# Traffic Control Signals Study – Old Kingston Road and Morrish Road

<table>
<thead>
<tr>
<th>Date</th>
<th>August 12, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>To:</td>
<td>Scarborough Community Council</td>
</tr>
<tr>
<td>From:</td>
<td>Director, Transportation Services, Scarborough District</td>
</tr>
<tr>
<td>Wards:</td>
<td>Ward 44 – Scarborough East</td>
</tr>
<tr>
<td>Reference</td>
<td>P:\2011\Cluster B\TRA\Scarborough\sc1190</td>
</tr>
<tr>
<td>Number:</td>
<td>D11-4277557 Old Kingston Morrish tcs</td>
</tr>
</tbody>
</table>

## SUMMARY

The purpose of this report is to secure the authority for the installation of Traffic Control Signals at the intersection of Old Kingston Road and Morrish Road.

Traffic studies reveal that Traffic Control Signals should be installed to improve safety.

## RECOMMENDATIONS

Transportation Services recommends that:

1. City Council approve the installation of Traffic Control Signals at the intersection of Old Kingston Road and Morrish Road.

2. City Council pass or amend the appropriate by-law(s) accordingly.

## Financial Impact

The financial cost of installing these new Traffic Control Signals is approximately $175,000.00. The funding for these signals is currently not available in the Transportation Services Division’s Capital Works Budget under Project No. CTP711-01. The Traffic Control Signal would be installed when budget and scheduling permits, taking into consideration competing priorities.
**ISSUE BACKGROUND**
Transportation Services staff conducted traffic studies to determine whether traffic control signals should be installed at the subject intersection.

A Traffic Control Signal study has been conducted at the intersection of Old Kingston Road and Morrish Road.

**COMMENTS**
The following characteristics describe the intersection of Old Kingston Road and Morrish Road:

- Old Kingston Road is a two-lane minor arterial road. Morrish Road is a collector road. This intersection is in the Centennial Scarborough Neighbourhood.
- Old Kingston Road has a posted speed limit of 50 kilometres per hour (km/h) and a daily traffic volume of approximately 9,500 vehicles per day (vpd).
- This intersection is presently controlled by a northbound and southbound stop sign on Morrish Road.
- Toronto Transit Commission bus stops for both the eastbound and westbound direction are located on the west side of Morrish Road on Old Kingston Road.
- Traffic Control Signals are located approximately 245 metres west at Military Trail and approximately 205 metres east at Lawson Road.
- Sidewalks are located on both sides of Old Kingston Road and Morrish Road.
- Land uses in the area consist of commercial uses and a place of worship.

**Traffic Control Signal Justification Study**
Transportation Services staff conducted a Traffic Control Signal Justification Study at the intersection of Old Kingston Road and Morrish Road. Using traffic volumes recorded over the peak eight hours of a typical weekday, the following warrant compliance results were obtained.

<table>
<thead>
<tr>
<th>Traffic Control Signal Justification</th>
<th>Compliance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Vehicular Volume</td>
<td>51%</td>
</tr>
<tr>
<td>Delay To Cross Traffic</td>
<td>80%</td>
</tr>
<tr>
<td>Collision Hazard</td>
<td>100%</td>
</tr>
</tbody>
</table>

For traffic control signals to be numerically justified, one of the “Minimum Vehicular Volume”, “Delay to Cross Traffic” or “Collision Hazards” warrants must be 100 percent satisfied, or the first two of the warrants must be at least 80 percent satisfied. Our review of the Collision Hazard is based on the previous three-year (2008-2010) collision history.

As outlined in the above table, the installation of traffic controls signals at this intersection is justified.
Collision History

A review of the Toronto Police Service collision records for the three-year period from January 1, 2008 to December 31, 2010 is summarised below.

<table>
<thead>
<tr>
<th>Three-Year Collision Information</th>
<th>Number of Reported Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
</tr>
<tr>
<td>Collisions Potentially Preventable by the installation of Traffic Control Signals</td>
<td>6</td>
</tr>
<tr>
<td>Collisions Involving Pedestrians Crossing Old Kingston Road</td>
<td>0</td>
</tr>
</tbody>
</table>

As show above, this collision records on the above noted roadway is indicative of a safety issue at this location.

In summary, since this intersection has an unusually high collision record, traffic control signals are justified and is beneficial to the overall operation of the intersection and should be installed.

**CONTACT**

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

**SIGNATURE**

Peter J. Noehammer, P.Eng.
Director, Transportation Services, Scarborough District

PW:ca

**ATTACHMENTS**

1. Location Plan (Proposed Traffic Control Signals – Old Kingston Road and Morrish Road)