



STAFF REPORT ACTION REQUIRED

Traffic Control Signals – Dundas Street West at Gladstone Avenue

Date:	February 11, 2010
To:	Toronto and East York Community Council
From:	Director, Transportation Services Toronto and East York District
Wards:	Davenport, Ward 18
Reference Number:	Ts10021te.top.doc.

SUMMARY

Transportation Services is requesting authority from City Council to install traffic control signals at the intersection of Dundas Street West and Gladstone Avenue.

The installation of traffic control signals at this location will replace an existing pedestrian crossover (PXO) and enhance safety for pedestrians and motorists. This installation will result in the loss of approximately four parking spaces on Gladstone Avenue.

RECOMMENDATIONS

Transportation Services recommends that:

1. City Council approve the removal of a pedestrian crossover (PXO) from the west side at the intersection of Dundas Street West and Gladstone Avenue and, coincident with the removal of the PXO, approve installation of traffic control signals at this intersection.

FINANCIAL IMPACT

The estimated cost of replacing the pedestrian crossover with traffic control signals on Dundas Street West and Gladstone Avenue is approximately \$130,000. Funds in the amount of \$2,725,000 have been allocated in the 2010 Transportation Services Capital Budget for installation of traffic control signals. This work would be subject to competing priorities and available funding.

ISSUE BACKGROUND

City of Toronto Council, at its meeting of September 25, 26, 27 and 28, 2006, adopted Clause No. 8 of Works Committee Report No. 6, recommending visibility enhancements to the pedestrian crossover operation at the intersection of Dundas Street West and Gladstone Avenue. The enhancements, which include the addition of flashing beacons, signs and zebra striping are part of a four-year upgrade across the City and scheduled for this location in 2011.

Transportation Services was recently requested by Councillor Adam Giambrone to investigate and report on the installation of traffic control signals at the intersection of Dundas Street West and Gladstone Avenue to enhance crossing safety for pedestrians.

COMMENTS

Current conditions

Dundas Street West is a minor arterial roadway with a daily two-way traffic volume of approximately 18,000 vehicles and a speed limit of 50 km/h. This section of Dundas Street West generally operates with a single lane of traffic in each direction, with parking permitted on both sides of the street except during the rush hour periods, Monday to Friday. Transit service on Dundas Street West is provided by the “505-Dundas” streetcar and near-side transit stops are located at Gladstone Avenue.

Gladstone Avenue is a local roadway that operates two-way, northbound and southbound, north of Dundas Street West, and reverts to one-way southbound, south of Dundas Street West. It has a daily traffic volume of approximately 1,700 vehicles and a speed limit of 40 km/h. Gladstone Avenue is “Stop” sign controlled for southbound traffic at Dundas Street West.

Currently, a pedestrian crossover (PXO) is located on the west intersection leg, providing pedestrians with a controlled crossing area across Dundas Street West.

Investigation

Transportation Services initially undertook a study to review the operating characteristics at the PXO. During the busiest eight-hour period of a typical weekday, a total of 565 pedestrians and 150 cyclists were recorded crossing Dundas Street West within the crosswalk. Additionally, a total of 23 pedestrians and 211 cyclists were recorded crossing Dundas Street West outside the crosswalk.

Based on the vehicular and pedestrian traffic count data obtained at the intersection of Dundas Street West and Gladstone Avenue, the technical warrants for the installation of traffic control signals are satisfied to the following extent:

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| • Warrant 1: | Minimum Vehicular Volume | 24 percent |
| • Warrant 2: | Delay to Cross Traffic | 100 percent |
| • Warrant 3: | Collision Hazard | 0 percent |

To meet the technical requirements for the installation of traffic control signals, one of the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrants 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 period from September 2006 to December 31, 2009 indicate that a total of 14 collisions have been reported at the intersection of Dundas Street West and Gladstone Avenue. Of the 14 collisions, 3 involved a pedestrian crossing within the crosswalk, and 3 others are considered potentially preventable by the installation of traffic control signals.

Based on the above results, the installation of traffic controls signals is warranted and recommended at this intersection.

The Toronto Transit Commission (TTC) has been advised of the proposed installation of traffic control signals at this intersection. Transit priority currently operates on Dundas Street West. The transit priority feature will be implemented with the signal operation at the Dundas/Gladstone intersection to enhance the “505-Dundas” streetcar operation through this intersection.

Summary

To provide enhanced protection for motorists and pedestrians crossing Dundas Street West, the installation of traffic control signals and the removal of the PXO at this intersection is recommended. Signalization will enhance intersection safety and minimize conflicts between pedestrians and motor vehicles, but some less desirable consequences may result:

- Some increased congestion and delay to traffic on Dundas Street West is possible;
- Signalization could promote increased traffic volume on Gladstone Avenue;
- As with any installation of traffic control signals, parking will be prohibited at all times within 30.5 metres of the intersection. This will result in a loss of about four parking spaces on Gladstone Avenue. Since Dundas Street West currently has corner restrictions exceeding this distance there will be no further impact on parking on Dundas Street West;

- Pedestrians will experience increased wait times before being able to cross Dundas Street West.

CONTACT

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SIGNATURE

Peter Noehammer, P.Eng.
Director, Transportation Services

LIST OF ATTACHMENTS

(1) Drawing No. 421F-9911, dated February 2010

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