

Peterborough

То:	Members of the General Committee
From:	Cynthia Fletcher Commissioner of Infrastructure and Planning Services
Meeting Date:	January 21, 2019
Subject:	Report IPSTR18-026 Request for a Crossing Guard at the Intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive

Purpose

A report to review the need for a crossing guard at the intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive.

Recommendations

That Council approve the recommendations outlined in Report IPSTR18-026 dated January 21, 2019, of the Commissioner of Infrastructure and Planning Services, as follows:

- a) That a crossing guard be installed at the intersection of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive during the A.M. and P.M. school admission/dismissal times; and
- b) That \$20,000 be added to the Traffic Adult School Guards 2019 Budget Account with funds transferred from the General Contingency.

Budget and Financial Implications

The implementation of crossing guards at the intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive will cost approximately \$20,000 per year. Funding for this service level enhancement was not included in the draft 2019 Operating Budget therefore, additional funding needs to be added to the 2019 Budget. Although the draft budget was finalized and distributed on December 3, 2018, if the recommendations of this report are approved, the budget will be adjusted during the budget approval process in January 2019.

The implementation of school crossing ahead signs will cost approximately \$1,400, funds for which are available in the 2018 approved capital budget for new sign infrastructure.

Background

In 2018, staff received several requests from parents and school officials to review the need for a school crossing guard (a "guard") at the intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive. Parents expressed concern for their children's safety when crossing at these intersections on their way to and from school. The data collection for these assessments was undertaken in September of 2018, following the commencement of the new school year.

School Crossing Guard Assessment

The role of a guard is to direct and supervise the movement of persons across a public road by creating necessary gaps in traffic to provide safe passage at a designated school crossing, as defined in the **Highway Traffic Act**.

The 2017 "Ontario Traffic Council School Crossing Guard Guide" was used to evaluate the need for guards at the subject locations. The goal of this guide is to promote consistency across the province in the application and management of school crossings to improve safety. The guide provides a step-by-step analytical approach to determine if a guard should be provided at a specific location. The key factors used to access the need for a guard depend on the proposed location of the crossing. School crossing locations are categorized as listed below:

- At Signalized Intersections,
- At All-Way Stop Controlled Intersections,
- At Minor Street Stop Controlled Intersections,
- At Pedestrian Signals,
- At Pedestrian Crossovers,
- At Mid-block Locations; and
- At Roundabouts.

Sherbrooke Street and Woodglade Boulevard

Sherbrooke Street is a two-lane arterial road running east-west from Water Street in the east and beyond city limits in the west. Woodglade Boulevard is a two-lane collector road running north-south from Glenforest Boulevard to Kawartha Heights Boulevard. Both Sherbrooke Street and Woodglade Boulevard have a speed limit of 50 km/h. The intersection of Sherbrooke Street and Woodglade Boulevard is controlled by traffic signals and has designated left-turn lanes and crosswalks on all-four legs of the

intersection. École Catholique Monseigneur-Jamot is located to the northeast of the intersection, and currently contains students JK to grade 9. A sketch of the intersection is shown in Appendix A.

The need for a guard at this intersection was previously assessed in Report USTR18-005, based on data collected during the 2017/2018 school year. At that time the intersection did not meet the minimum requirements to justify the provision of a guard. With the introduction of grade 9 students to the school in September of 2018, new crossing counts were undertaken to reassess the need for a guard.

Sherwood Crescent and Kawartha Drive

Sherwood Crescent is a two-lane local road running north-south from Weller Street in the south and ending at the driveway to Westmount Public School in the north. Kawartha Drive is a short two-lane local road running from Sherwood Crescent in the west to Fairmount Boulevard in the east. Both Sherwood Street and Kawartha Drive have a speed limit of 50 km/h. Kawartha Drive has a stop sign at the intersection with Sherwood Street, and there is a newly painted stop bar and crosswalk across Kawartha Drive. Despite parking and stopping restrictions on both Sherwood Crescent and Kawartha Drive, a large number of vehicles stop/park on these streets in order to drop their children off for school. Westmount Public School has students from JK to grade 8, and is located to the north. A sketch of the intersection is shown in Appendix A.

