

Turn Prohibitions - Sloane Avenue

Date: March 26, 2019

To: North York Community Council

From: Acting Director, Transportation Services, Traffic Management

Wards: Ward 16 - Don Valley East

SUMMARY

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

Transportation Services is requesting City Council approve southbound right-turn and westbound through movement prohibitions at the intersection of Sloane Avenue and Elvaston Avenue, from 7:00 a.m. to 9:00 a.m., Monday to Friday. We will also be requesting approval of southbound right-turn prohibitions at the intersections of Sloane Avenue with Trophy Drive and with Ecclestone Drive, from 7:00 a.m. to 9:00 a.m., Monday to Friday.

The prohibitions are intended to discourage traffic during the morning peak hours, from using Elvaston Drive, Ecclestone Drive and Trophy Drive to access westbound Eglinton Avenue East. These motorists are avoiding southbound right-turn delays at the intersection of Sloane Avenue and Eglinton Avenue East caused by the Eglinton LRT construction.

RECOMMENDATIONS

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

1. City Council prohibit southbound right-turns, from 7:00 a.m. to 9:00 a.m., Monday to Friday, at the intersection of Sloane Avenue and Elvaston Avenue.
2. City Council prohibit westbound through traffic movements, from 7:00 a.m. to 9:00 a.m., Monday to Friday, at the intersection of Sloane Avenue and Elvaston Avenue.
3. City Council prohibit southbound right-turns, from 7:00 a.m. to 9:00 a.m., Monday to Friday, at the intersection of Sloane Avenue and Trophy Drive.
4. City Council prohibit southbound right-turns, from 7:00 a.m. to 9:00 a.m., Monday to Friday, at the intersection of Sloane Avenue and Ecclestone Drive.

FINANCIAL IMPACT

All costs associated with the installation of signs for the proposed turn and through prohibitions are included within the Transportation Services 2019 Operating Budget.

DECISION HISTORY

At its meeting of January 15, 2019, North York Community Council adopted Item NY2.23 that directed Transportation Services to prepare a report for the North York Community Council meeting on April 24, 2019, identifying ways to limit transient traffic from cutting through Elvaston Drive, including limiting access to Swift Drive during peak morning periods. As part of this study, Transportation Services was requested to conduct a speed study and volume count on Elvaston Drive, west of Sloane Avenue.

The Council decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.NY2.23>

COMMENTS

Sloane Avenue is a 10.5 metre wide minor arterial street that runs north from the signalized intersection with Eglinton Avenue East and curves east to end at the signalized T-type intersection with Victoria Park Avenue. The TTC operates regular bus service on Sloane Avenue.

The subject section of Elvaston Drive is an 8.5 metres wide, two-way local street with a posted speed limit of 40 km/h. It runs west from Sloane Avenue, approximately 500 metres north of Eglinton Avenue East, and curves south to intersect with Ecclestone Drive. There are no sidewalks on this section of Elvaston Drive.

Ecclestone Drive is an 8.5 metre wide, two-way local street with a 50 km/h statutory speed limit. It runs west from Sloane Avenue, approximately 50 metres north of Eglinton Avenue East, terminating at a point 50 metres west of Swift Drive. There is a sidewalk on the south side of Ecclestone Drive.

Trophy Drive is an 8.5 metre wide, two-way local street with a 50 km/h statutory speed limit. It runs west from Sloane Avenue, midway between Elvaston Drive and Ecclestone Drive and curves south to intersect with Ecclestone Drive. There are no sidewalks on Trophy Drive.

A review of the Toronto Police Service collision records for the three year period ending December 31, 2018 revealed that there have been no reported collisions on the subject section of Elvaston Drive, one collision on Trophy Drive and three collisions on Ecclestone Drive. None of these collisions involved a pedestrian.

The following table is a summary of average vehicle volumes and speeds on Elvaston Drive, west of Sloane Avenue, based on data collected from December 4, 2018 to

December 10, 2018. The studies were completed as part of an earlier investigation prior to North York Community Council's direction on January 15, 2019.

Table 1 Elvaston Drive Speed and Volume Study

Elvaston Drive between	Direction	Speed Limit (km/h)	Vehicle Speeds (km/h) Operating*	Vehicle Speeds (km/h) Average	Traffic Volume AM Peak Hr	Traffic Volume PM Peak Hr	Traffic Volume 24 Hrs
Sloane Avenue and Halkin Crescent	EB	40	43	36	53	41	463
Sloane Avenue and Halkin Crescent	WB	40	47	40	196	102	1,537
Halkin Crescent and Ecclestone Drive	EB	40	49	39	43	33	340

*The operating speed is the speed that 85% of traffic is travelling at or below.

The traffic volumes and speeds shown in the above table are in a range that is typical for a local street such as Elvaston Drive.

Transportation Services completed an origin destination study on February 7, 2019 from 8:00 a.m. to 9:00 a.m. to determine the amount of transient traffic travelling from Sloane Avenue to Eglinton Avenue East via Elvaston Drive and adjacent local roadways, including Trophy Drive and Ecclestone Drive. For comparison, the afternoon peak hour traffic volumes are provided as well. An origin destination study was not undertaken during the afternoon peak hour. The study findings are summarized in the table below.

