DA TORONTO

Traffic Control Signals - Lawrence Avenue West and Brookview Drive

Date: July 19, 2019
To: North York Community Council
From: Acting Director, Transportation Services Division, North York District
Wards: Ward 8 - Eglinton-Lawrence

SUMMARY

As the Toronto Transit Commission (TTC) operates bus service on Lawrence Avenue West, City Council approval of this report is required.

Transportation Services is requesting approval to install traffic control signals at the intersection of Lawrence Avenue West and Brookview Drive.

The installation of traffic control signals is technically justified and will enhance safety for all road users. However, this installation may increase delays for motorists on Lawrence Avenue West, as these movements will no longer operate with free flow.

RECOMMENDATIONS

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

1. City Council approve the installation of traffic control signals at the intersection of Lawrence Avenue West and Brookview Drive.

FINANCIAL IMPACT

The estimated cost for installing traffic control signals is approximately \$180,000. 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 Councillor Mike Colle, on behalf of local residents, to review the need for pedestrian crossing protection (traffic control signals or a pedestrian crossover) at the intersection of Lawrence Avenue West and Brookview Drive.

Lawrence Avenue West is a 15 metre wide major arterial street consisting of two eastbound lanes, two westbound lanes and a two-way centre left turn lane. The statutory (unsigned) speed limit is 50 km/h and sidewalks are located on both sides of the street. The daily traffic volume on Lawrence Avenue West is approximately 35,000 vehicles. Brookview Drive is a two-way north/south 10.5 metre wide local street that is stop controlled at its intersection on the north side of Lawrence Avenue West.

The TTC operates regular bus service on Lawrence Avenue West and there are near side eastbound and westbound bus stops at the intersection. Bus bays are provided at both bus stops.

Adjacent traffic control signals on Lawrence Avenue West are located 180 metres to the east at Glenmount Avenue and 215 metres to the west at Varna Avenue.

The land use in this area is a mix of midrise and low density residential and institutional properties. A significant pedestrian generator in the area is the Yeshiva Gedolah School and adjacent synagogue.

In the City of Toronto, pedestrian crossovers (PXO) are often not appropriate on major arterial roads. However, the installation of traffic control signals may be considered on an arterial road if a PXO is warranted. Therefore, Transportation Services reviewed if traffic control signals are justified at this intersection based on the pedestrian crossing volume.

A review of Toronto Police Service collision records for the three year period ending December 31, 2018, revealed that there were six reported collisions at this intersection. Three of these collisions are considered to be potentially preventable by the installation of traffic control signals. There was one reported collision involving a pedestrian at the intersection. The collision involved an eastbound left-turning vehicle striking a pedestrian crossing Brookview Drive. This collision is not considered potentially preventable since these movements would still occur at the same time if traffic signals were installed.

To determine the need for traffic control signals at the intersection of Lawrence Avenue West and Brookview Drive, pedestrian volume and delay studies were undertaken at the intersection on Friday, June 21, 2019 and Saturday, June 22, 2019. The Saturday study was undertaken because of the significant number of pedestrians walking to the Yeshiva Gedolah School and adjacent synagogue on the weekend.

During the Friday study period, 173 pedestrians crossed Lawrence Avenue West in this area. This was comprised of 147 youths and adults, 20 assisted children, three

unassisted children and three seniors. Of these 173 pedestrians, 147 experienced delays greater than 10 seconds to cross.

During the Saturday study period, 216 pedestrians crossed. This comprised of 145 youths and adults, 65 assisted children, four unassisted children and two seniors. Of these 216 pedestrians, 190 experienced delays greater than 10 seconds to cross.

The study results were evaluated against the criteria for the installation of a PXO. Based on the study results, the numerical warrants are satisfied to the following extent:

Table 1: Lawrence Avenue West and Brookview Drive - Pedestrian Crossover Warrant Criteria and Compliance

Criteria	Compliance (Friday)	Compliance (Saturday)
Pedestrian Volume	90 percent	100 percent
Pedestrian Delay	100 percent	100 percent

To support the installation of a PXO, both criteria must be satisfied to 100 percent. Given that the Saturday study results meet the criteria and the Friday results almost meet, a pedestrian crossing device is justified at the intersection of Lawrence Avenue East and Brookview Drive. A pedestrian crossover (PXO) would not be appropriate on this major arterial road as it fails key "environmental criteria" considering the road width (five lanes) and the high traffic volumes (35,000 vehicles per day). Therefore, traffic control signals are recommended at this intersection.

The installation of traffic control signals will provide a protected crossing for pedestrians on Lawrence Avenue West and will enhance safety for all road users. However, this installation may increase delays for motorists on Lawrence Avenue West, as these movements will no longer operate with free flow. Driveways to single family homes exist on the south side of Lawrence Avenue West in the vicinity of the intersection. Although the driveway to 563 Lawrence Avenue West will be within the crosswalk lines of the intersection, access and egress from this driveway will remain the same as existing conditions as the driveway movements will not be signalized.

The TTC has been advised of the study results and recommendations but has not provided comments.

The Ward Councillor is aware of the recommendation of this staff report.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Map - Proposed Traffic Control Signals - Lawrence Avenue West and Brookview Drive

