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School Crossing Guard Policy Update and Review Staff Report to Council

Report Number: 2022-36

Department(s): Engineering Services

Author(s): M. Kryzanowski, Manager, Transportation Services

Meeting Date: May 30, 2022

Recommendations

1. That the report entitled School Crossing Guard Policy Update and Review, dated May 30, 2022, be received; and,
2. That changes to the School Crossing Guard sections of the Town's Transportation Management Policy as outlined in Appendix A be approved; and,
3. That a new location for a school crossing guard be implemented at the intersection of Woodspring Avenue and Aspenwood Drive, and that the corresponding Traffic Bylaw Amendment contained in Appendix B of this report be approved; and,
4. That the request for a new school crossing guard at the intersection of Doubletree Lane with Austin Paul Drive and Jordanray Boulevard not be approved at this time, for reasons identified in this report; and,
5. That staff undertake additional data collection required for the new Pedestrian Exposure Index (PEI) method of study, and that existing school crossing guard locations be reviewed against this new method of study to ensure that they will meet the new warrants; and,
6. That staff report back to Council in Quarter 2 of 2023; and,
7. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Purpose

The purpose of this report is to outline proposed changes to the School Crossing Guard section of Newmarket's Transportation Management Policy, and to review the request for two (2) new crossing guards, one at the intersection of Woodspring Avenue with Aspenwood Drive, and the other at the intersection of Doubletree Lane with Austin Paul Drive and Jordanray Boulevard.

Background

The current School Crossing Guard policy was developed in 2009, and forms part of the Town's broader Transportation Management Policy. In 2017, the Ontario Traffic Council (OTC) developed new guidelines for school crossing warrants. The most notable change is a recommendation to move away from the traditional "gap analysis" method in favour of a "Pedestrian Exposure Index" (PEI) method of study in establishing warrants for school crossing guard locations.

Shortly after the new OTC guidelines were published, Town staff started updating Newmarket's School Crossing Guard policy in line with the new guidelines. An initial data collection that was required for the update was undertaken in 2019, prior to the start of the Covid-19 Pandemic; however, with the Pandemic and resulting restrictions in early 2020, traffic flow around schools was greatly impacted and subsequent data collection could no longer be considered representative of normal traffic conditions around schools. Staff had to wait until 2021 to start conducting the necessary follow-up studies.

During this waiting period, two requests were received for new School Crossing Guards at two different locations to supplement the existing 28 locations currently under study. These two new locations are:

- 1) The intersection of Woodspring Avenue and Aspenwood Drive; and
- 2) The intersection of Doubletree Lane with Austin Paul Drive and Jordanray Boulevard.

Both requests were evaluated and the results are presented further below.

Discussion

Changes to the Existing School Crossing Guard Policy

The two major changes in the 2017 OTC guidelines for School Crossing Guards are:

- a) That the Town establish its own minimum threshold level for the number of pedestrians crossing the road at study locations, and
- b) That municipalities adopt a new Pedestrian Exposure Index (PEI) method of evaluating requests for crossing guard locations.

The Town's current policy uses a minimum of 10 children crossing a road at a given location in order to trigger a crossing guard study. In other words, if there are fewer than 10 children crossing the road at any given peak time period, a study will not be conducted and the location will be deemed ineligible for a crossing guard, unless other engineering factors are found to affect the children's safety. The OTC is suggesting an arbitrary number of 40 children crossing the road, as a minimum; however, the minimum is at the discretion of each municipality.

Upon reviewing what other municipalities are doing, staff found a very wide range of minimum numbers being adopted. As a result of staff's review and an analysis of studies from existing school crossing locations in Newmarket, it is recommended that the current minimum of 10 children crossing the road during a peak period be maintained in the new policy for the threshold to trigger a new crossing guard study.

The change from gap studies to a PEI system as a warrant process has more of an impact on the reviews. The previous gap study method was unclear in terms of determining the proper number and length of gaps required when the intersection was signalized or had an all-way stop. Since cars would come to a full stop at such intersections, an actual gap size was difficult to determine and did not factor correctly into the equation. Subjectivity of staff had to be used to guess the proper gap numbers and sizes at such intersections.

The new PEI system is a direct cross-product of the respective number of vehicles and children crossing the street at the subject location. Hence, the PEI study system creates a consistent approach, regardless of the location or intersection type, thereby removing any subjectivity that was previously found in the gap studies.

In 2019, prior to the pandemic, Town staff undertook specialized traffic counts at all of the 28 existing school crossing locations, and for the additional requested location at the Woodspring/Aspenwood location. The Doubletree/Austin Paul/Jordanray location was done as part of the 2021 follow-up counts throughout the Town.

