Traffic Control Signals – Bloor Street West and Lothian Avenue

Date: July 30, 2019
To: Etobicoke York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 3 – Etobicoke Lakeshore

SUMMARY

The purpose of this report is to obtain approval for the installation of traffic control signals at the intersection of Bloor Street West and Lothian Avenue.

Although the warrants for the installation of traffic control signals are not met, the intersection does satisfy the warrants for a pedestrian crossover (P.X.O.). However, a safety audit of the environmental factors revealed that this location is not suitable given the number of lanes on Bloor Street West. Based on the results of the pedestrian crossover audit, staff is recommending that traffic control signals be installed instead at this intersection.

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

RECOMMENDATIONS

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

1. City Council approve the installation of traffic control signals at the intersection of Bloor Street West and Lothian Avenue.

FINANCIAL IMPACT

The estimated cost for the installation of traffic control signals is $180,000. It is anticipated that these funds will be included within the Transportation Services 2021 Operating Budget subject to the availability of funding and competing priorities.
DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services staff received a request from the former area Councillor to determine the feasibility of installing pedestrian crossing protection on Bloor Street West in the area of Lothian Avenue. A map of the area is shown on Attachment 1.

Bloor Street West, between Islington Avenue and Aberfoyle Crescent, is a six-lane road classified in the City’s Road Classification System as a “major arterial” road. The roadway has an urban cross-section (curb and gutter) with sidewalks on both sides of the street. The legal speed limit on this section of Bloor Street West is 50 km/h.

Lothian Avenue is classified as a "local" road in the residential community south of Bloor Street West and east of Islington Avenue. The roadway has a rural cross section (ditched). There are no sidewalks on either side of the street, except for the section between Bloor Street and the first laneway south of Bloor Street West where sidewalks exist on both sides of the street. The legal speed limit on Lothian Avenue is currently 40 km/h. The intersection of Bloor Street West and Lothian Avenue is a three-legged "T" intersection with a stop control for northbound traffic.

The adjacent land use in this area is a mix of residential, business and commercial. A pedestrian access entrance to Islington Subway Station and the Islington Bloor Place business complex is located on the north side of Bloor Street West in the vicinity of Lothian Avenue. The closest traffic control signals for pedestrian crossings are located 187 metres west of Lothian Avenue at Islington Avenue and 180 metres east of Lothian Avenue at Aberfoyle Crescent.

The TTC operates transit overnight bus service on Bloor Street West in the area of Lothian Avenue.

To address the concerns regarding pedestrian safety and the feasibility of the installation of a P.X.O., an eight-hour pedestrian delay study was conducted on Tuesday, April 4, 2017, in which we recorded the volume and delays experienced by pedestrians crossing Bloor Street West near Lothian Avenue. In order to satisfy the Pedestrian Crossover Warrant, two categories must be 100% fulfilled. Our study revealed that these categories, "Pedestrian Volume" and "Pedestrian Delays", were both satisfied 100% respectively. The majority of pedestrians crossing in this area are adults crossing to area businesses and the Islington Bloor Business complex.

In terms of pedestrian classification, 97% (446) of the total pedestrians crossing during the eight-hour study were youths/adults. The remaining three percent were children, and seniors.
A P.X.O. is considered environmentally suitable if the operating speed is less than or equal to 60 km/h, there are four lanes or less on a two-way street, and the traffic volume is less than or equal to 35,000 vehicles per day. Bloor Street West between Islington Avenue and Aberfoyle Crescent is a six-lane roadway. Therefore, based on the above criteria, a pedestrian crossover is not suitable.

To assess traffic conditions, an eight-hour turning movement count was conducted on a typical weekday (Tuesday, April 4, 2017) at the intersection. Our turning movement study results were applied to the Traffic Control Signal Warrant analysis. The study results are as follows:

### Bloor Street West at Lothian Avenue

<table>
<thead>
<tr>
<th>Warrant</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Vehicular Volume Warrant</td>
<td>11%</td>
</tr>
<tr>
<td>Delay to Cross Traffic Warrant</td>
<td>46%</td>
</tr>
<tr>
<td>Collision Hazard Warrant</td>
<td>7%</td>
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</tbody>
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In order to meet the warrants, 100 percent compliance is required in one of the categories or a minimum of 80 percent in the first two. The Collision Hazard warrant is based on the number of collisions susceptible to correction by the installation of traffic control signals and must be 100 percent satisfied.

A review of the Toronto Police collision data revealed that over the past three years for which there is complete data, (January 1, 2016 to December 31, 2018) there was one reported collision which would be preventable with the installation of traffic control signals and no reported collisions involving pedestrians crossing Bloor Street West in the area of Lothian Avenue.

Although the warrants for a P.X.O at the intersection of Bloor Street West and Lothian Avenue are satisfied, the environmental factors found in the safety audit indicate that a pedestrian crossover is not suitable. Although the study data failed to meet the warrant for traffic signal controls, it is recommended that signals be installed at this intersection to provide safer and controlled crossings for pedestrians.

Parking is currently allowed on the north side of Bloor Street West, opposite Lothian Avenue. The installation of traffic control signals will result in the loss of four to five on street parking spaces near or within the intersection. TTC has been consulted in the preparation of this report but have not yet provided comments.

**CONTACT**

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ATTACHMENTS

1. Location Plan - Bloor Street West at Lothian Avenue