



# STAFF REPORT ACTION REQUIRED

## All-Way Stop Control – Dovercourt Road at Shanly Street

<b>Date:</b>	October 10, 2012
<b>To:</b>	Toronto and East York Community Council
<b>From:</b>	Acting Director, Transportation Services, Toronto and East York District
<b>Wards:</b>	Davenport, Ward 18 and Trinity-Spadina, Ward 19
<b>Reference Number:</b>	Ts2012202te.top.doc

### SUMMARY

Transportation Services is responding to the request from Councillor Bailão to investigate and report on replacing the existing pedestrian crossover with all-way stop control at the intersection of Dovercourt Road and Shanly Street.

### RECOMMENDATIONS

**Transportation Services recommends that Toronto and East York Community Council:**

1. Receive for information the report (October 10, 2012) from the Acting Director, Transportation Services, Toronto and East York District, respecting the installation of all-way stop control at the intersection of Dovercourt Road and Shanly Street.

### Financial Impact

There is no financial impact associated with the staff recommendation.

### ISSUE BACKGROUND

Transportation Services has investigated a request from Councillor Bailão, on behalf of area residents, to replace the existing pedestrian crossover with all-way stop control.

### COMMENTS

Dovercourt Road in the vicinity of Shanly Street is a minor arterial roadway operating two-way with a daily, two-way volume of approximately 12,000 vehicles and a speed limit of 40 km/h. TTC bus route No. 161 Rogers Road operates on Dovercourt Road north of Bloor Street West. A pedestrian crossover is located on Dovercourt Road at the north leg of the intersection with Shanly Street serving approximately 230 pedestrians during the busiest eight hours of a typical weekday. Shanly Street is a local roadway operating two-way with a daily, two-way traffic volume of approximately 2,000 vehicles and a speed limit of 40 km/h. Shanly Street is currently controlled by "Stop" signs at the intersection with Dovercourt Road.

## Pedestrian Crossover

The function of a pedestrian crossover is to provide a clearly marked area where pedestrians can cross a roadway with maximum efficiency and safety.

A review to assess any deficiencies in the operational and physical suitability of the pedestrian crossover at this location was carried out. By comparing the operation of the pedestrian crossover to provincially adopted “environmental standards” we determined whether this pedestrian crossover is operating under acceptable conditions. The standards and the comparative characteristics at this location are described in the following table:

Standard	Comment	Standard Met/ Not Met
<b>Speed</b> – Vehicle operating speed less than 60 km/h	The speed limit on Dovercourt Road is 40 km/h and the operating speed is in the range of 40 km/h.	Met
<b>Width</b> – Not more than four lanes wide on a two-way street	Dovercourt Road operates with a four-lane cross-section in this area.	Met
<b>Volume</b> – Traffic volume less than 35,000 vehicles per day	Dovercourt Road carries approximately 12,000 vehicles per day.	Met
<b>Turns</b> – No significant volume of turning movements which would interfere with the pedestrian crossover	8 hour totals of turning traffic from Shanly Street: Eastbound lefts – 295 Westbound rights - 33	Met
<b>Visibility</b> – No visibility problems exist for either pedestrians or motorists	Adequate sight lines on all approaches are provided for all road users	Met
<b>Loading</b> – No loading zones in the immediate vicinity	The TTC bus stops on Dovercourt Road are sufficiently set back from the pedestrian crossover	Met
<b>Driveways</b> – No driveways or entrances nearby	There are no driveways in the immediate vicinity of the pedestrian crossover	Met
<b>Spacing</b> – Not less than 200 metres to another pedestrian crossover or traffic control signal	Adjacent traffic control signals are located 365 metres to the south at Bloor Street West and 335 metres to the north of Hallam Street	Met

Based on this review the existing pedestrian crossover is operating under satisfactory conditions. We also reviewed the feasibility of relocating the pedestrian crossover to the south side of the intersection in order to reduce the volume of Shanly Street that turns across the pedestrian crossover. During the busiest eight hours there are about 330 vehicles that turn across the pedestrian crossover from Shanly Street. If the pedestrian crossover was on the south leg the volume of turning vehicles would be 450 vehicles. Therefore, there would be no benefit in

relocating the pedestrian crossover to the south leg. However, to increase the visibility of the pedestrian crossover we could install side-mounted flashing beacons on each side of Dovercourt Road.

### All-Way Stop Control

Based on our review, an all-way stop control is not warranted or recommended at the intersection of Dovercourt Road and Shanly Street. We have summarized the results of our all-way stop warrant study at this intersection in the following table:

Minimum Vehicle Volume (Each of 8 Peak Hours)	Combined Crossing Volume (Vehs. & Peds.)	Volume Split (<70%/30%)	Collision Hazard (=2/yr.)	All-way "Stop" Warrants Satisfied (Yes/No)
- Required 500 vehicles/hr  - Actual 748 vehicles/hr	- Required 200 units/hr  - Actual 152 units/hr	The volume split is 81% / 19%	1	NO – based on combined crossing volume, volume split and the collision hazard

A review of the Toronto Police Service collision records for the three-year period ending December 31, 2011 revealed a total of seven collisions at this intersection, three of which would be considered susceptible to correction by the use of all-way stop control. All three collisions involved a westbound motorist failing to yield the right-of-way to southbound traffic. None of the collisions involved a pedestrian. Also, a review of the collision records for the ten-year period ending December 31, 2011 did not reveal any collisions involving pedestrians within the pedestrian crossover.

The most common complaint expressed by residents at locations where unwarranted stop signs are installed, is that motorists are not stopping, but rather, rolling through the intersection, or that they are completely ignoring the stop signs. Installing an all-way stop control at this intersection could, in fact, reduce the safety for all road users, especially pedestrians and cyclists, by creating a false sense of security that all motorists will stop.

Replacing a warranted traffic control device (pedestrian crossover) with an unwarranted device (all-way stop control) will not improve the level of safety at this intersection.

### Traffic Control Signals

We have also investigated the need to replace the existing pedestrian crossover with a traffic control signals. Based on the eight-hour vehicular and pedestrian traffic counts and the collision history, the technical warrants for the installation of traffic control signals are satisfied to the following extent:

Warrant 1:	Minimum Vehicular Volume	47 percent;
Warrant 2:	Delay to Cross Traffic	28 percent; and
Warrant 3:	Collision Hazard	0 percent.

To meet the technical requirements for the installation of traffic control signals, one of the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrants must be 100 percent satisfied, or any two of the three warrants must be at least 80 percent satisfied. Based on the above results, the installation of traffic control signals is not warranted at this intersection at this time.

### **Conclusion**

The pedestrian crossover at this intersection is operating under satisfactory conditions and should be retained. However, the installation of side-mounted flashing beacons on both sides of Dovercourt Road would improve the visibility of the pedestrian crossover. The installation of all-way stop control or traffic control signals at this intersection is not warranted or recommended.

### **CONTACT**

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### **SIGNATURE**

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

### **LIST OF ATTACHMENTS**

(1) Drawing No. 421G-0874, dated October 2012

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