Traffic Control Signals – Lansdowne Avenue at Seaforth Avenue

Date: May 15, 2012

To: Toronto and East York Community Council

From: Acting Director, Transportation Services Toronto and East York District

Wards: Parkdale-High Park, Ward 14

Reference Number: Ts2012108te.top

SUMMARY

Transportation Services is requesting authority from City Council to install traffic control signals at the intersection of Lansdowne Avenue and Seaforth Avenue.

The installation of traffic control signals at this location will replace an existing pedestrian crossover and enhance safety for pedestrians and motorists. This installation will result in the loss of approximately three parking spaces in total, two on Lansdowne Avenue and one on Seaforth Avenue.

RECOMMENDATIONS

Transportation Services recommends that:

1. City Council approve the removal of a pedestrian crossover from the south side at the intersection of Lansdowne Avenue and Seaforth Avenue and, coincident with the removal of the pedestrian crossover, approve installation of traffic control signals at this intersection.

FINANCIAL IMPACT

The estimated cost of replacing the pedestrian crossover with traffic control signals on Lansdowne Avenue at Seaforth Avenue is approximately $160,000.00. Funds in the amount of $3,155,000.00 have been allocated in the 2012 Transportation Services Capital Budget for installation of traffic control signals. This work would be subject to competing priorities and available funding.
ISSUE BACKGROUND
Transportation Services was recently requested by Councillor Gord Perks to report on the installation of traffic control signals at the intersection of Lansdowne Avenue and Seaforth Avenue to enhance crossing safety for pedestrians.

COMMENTS
Current conditions
Lansdowne Avenue is a two-lane minor arterial roadway with a daily two-way traffic volume of approximately 16,000 vehicles and a speed limit of 40 km/h. This section of Lansdowne Avenue operates with a single lane of traffic in each direction, with parking permitted on the west side of the street at all times.

Seaforth Avenue is a local roadway and is "Stop" controlled for east-west vehicles and cyclists at Lansdowne Avenue. The daily traffic volumes are approximately 2,500 vehicles with a speed limit of 40 km/h.

Toronto Transit Commission service at this intersection is provided by the "47-Lansdowne " bus, operating on Lansdowne Avenue and Seaforth Avenue (west leg) and the "402-Parkdale" bus, which operates on Lansdowne Avenue.

Currently, a pedestrian crossover with enhanced lighting and pavement markings is located on the south intersection leg, providing pedestrians with a controlled crossing area across Lansdowne Avenue.

Investigation
Transportation Services undertook a study to review the operating characteristics within the intersection of Lansdowne Avenue and Seaforth Avenue. The results of the study during the busiest eight-hour period of a typical weekday, revealed a total of 585 pedestrians and 137 cyclists were recorded crossing Lansdowne Avenue within the crosswalk.

Based on the same vehicular and pedestrian study obtained at the intersection of Lansdowne Avenue and Seaforth Avenue, the technical warrants for the installation of traffic control signals are satisfied to the following extent:

- Warrant 1: Minimum Vehicular Volume 89 percent
- Warrant 2: Delay to Cross Traffic 84 percent
- Warrant 3: Collision Hazard 7 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.
Collision History
To satisfy the "Collision Hazard" warrant, collision history should confirm that there have been an average of 5 or more collisions per year of a type potentially preventable by traffic control signals during each of the three preceding years.

Our review of the Toronto Police Service collision records for a three-year period ending December 31, 2011 indicates that a total of 13 collisions have been reported at the intersection of Lansdowne Avenue and Seaforth Avenue. Of the 13 collisions, 2 are considered potentially preventable by the installation of traffic control signals. There were no collisions involving a pedestrian and/or cyclists within this intersection during the 3-year period.

Summary
Based on the study results, traffic control signals are technically warranted at the intersection of Lansdowne Avenue and Seaforth Avenue and are recommended. Replacing the existing pedestrian crossover at this intersection with traffic control signals will enhance safety and minimize conflicts between pedestrians, cyclists and motor vehicles.

The Toronto Transit Commission has been advised of the proposed installation of traffic control signals at this intersection. Transit priority currently operates on Lansdowne Avenue. The transit priority feature will be implemented with the signal operation at this intersection to enhance the “47-Lansdowne” and the "402-Parkdale” bus service through this intersection.
While signalization enhances intersection safety and minimizes conflict between pedestrians/cyclists and motor vehicles, some negative impact may be:

- Some increased congestion and delay to traffic on Lansdowne Avenue is possible;
- Signalization could promote increased traffic volume on Seaforth 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 approximately three parking spaces in total, two on Lansdowne Avenue and one on Seaforth Avenue; and
- Pedestrians will experience increased wait times before being able to cross Lansdowne Avenue.

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**SIGNATURE**

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**LIST OF ATTACHMENTS**

(1) Drawing No. 421G-0689, dated May 2012

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