

All-way Stop Control – Richmond Street West and Niagara Street

Date: November 23, 2018
To: Toronto and East York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 10, Spadina - Fort York

SUMMARY

This staff report is about a matter that Community Council has delegated authority to make a final decision, provided that it is not amended so that it varies with City Policy or by-laws.

Transportation Services is requesting approval to install all-way stop control at the intersection of Richmond Street West and Niagara Street to enhance safety for pedestrians, cyclists and motorists at this intersection. The installation of the all-way stop sign control is technically warranted and will enhance operational safety at this intersection.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services, recommends that:

1. Toronto and East York Community Council authorize all-way stop control at the intersection of Richmond Street West and Niagara Street (north intersection).

FINANCIAL IMPACT

All cost associated with the necessary signage installation are included within the Transportation Services 2019 Interim Operating Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

At the request of Councillor Mike Layton, on behalf of area residents, Transportation Services investigated the feasibility of implementing all-way stop control at the intersection of Richmond Street West and Niagara Street. This intersection is now located in Ward 10 of Spadina - Fort York.

Existing Conditions

Richmond Street West (east leg) is a local roadway that operates one-way in the eastbound direction, between Tecumseth Street and Niagara Street. It generally has a width of 7.3 metres with a posted speed limit of 30 km/h. Recently, a westbound contra-flow bike lane has been installed on the north side of Richmond Street West. A stop sign exists for westbound cyclists at Niagara Street.

Niagara Street is a collector roadway that operates two-way in the northbound and southbound directions between Queen Street West and King Street West. It generally has a width of 8.5 metres north of Richmond Street West, and 7.3 metres south of Richmond Street West (west leg), and a posted speed limit is 40 km/h. The land use in the vicinity of this intersection is generally residential. There is no TTC service provided at this intersection.

Analysis

The intersection of Richmond Street West and Niagara Street was evaluated against the warrants for the implementation of "All-way Stop" sign control adopted by City Council. The warrants governing the installation of "Stop" signs encompass such factors as right-of-way conflicts, vehicular and pedestrian usage of the intersection, physical and geometric configuration, surrounding traffic control and collision experience.

Collision statistics provided by the Toronto Police Service for the three-year period ending July 1, 2018 disclosed that three collisions had occurred at the intersection of Richmond Street West and Niagara Street. Further review of the three collisions disclosed that none of these collisions were considered to be potentially preventable by the installation of "All-way Stop" sign control.

The results of the all-way stop control warrant study at the intersection of Richmond Street West and Niagara Street has been summarized in the following table:

Total Approach Vehicle Volume (Each of Four Peak Hours)	Combined Crossing Volume (Vehicles & Pedestrians)	Main Street/Side-Street Volume Split ($\leq 70\%/30\%$)	Collision Hazard ($\geq 2/\text{yr.}$)	All-way Stop Warrants Satisfied (Yes/No)
Required: 375 Vehicles/Hour Actual: 746 Vehicles/Hr. (Met)	Required: 150 Units/Hour Actual: 366 Units/Hr. (Met)	56% / 44% (Met)	0.0 (Not Met)	Yes

Based on our evaluation, this intersection meets the warrants for the installation of all-way stop control at the intersection of Richmond Street West and Niagara Street and is supported by Transportation Services staff. This proposal will improve safety for all road users at this intersection.

The new Councillor for this area, Councillor Joe Cressy has been advised of the recommendation of this staff report.

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SIGNATURE

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ATTACHMENTS

1. Drawing No. 421G-3251, dated December 2018

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