Crossing Guard Warrant at Controlled Intersections

The Crossing Guard Warrant at Controlled Intersections considers three conditions: Condition A, Condition B, and Condition C.

Condition A is satisfied if there has been an average of more than two vehiclepedestrian collisions per year over the last three years. If Condition A criteria is not satisfied, a guard may still be warranted if Condition B criteria is met.

Condition B is satisfied if the exposure index of the requested location is greater than the established Peterborough Exposure Index curve, which represents the average exposure index found at the other signalized or all-way-stop controlled intersections where guards are already provided across the City. If Condition B criteria are not satisfied, a guard may still be warranted if Condition C criteria are met.

Condition C is satisfied if the exposure index of the requested location is greater than 50% of the Peterborough Exposure Index, and at least one other environmental condition is satisfied.

Table 1 below shows the results for the proposed school crossings at the intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive.

Warrant Conditions	Sherbrooke Street and Woodglade Boulevard	Sherwood Crescent and Kawartha Drive
Condition A The requested crossing location has an average of more than 2 vehicle and pedestrian collisions per year over the last 3 years.	 □ Satisfied ✓ Not Satisfied 	 □ Satisfied ✓ Not Satisfied
Condition B The Exposure Index for the requested crossing location falls above the established Peterborough Exposure Index.	 □ Satisfied ✓ Not Satisfied 	 ✓ Satisfied □ Not Satisfied
Condition C The Exposure Index for the requested crossing location is greater than 50% of the established Peterborough Exposure Index, and; At least 1 Environmental Condition is satisfied for the requested crossing location.	 ✓ Satisfied □ Not Satisfied 	 Satisfied Not Satisfied
If Condition A, Condition B, or Condition C are satisfied, a crossing guard is warranted.	Warranted	Warranted

Table 1: Crossing Guard Warrant at Controlled Intersections

Condition A was not satisfied for either location. The intersection of Sherbrooke Street/Woodglade Boulevard has had eight collisions in the past four years, none of which involved any pedestrians. There has been only one reported collision at the intersection of Sherwood Crescent/Kawartha Drive in the past four years, and this collision did not involve pedestrians.

At the intersection of Sherbrooke Street/Woodglade Boulevard a total of 9 students and 57 conflicting vehicle turning movements were recorded crossing Sherbrooke Street during the P.M. school dismissal time. At the intersection of Sherwood Crescent/Kawartha Drive a total of 39 students and 47 conflicting vehicles were observed crossing at Kawartha Drive during the A.M. school admission time.

As shown in Figure 1, the exposure index for the Sherwood Crescent/Kawartha Drive intersection is above the Peterborough Exposure Index curve and as such, the warrant for the implementation of a guard at this location is satisfied under Condition B. Since the warrant was satisfied under Condition B, a full environmental conditions assessment was not required.

The exposure index for the Sherbrooke Street/Woodglade Boulevard intersection is below the Peterborough Exposure Index curve and as such a guard is not warranted under Condition B. However, a guard was found to be warranted under Condition C as the exposure index is above the 50% curve in Figure 1 and one of the conditions in the Environmental Conditions Warrant was met.

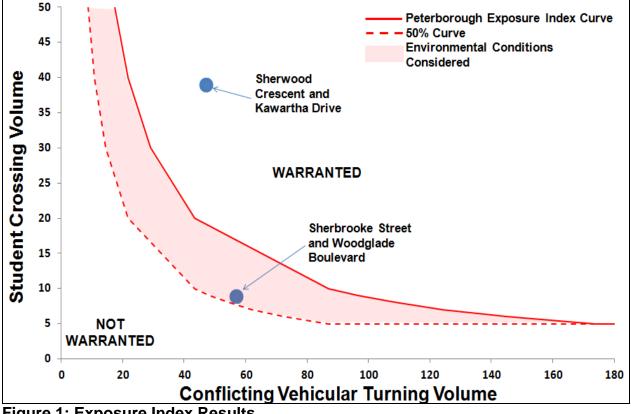


Figure 1: Exposure Index Results

The Environmental Conditions Warrant is broken down into three categories (as shown in Table 2): intersection geometry, vehicle and pedestrian visibility, and driver behavior. If any of the three criteria described in Table 2 are satisfied, a guard may be warranted. The Environmental Conditions Warrant was met under the intersection geometry criterion, as students crossing Sherbrooke Street are crossing more than two lanes of traffic. A guard is therefore warranted under Condition C.

