Traffic Control Signals: Keele Street at Gracefield Avenue

Date: March 17, 2014
To: Etobicoke York Community Council
From: Director, Transportation Services - Etobicoke York District
Wards: Ward 12 – York South-Weston
Reference Number: p:\2014\Cluster B\TRA\EtobicokeYork\eycc140067-to

SUMMARY
This staff report is about a matter for which Community Council does not have delegated authority from City Council to make a final decision. As the Toronto Transit Commission (TTC) operates a transit service on Keele Street, City Council approval of this report is required. TTC staff has not been advised of the signal installation studies.

The installation of traffic control signals at this location cannot be supported by staff as the Technical justification is not met.

RECOMMENDATIONS
Transportation Services Etobicoke York District recommends that City Council:

1. Not approve the installation of traffic control signals at the intersection of Keele Street and Gracefield Avenue.

Financial Impact
There is no financial impact associated with this report. However, should traffic control signals be installed at the intersection of Keele Street and Gracefield Avenue, the estimated cost is $150,000.00.

ISSUE BACKGROUND
Further to a request from the Ward Councillor on behalf of the area residents, Transportation Service staff conducted a traffic study to review the feasibility of installing traffic control signals at the intersection of Keele Street and Gracefield Avenue. A map of the area is Attachment 1.
COMMENTS
The following characteristics describe the area around Keele Street and Gracefield Avenue:

a. Keele Street is classified as a major arterial road with traffic volume of approximately 29,000 vehicles per day,
b. Keele Street has a posted speed limit of 60 km/h and a pavement width of 14.5 metres.
c. The intersection of these roadways is controlled by a ‘Stop’ sign on Gracefield Avenue.
d. Traffic control signals are located approximately 350 metres to the south at the intersection of Keele Street and Lawrence Avenue West and approximately 290 metres to the north at Keele Street and Maple Leaf Drive.

In response to the public request for traffic control signals at this intersection, Transportation Services staff has undertaken several traffic studies, turning movement counts and pedestrian crossing counts and has also reviewed the collision history along this section of roadway.

Traffic Control Signals
The results of the eight hour turning movement count at the intersection of Keele Street and Gracefield Avenue has indicated the technical requirements for the installation of traffic control signals were satisfied to the following extent:

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<thead>
<tr>
<th>Warrant</th>
<th>Compliance</th>
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<tr>
<td>Warrant 1</td>
<td>Minimum Vehicular Volume</td>
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<tr>
<td>Warrant 2</td>
<td>Delay to Cross Traffic</td>
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<tr>
<td>Warrant 3</td>
<td>Collision Hazard</td>
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To satisfy the installation of traffic control signals, 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 or greater. 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.

In reviewing the most recent three year collision history for Keele Street and Gracefield Avenue intersection, there have been four collisions of the type susceptible to correction by the installation of traffic control signals.

Therefore, in view of the above study results, the installation of Traffic Control Signals is not justified at the intersection of Keele Street and Gracefield Avenue.
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SIGNATURE

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ATTACHMENTS

Attachment 1: Map