TRANSPORTATION COMMITTEE   **15**   **COMITÉ DES TRANSPORTS**
REPORT 3   **RAPPORT 3**
12 JUNE 2019   **LE 12 JUIN 2019**

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2.   **Adult School Crossing Guard Program Update**

Mise à jour du Programme de brigadiers scolaires adultes

COMMITTEE RECOMMENDATION

That Council approve the updated Adult School Crossing Guard Program as described in this report.

RECOMMANDATION DU COMITÉ

Que le Conseil approuve la nouvelle version du Programme de brigadiers scolaires adultes dont traite le présent rapport.

DOCUMENTATION / DOCUMENTATION

1.   Director's report, Traffic Services, Transportation Services Department, dated 18 April 2019 (ACS2019-TSD-TRF-0002)

    Rapport du Directeur, Services de la circulation, Direction générale des transports, daté le 18 avril 2019 (ACS2019-TSD-TRF-0002)

2.   Extract of Draft Minute, Transportation Committee, 5 June 2019.

    Extrait de l'ébauche du procès-verbal de la Comité des transports, le 5 juin 2019.

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Report to
Rapport au:

Transportation Committee
Comité des transports
5 June 2019 / 5 juin 2019

and Council
et au Conseil
12 June 2019 / 12 juin 2019

Submitted on April 18, 2019
Soumis le 18 avril 2019

Submitted by
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Ward: CITY WIDE / À L'ÉCHELLE DE LA   **File Number**: ACS2019-TSD-TRF-0002
    VILLE

SUBJECT: Adult School Crossing Guard Program Update

OBJET: Mise à jour du Programme de brigadiers scolaires adultes

REPORT RECOMMENDATION

That the Transportation Committee recommend that Council approve the updated Adult School Crossing Guard Program as described in this report.

RECOMMANDATION DU RAPPORT

Que le Comité des transports recommande au Conseil d'approuver la nouvelle version du Programme de brigadiers scolaires adultes dont traite le présent rapport.

BACKGROUND

The Adult School Crossing Guard (ASCG) Program was established to provide assistance to elementary school children from Junior Kindergarten to Grade 6 when crossing roads on their way to and from school. As part of the program, locations requesting a crossing guard are reviewed using a warrant process to determine if criteria are met for the installation of an ASCG at the beginning of the following school year. Once an ASCG is funded and assigned to a location, the placement of the guard is permanent. A total of 228 ASCGs are currently funded by the City of Ottawa. The 223 crossing guards and five team lead positions provide crossing assistance at 206 crossing locations, some of which require multiple guards.

The ASCG Program and warrant process was approved by Council in 2002 as part of the Adult School Crossing Guard Program and School Zone Traffic Safety Program Report (ACS2002-TUP-TRF-0027). The current warrants provide an evaluation process for the installation of an ASCG only at signalized, stop-controlled and uncontrolled mid-block crossings.

The City of Ottawa, along with other municipalities in Ontario, participated in a project led by the Ontario Traffic Council (OTC) to update the OTC's School Crossing Guard Guide (SCGG). The updated version, the OTC's 2017 SCGG, released in May 2017, differs from the City's existing ASCG criteria in that it includes:

- New criteria for the implementation of ASCG for each of the five pedestrian crossing types in Ontario, including mid-block, Pedestrian Crossover (PXO), signal, roundabout and stop control crossings; and,
- A method to evaluate existing ASCG locations to determine whether an ASCG should be removed or re-allocated.

Transportation Services Department staff have compared guidance provided in the SCGG against the 2002 Council-approved City of Ottawa ASCG Warrants to develop updates to the City's ASCG Program. The purpose of this report is to:

- Establish revised methods and criteria for selecting locations for ASCGs at signalized, stop-controlled and uncontrolled mid-block crossings;
- Introduce methods and criteria for new types of crossings, including pedestrian crossovers and roundabouts; and,
- Establish a process for re-allocating funding of under-utilized ASCGs to new locations that meet the criteria described within this report.

DISCUSSION

Screening Process

Under the existing program, a location is first reviewed to determine if a set of screening criteria are met, prior to conducting a full analysis. The screening criteria includes the minimum number of children required for the City to consider funding a guard at the location, as well as some safety-related criteria. Locations must meet the following criteria to be assessed further for an ASCG:

- A minimum of 10 children crossing, combined between the AM and PM review periods coinciding with the school's bell times; the children must be in Junior Kindergarten through to Grade 6;
- No more than one lane of travel in each direction if the crossing location is uncontrolled;
- A distance greater than 200 metres from another traffic control device;
- A speed limit of less than or equal to 50 kilometres per hour on roadways approaching the crossing at uncontrolled crossing locations; and,
- Sightlines must be adequate for the conditions of crossing location.

