



City of  
**Peterborough**

---

**To: Members of the Committee of the Whole**

**From: W.H. Jackson, Director of Utility Services**

**Meeting Date: December 4, 2017**

**Subject: Report USTR17-019  
Request for a Crossing Guard at King George Public School**

---

## **Purpose**

A report recommending a crossing guard be installed at the intersection of Hunter Street East and Armour Road for the A.M. school admission time to supplement the existing crossing guard who operates during the P.M. school admission time.

## **Recommendation**

That Council approve the recommendation outlined in Report USTR17-019 dated December 4, 2017, of the Director of Utility Services, as follows:

That a crossing guard be implemented at the intersection of Hunter Street East and Armour Road for the A.M. school admission time.

## **Budget and Financial Implications**

The implementation of a crossing guard at Hunter Street East and Armour Road during the AM school admission time will cost approximately \$3,000.00 per year, funds for which are available in the USD Reserve for 2018. In future years the cost will be funded through the Crossing Guard annual operating budget.

## **Background**

In September 2017, staff received a request from the Principal of King George Public School to provide a crossing guard at the intersection of Hunter Street East and Armour Road during the A.M. school admission time. A recent increase in enrollment has resulted in more students walking to school. The City currently provides a crossing guard during the P.M. school dismissal time.

### **Site Details**

Hunter Street East is a two-lane arterial road running east-west from the Otonabee River to Ashburnham Drive. Armour Road is a two-lane arterial road running north south from Parkhill Road to Maria Street. These roads intersect on a hill with approach grades in excess of eight-percent. The intersection of Hunter Street East and Armour Road is controlled by traffic signals and has designated left-turn lanes and marked crosswalks on all four-legs of the intersection. King George School is located on the northeast corner of the intersection. A sketch of the subject area is shown in Appendix A.

### **School Crossing Guard Assessment**

In 1992, representatives from the Ontario Traffic Council (OTC) and the Ontario Ministry of Transportation (MTO) collaborated to prepare a report to standardize the implementation of school crossings. This document titled "School Crossing Review 1992" has been used as a guideline and best practice by municipalities across the province and laid the foundation for the development of the "OTC School Crossing Guide 2006" and the recent release of the "Crossing Guard Guide May 2017".

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 school crossing guard should be provided at a specific location. The following assessment follows the principals and best practices outlined in the 2017 School Crossing Guide.

The role of a crossing 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. At locations where traffic signals exist, the function of a traffic signal automatically creates gaps in traffic by displaying a red indication to traffic and a walk indication to pedestrians. However, vehicle movements such as right-turn on red and left-turns from the side street (conflicting vehicle movements) are not controlled by the signals. Therefore, when a significant number of conflicting vehicle movements exist and school children (JK to grade 6) are present, a crossing guard may be considered to help manage safety risks.

## **School Crossing Guard Analysis**

The key factors used to assess the need for a crossing guard at a signalized intersection include: Collision History, Exposure Index, and Environmental Conditions.

### **Collision History**

A crossing guard may be approved regardless of the outcome of the exposure index study or the number of students regularly crossing, if an average of more than two vehicle-pedestrian collisions per year occurred over the last three years and those collisions are susceptible to correction by a crossing guard.

A review of the collision history revealed less than two vehicle-pedestrian collisions occurred at the intersection in the past three years.

