Traffic Control Signals – Harbord Street at Clinton Street

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<th>Date:</th>
<th>December 9, 2010</th>
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<td>To:</td>
<td>Toronto and East York Community Council</td>
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<td>From:</td>
<td>Director, Transportation Services Toronto and East York District</td>
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<td>Wards:</td>
<td>Trinity-Spadina, Ward 19</td>
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SUMMARY

Transportation Services is requesting authority from City Council to install traffic control signals at the intersection of Harbord Street and Clinton Street.

The installation of traffic control signals at this location will enhance safety for pedestrians and motorists. This installation will result in the loss of eight parking spaces on Harbord Street and one space on Clinton Street.

RECOMMENDATIONS

Transportation Services recommends that:

1. City Council approve the installation of traffic control signals at the intersection of Harbord Street and Clinton Street.

Financial Impact

The estimated cost of installing traffic control signals at the intersection of Harbord Street and Clinton Street is approximately $160,000. Funds in the amount of $2,720,000 have been requested in the 2011 Transportation Services Capital Budget submission for installation of traffic control signals. This work would be subject to competing priorities and available funding.

ISSUE BACKGROUND

Transportation Services, was requested by Toronto Police Services to consider installing traffic control signals at the intersection of Harbord Street and Clinton Street to enhance safety for pedestrians crossing Harbord Street at this intersection.
COMMENTS

Current conditions

Harbord Street is a minor arterial roadway with a daily two-way traffic volume of approximately 21,000 vehicles and a speed limit of 40 km/h. Harbord Street has a single lane of traffic and a dedicated bicycle lane in each direction. Parking is permitted on both the north and south sides of the street for a maximum period of three hours, controlled by parking machines that operate from 8:00 a.m. to 6:00 p.m., Monday to Saturday. The “Wellesley-94” TTC bus operates on Harbord Street.

Clinton Street is a local roadway operating one-way northbound. It has a daily traffic volume of approximately 3,000 vehicles and a speed limit of 40 km/h. A “Stop” sign is posted for northbound traffic on Clinton Street at Harbord Street.

A “School Crossing” delineated by signs only is located on Harbord Street at the east side of the intersection. This crossing is staffed by an adult guard during normal school hours. Adjacent traffic control signals are located at Manning Avenue (about 100 metres east of Clinton Street) and at Grace Street (about 140 metres west of Clinton Street).

Investigation

Transportation Services undertook an eight-hour study of pedestrians, cyclists and traffic volumes at the intersection on a typical weekday. During the eight-hour period a total of 399 pedestrians and 353 cyclists were recorded crossing Harbord Street at Clinton Street.

Based on the pedestrian, cyclist and vehicular traffic count data obtained at the intersection of Harbord Street and Clinton Street, the technical warrants for the installation of traffic control signals are satisfied to the following extent:

- Warrant 1: Minimum Vehicular Volume 82 percent
- Warrant 2: Delay to Cross Traffic 100 percent
- Warrant 3: Collision Hazard 60 percent

To meet the technical requirements for the installation of traffic control signals, either the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrant must be 100 percent satisfied, or any two of the three warrants must be at least 80 percent satisfied.

The “Collision Hazard” warrant is based on the number of collisions potentially preventable by the installation of traffic control signals. Collision statistics provided by the Toronto Police Service for the preceding three-year period ending June 30, 2010 indicate that a total of 11 collisions were reported at the intersection of Harbord Street and Clinton Street. Of the 11 collisions reported, 1 involved a pedestrian, 3 involved cyclists, and 5 angle-type motor vehicle collisions. Each of these 9 collisions is considered potentially preventable by the installation of traffic control signals. The other 2 collisions were not of a type deemed preventable by traffic control signals.
Ideally, the spacing between adjacent signal controlled intersections is a minimum of 200 metres. However, in an urban environment such as the central area of Toronto it is difficult to maintain the desired spacing and provide the appropriate means of traffic control. Based on the warrant evaluation noted above, the installation of traffic controls signals at the intersection of Harbord Street and Clinton Street is warranted and recommended.

The Toronto Transit Commission (TTC) has been advised of the proposed installation of traffic control signals at this intersection. Transit priority currently operates on Harbord Street. The transit priority feature will be implemented as part of the signal operation to enhance the “Wellesley-94” bus operation through the Harbord/Clinton intersection.

As the members of Council are aware, parking is prohibited on all approach roads within 30.5 metres of signalized intersection. If signals are installed at this intersection, this will result in the loss of 8 parking spaces on Harbord Street and 1 parking space on Clinton Street.

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SIGNATURE

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LIST OF ATTACHMENTS
(1) Drawing No. 421G-0188, dated December 2010