REPORT FOR ACTION

Traffic Control Signals Review – Eglinton Avenue East between Oswego Road to Barbados Boulevard

Date: January 31, 2018
To: Scarborough Community Council
From: Director, Transportation Services, Scarborough District
Wards: Ward 35 – Scarborough Southwest and
Ward 38 – Scarborough Centre

SUMMARY

The report responds to a request from Councillor De Baeremaeker to review the need for a mid-block pedestrian signal on Eglinton Avenue East at the pathway to the town homes at 2792 / 2794 Eglinton Avenue East. The pathway at 2792 / 2794 Eglinton Avenue East is approximately midway between Oswego Road and Barbados Boulevard. Currently, this area is uncontrolled.

RECOMMENDATIONS

The Director, Transportation Services, Scarborough District recommends that:

1. City Council not authorize the installation of mid-block pedestrian traffic control signals 333 metres west of Barbados Boulevard.

FINANCIAL IMPACT

There is no financial impact associated with this report.

DECISION HISTORY

At its meeting of October 17, 2017, the Scarborough Community Council requested the Acting Director, Transportation Services, Scarborough District to report to the February 2018 meeting of Scarborough Community Council on the proposed traffic control signals. Here is the link to this decision:

http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.SC25.22

COMMENTS

This report responds to a request from Councillor De Baeremaeker to review the possibility of installing a mid-block pedestrian signal on Eglinton Avenue East at the pathway to the town homes at 2792 / 2794 Eglinton Avenue East.

Existing Conditions

The following characteristics describe the subject portion of Eglinton Avenue East:

- The subject portion of Eglinton Avenue East is located east of Danforth Road.
- This portion of Eglinton Avenue East is a seven-lane major arterial roadway (including a shared centre left turn lane) with a posted speed limit of 60 kilometres per hour and a daily traffic volume of approximately 29,500 vehicles per day.
- This land uses portion of Eglinton Avenue East is primarily townhomes and commercial / retail. Eastbound and westbound TTC stops are located at Oswego Road and at Barbados Boulevard.
- The walkway at 2792 / 2794 Eglinton Avenue East is located approximately 270 metres east of the traffic signals at Eglinton Avenue East and Danforth Road and 350 metres west of the traffic signals at Eglinton Avenue East and McCowan Road.
- There are sidewalks along both sides of Eglinton Avenue East and street-lighting on both sides
- A new French catholic school for Grades 7 to 9 recently opened on Trudelle Street and the school backs onto Eglinton Avenue East just east of Barbados Boulevard. There is no vehicular access to/from Eglinton Avenue East from the new school, the majority of the students are transported by school bus however some students use the TTC and cross Eglinton Avenue East. Currently, there are approximately 200 students; however, classes for additional grades will be added (grade 10 in September 2018, grade 11 in 2019 and Grade 12 in 2020) to reach an approximate student population of 550 students in 2020.
- City Transportation Planning is currently advancing the Eglinton Avenue East Light Rail Transit (EELRT) line, an easterly extension of the Eglinton Crosstown Light Rail Transit, to five percent design. The LRT is planned along Eglinton Avenue East. The original study from 2009 did not identify any signalised transit stops between McCowan Road and Danforth Road. The current LRT modelling is also indicating that a transit stop is not needed in this area, and that any unplanned Traffic Control Signals would have detrimental impacts on LRT operations.

Analysis

As a result of a request, Transportation Services staff conducted a mid-block traffic control signal and pedestrian crossing protection review of pedestrians crossing Eglinton Avenue East from 50 metres west of Oswego Road to 50 metres east of Barbados Boulevard, covering an area approximately 285 metres in length. The field study was conducted on Wednesday, May 17, 2017. The study observed vehicle traffic and pedestrian volumes and delays along the subject portion of Eglinton Avenue East.

Pedestrian Crossing Protection Study

Transportation Services staff conducted a detailed Warrant Study along the subject portion of Eglinton Avenue East. The study provides an assessment of the need for pedestrian traffic control signals based on vehicle volumes and pedestrian crossing volumes and delays, which are expressed in terms of percent compliance with accepted thresholds. For pedestrian crossing protection to be numerically justified, the required "Pedestrian Volume" must exceed 200 pedestrians crossing Eglinton Avenue East in the peak eight-hour period. In this case there were only 88 pedestrians observed crossing during the study period. Of the 88 pedestrians a total of 74 pedestrians experienced crossing delays greater than 10 seconds while waiting to cross Eglinton Avenue East. The 88 pedestrians were comprised of 85 adults / youths, 2 seniors and one assisted child.

