Pedestrian Crossing Protection Review – Kennedy Road and Perthshire Street

**Date:** May 25, 2016

**To:** Scarborough Community Council

**From:** Director Transportation Services

**Wards:** Ward 39 – Scarborough-Agincourt

**Reference Number:** P:\2016\Cluster B\TRA\Scarborough District\sc1645.docx

**SUMMARY**

This report recommends that neither traffic control signals nor a pedestrian crossover be approved near the intersection of Kennedy Road at Perthshire Street. The assessment concludes that based on current peak vehicular and pedestrian volumes and delays and conflicts at this intersection, neither traffic control signals nor a pedestrian crossover is warranted at this time.

**RECOMMENDATIONS**

Transportation Services recommends that:

1. City Council not approve the installation of traffic control signals or a pedestrian crossover at the intersection of Kennedy Road at Perthshire Street.

**Financial Impact**

There is no financial impact associated with this report. However, should Council approve the installation of a pedestrian crossover or traffic control signals, the cost would be approximately $95,000.00 and $160,000.00 respectively. Funding for either of these alternatives is not included in the Transportation Services 2016 Capital Budget.

**ISSUE BACKGROUND**

As a result of both a public request for Pedestrian Crossing protection and the submission of a claim related to a motor vehicle collision, Transportation Services staff reviewed the feasibility of providing pedestrian crossing protection at or near the intersection of Kennedy Road and Perthshire Street. The Traffic Management Centre conducted a study.
on Tuesday, March 8, 2016. The pedestrian crossover study covered an area of approximately 100 metres in length: 50 metres either side of the intersection.

**COMMENTS**
The following characteristics describe the area in the vicinity of the Kennedy Road and Perthshire Street intersection:

- Kennedy Road in the vicinity of Perthshire Street is a five-lane major arterial roadway with a two-way centre left turn lane. The pavement width is 16.6 metres in width.
- Kennedy Road has a speed limit of 60 kilometres per hour (km/h).
- Traffic control signals are located at the 3088 Kennedy Rd private access approximately 220 metres north of Perthshire Street and approximately 580 metres south at the Kennedy Road and Trojan Gate intersection.
- Sidewalks are located on both sides of Kennedy Road in the vicinity of Perthshire Street.
- The land uses on this section of Kennedy Road is primarily single family residential on the west side and commercial uses on the east side.

**Pedestrian Crossing Protection Warrant Studies**

Transportation Services staff conducted a Pedestrian Crossing Protection Warrant Study at the intersection of Kennedy Road at Perthshire Street. The study provides an assessment of the need for a signalized pedestrian crossover based on crossing pedestrian volumes and delays and are expressed in terms of percent compliance with accepted thresholds. The 100% threshold is approximately 200 pedestrian crossings in an eight-hour period. Using traffic volumes recorded over the peak eight hours of a typical weekday, the following results were obtained:

**Pedestrian Crossover Warrant Studies and Historical Counts**

<table>
<thead>
<tr>
<th>Pedestrian Crossover Warrant</th>
<th>Compliance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Volume (8 hours)</td>
<td>6% (12 crossings)</td>
</tr>
<tr>
<td>Pedestrian Delays</td>
<td>5%</td>
</tr>
</tbody>
</table>

As outlined in the above table, the installation of a pedestrian crossover is not justified because both categories must be met 100%.

In addition, Transportation Services staff conducted a Traffic Control Signal Justification Study at the intersection of Kennedy Road and Perthshire Street. The study provides an assessment of the need for Traffic Control Signals based on volumes and delays to cross vehicular traffic and pedestrians, and are expressed in terms of percentages so as to be comparable over time. For traffic control signals to be numerically justified, one of the
"Minimum Vehicular Volume" or "Delay to Cross Traffic" or "Collision Hazard" warrants must be 100% satisfied, or both "Minimum Vehicular Volume" and "Delay to Cross Traffic" must be at least 80% satisfied.

Traffic Control Signal Justification Studies

<table>
<thead>
<tr>
<th>Traffic Control Signal Warrant</th>
<th>Compliance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tuesday, March 8, 2016</td>
</tr>
<tr>
<td>Minimum Vehicular Volume</td>
<td>12%</td>
</tr>
<tr>
<td>Delay to Cross Traffic</td>
<td>13%</td>
</tr>
<tr>
<td>Collision Hazard</td>
<td>7%</td>
</tr>
</tbody>
</table>

As outlined in the above table, the traffic volumes do not satisfy the warrants to install traffic control signals at the subject intersection at this time.

It should be noted that a pedestrian refuge island is also not warranted as only 12 crossings were observed, and a 100 crossing minimum is the Divisional guideline. In addition, it is not feasible to install such an island south of Perthshire Street since it would interfere with turning lanes.

Collision History
The results of a review of the Toronto Police Service collision records for the six-year period ending December 31, 2015 on Kennedy Road at Perthshire Street are summarized below.

<table>
<thead>
<tr>
<th>Six-Year Collision Information</th>
<th>Number of Reported Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Vehicle-Only Collisions Potentially Preventable by the Installation of Traffic Control Signals (at intersection)</td>
<td>0</td>
</tr>
<tr>
<td>Collisions Involving Pedestrian Crossings of Kennedy Road (at intersection)</td>
<td>0</td>
</tr>
</tbody>
</table>

*2015 partial data only available from TMC.

This collision record is not indicative of a safety problem at this location.
On the basis of the foregoing studies and analyses, it is recommended that Pedestrian Crossing Protection not be installed in the area of Kennedy Road and Perthshire Street at this time. The TTC has been consulted regarding this matter.

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SIGNATURE

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John Mende, P Eng.
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Transportation Services Division

ATTACHMENTS
1. Location Plan (Pedestrian Crossing Protection Review - Kennedy Road and Perthshire Street)