



**STAFF REPORT
ACTION REQUIRED**

Dufferin Street and Saskatchewan Road – Traffic Control Signals

Date:	January 26, 2007
To:	Toronto and East York Community Council
From:	Director, Transportation Services Toronto and East York District
Wards:	Trinity-Spadina, Ward 19
Reference Number:	Ts04049te.top.doc

SUMMARY

Transportation Services has been requested by Exhibition Place to install traffic control signals at the intersection of Dufferin Street and Saskatchewan Road and to remove the pedestrian crossover (PXO) on Dufferin Street, approximately 75 metres north of Saskatchewan Road, near the Dufferin Gate.

The installation of traffic control signals at Dufferin Street and Saskatchewan Road will provide safe and efficient access for pedestrians, cyclists and motorists wishing to cross Dufferin Street. This will result in the removal of the PXO, approximately 75 metres to the north, at the same time as the traffic signals are installed. All costs will be borne by Exhibition Place as both locations are within the grounds of Exhibition Place.

RECOMMENDATIONS

Transportation Services recommends that:

1. Council approve traffic control signals at the intersection of Dufferin Street and Saskatchewan Road and that the existing pedestrian crossover on Dufferin Street, approximately 75 metres north of Saskatchewan Road, be removed coincident with the installation.

Financial Impact

The adoption of the above-noted Recommendation will not result in any financial impact to Transportation Services. All costs associated with the proposal, in the estimated amount of \$160,000.00, are the responsibility of Exhibition Place.

ISSUE BACKGROUND

Transportation Services was requested by Exhibition Place to report on the installation of traffic control signals at Dufferin Street and Saskatchewan Road.

COMMENTS

Dufferin Street, in the vicinity of Saskatchewan Road, is a two-lane roadway with exclusive southbound left-turn and northbound right-turn lanes provided at Saskatchewan Road. Saskatchewan Road is a two-lane roadway that intersects the east side of Dufferin Street in a “Stop” controlled, ‘T-type’ intersection. There is a pedestrian crossover (PXO) for pedestrians to cross Dufferin Street approximately 75 metres north of Saskatchewan Road.

Our staff recently undertook traffic studies to record vehicle and pedestrian volumes at this intersection during an event occurring on the Exhibition Place grounds, namely the Royal Agricultural Winter Fair. The studies were undertaken on two separate dates (Friday, November 10 and Saturday, November 11, 2006) to capture weekday and weekend conditions at this intersection during an event.

Based on the eight-hour vehicular and pedestrian traffic counts conducted at this intersection, and the collision history, the technical warrants for the installation of traffic control signals are satisfied to the following extent:

Warrant	Weekday event study	Weekend event study
Warrant 1: Minimum Vehicular Volume	69 percent	84 percent
Warrant 2: Delay to Cross Traffic	82 percent	86 percent
Warrant 3: Collision Hazard	0 percent	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. Based on the above results, the installation of traffic controls signals is not warranted at this intersection under weekday event conditions but is warranted under weekend event conditions.

Collision statistics provided by the Toronto Police Service for the three-year period ending July 31, 2006 disclosed that four collisions occurred at this intersection. None of these involved a pedestrian and none were potentially preventable by the installation of traffic control signals.

Additionally, it is noted that the minimum recommended spacing between adjacent traffic control devices is 200 metres. This is the minimum distance at which drivers can detect a traffic control device or a hazard in a cluttered environment, recognize it, and perform the required action safely. As noted, there is a PXO located approximately 75 metres north of Dufferin Street and Saskatchewan Road. Therefore, when the traffic control signals

are installed at the intersection of Dufferin Street and Saskatchewan Road, the existing PXO should be removed concurrently.

Our staff also undertook studies at this PXO on the same dates and during the same time periods as at Dufferin Street and Saskatchewan Road. During the busiest eight-hour periods of the weekday event and weekend event studies, there were 550 and 1,344 pedestrians recorded crossing within the painted crosswalk on Dufferin Street, respectively. The types of pedestrians recorded during these studies are summarized in the table below:

Pedestrian type	Weekday event study	Weekend event study
Youths and adults	370 (67 percent)	1,042 (78 percent)
Assisted children	147 (27 percent)	247 (18 percent)
Senior citizens	30 (5 percent)	50 (4 percent)
Unassisted children	3 (1 percent)	1 (0 percent)
Disabled	0 (0 percent)	4 (0 percent)
Total	550	1,344

The new traffic control signals will provide a viable option for these pedestrians to cross Dufferin Street. However, some crossings may continue to occur at this location after the PXO removal, instead of the traffic signals at Saskatchewan Road. Therefore, Exhibition Place staff has indicated that they will install measures to physically prevent pedestrian crossings of Dufferin Street.

A meeting will be held in late February 2007 between Deputy Mayor Pantalone, our staff and Exhibition Place staff to finalize the design of the proposed traffic control signals.

CONTACT

Dan Clement, Transportation Technologist
Traffic Operations, Toronto and East York District
Phone: (416) 338-5454; Fax: (416) 392-1920; e-mail: dclemen@toronto.ca

SIGNATURE

Andrew Koropeski, P.Eng.
Director, Transportation Services

ATTACHMENTS

Drawing No. 421F-8676, dated January 2007

P:\2007\Cluster B\TRA\Toronto and East York\top\ts07049te.top.doc – cag