

Traffic Control Signals - Avondale Avenue at Bales Avenue and Harrison Garden Boulevard

Date: May 17, 2019

To: North York Community Council

From: Acting Director, Traffic Management, Transportation Services

Wards: Ward 18 - Willowdale

SUMMARY

This staff report is about a matter for which 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 North York Community Council to approve the installation of traffic control signals at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard.

The proposed traffic control signals do not fully satisfy the traffic control signal warrants, however, this installation will address safety concerns for all intersection users and provide enhanced guidance over the current all-way stop sign controls at this intersection.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services, recommends that North York Community Council:

1. Authorize the installation of traffic control signals at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard.
2. Subject to the approval of traffic control signals at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard, the existing all-way stop control on Avondale Avenue and Bales Avenue/Harrison Garden Boulevard be rescinded, coincident with the traffic control signal installation.

FINANCIAL IMPACT

The estimated cost of installing traffic control signals at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard is \$180,000.00. This installation would be considered in 2020, subject to the availability of funding and competing priorities.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by the Councillor John Filion, on behalf of local residents, to review the feasibility of replacing the all-way stop sign controls on Avondale Avenue and Bales Avenue/Harrison Garden Boulevard with traffic control signals. The requested traffic control signals are intended to address safety concerns for pedestrians and motorists at this intersection.

Avondale Avenue is a four lane, east /west collector street with a posted speed limit of 40 km/h and a daily traffic volume of approximately 15,000 vehicles at the intersection with Bales Avenue/Harrison Garden Boulevard. Municipal sidewalks are located on both sides of the street. Heavy vehicles are prohibited at all times and there is no TTC services provided on Avondale Avenue.

Harrison Garden Boulevard is a two-way local street with a posted speed limit of 40 km/h that runs south from Avondale Avenue. It has an average daily traffic volume of approximately 8,000 vehicles.

Bales Avenue is a two-way local street with a regulatory speed limit of 50 km/h that runs north from Avondale Avenue. It has an average daily traffic volume of approximately 5,000 vehicles. Sidewalks are provided on both sides of Bales Avenue/Harrison Garden Boulevard. Heavy vehicles are prohibited at all times and there is no TTC service provided on Bales Avenue/Harrison Garden Boulevard.

The intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard is controlled by an All-Way Stop. Adjacent traffic control signals on Avondale Avenue are located at Yonge Street, approximately 100 metres (centreline to centreline) to the west of Bales Avenue/Harrison Garden Boulevard and the dual westbound left turn lanes at this intersection extend to Harrison Garden Boulevard.

The existing land use within the immediate area of the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard is primarily mid to high density

residential. Also, there are commercial uses in the vicinity of subject intersection. Avondale Park is located at the intersection of Harrison Garden Boulevard and Humberstone Drive, approximately 100 metres south of Avondale Avenue.

A review of the Toronto Police Service collision records for the three-year period ending December 31, 2018 revealed that there were four reported collisions that are considered potentially preventable by traffic control signals. There were two reported collisions involving pedestrians at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard. One collision occurred on Thursday, May 5, 2018 at 6:40 p.m. The collision involved a 22 year old pedestrian in the east crosswalk being struck by a westbound left-turning motorist. The driver was charged and the pedestrian sustained minimal injuries. The other collision occurred on Wednesday, October 23, 2018 at 5:40 p.m. and involved a 42 year old pedestrian. No further details have been provided in the collision report for this accident.

An on-site assessment has confirmed that signs and pavement markings at this intersection are clearly visible and are generally in good condition.

Observations during the weekday morning peak hour (8:00 am – 9:00 am) on March 27, 2019 and afternoon peak hour (5:00 pm – 6:00 pm) on April 4, 2019 revealed the following:

- Significant pedestrians activity at this intersection;
- The westbound queue from Yonge Street backed up through the intersection;
- The southbound queue from Avondale Avenue backed up to Glendora Avenue;
- Some left turn and right turn motorists failed to yield right-of-way and execute their turn in front of the pedestrian;
- Senior pedestrians were hesitant to cross Avondale Avenue;
- Some pedestrians crossed outside the crosswalks; and
- Improper lane changes occurred in the vicinity of the crosswalks.

Traffic Control Signals

Transportation Services staff also reviewed the warrants for the installation of traffic control signals at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard, based on a traffic count undertaken on March 27, 2019. The technical warrant criteria was satisfied to the following extent:

Table 1: Traffic Control Signals Warrant Criteria and Compliance

Criteria	Avondale Avenue and Bales Avenue/Harrison Garden Boulevard
Minimum Vehicular Volume	90 percent
Delay to Cross Traffic	62 percent
Collision Hazard	27 percent
TCS Warrant?	No

To satisfy the installation of traffic control signals, one of either the Minimum Vehicular Volume or Delay to Cross Traffic warrants must be 100 percent satisfied, or both must be satisfied to the extent of 80 percent.

The Collision Hazard warrant is based on the number of collisions potentially preventable by the installation of traffic control signals, and must be 100 percent satisfied.

Based on the above study results, traffic control signals are not technically warranted at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard.

However, based on staff observations and in order to address pedestrian safety, we are recommending traffic control signals at the intersection of Avondale Avenue and Bales Avenue/Harrison Garden Boulevard.

The installation of traffic control signals may result in increased delays for traffic on Bales Avenue/Harrison Garden Boulevard since north-south traffic will wait for a green phase. Additionally, traffic volume on Everson Drive and Tradewind Avenue may increase as motorists find it easier to enter/cross Avondale Avenue. Pedestrian delays may also be increased. Regardless, considering the signal warrants are almost achieved and based on our observations, in particular the difficulties pedestrians are experiencing crossing at this all-way stop controlled intersection, traffic control signals are supported.

This installation will provide enhanced guidance over the current all-way stop sign controls and will enhance safety for all road users.

The Ward Councillor is aware of the recommendations of this staff report.

CONTACT

Bruce Clayton, Manager, Traffic Operations, Traffic Management, Transportation Services, Tel: 416-394-8409, Fax: 416-394-8942, Email: Bruce.Clayton@toronto.ca

SIGNATURE

Roger Browne, M.A. Sc., P.Eng
Acting Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Proposed Traffic Control Signals - Avondale Avenue at Bales Avenue and Harrison Garden Boulevard

Attachment 1: Map - Proposed Traffic Control Signals - Avondale Avenue at Bales Avenue and Harrison Garden Boulevard

