Turn Prohibition – Bathurst Street and Adelaide Street West

Date: September 11, 2015
To: Toronto and East York Community Council
From: Director, Transportation Services, Toronto and East York District
Wards: Trinity-Spadina, Wards 19 and 20
Reference Number: Ts2015169te.top.doc

SUMMARY

Transportation Services is requesting approval from City Council to prohibit northbound right-turns on a red signal at the intersection of Bathurst Street and Adelaide Street West. The proposed regulation will enhance safety at this intersection by preventing potential conflicts between northbound right-turning motorists and eastbound cyclists. These changes will also enhance pedestrian safety and will have a minor impact on the traffic operations for northbound motorists.

RECOMMENDATIONS
Transportation Services recommends:

1. City Council prohibit northbound right-turns on a red signal from Bathurst Street to Adelaide Street West at all times.

Financial Impact
Funding for the installation of signs in the estimated amount of $200.00 is available within the Transportation Services 2015 Operating Budget.

ISSUE BACKGROUND
Transportation Services reviewed the requirement to prohibit northbound right-turns on red at the intersection of Bathurst Street and Adelaide Street West, due to reported safety concerns for the high volumes of eastbound cyclists at this intersection.
COMMENTS

The intersection of Bathurst Street and Adelaide Street West is controlled by traffic signals. Bathurst Street is a north-south major arterial road with a daily traffic volume of about 28,000 vehicles and a regulatory speed limit of 50 km/h. TTC service on Bathurst Street is provided by the '511 Bathurst' streetcar, which operates on a shared right-of-way with general traffic. Adelaide Street West is a major arterial road that intersects the east side of Bathurst Street in a 'T-type' intersection. It has a daily one-way traffic volume of about 12,000 vehicles and a regulatory speed limit of 50 km/h.

Northbound right-turn movements at this intersection are made from a shared lane with straight through traffic. Accordingly, if a straight through motorist is the first vehicle in the queue on a north-south red signal indication, right-turning motorists are not able to proceed. During the busiest eight-hour period of a typical weekday, about 2,600 northbound right-turns are made at the intersection of Bathurst Street and Adelaide Street West.

Cycle tracks were recently installed on the south side of Adelaide Street West, east of Bathurst Street, as well as the adjacent sections of Richmond Street West (Item PW31.7). Accordingly, there have been significant increases in the volumes of cyclists crossing Bathurst Street at this intersection. It is anticipated that these volumes will continue to increase, as the cycle track is extended further east. Presently, southbound cyclists on Bathurst Street, destined to Adelaide Street West, generally proceed eastbound on the north-south red indication. These cyclists report that they may conflict with northbound right-turning motorists while undertaking this movement.

In order to review potential conflicts with cyclists, Transportation Services recently undertook studies to review these movements. The studies disclosed 460 and 276 northbound right-turns were made in the a.m. and p.m. peak hours, respectively. Of these right-turn movements, about 13 percent were made on a north-south red signal indication. The studies also disclosed 736 and 93 cyclists travelled eastbound in the a.m. and p.m. peak hours, respectively. Generally, there were no conflicts observed between northbound right-turning motorists and eastbound cyclists.

A review of Toronto Police Service collision records for the three-year period ending December 31, 2014 disclosed that 30 collisions occurred at the intersection of Bathurst Street and Adelaide Street West. Of these 30 collisions, two involved a cyclist. In the first collision, a northbound motorist side-swiped a cyclist on the north intersection leg. In the second collision, a northbound right-turning motorist on a red signal indication struck an eastbound cyclist within the south intersection leg pedestrian crossing. The latter collision would have been potentially prevented by the implementation of “No Right-Turns on the Red” regulation for northbound motorists.
In view of the forgoing, Transportation Services recommends the implementation of a right-turn on red regulation for northbound traffic at the intersection of Bathurst Street and Adelaide Street West. This prohibition will address the potential safety concerns for cyclists. Additionally, it will enhance the safety for pedestrians crossing at this intersection.

Councillors Joe Cressy and Mike Layton have been advised of the recommendation in this report.

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SIGNATURE

Kyp Perikleous
Director, Transportation Services
Toronto and East York District

LIST OF ATTACHMENTS
1. Drawing No. 421G-1902, dated September 2015

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