The following Pedestrian Crossover Protection Study results were obtained.

Pedestrian Crossing Protection Warrants	Compliance Level - Wednesday, May 17, 2017
Pedestrian Volume	45%
Pedestrian Delays	57%

For pedestrian crossing protection to be numerically justified, both the “Pedestrian Volume” and “Pedestrian Delays” warrants must be 100% satisfied.

As outlined in the above table, the pedestrian volumes and delays do not satisfy the requirements to install pedestrian traffic control signals at the subject mid-block location at this time.

It should be noted that a pedestrian crossover is not feasible since the 85th percentile traffic speed of 69.5 km/h along Eglinton Avenue East exceeds the guideline of 60 km/h or less for which a pedestrian crossover is considered safe to use. In addition, Eglinton Avenue East would be too wide to qualify for a pedestrian crossover since they are only installed on roads with four lanes or less (Eglinton Avenue East has a total of seven lanes at this location).

Collision History

An updated review of the available Toronto Police Service collision records for the five-year period ending December 31, 2016 are summarised below:

Mid-Block collisions on Eglinton Ave. East between Oswego Rd. and Barbados Blvd.

Five-Year Collision	2012	2013	2014	2015	2016	Total
Collisions potentially Preventable by Traffic Control Signals	0	0	0	0	0	0
Collisions involving Pedestrian or Cyclists Crossing Eglinton Avenue East	0	0	0	0	0	0
Other Collisions	1	0	0	0	1	2

As shown in the above table, this collision record is not indicative of a safety problem at this location. None of the collisions involved pedestrians or cyclists.

In summary, on the basis of the foregoing studies and analyses, mid-block pedestrian signals are not technically justified at this location. The TTC has been consulted and advises that, should it be decided to provide pedestrian crossing protection across Eglinton Avenue East between Danforth Road and McCowan Road, the optimal location from a transit perspective would be to install mid-block pedestrian traffic control signals at the pedestrian walkway at 2792/2794 Eglinton Avenue East. Mid-block pedestrian signals at this location, coupled with consolidation of the two pairs of stops currently at Oswego Road and Barbados Boulevard, which are used by about 650 customers in total on a typical weekday, to a single pair at the new signals would provide crossing protection to all TTC customers needing to cross Eglinton Avenue East between Danforth Road and McCowan Road to get to or from a bus stop. The stop consolidation would also bring the stop spacing closer to the TTC's guidelines. However, the City's count data did not indicate that current crossings of Eglinton Avenue East using count data extended over to Oswego Road and Barbados Boulevard justify pedestrian crossing protection.

This location is also located along the route of the planned EELRT. Work is currently being conducted and City Transportation Planning advises that such mid-block pedestrian Traffic Control Signals could have adverse impacts on LRT operations, as no transit stop is planned for this area. Part of the current work is to optimize multi-modal operations within the corridor post-LRT implementation, and recommend interventions to improve conditions for all road users as part of the LRT project. Pedestrian safety and needs could be further considered as part of this work.

Alternate Recommendations

If, despite the findings and negative recommendation above, the Scarborough Community Council determines that a Traffic Control Signals would be beneficial, it may approve the following as to form:

1. City Council authorize the installation of mid-block pedestrian traffic control signals 333 metres west of Barbados Boulevard.

2. City Council request staff to re-evaluate this location for removal of the mid-block pedestrian traffic control signals when construction of the Eglinton Avenue East Light Rail Transit project commences.

However, should City Council approve the installation of traffic control signals, the cost would be approximately $120,000.00. Funding for such traffic control signals has not been requested in the Transportation Services Capital Budget and would be subject to competing priorities.

Another alternate recommendation could be as follows:

1. City Council request the Director, Transportation Services to conduct a new Traffic Control Signal review in this area in 2020, when the nearby secondary school is expected to be fully occupied.

