

## **Eastbound Left-Turn Advanced Feature - Finch Avenue West and Torresdale Avenue/Goldfinch Court**

**Date:** June 14, 2018

**To:** North York Community Council

**From:** Acting Director, Transportation Services, North York District

**Wards:** Ward 10 - York Centre

### **SUMMARY**

---

As the Toronto Transit Commission (TTC) operates a transit service on Finch Avenue West, City Council approval of this report is required.

Transportation Services was requested by Councillor Pasternak to study the implementation of an eastbound left-turn advance feature at the intersection of Finch Avenue West and Torresdale Avenue/Goldfinch Court and report back to North York Community Council at its July 4th, 2018 meeting. The studies disclosed that this feature is not justified on the basis of the left-turn volumes, queues and delays and is not supported.

### **RECOMMENDATIONS**

---

The Acting Director, Transportation Services, North York District recommends that:

1. City Council deny the installation of an eastbound left-turn advance feature at Finch Avenue West and Torresdale Avenue/Goldfinch Court.

### **FINANCIAL IMPACT**

---

There are no financial implications to this report.

However, should City Council overturn staff's recommendation, the installation of an eastbound left-turn advance feature at Finch Avenue West and Torresdale Avenue/Goldfinch Court, including the vehicle detector installation, is estimated to cost \$10,000.00. Additionally, should the signal controller need to be upgraded to facilitate the eastbound left-turn feature, an additional cost of up to \$15,000 would be required. This costs will be included within the Transportation Services 2019 Operating Budget.

## DECISION HISTORY

---

North York Community Council, at its meeting of June 6, 2018, adopted Item NY31.48, which requested Transportation Services to review the feasibility of installing an eastbound left-turn advance feature at Finch Avenue West and Torresdale Avenue/Goldfinch Court and report back to the July 4, 2018 meeting of North York Community Council. The Council decision can be found at:  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.NY31.48>

## COMMENTS

---

In response to a request from North York Community Council (NY31.48), Transportation Services conducted an eastbound left-turn study at the intersection of Finch Avenue West and Torresdale Avenue/Goldfinch Court.

### Existing Conditions

The intersection of Finch Avenue West and Torresdale Avenue/Goldfinch Court is controlled by traffic signals.

Finch Avenue West is a major arterial street that provides two lanes in each direction and a centre left-turn lane. It has a posted speed limit of 60 km/h and a daily two-way traffic volume of approximately 44,000 vehicles. There are sidewalks on both sides of the street. TTC service in this section of Finch Avenue West is provided by the 36 Finch West bus route and there are far-side transit stops located at the intersection with Torresdale Avenue/Goldfinch Court.

Torresdale Avenue is a local street that intersects the north side of Finch Avenue West. Goldfinch Court forms the south leg of the signalized intersection with Finch Avenue West, opposite Torresdale Avenue. Torresdale Avenue provides one lane in each direction as well as a centre left-turn lane. It has a regulatory speed limit of 50 km/h. Heavy vehicles are prohibited at all times and there is no TTC service provided on Torresdale Avenue.

This section of Finch Avenue West is mainly comprised of apartment buildings. Northview Heights Secondary School, Herbert H. Carnegie Centennial Centre and Centennial Community Branch Library are located on the north side of Finch Avenue West, just east of the intersection with Torresdale Avenue/Goldfinch Court. Branson Ambulatory Care Centre is located on the south side of Finch Avenue West, west of the intersection.

Torresdale Avenue connects to a number of other local streets and provides the only access to the surrounding neighbourhood, which is enclosed by G. Ross Lord Park to the west, a hydro corridor to the north and Herbert H. Carnegie Centennial Centre to the west.

The traffic control signals at the intersection of Finch Avenue West and Torresdale Avenue/Goldfinch Court operate with a semi-actuated mode of control, whereby the signal remains green for Finch Avenue West unless a vehicle is detected on Torresdale Avenue/Goldfinch Court or a pedestrian actuates the pushbutton to cross Finch Avenue West. There is also a left-turn green arrow feature provided for westbound traffic, which is only displayed when there is demand in the westbound left-turn lane.

