



## STAFF REPORT ACTION REQUIRED

### Traffic Control Signals Installation: Dufferin Street at Eversfield Road and Dufferin Street at Bloem Avenue

<b>Date:</b>	August 26, 2013
<b>To:</b>	Public Works & Infrastructure Committee
<b>From:</b>	General Manager, Transportation Services
<b>Wards:</b>	Ward 15 – Eglinton Lawrence Ward 17 – Davenport
<b>Reference Number:</b>	<i>p:\2013\ClusterB\Tra\NorthYork\pw13083</i>

#### **SUMMARY**

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The purpose of this report is to report to City Council on the request for installation of traffic control signals at the intersections of Dufferin Street and Eversfield Road and Dufferin Street and Bloem Avenue. This report is submitted to the Public Works and Infrastructure Committee, as the matter is a shared boundary issue between the North York Community Council and the Etobicoke York Community Council.

Traffic studies reveal that traffic control signals are not warranted at these locations.

#### **RECOMMENDATIONS**

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The General Manager, Transportation Services recommends that:

1. City Council deny the installation of traffic control signals at the intersection of Dufferin Street at Eversfield Road and Dufferin Street at Bloem Avenue.

#### **Financial Impact**

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There are no financial impacts with the adoption of this report.

## **ISSUE BACKGROUND**

Transportation Services Division, North York District and Etobicoke York District, have reviewed a request from Councillor Josh Colle and Councillor Cesar Palacio on behalf of the area residents to install traffic control signals on Dufferin Street at Eversfield Road and at Bloem Avenue.

## **COMMENTS**

Dufferin Street is a four-lane major arterial road with a daily two-way traffic flow of approximately 18,813 vehicles, and a regulatory speed limit of 50 km/h. Bloem Avenue and Eversfield Road are designated as two-way local roadways with a posted speed limit of 40 km/h. Both roadways intersect with Dufferin Street from the west and currently form T-type intersections and are controlled by stop controls. Adjacent traffic control signals are located approximately 362 metres to the north of Eversfield Road at Gibson Street and 68 metres to the south from Bloem Avenue at Rogers Road. The intersections of Eversfield Road and Bloem Avenue are approximately 118 metres apart.

A review of our traffic by-laws and on site observations has also revealed that northbound left turns from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. are prohibited at the intersection of Dufferin Street and Bloem Road.

The Toronto Transit Commission (TTC) operates a service transit route on Dufferin Street and has installed transit stops on both sides of Dufferin Street, south of Eversfield Road for northbound and southbound riders.

This section of Dufferin Street is primarily comprised of two-storey buildings, with the ground floor being utilized for commercial uses and the upper level as residential apartments. The property on the northwest corner of Dufferin Street and Eversfield Road was converted to a funeral home in July 2012.

On March 21, 2013 and May 13, 2013, this Division conducted eight-hour pedestrian movement counts to determine the feasibility of installing a Pedestrian Crossover at the intersection of Dufferin Street at Eversfield Road or at Dufferin Street at Bloem Avenue. The purpose of the installation of a pedestrian crossover is to address the existing traffic conditions and any difficulty pedestrians experience when crossing the roadway.

It should be noted that the installation of a Pedestrian Crossing Protection on an arterial road involves incremental consideration of the warrants for the installation of either a Pedestrian Crossover (PXO) or a Traffic Control Signals (TCS).

The following data summarizes the pedestrian crossing activity at both intersections:

**Pedestrian Crossing Volume**

Study Date: Thursday, March 21, 2013

Pedestrian Characteristics	Eight-Hour Pedestrian Crossing Volume: Dufferin Street at Eversfield Road		
	North of Eversfield Rd	South of Eversfield Rd	Combined Crossings
Assisted Children*	0	5	5
Youths/Adults	15	87	102
Senior Citizens	4	4	8
Total Pedestrian	19	96	115

\*Assisted children are crossing the road accompanied by a youth, an adult or a senior

Study Date: Monday, May 13, 2013

Pedestrian Characteristics	Eight-Hour Pedestrian Crossing Volume: Dufferin Street at Bloem Road		
	North of Bloem Rd	South of Bloem Rd	Combined Crossings
Assisted Children*	0	0	0
Youths/Adults	46	18	64
Senior Citizens	8	2	10
Total Pedestrian	54	20	74

