



**STAFF REPORT
ACTION REQUIRED**

**Traffic Control Signal Study – Danforth Road and
Pilkington Drive**

Date:	December 15, 2009
To:	Scarborough Community Council
From:	Acting Director, Transportation Services, Scarborough District
Wards:	Ward 35– Scarborough Southwest
Reference Number:	P:\2010\Cluster B\TRA\Scarborough\sc1003 D09-3466961 & D09-3142612 Danforth Rd & Pilkington tcs

SUMMARY

This staff report is about a matter for which the Community Council does not have delegated authority from City Council to make a final decision.

The purpose of this report is to discuss the feasibility of the installation of traffic control signals at Danforth Road and Pilkington Drive.

Traffic studies reveal that Traffic Control Signals are not warranted at this location.

RECOMMENDATIONS

Transportation Services, Scarborough District, recommends that Scarborough Community Council recommend that City Council:

1. Not approve the installation of traffic control signals at the intersection of Danforth Road and Pilkington Drive.
2. Not pass or amend the appropriate by-law(s) accordingly.

Financial Impact

There is no financial impact associated with this report; however, the financial cost of installing these new traffic control signals would be approximately \$175,000.00 should the installation be approved. The funding for these signals is not available in Transportation Services Division's Capital Works Budget under Project No. CTP709-0101 at this time.

ISSUE BACKGROUND

Further to a request from Councillor Adrian Heaps, Transportation Services staff reviewed the feasibility of installing traffic control signals at Danforth Road and Pilkington Drive. The area residents have also requested pedestrian crossing protection at this location.

The provision of Traffic Control Signals at this location was not required as a mitigating improvement for the subdivision approval of the new sub-division that is on the north side Danforth Road at Pilkington Drive.

COMMENTS

The following characteristics describe the intersection of Danforth Road and Pilkington Drive:

- This T-type intersection is presently controlled by stop signs on Pilkington Drive.
- Danforth Road at Pilkington Drive is a four-lane major arterial roadway.
- Danforth Road has a posted speed limit of 60 kilometres per hour (km/h), an operating speed of approximately 68 Km/h and a daily traffic volume of approximately 35,000 vehicles per day (vpd).
- Pilkington Drive is a two-lane local roadway with a unposted speed limit of 50 km/h. that forms a "T" type intersection on the north side of Danforth Road.
- Toronto Transit Commission bus stops for both the eastbound and westbound directions are in place along Danforth Road. They are located in close proximity to the intersection of Danforth Road and Pilkington Drive. The eastbound and westbound stops are located approximately 25 metres east of Pilkington Drive.
- Traffic control signals are located approximately 310 metres east at Birchmount Road, and 505 metres west at Mach Avenue.
- Sidewalks are located on both sides of Danforth Road and Pilkington Drive has a sidewalk on one side only.
- Pilkington Drive forms the through street in the new sub-division.

Traffic Control Signal Warrant Study

Transportation Services staff conducted a Traffic Control Signal Warrant Study at the intersection of Danforth Road and Pilkington Drive. Using traffic volumes recorded over the peak eight hours of a typical weekday, the following results were obtained:

Traffic Control Signal Warrant	Compliance Level
	Thursday, April 2, 2009
Minimum Vehicular Volume	10%
Delay To Cross Traffic	37%
Collision Hazard	0%

For traffic control signals to be numerically justified, one of the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrants must be 100% satisfied or any two of the three warrants must be at least 80% satisfied. Our review of the Collision Hazard is based on the previous three-year (2006 – 2008) collision history.

In addition a Pedestrian Crossover Warrant Study was also conducted.

Pedestrian Crossover Warrant	Compliance Level
	Thursday, April 2, 2009
Pedestrian Volume	28%
Pedestrian Delays	27%

As outlined in the above table, none of the categories are met. The installation of traffic control signals or a pedestrian crossover cannot be justified at the subject intersection based on the foregoing information.

Collision History

A review of the Toronto Police Service collision records for the five-year period ending December 31, 2008 is summarised below.

Five-Year Collision Information	Number of Reported Collisions					
	2004	2005	2006	2007	2008	Total
Collisions Potentially Preventable by the Installation of Traffic Control Signals	0	0	0	0	0	0
Collisions Involving Pedestrians Crossing Danforth Road	0	0	0	0	0	0

This collision record is not indicative of a safety problem at this site.

In summary, traffic control signals are not justified and should not be installed at the subject intersection. The TTC has been consulted and concur with these recommendations.

It should be noted that notwithstanding the current non-compliance with numerical warrants, should traffic control signals be warranted in the future, this would be a suitable location in terms of traffic control signal spacing and providing pedestrian access to the TTC stops.

CONTACT

Marko A. Oinonen, P.Eng.
Manager, Traffic Operations, Scarborough District
Tel: 416-396-7148
Fax: 416-396-5641
E-Mail: moinone@toronto.ca

SIGNATURE

Steven T. Kodama, P. Eng.
Acting Director, Transportation Services, Scarborough District

FJB:ca

ATTACHMENTS

1. Location Plan (Request for Crossing Protection – Danforth Road and Pilkington Drive)