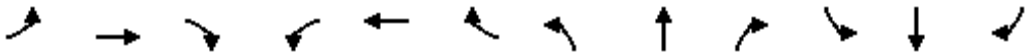
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	42	979	759	55	65	61
Future Volume (vph)	42	979	759	55	65	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor			0.96		0.92	
Frt			0.990		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1825	3579	3245	0	1610	0
Flt Permitted	0.298				0.975	
Satd. Flow (perm)	572	3579	3245	0	1558	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			13		42	
Link Speed (k/h)		50	50		40	
Link Distance (m)		158.0	400.4		167.2	
Travel Time (s)		11.4	28.8		15.0	
Confl. Peds. (#/hr)	71			71	40	44
Confl. Bikes (#/hr)	71			71	40	44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	2%	3%	1%	5%
Parking (#/hr)			0			
Adj. Flow (vph)	46	1064	825	60	71	66
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	1064	885	0	137	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	74.0	74.0	74.0		36.0	
Total Split (%)	67.3%	67.3%	67.3%		32.7%	
Maximum Green (s)	68.0	68.0	68.0		30.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	77.0	77.0	77.0		21.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio	0.70	0.70	0.70		0.19	
v/c Ratio	0.12	0.42	0.39		0.40	
Control Delay	6.2	7.7	2.4		30.8	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	6.2	7.7	2.4		30.8	
LOS	A	A	A		C	
Approach Delay		7.6	2.4		30.8	
Approach LOS		A	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)	2.9	45.4	9.1		17.7	
Queue Length 95th (m)	6.9	56.5	m11.1		36.0	
Internal Link Dist (m)		134.0	376.4		143.2	
Turn Bay Length (m)	11.0					
Base Capacity (vph)	400	2505	2275		469	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.12	0.42	0.39		0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 62.4%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bloor St. & Clendenan Ave



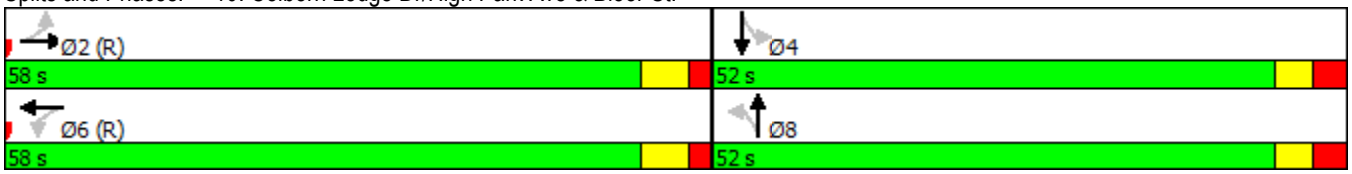
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Future Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.99			0.99			0.96			0.93	
Frt		0.994			0.989			0.955			0.963	
Flt Protected	0.950			0.950				0.982			0.969	
Satd. Flow (prot)	1825	3525	0	1825	3268	0	0	1742	0	0	1732	0
Flt Permitted	0.183			0.083				0.776			0.728	
Satd. Flow (perm)	347	3525	0	159	3268	0	0	1361	0	0	1258	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			10			14			21	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			218.9			101.1			229.4	
Travel Time (s)		28.8			15.8			18.2			20.6	
Confl. Peds. (#/hr)	42		79	79		42	62		48	48		62
Confl. Bikes (#/hr)	42		79	79		42	62		48	48		62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	4%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0	0						
Adj. Flow (vph)	40	1348	53	46	975	80	52	43	47	297	38	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	1401	0	46	1055	0	0	142	0	0	461	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	58.0	58.0		58.0	58.0		52.0	52.0		52.0	52.0	
Total Split (%)	52.7%	52.7%		52.7%	52.7%		47.3%	47.3%		47.3%	47.3%	
Maximum Green (s)	52.0	52.0		52.0	52.0		46.0	46.0		46.0	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	55.7	55.7		55.7	55.7			42.3			42.3	

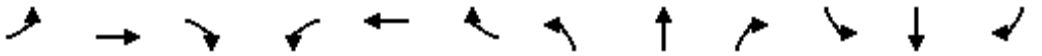
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.38			0.38	
v/c Ratio	0.23	0.78		0.57	0.64			0.27			0.93	
Control Delay	31.5	38.6		54.5	22.6			21.2			57.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	31.5	38.6		54.5	22.6			21.2			57.0	
LOS	C	D		D	C			C			E	
Approach Delay		38.4			24.0			21.2			57.0	
Approach LOS		D			C			C			E	
90th %ile Green (s)	52.0	52.0		52.0	52.0		46.0	46.0		46.0	46.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	52.0	52.0		52.0	52.0		46.0	46.0		46.0	46.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	52.1	52.1		52.1	52.1		45.9	45.9		45.9	45.9	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	57.1	57.1		57.1	57.1		40.9	40.9		40.9	40.9	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	65.1	65.1		65.1	65.1		32.9	32.9		32.9	32.9	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (m)	6.5	148.3		7.1	88.9			17.3			84.7	
Queue Length 95th (m)	16.9	172.0		#27.5	112.2			31.5			#144.5	
Internal Link Dist (m)		376.4			194.9			77.1			205.4	
Turn Bay Length (m)	25.0			26.2								
Base Capacity (vph)	175	1786		80	1658			577			538	
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	0.23	0.78		0.57	0.64			0.25			0.86	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 35.3 Intersection LOS: D
Intersection Capacity Utilization 78.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.



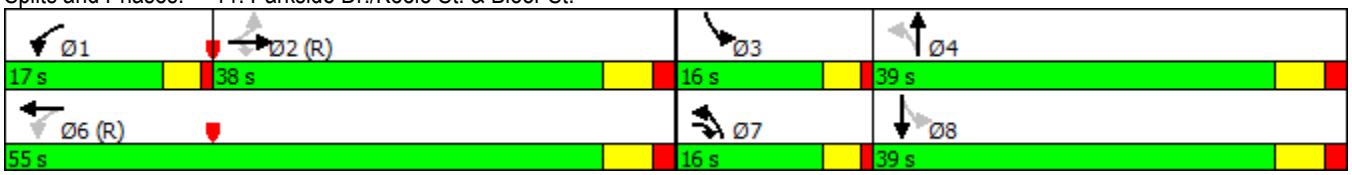


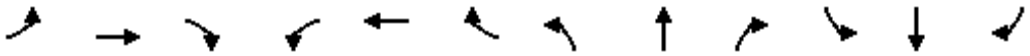
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	694	417	246	465	59	159	370	142	178	689	59
Future Volume (vph)	94	694	417	246	465	59	159	370	142	178	689	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.89		0.89	0.99	0.97		0.99	0.94		0.95	0.99	
Frt			0.850		0.983			0.958			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	3510	1585	1789	3329	0	1772	3101	0	1690	3376	0
Flt Permitted	0.438			0.180			0.144			0.304		
Satd. Flow (perm)	716	3510	1419	334	3329	0	266	3101	0	513	3376	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			69					52			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		220.8			249.0			249.1			226.0	
Travel Time (s)		15.9			17.9			17.9			16.3	
Confl. Peds. (#/hr)	193		55	55		193	30		107	107		30
Confl. Bikes (#/hr)	193		55	55		193	30		107	107		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	4%	3%	2%	4%	5%	3%	7%	5%	8%	6%	9%
Adj. Flow (vph)	102	754	453	267	505	64	173	402	154	193	749	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	754	453	267	569	0	173	556	0	193	813	0
Turn Type	Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2	7	1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	7	1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	6.0	6.0	27.0		6.0	27.0		6.0	27.0	
Minimum Split (s)	33.0	33.0	10.0	10.0	45.0		10.0	33.0		10.0	33.0	
Total Split (s)	38.0	38.0	16.0	17.0	55.0		16.0	39.0		16.0	39.0	
Total Split (%)	34.5%	34.5%	14.5%	15.5%	50.0%		14.5%	35.5%		14.5%	35.5%	
Maximum Green (s)	32.0	32.0	12.0	13.0	49.0		12.0	33.0		12.0	33.0	
Yellow Time (s)	4.0	4.0	3.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	None	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0			7.0			7.0			7.0	
Flash Dont Walk (s)	20.0	20.0			20.0			20.0			20.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	34.3	34.3	47.4	53.4	51.4		44.0	30.9		45.1	31.4	
Actuated g/C Ratio	0.31	0.31	0.43	0.49	0.47		0.40	0.28		0.41	0.29	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.46	0.69	0.68	0.79	0.37		0.67	0.61		0.58	0.84	
Control Delay	40.0	37.8	25.5	49.4	18.9		33.1	33.9		26.3	45.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.0	37.8	25.5	49.4	18.9		33.1	33.9		26.3	45.2	
LOS	D	D	C	D	B		C	C		C	D	
Approach Delay		33.7			28.7			33.7			41.5	
Approach LOS		C			C			C			D	
90th %ile Green (s)	32.0	32.0	12.0	13.0	49.0		12.0	33.0		12.0	33.0	
90th %ile Term Code	Coord	Coord	Max	Max	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	32.0	32.0	12.0	13.0	49.0		12.0	33.0		12.0	33.0	
70th %ile Term Code	Coord	Coord	Max	Max	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	30.9	30.9	12.4	13.4	48.3		12.4	32.6		13.1	33.3	
50th %ile Term Code	Coord	Coord	Gap	Max	Coord		Gap	Hold		Max	Gap	
30th %ile Green (s)	34.4	34.4	10.7	14.8	53.2		10.7	29.0		11.8	30.1	
30th %ile Term Code	Coord	Coord	Gap	Gap	Coord		Gap	Hold		Gap	Gap	
10th %ile Green (s)	42.1	42.1	8.5	11.6	57.7		8.5	27.0		9.3	27.8	
10th %ile Term Code	Coord	Coord	Gap	Gap	Coord		Gap	Min		Gap	Hold	
Queue Length 50th (m)	18.4	78.0	60.8	44.3	37.6		21.2	48.3		24.1	83.2	
Queue Length 95th (m)	35.8	98.4	92.8	#71.2	48.3		38.0	65.5		39.6	106.9	
Internal Link Dist (m)		196.8			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9	23.8			14.9			24.4		
Base Capacity (vph)	224	1101	680	339	1560		274	966		343	1020	
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	0.46	0.68	0.67	0.79	0.36		0.63	0.58		0.56	0.80	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 34.7		Intersection LOS: C	
Intersection Capacity Utilization 95.7%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.



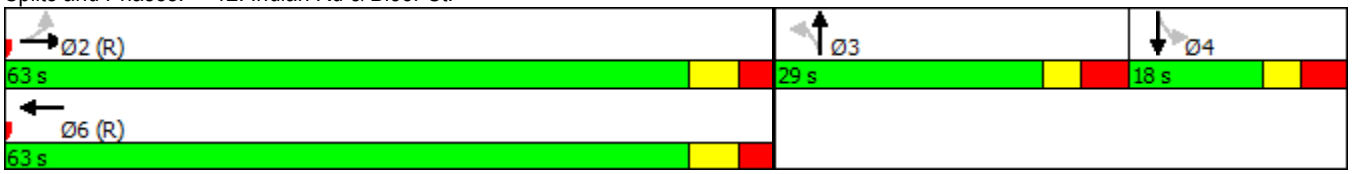


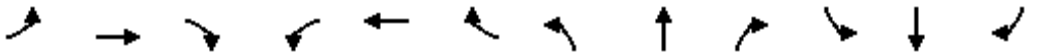
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Future Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.98			0.94	
Frt					0.998			0.980			0.958	
Flt Protected		0.999						0.966			0.967	
Satd. Flow (prot)	0	3139	0	0	3186	0	0	1628	0	0	1605	0
Flt Permitted		0.931						0.761			0.753	
Satd. Flow (perm)	0	2921	0	0	3186	0	0	1273	0	0	1213	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2			7			109	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	45		11	11		45	16		31	31		16
Confl. Bikes (#/hr)	45		11	11		45	16		31	31		16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	12%	16%	100%	0%	14%	16%	9%	0%	25%	9%	0%	5%
Adj. Flow (vph)	27	1078	3	0	509	8	47	9	10	47	0	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1108	0	0	517	0	0	66	0	0	68	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2						3			4		
Detector Phase	2	2			6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0			17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0			25.0		29.0	29.0		18.0	18.0	
Total Split (s)	63.0	63.0			63.0		29.0	29.0		18.0	18.0	
Total Split (%)	57.3%	57.3%			57.3%		26.4%	26.4%		16.4%	16.4%	
Maximum Green (s)	56.0	56.0			56.0		22.0	22.0		11.0	11.0	
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0			3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max			C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0			7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0			11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0			0		0	0				
Act Effct Green (s)		78.2			78.2			10.8			7.1	
Actuated g/C Ratio		0.71			0.71			0.10			0.06	
v/c Ratio		0.53			0.23			0.51			0.38	
Control Delay		6.9			8.0			54.8			8.7	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		6.9			8.0			54.8			8.7	
LOS		A			A			D			A	
Approach Delay		6.9			8.0			54.8			8.7	
Approach LOS		A			A			D			A	
90th %ile Green (s)	66.2	66.2			66.2		15.5	15.5		7.3	7.3	
90th %ile Term Code	Coord	Coord			Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	69.5	69.5			69.5		12.5	12.5		7.0	7.0	
70th %ile Term Code	Coord	Coord			Coord		Gap	Gap		Min	Min	
50th %ile Green (s)	71.6	71.6			71.6		10.4	10.4		7.0	7.0	
50th %ile Term Code	Coord	Coord			Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	73.6	73.6			73.6		8.4	8.4		7.0	7.0	
30th %ile Term Code	Coord	Coord			Coord		Gap	Gap		Min	Min	
10th %ile Green (s)	103.0	103.0			103.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord			Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		26.3			22.1			12.2			0.0	
Queue Length 95th (m)		31.5			34.7			25.0			4.6	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		2076			2265			260			219	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.53			0.23			0.25			0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 30 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 12: Indian Rd & Bloor St.



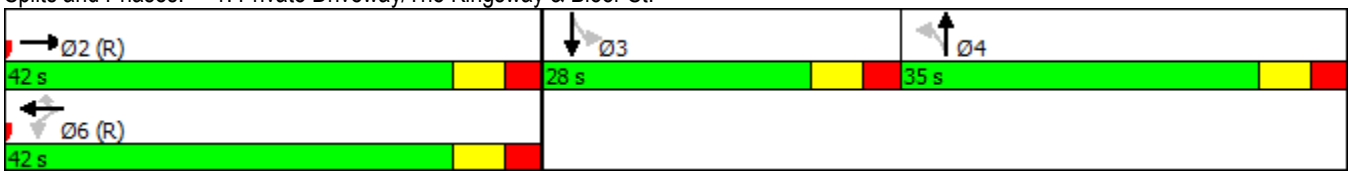


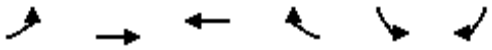
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1011	2	0	968	299	8	0	0	159	2	104
Future Volume (vph)	0	1011	2	0	968	299	8	0	0	159	2	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	1		0
Taper Length (m)	7.6			20.0			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00				0.82		1.00		1.00	0.99	
Frt						0.850					0.876	
Flt Protected								0.950		0.950	0.992	
Satd. Flow (prot)	0	3614	0	1921	3579	1617	0	1825	0	1734	1564	0
Flt Permitted												
Satd. Flow (perm)	0	3614	0	1921	3579	1327	0	1916	0	1822	1577	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						114					113	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			65.6			177.9	
Travel Time (s)		15.3			23.5			11.8			21.3	
Confl. Peds. (#/hr)	68		15	15		68	3		2	2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1099	2	0	1052	325	9	0	0	173	2	113
Shared Lane Traffic (%)										13%		
Lane Group Flow (vph)	0	1101	0	0	1052	325	0	9	0	151	137	0
Turn Type		NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6		6	4	4		3		
Detector Phase		2		6	6	6	4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0	22.0	7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0	29.0	34.0	34.0		14.0	14.0	
Total Split (s)		42.0		42.0	42.0	42.0	35.0	35.0		28.0	28.0	
Total Split (%)		40.0%		40.0%	40.0%	40.0%	33.3%	33.3%		26.7%	26.7%	
Maximum Green (s)		35.0		35.0	35.0	35.0	28.0	28.0		21.0	21.0	
Yellow Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)		7.0		7.0	7.0	7.0		7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0	15.0	20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0	0	0	0				
Act Effct Green (s)		73.9			73.9	73.9		7.2		14.1	14.1	
Actuated g/C Ratio		0.70			0.70	0.70		0.07		0.13	0.13	
v/c Ratio		0.43			0.42	0.34		0.07		0.62	0.44	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		8.8			18.6	15.6		46.8		53.2	15.5	
Queue Delay		0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay		8.8			18.6	15.6		46.8		53.2	15.5	
LOS		A			B	B		D		D	B	
Approach Delay		8.8			17.9			46.8			35.3	
Approach LOS		A			B			D			D	
90th %ile Green (s)		56.1		56.1	56.1	56.1	8.0	8.0		19.9	19.9	
90th %ile Term Code		Coord		Coord	Coord	Coord	Gap	Gap		Gap	Gap	
70th %ile Green (s)		74.9		74.9	74.9	74.9	0.0	0.0		16.1	16.1	
70th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Gap	Gap	
50th %ile Green (s)		77.0		77.0	77.0	77.0	0.0	0.0		14.0	14.0	
50th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Gap	Gap	
30th %ile Green (s)		79.2		79.2	79.2	79.2	0.0	0.0		11.8	11.8	
30th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Gap	Gap	
10th %ile Green (s)		82.2		82.2	82.2	82.2	0.0	0.0		8.8	8.8	
10th %ile Term Code		Coord		Coord	Coord	Coord	Skip	Skip		Gap	Gap	
Queue Length 50th (m)		38.7			76.4	33.1		1.8		31.1	4.6	
Queue Length 95th (m)		94.3			141.3	86.2		6.7		49.0	21.2	
Internal Link Dist (m)		188.8			302.4			41.6			153.9	
Turn Bay Length (m)						20.0						
Base Capacity (vph)		2542			2518	967		510		364	405	
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			0.42	0.34		0.02		0.41	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.



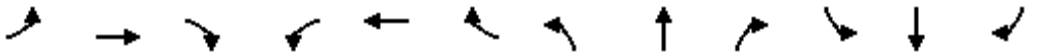


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	950	1278	44	30	120
Future Volume (vph)	113	950	1278	44	30	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	1			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	0.99		1.00		0.95	0.97
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1738	3650	3589	0	1825	1541
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1727	3650	3589	0	1740	1497
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4			130
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	815.2		142.8	
Travel Time (s)		23.5	58.7		12.9	
Confl. Peds. (#/hr)	26			26	37	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	0%	1%	0%	0%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	123	1033	1389	48	33	130
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	1033	1437	0	33	130
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	6.0	29.0	29.0		7.0	7.0
Minimum Split (s)	10.5	36.0	36.0		31.0	31.0
Total Split (s)	17.0	74.0	57.0		31.0	31.0
Total Split (%)	16.2%	70.5%	54.3%		29.5%	29.5%
Maximum Green (s)	13.0	67.0	50.0		25.0	25.0
Yellow Time (s)	3.0	4.0	4.0		3.0	3.0
All-Red Time (s)	1.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	7.0	7.0		6.0	6.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)	12.7	83.7	67.0		8.3	8.3
Actuated g/C Ratio	0.12	0.80	0.64		0.08	0.08

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.59	0.36	0.63		0.23	0.55
Control Delay	54.2	2.7	13.9		48.4	17.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	54.2	2.7	13.9		48.4	17.0
LOS	D	A	B		D	B
Approach Delay		8.2	13.9		23.4	
Approach LOS		A	B		C	
90th %ile Green (s)	17.5	80.1	58.6		11.9	11.9
90th %ile Term Code	Gap	Coord	Coord		Gap	Gap
70th %ile Green (s)	14.7	83.7	65.0		8.3	8.3
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	12.7	84.7	68.0		7.3	7.3
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	10.7	85.0	70.3		7.0	7.0
30th %ile Term Code	Gap	Coord	Coord		Min	Min
10th %ile Green (s)	7.8	85.0	73.2		7.0	7.0
10th %ile Term Code	Gap	Coord	Coord		Min	Min
Queue Length 50th (m)	21.2	21.5	82.3		6.5	0.0
Queue Length 95th (m)	38.5	8.7	132.5		15.2	16.8
Internal Link Dist (m)		302.4	791.2		118.8	
Turn Bay Length (m)	55.5					
Base Capacity (vph)	235	2909	2292		434	455
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.52	0.36	0.63		0.08	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 22.5 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 12.1		Intersection LOS: B	
Intersection Capacity Utilization 68.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Bloor St. & Old Mill Trail

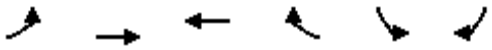


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	785	205	347	801	24	398	0	463	25	19	10
Future Volume (vph)	5	785	205	347	801	24	398	0	463	25	19	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.93		0.80	0.97	0.99					0.84		
Frt			0.850		0.996				0.850		0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3650	1633	1825	3575	0	1825	0	1633	1755	1821	0
Flt Permitted	0.317			0.128			0.950			0.950		
Satd. Flow (perm)	569	3650	1311	238	3575	0	1825	0	1633	1474	1821	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					4				124		11	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		815.2			70.9			102.2			164.4	
Travel Time (s)		58.7			5.3			7.7			19.7	
Confl. Peds. (#/hr)	121		92	92		121			34	34		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	5	853	223	377	871	26	433	0	503	27	21	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	853	223	377	897	0	433	0	503	27	32	0
Turn Type	Perm	NA	pm+ov	pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2	7	1	6		7		1 7		8	
Permitted Phases	2		2	6						8		
Detector Phase	2	2	7	1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0	28.0	6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0	33.0	11.0	37.0		33.0			14.0	14.0	
Total Split (s)	38.0	38.0	33.0	25.0	63.0		33.0			14.0	14.0	
Total Split (%)	34.5%	34.5%	30.0%	22.7%	57.3%		30.0%			12.7%	12.7%	
Maximum Green (s)	30.0	30.0	28.0	20.0	55.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0	3.0	3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0	2.0	2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0	
Total Lost Time (s)	8.0	8.0	5.0	5.0	8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max	None	None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0	7.0		7.0		7.0					
Flash Dont Walk (s)	22.0	22.0	21.0		22.0		21.0					
Pedestrian Calls (#/hr)	0	0	0		0		0					
Act Effct Green (s)	33.6	33.6	64.6	60.8	57.8		28.0		48.2	7.0	7.0	
Actuated g/C Ratio	0.31	0.31	0.59	0.55	0.53		0.25		0.44	0.06	0.06	
v/c Ratio	0.03	0.77	0.26	0.92	0.48		0.93		0.64	0.29	0.25	

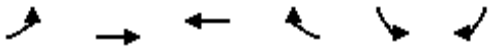
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	30.2	41.4	11.1	55.5	18.2		69.1		15.2	57.5	41.4	
Queue Delay	0.0	0.0	0.0	0.0	0.7		0.0		0.0	0.0	0.0	
Total Delay	30.2	41.4	11.1	55.5	18.9		69.1		15.2	57.5	41.4	
LOS	C	D	B	E	B		E		B	E	D	
Approach Delay		35.1			29.7			40.1			48.8	
Approach LOS		D			C			D			D	
90th %ile Green (s)	30.0	30.0	28.0	20.0	55.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
70th %ile Green (s)	30.0	30.0	28.0	20.0	55.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
50th %ile Green (s)	30.0	30.0	28.0	20.0	55.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
30th %ile Green (s)	30.0	30.0	28.0	20.0	55.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord	Max	Max	Coord		Max			Max	Max	
10th %ile Green (s)	48.0	48.0	28.0	16.0	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord	Max	Gap	Coord		Max			Skip	Skip	
Queue Length 50th (m)	0.8	91.5	20.8	60.2	64.8		91.2		40.5	5.6	4.4	
Queue Length 95th (m)	3.7	#121.8	32.9	#114.6	81.8		#149.4		64.3	14.6	14.0	
Internal Link Dist (m)		791.2			46.9			78.2			140.4	
Turn Bay Length (m)	41.8		33.2	52.1						39.6		
Base Capacity (vph)	174	1114	851	420	1880		464		796	93	126	
Starvation Cap Reductn	0	0	0	0	587		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	0.77	0.26	0.90	0.69		0.93		0.63	0.29	0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 34.7		Intersection LOS: C	
Intersection Capacity Utilization 93.7%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.



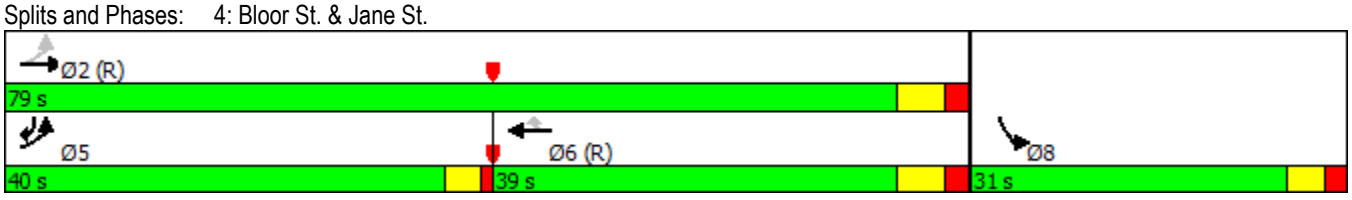
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	501	624	817	154	178	483
Future Volume (vph)	501	624	817	154	178	483
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor				0.57	0.83	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1738	3579	3614	1317	1755	1617
Flt Permitted	0.108				0.950	
Satd. Flow (perm)	198	3579	3614	751	1463	1617
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				62		483
Link Speed (k/h)		50	50		40	
Link Distance (m)		68.0	334.6		180.8	
Travel Time (s)		4.9	24.1		16.3	
Confl. Peds. (#/hr)	152			152	131	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	1%	24%	4%	1%
Adj. Flow (vph)	545	678	888	167	193	525
Shared Lane Traffic (%)						
Lane Group Flow (vph)	545	678	888	167	193	525
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	40.0	79.0	39.0	39.0	31.0	40.0
Total Split (%)	36.4%	71.8%	35.5%	35.5%	28.2%	36.4%
Maximum Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	33.0	33.0	26.0	36.0
Actuated g/C Ratio	0.68	0.66	0.30	0.30	0.24	0.33
v/c Ratio	0.85	0.29	0.82	0.62	0.47	0.61



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	39.9	8.1	38.9	27.8	40.4	7.3
Queue Delay	4.4	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	8.1	38.9	27.8	40.4	7.3
LOS	D	A	D	C	D	A
Approach Delay		24.2	37.1		16.2	
Approach LOS		C	D		B	
90th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	90.3	28.8	95.6	20.6	35.7	6.2
Queue Length 95th (m)	#149.6	37.2	119.2	13.7	57.7	34.6
Internal Link Dist (m)		44.0	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	639	2375	1084	268	414	854
Starvation Cap Reductn	50	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	0.93	0.29	0.82	0.62	0.47	0.61

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 26.8		Intersection LOS: C	
Intersection Capacity Utilization 84.5%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: Bloor St. & Jane St.



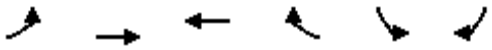
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	814	133	108	728	30	102	117	97	34	129	22
Future Volume (vph)	24	814	133	108	728	30	102	117	97	34	129	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.83	0.93		0.92	0.97		0.88	0.87		0.88	0.96	
Frt		0.979			0.994			0.932			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3309	0	1825	3520	0	1789	1562	0	1825	1812	0
Flt Permitted	0.312			0.238			0.593			0.464		
Satd. Flow (perm)	497	3309	0	421	3520	0	987	1562	0	788	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			8			36			7	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	428		161	161		428	120		144	144		120
Confl. Bikes (#/hr)	428		161	161		428	120		144	144		120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	885	145	117	791	33	111	127	105	37	140	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	1030	0	117	824	0	111	232	0	37	164	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	77.0	77.0		77.0	77.0		33.0	33.0		33.0	33.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	71.8	71.8		71.8	71.8		26.2	26.2		26.2	26.2	
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.24	0.24		0.24	0.24	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.08	0.47		0.43	0.36		0.47	0.58		0.20	0.38	
Control Delay	6.3	8.2		15.2	9.1		43.7	37.7		36.7	36.4	
Queue Delay	0.0	0.0		0.0	0.9		0.0	0.0		0.0	0.0	
Total Delay	6.3	8.2		15.2	10.1		43.7	37.7		36.7	36.4	
LOS	A	A		B	B		D	D		D	D	
Approach Delay		8.2			10.7			39.6			36.5	
Approach LOS		A			B			D			D	
90th %ile Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Hold	Hold	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	1.4	47.0		11.0	37.8		20.6	37.4		6.4	28.4	
Queue Length 95th (m)	m3.9	55.1		25.8	49.7		38.0	62.1		15.5	47.3	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)	25.3			28.3			15.5			15.2		
Base Capacity (vph)	324	2171		274	2300		242	410		193	450	
Starvation Cap Reductn	0	0		0	1126		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.47		0.43	0.70		0.46	0.57		0.19	0.36	

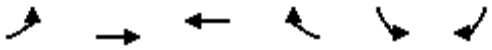
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 106.9%		ICU Level of Service G	
Analysis Period (min) 15			

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

Splits and Phases: 5: Windermere Ave & Bloor St.



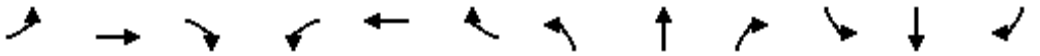
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	664	1050	46	29	90
Future Volume (vph)	33	664	1050	46	29	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.97		0.90	
Frt			0.994		0.898	
Flt Protected		0.998			0.988	
Satd. Flow (prot)	0	3334	3447	0	1597	0
Flt Permitted		0.830			0.988	
Satd. Flow (perm)	0	2763	3447	0	1541	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8		23	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	117.8		151.3	
Travel Time (s)		8.6	8.5		13.6	
Confl. Peds. (#/hr)	361			361	96	31
Confl. Bikes (#/hr)	361			361	96	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	2%	4%	0%	0%
Parking (#/hr)		0				
Adj. Flow (vph)	36	722	1141	50	32	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	758	1191	0	130	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	78.0	78.0	78.0		32.0	
Total Split (%)	70.9%	70.9%	70.9%		29.1%	
Maximum Green (s)	72.0	72.0	72.0		27.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		30.7	30.7		22.2	
Actuated g/C Ratio		0.48	0.48		0.35	
v/c Ratio		0.57	0.72		0.23	
Control Delay		13.5	15.7		15.6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		0.0	0.0		0.0	
Total Delay		13.5	15.7		15.6	
LOS		B	B		B	
Approach Delay		13.5	15.7		15.6	
Approach LOS		B	B		B	
90th %ile Green (s)	40.9	40.9	40.9		22.0	
90th %ile Term Code	Hold	Hold	Gap		Min	
70th %ile Green (s)	34.7	34.7	34.7		22.0	
70th %ile Term Code	Hold	Hold	Gap		Min	
50th %ile Green (s)	30.1	30.1	30.1		22.0	
50th %ile Term Code	Hold	Hold	Gap		Min	
30th %ile Green (s)	26.7	26.7	26.7		22.0	
30th %ile Term Code	Hold	Hold	Gap		Min	
10th %ile Green (s)	22.6	22.6	22.6		22.0	
10th %ile Term Code	Hold	Hold	Gap		Min	
Queue Length 50th (m)		31.3	54.3		8.5	
Queue Length 95th (m)		44.6	72.7		23.8	
Internal Link Dist (m)		95.3	93.8		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		2749	3429		693	
Starvation Cap Reductn		76	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.28	0.35		0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 64			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 70.3%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 73.9			
70th %ile Actuated Cycle: 67.7			
50th %ile Actuated Cycle: 63.1			
30th %ile Actuated Cycle: 59.7			
10th %ile Actuated Cycle: 55.6			

Splits and Phases: 6: Bloor St. & Durie St. N

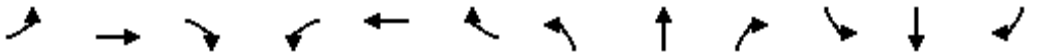


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	574	44	37	696	159	70	232	90	72	98	110
Future Volume (vph)	102	574	44	37	696	159	70	232	90	72	98	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.87	0.95		0.82	0.85		0.80	0.88		0.84	0.80	
Frt		0.989			0.972			0.958			0.921	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3154	0	1383	2867	0	1825	1581	0	1706	1353	0
Flt Permitted	0.262			0.370			0.506			0.313		
Satd. Flow (perm)	435	3154	0	440	2867	0	777	1581	0	472	1353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			28			20			7	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		115.7			188.8			215.2			259.0	
Travel Time (s)		8.3			13.6			25.8			23.3	
Confl. Peds. (#/hr)	596		290	290		596	231		354	354		231
Confl. Bikes (#/hr)	596		290	290		596	231		354	354		231
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	32%	3%	12%	0%	3%	0%	7%	3%	6%
Parking (#/hr)		0										
Adj. Flow (vph)	111	624	48	40	757	173	76	252	98	78	107	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	672	0	40	930	0	76	350	0	78	227	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	65.0	65.0		65.0	65.0		45.0	45.0		45.0	45.0	
Total Split (%)	59.1%	59.1%		59.1%	59.1%		40.9%	40.9%		40.9%	40.9%	
Maximum Green (s)	59.0	59.0		59.0	59.0		39.0	39.0		39.0	39.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	67.5	67.5		67.5	67.5		30.5	30.5		30.5	30.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.61	0.61		0.61	0.61		0.28	0.28		0.28	0.28	
v/c Ratio	0.42	0.35		0.15	0.53		0.35	0.77		0.60	0.60	
Control Delay	19.1	11.7		8.9	9.4		35.1	45.9		52.7	39.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.1	11.7		8.9	9.4		35.1	45.9		52.7	39.3	
LOS	B	B		A	A		D	D		D	D	
Approach Delay		12.7			9.3			44.0			42.7	
Approach LOS		B			A			D			D	
90th %ile Green (s)	59.0	59.0		59.0	59.0		39.0	39.0		39.0	39.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Hold	Hold	
70th %ile Green (s)	64.0	64.0		64.0	64.0		34.0	34.0		34.0	34.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	68.4	68.4		68.4	68.4		29.6	29.6		29.6	29.6	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	11.2	33.1		2.4	29.7		13.3	66.3		14.7	41.4	
Queue Length 95th (m)	31.8	54.8		m5.9	37.2		23.9	88.4		28.7	59.1	
Internal Link Dist (m)		91.7			164.8			191.2			235.0	
Turn Bay Length (m)	24.4			18.9			9.1			11.0		
Base Capacity (vph)	266	1938		270	1769		275	573		167	484	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.42	0.35		0.15	0.53		0.28	0.61		0.47	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 106.3%		ICU Level of Service G	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 7: Bloor St. & Runnymede Rd