\*Assisted children are crossing the road accompanied by a youth, an adult or a senior

In view of the above data the technical warrants for the installation of a pedestrian crossover were satisfied to the following extent:

**Dufferin Street at Eversfield Road:**

Warrant 1: Pedestrian Volume 28%  
Warrant 2: Pedestrian Delay 0%

**Bloem Avenue at Dufferin Street:**

Warrant 1: Pedestrian Volume 18%  
Warrant 2: Pedestrian Delay 0%

To support the installation of a pedestrian crossover, both warrants must be satisfied at 100 percent. Our study revealed that during the eight-hour study, a total of 115 pedestrians crossed Dufferin Street at Eversfield Road and a total of 74 pedestrians crossed Dufferin Street at Bloem Road. Of the pedestrians that crossed, seventy (70) experienced delays greater than 10 seconds at Dufferin Street and Eversfield Road and forty two (42) experienced delays greater than 10 seconds at Dufferin Street and Bloem Avenue. It should be noted that for the Pedestrian Delay Warrant portion to be calculated/considered a minimum of 200 pedestrians must be observed crossing the

roadway, of which a minimum of 130 pedestrians must be observed being delayed greater than 10 seconds.

Furthermore, it has been determined that a warrant to install a pedestrian crossover would not be met, even if pedestrian volume data for the two intersections was to be combined.

### **Traffic Control Signals**

As for the feasibility of installing traffic control signals at these locations, the technical warrant for the installation of traffic control signals are satisfied to the following extent:

#### **Dufferin Street at Eversfield Road:**

Warrant 1:	Minimum Vehicular Volume	18%
Warrant 2:	Delay to Cross Traffic	38%
Warrant 3:	Collision Hazard	7%

#### **Bloem Avenue at Dufferin Street:**

Warrant 1:	Minimum Vehicular Volume	4%
Warrant 2:	Delay to Cross Traffic	20%
Warrant 3:	Collision Hazard	13%

In order to meet the technical warrants for the installation of traffic control signals, one of the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrants must be 100 percent satisfied or both must be at least 80 percent satisfied. The “Collision Hazard” warrant is based on the number of collisions of the type susceptible to correction by the installation of traffic control signals.

Traffic Operations has also undertaken a detailed review of Toronto Police Service collision records to determine the collision history at these intersections. Our review has revealed that in a three-year period ending December 31, 2012, there has been one collision susceptible to correction by the installation of a traffic control signal or pedestrian crossover (PXO) at the intersection of Dufferin Street and Eversfield Road and there has been two collisions susceptible to correction by the installation of a traffic control signal or pedestrian crossover (PXO) at the intersection of Dufferin Street and Bloem Avenue.

In regards to the road configuration and alignments our review has indicated that both motorist and pedestrian sight lines were found to be clear and unobstructed for all approaches to the intersection.

In reviewing the feasibility of installing a traffic control signal, one key consideration that is taken under advisement is the spacing between existing traffic control devices. Ideally, traffic control signals should be placed 215 metres apart. As the distance decreases, signals become cluttered and are less recognizable by motorists. Signals in

close proximity to one another also negatively affect the progressive movement of main street traffic.

Therefore, in view of the short distance between Bloem Road and Rogers Road, the installation of a traffic control signal at the intersection of Bloem Avenue and Dufferin Street would not be recommended. Although the spacing between Eversfield Road and Gibson Street to the north is appropriate, the distance between Eversfield Road and Rogers Road is less than 215 metres.

Therefore in view of the results of the technical warrants, this Division does not support the installation of traffic control signals or pedestrian crossover at the intersections of Dufferin Street and Eversfield Road and Dufferin Street and Bloem Avenue.

Councillor Josh Colle and Councillor Cesar Palacio have been advised of the recommendations contained within this report.

## **CONTACT**

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## **SIGNATURE**

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Stephen Buckley  
General Manager

## **ATTACHMENTS**

Attachment 1: Map – Dufferin St at Eversfield Rd and Dufferin St and Bloem Av