CONTACT

Marko A. Oinonen, B.A.Sc., DPA, P.Eng.
Manager, Traffic Operations, Scarborough District
Tel: 416-396-7148
Fax: 416-396-5641
E-Mail: marko.oinonen@toronto.ca

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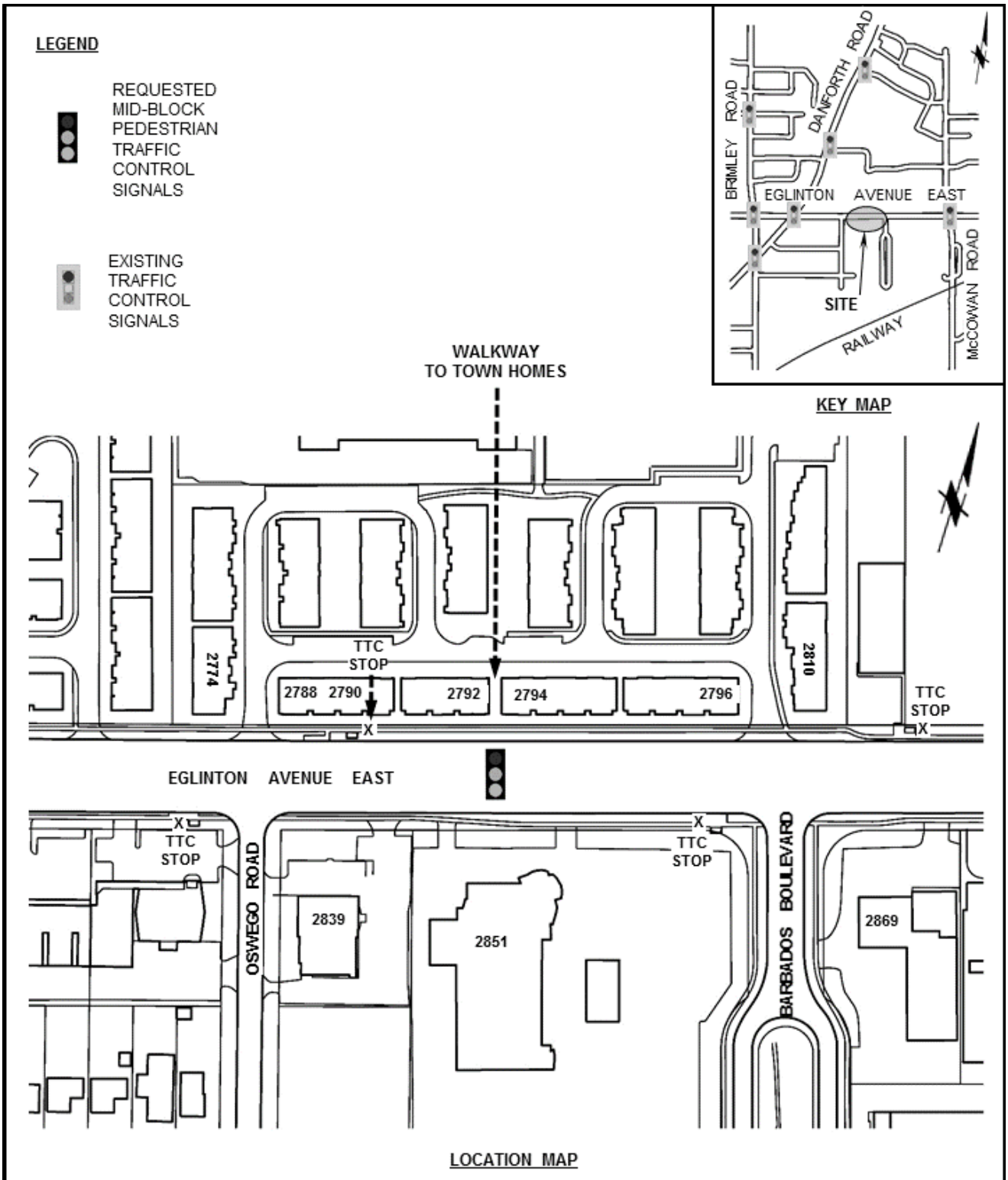
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Myles Currie, B.A.
Director, Transportation Services, Scarborough District

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ATTACHMENTS

1. Location Plan (Traffic Control Signals Review - Eglinton Avenue East between Oswego Road and Barbados Boulevard)



TORONTO TRANSPORTATION SERVICES

TRAFFIC OPERATIONS
Scarborough District

SCALE:	N.T.S.	MID-BLOCK PEDESTRIAN TRAFFIC CONTROL SIGNALS REVIEW EGLINTON AVENUE EAST BETWEEN OSWEGO ROAD AND BARBADOS BOULEVARD	FILE NUMBER: D17-8177468	
DATE:	JAN., 2018		ATTACHMENT 1	WARDS 35 & 38
DRAFTING:	O.K.			