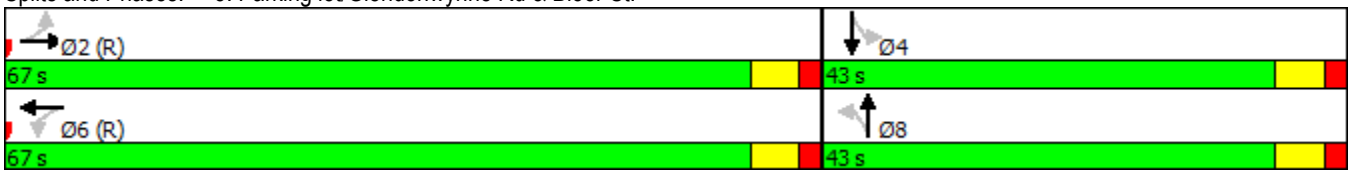


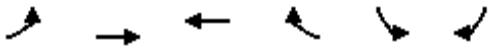
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	546	44	5	724	113	32	14	31	68	4	125
Future Volume (vph)	28	546	44	5	724	113	32	14	31	68	4	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			0.92			0.90			0.80	
Frt		0.989			0.980			0.945			0.914	
Flt Protected		0.998						0.980			0.983	
Satd. Flow (prot)	0	3226	0	0	3195	0	0	1689	0	0	1410	0
Flt Permitted		0.878			0.952			0.780			0.865	
Satd. Flow (perm)	0	2826	0	0	3039	0	0	1268	0	0	1209	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			25			34			55	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			181.4			31.3			313.4	
Travel Time (s)		13.6			13.1			2.3			28.2	
Confl. Peds. (#/hr)	225		163	163		225	141		54	54		141
Confl. Bikes (#/hr)	225		163	163		225	141		54	54		141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	30	593	48	5	787	123	35	15	34	74	4	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	671	0	0	915	0	0	84	0	0	214	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	67.0	67.0		67.0	67.0		43.0	43.0		43.0	43.0	
Total Split (%)	60.9%	60.9%		60.9%	60.9%		39.1%	39.1%		39.1%	39.1%	
Maximum Green (s)	61.0	61.0		61.0	61.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		74.3			74.3			23.7			23.7	
Actuated g/C Ratio		0.68			0.68			0.22			0.22	
v/c Ratio		0.35			0.44			0.28			0.70	
Control Delay		5.7			9.3			24.0			42.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		5.7			9.3			24.0			42.0	
LOS		A			A			C			D	
Approach Delay		5.7			9.3			24.0			42.0	
Approach LOS		A			A			C			D	
90th %ile Green (s)	67.2	67.2		67.2	67.2		30.8	30.8		30.8	30.8	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	73.1	73.1		73.1	73.1		24.9	24.9		24.9	24.9	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		20.2			38.0			9.1			33.0	
Queue Length 95th (m)		26.3			66.6			20.4			53.9	
Internal Link Dist (m)		164.8			157.4			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		1911			2059			449			443	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.35			0.44			0.19			0.48	

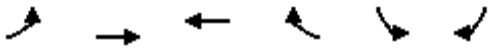
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 66.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





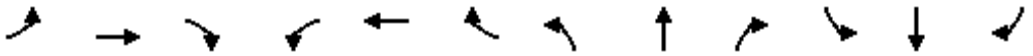
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	655	1085	63	44	46
Future Volume (vph)	47	655	1085	63	44	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor			0.96		0.96	
Frt			0.992		0.931	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1825	3400	3273	0	1670	0
Flt Permitted	0.186				0.976	
Satd. Flow (perm)	357	3400	3273	0	1650	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			11		44	
Link Speed (k/h)		50	50		40	
Link Distance (m)		156.3	400.4		167.2	
Travel Time (s)		11.3	28.8		15.0	
Confl. Peds. (#/hr)	186			186	15	22
Confl. Bikes (#/hr)	186			186	15	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	3%	0%	2%
Parking (#/hr)		0	0			
Adj. Flow (vph)	51	712	1179	68	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	712	1247	0	98	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	79.0	79.0	79.0		31.0	
Total Split (%)	71.8%	71.8%	71.8%		28.2%	
Maximum Green (s)	73.0	73.0	73.0		25.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	77.0	77.0	77.0		21.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio	0.70	0.70	0.70		0.19	
v/c Ratio	0.20	0.30	0.54		0.28	
Control Delay	8.2	6.7	2.7		24.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	8.2	6.7	2.7		24.4	
LOS	A	A	A		C	
Approach Delay		6.8	2.7		24.4	
Approach LOS		A	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)	3.4	27.0	15.2		9.8	
Queue Length 95th (m)	8.6	34.9	17.5		24.4	
Internal Link Dist (m)		132.3	376.4		143.2	
Turn Bay Length (m)	11.0					
Base Capacity (vph)	249	2380	2294		413	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.20	0.30	0.54		0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 5.2		Intersection LOS: A	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 9: Bloor St. & Clendenan Ave



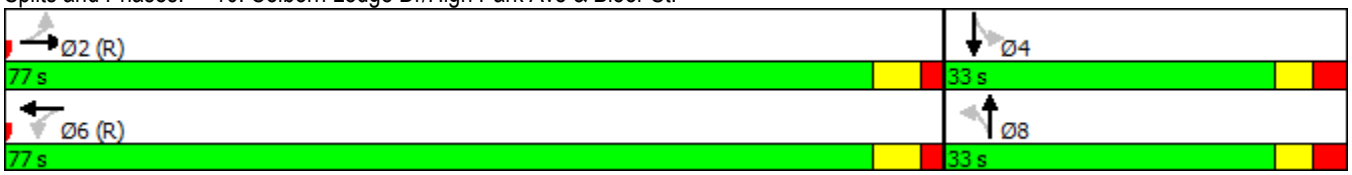
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	824	55	59	1209	189	75	68	84	78	71	64
Future Volume (vph)	78	824	55	59	1209	189	75	68	84	78	71	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98		0.95	0.96			0.93			0.95	
Frt		0.991			0.980			0.950			0.959	
Flt Protected	0.950			0.950				0.984			0.982	
Satd. Flow (prot)	1825	3397	0	1825	3381	0	0	1680	0	0	1751	0
Flt Permitted	0.114			0.264				0.745			0.704	
Satd. Flow (perm)	219	3397	0	484	3381	0	0	1257	0	0	1230	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			32			25			19	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			212.3			101.1			229.4	
Travel Time (s)		28.8			15.3			18.2			20.6	
Confl. Peds. (#/hr)	95		89	89		95	44		74	74		44
Confl. Bikes (#/hr)	95		89	89		95	44		74	74		44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	85	896	60	64	1314	205	82	74	91	85	77	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	956	0	64	1519	0	0	247	0	0	232	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	77.0	77.0		77.0	77.0		33.0	33.0		33.0	33.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	72.5	72.5		72.5	72.5			25.5			25.5	
Actuated g/C Ratio	0.66	0.66		0.66	0.66			0.23			0.23	

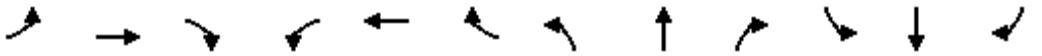
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.59	0.43		0.20	0.68			0.80			0.78	
Control Delay	34.9	9.3		9.6	13.4			55.3			54.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	34.9	9.3		9.6	13.4			55.3			54.7	
LOS	C	A		A	B			E			D	
Approach Delay		11.4			13.2			55.3			54.7	
Approach LOS		B			B			E			D	
90th %ile Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	72.6	72.6		72.6	72.6		25.4	25.4		25.4	25.4	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
10th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
Queue Length 50th (m)	8.9	44.2		4.9	93.9			45.5			43.3	
Queue Length 95th (m)	#38.0	57.5		11.7	122.2			#82.0			#77.4	
Internal Link Dist (m)		376.4			188.3			77.1			205.4	
Turn Bay Length (m)	25.0			26.2								
Base Capacity (vph)	144	2244		319	2239			327			316	
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	0.59	0.43		0.20	0.68			0.76			0.73	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 19.1 Intersection LOS: B
Intersection Capacity Utilization 94.4% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.





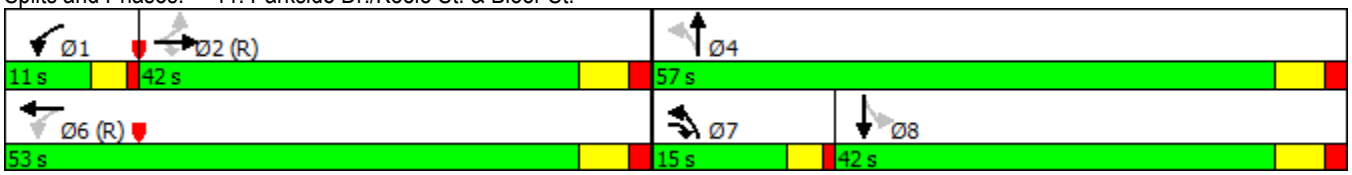
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	472	203	186	741	92	285	557	171	138	534	88
Future Volume (vph)	109	472	203	186	741	92	285	557	171	138	534	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.93		0.88	0.97	0.96		0.99	0.93		0.92	0.99	
Frt			0.850		0.983			0.965			0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3650	1617	1807	3412	0	1825	3222	0	1807	3484	0
Flt Permitted	0.278			0.329			0.211			0.352		
Satd. Flow (perm)	498	3650	1416	606	3412	0	400	3222	0	618	3484	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			106					49			18	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		227.3			249.0			249.1			226.0	
Travel Time (s)		16.4			17.9			17.9			16.3	
Confl. Peds. (#/hr)	220		68	68		220	42		189	189		42
Confl. Bikes (#/hr)	220		68	68		220	42		189	189		42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	1%	3%	0%	2%	1%	1%	1%	3%
Adj. Flow (vph)	118	513	221	202	805	100	310	605	186	150	580	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	513	221	202	905	0	310	791	0	150	676	0
Turn Type	Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		2	7	1	6		7	4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	7	1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	6.0	6.0	27.0		6.0	27.0		27.0	27.0	
Minimum Split (s)	33.0	33.0	10.0	10.0	45.0		10.0	33.0		33.0	33.0	
Total Split (s)	42.0	42.0	15.0	11.0	53.0		15.0	57.0		42.0	42.0	
Total Split (%)	38.2%	38.2%	13.6%	10.0%	48.2%		13.6%	51.8%		38.2%	38.2%	
Maximum Green (s)	36.0	36.0	11.0	7.0	47.0		11.0	51.0		36.0	36.0	
Yellow Time (s)	4.0	4.0	3.0	3.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.0	1.0	2.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	4.0	6.0		4.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	None	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0			7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	20.0	20.0			20.0			20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0			0			0		0	0	
Act Effct Green (s)	35.1	35.1	51.0	49.4	47.4		52.6	50.6		32.6	32.6	
Actuated g/C Ratio	0.32	0.32	0.46	0.45	0.43		0.48	0.46		0.30	0.30	

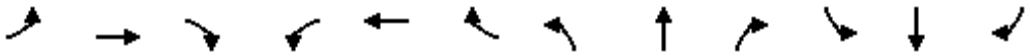
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.75	0.44	0.30	0.56	0.62		0.83	0.52		0.82	0.65	
Control Delay	63.3	31.2	9.8	26.3	26.6		41.4	21.1		68.9	35.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	63.3	31.2	9.8	26.3	26.6		41.4	21.1		68.9	35.5	
LOS	E	C	A	C	C		D	C		E	D	
Approach Delay		30.1			26.6			26.8			41.6	
Approach LOS		C			C			C			D	
90th %ile Green (s)	36.0	36.0	11.0	7.0	47.0		11.0	51.0		36.0	36.0	
90th %ile Term Code	Coord	Coord	Max	Max	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	36.0	36.0	11.0	7.0	47.0		11.0	51.0		36.0	36.0	
70th %ile Term Code	Coord	Coord	Max	Max	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	35.9	35.9	11.1	7.5	47.4		11.1	50.6		35.5	35.5	
50th %ile Term Code	Coord	Coord	Max	Max	Coord		Max	Hold		Gap	Gap	
30th %ile Green (s)	29.8	29.8	20.0	11.5	45.3		20.0	52.7		28.7	28.7	
30th %ile Term Code	Coord	Coord	Max	Gap	Coord		Max	Hold		Gap	Gap	
10th %ile Green (s)	37.6	37.6	16.6	8.8	50.4		16.6	47.6		27.0	27.0	
10th %ile Term Code	Coord	Coord	Gap	Gap	Coord		Gap	Hold		Min	Min	
Queue Length 50th (m)	22.3	45.1	13.3	26.3	77.4		40.6	58.0		28.7	62.0	
Queue Length 95th (m)	#52.2	60.1	27.8	42.1	98.6		#85.4	74.7		#61.8	80.2	
Internal Link Dist (m)		203.3			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9	23.8			14.9			24.4		
Base Capacity (vph)	164	1205	738	363	1481		372	1530		202	1152	
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	0.72	0.43	0.30	0.56	0.61		0.83	0.52		0.74	0.59	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 30.6 Intersection LOS: C
Intersection Capacity Utilization 111.9% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.



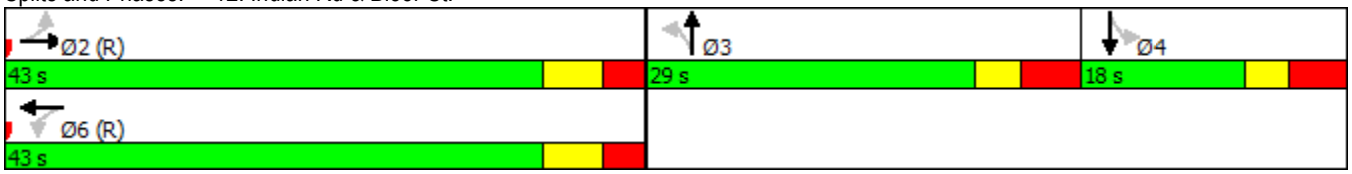


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Future Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.97			0.93	
Frt		0.994			0.998			0.953			0.913	
Flt Protected		0.999						0.973			0.987	
Satd. Flow (prot)	0	3252	0	0	3217	0	0	1501	0	0	1581	0
Flt Permitted		0.918			0.952			0.549			0.891	
Satd. Flow (perm)	0	2987	0	0	3062	0	0	842	0	0	1416	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			1			17			38	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	74		39	39		74	19		26	26		19
Confl. Bikes (#/hr)	74		39	39		74	19		26	26		19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	31%	10%	16%	0%	13%	11%	16%	50%	6%	7%	0%	2%
Adj. Flow (vph)	18	735	34	4	1000	11	27	5	17	16	5	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	787	0	0	1015	0	0	49	0	0	59	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	43.0	43.0		43.0	43.0		29.0	29.0		18.0	18.0	
Total Split (%)	47.8%	47.8%		47.8%	47.8%		32.2%	32.2%		20.0%	20.0%	
Maximum Green (s)	36.0	36.0		36.0	36.0		22.0	22.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		60.9			60.9			9.9			8.0	
Actuated g/C Ratio		0.68			0.68			0.11			0.09	
v/c Ratio		0.39			0.49			0.45			0.37	
Control Delay		10.8			12.2			39.7			25.5	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		10.8			12.2			39.7			25.5	
LOS		B			B			D			C	
Approach Delay		10.8			12.2			39.7			25.5	
Approach LOS		B			B			D			C	
90th %ile Green (s)	43.1	43.1		43.1	43.1		15.2	15.2		10.7	10.7	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	49.1	49.1		49.1	49.1		11.5	11.5		8.4	8.4	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	53.1	53.1		53.1	53.1		8.9	8.9		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	69.0	69.0		69.0	69.0		0.0	0.0		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Min	Min	
10th %ile Green (s)	83.0	83.0		83.0	83.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		36.3			52.1			5.3			3.5	
Queue Length 95th (m)		65.0			91.0			15.3			14.4	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		2021			2070			218			206	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.39			0.49			0.22			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: Indian Rd & Bloor St.



APPENDIX

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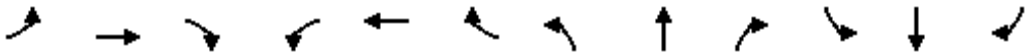
OPTION 1 SYNCHRO ANALYSIS SHEETS



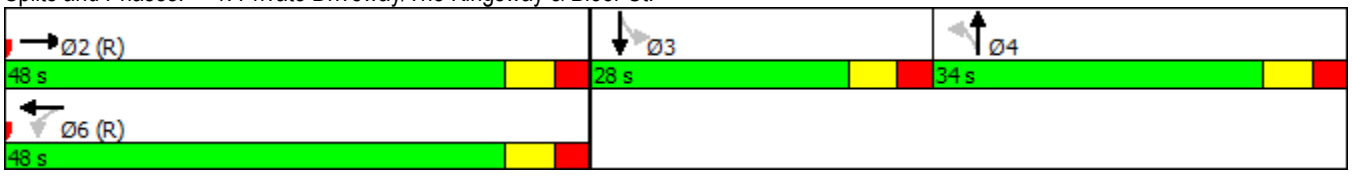
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1117	5	0	800	124	12	4	0	418	0	55
Future Volume (vph)	0	1117	5	0	800	124	12	4	0	418	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00			0.99					0.99	1.00	
Frt		0.999			0.980						0.965	
Flt Protected								0.963		0.950	0.963	
Satd. Flow (prot)	0	3506	0	0	3430	0	0	1626	0	1734	1692	0
Flt Permitted										0.765	0.810	
Satd. Flow (perm)	0	3506	0	0	3430	0	0	1689	0	1388	1417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					18						109	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			65.6			134.7	
Travel Time (s)		15.3			23.5			11.8			16.2	
Confl. Peds. (#/hr)	37		8	8		37			8	8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	3%	1%	18%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	1214	5	0	870	135	13	4	0	454	0	60
Shared Lane Traffic (%)										43%		
Lane Group Flow (vph)	0	1219	0	0	1005	0	0	17	0	259	255	0
Turn Type		NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6			4	4		3		
Detector Phase		2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0		7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0		34.0	34.0		14.0	14.0	
Total Split (s)		48.0		48.0	48.0		34.0	34.0		28.0	28.0	
Total Split (%)		43.6%		43.6%	43.6%		30.9%	30.9%		25.5%	25.5%	
Maximum Green (s)		41.0		41.0	41.0		27.0	27.0		21.0	21.0	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)		7.0			7.0			7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0		20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)		68.7			68.7			7.7		21.0	21.0	
Actuated g/C Ratio		0.62			0.62			0.07		0.19	0.19	
v/c Ratio		0.56			0.47			0.15		0.98	0.71	
Control Delay		14.4			14.0			50.4		96.2	35.7	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		14.4			14.0			50.4		96.2	35.7	

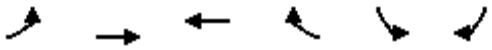
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		B			B			D		F	D	
Approach Delay		14.4			14.0			50.4			66.2	
Approach LOS		B			B			D			E	
90th %ile Green (s)		58.6		58.6	58.6		9.4	9.4		21.0	21.0	
90th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
70th %ile Green (s)		60.1		60.1	60.1		7.9	7.9		21.0	21.0	
70th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
50th %ile Green (s)		75.0		75.0	75.0		0.0	0.0		21.0	21.0	
50th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
30th %ile Green (s)		75.0		75.0	75.0		0.0	0.0		21.0	21.0	
30th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
10th %ile Green (s)		75.0		75.0	75.0		0.0	0.0		21.0	21.0	
10th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
Queue Length 50th (m)		60.3			44.8			3.5		58.7	31.0	
Queue Length 95th (m)		116.6			100.0			10.3		#111.4	#63.6	
Internal Link Dist (m)		188.8			302.4			41.6			110.7	
Turn Bay Length (m)												
Base Capacity (vph)		2190			2150			414		264	358	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.56			0.47			0.04		0.98	0.71	

Intersection Summary

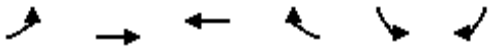
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 24.1 Intersection LOS: C
Intersection Capacity Utilization 58.3% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	1304	781	24	35	166
Future Volume (vph)	110	1304	781	24	35	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	0			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00		0.92	0.98
Frt			0.996			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	3583	3554	0	1789	1541
Flt Permitted		0.750			0.950	
Satd. Flow (perm)	0	2695	3554	0	1652	1510
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6			175
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	824.1		142.8	
Travel Time (s)		23.5	59.3		12.9	
Confl. Peds. (#/hr)	32			32	58	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	7%	1%	2%	4%	2%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	120	1417	849	26	38	180
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1537	875	0	38	180
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases	2					4
Detector Phase	2	2	6		4	4
Switch Phase						
Minimum Initial (s)	29.0	29.0	29.0		7.0	7.0
Minimum Split (s)	36.0	36.0	36.0		31.0	31.0
Total Split (s)	79.0	79.0	79.0		31.0	31.0
Total Split (%)	71.8%	71.8%	71.8%		28.2%	28.2%
Maximum Green (s)	72.0	72.0	72.0		25.0	25.0
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0
All-Red Time (s)	3.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	22.0	22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)		88.1	88.1		8.9	8.9
Actuated g/C Ratio		0.80	0.80		0.08	0.08

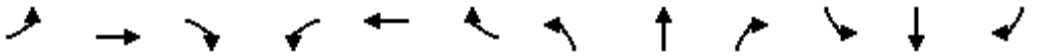


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio		0.71	0.31		0.26	0.64
Control Delay		8.7	3.4		50.9	18.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		8.7	3.4		50.9	18.4
LOS		A	A		D	B
Approach Delay		8.7	3.4		24.0	
Approach LOS		A	A		C	
90th %ile Green (s)	83.2	83.2	83.2		13.8	13.8
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	87.9	87.9	87.9		9.1	9.1
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	89.3	89.3	89.3		7.7	7.7
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	90.0	90.0	90.0		7.0	7.0
30th %ile Term Code	Coord	Coord	Coord		Min	Min
10th %ile Green (s)	90.0	90.0	90.0		7.0	7.0
10th %ile Term Code	Coord	Coord	Coord		Min	Min
Queue Length 50th (m)		102.3	18.8		7.9	1.0
Queue Length 95th (m)		m136.2	33.6		17.2	20.6
Internal Link Dist (m)		302.4	800.1		118.8	
Turn Bay Length (m)						
Base Capacity (vph)		2158	2846		406	478
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.71	0.31		0.09	0.38

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 22.5 (20%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 88.6%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 2: Bloor St. & Old Mill Trail

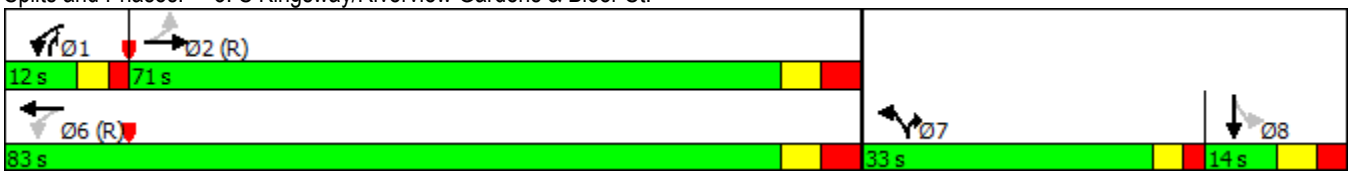


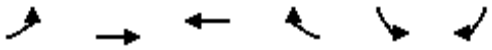
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	848	443	395	580	32	215	0	394	43	61	8
Future Volume (vph)	8	848	443	395	580	32	215	0	394	43	61	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.92			0.99					0.85		
Frt		0.949			0.995				0.850		0.982	
Flt Protected					0.981		0.950			0.950		
Satd. Flow (prot)	0	3132	0	0	3459	0	1825	0	1570	1825	1887	0
Flt Permitted		0.944			0.523		0.950			0.950		
Satd. Flow (perm)	0	2955	0	0	1844	0	1825	0	1570	1551	1887	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					4				101		4	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		824.1			77.1			102.2			164.4	
Travel Time (s)		59.3			5.8			7.7			19.7	
Confl. Peds. (#/hr)	95		98	98		95			27	27		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	2%	1%	4%	1%	3%	0%	0%	4%	0%	0%	0%
Adj. Flow (vph)	9	922	482	429	630	35	234	0	428	47	66	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1413	0	0	1094	0	234	0	428	47	75	0
Turn Type	Perm	NA		pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2		1	6		7		1 7		8	
Permitted Phases	2			6						8		
Detector Phase	2	2		1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0		6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0		11.0	37.0		33.0			14.0	14.0	
Total Split (s)	71.0	71.0		12.0	83.0		33.0			14.0	14.0	
Total Split (%)	54.6%	54.6%		9.2%	63.8%		25.4%			10.8%	10.8%	
Maximum Green (s)	63.0	63.0		7.0	75.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0		3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0		2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)		8.0			8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0			7.0		7.0					
Flash Dont Walk (s)	22.0	22.0			22.0		21.0					
Pedestrian Calls (#/hr)	0	0			0		0					
Act Effct Green (s)		63.0			75.0		28.0		35.0	7.0	7.0	
Actuated g/C Ratio		0.48			0.58		0.22		0.27	0.05	0.05	
v/c Ratio		0.99			3.55dl		0.60		0.86	0.57	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		54.1			48.5		53.1		42.1	85.7	91.4	
Queue Delay		0.0			39.9		0.0		0.0	0.0	0.0	
Total Delay		54.1			88.4		53.1		42.1	85.7	91.4	
LOS		D			F		D		D	F	F	
Approach Delay		54.1			88.4			46.0			89.2	
Approach LOS		D			F			D			F	
90th %ile Green (s)	63.0	63.0		7.0	75.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
70th %ile Green (s)	63.0	63.0		7.0	75.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
50th %ile Green (s)	63.0	63.0		7.0	75.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
30th %ile Green (s)	63.0	63.0		7.0	75.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
10th %ile Green (s)	63.0	63.0		7.0	75.0		28.0			7.0	7.0	
10th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
Queue Length 50th (m)		183.6			86.8		54.4		64.7	12.0	18.2	
Queue Length 95th (m)		#237.5			#133.6		81.4		#115.4	#28.3	#43.0	
Internal Link Dist (m)		800.1			53.1			78.2			140.4	
Turn Bay Length (m)										39.6		
Base Capacity (vph)		1432			1115		393		496	83	105	
Starvation Cap Reductn		0			227		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		0.99			1.23		0.60		0.86	0.57	0.71	

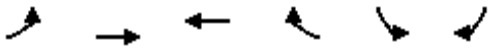
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 65.2		Intersection LOS: E	
Intersection Capacity Utilization 103.8%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.





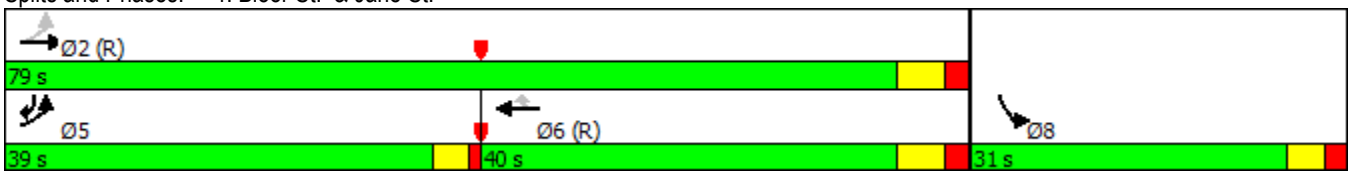
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	395	798	610	170	177	525
Future Volume (vph)	395	798	610	170	177	525
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	0.91			0.60	0.83	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1755	3544	3579	1328	1706	1541
Flt Permitted	0.229				0.950	
Satd. Flow (perm)	384	3544	3579	793	1420	1541
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				93		482
Link Speed (k/h)		50	50		40	
Link Distance (m)		61.8	334.6		180.8	
Travel Time (s)		4.4	24.1		16.3	
Confl. Peds. (#/hr)	142			142	132	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	2%	23%	7%	6%
Adj. Flow (vph)	429	867	663	185	192	571
Shared Lane Traffic (%)						
Lane Group Flow (vph)	429	867	663	185	192	571
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	39.0	79.0	40.0	40.0	31.0	39.0
Total Split (%)	35.5%	71.8%	36.4%	36.4%	28.2%	35.5%
Maximum Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	34.0	34.0	26.0	35.0
Actuated g/C Ratio	0.68	0.66	0.31	0.31	0.24	0.32
v/c Ratio	0.61	0.37	0.60	0.60	0.48	0.70

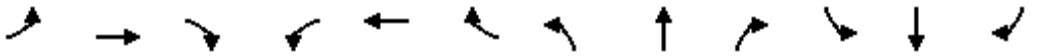


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	15.9	8.8	29.9	20.1	40.8	10.8
Queue Delay	0.4	0.6	0.0	0.0	0.0	0.0
Total Delay	16.2	9.4	29.9	20.1	40.8	10.8
LOS	B	A	C	C	D	B
Approach Delay		11.6	27.8		18.3	
Approach LOS		B	C		B	
90th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	39.8	39.5	67.1	19.0	35.7	13.8
Queue Length 95th (m)	72.8	50.0	86.2	19.2	57.6	52.4
Internal Link Dist (m)		37.8	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	698	2351	1106	309	403	818
Starvation Cap Reductn	48	1007	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	0.65	0.60	0.60	0.48	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 72.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Bloor St. & Jane St.



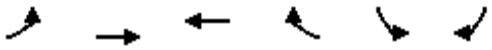


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	807	117	69	581	13	118	65	79	17	125	15
Future Volume (vph)	16	807	117	69	581	13	118	65	79	17	125	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			0.99		0.93	0.94		0.95	0.99	
Frt		0.981			0.997			0.918			0.984	
Flt Protected		0.999			0.995		0.950			0.950		
Satd. Flow (prot)	0	3218	0	0	3342	0	1825	1656	0	1825	1863	0
Flt Permitted		0.937			0.718		0.616			0.606		
Satd. Flow (perm)	0	3013	0	0	2402	0	1102	1656	0	1109	1863	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			3			57			6	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	112		81	81		112	68		48	48		68
Confl. Bikes (#/hr)	112		81	81		112	68		48	48		68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	2%	0%	1%	2%	16%	0%	1%	0%	0%	0%	0%
Parking (#/hr)		0			0							
Adj. Flow (vph)	17	877	127	75	632	14	128	71	86	18	136	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1021	0	0	721	0	128	157	0	18	152	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	71.0	71.0		71.0	71.0		39.0	39.0		39.0	39.0	
Total Split (%)	64.5%	64.5%		64.5%	64.5%		35.5%	35.5%		35.5%	35.5%	
Maximum Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		72.0			72.0		26.0	26.0		26.0	26.0	

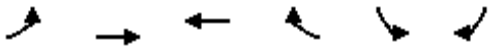
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.65			0.65		0.24	0.24		0.24	0.24	
v/c Ratio		0.52			0.46		0.49	0.36		0.07	0.34	
Control Delay		8.3			7.3		43.8	24.7		33.6	36.0	
Queue Delay		0.0			0.1		0.0	0.0		0.0	0.0	
Total Delay		8.3			7.4		43.8	24.7		33.6	36.0	
LOS		A			A		D	C		C	D	
Approach Delay		8.3			7.4			33.3			35.8	
Approach LOS		A			A			C			D	
90th %ile Green (s)	71.9	71.9		71.9	71.9		26.1	26.1		26.1	26.1	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		29.9			17.4		23.9	17.5		3.0	26.1	
Queue Length 95th (m)		35.0			22.3		42.9	36.1		9.0	44.3	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)							15.5			15.2		
Base Capacity (vph)		1980			1573		330	536		332	563	
Starvation Cap Reductn		0			143		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		0.52			0.50		0.39	0.29		0.05	0.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 109.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 5: Windermere Ave & Bloor St.



