Traffic Control Signals – Weston Road and Dennis Avenue

Date: June 5, 2018
To: Etobicoke York Community Council
From: Director, Transportation Services, Etobicoke York District
Wards: Ward 11 – York South-Weston

SUMMARY

The purpose of this report is to obtain approval to convert an existing pedestrian crossover (PXO) to traffic control signals at Weston Road and Dennis Avenue.

The installation of traffic control signals is justified as the safety audit of the existing pedestrian crossover on Weston Road at Dennis Avenue indicated that this location is no longer environmentally suitable for a pedestrian crossover, given the existing operating speed of vehicular traffic on Weston Road. Based on the results of the pedestrian crossover safety audit, staff is recommending that the pedestrian crossover be replaced with traffic control signals.

Since the Toronto Transit Commission (TTC) operates bus service on Weston Road, City Council approval of this report is required. The TTC has been consulted on the matter and as of the time this report was written, the TTC had not objected to the proposal.

RECOMMENDATIONS

The Director, Transportation Services, Etobicoke York District recommends that:

1. City Council approve the removal of the pedestrian crossover on Weston Road at Dennis Avenue.

1. City Council approve the installation of traffic control signals at the intersection of Weston Road and Dennis Avenue.
FINANCIAL IMPACT

The estimated cost for the installation of traffic control signals at Weston Road and Dennis Avenue is $180,000.00. These funds would be included within the Transportation Services' 2019 Capital Budget subject to the availability of funding and competing priorities.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services staff received requests from the area Councillor, Green Communities Canada and Principal of Dennis Avenue Community School to replace the existing pedestrian crossover on Weston Road at Dennis Avenue with traffic control signals. A map of the area is shown on Attachment 1.

According to the City of Toronto's Road Classification System, this stretch of Weston Road is classified as a 'Minor Arterial' road. Weston Road has a four lane cross section and a 50 km/h speed limit. Dennis Avenue is one-way eastbound and is designated in the City's Road Classification System as a 'Local' road. Traffic Control Signals exist on Weston Road 147 meters south of Dennis Avenue at Lambton Avenue/Brownville Avenue and 388 meters north of Dennis Avenue at Eglinton Avenue West. Dennis Avenue Community School is located 145 metres to the west on Dennis Avenue and Our Lady of Victory Catholic Elementary School is located at Dennis Avenue and Guestville Avenue.

Furthermore, the Toronto Transit Commission (TTC) operates bus service on Weston Road. The bus stops for both directions are located to the north and south of Dennis Avenue.

Traffic counts were undertaken at Weston Road and Dennis Avenue in May 2018, which included turning movement and pedestrian counts. In addition, motorist speeds were recorded and the collision history was reviewed. Based on the eight-hour vehicular and pedestrian traffic counts and the collision history, the technical justification for the installation of traffic control signals were satisfied to the following extent:
### Traffic Control Signal Warrant - Weston road and Dennis Avenue

<table>
<thead>
<tr>
<th>Criteria*</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Warrant 1: Minimum Vehicular Volume Warrant (8 Hrs)</td>
<td>42</td>
<td>255</td>
<td>16%</td>
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<td>OR</td>
<td>AND</td>
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<tr>
<td>Warrant 2: Delay to Cross Traffic Warrant (8 Hrs)</td>
<td>62</td>
<td>75</td>
<td>74%</td>
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<td>OR</td>
<td></td>
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<tr>
<td>Warrant 3: Collision Hazard Warrant (3 Years)</td>
<td>2</td>
<td>15</td>
<td>13%</td>
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*In order to meet the warrants for traffic control signals, 100 percent compliance is required in one of the three warrants or a minimum of 80 percent in both of the first two warrants. 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.

Our review of the collision records (over the last 3 years of complete data) revealed two (2) preventable collisions. The collision warrant was not met as the compliance rate was only 13 percent.

Given that the intersection failed to meet the traffic control signal warrants, the safety protocol requires that staff conduct a safety audit of the existing pedestrian crossover. One of the primary safety criteria is the road’s vehicular operating or 85th percentile speed. Pedestrian crossovers are not environmentally suitable if vehicle operating speeds are 60 km/h or more. Our most recent (May 2018) speed studies on Weston Road in the area of Dennis Avenue revealed an 85th percentile speed of 60 km/h. Given the elevated operating speeds on Weston Road, the existing pedestrian...
crossover near Dennis Avenue is no longer considered environmentally suitable for safe pedestrian crossings. Since pedestrian crossing assistance is essential in the area, the existing pedestrian crossover should be replaced with traffic control signals.

The proposed traffic control signal will provide a more appropriate form of crossing protection for pedestrians in this area and will also provide an increased level of control for vehicular traffic at this intersection. The function of a traffic control signal is to alternate vehicular and/or pedestrian right-of-way providing safe, efficient and effective traffic operation. Coincident with the installation of the traffic control signals, the existing pedestrian crossover would be removed.

Transportation Services has advised TTC of the proposed traffic control signals. The proposed traffic control signals will not affect any of the existing bus stop locations.

The Ward Councillor has been advised of the proposal to install traffic control signals at the intersection of Weston Road and Dennis Avenue.

CONTACT

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SIGNATURE

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Steven T. Kodama, P.Eng.
Director, Transportation Services - Etobicoke York District

ATTACHMENT

Attachment 1: Location Plan - Weston Road and Dennis Avenue