Criteria – Signalized and Stop-Controlled Crossings

A new set of criteria should be adopted for signalized intersection crossings, minor street stop-controlled and all-way stop-controlled intersection crossings. Existing ASCG criteria and corresponding issues are highlighted in Table 1 below.

Table 1 - Existing ASCG Warrants/Issues for Signalized and Stop-Controlled Crossings

Crossing Type	Existing Criteria	Issues
Signalized	Criteria is met if two or more conflicts between vehicles and school-aged children are observed during the site visit associated with the review. A conflict occurs when the legal right-of-way of school-aged pedestrians crossing the roadway is compromised by driver behaviour.	• The number of conflicts that occur from day-to-day can vary significantly. • Despite existing guidelines in what consists of a conflict, the designation of a conflict by an individual requires a level of subjectivity. • Exact results are difficult to re-produce from day to day at specific locations given the evaluation factors.
Stop-controlled	Criteria is met if compliance to the stop is less than 80 per cent.	• Despite existing guidelines that define a rolling stop versus a complete stop, the designation of compliance by an individual requires a level of subjectivity.

To mitigate some of the issues listed in Table 1, the SCGG recommends using an Exposure Index to evaluate the need for an ASCG at signalized or stop controlled legs of an intersection.

The Exposure Index quantifies the level of interaction and potential conflict between vehicular and child pedestrian movements at a given crossing. For a crosswalk at a signalized intersection, the conflicting movements considered as part of the Exposure Index would be those vehicles turning left or right across that crosswalk during the walk phase for that crosswalk signal. The Exposure Index is determined by multiplying the number of conflicting vehicle movements by the number of school-aged pedestrians at a crossing. It provides an empirically based value which can be used to objectively

determine if an ASCG is warranted at a location. When completing a count, a vehicle either drives through a crossing or it does not. The subjectivity is removed from the review.

The Exposure Index for a crossing is then compared to an Exposure Threshold value to determine if a guard is warranted or not. The Exposure Threshold is a calculated value that defines the amount of exposure beyond which an ASCG would be beneficial.

The SCGG recommends conducting counts at a number of crossings per control type to determine an Exposure Threshold for each. The SCGG recommends a threshold that would warrant crossings fall within the top 15 per cent of Exposure Index values, based on calculations for a minimum of 30 crossings. Traffic Services has completed the necessary reviews and established thresholds for crossings based on the SCGG recommendations at signalized and stop-controlled legs of an intersection. As these thresholds are based on actual count information, and a minimum sample size of just over 30 crossings, the threshold value will be reviewed every term of Council to ensure existing conditions are being captured and reflected.

Criteria – Mid-block Crossing

The City of Ottawa's current method for reviewing ASCG at mid-block, uncontrolled crossings is based on the results of a Gap Study. This method is still considered best practice as outlined in the SCGG. Gap Studies will continue to be used to determine if ASCGs are required for uncontrolled intersections or mid-block crossing locations.

A Gap Study is an objective way of evaluating whether there are sufficient gaps in traffic along a road for a child to cross. The gap time is calculated based on site specific criteria at the location. Elements considered in this assessment include the number of traffic gaps, the required crossing time, the student's visibility distance at the crossing, the speed of vehicle traffic, and the road's lane configuration.

The SCGG recommends a walking speed of 1.0 metre per second to use in the Gap Study calculations which differs from the 1.1 metre per second speed currently used. The updated ASCG Program will adopt a slower walking speed of 0.9 metre per second to align with current Gap Study practices used at signal crossings where it has been observed that children are not able to complete their crossing during a signal phase. Using a consistent 0.9 metre per second walking speed will enhance the safety of children crossing by increasing the required gap time to cross the road.

Criteria – Pedestrian Crossovers and Roundabouts

A process for evaluating pedestrian crossovers (PXOs) or roundabout crossings does not exist as part of the City's existing ASCG Program. Given that these crossings are now implemented city-wide, a set of criteria for ASCGs is necessary for these types of crossings. Similar to signalized and stop-controlled crossings, the SCGG recommends the use of an Exposure Index at these locations. As stated previously in the report, the Exposure Index must be compared to an Exposure Threshold value to determine if the ASCG is warranted. Exposure Thresholds vary by control type because the conflicting movements used in the calculations are different for each. At a mid-block PXO there are fewer conflicting movements than would occur at an all-way stop location. Comparing a lower calculated Exposure Index for a mid-block PXO to a higher Exposure Threshold for an all-way stop would result in few warranted PXO locations. Currently, Traffic Services is unable to determine an Exposure Threshold value for these types of crossings. Limited requests have come through the ASCG Program for implementation of guards at these types of crossings and as such, not enough data is available to calculate an Exposure Threshold value.

