

Feasibility of Installing Traffic Control Signals at the Intersection of Lawrence Avenue East and Elinor Avenue

Date:	December 21, 2006
To:	Scarborough Community Council
From:	Director, Transportation Services, Scarborough District
Wards:	Ward 37 – Scarborough Centre
Reference Number:	P:\2007\Cluster B\TRA\Scarborough\sc07012 D06-1030 & D06-2572 Lawrence Elinor

SUMMARY

This report describes a review of the feasibility of installing traffic control signals at the intersection of Lawrence Avenue East and Elinor Avenue. Transportation Services staff conducted a Traffic Control Signal Warrant Study at the subject intersection using traffic volumes recorded over the peak eight hours of a typical weekday.

The results of these studies indicate that the technical warrants for the installation of traffic control signals are not met at this time.

RECOMMENDATIONS

Transportation Services, Scarborough District, recommends that:

1. Traffic control signals not be installed at the intersection of Lawrence Avenue East and Elinor Avenue at this time.

FINANCIAL IMPACT

There are no financial implications if Council agrees with the staff recommendation.

DECISION HISTORY

Further to a request from City Councillor Michael Thompson, Transportation Services staff conducted a traffic study to determine whether traffic control signals should be installed at the subject intersection.

Concern about excessive speed of traffic along Lawrence Avenue East prompted this request. Also, the related issues of the proposed parking lot on the hydro right-of-way and the expansion of businesses on the south side of Lawrence Avenue East were considered.

ISSUE BACKGROUND

The justification for the installation of traffic control signals in the City of Toronto, the Traffic Control Signal Warrant, has been adopted by Council.

COMMENTS

Key factors involving this portion of Lawrence Avenue East include:

- It is a six-lane major arterial roadway with a shared two-way centre left turn lane.
- Daily traffic volume on this road is approximately 38,000 vehicles per day (vpd), which is within the volume range for this classification of roadway (>20,000 vpd.).
- The speed limit within the subject area of Lawrence Avenue East is 60 kilometres per hour (km/h).
- A stop sign on Elinor Avenue presently controls southbound traffic at this three-way intersection.

Key factors involving this portion of Elinor Avenue include:

- It is a two-lane local road which intersects Lawrence Avenue East forming a “T” intersection.
- Elinor Avenue has a speed limit of 40 km/h.

Traffic Control Signal Warrant

Transportation Services staff conducted a Traffic Control Signal Warrant Study at the intersection of Lawrence Avenue East and Elinor Avenue. Using traffic volumes recorded over the peak eight hours of a typical weekday the following negative results were obtained:

Warrant	Compliance
1. Minimum Vehicular Volume	36%
2. Delay to Cross Traffic	57%
3. Collision Hazard	0%

For the traffic control signals to be numerically justified, the following results need to be obtained:

1. One of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" warrants must be 100 per cent satisfied, or
2. Any two of the three warrants must be at least 80 per cent satisfied.

As outlined in the table, these values fall well short of those required to warrant a traffic control signal at this intersection.

Toronto Police Service Collision Records

Five-year review period for which we have complete data: January 1, 2001 to December 31, 2005

Five-Year Collision Information	Number of Reported Collisions					
	2001	2002	2003	2004	2005	Total
Collisions Potentially Preventable by the Installation of Traffic Control Signals	0	1	0	0	0	1
Collisions Involving Pedestrians Crossing Lawrence Avenue East	0	0	0	0	0	0

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

Should Scarborough Community Council decide that an unwarranted traffic control signal is desired at this intersection, City policy dictates that the Public Works and Infrastructure Committee must then review this decision for their appropriate consideration and approval.

CONTACT

Ian R. Harvey
Acting Manager, Traffic Operations, Scarborough District
Tel: 416-396-7148,
Fax: 416-396-5681
E-Mail: iharvey@toronto.ca

SIGNATURE

Peter J. Noehammer, P. Eng.
Director, Transportation Services, Scarborough District

JAB/IH:ca

ATTACHMENTS

1. Location Plan (Lawrence Avenue East and Elinor Avenue)

IH:ca