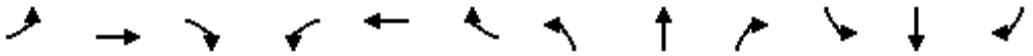
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	1022	679	20	23	37
Future Volume (vph)	16	1022	679	20	23	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.98		0.96	
Frt			0.996		0.917	
Flt Protected		0.999			0.981	
Satd. Flow (prot)	0	3397	3360	0	1641	0
Flt Permitted		0.937			0.981	
Satd. Flow (perm)	0	3179	3360	0	1607	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6		40	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	119.5		151.3	
Travel Time (s)		8.6	8.6		13.6	
Confl. Peds. (#/hr)	163			163	36	9
Confl. Bikes (#/hr)	163			163	36	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	5%	0%	5%
Parking (#/hr)		0	0	0		
Adj. Flow (vph)	17	1111	738	22	25	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1128	760	0	65	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	82.0	82.0	82.0		28.0	
Total Split (%)	74.5%	74.5%	74.5%		25.5%	
Maximum Green (s)	76.0	76.0	76.0		23.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		77.0	77.0		22.0	
Actuated g/C Ratio		0.70	0.70		0.20	
v/c Ratio		0.51	0.32		0.18	
Control Delay		3.8	6.8		19.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		0.1	0.0		0.0	
Total Delay		3.9	6.8		19.0	
LOS		A	A		B	
Approach Delay		3.9	6.8		19.0	
Approach LOS		A	A		B	
90th %ile Green (s)	77.0	77.0	77.0		22.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		22.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		22.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		22.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		22.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)		15.9	29.2		4.4	
Queue Length 95th (m)		19.5	37.6		15.9	
Internal Link Dist (m)		95.3	95.5		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		2225	2353		374	
Starvation Cap Reductn		246	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.57	0.32		0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Bloor St. & Durie St. N

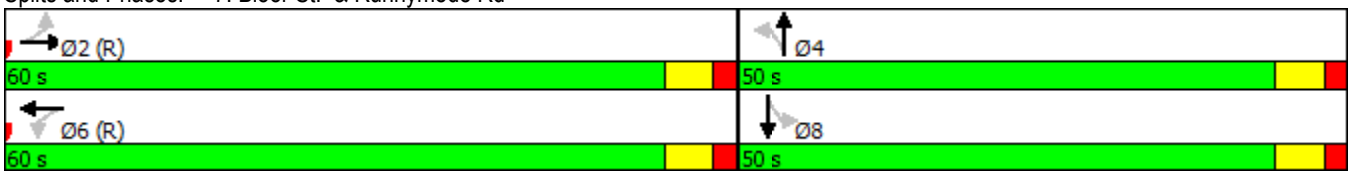


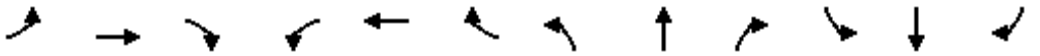
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	697	45	46	472	62	66	98	70	177	142	133
Future Volume (vph)	77	697	45	46	472	62	66	98	70	177	142	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			0.92		0.95	0.82		0.74	0.93	
Frt		0.992			0.984			0.938			0.927	
Flt Protected		0.995			0.996		0.950			0.950		
Satd. Flow (prot)	0	3473	0	0	2824	0	1825	1407	0	1789	1530	0
Flt Permitted		0.805			0.807		0.407			0.586		
Satd. Flow (perm)	0	2754	0	0	2278	0	740	1407	0	819	1530	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			16			39			31	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		114.3			188.8			215.2			259.0	
Travel Time (s)		8.2			13.6			25.8			23.3	
Confl. Peds. (#/hr)	388		113	113		388	72		387	387		72
Confl. Bikes (#/hr)	388		113	113		388	72		387	387		72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	35%	5%	40%	0%	8%	0%	2%	10%	7%
Parking (#/hr)					0	0						
Adj. Flow (vph)	84	758	49	50	513	67	72	107	76	192	154	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	891	0	0	630	0	72	183	0	192	299	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	60.0	60.0		60.0	60.0		50.0	50.0		50.0	50.0	
Total Split (%)	54.5%	54.5%		54.5%	54.5%		45.5%	45.5%		45.5%	45.5%	
Maximum Green (s)	54.0	54.0		54.0	54.0		44.0	44.0		44.0	44.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		65.8			65.8		32.2	32.2		32.2	32.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.60			0.60		0.29	0.29		0.29	0.29	
v/c Ratio		0.54			0.46		0.33	0.42		0.80	0.64	
Control Delay		15.9			10.6		32.6	25.7		59.0	35.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		15.9			10.6		32.6	25.7		59.0	35.5	
LOS		B			B		C	C		E	D	
Approach Delay		15.9			10.6			27.7			44.7	
Approach LOS		B			B			C			D	
90th %ile Green (s)	54.2	54.2		54.2	54.2		43.8	43.8		43.8	43.8	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	61.7	61.7		61.7	61.7		36.3	36.3		36.3	36.3	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	67.0	67.0		67.0	67.0		31.0	31.0		31.0	31.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		53.6			21.2		12.3	24.9		38.7	50.9	
Queue Length 95th (m)		93.7			50.1		21.4	37.4		57.1	66.7	
Internal Link Dist (m)		90.3			164.8			191.2			235.0	
Turn Bay Length (m)							9.1			11.0		
Base Capacity (vph)		1650			1368		296	586		327	630	
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		0.54			0.46		0.24	0.31		0.59	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 22.0		Intersection LOS: C	
Intersection Capacity Utilization 103.3%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 7: Bloor St. & Runnymede Rd



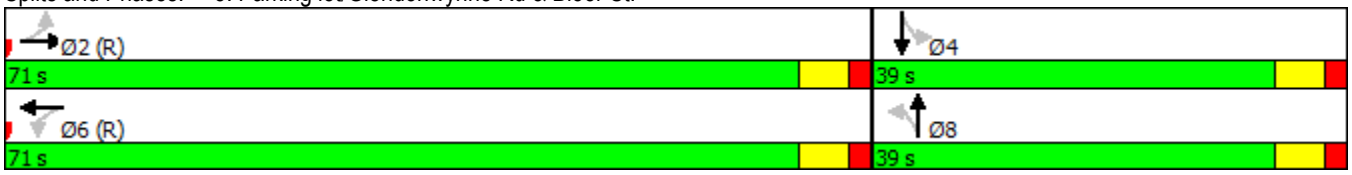


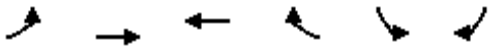
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	866	4	6	745	38	0	2	4	69	5	92
Future Volume (vph)	25	866	4	6	745	38	0	2	4	69	5	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.92			0.93	
Frt		0.999			0.993			0.910			0.925	
Flt Protected		0.999									0.980	
Satd. Flow (prot)	0	3501	0	0	3216	0	0	1612	0	0	1663	0
Flt Permitted		0.909			0.947						0.862	
Satd. Flow (perm)	0	3181	0	0	3045	0	0	1612	0	0	1417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			8			4			58	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			179.8			31.3			313.4	
Travel Time (s)		13.6			12.9			2.3			28.2	
Confl. Peds. (#/hr)	69		46	46		69	31		48	48		31
Confl. Bikes (#/hr)	69		46	46		69	31		48	48		31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	27	941	4	7	810	41	0	2	4	75	5	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	972	0	0	858	0	0	6	0	0	180	0
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	71.0	71.0		71.0	71.0		39.0	39.0		39.0	39.0	
Total Split (%)	64.5%	64.5%		64.5%	64.5%		35.5%	35.5%		35.5%	35.5%	
Maximum Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		76.6			76.6			21.4			21.4	
Actuated g/C Ratio		0.70			0.70			0.19			0.19	
v/c Ratio		0.44			0.40			0.02			0.56	
Control Delay		5.5			7.7			25.7			34.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		5.5			7.7			25.7			34.1	
LOS		A			A			C			C	
Approach Delay		5.5			7.7			25.7			34.1	
Approach LOS		A			A			C			C	
90th %ile Green (s)	75.1	75.1		75.1	75.1		22.9	22.9		22.9	22.9	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		31.1			35.5			0.4			23.6	
Queue Length 95th (m)		29.8			48.8			3.8			45.2	
Internal Link Dist (m)		164.8			155.8			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		2216			2123			486			465	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.44			0.40			0.01			0.39	

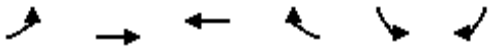
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





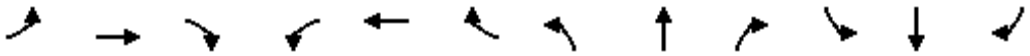
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	42	979	759	55	65	61
Future Volume (vph)	42	979	759	55	65	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	0			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.96		0.91	
Frt			0.990		0.935	
Flt Protected		0.998			0.975	
Satd. Flow (prot)	0	3574	3245	0	1606	0
Flt Permitted		0.867			0.975	
Satd. Flow (perm)	0	3095	3245	0	1554	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			14		40	
Link Speed (k/h)		50	50		40	
Link Distance (m)		158.0	400.4		167.2	
Travel Time (s)		11.4	28.8		15.0	
Confl. Peds. (#/hr)	71			71	40	44
Confl. Bikes (#/hr)	71			71	40	44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	2%	3%	1%	5%
Parking (#/hr)			0			
Adj. Flow (vph)	46	1064	825	60	71	66
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1110	885	0	137	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	78.0	78.0	78.0		32.0	
Total Split (%)	70.9%	70.9%	70.9%		29.1%	
Maximum Green (s)	72.0	72.0	72.0		26.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		77.0	77.0		21.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.70	0.70		0.19	
v/c Ratio		0.51	0.39		0.41	
Control Delay		8.7	2.0		31.4	
Queue Delay		0.0	0.0		0.0	
Total Delay		8.7	2.0		31.4	
LOS		A	A		C	
Approach Delay		8.7	2.0		31.4	
Approach LOS		A	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)		52.0	9.5		18.1	
Queue Length 95th (m)		65.7	m10.7		36.4	
Internal Link Dist (m)		134.0	376.4		143.2	
Turn Bay Length (m)						
Base Capacity (vph)		2166	2275		410	
Starvation Cap Reductn		0	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.51	0.39		0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 83.8%		ICU Level of Service E	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bloor St. & Clendenan Ave

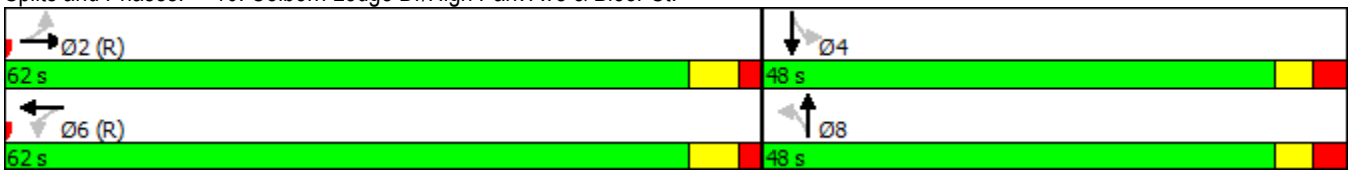


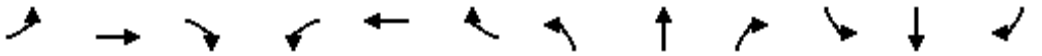
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Future Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.96			0.93	
Frt		0.994			0.989			0.955			0.963	
Flt Protected		0.999			0.998			0.982			0.969	
Satd. Flow (prot)	0	3525	0	0	3268	0	0	1741	0	0	1731	0
Flt Permitted		0.842			0.684			0.778			0.727	
Satd. Flow (perm)	0	2970	0	0	2240	0	0	1364	0	0	1256	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			11			19			20	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			218.9			101.1			229.4	
Travel Time (s)		28.8			15.8			18.2			20.6	
Confl. Peds. (#/hr)	42		79	79		42	62		48	48		62
Confl. Bikes (#/hr)	42		79	79		42	62		48	48		62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	4%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0	0						
Adj. Flow (vph)	40	1348	53	46	975	80	52	43	47	297	38	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1441	0	0	1101	0	0	142	0	0	461	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	62.0	62.0		62.0	62.0		48.0	48.0		48.0	48.0	
Total Split (%)	56.4%	56.4%		56.4%	56.4%		43.6%	43.6%		43.6%	43.6%	
Maximum Green (s)	56.0	56.0		56.0	56.0		42.0	42.0		42.0	42.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		57.1			57.1			40.9			40.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.52			0.52			0.37			0.37	
v/c Ratio		0.93			0.94			0.27			0.96	
Control Delay		49.2			41.7			22.0			66.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		49.2			41.7			22.0			66.3	
LOS		D			D			C			E	
Approach Delay		49.2			41.7			22.0			66.3	
Approach LOS		D			D			C			E	
90th %ile Green (s)	56.0	56.0		56.0	56.0		42.0	42.0		42.0	42.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	56.0	56.0		56.0	56.0		42.0	42.0		42.0	42.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	56.0	56.0		56.0	56.0		42.0	42.0		42.0	42.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	56.0	56.0		56.0	56.0		42.0	42.0		42.0	42.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	61.7	61.7		61.7	61.7		36.3	36.3		36.3	36.3	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Queue Length 50th (m)		158.2			114.2			17.7			90.8	
Queue Length 95th (m)		#196.8			#164.6			32.7			#155.2	
Internal Link Dist (m)		376.4			194.9			77.1			205.4	
Turn Bay Length (m)												
Base Capacity (vph)		1545			1168			532			491	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.93			0.94			0.27			0.94	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 47.8		Intersection LOS: D	
Intersection Capacity Utilization 104.8%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.





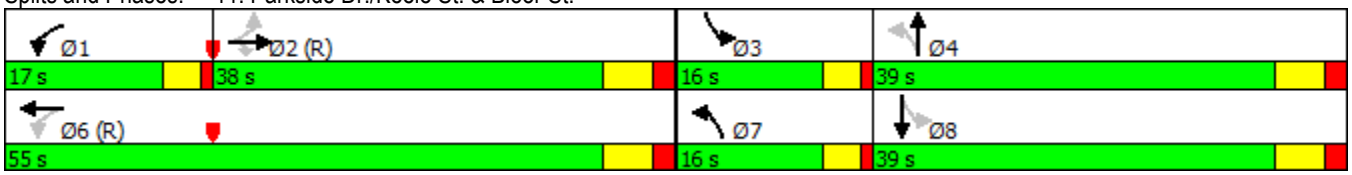
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	694	420	246	465	59	161	370	142	178	689	60
Future Volume (vph)	97	694	420	246	465	59	161	370	142	178	689	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.89		0.88	0.99	0.97		0.99	0.94		0.95	0.99	
Frt			0.850		0.983			0.958			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	3510	1585	1789	3329	0	1772	3101	0	1690	3376	0
Flt Permitted	0.438			0.181			0.142			0.308		
Satd. Flow (perm)	716	3510	1403	336	3329	0	263	3101	0	520	3376	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			185					52			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		220.8			249.0			249.1			226.0	
Travel Time (s)		15.9			17.9			17.9			16.3	
Confl. Peds. (#/hr)	193		55	55		193	30		107	107		30
Confl. Bikes (#/hr)	193		55	55		193	30		107	107		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	4%	3%	2%	4%	5%	3%	7%	5%	8%	6%	9%
Adj. Flow (vph)	105	754	457	267	505	64	175	402	154	193	749	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	754	457	267	569	0	175	556	0	193	814	0
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	2	1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	27.0	6.0	27.0		6.0	27.0		6.0	27.0	
Minimum Split (s)	33.0	33.0	33.0	10.0	45.0		10.0	33.0		10.0	33.0	
Total Split (s)	38.0	38.0	38.0	17.0	55.0		16.0	39.0		16.0	39.0	
Total Split (%)	34.5%	34.5%	34.5%	15.5%	50.0%		14.5%	35.5%		14.5%	35.5%	
Maximum Green (s)	32.0	32.0	32.0	13.0	49.0		12.0	33.0		12.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)	20.0	20.0	20.0		20.0			20.0			20.0	
Pedestrian Calls (#/hr)	0	0	0		0			0			0	
Act Effct Green (s)	34.5	34.5	34.5	53.5	51.5		44.1	31.1		44.8	31.4	
Actuated g/C Ratio	0.31	0.31	0.31	0.49	0.47		0.40	0.28		0.41	0.29	

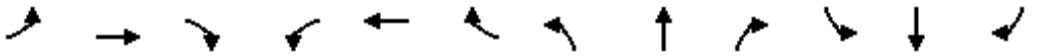
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.47	0.69	0.81	0.79	0.36		0.68	0.61		0.58	0.84	
Control Delay	40.2	37.6	33.6	49.0	18.6		34.1	33.7		26.5	45.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	40.2	37.6	33.6	49.0	18.6		34.1	33.7		26.5	45.4	
LOS	D	D	C	D	B		C	C		C	D	
Approach Delay		36.4			28.3			33.8			41.8	
Approach LOS		D			C			C			D	
90th %ile Green (s)	32.0	32.0	32.0	13.0	49.0		12.0	33.0		12.0	33.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	32.0	32.0	32.0	13.0	49.0		12.0	33.0		12.0	33.0	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	32.0	32.0	32.0	13.0	49.0		12.0	33.0		12.0	33.0	
50th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
30th %ile Green (s)	34.2	34.2	34.2	14.8	53.0		10.8	29.3		11.7	30.2	
30th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Hold		Gap	Gap	
10th %ile Green (s)	42.1	42.1	42.1	11.6	57.7		8.6	27.0		9.3	27.7	
10th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Min		Gap	Hold	
Queue Length 50th (m)	18.7	76.8	58.0	43.2	37.8		21.8	48.0		24.4	83.7	
Queue Length 95th (m)	36.8	98.4	#114.3	#71.4	47.1		38.7	65.5		39.6	107.0	
Internal Link Dist (m)		196.8			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9	23.8			14.9			24.4		
Base Capacity (vph)	224	1099	566	340	1559		272	966		341	1018	
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	0.47	0.69	0.81	0.79	0.36		0.64	0.58		0.57	0.80	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 35.6 Intersection LOS: D
Intersection Capacity Utilization 95.7% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.



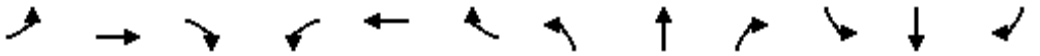


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Future Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.94	
Frt					0.998			0.980			0.958	
Flt Protected		0.999						0.966			0.967	
Satd. Flow (prot)	0	3139	0	0	3186	0	0	1628	0	0	1605	0
Flt Permitted		0.931						0.761			0.753	
Satd. Flow (perm)	0	2921	0	0	3186	0	0	1283	0	0	1213	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2			7			109	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	45		11	11		45	16		31	31		16
Confl. Bikes (#/hr)	45		11	11		45	16		31	31		16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	12%	16%	100%	0%	14%	16%	9%	0%	25%	9%	0%	5%
Adj. Flow (vph)	27	1078	3	0	509	8	47	9	10	47	0	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1108	0	0	517	0	0	66	0	0	68	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	62.0	62.0		62.0	62.0		30.0	30.0		18.0	18.0	
Total Split (%)	56.4%	56.4%		56.4%	56.4%		27.3%	27.3%		16.4%	16.4%	
Maximum Green (s)	55.0	55.0		55.0	55.0		23.0	23.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		78.2			78.2			10.7			7.1	
Actuated g/C Ratio		0.71			0.71			0.10			0.06	
v/c Ratio		0.53			0.23			0.50			0.38	
Control Delay		6.9			8.0			54.6			8.7	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		6.9			8.0			54.6			8.7	
LOS		A			A			D			A	
Approach Delay		6.9			8.0			54.6			8.7	
Approach LOS		A			A			D			A	
90th %ile Green (s)	66.3	66.3		66.3	66.3		15.4	15.4		7.3	7.3	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	69.6	69.6		69.6	69.6		12.4	12.4		7.0	7.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
50th %ile Green (s)	71.6	71.6		71.6	71.6		10.4	10.4		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	73.6	73.6		73.6	73.6		8.4	8.4		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
10th %ile Green (s)	103.0	103.0		103.0	103.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		26.4			22.1			12.2			0.0	
Queue Length 95th (m)		31.4			34.6			25.0			4.6	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		2077			2266			273			219	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.53			0.23			0.24			0.31	

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 30 (27%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 9.1	Intersection LOS: A
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 12: Indian Rd & Bloor St.

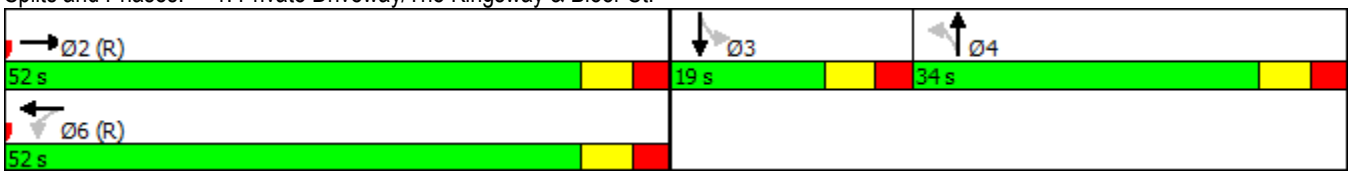


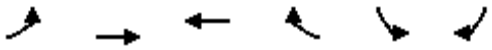
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	2	0	969	299	8	0	0	159	2	104
Future Volume (vph)	0	1012	2	0	969	299	8	0	0	159	2	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00			0.96			1.00		1.00	0.98	
Frt					0.965						0.876	
Flt Protected								0.950		0.950	0.992	
Satd. Flow (prot)	0	3614	0	0	3315	0	0	1825	0	1734	1562	0
Flt Permitted								0.870				
Satd. Flow (perm)	0	3614	0	0	3315	0	0	1667	0	1822	1574	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					51						113	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			65.6			177.9	
Travel Time (s)		15.3			23.5			11.8			21.3	
Confl. Peds. (#/hr)	68		15	15		68	3		2	2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1100	2	0	1053	325	9	0	0	173	2	113
Shared Lane Traffic (%)										13%		
Lane Group Flow (vph)	0	1102	0	0	1378	0	0	9	0	151	137	0
Turn Type		NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6			4	4		3		
Detector Phase		2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0		7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0		34.0	34.0		14.0	14.0	
Total Split (s)		52.0		52.0	52.0		34.0	34.0		19.0	19.0	
Total Split (%)		49.5%		49.5%	49.5%		32.4%	32.4%		18.1%	18.1%	
Maximum Green (s)		45.0		45.0	45.0		27.0	27.0		12.0	12.0	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		-3.0			-3.0			-3.0		-3.0	-3.0	
Total Lost Time (s)		4.0			4.0			4.0		4.0	4.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0		20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)		79.7			79.7			10.2		14.3	14.3	
Actuated g/C Ratio		0.76			0.76			0.10		0.14	0.14	
v/c Ratio		0.40			0.55			0.06		0.61	0.44	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		5.7			6.4			43.8		53.7	16.2	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		5.7			6.4			43.8		53.7	16.2	
LOS		A			A			D		D	B	
Approach Delay		5.7			6.4			43.8			35.8	
Approach LOS		A			A			D			D	
90th %ile Green (s)		64.0		64.0	64.0		8.0	8.0		12.0	12.0	
90th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
70th %ile Green (s)		79.0		79.0	79.0		0.0	0.0		12.0	12.0	
70th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
50th %ile Green (s)		79.0		79.0	79.0		0.0	0.0		12.0	12.0	
50th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
30th %ile Green (s)		79.2		79.2	79.2		0.0	0.0		11.8	11.8	
30th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Gap	Gap	
10th %ile Green (s)		82.2		82.2	82.2		0.0	0.0		8.8	8.8	
10th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Gap	Gap	
Queue Length 50th (m)		29.9			42.4			1.7		30.7	4.5	
Queue Length 95th (m)		70.4			94.2			6.5		52.1	22.6	
Internal Link Dist (m)		188.8			302.4			41.6			153.9	
Turn Bay Length (m)												
Base Capacity (vph)		2742			2528			476		260	321	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.40			0.55			0.02		0.58	0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 9.3		Intersection LOS: A	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.



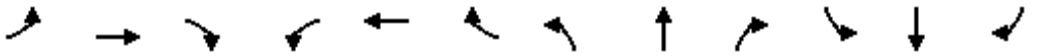


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	951	1279	44	30	120
Future Volume (vph)	113	951	1279	44	30	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	0			0	1	1
Taper Length (m)	7.5				7.5	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor			1.00		0.95	0.97
Frt			0.995			0.850
Flt Protected		0.995			0.950	
Satd. Flow (prot)	0	3613	3589	0	1825	1541
Flt Permitted		0.608			0.950	
Satd. Flow (perm)	0	2208	3589	0	1740	1497
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			130
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	815.2		142.8	
Travel Time (s)		23.5	58.7		12.9	
Confl. Peds. (#/hr)	26			26	37	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	0%	1%	0%	0%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	123	1034	1390	48	33	130
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1157	1438	0	33	130
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2					4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	6.0	29.0	29.0		7.0	7.0
Minimum Split (s)	10.5	36.0	36.0		31.0	31.0
Total Split (s)	10.6	74.0	63.4		31.0	31.0
Total Split (%)	10.1%	70.5%	60.4%		29.5%	29.5%
Maximum Green (s)	6.6	67.0	56.4		25.0	25.0
Yellow Time (s)	3.0	4.0	4.0		3.0	3.0
All-Red Time (s)	1.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)		-3.0	-3.0		-2.0	-2.0
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		86.7	86.7		10.3	10.3
Actuated g/C Ratio		0.83	0.83		0.10	0.10

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio		0.63	0.49		0.18	0.49
Control Delay		5.9	3.4		45.1	14.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		5.9	3.4		45.1	14.4
LOS		A	A		D	B
Approach Delay		5.9	3.4		20.6	
Approach LOS		A	A		C	
90th %ile Green (s)	0.0	80.1	80.1		11.9	11.9
90th %ile Term Code	Skip	Coord	Coord		Gap	Gap
70th %ile Green (s)	0.0	83.7	83.7		8.3	8.3
70th %ile Term Code	Skip	Coord	Coord		Gap	Gap
50th %ile Green (s)	0.0	84.7	84.7		7.3	7.3
50th %ile Term Code	Skip	Coord	Coord		Gap	Gap
30th %ile Green (s)	0.0	85.0	85.0		7.0	7.0
30th %ile Term Code	Skip	Coord	Coord		Min	Min
10th %ile Green (s)	0.0	85.0	85.0		7.0	7.0
10th %ile Term Code	Skip	Coord	Coord		Min	Min
Queue Length 50th (m)		52.7	30.0		6.4	0.0
Queue Length 95th (m)		31.5	52.2		14.8	16.4
Internal Link Dist (m)		302.4	791.2		118.8	
Turn Bay Length (m)						
Base Capacity (vph)		1823	2964		469	481
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		0.63	0.49		0.07	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 22.5 (21%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Bloor St. & Old Mill Trail



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	786	205	354	802	24	398	0	474	25	19	10
Future Volume (vph)	5	786	205	354	802	24	398	0	474	25	19	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			1.00					0.84		
Frt		0.969			0.997				0.850		0.948	
Flt Protected					0.985		0.950			0.950		
Satd. Flow (prot)	0	3398	0	0	3543	0	1825	0	1633	1755	1821	0
Flt Permitted		0.947			0.509		0.950			0.950		
Satd. Flow (perm)	0	3217	0	0	1831	0	1825	0	1633	1474	1821	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					3				119		11	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		815.2			70.9			102.2			164.4	
Travel Time (s)		58.7			5.3			7.7			19.7	
Confl. Peds. (#/hr)	121		92	92		121			34	34		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	5	854	223	385	872	26	433	0	515	27	21	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1082	0	0	1283	0	433	0	515	27	32	0
Turn Type	Perm	NA		Perm	NA		Prot		custom	Perm	NA	
Protected Phases		2			6		7		1 7		8	
Permitted Phases	2			6						8		
Detector Phase	2	2		6	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0		29.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0		37.0	37.0		33.0			14.0	14.0	
Total Split (s)	52.0	52.0		63.0	63.0		33.0			14.0	14.0	
Total Split (%)	47.3%	47.3%		57.3%	57.3%		30.0%			12.7%	12.7%	
Maximum Green (s)	44.0	44.0		55.0	55.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0		4.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0			0.0	0.0	
Total Lost Time (s)		8.0			8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag					Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes					Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None			None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0					
Flash Dont Walk (s)	22.0	22.0		22.0	22.0		21.0					
Pedestrian Calls (#/hr)	0	0		0	0		0					
Act Effct Green (s)		46.2			57.8		28.0		35.6	7.0	7.0	
Actuated g/C Ratio		0.42			0.53		0.25		0.32	0.06	0.06	
v/c Ratio		0.80			3.56dl		0.93		0.85	0.29	0.25	

Lane Group	Ø1
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	1
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.0
Total Split (s)	11.0
Total Split (%)	10%
Maximum Green (s)	6.0
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		34.2			182.7		69.1		34.4	57.5	41.4	
Queue Delay		0.9			0.0		0.0		0.2	0.0	0.0	
Total Delay		35.1			182.7		69.1		34.6	57.5	41.4	
LOS		D			F		E		C	E	D	
Approach Delay		35.1			182.7			50.3			48.8	
Approach LOS		D			F			D			D	
90th %ile Green (s)	44.0	44.0		55.0	55.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max			Max	Max	
70th %ile Green (s)	44.0	44.0		55.0	55.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max			Max	Max	
50th %ile Green (s)	44.0	44.0		55.0	55.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max			Max	Max	
30th %ile Green (s)	44.0	44.0		55.0	55.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max			Max	Max	
10th %ile Green (s)	55.0	55.0		69.0	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max			Skip	Skip	
Queue Length 50th (m)		108.7			~195.8		91.2		62.6	5.6	4.4	
Queue Length 95th (m)		136.9			#237.7		#149.4		#123.1	14.6	14.0	
Internal Link Dist (m)		791.2			46.9			78.2			140.4	
Turn Bay Length (m)										39.6		
Base Capacity (vph)		1350			963		464		608	93	126	
Starvation Cap Reductn		0			0		0		0	0	0	
Spillback Cap Reductn		89			0		0		3	0	0	
Storage Cap Reductn		0			0		0		0	0	0	
Reduced v/c Ratio		0.86			1.33		0.93		0.85	0.29	0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 95.8		Intersection LOS: F	
Intersection Capacity Utilization 108.3%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

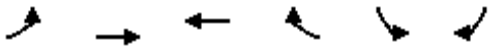
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

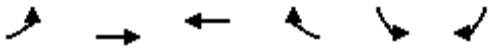
Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.

Lane Group	Ø1
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	6.0
90th %ile Term Code	Max
70th %ile Green (s)	6.0
70th %ile Term Code	Max
50th %ile Green (s)	6.0
50th %ile Term Code	Max
30th %ile Green (s)	6.0
30th %ile Term Code	Max
10th %ile Green (s)	9.0
10th %ile Term Code	Gap
Queue Length 50th (m)	
Queue Length 95th (m)	
Internal Link Dist (m)	
Turn Bay Length (m)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



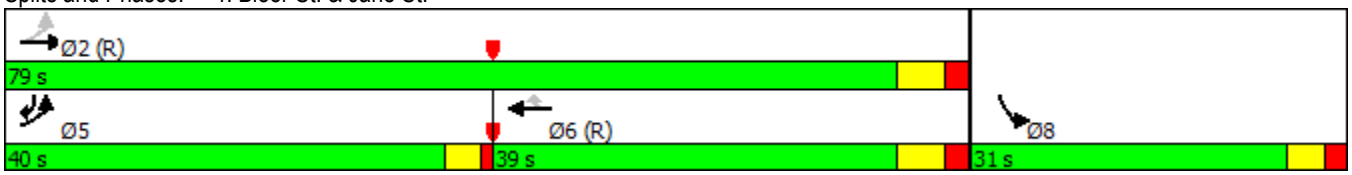
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	502	632	822	155	179	486
Future Volume (vph)	502	632	822	155	179	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	7.5				7.5	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor				0.57	0.83	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1738	3579	3614	1317	1755	1617
Flt Permitted	0.108				0.950	
Satd. Flow (perm)	198	3579	3614	751	1463	1617
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				62		483
Link Speed (k/h)		50	50		40	
Link Distance (m)		68.0	334.6		180.8	
Travel Time (s)		4.9	24.1		16.3	
Confl. Peds. (#/hr)	152			152	131	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	1%	24%	4%	1%
Adj. Flow (vph)	546	687	893	168	195	528
Shared Lane Traffic (%)						
Lane Group Flow (vph)	546	687	893	168	195	528
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	40.0	79.0	39.0	39.0	31.0	40.0
Total Split (%)	36.4%	71.8%	35.5%	35.5%	28.2%	36.4%
Maximum Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	33.0	33.0	26.0	36.0
Actuated g/C Ratio	0.68	0.66	0.30	0.30	0.24	0.33
v/c Ratio	0.85	0.29	0.82	0.63	0.47	0.62

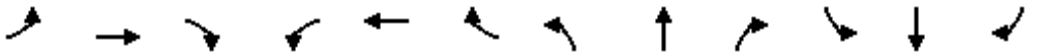


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	39.8	7.9	36.9	25.2	40.5	7.5
Queue Delay	4.3	0.0	0.0	0.0	0.0	55.9
Total Delay	44.1	7.9	36.9	25.2	40.5	63.4
LOS	D	A	D	C	D	E
Approach Delay		24.0	35.1		57.2	
Approach LOS		C	D		E	
90th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	89.0	28.4	96.1	20.2	36.2	6.7
Queue Length 95th (m)	m#148.9	m36.8	118.3	43.2	57.9	35.5
Internal Link Dist (m)		44.0	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	639	2375	1084	268	414	854
Starvation Cap Reductn	49	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	460
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.29	0.82	0.63	0.47	1.34

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Bloor St. & Jane St.



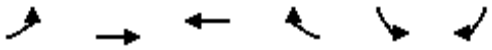


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	823	133	108	734	30	102	117	97	34	129	22
Future Volume (vph)	24	823	133	108	734	30	102	117	97	34	129	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93			0.97		0.89	0.88		0.89	0.97	
Frt		0.980			0.995			0.932			0.978	
Flt Protected		0.999			0.994		0.950			0.950		
Satd. Flow (prot)	0	3318	0	0	3517	0	1789	1569	0	1825	1814	0
Flt Permitted		0.911			0.638		0.557			0.439		
Satd. Flow (perm)	0	3017	0	0	2238	0	932	1569	0	749	1814	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			7			37			8	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	428		161	161		428	120		144	144		120
Confl. Bikes (#/hr)	428		161	161		428	120		144	144		120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	895	145	117	798	33	111	127	105	37	140	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1066	0	0	948	0	111	232	0	37	164	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	76.0	76.0		76.0	76.0		34.0	34.0		34.0	34.0	
Total Split (%)	69.1%	69.1%		69.1%	69.1%		30.9%	30.9%		30.9%	30.9%	
Maximum Green (s)	70.0	70.0		70.0	70.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0			-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		73.7			73.7		28.3	28.3		28.3	28.3	
Actuated g/C Ratio		0.67			0.67		0.26	0.26		0.26	0.26	

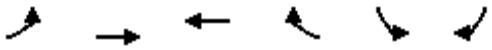
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.52			0.63		0.46	0.54		0.19	0.35	
Control Delay		8.3			12.8		41.6	34.5		34.8	33.9	
Queue Delay		0.0			2.0		0.0	0.0		0.0	0.0	
Total Delay		8.3			14.8		41.6	34.5		34.8	33.9	
LOS		A			B		D	C		C	C	
Approach Delay		8.3			14.8			36.8			34.1	
Approach LOS		A			B			D			C	
90th %ile Green (s)	70.3	70.3		70.3	70.3		27.7	27.7		27.7	27.7	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		47.7			54.3		20.2	36.2		6.2	27.4	
Queue Length 95th (m)		58.0			77.6		37.2	59.6		15.0	45.4	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)							15.5			15.2		
Base Capacity (vph)		2031			1500		254	454		204	500	
Starvation Cap Reductn		0			385		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		0.52			0.85		0.44	0.51		0.18	0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 16.6		Intersection LOS: B	
Intersection Capacity Utilization 110.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 5: Windermere Ave & Bloor St.