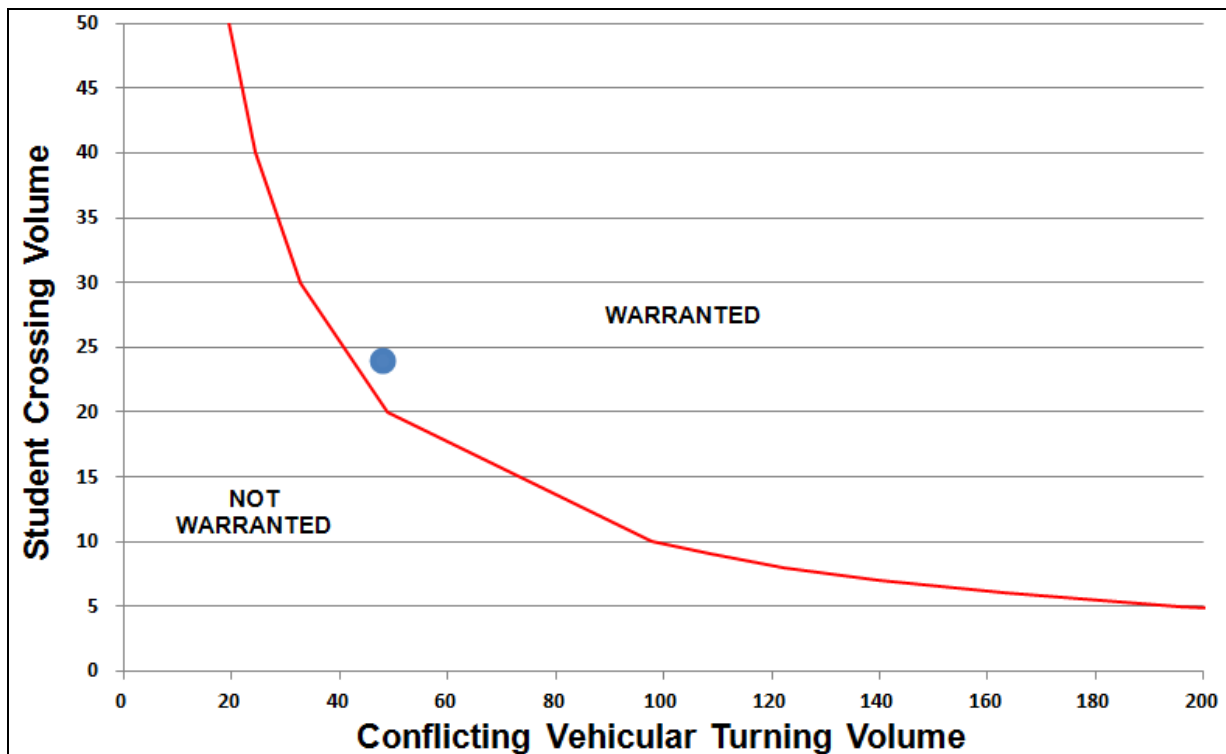
### **Exposure Index**

The crossing guard warrant methodology for crossings at signalized intersections uses an exposure index to compare the requested crossing guard location to other existing signalized intersections in the community that currently employ crossing guards. In this context, an exposure index represents the potential interactions created by turning vehicles and the number of pedestrians crossing an intersection. School aged children (JK to grade 6) crossing at designated crosswalks are counted along with vehicles that pass over the crosswalk during the pedestrian walk signal, during both the AM and PM peak periods.

Data on traffic conflicts and crossing activity at 5 other signalized intersections in Peterborough (where crossing guards are used) was collected to produce the local Exposure Index.

During the A.M. school crossing admission time the student volume and the conflicting vehicular turning volume is greater than the exposure index curve as represented in Figure 1. Based on this result, the warrant for the implementation of crossing guard at the intersection of Hunter Street East and Armour Road is satisfied.

**Figure 1: Exposure Index for Hunter Street East and Armour Road**



### **Environmental Conditions**

In some cases, other “Environmental Factors” at a particular site may present additional operational or safety risks that may not necessarily be reflected in the sites chosen when creating the local Exposure Index. For that reason, the Guidelines include other Environmental Conditions (such as wide crossings of multi-lane arterial roads, or intersections with poor sight distance, etc) which should be considered in determining if a crossing guard is needed at sites that do not meet the Exposure Index criteria.

The intersection of Hunter Street East and Armour Road meets the Exposure Index warrant for a crossing guard during the AM school admission time and, accordingly, a full review to assess other Environmental Conditions was not required.

### **Timelines**

If the recommendation is approved, implementation of a crossing guard during the A.M. school admission time at Hunter Street East and Armour Road could begin immediately.

### **Summary**

The crossing guard review supports the need for a crossing at the intersection of Hunter Street East and Armour Road during the A.M. school admission time to supplement the

existing afternoon crossing guard. The implementation of a crossing guard should reduce the pedestrian's exposure to conflicting vehicle movements and improve pedestrian safety at the intersection.

Submitted by,

W.H. Jackson  
Director of Utility Services

Contact Name:  
Peter Malin  
Transportation Services Coordinator  
Phone: 705-742-7777 Ext. 1846  
Toll Free: 1-855-738-3755  
Fax: 705-876-4621  
E-Mail: [pmalin@peterborough.ca](mailto:pmalin@peterborough.ca)

Attachments:  
Appendix A: Hunter Street East at Armour Road Area Diagram

Appendix A – Hunter Street East at Armour Road Area Diagram

