Pedestrian Crossing Protection Study: Wilson Avenue at William Cragg Drive

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<tr>
<th>Date:</th>
<th>March 13, 2013</th>
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<td>To:</td>
<td>North York Community Council</td>
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<tr>
<td>From:</td>
<td>Acting Director, Transportation Services, North York District</td>
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<td>Wards:</td>
<td>Ward 9 – York West</td>
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<tr>
<td>Reference Number:</td>
<td>ny13050 P:\2013\Cluster B\TRA\NorthYorkDistrict</td>
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**SUMMARY**

As the Toronto Transit Commission (TTC) operates a transit service on Wilson Avenue, City Council approval of this report is required.

The purpose of this report is to deny the request for the installation of traffic control signals or a pedestrian crossover at the intersection of Wilson Avenue and William Cragg Drive.

The existing traffic and roadway conditions do not warrant the introduction of traffic control signals or a pedestrian crossover at the above noted intersection.

**RECOMMENDATIONS**

Transportation Services, North York District, recommends that City Council:

1. Deny the installation of traffic control signals or a pedestrian crossover at the intersection of Wilson Avenue and William Cragg Drive.

**Financial Impact**

There is no financial impact associated with the adoption of this report.
ISSUE BACKGROUND

Transportation Services, North York District, was requested by Ward Councillor, on behalf of the area residents to review the feasibility of installing traffic control signals or a pedestrian crossover at the intersection of Wilson Avenue and William Cragg Drive.

COMMENTS

Wilson Avenue is a major arterial roadway with a posted speed limit of 60 km/h and a daily two way traffic flow of approximately 23,000 vehicles per day. At this location Wilson Avenue has two lanes in each direction and a two way centre left turn lane in the middle of the roadway. Traffic control signals are located approximately 675 metres to the west at Jane Street and approximately 300 metres to the east at Lexfield Avenue/Highview Avenue.

The intersection of Wilson Avenue and William Cragg Drive is a three legged (T) intersection with the north leg providing access to a residential community. As such the southbound traffic is controlled by a stop control and east/west traffic on Wilson Avenue is free flow.

It should also be noted that the TTC transit stops for both the eastbound and westbound directions along Wilson Avenue are located in direct proximity to the intersection. The eastbound stop is located on the south side of the roadway, midblock opposite William Cragg Drive and the westbound stop is located on the north side of Wilson Avenue just east side of William Cragg Drive. Both transit stops are augmented by the presence of a bus bay, which provides the TTC the ability to stop on Wilson Avenue without impacting the flow of traffic.

To determine the feasibility of installing a traffic control signal or a pedestrian crossover, this Division conducted the appropriate studies to identify the existing traffic conditions and any difficulty pedestrians are experiencing when crossing Wilson Avenue and William Cragg Drive.

Traffic Control Signal Review

An eight-hour turning movement count was conducted at the intersection of Wilson Avenue and William Cragg Drive. The technical warrants for the installation of a traffic control signal are satisfied to the following extent:

- Warrant 1: Minimum Vehicular Volume 23%
- Warrant 2: Delay to Cross Traffic 57%
- Warrant 3: Collision Hazard 0%
To satisfy the installation of a traffic control signal, one of either the Minimum Vehicular Volume or Delay to Cross Traffic warrants must be 100 percent satisfied, or both must be satisfied to the extent of 80 percent. Accordingly, the installation of a traffic control signal is not warranted.

**Pedestrian Crossover Review**

An eight hour pedestrian delay study was undertaken on June 8, 2012. The technical warrants for the installation of a pedestrian crossover are satisfied to the following extent:

- **Warrant 1: Pedestrian Volume** 44%
- **Warrant 2: Pedestrian Delay** 0%

In order to meet the technical requirements for the installation of a pedestrian crossover, both warrants must be satisfied 100 percent. The study revealed that during the eight hour study, a total of 88 pedestrians crossed Wilson Avenue at William Cragg Drive. A minimum of 200 pedestrians are required in order to warrant a pedestrian crossover. Of the pedestrians that crossed, twenty nine (29) experienced delays greater than 10 seconds, whereas a minimum of 130 pedestrians must be observed being delayed crossing the road to meet the warrant.

**Collision History**

A review of Toronto Police Services collision records for the three-year period ending December 31, 2012 revealed the following history in this area of Wilson Avenue at William Cragg Drive:

<table>
<thead>
<tr>
<th>Five-Year Collision Information</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Collision</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Potentially Preventable by the Installation of TCS</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Collisions Involving Pedestrians</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</table>

Given the study results, the installation of a pedestrian crossover is not warranted.

In addition to the above studies, Staff has obtained from the TTC their ridership counts at this location. The data provided by the TTC indicates that the boarding and alighting figures for transit activity at the intersection of Wilson Avenue and William Cragg Drive are as follows:

<table>
<thead>
<tr>
<th>Direction</th>
<th>Boarding</th>
<th>Alighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastbound</td>
<td>200</td>
<td>96</td>
</tr>
<tr>
<td>Westbound</td>
<td>65</td>
<td>165</td>
</tr>
</tbody>
</table>
The TTC staff has advised that if a traffic control signal were to be installed at this location, the existing bus stops within bus bays in both directions would be impacted by any installation and the bus bays may have to be eliminated or relocated in order to provide adequate bus storage and passenger platforms.

Our review has also concluded that the significant modifications to the existing geometry of the intersection will be required to address the TTC’s concerns, as well as to ensure that motorists and pedestrians are provided with a traffic control signal that will achieve the desired goal of the community. The installation of the traffic control signal may result in an increase of transient traffic volumes on William Cragg Drive as this roadway connects to Jane Street, north of Wilson Avenue.

As such, the installation of a traffic control signal or a pedestrian crossover cannot be justified and should not be installed at the subject intersection based on the above noted information.

The Ward Councillor has been advised of the recommendation in this staff report.

**CONTACT**

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**SIGNATURE**

Pascoal D'Souza C.E.T.
Acting Director

**ATTACHMENTS**

Attachment 1:  Map – Pedestrian Crossings: Wilson Avenue at William Cragg Drive
Attachment 2:  Map – Intersection Lay-out: Wilson Avenue at William Cragg Drive