Table 2 Origin Destination Study

Entering Intersection from Sloane Ave	Movement	Entering Volume AM Peak Hour	Entering Volume PM Peak Hour	Matched Exiting Volume* at Swift Dr & Eglinton Ave E AM Peak Hour Only
Elvaston Dr	SB right-turn	82 vehicles	36 vehicles	66 vehicles (81%)
Elvaston Dr	WB thru	135 vehicles	46 vehicles	68 vehicles (50%)

Entering Intersection from Sloane Ave	Movement	Entering Volume AM Peak Hour	Entering Volume PM Peak Hour	Matched Exiting Volume* at Swift Dr & Eglinton Ave E AM Peak Hour Only
Trophy Dr	SB right-turn	4 vehicles	11 vehicles	1 vehicles (25%)
Eccleston Dr.	SB right-turn	53 vehicles	30 vehicles	14 vehicles (26%)
Total Traffic Volume		274 vehicles	123 vehicles	149 vehicles (54%)

*licence plate match

As shown in the above table, there is a significant volume of traffic that enters Elvaston Drive at Sloane Avenue and exits onto Eglinton Avenue East at Swift Avenue during the weekday morning peak hour. This traffic is likely avoiding congestion at the intersection of Sloane Avenue and Eglinton Avenue East caused by the Eglinton LRT construction. For the last year, Eglinton Avenue East has been intermittently reduced from three lanes westbound to two in the vicinity of the intersection of Sloane Avenue/Bermondsey Avenue. These lane reductions increase delay to southbound traffic on Sloane Avenue turning right onto westbound Eglinton Avenue East.

A traffic count at the intersection of Sloane Avenue and Eglinton Avenue East completed on February 1, 2011 (prior to the LRT construction) revealed an a.m. peak hour southbound left-turn volume of 107 vehicles and a southbound through volume of 354 vehicles. A count at the intersection on February 20, 2019 (during LRT construction) revealed significantly reduced a.m. peak period southbound left-turn and through volume of 50 vehicles and 232 vehicles, respectively. These reduced traffic volumes indicate southbound traffic on Sloane Avenue is diverting from the intersection with Eglinton Avenue East.

The lane reductions on Eglinton Avenue East will continue for the duration of the LRT construction. At this time LRT construction is scheduled to be complete not before September 2021. After LRT construction is complete, the section of Eglinton Avenue East in the vicinity of Sloane Avenue will be permanently reduced to two lanes in each direction.

Considering the above, transient traffic will likely continue to use Elvaston Avenue for the foreseeable future. To limit this traffic during the weekday morning peak period it is feasible to implement turn prohibitions during this period. Turn prohibitions could be supported either from Sloane Avenue to prevent traffic from entering the local streets, or at the intersection of Swift Avenue and Eglinton Avenue East to prevent traffic from exiting the community. The advantages and disadvantages of these options are as follows.

Turn Prohibitions from Sloane Avenue

Prohibiting southbound right-turns and westbound through movements at the intersection of Sloane Avenue and Elvaston Avenue, from 7:00 a.m. to 9:00 a.m., Monday to Friday, would discourage transient traffic from using Elvaston Drive. The recorded volume shown to be 134 vehicles during the peak hour. Since this traffic would likely reroute to Trophy Drive or Eccleston Drive, similar prohibitions are required at these intersections. These prohibitions would discourage transient traffic, subject to police enforcement, however local traffic, shown to be 125 vehicles during the peak hour, would have to find alternate routes into the community as there wouldn't be an exemption to these regulatory signs. This could include executing southbound to northbound u-turns on Sloane Avenue to enter via a northbound left-turn at the subject streets. Local residents could also execute a southbound left-turn at the intersection of Sloane Avenue and Trophy Drive/Tinder Crescent, execute a U-turn on Tinder Crescent and travel westbound back across Sloane Avenue to enter at Trophy Drive.

Turn Prohibition at Swift Avenue and Eglinton Avenue East

Prohibiting southbound right-turns at the intersection of Swift Avenue and Eglinton Avenue West, from 7:00 a.m. to 9:00 a.m., Monday to Friday, would allow local traffic to enter the community from Sloane Avenue but discourage traffic from exiting, subject to police enforcement. Our study revealed 445 vehicles southbound right-turns at that intersection of Swift Avenue and Eglinton Avenue during the morning peak hour. Of these 445 vehicles, 296 were local and 149 entered from Sloane Avenue. Therefore, prohibiting this movement, while discouraging transient traffic from travelling through the community, would inconvenience a greater volume of local traffic. As part of this option, it would be necessary to post signage on Sloane Avenue at Elvaston Drive, Trophy Drive and Eccleston Drive, advising that there is no westbound access to Eglinton Avenue East during the weekday morning period. Some drivers may not notice or disregard these signs and continue into the community.

Considering the advantages and disadvantages of both options, Transportation Services recommends turn prohibitions from Sloane Avenue.

It should be noted that the roadway widening and reconstruction at the intersection of Eglinton Avenue East and Bermondsey Road/Sloane Avenue, as part of the Eglinton LRT will require successive closures of the north and south portions of the intersection for a period of six weeks. The south portion of the intersection (Bermondsey Road at Eglinton Avenue East) is planned to be closed from April 15, 2019 to May 26, 2019 and the north portion (Sloane Avenue at Eglinton Avenue East) is planned to be closed from May 27, 2019 to July 7, 2019. Any turn prohibitions from Sloane Avenue onto Elvaston Drive, Trophy Drive and Ecclestone Drive during the morning peak period should be considered after this construction work at the intersection of Eglinton Avenue East and Bermondsey Road/Sloane Avenue is complete.

The TTC has been advised of this matter and has not provided comments.

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

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachments 1: Map 1 - Turn Prohibitions - Sloane Avenue

Map 1 Turn Prohibitions Sloane Avenue

