



**STAFF REPORT
ACTION REQUIRED**

Mid-block Pedestrian Traffic Control Signal – Bathurst Street, North of Niagara Street

Date:	January 16, 2009
To:	Toronto and East York Community Council
From:	Director, Transportation Services Toronto and East York District
Wards:	Trinity-Spadina, Wards 19, 20
Reference Number:	Ts09013te.top.doc

SUMMARY

Transportation Services is requesting authority from City Council to install a mid-block pedestrian traffic control signal on Bathurst Street, between Wellington Street West and Niagara Street.

The installation of a mid-block pedestrian traffic control signal on Bathurst Street, between Wellington Street and Niagara Street will provide a safe and effective crossing area for pedestrians wishing to cross Bathurst Street in the Wellington/Niagara neighbourhood and is recommended.

RECOMMENDATIONS

Transportation Services recommends that City Council:

1. Approve the installation of a mid-block pedestrian traffic control signal on Bathurst Street, at a point approximately 37 metres north of Niagara Street.

Financial Impact

The estimated cost of installing a pedestrian traffic control signal on Bathurst Street, between Wellington Street West and Niagara Street is about \$110,000. Funds in the amount of \$2,450,000 have been allocated in the 2009 Transportation Services Capital Budget for installation of traffic control signals. This work would be subject to competing priorities and available funding.

ISSUE BACKGROUND

Transportation Services was requested by Deputy Mayor Joe Pantalone to investigate and report on the installation of a mid-block traffic control signal on Bathurst Street, between Wellington Street and Niagara Street to enhance crossing safety for pedestrians. Bathurst Street is the boundary street separating Trinity-Spadina Wards 19 and 20. Both Deputy Mayor Pantalone and Councillor Adam Vaughan have been consulted on this proposal.

COMMENTS

Current 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, Wellington Street West and Front Street West.

There are no traffic signals or pedestrian crossing controls along Bathurst Street, between King Street West and Front Street West, a distance of about 340 metres. Wellington Street West intersects Bathurst Street about 140 metres south of King Street West. Wellington Street West is a collector roadway operating one-way westbound with a “Stop” sign at Bathurst Street. Niagara Street intersects Bathurst Street about 75 metres south of Wellington Street West and 125 metres north of Front Street West. Niagara Street is a local roadway operating one-way eastbound with a “Stop” sign at Bathurst Street.

The minimum recommended spacing between adjacent traffic control devices is 200 metres. This is often reduced in the downtown area out of necessity (major intersections in closer proximity to one another) and because traffic typically operates at slower speeds.

Investigation

Transportation Services has undertaken traffic studies on Bathurst Street at the intersections of Bathurst/Wellington and Bathurst/Niagara on two occasions since 2003. The studies considered possible installation of a Pedestrian Crossover (PXO) or Traffic Control Signals.

Crossing Control

Installation of a Pedestrian Crossover is not an appropriate control measure at this location on Bathurst Street. However, installation of traffic control signals may be considered at locations where PXO’s are technically warranted, but their installation is unsuitable or unsafe due to operational conditions. Therefore, the investigation only considered installation of traffic control signals.

Pedestrian volume and delay surveys conducted over a peak eight-hour period recorded about 210 pedestrians crossing Bathurst Street at Wellington Street West and about 90 pedestrians crossing Bathurst Street at Niagara Street. Pedestrians were observed crossing the mid-block section of Bathurst Street, between Wellington Street West and Niagara Street. The higher volume of pedestrians crossing Bathurst Street at Wellington Street West is a consequence of the TTC streetcar stops located nearside to the intersection on both sides of Bathurst Street. The total volume of pedestrians crossing Bathurst Street in the Wellington Street West to Niagara Street section of the street is over 300 pedestrians in the peak eight-hours of the day. Over 90% of the pedestrians crossing at Wellington Street and 40% of the pedestrians crossing at Niagara Street experienced delays at the curb of more than 10 seconds before being able to start crossing Bathurst Street. Some pedestrians also had to stop midway to allow vehicles to pass before continuing to the other side of the street.

The investigation also revealed that 43 collisions were reported over the preceding 3-year period ending August 31, 2008 on Bathurst Street, in the area between and at the intersections of Wellington Street West and Niagara Street. Three of these collisions involved a pedestrian and one involved a cyclist.

Based on an assessment of the technical warrants, the installation of a pedestrian crossing control measure in this area is satisfied to the following extent:

Pedestrian Volume Warrant	100 percent
Pedestrian Delay Warrant	95 percent

To meet the technical requirements both of the warrants should be 100 percent satisfied. Despite this, staff considers the installation warrants for a pedestrian traffic control signal satisfied for the following reasons:

- the collision experience suggests pedestrians and cyclists are at risk;
- the volume of pedestrians can fluctuate to a degree on a day-by-day basis;
- new condominium developments in the area have become occupied since the pedestrian survey was undertaken; and
- on-going residential development in the area will increase pedestrian crossing activity.

Pedestrian Traffic Control Signals

Installation of mid-block pedestrian traffic control signals on Bathurst Street, at a point midway between Wellington Street West and Niagara Street is recommended. This will locate the signal at a point about 37 metres north of Niagara Street. Acceptable spacing between adjacent traffic control signals at King Street West and at Front Street West is maintained. Also, the signal will not promote vehicular traffic infiltration of the adjacent neighbourhoods east and west of Bathurst Street, a concern of both Deputy Mayor Pantalone and Councillor Vaughan. Staff also expects the installation of a mid-block pedestrian traffic control signal will relocate pedestrian crossing activity from the

Bathurst/Wellington and Bathurst/Niagara uncontrolled intersections to the new fully protected crossing location.

The installation of mid-block pedestrian traffic control signals could increase congestion and delay to vehicular traffic on Bathurst Street and will eliminate two metered parking spaces on the east side of Bathurst Street. Some conflict with the operation of a driveway on the east side of Bathurst Street (public parking lot) might occur.

Relocation of the streetcar stops from Wellington Street West to nearside on the northbound and southbound approaches to the pedestrian traffic control signal is necessary. This will encourage transit riders to cross Bathurst Street at the signal and discourage them from crossing at Wellington Street West. The Toronto Transit Commission has agreed in principle to this suggestion. Further discussion between Transportation Services and TTC staff on this matter will finalize the details. To minimize delay to streetcar operations, transit priority will be implemented to assist streetcars in clearing the new traffic control signal.

CONTACT

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SIGNATURE

Andrew Koropeski, P.Eng.
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LIST OF ATTACHMENTS

(1) Drawing No 421F-9531, dated January 2009

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