



**STAFF REPORT
ACTION REQUIRED**

Traffic Control Signals – Lumsden Avenue and Westlake Avenue

Date:	May 16, 2012
To:	Toronto and East York Community Council
From:	Acting Director, Transportation Services Toronto and East York District
Wards:	Beaches – East York, Ward 31
Reference Number:	Ts2012115te.top.doc

SUMMARY

Transportation Services is requesting authority from City Council to install traffic control signals at the intersection of Lumsden Avenue and Westlake Avenue.

The installation of traffic control signals at this location will replace an existing pedestrian crossover and enhance safety for pedestrians and motorists. This installation will result in the loss of approximately four on-street parking spaces in total, two on Lumsden Avenue and two on Westlake Avenue.

RECOMMENDATIONS

Transportation Services recommends that:

1. City Council approve the removal of a pedestrian crossover on the west side of Lumsden Avenue and Westlake Avenue and, coincident with the removal of the pedestrian crossover, approve the installation of traffic control signals at this intersection.

Financial Impact

The estimated cost of replacing the pedestrian crossover with traffic control signals at Lumsden Avenue at Westlake Avenue is approximately \$160,000.00. Funds in the amount of \$3,155,000.00 have been allocated in the 2012 Transportation Services Capital Budget for installation of traffic control signals. This work would be subject to competing priorities and available funding.

ISSUE BACKGROUND

Councillor Janet Davis, on behalf of area residents, requested Transportation Services to review several concerns and suggestions related to traffic and pedestrian activity on

Lumsden Avenue, between Gledhill Avenue and Westlake Avenue, to improve the crossing environment for students in the vicinity of D. A. Morrison Middle School. Area residents provided some suggestions for staff to review:

- Installing either an all-way stop control, a pedestrian crossover, a "Flashing Beacon" or traffic control signals at Lumsden Avenue and Oak Park Avenue;
- Installing traffic control signals at Lumsden Avenue and Westlake Avenue;
- Prohibiting parking on Lumsden Avenue, between Gledhill Avenue and Westlake Avenue; and
- Restricting traffic on Oak Park Avenue to a one-way direction northbound, north of Lumsden Avenue.

Subsequently, Councillor Janet Davis organized a community meeting in April of 2012, to discuss our assessment with representatives of the residents in the area bounded by Woodbine Avenue, Lumsden Avenue, Westlake Avenue and Cosburn Avenue, attended by Councillor Davis, Toronto Police Services, the Principal of D.A. Morrison Middle School and staff of Transportation Services. As a result of that meeting, amongst other things, an agreement and consensus was reached that staff install red "Flashing Beacons" above the existing stop signs on Oak Park Avenue at Lumsden Avenue and proceed with a report to Toronto and East York Community Council to replace the existing pedestrian crossover with traffic control signals at the intersection of Lumsden Avenue and Westlake Avenue to enhance the crossing environment for pedestrians, cyclists and motorists.

COMMENTS

Current Conditions

Lumsden Avenue is classified as a minor arterial roadway operating two-way, east-west, with a pavement width of 8.5 metres. The speed limit on Lumsden Avenue is 40 km/h. The TTC 62 Mortimer bus route operates on this section of Lumsden Avenue.

Westlake Avenue is classified as a local street and operates two-way, north-south, with a pavement width of 8.5 metres with a speed limit of 50 km/h. Westlake Avenue traffic is controlled by stop signs with red "Flashing Beacons" at Lumsden Avenue. The TTC 87 Cosburn Bus Route operates on this section of Westlake Avenue.

Currently, a pedestrian crossover with enhanced lighting and pavement markings is located on the west side of Westlake Avenue, providing pedestrians with a controlled crossing area across Lumsden Avenue. This intersection is located approximately 280 metres east of the signalized intersection of Lumsden Avenue and Gledhill Avenue, and 305 metres west of the traffic control signals at Lumsden Avenue and Main Street.

Investigation

As part of our assessment, we reviewed pedestrian crossing patterns, vehicular traffic volumes and collisions. One characteristic that was notable as part of our investigation, was a collision pattern involving angle type collisions. Our review of the Toronto Police

Service collision records for a three-year period ending December 31, 2011 indicated a total of 14 collisions had been reported at the intersection of Lumsden Avenue and Westlake Avenue. Of the 14 collisions, one involved a pedestrian crossing within the crosswalk, and one involved a westbound cyclist on Lumsden Avenue, and 10 others are considered potentially preventable by the installation of traffic control signals.

We further applied the results of our traffic study conducted in October 2011 on Lumsden Avenue at Westlake Avenue to the warrant criteria for the installation of traffic control signals.

Based on an eight-hour traffic survey, the technical warrants for the installation of traffic control signals are satisfied to the following extent:

Warrant 1:	Minimum Vehicular Volume	51 per cent
Warrant 2:	Delay to Cross Traffic	78 per cent
Warrant 3:	Collision Hazard	80 per cent

To meet the technical requirements for the installation of traffic control signals, one of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" warrants should be 100 percent satisfied, or any two of the three warrants should be at least 80 percent satisfied.

While this evaluation indicates that the "Delay to Cross Traffic" warrant is just shy of the required 80 per cent, a small difference in the pedestrian volume in the middle of the day would result in compliance. To satisfy the "Collision Hazard" warrant, motor vehicle accident records (MVAs) should confirm there has been an average of 5 or more collisions per year of a type potentially preventable by traffic control signals during each of the three preceding years.

Based on our evaluation of this matter, the technical requirements for the installation of traffic control signals can be justified at the intersection of Lumsden Avenue and Westlake Avenue as two of the warrants are technically satisfied. We are recommending removing the existing pedestrian crossover and replacing it with traffic control signals.

Additional resident concerns/suggestions

Some other suggestions and discussions brought forward at the community meeting to address safety and operational concerns were:

- Providing additional School Zone signs to increase motorist awareness that students are crossing in this vicinity;
- Enhanced stop bars at various intersections to increase compliance;
- Review signal timing on this section of Lumsden Avenue;
- Review corner parking restrictions to promote greater visibility of on-coming traffic and pedestrians crossing at the intersections;
- Relocate existing bus shelters to signalized intersection to improve traffic flow; and
- Develop urban design elements such as boulevard widening, planters, or lay-by parking to create a buffer between pedestrians and vehicles.

In summary, the following measures can/have been taken:

- Replacing the existing pedestrian crossover at Lumsden Avenue and Westlake Avenue and with traffic control signals;
- Installing red "Flashing Beacons" on top of the existing north and south stop signs located on Oak Park Avenue at Lumsden Avenue;
- We have requested our Signs and Pavement Marking Section to install additional school area signs in the vicinity of D. A. Morrison Middle School;
- Our Signs and Pavement Marking Section has installed new stop bars with crosswalk lines at the intersection of Lumsden Avenue and Oak Park Avenue;
- We have requested our Urban Traffic Control Section to review the signal operation at Lumsden Avenue and Gledhill Avenue;
- We are working with TTC to determine the best placement of transit shelters once the traffic control signals at Lumsden Avenue and Westlake have been given approval; and
- Councillor Davis has initiated discussions with staff to develop urban design improvements on Lumsden Avenue in this vicinity.

The implementation of the above noted items, collectively, will significantly improve and enhance pedestrian, cyclist and vehicular safety on Lumsden Avenue in this vicinity of D. A. Morrison Middle School.

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SIGNATURE

Jacqueline White, P.Eng.
Acting Director, Transportation Services
Toronto and East York District

ATTACHMENT

(1) Drawing No. 421G-0664, dated April 2012

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