



# Memorandum

**TO:** BUILDING BETTER  
TRANSPORTATION COMMITTEE

**FROM:** James R. Helmer  
Robert L. Davis

**SUBJECT: PROPOSED CHANGES TO THE  
CROSSING GUARD SAFETY INDEX**

**DATE:** 04-22-05

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Approved

Date

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## **RECOMMENDATION**

The Building Better Transportation (BBT) Committee recommend that the City Council approve the modifications to the Safety Index formula, and refer staffing newly qualified intersections to the Police Department for consideration in the Fall 2005 Crossing Guard staffing plan, within existing funding levels.

## **BACKGROUND**

On March 7, 2005, proposed revisions to the Adult Crossing Guard formula were presented to the BBT Committee. The revisions were developed to incorporate several changes, including those recommended within the May 2004 City Auditor's report on the Adult Crossing Guard Program.

As requested at the March 7th BBT meeting, the Department of Transportation (DOT) has re-calculated the intersections that did not qualify for an adult crossing guard during the 2002, 2003 and 2004 calendar years using the proposed new Safety Index formula. This report discusses the results of this process and the budget implications if the new formula is approved by the City Council.

## **ANALYSIS**

The Safety Index formula is used as an objective means for evaluating the relative safety of intersections in the City, with respect to students crossing the roadway. Locations with a high index rating receive higher priority for crossing guards compared to locations with a low index. Currently, a safety index of 120 is used as the minimum value for recommending placement of a crossing guard. While many factors in the Safety Index have been modified, a minimum of 120 is still proposed as the value needed to warrant a crossing guard.

In the prior three calendar years, there were 39 intersections studied with the existing Safety Index formula that did not qualify for an adult crossing guard. DOT recently reevaluated all of these intersections with the proposed new Safety Index formula. The attached table highlights the

locations studied, the original Safety Index, and the impacts of applying the proposed formula to these intersections. As highlighted on the attached table, 7 of the 39 (18%) restudied intersections qualify for an adult crossing guard with the proposed formula. It should be noted that at the existing 120 intersections with adult crossing guards, there are approximately 1.5 guards per intersection, as some intersections have multiple guards. Based on this 1.5 guard per intersection rate, these 7 intersections could require up to 11 guards.

There are two primary reasons why these 7 intersections now qualify for a crossing guard. First, all of the intersections were assigned a higher age factor than used in the existing formula. Only 2 different age factors are used in the proposed formula vs. the tiered structure in the existing formula, both of which are not dependent upon distance from the school. In addition, both the existing and proposed formulas assign a higher age factor to crosswalks serving elementary schools than those serving middle schools. However, at crosswalks serving both elementary and middle grades, the proposed formula assigns the age factor based upon the youngest grade of student using the crosswalk, vs. the oldest grade as in the existing formula. Secondly, the majority of these 7 intersections had a high aggregate volume of school children crossing on all legs of the intersection being studied vs. only the specific leg of the crosswalk being studied with the existing formula. This high volume of pedestrians is now considered in the Safety Index formula as part of the unusual conditions factor that was added to the formula.

On average, approximately 15-20 intersections are studied on an annual basis, with between 6-7 warranting an adult crossing guard with the existing formula. If the new Safety Index is approved, it is anticipated that an additional 2-4 intersections will qualify annually for a crossing guard, resulting in a total of between 8-11 intersections warranting a crossing guard. Using the 1.5 guard per intersection rate, the total demand for new guards is estimated to increase by 9-13 guards per year.

### **COST IMPLICATIONS**

Based on input from the Police Department, each additional crossing guard will cost about \$7,500 per year. Each additional 50 guards will also require a coordinator/supervisor, at an annual cost of \$64,000.

The proposed changes to the Safety Index formula will provide greater opportunities for an intersection to qualify for an adult crossing guard. As discussed above, the 7 intersections that did not qualify for a guard with the existing formula, warrant a guard with the proposed new formula. Assuming 11 guards are needed at these intersections, the additional cost for these guards would be \$82,500. This cost is in addition to the 9-13 guards anticipated to be warranted each year at a cost between \$67,500 – 97,500. These are annual costs required on an “on-going” basis unless a guard is removed from a previously qualified location.

Given the City’s current fiscal situation and the likely service reductions that are being contemplated in many City Service Areas, it is not recommended that additional resources be allocated to the Adult Crossing Guard Program at this time. Police Department staff will analyze

the existing deployment of guards to determine if any of the existing multiple staffed intersections can be redeployed to staff new intersections that qualify under the new formula. If redeployments are possible, they would occur beginning with the 2005 Fall school year. A follow up report would be submitted to the BBT Committee in September 2005 outlining the results.

**COORDINATION**

This report has been coordinated with the City Attorney's Office and the Budget Office.

JAMES R. HELMER  
Director of Transportation

ROBERT L. DAVIS  
Chief of Police

Attachment