Criteria	Description	Sherbrooke Street and Woodglade Boulevard
Intersection Geometry	Students are crossing more than 2 lanes of traffic, channelized right turn lanes, or a centre turn lane.	✓ Satisfied□ Not Satisfied
Vehicle and Pedestrian Visibility	There are sight line limitations for vehicles or pedestrians (horizontal or vertical road curvature, trees, bus shelters/ bus stops, other) which limits visibility to less than 125 meters.	 □ Satisfied ✓ Not Satisfied
Driver Behavior	Illegal driver behavior was observed during the site inspection (speeding, rolling stops, illegal u-turns, excessively aggressive driving).	 □ Satisfied ✓ Not Satisfied

Table 2: Environmental Conditions Warrant

Timelines

If the recommendation is approved and sufficient 2019 funding is approved, it is planned to establish a guard at the intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive by March 2019. This start date is subject, however, to the successful hiring of additional guards.

Summary

The crossing guard review supports the need for a guard at the intersections of Sherbrooke Street/Woodglade Boulevard and Sherwood Crescent/Kawartha Drive. The implementation of a guard at these locations should reduce student exposure to conflicting vehicle movements and improve pedestrian safety at the intersections.

Submitted by,

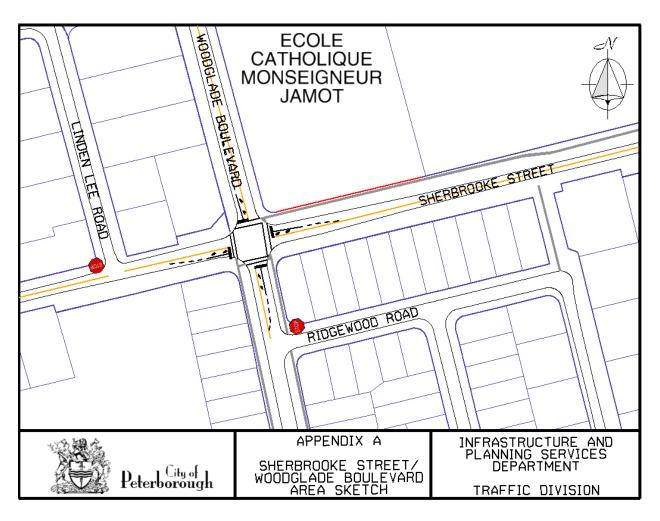
Cynthia Fletcher Commissioner of Infrastructure and Planning Services

Contact Name: Peter Malin Transportation Services Coordinator Phone: 705-742-7777 Ext. 1846 Toll Free: 1-855-738-3755 E-Mail: <u>pmalin@peterborough.ca</u>

Attachments: Appendix A – Area Diagrams

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Figure 2: Sherbrooke Street and Woodglade Boulevard Intersection



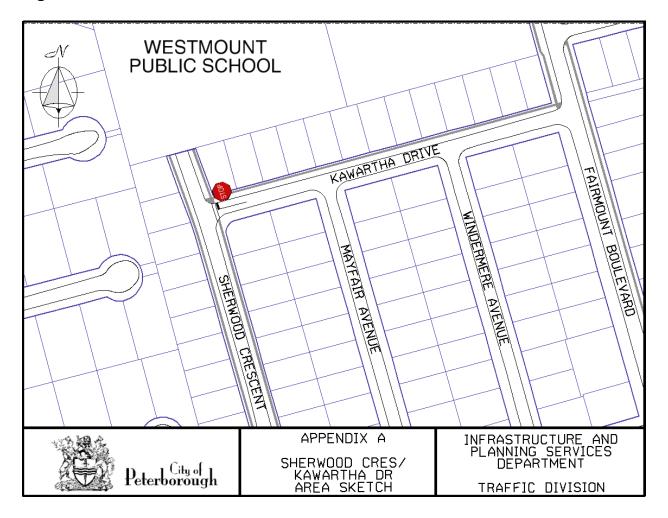


Figure 3: Sherwood Crescent and Kawartha Drive Intersection