



STAFF REPORT ACTION REQUIRED

Sheppard Avenue West and Laura Road – Traffic Control Signals

Date:	July 19, 2010
To:	Etobicoke York Community Council
From:	Director, Transportation Services - Etobicoke York District
Wards:	Ward 7 – York West
Reference Number:	p:\2010\Cluster B\TRA\EtobicokeYork\eycc100134-to

SUMMARY

The purpose of this report is to obtain approval for the installation of traffic control signals at Sheppard Avenue West and Laura Road.

Traffic studies reveal that the existing pedestrian refuge island should be upgraded to a traffic signal to improve safety. As a result, traffic control signals should be installed.

RECOMMENDATIONS

Transportation Services recommends that Council approve:

1. The installation of traffic control signals at the intersection of Sheppard Avenue West and Laura Road.

Financial Impact

The financial cost of installing these new traffic control signals is approximately \$150,000.00. The funding for these signals is available in Transportation Services Division's Capital Works Budget under Project No. CTP706-01.

DECISION HISTORY

As a result of a request for a traffic signal from Councillor Giorgio Mammoliti, Ward 7, York West, a turning movement count was conducted using the peak eight-hours at the intersection of Sheppard Avenue West and Laura Road. A map of the area is Attachment No. 1.

COMMENTS

Sheppard Avenue West is a major arterial road while Laura Avenue is a local road that runs parallel to Jane Street. The speed limit on Sheppard Avenue West in the area is 60 km/h, while the speed limit on Laura Road is 50 km/h. The intersection of these roadways is controlled by a southbound 'Stop' sign on Laura Road. An overhead flashing warning beacon exists for eastbound and westbound traffic at this intersection.

On Sheppard Avenue West, an eastbound left turn storage lane/taper exists at the intersection approach, and a raised concrete pedestrian refuge median island, measuring approximately 2.0m in width by 10.0m in length is on the east leg only. "Pedestrians Ahead (WC-7)" warning signs are located east and west of the subject intersection facing westbound and eastbound vehicular traffic, respectively. The Toronto Transit Commission (TTC) operates transit service on Sheppard Avenue West. Traffic control signals exist 300.0 metres to the west at Oakdale Road and 580.0 metres to the east at Jane Street.

To assess traffic conditions, a turning movement count was conducted using the peak eight hours. The results were applied to the traffic control signal warrant analysis. Although the intersection of Sheppard Avenue West and Laura Road still fails to meet the minimum criteria to warrant traffic control signals, it was noted that there has been an increase in both traffic volumes and pedestrian crossing volumes since the previous study conducted in May of 2007. The study results are as follows:

Thursday June 17, 2010

a)	Minimum Vehicular Volume	47 percent
b)	Delay to Cross Traffic	70 percent

Tuesday May 22, 2007

a)	Minimum Vehicular Volume	40 percent
b)	Delay to Cross Traffic	50 percent

In order to meet the warrants, 100 percent compliance is required in one of the categories or a minimum of 80 percent both. Given that neither warrant is met, traffic control signals are not recommended.

In addition to the traffic control signal warrant analysis, study results were also applied to the pedestrian crossover warrant producing the following negative results:

Thursday June 17, 2010

- | | | |
|----|-------------------|-----------------|
| a) | Pedestrian Volume | 59% percent |
| b) | Pedestrian Delays | Not Applicable* |

Tuesday May 22, 2007

- | | | |
|----|-------------------|-----------------|
| a) | Pedestrian Volume | 42% percent |
| b) | Pedestrian Delays | Not Applicable* |

In order to meet the warrants, 100 percent compliance is required in both of the categories. *In addition, the 118 eight-hour pedestrian volume does not meet the required 200 Pedestrian Delay Warrant.

A review of the Toronto Police Service collision records reveals three collisions considered preventable by traffic control signals over the past three years, January 1, 2007 to December 31, 2009. Over this same time period, there have been no reported collisions involving pedestrians crossing Sheppard Avenue West. Staff also examined the collision history for incidents of motorists striking the existing Pedestrian Refuge Island. Over this same three year period, this island has been struck on three separate occasions.

However, further review shows that the island fails to meet the Division's current guidelines for pedestrian islands where the maximum number of lanes to install them is five lanes; Sheppard Avenue is seven lanes wide at this location including the westbound right turn lane and the bus loop at the south side. As pedestrian crossing protection is still warranted, an upgrade to a higher form of traffic control is needed. Staff considered the installation of a Pedestrian Crossover (PXO); however, due to the wide cross section, the installation of a PXO may pose a greater risk to pedestrians. Therefore, traffic control signals should be installed to provide a safe form of pedestrian crossing protection. Although traffic control signals warrants are not technically met, they are justified under engineering judgement to provide the best level of pedestrian crossing protection.

Accordingly, the resultant installation is expected to improve safety for pedestrians crossing at Sheppard Avenue and Laura Road as well as motorists in the intersection and

should not have a significant impact on the operation of the arterial road network. The Toronto Transit Commission staff was consulted on the conversion of the Pedestrian Refuge Island to a Traffic Control Signal.

CONTACT

Kevin Akins, Transportation Services - Etobicoke York District

Tel: (416) 394-6046; Fax: (416) 394-8942

E-mail: krakins@toronto.ca

AFS12646

SIGNATURE

Steven T. Kodama, P.Eng.

Acting Director, Transportation Services, Etobicoke York District

ATTACHMENTS

Attachment No. 1: Map