

All-way Stop Controls - Greenwood Avenue and Strathmore Boulevard

Date: November 26, 2018
To: Toronto and East York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 14, Toronto - Danforth

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 staff have reviewed the need for all-way stop controls at the intersection of Greenwood Avenue and Strathmore Boulevard, to address residents' concerns regarding safety. Our assessment indicates the criteria as set out in the all-way stop warrant has been satisfied at this intersection. Therefore, the installation of all-way stop controls at the intersection of Greenwood Avenue and Strathmore Boulevard is recommended.

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 Greenwood Avenue and Strathmore Boulevard.

FINANCIAL IMPACT

All costs associated with the necessary installations at Greenwood Avenue and Strathmore Boulevard are included within the Transportation Services 2019 Interim Operating Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by former Councillor Mary Fragedakis to investigate the feasibility of installing all-way stop control at the intersection of Greenwood Avenue and Strathmore Boulevard, in response to a request from students of Danforth Collegiate and Technical Institute Secondary School.

Existing Conditions

Greenwood Avenue, in the vicinity of Strathmore Boulevard, is a north-south roadway classified as a minor arterial roadway and operates with two-way traffic on a pavement width of about 8.5 metres. The daily two-way traffic volume is about 10,000 vehicles and the posted speed limit is 40 km/h. Heavy trucks are prohibited at all times. There is no TTC service provided on Greenwood Avenue.

Strathmore Boulevard is classified as an east/west local roadway that operates two-way traffic on a pavement width of about 8.5 metres. The daily two-way traffic volume is about 1,100 vehicles and the posted speed limit is 30 km/h. Heavy trucks are prohibited at all times. There is no TTC service provided on Strathmore Boulevard.

Strathmore Boulevard at Greenwood Avenue is stop-controlled as Greenwood Avenue is designated as a through highway. Danforth Collegiate and Technical Institute Secondary School is located at the northwest corner of this intersection. Crosswalk lines are provided for north-south crossings of Strathmore Boulevard.

Analysis

In order for all-way stop control to be justified at an intersection, established warrant criteria must be satisfied. The criteria, as adopted by City Council, include such factors as collision history, total vehicle volume, the percentage of traffic on the major road and combined vehicle and pedestrian volumes crossing the major road.

Transportation Services evaluated Toronto Police Services collision records for the intersection of Greenwood Avenue at Strathmore Boulevard and the results of a vehicle/pedestrian study conducted at the intersection against the City's all-way stop control criteria. Based on this analysis, the intersection does meet the minimum criteria required for all-way stop control.

A review of the Toronto Police Services collision records over a three-year period ending December 31, 2017, revealed that eight collisions had occurred at or close to the intersection of Greenwood Avenue and Strathmore Boulevard. Further review of these collisions indicated that five of the eight collisions could have potentially been prevented by the installation of all-way stop controls at this intersection. Four of the five collisions resulted in property damage while one resulted in non-fatal injuries.

The results of the all-way stop control warrant study at the intersection of Greenwood Avenue at Strathmore Boulevard has been summarized in the following table:

Table 1 - All-way Stop Control Warrant

Warrant A: Collision History	Warrant B-1A: Total Approach Vehicular Volume	Warrant B-1B: Combined Crossing Volume (Vehicles & Pedestrians)	Warrant B-2: Main Street/Side- Street Volume Split	All-way Stop Warrants Satisfied (Yes/No)
Required: ≥4 Collisions/Year Actual: 1.7 Collisions/year (Not Met)	Required: 500 Vehicles/ Hour Actual: 642 Vehicles/Hour (Met)	Required: 200 Units/Hour Actual: 240 Units/Hour (Met)	Required: ≤70%/30% Actual: 70%/30% (Met)	Yes

In order to warrant for the installation of all-way stop controls, Warrant A, Warrant B-1A or Warrant B-1B must be met in addition to Warrant B-2. Based on the volume of vehicles, and combined traffic crossing the through street, the installation of all-way stop controls at the intersection of Greenwood Avenue and Strathmore Boulevard is supported by the technical criteria adopted by Toronto City Council and is, therefore recommended.

Councillor Paula Fletcher has been advised of the recommendation of this staff report.

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SIGNATURE

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ATTACHMENTS

1. Drawing No. 421G-3228, dated December 2018.

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