## Study Findings

At signalized intersections in the City of Toronto, the primary criteria used for the installation of a left-turn phase is based on provincially established standards, which are as follows:

- Volume of left-turning motorists: There must be at least an average of two left turns per signal cycle;
- Delay to left-turning motorists: There must be at least ten percent of left-turning motorists delayed for a signal cycle or more; and
- Collisions involving left-turning motorists: There must be a clear pattern of collisions involving left-turning motorists.

Other criteria considered include the volume of left turns made during the amber and all-red phase, the number of transit vehicles turning left and the amount of times the left-turning traffic exceeds the available storage in the left-turn lane. A combination of the above-noted criteria must be met if a left-turn phase is to be considered. Even if the left-turn phase criteria are met, the phase must be evaluated with respect to the impacts that it will have on other intersection movements.

The historical eastbound left-turn volumes during the peak periods at the intersection of Finch Avenue West and Torresdale Avenue/Goldfinch Court were reviewed and are summarized in the table below.

Table 1: Finch Avenue West and Torresdale Avenue/Goldfinch Court - Left-turn Summary

Date	Time period	Left-turn volume
Monday, December 17, 2013	A.M. Peak Hour	36
	Off-peak Hour	38
	P.M. Peak Hour	94
Tuesday, February 9, 2010	A.M. Peak Hour	31
	Off-peak Hour	34
	P.M. Peak Hour	95

Date	Time period	Left-turn volume
Wednesday, April 12, 2006	A.M. Peak Hour	34
	Off-peak Hour	39
	P.M. Peak Hour	174
Tuesday, November 19, 2002	A.M. Peak Hour	35
	Off-peak Hour	34
	P.M. Peak Hour	79
Wednesday, December 8, 1999	A.M. Peak Hour	43
	Off-peak Hour	42
	P.M. Peak Hour	130
Thursday, December 2, 1999	A.M. Peak Hour	62
	Off-peak Hour	21
	P.M. Peak Hour	33
Tuesday, November 2, 1993	A.M. Peak Hour	25
	Off-peak Hour	33
	P.M. Peak Hour	94

Based on the historic eastbound left-turn volumes, Transportation Services undertook studies during the morning and afternoon peak periods at Finch Avenue West at Torresdale Avenue/Goldfinch Court on Wednesday, June 7, 2018. The studies quantified the eastbound left-turn volumes, queues and delays. The summarized study results are provided in the table below.

Table 2: Eastbound Left-Turn Study (June 7, 2018)

Time period	Left-turn volume			Delays	
	Total	Clearing on green	Clearing on amber /all red	One cycle	Two cycle
A.M. Peak Hour	49	31	18	2	0
P.M. Peak Hour	195	113	82	8	0

The results of the left turn studies confirmed that the majority of the left turns were completed during the east/west green signal phase. At no time did the eastbound left turning traffic queue extend beyond the limits of the left-turn lane. Additionally, it was also observed that the adjacent signals at Finch Avenue West and Virgilwood Drive, located one block east, provides sufficient gaps for eastbound left-turn vehicles at Finch Avenue West and Torresdale Avenue/Goldfinch Court to proceed safely during the afternoon study period.

A review of the Toronto Police Service collision records over a five year period ending December 31, 2017 disclosed that there have been three reported collisions at the intersection of Finch Avenue West and Torresdale Avenue/Goldfinch Court involving and eastbound left turn. These three collisions are described in more detail below:

- In two collisions, an eastbound left-turning motorist collided with a westbound straight through motorist within the intersection; and
- In the remaining collision, an eastbound left-turning motorist collided with a westbound straight through motorist, west of the intersection.

Based on Transportation Services assessment, the eastbound left-turn movement at Finch Avenue West and Torresdale Avenue/Goldfinch Court is operating satisfactorily and the implementation of an eastbound left-turn priority feature during the morning and afternoon peak periods is not warranted or recommended. Further, any adjustment to the signal timing at this location would potentially result in negative impacts on the opposing traffic movements.

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

## **CONTACT**

---

Dan Clement, Acting Manager, Traffic Operations, Transportation Services Division,  
North York District, Tel: 416-395-7463, Fax: 416-395-7544, Email:  
Dan.Clement@toronto.ca

## **SIGNATURE**

---

Peter K. Hillier  
Acting Director

## **ATTACHMENTS**

---

Attachment 1: Map - Eastbound Left-Turn Advance Feature - Finch Avenue West and  
Torresdale Avenue/Goldfinch Court