Until an Exposure Threshold can be defined, stop compliance data will be used at PXOs and roundabouts as the measure to determine if these types of crossings warrant ASCGs. A stop compliance study measures the percentage of approaching traffic stopping when pedestrians are present at a PXO and waiting to cross. This practice will be utilized until the necessary data becomes available to proceed with an Exposure Threshold calculation. Traffic Services staff will continue to collect the necessary data every time an ASCG review is completed for a PXO and/or a roundabout crossing. Once data has been collected for a minimum of 30 crossings, staff will then establish an Exposure Threshold value for these types of crossings. Once an initial Exposure Threshold value has been developed for these crossings, it will be reviewed each term of Council, thereafter, to ensure existing conditions are being captured and reflected.

Prioritization of Adult School Crossing Guard Locations Meeting Criteria

In years when the number of locations meeting criteria for a guard exceeds the Council approved budget, Traffic Services will continue to prioritize locations for implementation. A prioritization process ensures fairness and transparency; it also ensures that an ASCG is installed where it is needed most. It considers characteristics of the crossings that could lead to higher severity of collision, if one were to occur, and is based on an

accumulated points system considering the following:

- Type of traffic control for the crossing location;
- Collision history;
- Vehicular speed (speed limit versus operating speed);
- Number of travel lanes;
- Number of children crossing; and,
- Percentage of conflicting heavy vehicles.

Removal Process for Adult School Crossing Guards

All existing ASCG locations will be grandfathered in the program and will not be subject to a review using the revised screening and warrant criteria. ASCG locations will only be removed as per the ASCG Removal Process, as described below.

A crossing guard is used for the purpose of providing crossing assistance to school-aged children walking to and from school. Over time, there are many factors that could lead to a decrease in the number of children using a certain crossing. In order to increase the overall sustainability of the program, there must be a process in place to re-allocate resources to other areas when the number of children crossing falls below the minimum threshold used to consider providing an ASCG. Under the current program, no such process exists.

The third-party provider that operates the ASCG Program on behalf of the City of Ottawa is required to undertake counts of children using the crossing each year. These counts will be used to identify locations that should be reviewed by Traffic Services for potential removal of a guard. When a location has been identified as falling below the minimum threshold of 10 school-aged children being crossed during the AM and PM crossing periods combined, Traffic Services will undertake bi-monthly counts to determine if the number of children crossing is consistent through the following school year. If the location falls below the minimum number of students during each consecutive review, the Ward Councillor will be notified and the guard will be removed from the crossing at the start of the following school year. The funds for this location will be used to support a new warranted crossing guard location. In addition, when a school closes and the ASCG is only servicing children at that school, the ASCG will be removed without the need to re-evaluate the crossing location. If a crossing guard is removed from a location the Ward Councillor will be advised by staff.

The updates to the Adult School Crossing Guard Program, as described in this report, align with guidance provided in the Ontario Traffic Council's 2017 School Crossing Guard Guide. These updates will help better manage program resources moving forward and better support the needs of school aged children utilizing active modes of transportation on their way to and from school.

RURAL IMPLICATIONS

The Adult School Crossing Guard Program is applicable city-wide.

CONSULTATION

The Updated Adult School Crossing Guard Program supports a transparent, fair and consistent process in the implementation of crossing guards city-wide. The updated program aligns with the Ontario Traffic Council's 2017 School Crossing Guard Guide, which was developed in consultation with Ontario municipalities.

ADVISORY COMMITTEE(S) COMMENTS

Not applicable.

LEGAL IMPLICATIONS

There are no legal impediments to implementing the recommendation in this report.

RISK MANAGEMENT IMPLICATIONS

There are no risk implications.

FINANCIAL IMPLICATIONS

There are no financial implications with the recommendations contained in this report.

ACCESSIBILITY IMPACTS

There are no impacts to accessibility associated with this report.

TERM OF COUNCIL PRIORITIES

The Adult School Crossing Guard Program update aligns with the Transportation and Mobility Priority in the City of Ottawa's 2015-2018 Strategic Plan.

DISPOSITION

The Transportation Services Department will administer the Adult School Crossing Guard Program in Ottawa, as supported and approved by Council.