TORONTO

REPORT FOR ACTION

Traffic Control Signals - Bay Street and Scollard Street

Date: May 31, 2019
To: Toronto and East York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 11, University - Rosedale

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Bay 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 Bay Street and Scollard Street. This installation will provide enhanced safety for pedestrians and motorists at the intersection and is technically justified.

RECOMMENDATIONS

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

1. City Council authorize the installation of traffic control signals at the intersection of Bay Street and Scollard Street.

FINANCIAL IMPACT

The estimated cost of installing traffic control signals at the intersection of Bay Street and Scollard Street is $200,000. 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 a local resident through 311 to investigate the feasibility of installing traffic control signals at the intersection of Bay Street and Scollard Street.

Existing Conditions

Bay Street is classified as a major arterial roadway that operates two-way traffic on a pavement width of about 15.5 metres, with two travel lanes and a bike lane in each direction. It has a daily two-way traffic volume of about 18,700 vehicles and a posted speed limit of 40 km/h. TTC service on Bay Street is provided by the "6 Bay" bus and no bus stops are provided at the intersection of Scollard Street.

Scollard Street is classified as a local roadway on a pavement width of about 7.5 metres. It has a daily two-way traffic volume of about 2,800 vehicles and a posted speed limit of 30 km/h. Scollard Street operates two-way traffic from Bay Street to a point 101 metres west, and operates one-way westbound from this point to Hazelton Avenue and from Bay Street to Yonge Street. There is no TTC service provided on Scollard Street.

Adjacent traffic control signals to this intersection on Bay Street are located about 110 metres to the north at Davenport Road, and about 90 metres to the south at Yorkville Avenue.

Collision Review

Collision statistics provided by the Toronto Police Services for the three-year period ending December 31, 2018 disclosed that 12 collisions were reported at the intersection of Bay Street and Scollard Street. Of these 12 collisions, one involved a pedestrian and four were considered to be potentially preventable by the installation of traffic control signals which can be summarised as:

- A northbound straight-through motorist and an eastbound crossing pedestrian collided;
- In two collisions, a southbound straight-through motorist and a westbound straight-through motorist collided;
- An eastbound straight-through motorist and a northbound right-turning motorist collided; and
- A southbound straight-through motorist and an eastbound straight-through motorist collided.

Traffic Control Signal Review
Traffic studies were undertaken at the intersection of Bay Street and Scollard Street on May 3, 2017, during the busiest eight-hour period of the day. Based on the eight-hour vehicular and pedestrian counts, and the collision history, the technical justifications for the installation of the traffic control signals are satisfied to the following extent:

Justification 1:	Minimum Vehicular Volume	85%
Justification 2:	Delay to Cross Traffic	100%
Justification 3:	Collision Hazard	27%

To meet the technical requirements for the installation of traffic control signals, one of the three justifications must be 100 percent satisfied, or any two of the three warrants must be at least 80 percent satisfied. Based on the above results, the warrant criteria for the installation of the traffic control signals at the intersection of Bay Street and Scollard Street have been satisfied.

Pedestrian Crossover (PXO) Review
A pedestrian crossover (PXO) is not appropriate at the intersection of Bay Street and Scollard Street, as PXO's are no longer installed on arterial roadways. However, traffic control signals are considered at locations where pedestrian crossovers are technically justified.

A study was also undertaken to review the feasibility of installing a PXO at the intersection of Bay Street and Scollard Street on May 3, 2017. During the busiest eight-hour period of a typical weekday, 283 pedestrians were recorded crossing Bay Street at Scollard Street.

The technical justifications for the installation of a PXO are satisfied to the following extent:

Pedestrian Volume Justification:	Met
Pedestrian Delay Justification:	Met

To meet the technical requirements for the installation of a PXO, both justifications must be satisfied. Based on the above results, the installation of a PXO is justified at this intersection.

In addition to the PXO warrant evaluation, a Pedestrian Crossover Audit was also conducted to assess the operational and physical suitability for the potential PXO at this location. By comparing the operation of the proposed PXO to provincially adopted "environment standards" we determined whether a PXO would be operating under acceptable conditions. The standards and comparative characteristics at this location are described in the attached Appendix "A".

Summary
Transportation Services recommends the installation of traffic control signals at the intersection of Bay Street and Scollard Street to enhance pedestrian safety and facilitate motorists exiting from Scollard Street.

Cycling and Public Realm Units and TTC have been consulted. Cycling and Public Realm have no objections and we have not received a response from TTC.

Councillor Mike Layton has been advised of the recommendation of this staff report.