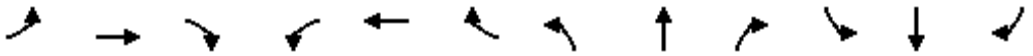
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	673	1056	46	29	90
Future Volume (vph)	33	673	1056	46	29	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.97		0.90	
Frt			0.994		0.898	
Flt Protected		0.998			0.988	
Satd. Flow (prot)	0	3334	3448	0	1598	0
Flt Permitted		0.851			0.988	
Satd. Flow (perm)	0	2834	3448	0	1542	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			9		24	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	117.8		151.3	
Travel Time (s)		8.6	8.5		13.6	
Confl. Peds. (#/hr)	361			361	96	31
Confl. Bikes (#/hr)	361			361	96	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	2%	4%	0%	0%
Parking (#/hr)		0				
Adj. Flow (vph)	36	732	1148	50	32	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	768	1198	0	130	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	78.0	78.0	78.0		32.0	
Total Split (%)	70.9%	70.9%	70.9%		29.1%	
Maximum Green (s)	72.0	72.0	72.0		27.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		-2.0	-2.0		-1.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		33.0	33.0		23.2	
Actuated g/C Ratio		0.51	0.51		0.36	
v/c Ratio		0.53	0.68		0.22	
Control Delay		11.6	13.5		14.9	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		0.0	0.0		0.0	
Total Delay		11.6	13.5		14.9	
LOS		B	B		B	
Approach Delay		11.6	13.5		14.9	
Approach LOS		B	B		B	
90th %ile Green (s)	41.1	41.1	41.1		22.0	
90th %ile Term Code	Hold	Hold	Gap		Min	
70th %ile Green (s)	34.8	34.8	34.8		22.0	
70th %ile Term Code	Hold	Hold	Gap		Min	
50th %ile Green (s)	31.2	31.2	31.2		22.0	
50th %ile Term Code	Hold	Hold	Gap		Min	
30th %ile Green (s)	26.8	26.8	26.8		22.0	
30th %ile Term Code	Hold	Hold	Gap		Min	
10th %ile Green (s)	22.7	22.7	22.7		22.0	
10th %ile Term Code	Hold	Hold	Gap		Min	
Queue Length 50th (m)		29.3	50.6		8.4	
Queue Length 95th (m)		41.5	67.8		23.2	
Internal Link Dist (m)		95.3	93.8		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		2833	3447		715	
Starvation Cap Reductn		161	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.29	0.35		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 64.3			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 74.1			
70th %ile Actuated Cycle: 67.8			
50th %ile Actuated Cycle: 64.2			
30th %ile Actuated Cycle: 59.8			
10th %ile Actuated Cycle: 55.7			

Splits and Phases: 6: Bloor St. & Durie St. N

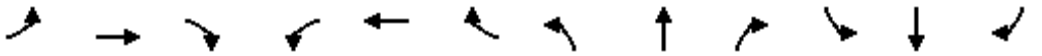


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	574	44	38	696	159	70	232	91	72	98	114
Future Volume (vph)	104	574	44	38	696	159	70	232	91	72	98	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.94			0.85		0.81	0.88		0.85	0.80	
Frt		0.991			0.973			0.958			0.919	
Flt Protected		0.993			0.998		0.950			0.950		
Satd. Flow (prot)	0	3178	0	0	2861	0	1825	1578	0	1706	1343	0
Flt Permitted		0.643			0.884		0.470			0.293		
Satd. Flow (perm)	0	2022	0	0	2519	0	732	1578	0	447	1343	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			21			20			10	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		115.7			188.8			215.2			259.0	
Travel Time (s)		8.3			13.6			25.8			23.3	
Confl. Peds. (#/hr)	596		290	290		596	231		354	354		231
Confl. Bikes (#/hr)	596		290	290		596	231		354	354		231
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	32%	3%	12%	0%	3%	0%	7%	3%	6%
Parking (#/hr)		0										
Adj. Flow (vph)	113	624	48	41	757	173	76	252	99	78	107	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	785	0	0	971	0	76	351	0	78	231	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	68.0	68.0		68.0	68.0		42.0	42.0		42.0	42.0	
Total Split (%)	61.8%	61.8%		61.8%	61.8%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	62.0	62.0		62.0	62.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0			-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		70.1			70.1		31.9	31.9		31.9	31.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.64			0.64		0.29	0.29		0.29	0.29	
v/c Ratio		0.61			0.60		0.36	0.75		0.60	0.58	
Control Delay		15.0			10.7		34.9	43.2		53.2	37.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		15.0			10.7		34.9	43.2		53.2	37.6	
LOS		B			B		C	D		D	D	
Approach Delay		15.0			10.7			41.7			41.5	
Approach LOS		B			B			D			D	
90th %ile Green (s)	62.0	62.0		62.0	62.0		36.0	36.0		36.0	36.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Hold	Hold	
70th %ile Green (s)	64.2	64.2		64.2	64.2		33.8	33.8		33.8	33.8	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	68.5	68.5		68.5	68.5		29.5	29.5		29.5	29.5	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		47.0			68.5		13.0	64.8		14.5	40.7	
Queue Length 95th (m)		77.7			35.7		24.6	90.1		29.9	60.7	
Internal Link Dist (m)		91.7			164.8			191.2			235.0	
Turn Bay Length (m)							9.1			11.0		
Base Capacity (vph)		1292			1613		252	558		154	470	
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		0.61			0.60		0.30	0.63		0.51	0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 21.2		Intersection LOS: C	
Intersection Capacity Utilization 103.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 7: Bloor St. & Runnymede Rd

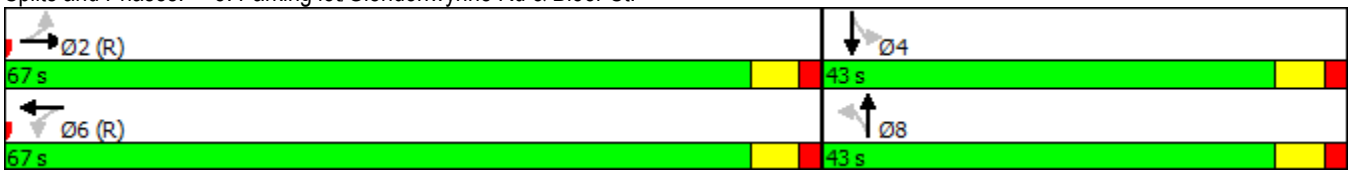


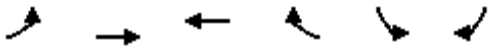
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	547	44	5	725	113	32	14	31	68	4	125
Future Volume (vph)	28	547	44	5	725	113	32	14	31	68	4	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			0.92			0.90			0.80	
Frt		0.989			0.980			0.945			0.914	
Flt Protected		0.998						0.980			0.983	
Satd. Flow (prot)	0	3227	0	0	3196	0	0	1690	0	0	1414	0
Flt Permitted		0.881			0.952			0.801			0.872	
Satd. Flow (perm)	0	2837	0	0	3040	0	0	1307	0	0	1223	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			26			34			58	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			181.4			31.3			313.4	
Travel Time (s)		13.6			13.1			2.3			28.2	
Confl. Peds. (#/hr)	225		163	163		225	141		54	54		141
Confl. Bikes (#/hr)	225		163	163		225	141		54	54		141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	30	595	48	5	788	123	35	15	34	74	4	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	673	0	0	916	0	0	84	0	0	214	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	67.0	67.0		67.0	67.0		43.0	43.0		43.0	43.0	
Total Split (%)	60.9%	60.9%		60.9%	60.9%		39.1%	39.1%		39.1%	39.1%	
Maximum Green (s)	61.0	61.0		61.0	61.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0			-2.0			-2.0			-2.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		76.4			76.4			25.6			25.6	
Actuated g/C Ratio		0.69			0.69			0.23			0.23	
v/c Ratio		0.34			0.43			0.26			0.65	
Control Delay		5.3			8.3			22.6			37.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		5.3			8.3			22.6			37.0	
LOS		A			A			C			D	
Approach Delay		5.3			8.3			22.6			37.0	
Approach LOS		A			A			C			D	
90th %ile Green (s)	67.7	67.7		67.7	67.7		30.3	30.3		30.3	30.3	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
70th %ile Green (s)	73.5	73.5		73.5	73.5		24.5	24.5		24.5	24.5	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		18.7			35.1			8.9			31.4	
Queue Length 95th (m)		25.6			62.2			19.9			52.0	
Internal Link Dist (m)		164.8			157.4			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		1974			2120			485			471	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.43			0.17			0.45	

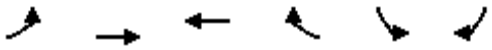
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





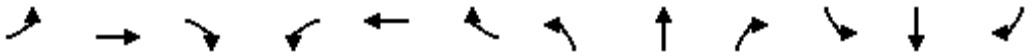
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	655	1086	63	44	46
Future Volume (vph)	47	655	1086	63	44	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	0			0	1	0
Taper Length (m)	7.5				7.5	
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor			0.96		0.95	
Frt			0.992		0.931	
Flt Protected		0.997			0.976	
Satd. Flow (prot)	0	3394	3273	0	1669	0
Flt Permitted		0.778			0.976	
Satd. Flow (perm)	0	2648	3273	0	1650	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			13		44	
Link Speed (k/h)		50	50		40	
Link Distance (m)		156.3	400.4		167.2	
Travel Time (s)		11.3	28.8		15.0	
Confl. Peds. (#/hr)	186			186	15	22
Confl. Bikes (#/hr)	186			186	15	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	3%	0%	2%
Parking (#/hr)		0	0			
Adj. Flow (vph)	51	712	1180	68	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	763	1248	0	98	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	82.0	82.0	82.0		28.0	
Total Split (%)	74.5%	74.5%	74.5%		25.5%	
Maximum Green (s)	76.0	76.0	76.0		22.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		79.0	79.0		23.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio		0.72	0.72		0.21	
v/c Ratio		0.40	0.53		0.26	
Control Delay		6.9	3.0		23.1	
Queue Delay		0.0	0.0		0.0	
Total Delay		6.9	3.0		23.1	
LOS		A	A		C	
Approach Delay		6.9	3.0		23.1	
Approach LOS		A	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)		29.7	14.9		9.5	
Queue Length 95th (m)		39.2	17.3		23.8	
Internal Link Dist (m)		132.3	376.4		143.2	
Turn Bay Length (m)						
Base Capacity (vph)		1901	2354		398	
Starvation Cap Reductn		0	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.40	0.53		0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 5.3		Intersection LOS: A	
Intersection Capacity Utilization 77.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 9: Bloor St. & Clendenan Ave

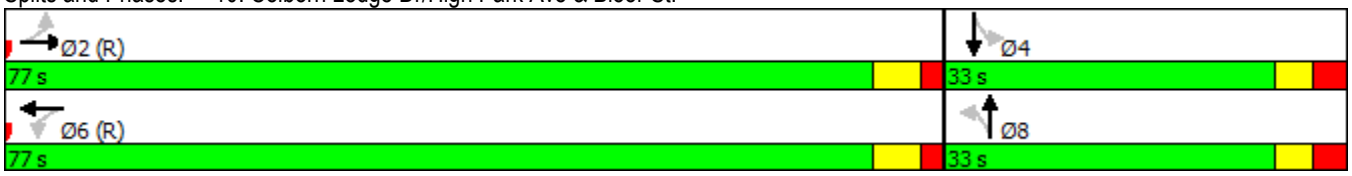


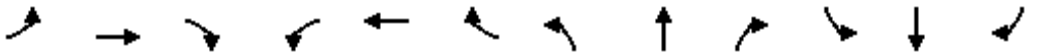
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	824	55	59	1210	189	75	68	84	78	71	64
Future Volume (vph)	78	824	55	59	1210	189	75	68	84	78	71	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.96			0.93			0.95	
Frt		0.991			0.981			0.950			0.959	
Flt Protected		0.996			0.998			0.984			0.982	
Satd. Flow (prot)	0	3401	0	0	3386	0	0	1683	0	0	1752	0
Flt Permitted		0.610			0.836			0.758			0.716	
Satd. Flow (perm)	0	2083	0	0	2832	0	0	1282	0	0	1253	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			32			26			19	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			212.3			101.1			229.4	
Travel Time (s)		28.8			15.3			18.2			20.6	
Confl. Peds. (#/hr)	95		89	89		95	44		74	74		44
Confl. Bikes (#/hr)	95		89	89		95	44		74	74		44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	85	896	60	64	1315	205	82	74	91	85	77	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1041	0	0	1584	0	0	247	0	0	232	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	77.0	77.0		77.0	77.0		33.0	33.0		33.0	33.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		-2.0			-2.0			-2.0			-2.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		74.8			74.8			27.2			27.2	
Actuated g/C Ratio		0.68			0.68			0.25			0.25	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.73			0.82			0.74			0.72	
Control Delay		18.1			17.3			47.9			48.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.1			17.3			47.9			48.1	
LOS		B			B			D			D	
Approach Delay		18.1			17.3			47.9			48.1	
Approach LOS		B			B			D			D	
90th %ile Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
10th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Min	Min	
Queue Length 50th (m)		68.7			109.0			44.7			42.8	
Queue Length 95th (m)		100.2			157.8			71.9			68.9	
Internal Link Dist (m)		376.4			188.3			77.1			205.4	
Turn Bay Length (m)												
Base Capacity (vph)		1420			1936			357			344	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.73			0.82			0.69			0.67	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 22.3		Intersection LOS: C	
Intersection Capacity Utilization 99.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.



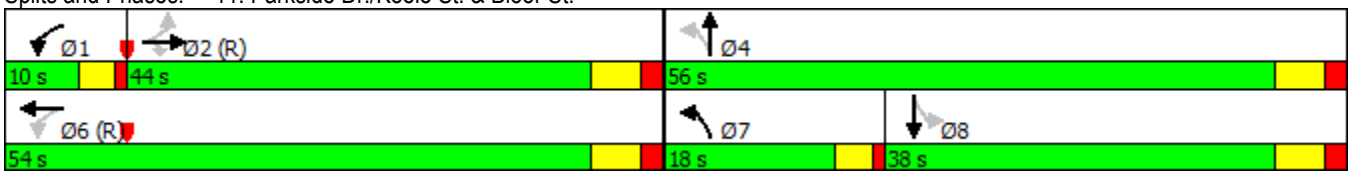


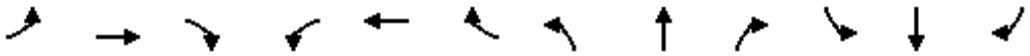
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	472	206	186	741	92	289	557	171	138	534	92
Future Volume (vph)	111	472	206	186	741	92	289	557	171	138	534	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.93		0.87	0.97	0.96		0.99	0.93		0.92	0.99	
Frt			0.850		0.983			0.965			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3650	1617	1807	3414	0	1825	3223	0	1807	3478	0
Flt Permitted	0.263			0.316			0.174			0.352		
Satd. Flow (perm)	472	3650	1408	582	3414	0	330	3223	0	618	3478	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			149					50			18	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		227.3			249.0			249.1			226.0	
Travel Time (s)		16.4			17.9			17.9			16.3	
Confl. Peds. (#/hr)	220		68	68		220	42		189	189		42
Confl. Bikes (#/hr)	220		68	68		220	42		189	189		42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	1%	3%	0%	2%	1%	1%	1%	3%
Adj. Flow (vph)	121	513	224	202	805	100	314	605	186	150	580	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	513	224	202	905	0	314	791	0	150	680	0
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	2	1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	27.0	6.0	27.0		6.0	27.0		27.0	27.0	
Minimum Split (s)	33.0	33.0	33.0	10.0	45.0		10.0	33.0		33.0	33.0	
Total Split (s)	44.0	44.0	44.0	10.0	54.0		18.0	56.0		38.0	38.0	
Total Split (%)	40.0%	40.0%	40.0%	9.1%	49.1%		16.4%	50.9%		34.5%	34.5%	
Maximum Green (s)	38.0	38.0	38.0	6.0	48.0		14.0	50.0		32.0	32.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	20.0	20.0	20.0		20.0			20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0	0		0			0		0	0	
Act Effct Green (s)	38.0	38.0	38.0	49.5	49.5		52.5	52.5		32.5	32.5	
Actuated g/C Ratio	0.35	0.35	0.35	0.45	0.45		0.48	0.48		0.30	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.75	0.41	0.38	0.59	0.59		0.84	0.51		0.82	0.65	
Control Delay	60.5	28.4	11.2	27.7	24.7		41.3	19.8		70.3	36.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	60.5	28.4	11.2	27.7	24.7		41.3	19.8		70.3	36.1	
LOS	E	C	B	C	C		D	B		E	D	
Approach Delay		28.5			25.2			25.9			42.3	
Approach LOS		C			C			C			D	
90th %ile Green (s)	38.0	38.0	38.0	6.0	48.0		14.0	50.0		32.0	32.0	
90th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	38.0	38.0	38.0	6.0	48.0		14.0	50.0		32.0	32.0	
70th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	38.0	38.0	38.0	6.0	48.0		14.0	50.0		32.0	32.0	
50th %ile Term Code	Coord	Coord	Coord	Max	Coord		Max	Hold		Max	Max	
30th %ile Green (s)	28.5	28.5	28.5	10.6	43.1		21.4	54.9		29.5	29.5	
30th %ile Term Code	Coord	Coord	Coord	Max	Coord		Gap	Hold		Gap	Gap	
10th %ile Green (s)	37.4	37.4	37.4	8.8	50.2		16.8	47.8		27.0	27.0	
10th %ile Term Code	Coord	Coord	Coord	Gap	Coord		Gap	Hold		Min	Min	
Queue Length 50th (m)	22.0	42.4	10.7	26.0	73.9		41.7	56.3		29.3	63.8	
Queue Length 95th (m)	#52.5	56.5	29.3	41.4	93.4		#90.6	73.2		#64.3	83.2	
Internal Link Dist (m)		203.3			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9	23.8			14.9			24.4		
Base Capacity (vph)	171	1327	606	345	1565		375	1577		191	1087	
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	0.71	0.39	0.37	0.59	0.58		0.84	0.50		0.79	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 29.8		Intersection LOS: C	
Intersection Capacity Utilization 105.3%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.



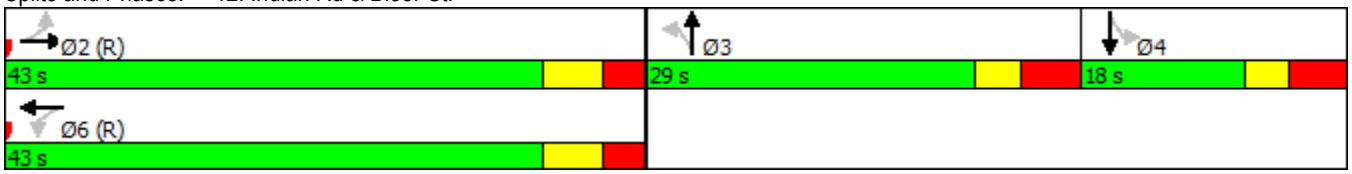


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Future Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.98			0.95	
Frt		0.994			0.998			0.953			0.913	
Flt Protected		0.999						0.973			0.987	
Satd. Flow (prot)	0	3252	0	0	3217	0	0	1502	0	0	1598	0
Flt Permitted		0.920			0.953			0.490			0.892	
Satd. Flow (perm)	0	2994	0	0	3065	0	0	756	0	0	1433	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			1			17			38	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	74		39	39		74	19		26	26		19
Confl. Bikes (#/hr)	74		39	39		74	19		26	26		19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	31%	10%	16%	0%	13%	11%	16%	50%	6%	7%	0%	2%
Adj. Flow (vph)	18	735	34	4	1000	11	27	5	17	16	5	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	787	0	0	1015	0	0	49	0	0	59	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	43.0	43.0		43.0	43.0		29.0	29.0		18.0	18.0	
Total Split (%)	47.8%	47.8%		47.8%	47.8%		32.2%	32.2%		20.0%	20.0%	
Maximum Green (s)	36.0	36.0		36.0	36.0		22.0	22.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		-3.0			-3.0			-3.0			-3.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		63.7			63.7			12.5			11.0	
Actuated g/C Ratio		0.71			0.71			0.14			0.12	
v/c Ratio		0.37			0.47			0.41			0.28	
Control Delay		8.9			10.1			35.2			21.2	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		8.9			10.1			35.2			21.2	
LOS		A			B			D			C	
Approach Delay		8.9			10.1			35.2			21.2	
Approach LOS		A			B			D			C	
90th %ile Green (s)	44.3	44.3		44.3	44.3		14.2	14.2		10.5	10.5	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	49.9	49.9		49.9	49.9		10.8	10.8		8.3	8.3	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	53.4	53.4		53.4	53.4		8.6	8.6		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	69.0	69.0		69.0	69.0		0.0	0.0		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Min	Min	
10th %ile Green (s)	83.0	83.0		83.0	83.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		32.4			46.5			5.1			3.3	
Queue Length 95th (m)		58.2			81.5			15.1			13.8	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		2121			2170			222			255	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.37			0.47			0.22			0.23	

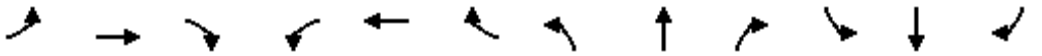
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 10.6		Intersection LOS: B	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Indian Rd & Bloor St.



APPENDIX

G OPTION 2 SYNCHRO ANALYSIS SHEETS

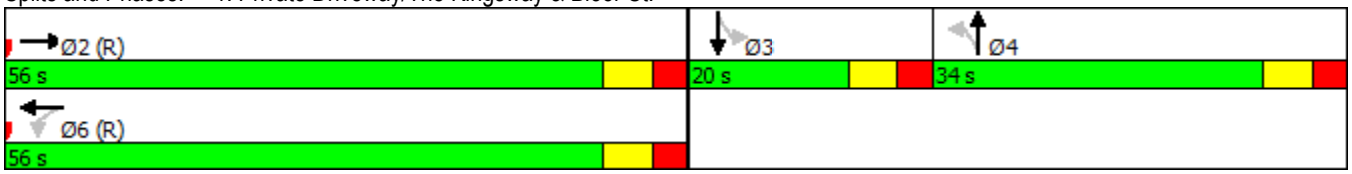


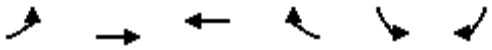
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1117	5	0	800	124	12	4	0	418	0	55
Future Volume (vph)	0	1117	5	0	800	124	12	4	0	418	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (m)	7.6			20.0			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00			0.99					0.99	0.99	
Frt		0.999			0.980						0.965	
Flt Protected								0.963		0.950	0.963	
Satd. Flow (prot)	0	1845	0	1921	1805	0	0	1626	0	1734	1692	0
Flt Permitted										0.765	0.810	
Satd. Flow (perm)	0	1845	0	1921	1805	0	0	1689	0	1379	1410	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9						109	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			65.6			177.9	
Travel Time (s)		15.3			23.5			11.8			21.3	
Confl. Peds. (#/hr)	37		8	8		37			8	8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	3%	1%	18%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	1214	5	0	870	135	13	4	0	454	0	60
Shared Lane Traffic (%)										43%		
Lane Group Flow (vph)	0	1219	0	0	1005	0	0	17	0	259	255	0
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6			4	4		3		
Detector Phase		2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0		7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0		34.0	34.0		14.0	14.0	
Total Split (s)		56.0		56.0	56.0		34.0	34.0		20.0	20.0	
Total Split (%)		50.9%		50.9%	50.9%		30.9%	30.9%		18.2%	18.2%	
Maximum Green (s)		49.0		49.0	49.0		27.0	27.0		13.0	13.0	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0		20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)		76.7			76.7			7.7		13.0	13.0	
Actuated g/C Ratio		0.70			0.70			0.07		0.12	0.12	
v/c Ratio		0.95			0.80			0.15		1.60	0.97	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		33.1			27.4			50.4		329.5	78.0	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		33.1			27.4			50.4		329.5	78.0	
LOS		C			C			D		F	E	
Approach Delay		33.1			27.4			50.4			204.7	
Approach LOS		C			C			D			F	
90th %ile Green (s)		66.6		66.6	66.6		9.4	9.4		13.0	13.0	
90th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
70th %ile Green (s)		68.1		68.1	68.1		7.9	7.9		13.0	13.0	
70th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
50th %ile Green (s)		83.0		83.0	83.0		0.0	0.0		13.0	13.0	
50th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
30th %ile Green (s)		83.0		83.0	83.0		0.0	0.0		13.0	13.0	
30th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
10th %ile Green (s)		83.0		83.0	83.0		0.0	0.0		13.0	13.0	
10th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
Queue Length 50th (m)		159.7			174.2			3.5		~83.6	34.3	
Queue Length 95th (m)		#373.6			#274.4			10.3		#135.4	#87.4	
Internal Link Dist (m)		188.8			302.4			41.6			153.9	
Turn Bay Length (m)												
Base Capacity (vph)		1287			1262			414		162	262	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.95			0.80			0.04		1.60	0.97	

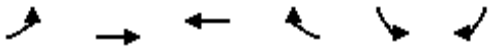
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay: 63.1		Intersection LOS: E	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	1304	781	24	35	166
Future Volume (vph)	110	1304	781	24	35	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	1			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98		1.00		0.87	0.97
Frt			0.996			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1706	1902	1870	0	1789	1541
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1675	1902	1870	0	1561	1490
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			2			180
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	824.1		142.8	
Travel Time (s)		23.5	59.3		12.9	
Confl. Peds. (#/hr)	32			32	58	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	7%	1%	2%	4%	2%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	120	1417	849	26	38	180
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	1417	875	0	38	180
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	6.0	29.0	29.0		7.0	7.0
Minimum Split (s)	10.5	36.0	36.0		31.0	31.0
Total Split (s)	11.0	78.0	67.0		32.0	32.0
Total Split (%)	10.0%	70.9%	60.9%		29.1%	29.1%
Maximum Green (s)	7.0	71.0	60.0		26.0	26.0
Yellow Time (s)	3.0	4.0	4.0		3.0	3.0
All-Red Time (s)	1.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	7.0	7.0		6.0	6.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)	16.4	88.2	67.8		8.8	8.8
Actuated g/C Ratio	0.15	0.80	0.62		0.08	0.08

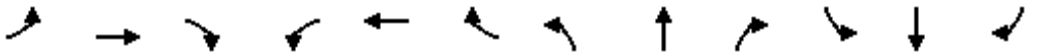


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.47	0.93	0.76		0.27	0.63
Control Delay	48.6	15.0	16.1		51.1	17.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	48.6	15.0	16.1		51.1	17.4
LOS	D	B	B		D	B
Approach Delay		17.6	16.1		23.3	
Approach LOS		B	B		C	
90th %ile Green (s)	17.8	83.5	61.7		13.5	13.5
90th %ile Term Code	Gap	Coord	Coord		Gap	Gap
70th %ile Green (s)	16.4	88.1	67.7		8.9	8.9
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	15.9	89.3	69.4		7.7	7.7
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	15.7	90.0	70.3		7.0	7.0
30th %ile Term Code	Gap	Coord	Coord		Min	Min
10th %ile Green (s)	16.2	90.0	69.8		7.0	7.0
10th %ile Term Code	Gap	Coord	Coord		Min	Min
Queue Length 50th (m)	23.4	280.7	80.1		7.9	0.0
Queue Length 95th (m)	m24.0	m236.1	119.4		17.3	19.5
Internal Link Dist (m)		302.4	800.1		118.8	
Turn Bay Length (m)	55.5					
Base Capacity (vph)	254	1524	1152		422	489
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.47	0.93	0.76		0.09	0.37

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 22.5 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 17.6		Intersection LOS: B	
Intersection Capacity Utilization 88.0%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 2: Bloor St. & Old Mill Trail

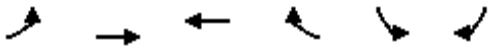


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	848	443	395	580	32	215	0	394	43	61	8
Future Volume (vph)	8	848	443	395	580	32	215	0	394	43	61	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.94	0.93			0.99					0.79		
Frt		0.949			0.992				0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1601	1669	0	1755	1865	0	1825	0	1570	1825	1887	0
Flt Permitted	0.327			0.086			0.950			0.950		
Satd. Flow (perm)	520	1669	0	159	1865	0	1825	0	1570	1438	1887	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					4				119		5	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		824.1			77.1			102.2			164.4	
Travel Time (s)		59.3			5.8			7.7			19.7	
Confl. Peds. (#/hr)	95		98	98		95			27	27		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	2%	1%	4%	1%	3%	0%	0%	4%	0%	0%	0%
Adj. Flow (vph)	9	922	482	429	630	35	234	0	428	47	66	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1404	0	429	665	0	234	0	428	47	75	0
Turn Type	Perm	NA		pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2		1	6		7		1 7		8	
Permitted Phases	2			6						8		
Detector Phase	2	2		1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0		6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0		11.0	37.0		33.0			14.0	14.0	
Total Split (s)	51.0	51.0		12.0	63.0		33.0			14.0	14.0	
Total Split (%)	46.4%	46.4%		10.9%	57.3%		30.0%			12.7%	12.7%	
Maximum Green (s)	43.0	43.0		7.0	55.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0		3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0		2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0	0.0	
Total Lost Time (s)	8.0	8.0		5.0	8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0			7.0		7.0					
Flash Dont Walk (s)	22.0	22.0			22.0		21.0					
Pedestrian Calls (#/hr)	0	0			0		0					
Act Effct Green (s)	43.0	43.0		60.8	57.8		28.0		38.8	7.0	7.0	
Actuated g/C Ratio	0.39	0.39		0.55	0.53		0.25		0.35	0.06	0.06	
v/c Ratio	0.04	2.15		1.87	0.68		0.50		0.68	0.52	0.60	

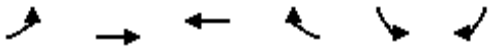
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	18.2	543.8		428.9	25.2		39.6		21.5	70.2	67.6	
Queue Delay	0.0	0.0		0.0	7.0		0.0		0.0	0.0	0.0	
Total Delay	18.2	543.8		428.9	32.2		39.6		21.5	70.2	67.6	
LOS	B	F		F	C		D		C	E	E	
Approach Delay		540.5			187.7			27.9			68.6	
Approach LOS		F			F			C			E	
90th %ile Green (s)	43.0	43.0		7.0	55.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
70th %ile Green (s)	43.0	43.0		7.0	55.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
50th %ile Green (s)	43.0	43.0		7.0	55.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
30th %ile Green (s)	43.0	43.0		7.0	55.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
10th %ile Green (s)	43.0	43.0		21.0	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord		Max	Coord		Max			Skip	Skip	
Queue Length 50th (m)	1.3	~493.8		~135.7	107.6		43.1		42.8	10.0	14.9	
Queue Length 95th (m)	m1.3	m#544.0		#196.5	150.1		67.1		74.7	#24.8	#33.8	
Internal Link Dist (m)		800.1			53.1			78.2			140.4	
Turn Bay Length (m)	41.8			52.1						39.6		
Base Capacity (vph)	203	652		230	981		464		630	91	124	
Starvation Cap Reductn	0	0		0	267		0		0	0	0	
Spillback Cap Reductn	0	0		0	0		0		0	0	0	
Storage Cap Reductn	0	0		0	0		0		0	0	0	
Reduced v/c Ratio	0.04	2.15		1.87	0.93		0.50		0.68	0.52	0.60	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.15			
Intersection Signal Delay: 302.6		Intersection LOS: F	
Intersection Capacity Utilization 128.3%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.



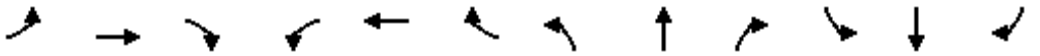
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	395	798	610	170	177	525
Future Volume (vph)	395	798	610	170	177	525
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor	0.91			0.60	0.72	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1755	1865	3579	1328	1706	1541
Flt Permitted	0.235				0.950	
Satd. Flow (perm)	394	1865	3579	793	1229	1541
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				95		476
Link Speed (k/h)		50	50		40	
Link Distance (m)		61.8	334.6		180.8	
Travel Time (s)		4.4	24.1		16.3	
Confl. Peds. (#/hr)	142			142	132	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	2%	23%	7%	6%
Adj. Flow (vph)	429	867	663	185	192	571
Shared Lane Traffic (%)						
Lane Group Flow (vph)	429	867	663	185	192	571
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	38.0	79.0	41.0	41.0	31.0	38.0
Total Split (%)	34.5%	71.8%	37.3%	37.3%	28.2%	34.5%
Maximum Green (s)	34.0	73.0	35.0	35.0	26.0	34.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	35.0	35.0	26.0	34.0
Actuated g/C Ratio	0.68	0.66	0.32	0.32	0.24	0.31
v/c Ratio	0.62	0.70	0.58	0.58	0.48	0.71



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	15.8	15.5	27.2	16.7	40.8	11.6
Queue Delay	0.3	16.0	0.0	0.0	0.0	0.9
Total Delay	16.1	31.5	27.2	16.7	40.8	12.5
LOS	B	C	C	B	D	B
Approach Delay		26.4	24.9		19.6	
Approach LOS		C	C		B	
90th %ile Green (s)	34.0	73.0	35.0	35.0	26.0	34.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	34.0	73.0	35.0	35.0	26.0	34.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	34.0	73.0	35.0	35.0	26.0	34.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	34.0	73.0	35.0	35.0	26.0	34.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	34.0	73.0	35.0	35.0	26.0	34.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	38.9	106.3	58.1	10.3	35.7	15.0
Queue Length 95th (m)	72.0	150.8	71.8	34.3	57.6	55.1
Internal Link Dist (m)		37.8	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	689	1237	1138	317	403	805
Starvation Cap Reductn	36	371	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	71
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	1.00	0.58	0.58	0.48	0.78

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 72.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Bloor St. & Jane St.

