



**STAFF REPORT
ACTION REQUIRED**

Traffic Control Signal Study – Pharmacy Avenue and Arnall Avenue

Date:	October 20, 2008
To:	Scarborough Community Council
From:	Director, Transportation Services, Scarborough District
Wards:	Ward 39– Scarborough Agincourt
Reference Number:	P:\2008\Cluster B\TRA\Scarborough\sc08091 D08-2856479 Pharmacy Arnall 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 review the feasibility of the installation of traffic control signals at Pharmacy Avenue and Arnall Avenue.

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 Pharmacy Avenue and Arnall Avenue.
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 \$165,000.00 should the installation be approved. The funding for these signals is not available in Transportation Services Division's Capital Works Budget under Project No. CTP708-01 at this time.

ISSUE BACKGROUND

Further to a request from Councillor Mike Del Grande, Transportation Services staff reviewed the feasibility of installing traffic control signals at Pharmacy Avenue and Arnall Avenue. Two pedestrian fatalities occurred at this location on Saturday, June 14, 2008 at 12:05 a.m. during a heavy rainfall. The female pedestrians, 26 and 28 years of age, were crossing Pharmacy Avenue and walking towards Arnall Avenue when struck by a vehicle travelling southbound on Pharmacy Avenue.

COMMENTS

The following characteristics describe the intersection of Pharmacy Avenue and Arnall Avenue:

- This T-type intersection is presently controlled by a stop sign on Arnall Avenue.
- Pharmacy Avenue is a four-lane minor arterial roadway.
- The land use on this section of Pharmacy Avenue is residential on the east side and industrial/commercial on the west side.
- Pharmacy Avenue has a posted speed limit of 60 kilometres per hour (km/h) and a daily traffic volume of approximately 12,000 vehicles per day (vpd).
- The operating (85th percentile) speed of traffic on Pharmacy Avenue is approximately 69 km/h. The 85th percentile speed is the speed at or below which the majority of motorists are travelling.
- Arnall Avenue is a two-lane collector roadway with an unposted speed limit of 50 km/h that forms a "T" type intersection on the east side of Pharmacy Avenue.
- Toronto Transit Commission bus stops for both the northbound and southbound directions are located along Pharmacy Avenue. They are situated in close proximity to this intersection. The northbound stop is located on the southeast corner of Pharmacy Avenue and Arnall Avenue, while the southbound stop is located on the west side of Pharmacy Avenue directly opposite the north curb line of Arnall Avenue.
- Traffic control signals are located approximately 352 metres south at McNicoll Avenue, and 523 metres north at Gorden Baker Road/Glendinning Avenue.
- Sidewalks are located on both sides of Pharmacy Avenue and Arnall Avenue.
- Arnall Avenue forms an access point to the residential subdivision bounded by Pharmacy Avenue to the west, McNicoll Avenue to the south, Steeles Avenue East to the north and Warden Avenue to the west.

Traffic Control Signal Warrant Study

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

Traffic Control Signal Warrant	Compliance Level
	Tuesday, October 7, 2008
Minimum Vehicular Volume	25%
Delay To Cross Traffic	64%
Collision Hazard	33% *

*Pedestrian collision in 2008 included in our traffic signal control warrant analysis. (Note: staff recorded vehicle and pedestrian traffic over a 14 hour period and the highest 8 hours were used in the warrant calculation.)

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.

In addition to the above, a Pedestrian Crossover Warrant Study was also conducted.

Pedestrian Crossover Warrant	Compliance Level
	Tuesday, October 7, 2008
Pedestrian Volume	19%
Pedestrian Delays	35%

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, 2007 is summarised below.

Five-Year Collision Information	Number of Reported Collisions						
	2003	2004	2005	2006	2007	2008	Total
Total Collisions	0	1	2	2	2	2	9
Collisions Potentially Preventable by the Installation of Traffic Control Signals	0	1	0	1	2	1*	5
Collisions Involving Pedestrians Crossing Pharmacy Avenue	0	0	0	0	0	1*	1

*Pedestrian collision in 2008 included in our traffic signal control warrant analysis; based on partial year of data available, January 1, 2008 to September 30, 2008.

A pedestrian collision occurred on Saturday, June 14, 2008 at 12:05 a.m. The unfortunate collision resulted in two fatalities. The female pedestrians, 26 and 28 years of age, were crossing Pharmacy Avenue and walking towards Arnall Avenue when struck by a vehicle travelling southbound on Pharmacy Avenue.

In summary, traffic control signals are not justified based on the technical warrants at the subject intersection.

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

CONTACT

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SIGNATURE

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ATTACHMENTS

1. Location Plan (Request for Pedestrian Crossing Protection – Pharmacy Avenue and Arnall Avenue)