CONTACT

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SIGNATURE

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ATTACHMENTS

1. Drawing No. 421G-3424, dated May 2019.
2. Appendix A - Pedestrian Crossover Audit

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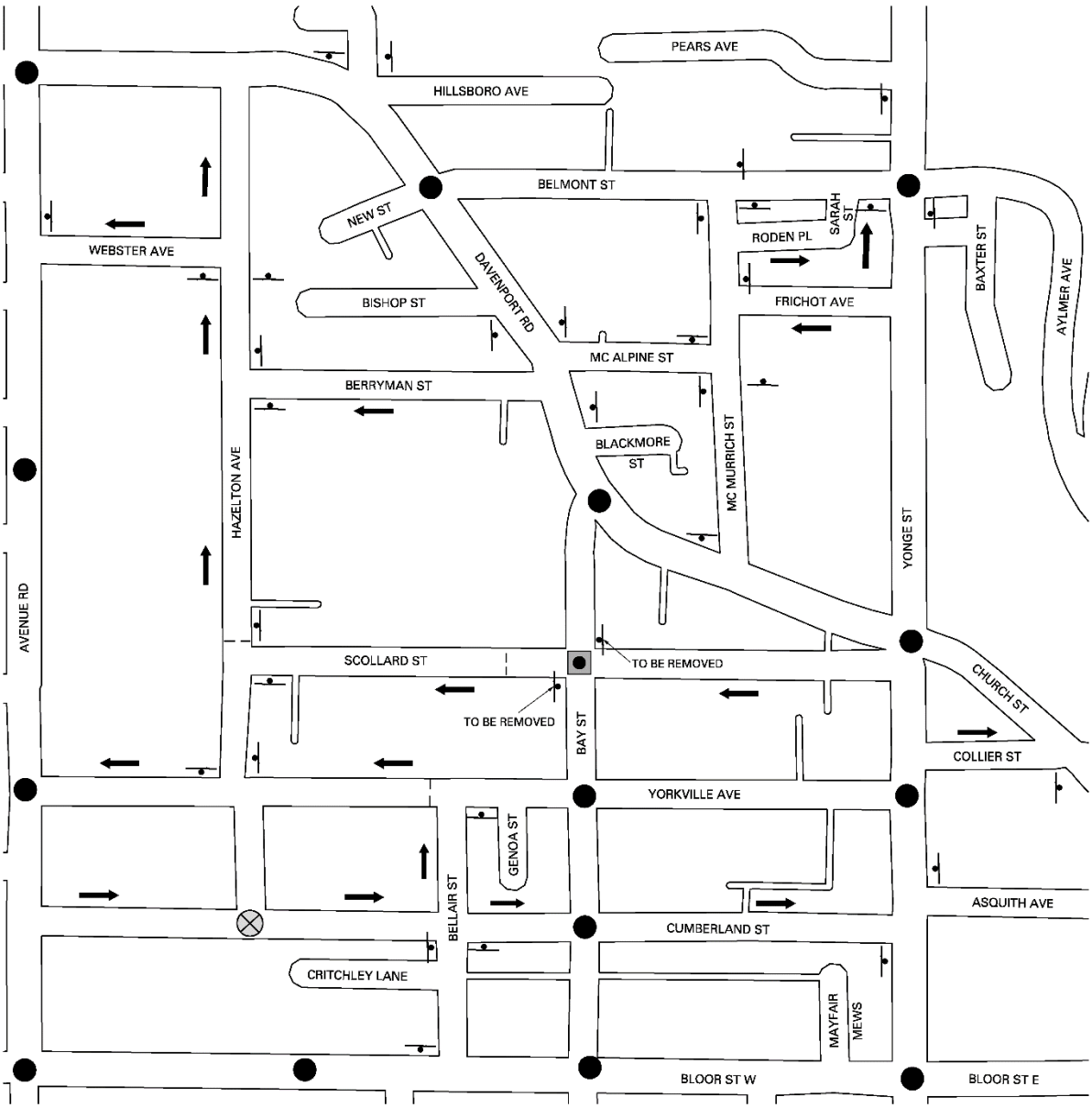

LEGEND

- PROPOSED TRAFFIC CONTROL SIGNAL
- STOP SIGN
- PEDESTRIAN CROSSOVER
- SIGNALIZED INTERSECTION
- ONE WAY STREET

NOTE:
INFORMATION ON THIS PLAN IS BASED ON OFFICE RECORDS AND IS SUBJECT TO FIELD VERIFICATION.

BAY ST AND SCOLLARD ST: PROPOSED TRAFFIC CONTROL SIGNALS

O.P.

DWG. NO. 421G-3424 MAY, 2019 TRANSPORTATION SERVICES TORONTO & EAST YORK DISTRICT

Appendix "A" - Pedestrian Crossover Audit
Bay Street and Scollard Street

Standard	Comments	Standard Met / Not Met
Speed - Vehicle operating speed less than 60 km/hr	The posted speed limit on Bay Street is 40 km/hr	Met
Width - Not more than four lanes wide on two-way street or more than three lanes wide on a one-way street.	Bay Street has two travel lanes and one bike lane in each direction.	Not Met
Volume - Traffic Volume less than 35,000 vehicles per day	Bay Street carries approximately 18,700 vehicles per day in both directions.	Met
Turns - No significant volume of turning movements which	No significant turning movement counts	Met
Visibility - No visibility problems exist for either pedestrians or motorists	None	Met
Loading - No loading zones (including TTC) in the immediate	None (No nearside TTC stops)	Met
Driveways - No driveways or entrances nearby	None	Met
Spacing - Not less than 200 metres to another pedestrian crossover or traffic control signal (TCS)	There are traffic control signals on Bay Street at Davenport Road, 110 metres to the north, and at Yorkville Avenue, about 90 metres to the south	Not Met