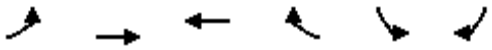


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	807	117	69	581	13	118	65	79	17	125	15
Future Volume (vph)	16	807	117	69	581	13	118	65	79	17	125	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.92	0.96			0.99		0.93	0.90		0.92	0.98	
Frt		0.981			0.997			0.918			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1722	1607	0	1807	1671	0	1825	1576	0	1825	1860	0
Flt Permitted	0.330			0.125			0.616			0.606		
Satd. Flow (perm)	551	1607	0	238	1671	0	1103	1576	0	1073	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			2			52			5	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	112		81	81		112	68		48	48		68
Confl. Bikes (#/hr)	112		81	81		112	68		48	48		68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	2%	0%	1%	2%	16%	0%	1%	0%	0%	0%	0%
Parking (#/hr)		0			0							
Adj. Flow (vph)	17	877	127	75	632	14	128	71	86	18	136	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1004	0	75	646	0	128	157	0	18	152	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	78.0	78.0		78.0	78.0		32.0	32.0		32.0	32.0	
Total Split (%)	70.9%	70.9%		70.9%	70.9%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	

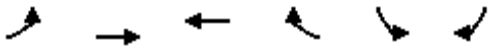
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.24	0.24		0.24	0.24	
v/c Ratio	0.05	0.95		0.48	0.59		0.49	0.38		0.07	0.34	
Control Delay	6.2	27.4		13.3	6.5		43.9	26.3		33.7	36.3	
Queue Delay	0.0	9.1		0.0	0.4		0.0	0.0		0.0	0.0	
Total Delay	6.2	36.6		13.3	6.9		43.9	26.4		33.7	36.3	
LOS	A	D		B	A		D	C		C	D	
Approach Delay		36.1			7.6			34.2			36.1	
Approach LOS		D			A			C			D	
90th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Queue Length 50th (m)	0.8	83.4		2.5	22.2		23.9	18.6		3.0	26.3	
Queue Length 95th (m)	m1.4	#284.9		m4.3	29.2		43.0	37.5		9.0	44.6	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)	25.3			28.3			15.5			15.2		
Base Capacity (vph)	360	1056		155	1094		260	412		253	443	
Starvation Cap Reductn	0	0		0	127		0	0		0	0	
Spillback Cap Reductn	0	56		0	0		0	1		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.05	1.00		0.48	0.67		0.49	0.38		0.07	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 115.7%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Windermere Ave & Bloor St.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	1022	679	20	23	37
Future Volume (vph)	16	1022	679	20	23	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98		0.93	
Frt			0.996		0.917	
Flt Protected		0.999			0.981	
Satd. Flow (prot)	0	1694	1676	0	1616	0
Flt Permitted		0.985			0.981	
Satd. Flow (perm)	0	1670	1676	0	1560	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			3		40	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	119.5		151.3	
Travel Time (s)		8.6	8.6		13.6	
Confl. Peds. (#/hr)	163			163	36	9
Confl. Bikes (#/hr)	163			163	36	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	5%	0%	5%
Parking (#/hr)		0	0	0		
Adj. Flow (vph)	17	1111	738	22	25	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1128	760	0	65	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	83.0	83.0	83.0		27.0	
Total Split (%)	75.5%	75.5%	75.5%		24.5%	
Maximum Green (s)	77.0	77.0	77.0		22.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		77.0	77.0		22.0	
Actuated g/C Ratio		0.70	0.70		0.20	
v/c Ratio		0.96	0.65		0.18	
Control Delay		21.2	12.2		19.1	

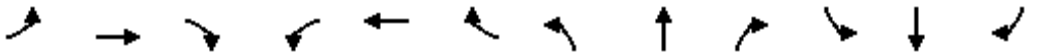


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		6.8	0.6		0.0	
Total Delay		28.0	12.9		19.1	
LOS		C	B		B	
Approach Delay		28.0	12.9		19.1	
Approach LOS		C	B		B	
90th %ile Green (s)	77.0	77.0	77.0		22.0	
90th %ile Term Code	Coord	Coord	Coord		Max	
70th %ile Green (s)	77.0	77.0	77.0		22.0	
70th %ile Term Code	Coord	Coord	Coord		Max	
50th %ile Green (s)	77.0	77.0	77.0		22.0	
50th %ile Term Code	Coord	Coord	Coord		Max	
30th %ile Green (s)	77.0	77.0	77.0		22.0	
30th %ile Term Code	Coord	Coord	Coord		Max	
10th %ile Green (s)	77.0	77.0	77.0		22.0	
10th %ile Term Code	Coord	Coord	Coord		Max	
Queue Length 50th (m)		38.2	79.0		4.4	
Queue Length 95th (m)		m#278.2	115.1		15.9	
Internal Link Dist (m)		95.3	95.5		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		1169	1174		355	
Starvation Cap Reductn		43	146		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		1.00	0.74		0.18	

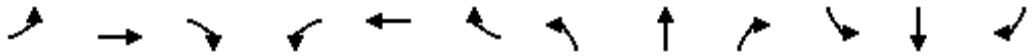
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 21.8		Intersection LOS: C	
Intersection Capacity Utilization 94.1%		ICU Level of Service F	
Analysis Period (min) 15			

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

Splits and Phases: 6: Bloor St. & Durie St. N



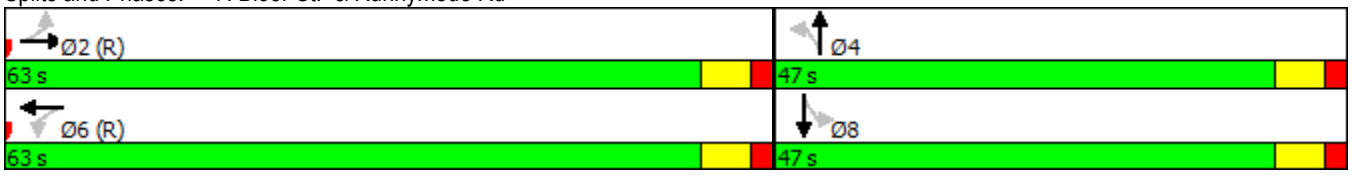
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	697	45	46	472	62	66	98	70	177	142	133
Future Volume (vph)	77	697	45	46	472	62	66	98	70	177	142	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.85	0.98			0.92		0.91	0.69		0.57	0.89	
Frt		0.991			0.983			0.938			0.927	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1828	0	1352	1430	0	1825	1189	0	1789	1453	0
Flt Permitted	0.326			0.170			0.436			0.599		
Satd. Flow (perm)	533	1828	0	242	1430	0	764	1189	0	647	1453	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			9			37			38	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		114.3			188.8			215.2			259.0	
Travel Time (s)		8.2			13.6			25.8			23.3	
Confl. Peds. (#/hr)	388		113	113		388	72		387	387		72
Confl. Bikes (#/hr)	388		113	113		388	72		387	387		72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	35%	5%	40%	0%	8%	0%	2%	10%	7%
Parking (#/hr)					0	0						
Adj. Flow (vph)	84	758	49	50	513	67	72	107	76	192	154	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	807	0	50	580	0	72	183	0	192	299	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	63.0	63.0		63.0	63.0		47.0	47.0		47.0	47.0	
Total Split (%)	57.3%	57.3%		57.3%	57.3%		42.7%	42.7%		42.7%	42.7%	
Maximum Green (s)	57.0	57.0		57.0	57.0		41.0	41.0		41.0	41.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	62.2	62.2		62.2	62.2		35.8	35.8		35.8	35.8	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.57	0.57		0.57	0.57		0.33	0.33		0.33	0.33	
v/c Ratio	0.28	0.78		0.37	0.71		0.29	0.45		0.91	0.60	
Control Delay	17.5	26.7		20.5	18.8		29.1	25.4		79.0	31.4	
Queue Delay	0.0	0.5		0.0	0.2		0.0	0.0		0.0	0.0	
Total Delay	17.5	27.2		20.5	19.0		29.1	25.4		79.0	31.4	
LOS	B	C		C	B		C	C		E	C	
Approach Delay		26.3			19.1			26.5			50.0	
Approach LOS		C			B			C			D	
90th %ile Green (s)	57.0	57.0		57.0	57.0		41.0	41.0		41.0	41.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	57.0	57.0		57.0	57.0		41.0	41.0		41.0	41.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	58.6	58.6		58.6	58.6		39.4	39.4		39.4	39.4	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	65.6	65.6		65.6	65.6		32.4	32.4		32.4	32.4	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	9.6	137.8		4.2	47.7		10.8	23.0		37.2	44.2	
Queue Length 95th (m)	21.3	#211.8		m7.3	119.9		22.2	41.5		#75.9	69.8	
Internal Link Dist (m)		90.3			164.8			191.2			235.0	
Turn Bay Length (m)	24.4			18.9			9.1			11.0		
Base Capacity (vph)	301	1036		136	813		284	466		241	565	
Starvation Cap Reductn	0	43		0	21		0	0		0	0	
Spillback Cap Reductn	0	28		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.28	0.81		0.37	0.73		0.25	0.39		0.80	0.53	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 29.4		Intersection LOS: C	
Intersection Capacity Utilization 119.8%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 7: Bloor St. & Runnymede Rd

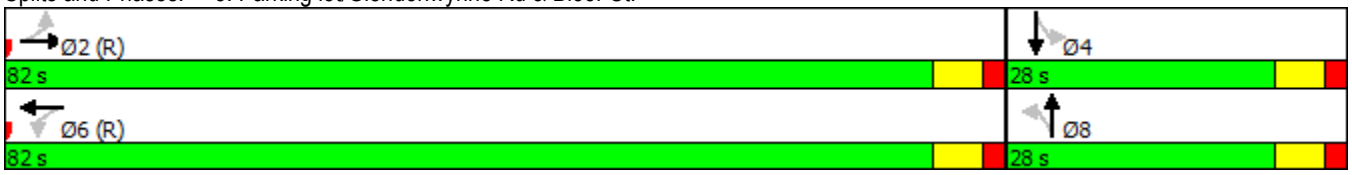


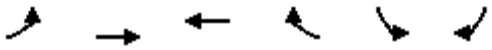
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	866	4	6	745	38	0	2	4	69	5	92
Future Volume (vph)	25	866	4	6	745	38	0	2	4	69	5	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.85			0.87	
Frt		0.999			0.994			0.910			0.925	
Flt Protected		0.999									0.980	
Satd. Flow (prot)	0	1842	0	0	1606	0	0	1491	0	0	1594	0
Flt Permitted		0.964			0.993						0.862	
Satd. Flow (perm)	0	1776	0	0	1594	0	0	1491	0	0	1329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5			4			51	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			179.8			31.3			313.4	
Travel Time (s)		13.6			12.9			2.3			28.2	
Confl. Peds. (#/hr)	69		46	46		69	31		48	48		31
Confl. Bikes (#/hr)	69		46	46		69	31		48	48		31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	27	941	4	7	810	41	0	2	4	75	5	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	972	0	0	858	0	0	6	0	0	180	0
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	82.0	82.0		82.0	82.0		28.0	28.0		28.0	28.0	
Total Split (%)	74.5%	74.5%		74.5%	74.5%		25.5%	25.5%		25.5%	25.5%	
Maximum Green (s)	76.0	76.0		76.0	76.0		22.0	22.0		22.0	22.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		76.8			76.8			21.2			21.2	
Actuated g/C Ratio		0.70			0.70			0.19			0.19	
v/c Ratio		0.78			0.77			0.02			0.61	
Control Delay		12.2			16.9			26.0			38.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		1.6			0.1			0.0			0.0	
Total Delay		13.8			17.0			26.0			38.3	
LOS		B			B			C			D	
Approach Delay		13.8			17.0			26.0			38.3	
Approach LOS		B			B			C			D	
90th %ile Green (s)	76.0	76.0		76.0	76.0		22.0	22.0		22.0	22.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		57.4			105.4			0.4			25.4	
Queue Length 95th (m)		68.2			167.2			3.9			48.2	
Internal Link Dist (m)		164.8			155.8			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		1240			1114			301			306	
Starvation Cap Reductn		125			0			0			0	
Spillback Cap Reductn		0			14			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.87			0.78			0.02			0.59	

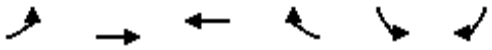
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 90.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





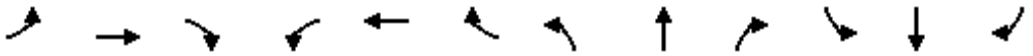
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	42	979	759	55	65	61
Future Volume (vph)	42	979	759	55	65	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.85	
Frt			0.991		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1825	1883	1620	0	1531	0
Flt Permitted	0.223				0.975	
Satd. Flow (perm)	428	1883	1620	0	1448	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8		38	
Link Speed (k/h)		50	50		40	
Link Distance (m)		158.0	400.4		167.2	
Travel Time (s)		11.4	28.8		15.0	
Confl. Peds. (#/hr)	71			71	40	44
Confl. Bikes (#/hr)	71			71	40	44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	2%	3%	1%	5%
Parking (#/hr)			0			
Adj. Flow (vph)	46	1064	825	60	71	66
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	1064	885	0	137	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	83.0	83.0	83.0		27.0	
Total Split (%)	75.5%	75.5%	75.5%		24.5%	
Maximum Green (s)	77.0	77.0	77.0		21.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	77.0	77.0	77.0		21.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio	0.70	0.70	0.70		0.19	
v/c Ratio	0.15	0.81	0.78		0.42	
Control Delay	7.0	17.6	5.5		32.6	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	7.0	17.6	5.5		32.6	
LOS	A	B	A		C	
Approach Delay		17.2	5.5		32.6	
Approach LOS		B	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Max	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Max	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Max	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Max	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Max	
Queue Length 50th (m)	2.9	139.6	22.2		18.6	
Queue Length 95th (m)	7.4	204.1	m22.2		37.2	
Internal Link Dist (m)		134.0	376.4		143.2	
Turn Bay Length (m)	11.0					
Base Capacity (vph)	299	1318	1136		323	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.15	0.81	0.78		0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 13.3		Intersection LOS: B	
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bloor St. & Clendenan Ave

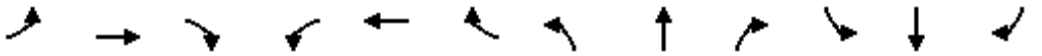


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Future Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.92			0.89	
Frt		0.994			0.989			0.955			0.963	
Flt Protected	0.950			0.950				0.982			0.969	
Satd. Flow (prot)	1825	1856	0	1825	1630	0	0	1694	0	0	1682	0
Flt Permitted	0.062			0.062				0.797			0.717	
Satd. Flow (perm)	119	1856	0	119	1630	0	0	1352	0	0	1179	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7			23			18	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			218.9			101.1			229.4	
Travel Time (s)		28.8			15.8			18.2			20.6	
Confl. Peds. (#/hr)	42		79	79		42	62		48	48		62
Confl. Bikes (#/hr)	42		79	79		42	62		48	48		62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	4%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0	0						
Adj. Flow (vph)	40	1348	53	46	975	80	52	43	47	297	38	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	1401	0	46	1055	0	0	142	0	0	461	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	71.0	71.0		71.0	71.0		39.0	39.0		39.0	39.0	
Total Split (%)	64.5%	64.5%		64.5%	64.5%		35.5%	35.5%		35.5%	35.5%	
Maximum Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	65.0	65.0		65.0	65.0			33.0			33.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.59	0.59		0.59	0.59			0.30			0.30	
v/c Ratio	0.57	1.28		0.66	1.09			0.34			1.26	
Control Delay	53.8	160.7		62.7	81.2			27.6			170.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	53.8	160.7		62.7	81.2			27.6			170.2	
LOS	D	F		E	F			C			F	
Approach Delay		157.7			80.4			27.6			170.2	
Approach LOS		F			F			C			F	
90th %ile Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	65.0	65.0		65.0	65.0		33.0	33.0		33.0	33.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Queue Length 50th (m)	7.2	~377.9		6.2	~256.2			19.6			~122.3	
Queue Length 95th (m)	m12.3	#461.0		#28.6	#333.7			36.9			#184.3	
Internal Link Dist (m)		376.4			194.9			77.1			205.4	
Turn Bay Length (m)	25.0			26.2								
Base Capacity (vph)	70	1097		70	966			421			366	
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	0.57	1.28		0.66	1.09			0.34			1.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.28			
Intersection Signal Delay: 126.6		Intersection LOS: F	
Intersection Capacity Utilization 110.4%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	694	420	246	465	59	161	370	142	178	689	60
Future Volume (vph)	97	694	420	246	465	59	161	370	142	178	689	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.93		0.90		0.98		0.99	0.90		0.92	0.99	
Frt			0.850		0.989			0.958			0.988	
Flt Protected	0.950				0.984		0.950			0.950		
Satd. Flow (prot)	1738	1847	1585	0	3358	0	1772	2958	0	1690	3361	0
Flt Permitted	0.272				0.505		0.141			0.299		
Satd. Flow (perm)	461	1847	1425	0	1723	0	260	2958	0	488	3361	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			129					48			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		220.8			249.0			249.1			226.0	
Travel Time (s)		15.9			17.9			17.9			16.3	
Confl. Peds. (#/hr)	193		55	55		193	30		107	107		30
Confl. Bikes (#/hr)	193		55	55		193	30		107	107		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	4%	3%	2%	4%	5%	3%	7%	5%	8%	6%	9%
Adj. Flow (vph)	105	754	457	267	505	64	175	402	154	193	749	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	754	457	0	836	0	175	556	0	193	814	0
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	2	1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	27.0	6.0	27.0		6.0	27.0		6.0	27.0	
Minimum Split (s)	33.0	33.0	33.0	10.0	45.0		10.0	33.0		10.0	33.0	
Total Split (s)	57.0	57.0	57.0	10.0	67.0		10.0	33.0		10.0	33.0	
Total Split (%)	51.8%	51.8%	51.8%	9.1%	60.9%		9.1%	30.0%		9.1%	30.0%	
Maximum Green (s)	51.0	51.0	51.0	6.0	61.0		6.0	27.0		6.0	27.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)	20.0	20.0	20.0		20.0			20.0			20.0	
Pedestrian Calls (#/hr)	0	0	0		0			0			0	
Act Effct Green (s)	57.2	57.2	57.2		57.2		39.6	28.3		37.8	27.4	
Actuated g/C Ratio	0.52	0.52	0.52		0.52		0.36	0.26		0.34	0.25	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.44	0.78	0.57		1.67dl		0.78	0.70		0.74	0.97	
Control Delay	22.1	27.8	14.9		36.9		55.7	39.5		48.0	65.1	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	22.1	27.8	14.9		36.9		55.7	39.5		48.0	65.1	
LOS	C	C	B		D		E	D		D	E	
Approach Delay		22.8			36.9			43.4			61.8	
Approach LOS		C			D			D			E	
90th %ile Green (s)	61.0	61.0	61.0	0.0	61.0		6.0	27.0		6.0	27.0	
90th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Max		Max	Max	
70th %ile Green (s)	61.0	61.0	61.0	0.0	61.0		6.0	27.0		6.0	27.0	
70th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Max		Max	Max	
50th %ile Green (s)	61.0	61.0	61.0	0.0	61.0		6.0	27.0		6.0	27.0	
50th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Max		Max	Max	
30th %ile Green (s)	54.5	54.5	54.5	0.0	54.5		12.5	27.0		12.5	27.0	
30th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Max		Max	Max	
10th %ile Green (s)	48.6	48.6	48.6	0.0	48.6		16.6	33.5		11.9	28.8	
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Gap	Hold		Gap	Max	
Queue Length 50th (m)	12.3	115.8	41.5		46.9		~29.0	53.1		29.9	90.9	
Queue Length 95th (m)	27.1	163.2	69.2		#119.1		#68.4	72.6		#66.8	#131.5	
Internal Link Dist (m)		196.8			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9				14.9			24.4		
Base Capacity (vph)	241	969	808		955		223	796		260	842	
Starvation Cap Reductn	0	0	0		0		0	0		0	0	
Spillback Cap Reductn	0	0	0		0		0	0		0	0	
Storage Cap Reductn	0	0	0		0		0	0		0	0	
Reduced v/c Ratio	0.44	0.78	0.57		0.88		0.78	0.70		0.74	0.97	

Intersection Summary

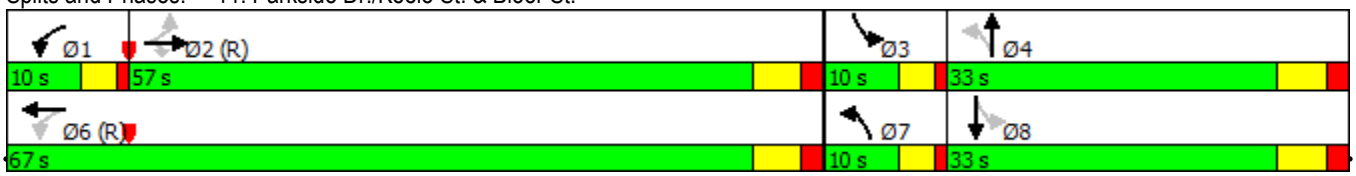
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 39.8 Intersection LOS: D
Intersection Capacity Utilization 109.7% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.

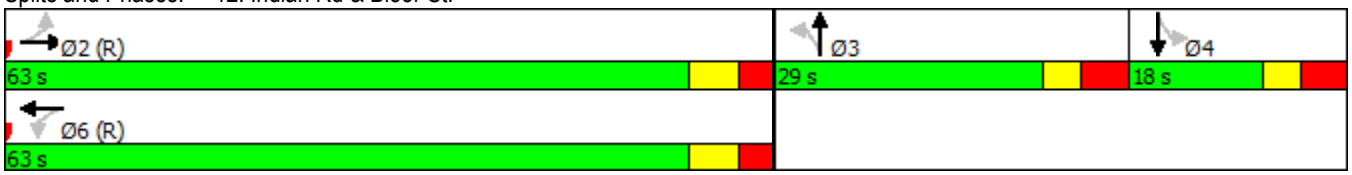


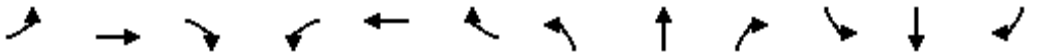
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Future Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.97			0.92	
Frt					0.998			0.980			0.958	
Flt Protected		0.999						0.966			0.967	
Satd. Flow (prot)	0	1652	0	0	1677	0	0	1613	0	0	1605	0
Flt Permitted		0.980						0.761			0.753	
Satd. Flow (perm)	0	1619	0	0	1677	0	0	1261	0	0	1188	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			7			109	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	45		11	11		45	16		31	31		16
Confl. Bikes (#/hr)	45		11	11		45	16		31	31		16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	12%	16%	100%	0%	14%	16%	9%	0%	25%	9%	0%	5%
Adj. Flow (vph)	27	1078	3	0	509	8	47	9	10	47	0	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1108	0	0	517	0	0	66	0	0	68	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	63.0	63.0		63.0	63.0		29.0	29.0		18.0	18.0	
Total Split (%)	57.3%	57.3%		57.3%	57.3%		26.4%	26.4%		16.4%	16.4%	
Maximum Green (s)	56.0	56.0		56.0	56.0		22.0	22.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		78.1			78.1			10.8			7.1	
Actuated g/C Ratio		0.71			0.71			0.10			0.06	
v/c Ratio		0.96			0.43			0.51			0.38	
Control Delay		33.1			11.0			54.9			8.9	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		33.1			11.0			54.9			8.9	
LOS		C			B			D			A	
Approach Delay		33.1			11.0			54.9			8.9	
Approach LOS		C			B			D			A	
90th %ile Green (s)	66.1	66.1		66.1	66.1		15.6	15.6		7.3	7.3	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	69.4	69.4		69.4	69.4		12.6	12.6		7.0	7.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
50th %ile Green (s)	71.5	71.5		71.5	71.5		10.5	10.5		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	73.6	73.6		73.6	73.6		8.4	8.4		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
10th %ile Green (s)	103.0	103.0		103.0	103.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		~264.8			51.2			12.2			0.0	
Queue Length 95th (m)		#361.5			86.7			25.0			4.6	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		1149			1191			257			216	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.96			0.43			0.26			0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 30 (27%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 98.1%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 12: Indian Rd & Bloor St.



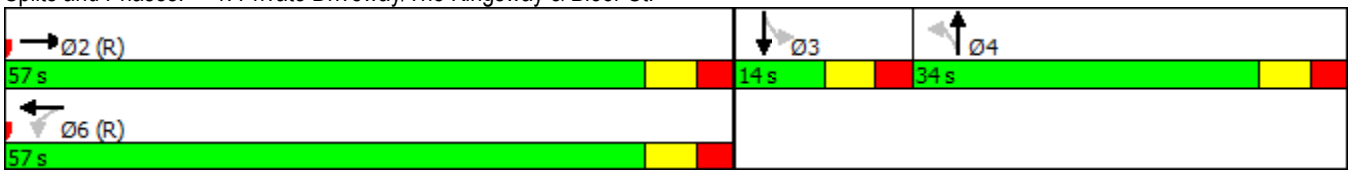


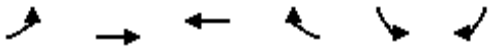
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	2	0	969	299	8	0	0	159	2	104
Future Volume (vph)	0	1012	2	0	969	299	8	0	0	159	2	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (m)	7.6			20.0			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00			0.96			1.00		1.00	0.98	
Frt					0.965						0.876	
Flt Protected								0.950		0.950	0.992	
Satd. Flow (prot)	0	1902	0	1921	1745	0	0	1825	0	1734	1553	0
Flt Permitted												
Satd. Flow (perm)	0	1902	0	1921	1745	0	0	1916	0	1819	1565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						113	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			65.6			177.9	
Travel Time (s)		15.3			23.5			11.8			21.3	
Confl. Peds. (#/hr)	68		15	15		68	3		2	2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1100	2	0	1053	325	9	0	0	173	2	113
Shared Lane Traffic (%)										13%		
Lane Group Flow (vph)	0	1102	0	0	1378	0	0	9	0	151	137	0
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6			4	4		3		
Detector Phase		2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0		7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0		34.0	34.0		14.0	14.0	
Total Split (s)		57.0		57.0	57.0		34.0	34.0		14.0	14.0	
Total Split (%)		54.3%		54.3%	54.3%		32.4%	32.4%		13.3%	13.3%	
Maximum Green (s)		50.0		50.0	50.0		27.0	27.0		7.0	7.0	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0		20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)		81.0			81.0			7.2		7.0	7.0	
Actuated g/C Ratio		0.77			0.77			0.07		0.07	0.07	
v/c Ratio		0.75			1.02			0.07		1.25	0.66	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		12.4			35.8			46.8		204.5	29.0	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		12.4			35.8			46.8		204.5	29.0	
LOS		B			D			D		F	C	
Approach Delay		12.4			35.8			46.8			121.0	
Approach LOS		B			D			D			F	
90th %ile Green (s)		69.0		69.0	69.0		8.0	8.0		7.0	7.0	
90th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
70th %ile Green (s)		84.0		84.0	84.0		0.0	0.0		7.0	7.0	
70th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
50th %ile Green (s)		84.0		84.0	84.0		0.0	0.0		7.0	7.0	
50th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
30th %ile Green (s)		84.0		84.0	84.0		0.0	0.0		7.0	7.0	
30th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
10th %ile Green (s)		84.0		84.0	84.0		0.0	0.0		7.0	7.0	
10th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
Queue Length 50th (m)		83.4			225.8			1.8		~40.6	5.0	
Queue Length 95th (m)		#279.5			m#284.0			6.7		#81.4	#29.4	
Internal Link Dist (m)		188.8			302.4			41.6			153.9	
Turn Bay Length (m)												
Base Capacity (vph)		1467			1351			492		121	209	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.75			1.02			0.02		1.25	0.66	

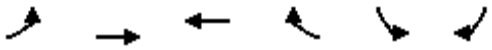
Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.25			
Intersection Signal Delay: 35.4		Intersection LOS: D	
Intersection Capacity Utilization 89.7%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	951	1279	44	30	120
Future Volume (vph)	113	951	1279	44	30	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	1			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			1.00		0.92	0.95
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1738	1921	1889	0	1825	1541
Flt Permitted	0.053				0.950	
Satd. Flow (perm)	97	1921	1889	0	1683	1468
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			3			130
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	815.2		142.8	
Travel Time (s)		23.5	58.7		12.9	
Confl. Peds. (#/hr)	26			26	37	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	0%	1%	0%	0%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	123	1034	1390	48	33	130
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	1034	1438	0	33	130
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2					4
Detector Phase	5	2	6		4	4
Switch Phase						
Minimum Initial (s)	6.0	29.0	29.0		7.0	7.0
Minimum Split (s)	10.5	36.0	36.0		31.0	31.0
Total Split (s)	10.5	74.0	63.5		31.0	31.0
Total Split (%)	10.0%	70.5%	60.5%		29.5%	29.5%
Maximum Green (s)	6.5	67.0	56.5		25.0	25.0
Yellow Time (s)	3.0	4.0	4.0		3.0	3.0
All-Red Time (s)	1.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	7.0	7.0		6.0	6.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)	86.7	83.7	71.2		8.3	8.3
Actuated g/C Ratio	0.83	0.80	0.68		0.08	0.08



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.58	0.68	1.12		0.23	0.55
Control Delay	26.8	7.1	85.5		48.3	17.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	26.8	7.1	85.5		48.3	17.2
LOS	C	A	F		D	B
Approach Delay		9.2	85.5		23.5	
Approach LOS		A	F		C	
90th %ile Green (s)	12.4	79.9	63.5		12.1	12.1
90th %ile Term Code	Gap	Coord	Coord		Gap	Gap
70th %ile Green (s)	9.5	83.7	70.2		8.3	8.3
70th %ile Term Code	Gap	Coord	Coord		Gap	Gap
50th %ile Green (s)	7.3	84.7	73.4		7.3	7.3
50th %ile Term Code	Gap	Coord	Coord		Gap	Gap
30th %ile Green (s)	6.8	85.0	74.2		7.0	7.0
30th %ile Term Code	Gap	Coord	Coord		Min	Min
10th %ile Green (s)	6.3	85.0	74.7		7.0	7.0
10th %ile Term Code	Gap	Coord	Coord		Min	Min
Queue Length 50th (m)	6.3	125.3	~332.4		6.5	0.0
Queue Length 95th (m)	m17.0	m33.5	#452.2		15.2	16.8
Internal Link Dist (m)		302.4	791.2		118.8	
Turn Bay Length (m)	55.5					
Base Capacity (vph)	212	1530	1281		434	448
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.58	0.68	1.12		0.08	0.29

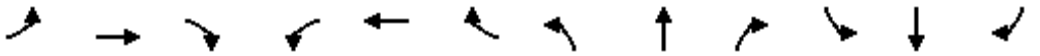
Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 22.5 (21%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 49.8		Intersection LOS: D	
Intersection Capacity Utilization 101.6%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

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

Splits and Phases: 2: Bloor St. & Old Mill Trail

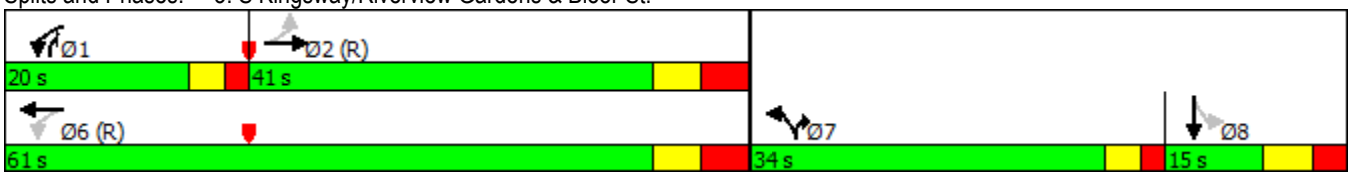


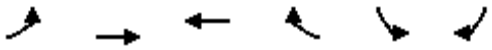
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	786	205	354	802	24	398	0	474	25	19	10
Future Volume (vph)	5	786	205	354	802	24	398	0	474	25	19	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97	0.96			0.99					0.77		
Frt		0.969			0.996				0.850		0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1788	0	1825	1882	0	1825	0	1633	1755	1821	0
Flt Permitted	0.127			0.109			0.950			0.950		
Satd. Flow (perm)	236	1788	0	209	1882	0	1825	0	1633	1345	1821	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					2				140		11	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		815.2			70.9			102.2			164.4	
Travel Time (s)		58.7			5.3			7.7			19.7	
Confl. Peds. (#/hr)	121		92	92		121			34	34		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	5	854	223	385	872	26	433	0	515	27	21	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1077	0	385	898	0	433	0	515	27	32	0
Turn Type	Perm	NA		pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2		1	6		7		1 7		8	
Permitted Phases	2			6						8		
Detector Phase	2	2		1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0		6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0		11.0	37.0		33.0			14.0	14.0	
Total Split (s)	41.0	41.0		20.0	61.0		34.0			15.0	15.0	
Total Split (%)	37.3%	37.3%		18.2%	55.5%		30.9%			13.6%	13.6%	
Maximum Green (s)	33.0	33.0		15.0	53.0		29.0			8.0	8.0	
Yellow Time (s)	4.0	4.0		3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0		2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0	0.0	
Total Lost Time (s)	8.0	8.0		5.0	8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0			7.0		7.0					
Flash Dont Walk (s)	22.0	22.0			22.0		21.0					
Pedestrian Calls (#/hr)	0	0			0		0					
Act Effct Green (s)	33.0	33.0		59.5	56.5		28.8		48.3	7.5	7.5	
Actuated g/C Ratio	0.30	0.30		0.54	0.51		0.26		0.44	0.07	0.07	
v/c Ratio	0.07	2.01		1.00	0.93		0.91		0.65	0.30	0.24	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	31.0	485.3		78.2	43.7		63.6		15.4	57.2	40.1	
Queue Delay	0.0	1.7		0.0	45.7		0.0		0.0	0.0	0.0	
Total Delay	31.0	487.0		78.2	89.4		63.6		15.5	57.2	40.1	
LOS	C	F		E	F		E		B	E	D	
Approach Delay		484.9			86.0			37.5			47.9	
Approach LOS		F			F			D			D	
90th %ile Green (s)	33.0	33.0		15.0	53.0		29.0			8.0	8.0	
90th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
70th %ile Green (s)	33.0	33.0		15.0	53.0		29.0			8.0	8.0	
70th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
50th %ile Green (s)	33.0	33.0		15.4	53.4		29.0			7.6	7.6	
50th %ile Term Code	Coord	Coord		Max	Coord		Max			Gap	Gap	
30th %ile Green (s)	33.0	33.0		16.0	54.0		29.0			7.0	7.0	
30th %ile Term Code	Coord	Coord		Max	Coord		Max			Min	Min	
10th %ile Green (s)	33.0	33.0		31.0	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord		Max	Coord		Min			Skip	Skip	
Queue Length 50th (m)	0.8	~362.2		~80.1	183.9		89.9		43.7	5.6	4.3	
Queue Length 95th (m)	3.8	#438.3		m#139.7	#273.4		#145.7		69.9	14.5	13.9	
Internal Link Dist (m)		791.2			46.9			78.2			140.4	
Turn Bay Length (m)	41.8			52.1						39.6		
Base Capacity (vph)	70	536		384	967		481		784	97	142	
Starvation Cap Reductn	0	0		0	204		0		0	0	0	
Spillback Cap Reductn	0	95		0	0		0		7	0	0	
Storage Cap Reductn	0	0		0	0		0		0	0	0	
Reduced v/c Ratio	0.07	2.44		1.00	1.18		0.90		0.66	0.28	0.23	

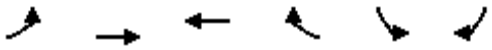
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.01			
Intersection Signal Delay: 199.7		Intersection LOS: F	
Intersection Capacity Utilization 117.5%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.





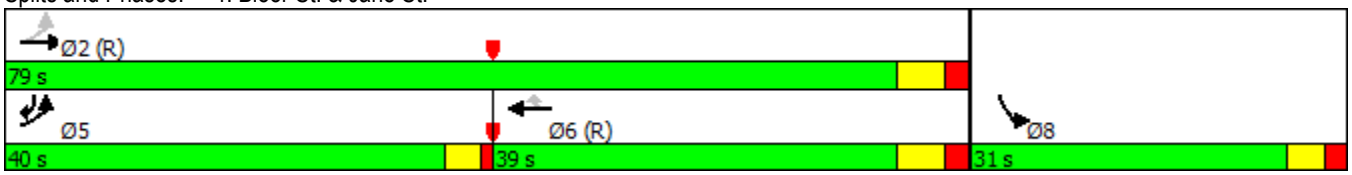
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	502	632	822	155	179	486
Future Volume (vph)	502	632	822	155	179	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor				0.57	0.72	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1738	1883	3614	1317	1755	1617
Flt Permitted	0.108				0.950	
Satd. Flow (perm)	198	1883	3614	751	1269	1617
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				62		483
Link Speed (k/h)		50	50		40	
Link Distance (m)		68.0	334.6		180.8	
Travel Time (s)		4.9	24.1		16.3	
Confl. Peds. (#/hr)	152			152	131	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	1%	24%	4%	1%
Adj. Flow (vph)	546	687	893	168	195	528
Shared Lane Traffic (%)						
Lane Group Flow (vph)	546	687	893	168	195	528
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	40.0	79.0	39.0	39.0	31.0	40.0
Total Split (%)	36.4%	71.8%	35.5%	35.5%	28.2%	36.4%
Maximum Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	33.0	33.0	26.0	36.0
Actuated g/C Ratio	0.68	0.66	0.30	0.30	0.24	0.33
v/c Ratio	0.85	0.55	0.82	0.63	0.47	0.62



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	39.6	11.5	35.3	23.6	40.5	7.5
Queue Delay	4.5	3.6	0.5	0.0	0.0	1.0
Total Delay	44.1	15.1	35.8	23.6	40.5	8.4
LOS	D	B	D	C	D	A
Approach Delay		27.9	33.9		17.1	
Approach LOS		C	C		B	
90th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	88.9	67.7	96.3	16.9	36.2	6.7
Queue Length 95th (m)	m#143.6	m93.8	109.3	m34.8	57.9	35.5
Internal Link Dist (m)		44.0	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	639	1249	1084	268	414	854
Starvation Cap Reductn	50	457	0	0	0	0
Spillback Cap Reductn	0	0	30	0	0	131
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.87	0.85	0.63	0.47	0.73

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 4: Bloor St. & Jane St.



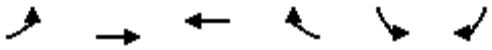
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	823	133	108	734	30	102	117	97	34	129	22
Future Volume (vph)	24	823	133	108	734	30	102	117	97	34	129	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.93			0.97		0.88	0.78		0.81	0.96	
Frt		0.979			0.994			0.932			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1743	0	1825	1853	0	1789	1405	0	1825	1811	0
Flt Permitted	0.223			0.105			0.592			0.462		
Satd. Flow (perm)	428	1743	0	202	1853	0	986	1405	0	716	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			4			35			7	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	428		161	161		428	120		144	144		120
Confl. Bikes (#/hr)	428		161	161		428	120		144	144		120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	895	145	117	798	33	111	127	105	37	140	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	1040	0	117	831	0	111	232	0	37	164	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	78.0	78.0		78.0	78.0		32.0	32.0		32.0	32.0	
Total Split (%)	70.9%	70.9%		70.9%	70.9%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.24	0.24		0.24	0.24	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.09	0.91		0.89	0.68		0.48	0.65		0.22	0.38	
Control Delay	6.4	24.7		74.6	15.5		44.1	41.5		37.9	36.7	
Queue Delay	0.0	0.0		0.0	30.7		0.0	0.0		0.0	0.0	
Total Delay	6.4	24.7		74.6	46.2		44.1	41.5		37.9	36.7	
LOS	A	C		E	D		D	D		D	D	
Approach Delay		24.3			49.7			42.4			36.9	
Approach LOS		C			D			D			D	
90th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Queue Length 50th (m)	1.4	193.6		18.8	101.2		20.6	38.4		6.4	28.4	
Queue Length 95th (m)	m2.9	#286.8		#58.6	143.9		38.5	65.1		15.9	47.9	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)	25.3			28.3			15.5			15.2		
Base Capacity (vph)	280	1146		132	1214		233	358		169	433	
Starvation Cap Reductn	0	0		0	421		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.91		0.89	1.05		0.48	0.65		0.22	0.38	

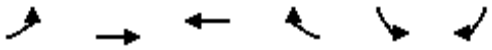
Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 37.1 Intersection LOS: D
Intersection Capacity Utilization 131.6% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Windermere Ave & Bloor St.



