TORONTO

REPORT FOR ACTION

Turn Prohibitions - Avenue Road and Glencairn Avenue

Date: November 13, 2020

To: North York Community Council

From: Acting Director, Traffic Management, Transportation Services

Wards: Ward 8 - Eglinton Lawrence

SUMMARY

As the Toronto Transit Commission (TTC) operates bus service on Avenue Road, City Council approval of this report is required.

Transportation Services recommends the prohibition of eastbound and westbound left turn and through-traffic movements at all times at the intersection of Avenue Road and Glencairn Avenue. These prohibitions are intended to reduce the likelihood of collisions at the intersection.

Transportation Services completed a safety review of the intersection of Avenue Road and Glencairn Avenue that revealed a pattern of angle collisions. The majority of these collisions involved eastbound and westbound through or left-turning motorists crossing Avenue Road during the off-peak periods. These movements are already prohibited during the peak periods.

While traffic control signals are warranted based on the collision history at the intersection, the proposed prohibitions are recommended as a less restrictive measure to address these collisions. Also, the installation of signals would result in increased traffic on Glencairn Avenue, which may be concerning to Glencairn Avenue residents.

RECOMMENDATIONS

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

- 1. City Council amend the eastbound and westbound left-turn prohibitions in effect from 6:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m., Monday to Friday, at Avenue Road and Glencairn Avenue, to be in effect at all times.
- 2. City Council amend the eastbound through-movement prohibition in effect from 6:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m., Monday to Friday, at Avenue Road and Glencairn Avenue, to be in effect at all times.

3. City Council amend the westbound through-movement prohibition in effect from 6:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m., Monday to Friday, at Avenue Road and Glencairn Avenue, to be in effect at all times.

FINANCIAL IMPACT

All costs associated with amendments to the time of the turn and through prohibitions are included within the Transportation Services 2020 Operating Budget.

DECISION HISTORY

At its meeting of October 22, 2009, City Council prohibited eastbound and westbound left-turn and through-traffic movements from 6:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m., Monday to Friday, at Avenue Road and Glencairn Avenue. This was to address safety concerns with these movements. The Council decision can be found at: http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2009.NY28.22

COMMENTS

Transportation Services was requested by Councillor Mike Colle, on behalf of an area resident, to review traffic safety at the intersection of Avenue Road and Glencairn Avenue.

Existing Conditions

The intersection of Avenue Road and Glencairn Avenue is characterized by the following conditions:

- Avenue Road is a major arterial road with a daily two-way traffic volume of approximately 42,000 vehicles
- Avenue Road consists of two lanes northbound and two lanes southbound and curves to the west through the intersection with Glencairn Avenue
- Edge line and hatching pavement markings (urban shoulders) were added to Avenue Road in this area in 2018 to narrow the travelled portion of the street
- Parking is prohibited at all times on both sides of Avenue Road in the vicinity of Glencairn Avenue. Stopping is prohibited from 7:00 a.m. to 9:00 a.m., Monday to Friday on the west side of the street and from 4:00 p.m. to 6:00 p.m., Monday to Friday on the east side
- The TTC operates regular bus route 61 and express bus route 142 on this section of Avenue Road. There is a southbound near-side bus stop at the intersection.
- The land use in the area is single family residential properties.
- Glencairn Avenue is an 8.5 metre wide, two-way local street that is stop-controlled at Avenue Road

Visibility at the intersection is restricted for the eastbound, northbound and southbound approaches due to the horizontal alignment of Avenue Road. To ameliorate this condition there is a four-way overhead flashing beacon that displays a yellow signal for Avenue Road traffic and a red signal for Glencairn Avenue traffic.

East/west left-turn and through movements are prohibited at the intersection from 6:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m., Monday to Friday. These prohibitions were enacted in 2009 to address a pattern of collisions involving these movements, possibly caused by the limited sightlines.

Adjacent traffic control signals on Avenue Road are located 130 metres to the north at Glengrove Avenue West, and 220 metres to the south at the southerly intersection with Lytton Boulevard.

A review the Toronto Police collision records for the three year period ending March 31, 2020 revealed that there were 17 reported collisions involving eastbound left-turn or through movements at the intersection (7 eastbound, 10 westbound). Of these collisions, 16 occurred during the off-peak period when these movements are allowed. One westbound collision occurred during the prohibited times. One of the collisions involved a cyclist and none involved a pedestrian.

The recent collision history and the vehicle and pedestrian traffic volumes at the intersection, counted on April 6, 2017, were applied against the warrants for the installation of traffic control signals. The warrants are satisfied to the following extent:

Table 1 - Traffic Signal Warrant Review

Warrant 1	Minimum Vehicle Volume	83%
Warrant 2	Delay to Cross Traffic	26%
Warrant 3	Collision Hazard	100%

To justify 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. For traffic control signals to be justified based on the Collision Hazard warrant there must be 15 potentially preventable collisions over a three-year period.

Therefore, based on the collision history, traffic control signals are technically warranted at the intersection. However, when only the collision warrant is met we review if there are alternatives to traffic signals.

As an alternative, it is feasible to prohibit east/west left-turns and through movements at all times to address the collision pattern involving these movements. The April 6, 2017 traffic count at the intersection revealed that there is minimal traffic completing these manoeuvres, as shown in Table 2 below.

Table 2: Average Off Peak Hourly East/West Traffic Volumes

Direction	Average Off Peak Hourly Traffic Volume		
Direction	Left-turn	Through	Right-turn
Eastbound	5	14	51
Westbound	8	13	31

The left-turn and through traffic volumes shown in the above table could divert to the traffic signals at Glengrove Avenue West to the north or Lytton Boulevard to the south with minimal operational effect on those streets. Full-time prohibitions will allow for the installation of "right-turn only" pavement markings to supplement the signs and thereby promote driver compliance. The Toronto Police Service collision records for the intersection could be monitored to determine if the prohibitions reduce the frequency of collisions.

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

CONTACT

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SIGNATURE

Roger Browne, M.A. Sc., P.Eng

Acting Director, Traffic Management, Transportation Services

ATTACHMENT

Attachment 1: Map - Turn Prohibitions - Avenue Road and Glencairn Avenue

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