

Traffic Control Signals - Bathurst Street and Wellington Street West

Date: October 16, 2019
To: Toronto and East York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 10, Spadina-Fort York

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Bathurst Street, City Council approval of this report is required.

Transportation Services is requesting approval from City Council to install traffic control signals at the intersection of Bathurst Street and Wellington Street West. This installation is justified based on the technical requirements and will provide improved safety for pedestrians, cyclists and motorists at this intersection.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services, recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Bathurst Street and Wellington Street West.
2. Subject to approval of and in conjunction with the installation of traffic control signals at Bathurst Street and Wellington Street West:
 - a. City Council rescind the existing parking prohibition in effect at all times on the north side of Wellington Street West, between Bathurst Street and a point 24 metres east.
 - b. City Council prohibit stopping at all times on the north side of Wellington Street West, between Bathurst Street and a point 30.5 metres east.

- c. City Council amend the existing passenger loading zone and related standing prohibition in effect at all times on the north side of Wellington Street West, between a point 24 metres east of Bathurst Street and a point 36 metres further east, to be in effect at all times, between a point 30.5 metres east of Bathurst Street and a point 36 metres further east.
- d. City Council prohibit stopping at all times on the south side of Wellington Street West, between Bathurst Street and a point 15 metres west.
- e. City Council amend the existing maximum one-hour parking regulation in effect from 8:00 a.m. to 4:00 p.m., on the south side of Wellington Street West, between Bathurst Street and a point 55 metres west, to be in effect between a point 15 metres west of Bathurst Street and a point 40 metres further west.

FINANCIAL IMPACT

The estimated cost of installing traffic control signals at the intersection of Bathurst Street and Wellington Street West is \$200,000.00. This installation would be subject to the availability of funding and competing priorities.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by Councillor Joe Cressy and local residents to investigate the feasibility of installing traffic control signal at the intersection of Bathurst Street and Wellington Street West.

Existing Conditions

Bathurst Street, between King Street West and Front Street West, is a north-south, four-lane major arterial roadway with a pavement width of about 18 metres. It carries a daily two-way traffic volume of approximately 25,000 vehicles and has a maximum speed limit of 50 km/h. There are streetcar tracks on Bathurst Street that operate in a shared right-of-way with general traffic. Transit service is provided by the “511-Bathurst” streetcar. Transit stops are located at King Street West and Niagara Street.

Wellington Street West is classified as a collector roadway and operates one-way westbound. It has a posted speed limit of 40 km/h, a daily traffic volume of approximately 5,200 vehicles and sidewalks on both sides. There is a bike lane on the north side of Wellington Street West, from Bathurst Street to Niagara Street.

Adjacent traffic control signals are located about 86 metres to the south at Niagara Street and about 147 metres to the north at King Street West.

Collision Review

Collision statistics provided by Toronto Police Service for the three-year period ending December 31, 2018 disclosed that 46 collisions had occurred at the intersection of Bathurst Street and Wellington Street West. Of these 46 collisions, 16 were of the type considered to be potentially preventable by the installation of traffic control signals.

Traffic Control Signal Review

Based on the eight-hour vehicular and pedestrian traffic counts, and the collision history, the technical justifications for the installation of traffic control signals are satisfied to the following extent:

Justification 1: Minimum Vehicular Volume	86 percent
Justification 2: Delay to Cross Traffic	100 percent
Justification 3: Collision Hazard	100 percent

To meet the technical requirements for the installation of traffic control signals, one of the Minimum Vehicular Volume or Delay to Cross Traffic justifications must be 100 percent satisfied, or any two of the three justifications must be at least 80 percent satisfied. Based on the above results, the installation of traffic control signals are justified at the intersection of Bathurst Street and Wellington Street West.

In addition to the traffic control signal warrant evaluation, an audit was also conducted to assess the operational and physical suitability for the traffic control signal at this location. The minimum recommended spacing between adjacent traffic control devices is 200 metres. This is often reduced in the downtown area out of necessity (intersections are in closer proximity to one another) which may lead to traffic spill-over, congestion and delays due to lack of storage space available between the traffic control signals. Additionally, this installation may increase traffic infiltration on Wellington Street West, west of Bathurst Street as it facilitates the movement of vehicles across Bathurst Street. In this regard, further studies may need to be conducted by Transportation Services post-installation to determine impacts and possible mitigating measures, including restricting westbound movements during certain times and days.

Parking amendments are also required in conjunction with this traffic control signal installation. Parking is typically prohibited within 30.5 metres of an intersection controlled by a traffic control signal. The following on-street parking spaces will be lost on Bathurst Street and Wellington Street West as a result of the traffic control signal implementation:

- two pay-and-display parking spaces on the east side of Bathurst Street, north of Wellington Street West.

- one pay-and-display parking space on the north side of Wellington Street West, east of Bathurst Street. The existing passenger loading zone fronting the Thompson Hotel will need to be shifted further east, thereby eliminating one pay and display parking space on this section of roadway. Of note, the actual length of the passenger loading zone will not change with this parking amendment.
- one on-street permit parking space on the south side of Wellington Street West, west of Bathurst Street. On-street parking is in high demand on this section Wellington Street West; therefore, parking will be prohibited a distance of 15 metres from the corner instead of 30.5 metres. This portion of Wellington Street West operates one-way westbound, with traffic travelling away from Bathurst Street. In this regard, traffic operations will not be impacted with the implementation of this corner parking prohibition.

Of note, Transportation Services is recommending that stopping be prohibited at all times within the corner parking prohibitions on Wellington Street West at Bathurst Street. This will deter parking, provide unobstructed traffic flow and maintain clear corner sightlines.

Although the operational and physical suitability of the traffic control signal is not fully satisfied, it is anticipated that the negative impacts associated with the lack of spacing and traffic infiltration could be mitigated through signal timing coordination and future consideration of the need for turn restrictions at Bathurst Street and Wellington Street West. In addition, the installation of traffic control signals at this intersection will facilitate future enhancements to the existing cycling infrastructure in terms of connectivity and expansion.

The TTC has been informed of this traffic control signal proposal; however, comments have yet to be received.

Councillor Joe Cressy has been advised of the recommendations of this staff report.

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SIGNATURE

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ATTACHMENTS

1. Drawing No. 421G-3548, dated October 2019

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