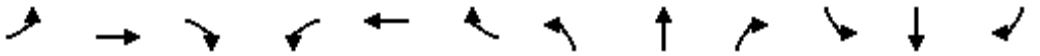
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	673	1056	46	29	90
Future Volume (vph)	33	673	1056	46	29	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.97		0.79	
Frt			0.994		0.898	
Flt Protected		0.998			0.988	
Satd. Flow (prot)	0	1662	1816	0	1431	0
Flt Permitted		0.688			0.988	
Satd. Flow (perm)	0	1146	1816	0	1347	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			7		49	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	117.8		151.3	
Travel Time (s)		8.6	8.5		13.6	
Confl. Peds. (#/hr)	361			361	96	31
Confl. Bikes (#/hr)	361			361	96	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	2%	4%	0%	0%
Parking (#/hr)		0				
Adj. Flow (vph)	36	732	1148	50	32	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	768	1198	0	130	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	95.0	95.0	95.0		15.0	
Total Split (%)	86.4%	86.4%	86.4%		13.6%	
Maximum Green (s)	89.0	89.0	89.0		10.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		58.8	58.8		10.6	
Actuated g/C Ratio		0.73	0.73		0.13	
v/c Ratio		0.92	0.91		0.57	
Control Delay		26.9	19.2		37.6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		0.6	0.1		0.0	
Total Delay		27.5	19.3		37.6	
LOS		C	B		D	
Approach Delay		27.5	19.3		37.6	
Approach LOS		C	B		D	
90th %ile Green (s)	89.0	89.0	89.0		10.0	
90th %ile Term Code	Hold	Hold	Max		Max	
70th %ile Green (s)	72.7	72.7	72.7		10.0	
70th %ile Term Code	Hold	Hold	Gap		Max	
50th %ile Green (s)	57.7	57.7	57.7		10.0	
50th %ile Term Code	Hold	Hold	Gap		Max	
30th %ile Green (s)	45.8	45.8	45.8		10.0	
30th %ile Term Code	Hold	Hold	Gap		Max	
10th %ile Green (s)	34.7	34.7	34.7		10.0	
10th %ile Term Code	Hold	Hold	Gap		Max	
Queue Length 50th (m)		74.0	111.1		11.4	
Queue Length 95th (m)		153.2	176.8		#46.3	
Internal Link Dist (m)		95.3	93.8		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		1091	1729		229	
Starvation Cap Reductn		91	61		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.77	0.72		0.57	

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 81	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 23.5	Intersection LOS: C
Intersection Capacity Utilization 89.8%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 110	
70th %ile Actuated Cycle: 93.7	
50th %ile Actuated Cycle: 78.7	
30th %ile Actuated Cycle: 66.8	
10th %ile Actuated Cycle: 55.7	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 6: Bloor St. & Durie St. N

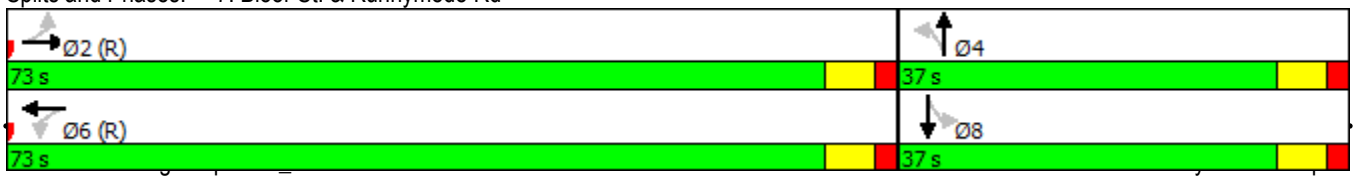


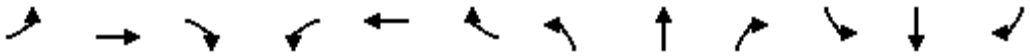
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	574	44	38	696	159	70	232	91	72	98	114
Future Volume (vph)	104	574	44	38	696	159	70	232	91	72	98	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.95		0.88	0.85		0.68	0.78		0.75	0.64	
Frt		0.989			0.972			0.958			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1574	0	1383	1514	0	1825	1410	0	1706	1087	0
Flt Permitted	0.142			0.298			0.492			0.297		
Satd. Flow (perm)	273	1574	0	382	1514	0	640	1410	0	399	1087	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			10			18			14	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		115.7			188.8			215.2			259.0	
Travel Time (s)		8.3			13.6			25.8			23.3	
Confl. Peds. (#/hr)	596		290	290		596	231		354	354		231
Confl. Bikes (#/hr)	596		290	290		596	231		354	354		231
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	32%	3%	12%	0%	3%	0%	7%	3%	6%
Parking (#/hr)		0										
Adj. Flow (vph)	113	624	48	41	757	173	76	252	99	78	107	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	113	672	0	41	930	0	76	351	0	78	231	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	73.0	73.0		73.0	73.0		37.0	37.0		37.0	37.0	
Total Split (%)	66.4%	66.4%		66.4%	66.4%		33.6%	33.6%		33.6%	33.6%	
Maximum Green (s)	67.0	67.0		67.0	67.0		31.0	31.0		31.0	31.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	68.6	68.6		68.6	68.6		29.4	29.4		29.4	29.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.27	0.27		0.27	0.27	
v/c Ratio	0.66	0.68		0.17	0.98		0.44	0.90		0.74	0.77	
Control Delay	37.1	18.4		9.5	34.8		42.4	63.9		75.4	52.7	
Queue Delay	0.0	0.2		0.0	2.1		0.0	0.0		0.0	0.0	
Total Delay	37.1	18.6		9.5	36.9		42.4	63.9		75.4	52.7	
LOS	D	B		A	D		D	E		E	D	
Approach Delay		21.3			35.7			60.1			58.4	
Approach LOS		C			D			E			E	
90th %ile Green (s)	67.0	67.0		67.0	67.0		31.0	31.0		31.0	31.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	67.0	67.0		67.0	67.0		31.0	31.0		31.0	31.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	67.0	67.0		67.0	67.0		31.0	31.0		31.0	31.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Hold	Hold	
30th %ile Green (s)	69.1	69.1		69.1	69.1		28.9	28.9		28.9	28.9	
30th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	15.1	90.8		2.7	~197.5		13.3	68.0		14.9	42.3	
Queue Length 95th (m)	#48.8	134.0		m4.2	#281.6		28.1	#117.9		#39.8	#77.9	
Internal Link Dist (m)		91.7			164.8			191.2			235.0	
Turn Bay Length (m)	24.4			18.9			9.1			11.0		
Base Capacity (vph)	170	984		238	948		180	410		112	316	
Starvation Cap Reductn	0	39		0	10		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.66	0.71		0.17	0.99		0.42	0.86		0.70	0.73	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 38.1		Intersection LOS: D	
Intersection Capacity Utilization 128.2%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 7: Bloor St. & Runnymede Rd





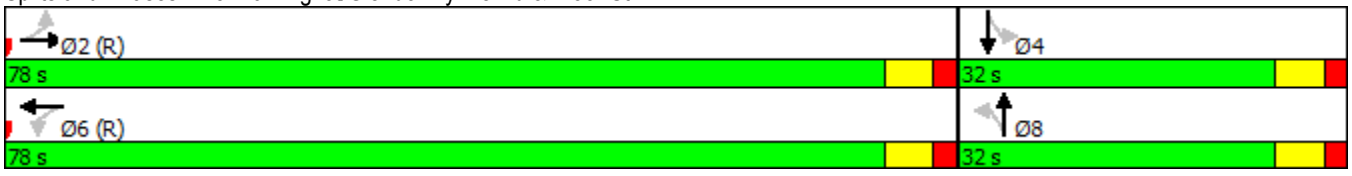
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	547	44	5	725	113	32	14	31	68	4	125
Future Volume (vph)	28	547	44	5	725	113	32	14	31	68	4	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			0.92			0.83			0.64	
Frt		0.990			0.982			0.945			0.914	
Flt Protected		0.998						0.980			0.983	
Satd. Flow (prot)	0	1611	0	0	1688	0	0	1613	0	0	1154	0
Flt Permitted		0.937			0.997			0.777			0.865	
Satd. Flow (perm)	0	1507	0	0	1681	0	0	1166	0	0	973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			15			29			75	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			181.4			31.3			313.4	
Travel Time (s)		13.6			13.1			2.3			28.2	
Confl. Peds. (#/hr)	225		163	163		225	141		54	54		141
Confl. Bikes (#/hr)	225		163	163		225	141		54	54		141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	30	595	48	5	788	123	35	15	34	74	4	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	673	0	0	916	0	0	84	0	0	214	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	78.0	78.0		78.0	78.0		32.0	32.0		32.0	32.0	
Total Split (%)	70.9%	70.9%		70.9%	70.9%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		74.6			74.6			23.4			23.4	
Actuated g/C Ratio		0.68			0.68			0.21			0.21	
v/c Ratio		0.66			0.80			0.31			0.80	
Control Delay		8.3			19.7			27.3			49.4	

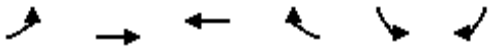
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.3			4.6			0.0			0.6	
Total Delay		8.6			24.3			27.3			50.0	
LOS		A			C			C			D	
Approach Delay		8.6			24.3			27.3			50.0	
Approach LOS		A			C			C			D	
90th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	74.9	74.9		74.9	74.9		23.1	23.1		23.1	23.1	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		42.5			121.4			9.9			29.2	
Queue Length 95th (m)		m53.0			201.8			23.1			#64.6	
Internal Link Dist (m)		164.8			157.4			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		1024			1144			297			287	
Starvation Cap Reductn		59			0			0			0	
Spillback Cap Reductn		0			164			2			7	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			0.93			0.28			0.76	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 21.8		Intersection LOS: C	
Intersection Capacity Utilization 80.1%		ICU Level of Service D	
Analysis Period (min) 15			

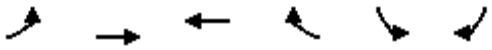
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





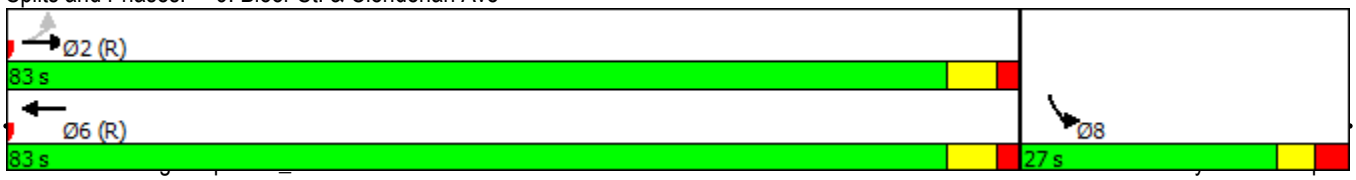
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	655	1086	63	44	46
Future Volume (vph)	47	655	1086	63	44	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.96		0.92	
Frt			0.993		0.931	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1825	1695	1634	0	1625	0
Flt Permitted	0.052				0.976	
Satd. Flow (perm)	100	1695	1634	0	1594	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6		42	
Link Speed (k/h)		50	50		40	
Link Distance (m)		156.3	400.4		167.2	
Travel Time (s)		11.3	28.8		15.0	
Confl. Peds. (#/hr)	186			186	15	22
Confl. Bikes (#/hr)	186			186	15	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	3%	0%	2%
Parking (#/hr)		0	0			
Adj. Flow (vph)	51	712	1180	68	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	712	1248	0	98	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	83.0	83.0	83.0		27.0	
Total Split (%)	75.5%	75.5%	75.5%		24.5%	
Maximum Green (s)	77.0	77.0	77.0		21.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	77.0	77.0	77.0		21.0	

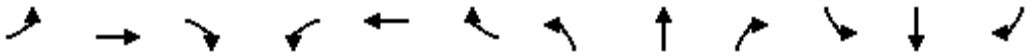


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio	0.70	0.70	0.70		0.19	
v/c Ratio	0.73	0.60	1.09		0.28	
Control Delay	69.3	11.2	52.8		25.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	69.3	11.2	52.8		25.3	
LOS	E	B	D		C	
Approach Delay		15.1	52.8		25.3	
Approach LOS		B	D		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Max	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Max	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Max	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Max	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Max	
Queue Length 50th (m)	6.0	70.1	~307.7		10.2	
Queue Length 95th (m)	#16.7	101.3	m28.2		24.9	
Internal Link Dist (m)		132.3	376.4		143.2	
Turn Bay Length (m)	11.0					
Base Capacity (vph)	70	1186	1145		344	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.73	0.60	1.09		0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 37.9		Intersection LOS: D	
Intersection Capacity Utilization 88.9%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bloor St. & Clendenan Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	824	55	59	1210	189	75	68	84	78	71	64
Future Volume (vph)	78	824	55	59	1210	189	75	68	84	78	71	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.96			0.88			0.91	
Frt		0.991			0.980			0.950			0.959	
Flt Protected	0.950			0.950				0.984			0.982	
Satd. Flow (prot)	1825	1788	0	1825	1780	0	0	1599	0	0	1708	0
Flt Permitted	0.054			0.166				0.739			0.696	
Satd. Flow (perm)	104	1788	0	319	1780	0	0	1178	0	0	1170	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			16			24			18	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			212.3			101.1			229.4	
Travel Time (s)		28.8			15.3			18.2			20.6	
Confl. Peds. (#/hr)	95		89	89		95	44		74	74		44
Confl. Bikes (#/hr)	95		89	89		95	44		74	74		44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	85	896	60	64	1315	205	82	74	91	85	77	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	956	0	64	1520	0	0	247	0	0	232	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	80.0	80.0		80.0	80.0		30.0	30.0		30.0	30.0	
Total Split (%)	72.7%	72.7%		72.7%	72.7%		27.3%	27.3%		27.3%	27.3%	
Maximum Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	74.0	74.0		74.0	74.0			24.0			24.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.22			0.22	

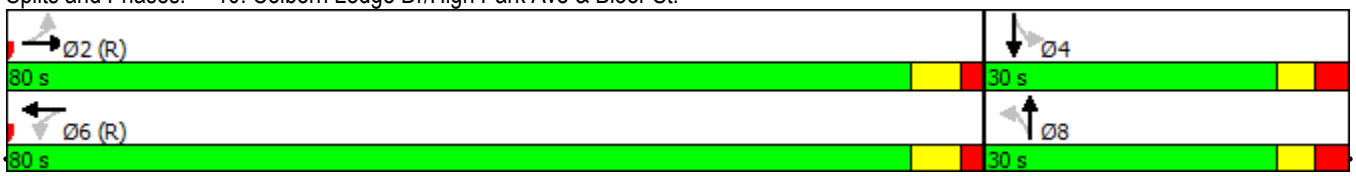
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.23	0.79		0.30	1.26			0.90			0.86	
Control Delay	207.2	22.0		11.9	146.8			72.4			68.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	207.2	22.0		11.9	146.8			72.4			68.2	
LOS	F	C		B	F			E			E	
Approach Delay		37.1			141.4			72.4			68.2	
Approach LOS		D			F			E			E	
90th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Queue Length 50th (m)	~22.1	135.3		5.1	~412.8			47.2			44.8	
Queue Length 95th (m)	m#44.5	187.2		13.0	#494.0			#94.0			#88.4	
Internal Link Dist (m)		376.4			188.3			77.1			205.4	
Turn Bay Length (m)	25.0			26.2								
Base Capacity (vph)	69	1205		214	1202			275			269	
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	1.23	0.79		0.30	1.26			0.90			0.86	

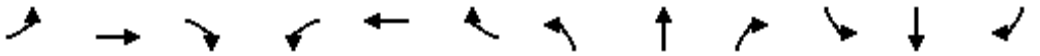
Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay: 95.4 Intersection LOS: F
Intersection Capacity Utilization 105.9% ICU Level of Service G
Analysis Period (min) 15

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

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.





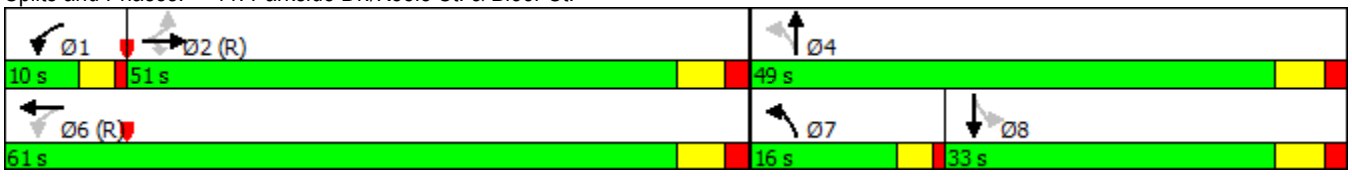
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	472	206	186	741	92	289	557	171	138	534	92
Future Volume (vph)	111	472	206	186	741	92	289	557	171	138	534	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	0		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.95		0.87		0.97		0.98	0.88		0.87	0.98	
Frt			0.850		0.986			0.965			0.978	
Flt Protected	0.950				0.991		0.950			0.950		
Satd. Flow (prot)	1825	1921	1617	0	3420	0	1825	3048	0	1807	3440	0
Flt Permitted	0.162				0.644		0.157			0.352		
Satd. Flow (perm)	297	1921	1414	0	2213	0	295	3048	0	584	3440	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			109					43			17	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		227.3			249.0			249.1			226.0	
Travel Time (s)		16.4			17.9			17.9			16.3	
Confl. Peds. (#/hr)	220		68	68		220	42		189	189		42
Confl. Bikes (#/hr)	220		68	68		220	42		189	189		42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	1%	3%	0%	2%	1%	1%	1%	3%
Adj. Flow (vph)	121	513	224	202	805	100	314	605	186	150	580	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	513	224	0	1107	0	314	791	0	150	680	0
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	2	1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	27.0	6.0	27.0		6.0	27.0		27.0	27.0	
Minimum Split (s)	33.0	33.0	33.0	10.0	45.0		10.0	33.0		33.0	33.0	
Total Split (s)	51.0	51.0	51.0	10.0	61.0		16.0	49.0		33.0	33.0	
Total Split (%)	46.4%	46.4%	46.4%	9.1%	55.5%		14.5%	44.5%		30.0%	30.0%	
Maximum Green (s)	45.0	45.0	45.0	6.0	55.0		12.0	43.0		27.0	27.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0		4.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	20.0	20.0	20.0		20.0			20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0	0		0			0		0	0	
Act Effct Green (s)	55.0	55.0	55.0		55.0		45.0	43.0		27.0	27.0	
Actuated g/C Ratio	0.50	0.50	0.50		0.50		0.41	0.39		0.25	0.25	

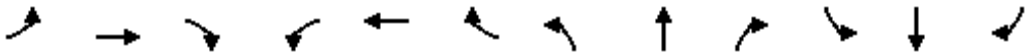
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.82	0.53	0.29		1.00		1.09	0.65		1.05	0.79	
Control Delay	65.3	21.3	9.1		55.6		107.0	28.8		131.0	45.8	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	65.3	21.3	9.1		55.6		107.0	28.8		131.0	45.8	
LOS	E	C	A		E		F	C		F	D	
Approach Delay		24.3			55.6			51.0			61.2	
Approach LOS		C			E			D			E	
90th %ile Green (s)	55.0	55.0	55.0	0.0	55.0		12.0	43.0		27.0	27.0	
90th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	55.0	55.0	55.0	0.0	55.0		12.0	43.0		27.0	27.0	
70th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	55.0	55.0	55.0	0.0	55.0		12.0	43.0		27.0	27.0	
50th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
30th %ile Green (s)	55.0	55.0	55.0	0.0	55.0		12.0	43.0		27.0	27.0	
30th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
10th %ile Green (s)	55.0	55.0	55.0	0.0	55.0		12.0	43.0		27.0	27.0	
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
Queue Length 50th (m)	21.1	72.4	13.0		~120.8		~55.9	68.1		~35.1	70.5	
Queue Length 95th (m)	#57.7	102.5	27.9		#170.7		#110.2	88.8		#74.9	91.9	
Internal Link Dist (m)		203.3			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9				14.9			24.4		
Base Capacity (vph)	148	960	761		1106		287	1217		143	857	
Starvation Cap Reductn	0	0	0		0		0	0		0	0	
Spillback Cap Reductn	0	0	0		0		0	0		0	0	
Storage Cap Reductn	0	0	0		0		0	0		0	0	
Reduced v/c Ratio	0.82	0.53	0.29		1.00		1.09	0.65		1.05	0.79	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 48.6 Intersection LOS: D
Intersection Capacity Utilization 119.5% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.



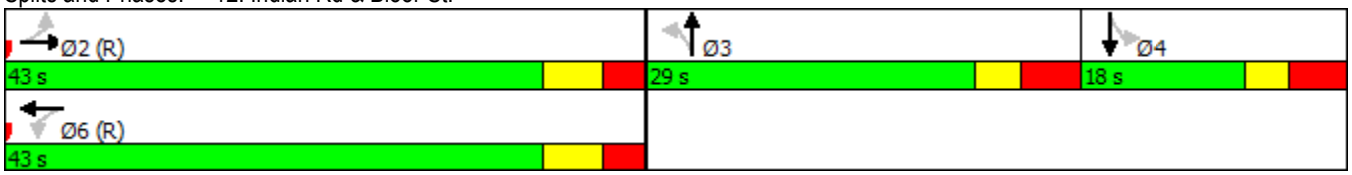


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Future Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.96			0.93	
Frt		0.994			0.999			0.953			0.913	
Flt Protected		0.999						0.973			0.987	
Satd. Flow (prot)	0	1712	0	0	1695	0	0	1477	0	0	1581	0
Flt Permitted		0.968			0.998			0.546			0.891	
Satd. Flow (perm)	0	1659	0	0	1691	0	0	824	0	0	1408	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			1			17			38	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	74		39	39		74	19		26	26		19
Confl. Bikes (#/hr)	74		39	39		74	19		26	26		19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	31%	10%	16%	0%	13%	11%	16%	50%	6%	7%	0%	2%
Adj. Flow (vph)	18	735	34	4	1000	11	27	5	17	16	5	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	787	0	0	1015	0	0	49	0	0	59	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	43.0	43.0		43.0	43.0		29.0	29.0		18.0	18.0	
Total Split (%)	47.8%	47.8%		47.8%	47.8%		32.2%	32.2%		20.0%	20.0%	
Maximum Green (s)	36.0	36.0		36.0	36.0		22.0	22.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		60.8			60.8			10.0			8.0	
Actuated g/C Ratio		0.68			0.68			0.11			0.09	
v/c Ratio		0.70			0.89			0.46			0.37	
Control Delay		19.8			30.5			40.1			25.6	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		19.8			30.5			40.1			25.6	
LOS		B			C			D			C	
Approach Delay		19.8			30.5			40.1			25.6	
Approach LOS		B			C			D			C	
90th %ile Green (s)	42.9	42.9		42.9	42.9		15.4	15.4		10.7	10.7	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	49.0	49.0		49.0	49.0		11.6	11.6		8.4	8.4	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	53.0	53.0		53.0	53.0		9.0	9.0		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	69.0	69.0		69.0	69.0		0.0	0.0		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Min	Min	
10th %ile Green (s)	83.0	83.0		83.0	83.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		97.5			~175.2			5.3			3.5	
Queue Length 95th (m)		#210.0			#296.7			15.3			14.4	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		1121			1142			214			205	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			0.89			0.23			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 26.2		Intersection LOS: C	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

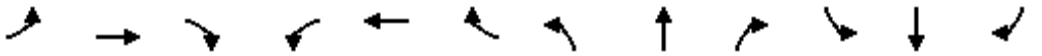
Splits and Phases: 12: Indian Rd & Bloor St.



APPENDIX

H

OPTION 3 SYNCHRO ANALYSIS SHEETS

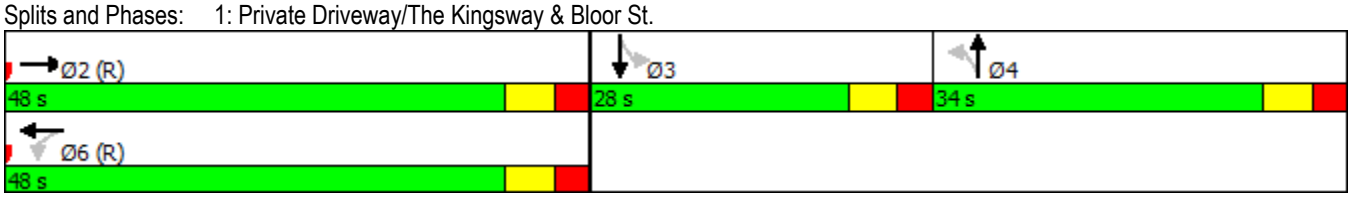


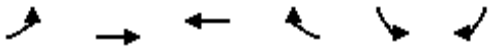
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1117	5	0	800	124	12	4	0	418	0	55
Future Volume (vph)	0	1117	5	0	800	124	12	4	0	418	0	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (m)	7.6			20.0			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00			0.99					0.99	0.99	
Frt		0.999			0.980						0.965	
Flt Protected								0.963		0.950	0.963	
Satd. Flow (prot)	0	1845	0	1921	3430	0	0	1626	0	1734	1692	0
Flt Permitted										0.765	0.810	
Satd. Flow (perm)	0	1845	0	1921	3430	0	0	1689	0	1383	1413	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					18						109	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			96.5			98.0	
Travel Time (s)		15.3			23.5			17.4			11.8	
Confl. Peds. (#/hr)	37		8	8		37			8	8		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	0%	3%	1%	18%	0%	0%	0%	0%	1%
Adj. Flow (vph)	0	1214	5	0	870	135	13	4	0	454	0	60
Shared Lane Traffic (%)										43%		
Lane Group Flow (vph)	0	1219	0	0	1005	0	0	17	0	259	255	0
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6			4	4		3		
Detector Phase		2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0		7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0		34.0	34.0		14.0	14.0	
Total Split (s)		48.0		48.0	48.0		34.0	34.0		28.0	28.0	
Total Split (%)		43.6%		43.6%	43.6%		30.9%	30.9%		25.5%	25.5%	
Maximum Green (s)		41.0		41.0	41.0		27.0	27.0		21.0	21.0	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0		20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)		68.7			68.7			7.7		21.0	21.0	
Actuated g/C Ratio		0.62			0.62			0.07		0.19	0.19	
v/c Ratio		1.06			0.47			0.15		0.98	0.71	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		65.9			17.5			50.4		96.3	35.8	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		65.9			17.5			50.4		96.3	35.8	
LOS		E			B			D		F	D	
Approach Delay		65.9			17.5			50.4			66.3	
Approach LOS		E			B			D			E	
90th %ile Green (s)		58.6		58.6	58.6		9.4	9.4		21.0	21.0	
90th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
70th %ile Green (s)		60.1		60.1	60.1		7.9	7.9		21.0	21.0	
70th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Max	Max	
50th %ile Green (s)		75.0		75.0	75.0		0.0	0.0		21.0	21.0	
50th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
30th %ile Green (s)		75.0		75.0	75.0		0.0	0.0		21.0	21.0	
30th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
10th %ile Green (s)		75.0		75.0	75.0		0.0	0.0		21.0	21.0	
10th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Max	Max	
Queue Length 50th (m)		220.4			66.1			3.5		58.8	31.1	
Queue Length 95th (m)		#403.7			106.0			10.3		#111.6	#64.1	
Internal Link Dist (m)		188.8			302.4			72.5			74.0	
Turn Bay Length (m)												
Base Capacity (vph)		1152			2150			414		264	357	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		1.06			0.47			0.04		0.98	0.71	

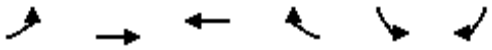
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 48.2		Intersection LOS: D	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	1304	781	24	35	166
Future Volume (vph)	110	1304	781	24	35	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	0			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00		0.87	0.98
Frt			0.996			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	1886	3554	0	1789	1541
Flt Permitted		0.849			0.950	
Satd. Flow (perm)	0	1605	3554	0	1561	1510
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6			175
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	824.1		142.8	
Travel Time (s)		23.5	59.3		12.9	
Confl. Peds. (#/hr)	32			32	58	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	7%	1%	2%	4%	2%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	120	1417	849	26	38	180
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1537	875	0	38	180
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases	2					4
Detector Phase	2	2	6		4	4
Switch Phase						
Minimum Initial (s)	29.0	29.0	29.0		7.0	7.0
Minimum Split (s)	36.0	36.0	36.0		31.0	31.0
Total Split (s)	79.0	79.0	79.0		31.0	31.0
Total Split (%)	71.8%	71.8%	71.8%		28.2%	28.2%
Maximum Green (s)	72.0	72.0	72.0		25.0	25.0
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0
All-Red Time (s)	3.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	22.0	22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)		88.1	88.1		8.9	8.9
Actuated g/C Ratio		0.80	0.80		0.08	0.08



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio		1.20	0.31		0.26	0.64
Control Delay		104.8	4.5		50.9	18.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		104.8	4.5		50.9	18.4
LOS		F	A		D	B
Approach Delay		104.8	4.5		24.0	
Approach LOS		F	A		C	
90th %ile Green (s)	83.2	83.2	83.2		13.8	13.8
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	87.9	87.9	87.9		9.1	9.1
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	89.3	89.3	89.3		7.7	7.7
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	90.0	90.0	90.0		7.0	7.0
30th %ile Term Code	Coord	Coord	Coord		Min	Min
10th %ile Green (s)	90.0	90.0	90.0		7.0	7.0
10th %ile Term Code	Coord	Coord	Coord		Min	Min
Queue Length 50th (m)		~406.9	26.5		7.9	1.0
Queue Length 95th (m)		m#408.0	33.9		17.2	20.6
Internal Link Dist (m)		302.4	800.1		118.8	
Turn Bay Length (m)						
Base Capacity (vph)		1285	2846		406	478
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		1.20	0.31		0.09	0.38

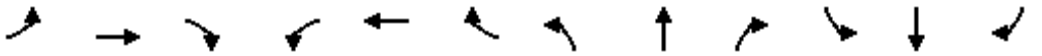
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 22.5 (20%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 64.8		Intersection LOS: E	
Intersection Capacity Utilization 124.1%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

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

Splits and Phases: 2: Bloor St. & Old Mill Trail

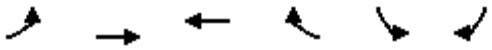


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	848	443	395	580	32	215	0	394	43	61	8
Future Volume (vph)	8	848	443	395	580	32	215	0	394	43	61	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.93	0.93			0.99					0.79		
Frt		0.949			0.992				0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1601	1669	0	1755	3544	0	1825	0	1570	1825	1887	0
Flt Permitted	0.399			0.120			0.950			0.950		
Satd. Flow (perm)	624	1669	0	222	3544	0	1825	0	1570	1438	1887	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					7				119		5	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		824.1			77.1			102.2			164.4	
Travel Time (s)		59.3			5.8			7.7			19.7	
Confl. Peds. (#/hr)	95		98	98		95			27	27		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	14%	2%	1%	4%	1%	3%	0%	0%	4%	0%	0%	0%
Adj. Flow (vph)	9	922	482	429	630	35	234	0	428	47	66	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1404	0	429	665	0	234	0	428	47	75	0
Turn Type	Perm	NA		pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2		1	6		7		1 7		8	
Permitted Phases	2			6						8		
Detector Phase	2	2		1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0		6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0		11.0	37.0		33.0			14.0	14.0	
Total Split (s)	37.0	37.0		26.0	63.0		33.0			14.0	14.0	
Total Split (%)	33.6%	33.6%		23.6%	57.3%		30.0%			12.7%	12.7%	
Maximum Green (s)	29.0	29.0		21.0	55.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0		3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0		2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0	0.0	
Total Lost Time (s)	8.0	8.0		5.0	8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0			7.0		7.0					
Flash Dont Walk (s)	22.0	22.0			22.0		21.0					
Pedestrian Calls (#/hr)	0	0			0		0					
Act Effct Green (s)	29.6	29.6		60.8	57.8		28.0		52.2	7.0	7.0	
Actuated g/C Ratio	0.27	0.27		0.55	0.53		0.25		0.47	0.06	0.06	
v/c Ratio	0.05	3.12		0.96	0.36		0.50		0.53	0.52	0.60	

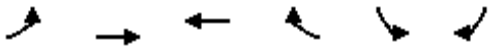
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	24.9	972.2		65.4	16.8		39.6		11.7	70.2	67.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Total Delay	24.9	972.2		65.4	16.8		39.6		11.7	70.2	67.6	
LOS	C	F		E	B		D		B	E	E	
Approach Delay		966.2			35.8			21.5			68.6	
Approach LOS		F			D			C			E	
90th %ile Green (s)	29.0	29.0		21.0	55.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
70th %ile Green (s)	29.0	29.0		21.0	55.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
50th %ile Green (s)	29.0	29.0		21.0	55.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
30th %ile Green (s)	29.0	29.0		21.0	55.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
10th %ile Green (s)	32.2	32.2		31.8	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord		Gap	Coord		Max			Skip	Skip	
Queue Length 50th (m)	1.3	~536.8		~83.3	45.0		43.1		30.3	10.0	14.9	
Queue Length 95th (m)	m1.1	m#435.4		#144.1	58.4		67.1		49.9	#24.8	#33.8	
Internal Link Dist (m)		800.1			53.1			78.2			140.4	
Turn Bay Length (m)	41.8			52.1						39.6		
Base Capacity (vph)	168	450		445	1865		464		807	91	124	
Starvation Cap Reductn	0	0		0	0		0		0	0	0	
Spillback Cap Reductn	0	0		0	0		0		0	0	0	
Storage Cap Reductn	0	0		0	0		0		0	0	0	
Reduced v/c Ratio	0.05	3.12		0.96	0.36		0.50		0.53	0.52	0.60	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.12			
Intersection Signal Delay: 433.6		Intersection LOS: F	
Intersection Capacity Utilization 128.3%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.



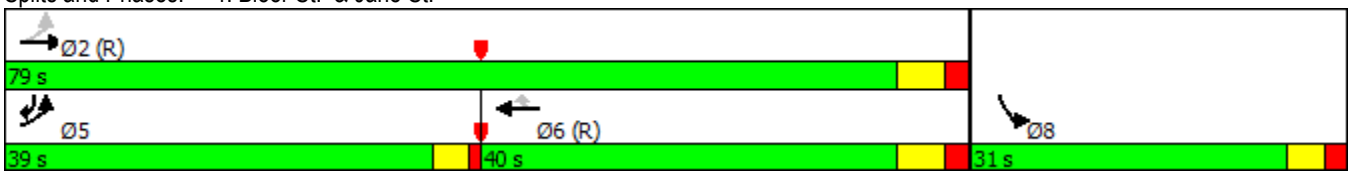
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	395	798	610	170	177	525
Future Volume (vph)	395	798	610	170	177	525
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor	0.91			0.60	0.72	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1755	1865	3579	1328	1706	1541
Flt Permitted	0.229				0.950	
Satd. Flow (perm)	384	1865	3579	793	1229	1541
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				93		482
Link Speed (k/h)		50	50		40	
Link Distance (m)		61.8	334.6		180.8	
Travel Time (s)		4.4	24.1		16.3	
Confl. Peds. (#/hr)	142			142	132	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	2%	23%	7%	6%
Adj. Flow (vph)	429	867	663	185	192	571
Shared Lane Traffic (%)						
Lane Group Flow (vph)	429	867	663	185	192	571
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	39.0	79.0	40.0	40.0	31.0	39.0
Total Split (%)	35.5%	71.8%	36.4%	36.4%	28.2%	35.5%
Maximum Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	C-Max	C-Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	34.0	34.0	26.0	35.0
Actuated g/C Ratio	0.68	0.66	0.31	0.31	0.24	0.32
v/c Ratio	0.61	0.70	0.60	0.60	0.48	0.70

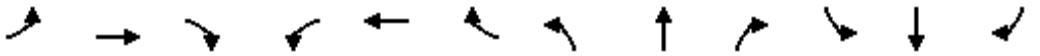


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	15.9	15.5	29.1	19.0	40.8	10.8
Queue Delay	0.4	16.0	0.0	0.0	0.0	0.0
Total Delay	16.2	31.5	29.1	19.0	40.8	10.8
LOS	B	C	C	B	D	B
Approach Delay		26.5	26.9		18.3	
Approach LOS		C	C		B	
90th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	35.0	73.0	34.0	34.0	26.0	35.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	39.8	106.3	67.1	14.5	35.7	13.8
Queue Length 95th (m)	72.8	150.8	83.6	30.8	57.6	52.4
Internal Link Dist (m)		37.8	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	698	1237	1106	309	403	818
Starvation Cap Reductn	48	371	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	1.00	0.60	0.60	0.48	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 40 (36%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 24.5		Intersection LOS: C	
Intersection Capacity Utilization 72.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Bloor St. & Jane St.



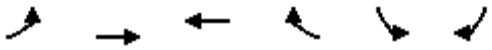


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	807	117	69	581	13	118	65	79	17	125	15
Future Volume (vph)	16	807	117	69	581	13	118	65	79	17	125	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.89	0.96			0.99		0.93	0.90		0.92	0.98	
Frt		0.981			0.997			0.918			0.984	
Flt Protected	0.950				0.995		0.950			0.950		
Satd. Flow (prot)	1722	1607	0	0	3342	0	1825	1576	0	1825	1860	0
Flt Permitted	0.356				0.606		0.616			0.606		
Satd. Flow (perm)	577	1607	0	0	2035	0	1103	1576	0	1073	1860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			4			52			5	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	112		81	81		112	68		48	48		68
Confl. Bikes (#/hr)	112		81	81		112	68		48	48		68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	6%	2%	0%	1%	2%	16%	0%	1%	0%	0%	0%	0%
Parking (#/hr)		0			0							
Adj. Flow (vph)	17	877	127	75	632	14	128	71	86	18	136	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1004	0	0	721	0	128	157	0	18	152	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	78.0	78.0		78.0	78.0		32.0	32.0		32.0	32.0	
Total Split (%)	70.9%	70.9%		70.9%	70.9%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	72.0	72.0			72.0		26.0	26.0		26.0	26.0	

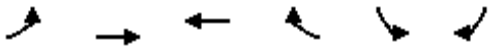
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.65	0.65			0.65		0.24	0.24		0.24	0.24	
v/c Ratio	0.05	0.95			0.54		0.49	0.38		0.07	0.34	
Control Delay	6.0	27.4			7.3		43.9	26.3		33.7	36.3	
Queue Delay	0.0	9.4			0.0		0.0	0.0		0.0	0.0	
Total Delay	6.0	36.8			7.3		43.9	26.4		33.7	36.3	
LOS	A	D			A		D	C		C	D	
Approach Delay		36.3			7.3			34.2			36.1	
Approach LOS		D			A			C			D	
90th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Queue Length 50th (m)	0.8	81.5			12.9		23.9	18.6		3.0	26.3	
Queue Length 95th (m)	m1.4	#284.9			16.8		43.0	37.5		9.0	44.6	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)	25.3						15.5			15.2		
Base Capacity (vph)	377	1056			1333		260	412		253	443	
Starvation Cap Reductn	0	0			19		0	0		0	0	
Spillback Cap Reductn	0	57			0		0	1		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.05	1.01			0.55		0.49	0.38		0.07	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 128.9%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 5: Windermere Ave & Bloor St.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	1022	679	20	23	37
Future Volume (vph)	16	1022	679	20	23	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.98		0.94	
Frt			0.996		0.917	
Flt Protected		0.999			0.981	
Satd. Flow (prot)	0	1694	3360	0	1640	0
Flt Permitted		0.984			0.981	
Satd. Flow (perm)	0	1664	3360	0	1584	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6		40	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	119.5		151.3	
Travel Time (s)		8.6	8.6		13.6	
Confl. Peds. (#/hr)	163			163	36	9
Confl. Bikes (#/hr)	163			163	36	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	5%	0%	5%
Parking (#/hr)		0	0	0		
Adj. Flow (vph)	17	1111	738	22	25	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1128	760	0	65	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	83.0	83.0	83.0		27.0	
Total Split (%)	75.5%	75.5%	75.5%		24.5%	
Maximum Green (s)	77.0	77.0	77.0		22.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		77.0	77.0		22.0	
Actuated g/C Ratio		0.70	0.70		0.20	
v/c Ratio		0.97	0.32		0.18	
Control Delay		22.0	6.8		19.0	

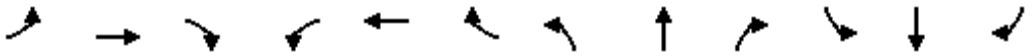


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		6.7	0.0		0.0	
Total Delay		28.7	6.8		19.0	
LOS		C	A		B	
Approach Delay		28.7	6.8		19.0	
Approach LOS		C	A		B	
90th %ile Green (s)	77.0	77.0	77.0		22.0	
90th %ile Term Code	Coord	Coord	Coord		Max	
70th %ile Green (s)	77.0	77.0	77.0		22.0	
70th %ile Term Code	Coord	Coord	Coord		Max	
50th %ile Green (s)	77.0	77.0	77.0		22.0	
50th %ile Term Code	Coord	Coord	Coord		Max	
30th %ile Green (s)	77.0	77.0	77.0		22.0	
30th %ile Term Code	Coord	Coord	Coord		Max	
10th %ile Green (s)	77.0	77.0	77.0		22.0	
10th %ile Term Code	Coord	Coord	Coord		Max	
Queue Length 50th (m)		38.2	29.2		4.4	
Queue Length 95th (m)		m#279.2	37.6		15.9	
Internal Link Dist (m)		95.3	95.5		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		1164	2353		360	
Starvation Cap Reductn		40	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		1.00	0.32		0.18	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 19.8 Intersection LOS: B
Intersection Capacity Utilization 94.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Bloor St. & Durie St. N

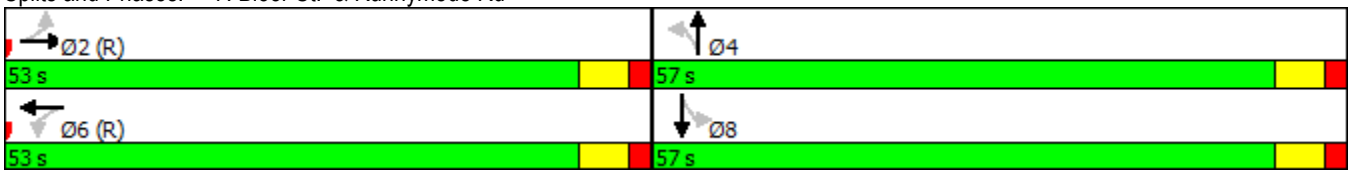


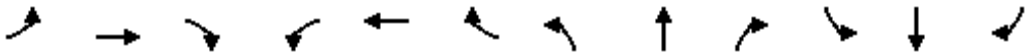
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	697	45	46	472	62	66	98	70	177	142	133
Future Volume (vph)	77	697	45	46	472	62	66	98	70	177	142	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.80	0.98			0.92		0.94	0.70		0.56	0.93	
Frt		0.991			0.984			0.938			0.927	
Flt Protected	0.950				0.996		0.950			0.950		
Satd. Flow (prot)	1825	1827	0	0	2819	0	1825	1213	0	1789	1534	0
Flt Permitted	0.376				0.689		0.452			0.606		
Satd. Flow (perm)	577	1827	0	0	1950	0	820	1213	0	643	1534	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			14			43			18	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		114.3			188.8			215.2			259.0	
Travel Time (s)		8.2			13.6			25.8			23.3	
Confl. Peds. (#/hr)	388		113	113		388	72		387	387		72
Confl. Bikes (#/hr)	388		113	113		388	72		387	387		72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	35%	5%	40%	0%	8%	0%	2%	10%	7%
Parking (#/hr)					0	0						
Adj. Flow (vph)	84	758	49	50	513	67	72	107	76	192	154	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	807	0	0	630	0	72	183	0	192	299	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	53.0	53.0		53.0	53.0		57.0	57.0		57.0	57.0	
Total Split (%)	48.2%	48.2%		48.2%	48.2%		51.8%	51.8%		51.8%	51.8%	
Maximum Green (s)	47.0	47.0		47.0	47.0		51.0	51.0		51.0	51.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	59.8	59.8			59.8		38.2	38.2		38.2	38.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.54	0.54			0.54		0.35	0.35		0.35	0.35	
v/c Ratio	0.27	0.81			0.59		0.25	0.41		0.86	0.55	
Control Delay	20.1	31.2			17.4		24.9	21.2		65.1	29.5	
Queue Delay	0.0	1.8			0.0		0.0	0.0		0.0	0.0	
Total Delay	20.1	33.0			17.4		24.9	21.2		65.1	29.5	
LOS	C	C			B		C	C		E	C	
Approach Delay		31.8			17.4			22.3			43.4	
Approach LOS		C			B			C			D	
90th %ile Green (s)	47.0	47.0		47.0	47.0		51.0	51.0		51.0	51.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	52.5	52.5		52.5	52.5		45.5	45.5		45.5	45.5	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	59.0	59.0		59.0	59.0		39.0	39.0		39.0	39.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
30th %ile Green (s)	67.5	67.5		67.5	67.5		30.5	30.5		30.5	30.5	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	9.3	136.6			33.4		10.8	22.0		37.6	47.7	
Queue Length 95th (m)	25.1	#258.7			82.6		18.4	33.6		59.2	60.9	
Internal Link Dist (m)		90.3			164.8			191.2			235.0	
Turn Bay Length (m)	24.4						9.1			11.0		
Base Capacity (vph)	313	994			1066		380	585		298	720	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	80			0		0	1		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.27	0.88			0.59		0.19	0.31		0.64	0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 29.2		Intersection LOS: C	
Intersection Capacity Utilization 119.8%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Bloor St. & Runnymede Rd



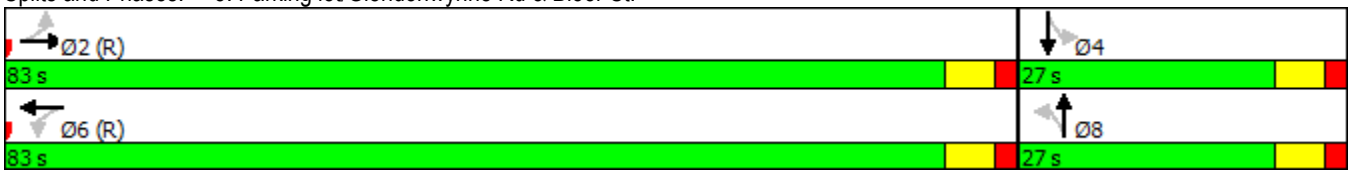


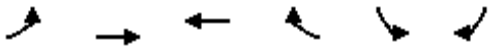
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	866	4	6	745	38	0	2	4	69	5	92
Future Volume (vph)	25	866	4	6	745	38	0	2	4	69	5	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.85			0.90	
Frt		0.999			0.993			0.910			0.925	
Flt Protected		0.999									0.980	
Satd. Flow (prot)	0	1842	0	0	3217	0	0	1486	0	0	1652	0
Flt Permitted		0.962			0.947						0.862	
Satd. Flow (perm)	0	1771	0	0	3046	0	0	1486	0	0	1377	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11			4			51	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			179.8			31.3			313.4	
Travel Time (s)		13.6			12.9			2.3			28.2	
Confl. Peds. (#/hr)	69		46	46		69	31		48	48		31
Confl. Bikes (#/hr)	69		46	46		69	31		48	48		31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0							
Adj. Flow (vph)	27	941	4	7	810	41	0	2	4	75	5	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	972	0	0	858	0	0	6	0	0	180	0
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	83.0	83.0		83.0	83.0		27.0	27.0		27.0	27.0	
Total Split (%)	75.5%	75.5%		75.5%	75.5%		24.5%	24.5%		24.5%	24.5%	
Maximum Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		77.0			77.0			21.0			21.0	
Actuated g/C Ratio		0.70			0.70			0.19			0.19	
v/c Ratio		0.78			0.40			0.02			0.59	
Control Delay		11.1			7.4			26.3			37.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		4.7			0.0			0.0			0.0	
Total Delay		15.9			7.4			26.3			37.7	
LOS		B			A			C			D	
Approach Delay		15.9			7.4			26.3			37.7	
Approach LOS		B			A			C			D	
90th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Queue Length 50th (m)		106.3			35.3			0.4			25.3	
Queue Length 95th (m)		49.5			45.4			3.9			48.2	
Internal Link Dist (m)		164.8			155.8			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		1239			2135			286			304	
Starvation Cap Reductn		201			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.94			0.40			0.02			0.59	

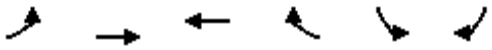
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 93.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





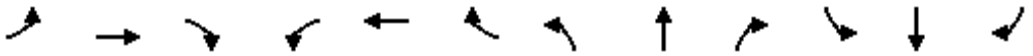
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	42	979	759	55	65	61
Future Volume (vph)	42	979	759	55	65	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	0			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.91		0.96		0.89	
Frt			0.990		0.935	
Flt Protected	0.950				0.975	
Satd. Flow (prot)	1825	1883	3245	0	1599	0
Flt Permitted	0.298				0.975	
Satd. Flow (perm)	519	1883	3245	0	1512	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			16		38	
Link Speed (k/h)		50	50		40	
Link Distance (m)		158.0	400.4		167.2	
Travel Time (s)		11.4	28.8		15.0	
Confl. Peds. (#/hr)	71			71	40	44
Confl. Bikes (#/hr)	71			71	40	44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	2%	3%	1%	5%
Parking (#/hr)			0			
Adj. Flow (vph)	46	1064	825	60	71	66
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	1064	885	0	137	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	83.0	83.0	83.0		27.0	
Total Split (%)	75.5%	75.5%	75.5%		24.5%	
Maximum Green (s)	77.0	77.0	77.0		21.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	77.0	77.0	77.0		21.0	



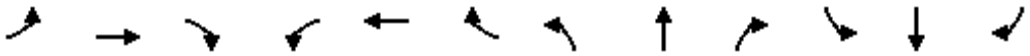
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio	0.70	0.70	0.70		0.19	
v/c Ratio	0.13	0.81	0.39		0.41	
Control Delay	6.5	17.6	2.7		32.1	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	6.5	17.6	2.7		32.1	
LOS	A	B	A		C	
Approach Delay		17.2	2.7		32.1	
Approach LOS		B	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Max	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Max	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Max	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Max	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Max	
Queue Length 50th (m)	2.9	139.6	12.2		18.5	
Queue Length 95th (m)	7.0	204.1	m13.2		36.8	
Internal Link Dist (m)		134.0	376.4		143.2	
Turn Bay Length (m)	11.0					
Base Capacity (vph)	363	1318	2276		336	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.13	0.81	0.39		0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 12.1		Intersection LOS: B	
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bloor St. & Clendenan Ave



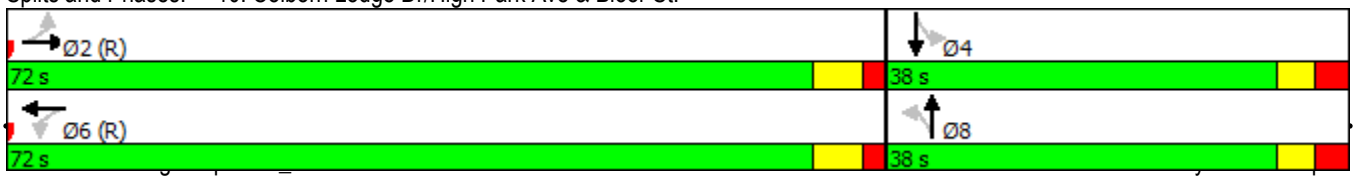
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Future Volume (vph)	37	1240	49	42	897	74	48	40	43	273	35	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.99			0.99			0.93			0.91	
Frt		0.994			0.989			0.955			0.963	
Flt Protected	0.950				0.998			0.982			0.969	
Satd. Flow (prot)	1825	1856	0	0	3269	0	0	1693	0	0	1726	0
Flt Permitted	0.201				0.572			0.800			0.715	
Satd. Flow (perm)	380	1856	0	0	1874	0	0	1366	0	0	1206	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			13			23			17	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			218.9			101.1			229.4	
Travel Time (s)		28.8			15.8			18.2			20.6	
Confl. Peds. (#/hr)	42		79	79		42	62		48	48		62
Confl. Bikes (#/hr)	42		79	79		42	62		48	48		62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	4%	1%	0%	0%	0%	0%	0%	0%
Parking (#/hr)					0	0						
Adj. Flow (vph)	40	1348	53	46	975	80	52	43	47	297	38	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	1401	0	0	1101	0	0	142	0	0	461	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	72.0	72.0		72.0	72.0		38.0	38.0		38.0	38.0	
Total Split (%)	65.5%	65.5%		65.5%	65.5%		34.5%	34.5%		34.5%	34.5%	
Maximum Green (s)	66.0	66.0		66.0	66.0		32.0	32.0		32.0	32.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	66.0	66.0			66.0			32.0			32.0	

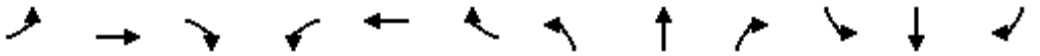


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.60	0.60			0.60			0.29			0.29	
v/c Ratio	0.18	1.26			0.98			0.34			1.27	
Control Delay	17.1	151.7			43.5			28.4			176.2	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	17.1	151.7			43.5			28.4			176.2	
LOS	B	F			D			C			F	
Approach Delay		148.0			43.5			28.4			176.2	
Approach LOS		F			D			C			F	
90th %ile Green (s)	66.0	66.0		66.0	66.0		32.0	32.0		32.0	32.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	66.0	66.0		66.0	66.0		32.0	32.0		32.0	32.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	66.0	66.0		66.0	66.0		32.0	32.0		32.0	32.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	66.0	66.0		66.0	66.0		32.0	32.0		32.0	32.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	66.0	66.0		66.0	66.0		32.0	32.0		32.0	32.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Queue Length 50th (m)	5.2	~374.0			111.3			19.9			~123.2	
Queue Length 95th (m)	m7.9	#456.9			#166.6			37.3			#185.2	
Internal Link Dist (m)		376.4			194.9			77.1			205.4	
Turn Bay Length (m)	25.0											
Base Capacity (vph)	228	1114			1129			413			362	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.18	1.26			0.98			0.34			1.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay: 110.1		Intersection LOS: F	
Intersection Capacity Utilization 110.4%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	694	420	246	465	59	161	370	142	178	689	60
Future Volume (vph)	97	694	420	246	465	59	161	370	142	178	689	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	0		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.93		0.90		0.98		0.99	0.90		0.92	0.99	
Frt			0.850		0.989			0.958			0.988	
Flt Protected	0.950				0.984		0.950			0.950		
Satd. Flow (prot)	1738	1847	1585	0	3357	0	1772	2958	0	1690	3375	0
Flt Permitted	0.271				0.504		0.143			0.287		
Satd. Flow (perm)	460	1847	1429	0	1720	0	265	2958	0	469	3375	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			74					48			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		220.8			249.0			249.1			226.0	
Travel Time (s)		15.9			17.9			17.9			16.3	
Confl. Peds. (#/hr)	193		55	55		193	30		107	107		30
Confl. Bikes (#/hr)	193		55	55		193	30		107	107		30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	4%	3%	2%	4%	5%	3%	7%	5%	8%	6%	9%
Adj. Flow (vph)	105	754	457	267	505	64	175	402	154	193	749	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	754	457	0	836	0	175	556	0	193	814	0
Turn Type	Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		2	7	1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	7	1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	6.0	5.0	27.0		6.0	27.0		6.0	27.0	
Minimum Split (s)	33.0	33.0	10.0	9.5	45.0		10.0	33.0		10.0	33.0	
Total Split (s)	55.5	55.5	12.0	9.5	65.0		12.0	33.0		12.0	33.0	
Total Split (%)	50.5%	50.5%	10.9%	8.6%	59.1%		10.9%	30.0%		10.9%	30.0%	
Maximum Green (s)	49.5	49.5	8.0	5.0	59.0		8.0	27.0		8.0	27.0	
Yellow Time (s)	4.0	4.0	3.0	3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	1.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0		6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	None	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0			7.0			7.0			7.0	
Flash Dont Walk (s)	20.0	20.0			20.0			20.0			20.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	56.8	56.8	68.2		56.8		39.3	27.9		39.1	27.8	
Actuated g/C Ratio	0.52	0.52	0.62		0.52		0.36	0.25		0.36	0.25	

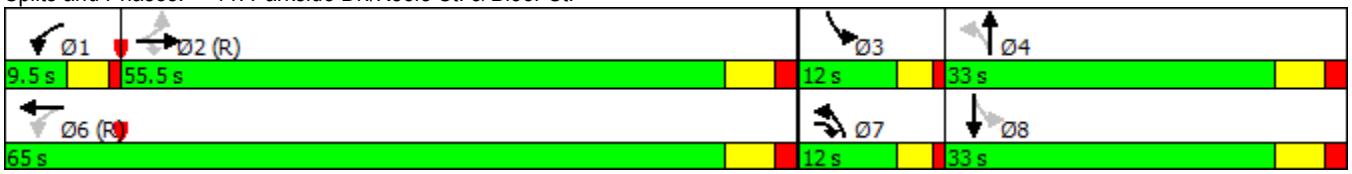
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.44	0.79	0.49		1.73dl		0.78	0.71		0.71	0.95	
Control Delay	23.4	28.8	9.7		43.7		51.0	39.9		42.3	61.2	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	23.4	28.8	9.7		43.7		51.0	39.9		42.3	61.2	
LOS	C	C	A		D		D	D		D	E	
Approach Delay		21.8			43.7			42.6			57.6	
Approach LOS		C			D			D			E	
90th %ile Green (s)	59.0	59.0	8.0	0.0	59.0		8.0	27.0		8.0	27.0	
90th %ile Term Code	Coord	Coord	Max	Skip	Coord		Max	Max		Max	Max	
70th %ile Green (s)	59.0	59.0	8.0	0.0	59.0		8.0	27.0		8.0	27.0	
70th %ile Term Code	Coord	Coord	Max	Skip	Coord		Max	Max		Max	Max	
50th %ile Green (s)	59.0	59.0	8.0	0.0	59.0		8.0	27.0		8.0	27.0	
50th %ile Term Code	Coord	Coord	Max	Skip	Coord		Max	Max		Max	Max	
30th %ile Green (s)	52.7	52.7	12.7	0.0	52.7		12.7	28.6		12.7	28.6	
30th %ile Term Code	Coord	Coord	Gap	Skip	Coord		Gap	Hold		Gap	Max	
10th %ile Green (s)	54.1	54.1	10.5	0.0	54.1		10.5	29.9		10.0	29.4	
10th %ile Term Code	Coord	Coord	Gap	Skip	Coord		Gap	Hold		Gap	Gap	
Queue Length 50th (m)	12.9	121.1	33.9		55.5		25.9	53.1		29.0	90.8	
Queue Length 95th (m)	28.4	170.9	52.8		#127.0		#60.3	72.6		#58.6	#131.1	
Internal Link Dist (m)		196.8			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9				14.9			24.4		
Base Capacity (vph)	237	952	927		922		223	786		270	858	
Starvation Cap Reductn	0	0	0		0		0	0		0	0	
Spillback Cap Reductn	0	0	0		0		0	0		0	0	
Storage Cap Reductn	0	0	0		0		0	0		0	0	
Reduced v/c Ratio	0.44	0.79	0.49		0.91		0.78	0.71		0.71	0.95	

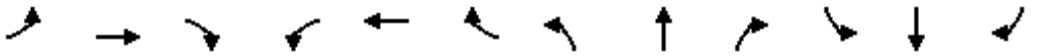
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 7 (6%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 39.7		Intersection LOS: D	
Intersection Capacity Utilization 109.7%		ICU Level of Service H	
Analysis Period (min) 15			

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

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.



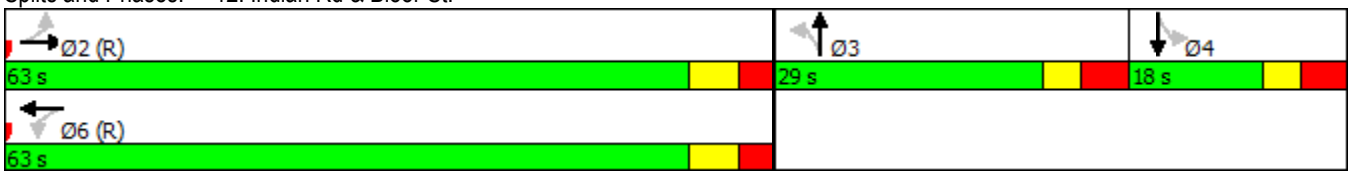


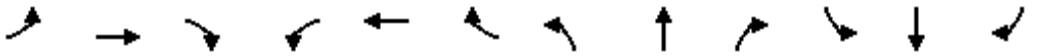
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Future Volume (vph)	25	992	3	0	468	7	43	8	9	43	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.97			0.92	
Frt					0.998			0.980			0.958	
Flt Protected		0.999						0.966			0.967	
Satd. Flow (prot)	0	1652	0	0	3186	0	0	1613	0	0	1605	0
Flt Permitted		0.979						0.761			0.753	
Satd. Flow (perm)	0	1617	0	0	3186	0	0	1261	0	0	1188	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2			7			109	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	45		11	11		45	16		31	31		16
Confl. Bikes (#/hr)	45		11	11		45	16		31	31		16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	12%	16%	100%	0%	14%	16%	9%	0%	25%	9%	0%	5%
Adj. Flow (vph)	27	1078	3	0	509	8	47	9	10	47	0	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1108	0	0	517	0	0	66	0	0	68	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	63.0	63.0		63.0	63.0		29.0	29.0		18.0	18.0	
Total Split (%)	57.3%	57.3%		57.3%	57.3%		26.4%	26.4%		16.4%	16.4%	
Maximum Green (s)	56.0	56.0		56.0	56.0		22.0	22.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		78.1			78.1			10.8			7.1	
Actuated g/C Ratio		0.71			0.71			0.10			0.06	
v/c Ratio		0.97			0.23			0.51			0.38	
Control Delay		34.3			8.1			54.9			8.9	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		34.3			8.1			54.9			8.9	
LOS		C			A			D			A	
Approach Delay		34.3			8.1			54.9			8.9	
Approach LOS		C			A			D			A	
90th %ile Green (s)	66.1	66.1		66.1	66.1		15.6	15.6		7.3	7.3	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	69.4	69.4		69.4	69.4		12.6	12.6		7.0	7.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
50th %ile Green (s)	71.5	71.5		71.5	71.5		10.5	10.5		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	73.6	73.6		73.6	73.6		8.4	8.4		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
10th %ile Green (s)	103.0	103.0		103.0	103.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		~256.6			22.2			12.2			0.0	
Queue Length 95th (m)		#356.2			34.7			25.0			4.6	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		1148			2263			257			216	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.97			0.23			0.26			0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 30 (27%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 26.4		Intersection LOS: C	
Intersection Capacity Utilization 98.1%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 12: Indian Rd & Bloor St.



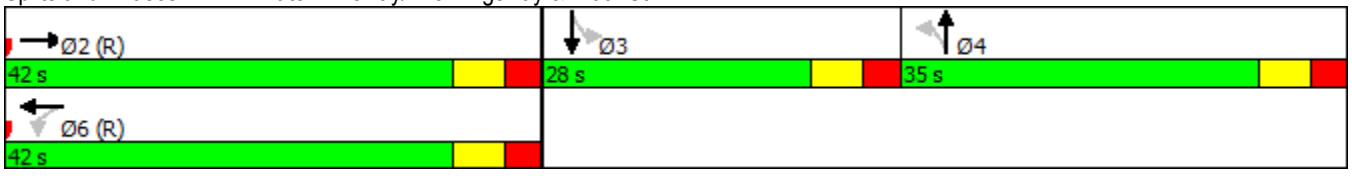


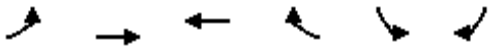
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	2	0	969	299	8	0	0	159	2	104
Future Volume (vph)	0	1012	2	0	969	299	8	0	0	159	2	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	10.0		20.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (m)	7.6			20.0			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00			0.96			1.00		1.00	0.99	
Frt					0.965						0.876	
Flt Protected								0.950		0.950	0.992	
Satd. Flow (prot)	0	1902	0	1921	3315	0	0	1825	0	1734	1564	0
Flt Permitted												
Satd. Flow (perm)	0	1902	0	1921	3315	0	0	1916	0	1821	1577	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					42						113	
Link Speed (k/h)		50			50			20			30	
Link Distance (m)		212.8			326.4			65.6			177.9	
Travel Time (s)		15.3			23.5			11.8			21.3	
Confl. Peds. (#/hr)	68		15	15		68	3		2	2		3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1100	2	0	1053	325	9	0	0	173	2	113
Shared Lane Traffic (%)										13%		
Lane Group Flow (vph)	0	1102	0	0	1378	0	0	9	0	151	137	0
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases				6			4	4		3		
Detector Phase		2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)		22.0		22.0	22.0		7.0	7.0		7.0	7.0	
Minimum Split (s)		29.0		29.0	29.0		34.0	34.0		14.0	14.0	
Total Split (s)		42.0		42.0	42.0		35.0	35.0		28.0	28.0	
Total Split (%)		40.0%		40.0%	40.0%		33.3%	33.3%		26.7%	26.7%	
Maximum Green (s)		35.0		35.0	35.0		28.0	28.0		21.0	21.0	
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)		7.0		7.0	7.0			7.0		7.0	7.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)		15.0		15.0	15.0		20.0	20.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)		73.9			73.9			7.2		14.1	14.1	
Actuated g/C Ratio		0.70			0.70			0.07		0.13	0.13	
v/c Ratio		0.82			0.59			0.07		0.62	0.44	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		20.3			18.6			46.8		53.2	15.5	
Queue Delay		0.0			0.0			0.0		0.0	0.0	
Total Delay		20.3			18.6			46.8		53.2	15.5	
LOS		C			B			D		D	B	
Approach Delay		20.3			18.6			46.8			35.2	
Approach LOS		C			B			D			D	
90th %ile Green (s)		56.0		56.0	56.0		8.0	8.0		20.0	20.0	
90th %ile Term Code		Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)		74.9		74.9	74.9		0.0	0.0		16.1	16.1	
70th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Gap	Gap	
50th %ile Green (s)		77.0		77.0	77.0		0.0	0.0		14.0	14.0	
50th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Gap	Gap	
30th %ile Green (s)		79.2		79.2	79.2		0.0	0.0		11.8	11.8	
30th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Gap	Gap	
10th %ile Green (s)		82.2		82.2	82.2		0.0	0.0		8.8	8.8	
10th %ile Term Code		Coord		Coord	Coord		Skip	Skip		Gap	Gap	
Queue Length 50th (m)		122.0			95.1			1.8		31.1	4.6	
Queue Length 95th (m)		#329.7			172.4			6.7		49.0	21.1	
Internal Link Dist (m)		188.8			302.4			41.6			153.9	
Turn Bay Length (m)												
Base Capacity (vph)		1337			2344			510		364	405	
Starvation Cap Reductn		0			0			0		0	0	
Spillback Cap Reductn		0			0			0		0	0	
Storage Cap Reductn		0			0			0		0	0	
Reduced v/c Ratio		0.82			0.59			0.02		0.41	0.34	

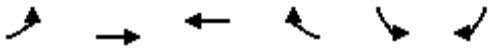
Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Private Driveway/The Kingsway & Bloor St.





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	951	1279	44	30	120
Future Volume (vph)	113	951	1279	44	30	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	55.5			0.0	0.0	0.0
Storage Lanes	0			0	1	1
Taper Length (m)	17.4				7.6	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00		0.92	0.97
Frt			0.995			0.850
Flt Protected		0.995			0.950	
Satd. Flow (prot)	0	1901	3589	0	1825	1541
Flt Permitted		0.623			0.950	
Satd. Flow (perm)	0	1190	3589	0	1683	1497
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6			53
Link Speed (k/h)		50	50		40	
Link Distance (m)		326.4	815.2		142.8	
Travel Time (s)		23.5	58.7		12.9	
Confl. Peds. (#/hr)	26			26	37	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	0%	1%	0%	0%	6%
Parking (#/hr)				0		
Adj. Flow (vph)	123	1034	1390	48	33	130
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1157	1438	0	33	130
Turn Type	Perm	NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases	2					4
Detector Phase	2	2	6		4	4
Switch Phase						
Minimum Initial (s)	29.0	29.0	29.0		7.0	7.0
Minimum Split (s)	36.0	36.0	36.0		31.0	31.0
Total Split (s)	74.0	74.0	74.0		31.0	31.0
Total Split (%)	70.5%	70.5%	70.5%		29.5%	29.5%
Maximum Green (s)	67.0	67.0	67.0		25.0	25.0
Yellow Time (s)	4.0	4.0	4.0		3.0	3.0
All-Red Time (s)	3.0	3.0	3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		7.0	7.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	22.0	22.0	22.0		18.0	18.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)		80.6	80.6		11.4	11.4
Actuated g/C Ratio		0.77	0.77		0.11	0.11



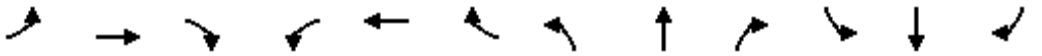
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio		1.27	0.52		0.17	0.62
Control Delay		148.6	5.9		42.4	39.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		148.6	5.9		42.4	39.3
LOS		F	A		D	D
Approach Delay		148.6	5.9		39.9	
Approach LOS		F	A		D	
90th %ile Green (s)	74.9	74.9	74.9		17.1	17.1
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	78.6	78.6	78.6		13.4	13.4
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	81.1	81.1	81.1		10.9	10.9
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	83.6	83.6	83.6		8.4	8.4
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	85.0	85.0	85.0		7.0	7.0
10th %ile Term Code	Coord	Coord	Coord		Min	Min
Queue Length 50th (m)		~298.8	47.5		6.3	15.1
Queue Length 95th (m)		#405.0	79.0		14.3	32.1
Internal Link Dist (m)		302.4	791.2		118.8	
Turn Bay Length (m)						
Base Capacity (vph)		913	2757		434	396
Starvation Cap Reductn		0	0		0	0
Spillback Cap Reductn		0	0		0	0
Storage Cap Reductn		0	0		0	0
Reduced v/c Ratio		1.27	0.52		0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 22.5 (21%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay: 67.8		Intersection LOS: E	
Intersection Capacity Utilization 120.9%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Splits and Phases: 2: Bloor St. & Old Mill Trail

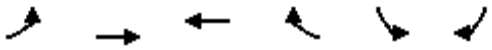


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	786	205	354	802	24	398	0	474	25	19	10
Future Volume (vph)	5	786	205	354	802	24	398	0	474	25	19	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	41.8		33.2	52.1		0.0	0.0		0.0	39.6		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	24.7			13.1			7.6			23.8		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.93	0.96			0.99					0.73		
Frt		0.969			0.996				0.850		0.948	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1788	0	1825	3575	0	1825	0	1633	1755	1821	0
Flt Permitted	0.317			0.088			0.950			0.950		
Satd. Flow (perm)	569	1788	0	169	3575	0	1825	0	1633	1286	1821	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					4				119		11	
Link Speed (k/h)		50			48			48			30	
Link Distance (m)		815.2			70.9			102.2			164.4	
Travel Time (s)		58.7			5.3			7.7			19.7	
Confl. Peds. (#/hr)	121		92	92		121			34	34		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	5	854	223	385	872	26	433	0	515	27	21	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1077	0	385	898	0	433	0	515	27	32	0
Turn Type	Perm	NA		pm+pt	NA		Prot		pt+ov	Perm	NA	
Protected Phases		2		1	6		7		1 7		8	
Permitted Phases	2			6						8		
Detector Phase	2	2		1	6		7		1 7	8	8	
Switch Phase												
Minimum Initial (s)	29.0	29.0		6.0	29.0		28.0			7.0	7.0	
Minimum Split (s)	37.0	37.0		11.0	37.0		33.0			14.0	14.0	
Total Split (s)	50.0	50.0		13.0	63.0		33.0			14.0	14.0	
Total Split (%)	45.5%	45.5%		11.8%	57.3%		30.0%			12.7%	12.7%	
Maximum Green (s)	42.0	42.0		8.0	55.0		28.0			7.0	7.0	
Yellow Time (s)	4.0	4.0		3.0	4.0		3.0			4.0	4.0	
All-Red Time (s)	4.0	4.0		2.0	4.0		2.0			3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0	0.0	
Total Lost Time (s)	8.0	8.0		5.0	8.0		5.0			7.0	7.0	
Lead/Lag	Lag	Lag		Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max		None			None	None	
Walk Time (s)	7.0	7.0			7.0		7.0					
Flash Dont Walk (s)	22.0	22.0			22.0		21.0					
Pedestrian Calls (#/hr)	0	0			0		0					
Act Effct Green (s)	42.0	42.0		60.8	57.8		28.0		39.8	7.0	7.0	
Actuated g/C Ratio	0.38	0.38		0.55	0.53		0.25		0.36	0.06	0.06	
v/c Ratio	0.02	1.58		1.51	0.48		0.93		0.77	0.33	0.25	

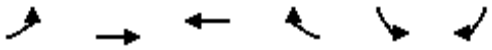
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	21.8	295.2		272.6	18.6		69.1		26.1	60.8	41.4	
Queue Delay	0.0	1.1		0.0	0.7		0.0		0.1	0.0	0.0	
Total Delay	21.8	296.3		272.6	19.3		69.1		26.2	60.8	41.4	
LOS	C	F		F	B		E		C	E	D	
Approach Delay		295.0			95.3			45.8			50.3	
Approach LOS		F			F			D			D	
90th %ile Green (s)	42.0	42.0		8.0	55.0		28.0			7.0	7.0	
90th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
70th %ile Green (s)	42.0	42.0		8.0	55.0		28.0			7.0	7.0	
70th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
50th %ile Green (s)	42.0	42.0		8.0	55.0		28.0			7.0	7.0	
50th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
30th %ile Green (s)	42.0	42.0		8.0	55.0		28.0			7.0	7.0	
30th %ile Term Code	Coord	Coord		Max	Coord		Max			Max	Max	
10th %ile Green (s)	42.0	42.0		22.0	69.0		28.0			0.0	0.0	
10th %ile Term Code	Coord	Coord		Max	Coord		Max			Skip	Skip	
Queue Length 50th (m)	0.7	~329.4		~109.1	65.8		91.2		57.7	5.7	4.4	
Queue Length 95th (m)	3.1	#405.5		m#167.2	82.7		#149.4		#110.3	14.7	14.0	
Internal Link Dist (m)		791.2			46.9			78.2			140.4	
Turn Bay Length (m)	41.8			52.1						39.6		
Base Capacity (vph)	217	682		255	1880		464		666	81	126	
Starvation Cap Reductn	0	0		0	587		0		0	0	0	
Spillback Cap Reductn	0	98		0	0		0		6	0	0	
Storage Cap Reductn	0	0		0	0		0		0	0	0	
Reduced v/c Ratio	0.02	1.84		1.51	0.69		0.93		0.78	0.33	0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay: 144.7		Intersection LOS: F	
Intersection Capacity Utilization 117.5%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: S Kingsway/Riverview Gardens & Bloor St.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	502	632	822	155	179	486
Future Volume (vph)	502	632	822	155	179	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	26.5			20.7	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	18.3				7.6	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Ped Bike Factor				0.57	0.72	
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1738	1883	3614	1317	1755	1617
Flt Permitted	0.108				0.950	
Satd. Flow (perm)	198	1883	3614	751	1269	1617
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				62		483
Link Speed (k/h)		50	50		40	
Link Distance (m)		68.0	334.6		180.8	
Travel Time (s)		4.9	24.1		16.3	
Confl. Peds. (#/hr)	152			152	131	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	1%	24%	4%	1%
Adj. Flow (vph)	546	687	893	168	195	528
Shared Lane Traffic (%)						
Lane Group Flow (vph)	546	687	893	168	195	528
Turn Type	pm+pt	NA	NA	Perm	Prot	Over
Protected Phases	5	2	6		8	5
Permitted Phases	2			6		
Detector Phase	5	2	6	6	8	5
Switch Phase						
Minimum Initial (s)	6.0	20.0	20.0	20.0	26.0	6.0
Minimum Split (s)	30.0	26.0	26.0	26.0	31.0	30.0
Total Split (s)	40.0	79.0	39.0	39.0	31.0	40.0
Total Split (%)	36.4%	71.8%	35.5%	35.5%	28.2%	36.4%
Maximum Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	5.0	4.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	None	None	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	19.0	13.0	13.0	13.0	19.0	19.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	75.0	73.0	33.0	33.0	26.0	36.0
Actuated g/C Ratio	0.68	0.66	0.30	0.30	0.24	0.33
v/c Ratio	0.85	0.55	0.82	0.63	0.47	0.62



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Control Delay	40.0	11.6	35.3	23.9	40.5	7.5
Queue Delay	4.5	3.6	0.0	0.0	0.0	0.0
Total Delay	44.5	15.2	35.3	23.9	40.5	7.5
LOS	D	B	D	C	D	A
Approach Delay		28.2	33.5		16.4	
Approach LOS		C	C		B	
90th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
90th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
70th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
70th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
50th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
50th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
30th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
30th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
10th %ile Green (s)	36.0	73.0	33.0	33.0	26.0	36.0
10th %ile Term Code	MaxR	Coord	Coord	Coord	MaxR	MaxR
Queue Length 50th (m)	89.5	68.2	89.6	14.5	36.2	6.7
Queue Length 95th (m)	m#144.7	m94.8	112.4	m29.7	57.9	35.5
Internal Link Dist (m)		44.0	310.6		156.8	
Turn Bay Length (m)	26.5			20.7		
Base Capacity (vph)	639	1249	1084	268	414	854
Starvation Cap Reductn	50	457	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	0.93	0.87	0.82	0.63	0.47	0.62

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 27.2		Intersection LOS: C	
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

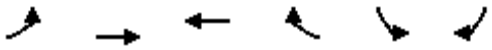
Splits and Phases: 4: Bloor St. & Jane St.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	823	133	108	734	30	102	117	97	34	129	22
Future Volume (vph)	24	823	133	108	734	30	102	117	97	34	129	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.3		0.0	28.3		0.0	15.5		0.0	15.2		0.0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (m)	36.6			36.9			9.4			13.1		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.87	0.93			0.97		0.88	0.78		0.81	0.96	
Frt		0.979			0.995			0.932			0.978	
Flt Protected	0.950				0.994		0.950			0.950		
Satd. Flow (prot)	1825	1743	0	0	3517	0	1789	1405	0	1825	1811	0
Flt Permitted	0.266				0.523		0.592			0.462		
Satd. Flow (perm)	442	1743	0	0	1851	0	986	1405	0	716	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			7			35			7	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		334.6			119.3			132.2			162.7	
Travel Time (s)		24.1			8.6			11.9			14.6	
Confl. Peds. (#/hr)	428		161	161		428	120		144	144		120
Confl. Bikes (#/hr)	428		161	161		428	120		144	144		120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	26	895	145	117	798	33	111	127	105	37	140	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	1040	0	0	948	0	111	232	0	37	164	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	19.0	19.0		19.0	19.0		26.0	26.0		26.0	26.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		32.0	32.0		32.0	32.0	
Total Split (s)	78.0	78.0		78.0	78.0		32.0	32.0		32.0	32.0	
Total Split (%)	70.9%	70.9%		70.9%	70.9%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		19.0	19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	72.0	72.0			72.0		26.0	26.0		26.0	26.0	
Actuated g/C Ratio	0.65	0.65			0.65		0.24	0.24		0.24	0.24	

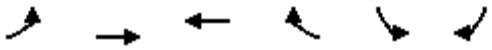
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.09	0.91			0.89dl		0.48	0.65		0.22	0.38	
Control Delay	6.3	24.8			19.2		44.1	41.5		37.9	36.7	
Queue Delay	0.0	0.0			4.1		0.0	0.0		0.0	0.0	
Total Delay	6.3	24.8			23.3		44.1	41.5		37.9	36.7	
LOS	A	C			C		D	D		D	D	
Approach Delay		24.3			23.3			42.4			36.9	
Approach LOS		C			C			D			D	
90th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	72.0	72.0		72.0	72.0		26.0	26.0		26.0	26.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Queue Length 50th (m)	1.4	193.7			68.4		20.6	38.4		6.4	28.4	
Queue Length 95th (m)	m2.9	#286.5			98.7		38.5	65.1		15.9	47.9	
Internal Link Dist (m)		310.6			95.3			108.2			138.7	
Turn Bay Length (m)	25.3						15.5			15.2		
Base Capacity (vph)	289	1146			1213		233	358		169	433	
Starvation Cap Reductn	0	0			190		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	0.91			0.93		0.48	0.65		0.22	0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 140.4%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.			

Splits and Phases: 5: Windermere Ave & Bloor St.



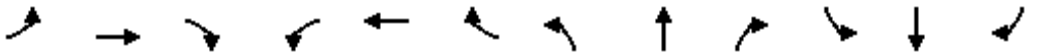
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	673	1056	46	29	90
Future Volume (vph)	33	673	1056	46	29	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor		1.00	0.97		0.88	
Frt			0.994		0.898	
Flt Protected		0.998			0.988	
Satd. Flow (prot)	0	1662	3449	0	1590	0
Flt Permitted		0.901			0.988	
Satd. Flow (perm)	0	1495	3449	0	1496	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			9		29	
Link Speed (k/h)		50	50		40	
Link Distance (m)		119.3	117.8		151.3	
Travel Time (s)		8.6	8.5		13.6	
Confl. Peds. (#/hr)	361			361	96	31
Confl. Bikes (#/hr)	361			361	96	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	2%	4%	0%	0%
Parking (#/hr)		0				
Adj. Flow (vph)	36	732	1148	50	32	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	768	1198	0	130	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Detector Phase	2	2	6		4	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		22.0	
Minimum Split (s)	24.0	24.0	23.0		27.0	
Total Split (s)	83.0	83.0	83.0		27.0	
Total Split (%)	75.5%	75.5%	75.5%		24.5%	
Maximum Green (s)	77.0	77.0	77.0		22.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		6.0	6.0		5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	10.0		15.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)		47.2	47.2		22.9	
Actuated g/C Ratio		0.58	0.58		0.28	
v/c Ratio		0.89	0.60		0.28	
Control Delay		27.2	11.5		24.6	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Delay		0.3	0.0		0.0	
Total Delay		27.5	11.5		24.6	
LOS		C	B		C	
Approach Delay		27.5	11.5		24.6	
Approach LOS		C	B		C	
90th %ile Green (s)	75.9	75.9	75.9		22.0	
90th %ile Term Code	Gap	Gap	Hold		Max	
70th %ile Green (s)	55.7	55.7	55.7		22.0	
70th %ile Term Code	Gap	Gap	Hold		Max	
50th %ile Green (s)	45.2	45.2	45.2		22.0	
50th %ile Term Code	Gap	Gap	Hold		Max	
30th %ile Green (s)	37.7	37.7	37.7		22.0	
30th %ile Term Code	Gap	Gap	Hold		Max	
10th %ile Green (s)	28.1	28.1	28.1		22.0	
10th %ile Term Code	Gap	Gap	Hold		Max	
Queue Length 50th (m)		90.1	54.7		11.4	
Queue Length 95th (m)		139.0	67.9		36.1	
Internal Link Dist (m)		95.3	93.8		127.3	
Turn Bay Length (m)						
Base Capacity (vph)		1363	3146		467	
Starvation Cap Reductn		176	0		0	
Spillback Cap Reductn		0	0		0	
Storage Cap Reductn		0	0		0	
Reduced v/c Ratio		0.65	0.38		0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 81.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 18.2		Intersection LOS: B	
Intersection Capacity Utilization 89.8%		ICU Level of Service E	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 108.9			
70th %ile Actuated Cycle: 88.7			
50th %ile Actuated Cycle: 78.2			
30th %ile Actuated Cycle: 70.7			
10th %ile Actuated Cycle: 61.1			

Splits and Phases: 6: Bloor St. & Durie St. N

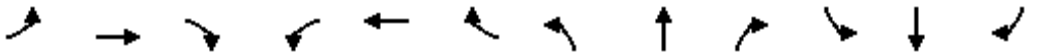


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	574	44	38	696	159	70	232	91	72	98	114
Future Volume (vph)	104	574	44	38	696	159	70	232	91	72	98	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	24.4		0.0	18.9		0.0	9.1		0.0	11.0		0.0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (m)	27.4			27.4			15.2			14.6		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.87	0.95			0.85		0.80	0.79		0.74	0.79	
Frt		0.989			0.973			0.958			0.919	
Flt Protected	0.950				0.998		0.950			0.950		
Satd. Flow (prot)	1825	1573	0	0	2859	0	1825	1424	0	1706	1339	0
Flt Permitted	0.246				0.882		0.504			0.320		
Satd. Flow (perm)	412	1573	0	0	2526	0	777	1424	0	425	1339	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			20			19			9	
Link Speed (k/h)		50			50			30			40	
Link Distance (m)		115.7			188.8			215.2			259.0	
Travel Time (s)		8.3			13.6			25.8			23.3	
Confl. Peds. (#/hr)	596		290	290		596	231		354	354		231
Confl. Bikes (#/hr)	596		290	290		596	231		354	354		231
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	0%	32%	3%	12%	0%	3%	0%	7%	3%	6%
Parking (#/hr)		0										
Adj. Flow (vph)	113	624	48	41	757	173	76	252	99	78	107	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	113	672	0	0	971	0	76	351	0	78	231	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	22.0	22.0		22.0	22.0		25.0	25.0		25.0	25.0	
Minimum Split (s)	28.0	28.0		28.0	28.0		31.0	31.0		31.0	31.0	
Total Split (s)	68.0	68.0		68.0	68.0		42.0	42.0		42.0	42.0	
Total Split (%)	61.8%	61.8%		61.8%	61.8%		38.2%	38.2%		38.2%	38.2%	
Maximum Green (s)	62.0	62.0		62.0	62.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	66.8	66.8			66.8		31.2	31.2		31.2	31.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.61	0.61			0.61		0.28	0.28		0.28	0.28	
v/c Ratio	0.45	0.70			0.63		0.35	0.84		0.65	0.60	
Control Delay	20.7	20.8			12.1		34.7	52.9		59.1	38.8	
Queue Delay	0.0	0.1			0.0		0.0	0.0		0.0	0.0	
Total Delay	20.7	21.0			12.1		34.7	52.9		59.1	38.8	
LOS	C	C			B		C	D		E	D	
Approach Delay		20.9			12.1			49.7			43.9	
Approach LOS		C			B			D			D	
90th %ile Green (s)	62.0	62.0		62.0	62.0		36.0	36.0		36.0	36.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	62.0	62.0		62.0	62.0		36.0	36.0		36.0	36.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Hold	Hold	
50th %ile Green (s)	65.9	65.9		65.9	65.9		32.1	32.1		32.1	32.1	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	70.9	70.9		70.9	70.9		27.1	27.1		27.1	27.1	
30th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	73.0	73.0		73.0	73.0		25.0	25.0		25.0	25.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)	12.5	93.4			37.4		12.8	66.6		14.5	40.6	
Queue Length 95th (m)	31.9	152.4			45.9		25.0	97.7		#33.8	62.8	
Internal Link Dist (m)		91.7			164.8			191.2			235.0	
Turn Bay Length (m)	24.4						9.1			11.0		
Base Capacity (vph)	250	957			1541		254	478		139	444	
Starvation Cap Reductn	0	23			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	0.45	0.72			0.63		0.30	0.73		0.56	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 25.3		Intersection LOS: C	
Intersection Capacity Utilization 122.4%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 7: Bloor St. & Runnymede Rd

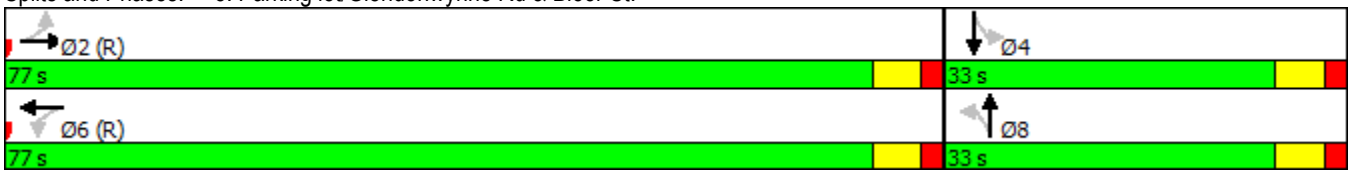


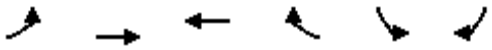
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	547	44	5	725	113	32	14	31	68	4	125
Future Volume (vph)	28	547	44	5	725	113	32	14	31	68	4	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.95			0.92			0.86			0.77	
Frt		0.990			0.980			0.945			0.914	
Flt Protected		0.998						0.980			0.983	
Satd. Flow (prot)	0	1611	0	0	3200	0	0	1615	0	0	1386	0
Flt Permitted		0.934			0.952			0.769			0.865	
Satd. Flow (perm)	0	1500	0	0	3044	0	0	1199	0	0	1169	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			32			29			76	
Link Speed (k/h)		50			50			48			40	
Link Distance (m)		188.8			181.4			31.3			313.4	
Travel Time (s)		13.6			13.1			2.3			28.2	
Confl. Peds. (#/hr)	225		163	163		225	141		54	54		141
Confl. Bikes (#/hr)	225		163	163		225	141		54	54		141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Parking (#/hr)		0										
Adj. Flow (vph)	30	595	48	5	788	123	35	15	34	74	4	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	673	0	0	916	0	0	84	0	0	214	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	27.0	27.0		27.0	27.0		21.0	21.0		21.0	21.0	
Minimum Split (s)	33.0	33.0		33.0	33.0		27.0	27.0		27.0	27.0	
Total Split (s)	77.0	77.0		77.0	77.0		33.0	33.0		33.0	33.0	
Total Split (%)	70.0%	70.0%		70.0%	70.0%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	10.0	10.0		10.0	10.0		14.0	14.0		14.0	14.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		75.3			75.3			22.7			22.7	
Actuated g/C Ratio		0.68			0.68			0.21			0.21	
v/c Ratio		0.65			0.44			0.31			0.71	
Control Delay		7.6			8.5			27.7			39.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.3			0.0			0.0			0.0	
Total Delay		7.8			8.5			27.7			39.4	
LOS		A			A			C			D	
Approach Delay		7.8			8.5			27.7			39.4	
Approach LOS		A			A			C			D	
90th %ile Green (s)	71.0	71.0		71.0	71.0		27.0	27.0		27.0	27.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	74.6	74.6		74.6	74.6		23.4	23.4		23.4	23.4	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
30th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
10th %ile Green (s)	77.0	77.0		77.0	77.0		21.0	21.0		21.0	21.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Min	Min		Min	Min	
Queue Length 50th (m)		37.9			37.6			10.1			28.4	
Queue Length 95th (m)		48.3			59.4			22.7			52.4	
Internal Link Dist (m)		164.8			157.4			7.3			289.4	
Turn Bay Length (m)												
Base Capacity (vph)		1029			2094			316			344	
Starvation Cap Reductn		59			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.69			0.44			0.27			0.62	

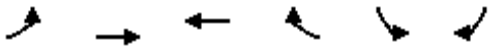
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Parking lot/Glendonwynne Rd & Bloor St.





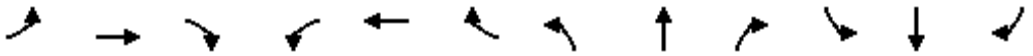
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	655	1086	63	44	46
Future Volume (vph)	47	655	1086	63	44	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	11.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	25.9				7.6	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor			0.96		0.95	
Frt			0.992		0.931	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1825	1695	3273	0	1667	0
Flt Permitted	0.186				0.976	
Satd. Flow (perm)	357	1695	3273	0	1635	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			12		43	
Link Speed (k/h)		50	50		40	
Link Distance (m)		156.3	400.4		167.2	
Travel Time (s)		11.3	28.8		15.0	
Confl. Peds. (#/hr)	186			186	15	22
Confl. Bikes (#/hr)	186			186	15	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	1%	3%	0%	2%
Parking (#/hr)		0	0			
Adj. Flow (vph)	51	712	1180	68	48	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	712	1248	0	98	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		8	
Permitted Phases	2					
Detector Phase	2	2	6		8	
Switch Phase						
Minimum Initial (s)	17.0	17.0	17.0		21.0	
Minimum Split (s)	23.0	23.0	23.0		27.0	
Total Split (s)	82.0	82.0	82.0		28.0	
Total Split (%)	74.5%	74.5%	74.5%		25.5%	
Maximum Green (s)	76.0	76.0	76.0		22.0	
Yellow Time (s)	4.0	4.0	4.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		3.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	C-Max		Min	
Walk Time (s)	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	10.0	10.0	1.0		14.0	
Pedestrian Calls (#/hr)	0	0	0		0	
Act Effct Green (s)	77.0	77.0	77.0		21.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Actuated g/C Ratio	0.70	0.70	0.70		0.19	
v/c Ratio	0.20	0.60	0.54		0.28	
Control Delay	8.2	11.2	2.4		24.8	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	8.2	11.2	2.4		24.8	
LOS	A	B	A		C	
Approach Delay		11.0	2.4		24.8	
Approach LOS		B	A		C	
90th %ile Green (s)	77.0	77.0	77.0		21.0	
90th %ile Term Code	Coord	Coord	Coord		Min	
70th %ile Green (s)	77.0	77.0	77.0		21.0	
70th %ile Term Code	Coord	Coord	Coord		Min	
50th %ile Green (s)	77.0	77.0	77.0		21.0	
50th %ile Term Code	Coord	Coord	Coord		Min	
30th %ile Green (s)	77.0	77.0	77.0		21.0	
30th %ile Term Code	Coord	Coord	Coord		Min	
10th %ile Green (s)	77.0	77.0	77.0		21.0	
10th %ile Term Code	Coord	Coord	Coord		Min	
Queue Length 50th (m)	3.4	70.1	15.2		10.0	
Queue Length 95th (m)	8.6	101.3	m16.3		24.6	
Internal Link Dist (m)		132.3	376.4		143.2	
Turn Bay Length (m)	11.0					
Base Capacity (vph)	249	1186	2294		367	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.20	0.60	0.54		0.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 6.6		Intersection LOS: A	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 9: Bloor St. & Clendenan Ave



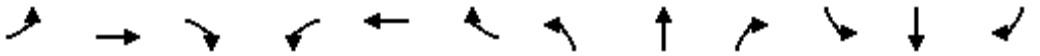
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	824	55	59	1210	189	75	68	84	78	71	64
Future Volume (vph)	78	824	55	59	1210	189	75	68	84	78	71	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	25.0		0.0	26.2		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	57.0			43.3			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.96			0.88			0.93	
Frt		0.991			0.981			0.950			0.959	
Flt Protected	0.950				0.998			0.984			0.982	
Satd. Flow (prot)	1825	1788	0	0	3386	0	0	1599	0	0	1748	0
Flt Permitted	0.105				0.725			0.739			0.696	
Satd. Flow (perm)	202	1788	0	0	2460	0	0	1187	0	0	1198	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			33			24			18	
Link Speed (k/h)		50			50			20			40	
Link Distance (m)		400.4			212.3			101.1			229.4	
Travel Time (s)		28.8			15.3			18.2			20.6	
Confl. Peds. (#/hr)	95		89	89		95	44		74	74		44
Confl. Bikes (#/hr)	95		89	89		95	44		74	74		44
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	85	896	60	64	1315	205	82	74	91	85	77	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	956	0	0	1584	0	0	247	0	0	232	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	23.0	23.0		23.0	23.0		7.0	7.0		24.0	24.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		30.0	30.0		30.0	30.0	
Total Split (s)	80.0	80.0		80.0	80.0		30.0	30.0		30.0	30.0	
Total Split (%)	72.7%	72.7%		72.7%	72.7%		27.3%	27.3%		27.3%	27.3%	
Maximum Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		17.0	17.0		17.0	17.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	74.0	74.0			74.0			24.0			24.0	
Actuated g/C Ratio	0.67	0.67			0.67			0.22			0.22	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.63	0.79			0.95			0.89			0.84	
Control Delay	37.3	21.5			30.2			71.2			65.1	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	37.3	21.5			30.2			71.2			65.1	
LOS	D	C			C			E			E	
Approach Delay		22.8			30.2			71.2			65.1	
Approach LOS		C			C			E			E	
90th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	74.0	74.0		74.0	74.0		24.0	24.0		24.0	24.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Queue Length 50th (m)	10.6	131.9			144.8			47.2			44.6	
Queue Length 95th (m)	m#34.4	183.5			#218.3			#93.5			#86.9	
Internal Link Dist (m)		376.4			188.3			77.1			205.4	
Turn Bay Length (m)	25.0											
Base Capacity (vph)	135	1205			1665			277			275	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.63	0.79			0.95			0.89			0.84	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 33.6 Intersection LOS: C
Intersection Capacity Utilization 114.3% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Colborn Lodge Dr/High Park Ave & Bloor St.



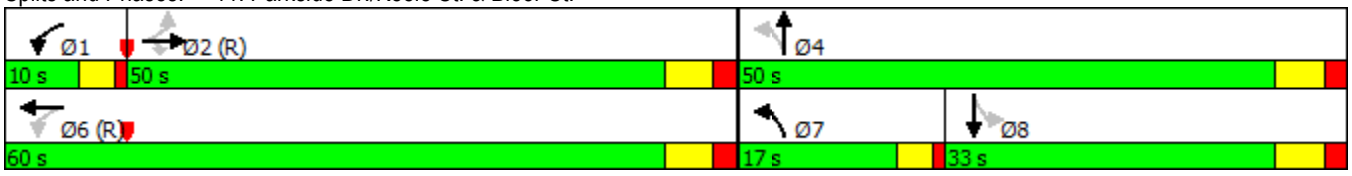
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	472	206	186	741	92	289	557	171	138	534	92
Future Volume (vph)	111	472	206	186	741	92	289	557	171	138	534	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	21.3		18.9	23.8		0.0	14.9		0.0	24.4		0.0
Storage Lanes	1		1	0		0	1		0	1		0
Taper Length (m)	42.7			58.2			44.5			24.7		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.95		0.87		0.97		0.99	0.88		0.87	0.99	
Frt			0.850		0.986			0.965			0.978	
Flt Protected	0.950				0.991		0.950			0.950		
Satd. Flow (prot)	1825	1921	1617	0	3420	0	1825	3050	0	1807	3474	0
Flt Permitted	0.158				0.640		0.157			0.352		
Satd. Flow (perm)	290	1921	1413	0	2199	0	298	3050	0	584	3474	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)			109					44			17	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		227.3			249.0			249.1			226.0	
Travel Time (s)		16.4			17.9			17.9			16.3	
Confl. Peds. (#/hr)	220		68	68		220	42		189	189		42
Confl. Bikes (#/hr)	220		68	68		220	42		189	189		42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	1%	3%	0%	2%	1%	1%	1%	3%
Adj. Flow (vph)	121	513	224	202	805	100	314	605	186	150	580	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	513	224	0	1107	0	314	791	0	150	680	0
Turn Type	Perm	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6			4			8		
Detector Phase	2	2	2	1	6		7	4		8	8	
Switch Phase												
Minimum Initial (s)	27.0	27.0	27.0	6.0	27.0		6.0	27.0		27.0	27.0	
Minimum Split (s)	33.0	33.0	33.0	10.0	45.0		10.0	33.0		33.0	33.0	
Total Split (s)	50.0	50.0	50.0	10.0	60.0		17.0	50.0		33.0	33.0	
Total Split (%)	45.5%	45.5%	45.5%	9.1%	54.5%		15.5%	45.5%		30.0%	30.0%	
Maximum Green (s)	44.0	44.0	44.0	6.0	54.0		13.0	44.0		27.0	27.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0		4.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	20.0	20.0	20.0		20.0			20.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0	0		0			0		0	0	
Act Effct Green (s)	54.0	54.0	54.0		54.0		46.0	44.0		27.0	27.0	
Actuated g/C Ratio	0.49	0.49	0.49		0.49		0.42	0.40		0.25	0.25	

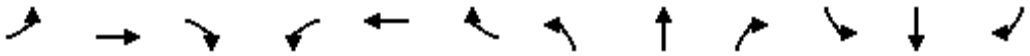
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.85	0.54	0.30		1.03		1.03	0.63		1.05	0.79	
Control Delay	73.2	22.2	9.4		62.9		86.0	27.7		131.0	45.3	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay	73.2	22.2	9.4		62.9		86.0	27.7		131.0	45.3	
LOS	E	C	A		E		F	C		F	D	
Approach Delay		26.0			62.9			44.3			60.8	
Approach LOS		C			E			D			E	
90th %ile Green (s)	54.0	54.0	54.0	0.0	54.0		13.0	44.0		27.0	27.0	
90th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
70th %ile Green (s)	54.0	54.0	54.0	0.0	54.0		13.0	44.0		27.0	27.0	
70th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
50th %ile Green (s)	54.0	54.0	54.0	0.0	54.0		13.0	44.0		27.0	27.0	
50th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
30th %ile Green (s)	54.0	54.0	54.0	0.0	54.0		13.0	44.0		27.0	27.0	
30th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
10th %ile Green (s)	54.0	54.0	54.0	0.0	54.0		13.0	44.0		27.0	27.0	
10th %ile Term Code	Coord	Coord	Coord	Skip	Coord		Max	Hold		Max	Max	
Queue Length 50th (m)	21.9	73.9	13.2		~133.6		~51.6	66.8		~35.1	70.4	
Queue Length 95th (m)	#59.0	104.6	28.5		#174.0		#105.9	87.3		#74.9	91.6	
Internal Link Dist (m)		203.3			225.0			225.1			202.0	
Turn Bay Length (m)	21.3		18.9				14.9			24.4		
Base Capacity (vph)	142	943	749		1079		305	1246		143	865	
Starvation Cap Reductn	0	0	0		0		0	0		0	0	
Spillback Cap Reductn	0	0	0		0		0	0		0	0	
Storage Cap Reductn	0	0	0		0		0	0		0	0	
Reduced v/c Ratio	0.85	0.54	0.30		1.03		1.03	0.63		1.05	0.79	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 17 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 49.1 Intersection LOS: D
Intersection Capacity Utilization 119.5% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 11: Parkside Dr./Keele St. & Bloor St.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Future Volume (vph)	17	676	31	4	920	10	25	5	16	15	5	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			0.96			0.93	
Frt		0.994			0.998			0.953			0.913	
Flt Protected		0.999						0.973			0.987	
Satd. Flow (prot)	0	1712	0	0	3217	0	0	1478	0	0	1581	0
Flt Permitted		0.966			0.953			0.549			0.891	
Satd. Flow (perm)	0	1654	0	0	3066	0	0	834	0	0	1408	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			1			17			38	
Link Speed (k/h)		50			50			40			30	
Link Distance (m)		249.0			155.2			169.9			91.8	
Travel Time (s)		17.9			11.2			15.3			11.0	
Confl. Peds. (#/hr)	74		39	39		74	19		26	26		19
Confl. Bikes (#/hr)	74		39	39		74	19		26	26		19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	31%	10%	16%	0%	13%	11%	16%	50%	6%	7%	0%	2%
Adj. Flow (vph)	18	735	34	4	1000	11	27	5	17	16	5	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	787	0	0	1015	0	0	49	0	0	59	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			3			4	
Permitted Phases	2			6			3			4		
Detector Phase	2	2		6	6		3	3		4	4	
Switch Phase												
Minimum Initial (s)	17.0	17.0		17.0	17.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	26.0	26.0		25.0	25.0		29.0	29.0		18.0	18.0	
Total Split (s)	42.0	42.0		42.0	42.0		30.0	30.0		18.0	18.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		33.3%	33.3%		20.0%	20.0%	
Maximum Green (s)	35.0	35.0		35.0	35.0		23.0	23.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		60.9			60.9			9.9			8.0	
Actuated g/C Ratio		0.68			0.68			0.11			0.09	
v/c Ratio		0.70			0.49			0.46			0.37	
Control Delay		19.8			12.2			40.1			25.6	
Queue Delay		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay		19.8			12.2			40.1			25.6	
LOS		B			B			D			C	
Approach Delay		19.8			12.2			40.1			25.6	
Approach LOS		B			B			D			C	
90th %ile Green (s)	43.1	43.1		43.1	43.1		15.2	15.2		10.7	10.7	
90th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
70th %ile Green (s)	49.1	49.1		49.1	49.1		11.5	11.5		8.4	8.4	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Gap	Gap	
50th %ile Green (s)	53.1	53.1		53.1	53.1		8.9	8.9		7.0	7.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Min	Min	
30th %ile Green (s)	69.0	69.0		69.0	69.0		0.0	0.0		7.0	7.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Min	Min	
10th %ile Green (s)	83.0	83.0		83.0	83.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (m)		97.5			52.1			5.3			3.5	
Queue Length 95th (m)		#209.8			90.8			15.3			14.4	
Internal Link Dist (m)		225.0			131.2			145.9			67.8	
Turn Bay Length (m)												
Base Capacity (vph)		1119			2073			225			205	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.70			0.49			0.22			0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 30 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 16.4		Intersection LOS: B	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 12: Indian Rd & Bloor St.