The OTC guidelines state that each municipality can determine its own threshold levels for PEI studies to determine whether or not a crossing guard is warranted. After reviewing the Newmarket-specific data, it is determined that the PEI threshold for locations with a minor stop-control and for mid-block locations is 4,700. The PEI threshold for all-way stop locations and for signalized intersections is 7,000. These thresholds are comparable with, and in some cases slightly lower than, those adopted in other Ontario municipalities.

Regardless of switching over to a PEI system for main crossing guard warrants, Town staff still finds that gap studies can be an effective tool to supplement the PEI. For example, in a case of a minor stop or a mid-block study where the PEI warrant is met at 75% or more, an additional gap study would be undertaken to make a final determination on whether a school crossing guard is needed. Similarly, some other

municipalities have also chosen to retain the gap study method specifically for this purpose.

The new OTC guidelines also recommend that school crossing locations be implemented only on streets with a speed limit of less than 60 km/h. This is likely to accommodate larger and upper-tier municipalities who have arterial roads, such as York Region; however, all Newmarket roads have a speed limit of 50 km/h or less and therefore, this restriction does not apply to the Town since all roads are captured.

The new OTC guidelines also state that if there are existing all-way stops, controlled intersections or school crossing guard locations between the new requested location and the school, then the new location shall not be reviewed.

Finally, a review timeframe of 4 years has been added to the Town's policy to ensure that all school crossing guards are reviewed regularly to ensure that they still meet the warrants despite any changes to demographics and local school programming. Regular reviews will also help determine that the PEI thresholds developed by the Town are still valid.

Appendix A presents the new proposed School Crossing Guard Policy, with additions in bold print and removals in double-strikethrough.

Evaluation of Two New Requests for School Crossing Guards

As mentioned previously, two requests were received for new crossing guard locations. The two are:

- a) The intersection of Woodspring Avenue and Aspenwood Drive; and
- b) The intersection of Doubletree Lane with Austin Paul Drive and Jordanray Boulevard.

These two additional locations afforded staff the opportunity to test the new PEI warrant system. Both intersections are all-way stop locations and would therefore use 7,000 as the PEI threshold level.

The table below shows the results of the two test intersections:

Location	2019 Pedestrians	2019 PEI	2021 Number of Conflicting Vehicles	2021 Pedestrians	2021 PEI	2019 Warrant Result	2021 Warrant Result
Doubletree / Austin Paul / Jordanray	N/A	N/A	189	14	2,646	N/A	Not Met
Woodspring / Aspenwood	41	15,744	404	33	13,332	Met	Met

In the table above, the Woodspring Avenue and Aspenwood Drive intersection clearly exceeds both the pedestrian and the PEI threshold levels of the warrant. This location is

therefore recommended for a school crossing guard to be implemented in time for the September 2022 school year.

The Doubletree & Austin Paul/Jordanray location met the minimum pedestrian requirement to trigger the study, but the result of the study is well below the PEI threshold level required to warrant a school crossing guard; therefore, this location is not recommended at this time.

Next Steps

The traffic counts undertaken in 2021 were still somewhat impacted by the pandemic. While the counts were undertaken when schools were back to in-person learning, the comparative results to the 2019 traffic counts were still inconsistent. Some traffic and pedestrian volumes increased while others decreased when comparing the two time frames that were measured.

It is recommended that an additional set of traffic and pedestrian data be collected at each existing school crossing guard location in the fall of 2022. Once the information is reviewed, a report will be brought back to Council with the results and recommendations. This review will again include the Doubletree & Austin Paul/Jordanray location.

Conclusion

The policy amendments being recommended in Appendix A are a culmination of 4 years of work, and they represent a Newmarket-specific policy that aligns with the new OTC crossing guard warrant guidelines. The changes being proposed are comparable to those that have already been made by the few Ontario municipalities that have completed their own policy amendments.

Two new requests for crossing guard locations were evaluated using the new PEI method to determine warrants. One of the locations exceeded the warrant and is being recommended for a new crossing guard in September 2022. The other location did not meet the warrant at this time; however, it will be re-evaluated in 2022, when a more normalized, post-pandemic traffic pattern is anticipated in school areas.

Business Plan and Strategic Plan Linkages

Well-planned and connected...strategically planning for the future to improve information access and enhance travel to, from, and within Newmarket.

Consultation

The Development and Infrastructure Services' senior management team (SMT) was consulted throughout the process.

Staff have been in contact with the Phoebe Gilman PS school administration in regards to the recommended school crossing location at the Woodspring & Aspenwood intersection.

Public Works Services was consulted on the budget and staffing parts of the report.

Additional consultation with the school administrations will occur, if necessary, when the data collection in the fall of 2022 is completed and reviewed.

Human Resource Considerations

An additional contract position would be required to fill the school crossing guard position at the new recommended location.

Budget Impact

The approval of the policy amendments section of this report would have no direct budget impacts. Any changes in future school crossing locations would affect the Operating budget and would be subject to additional reports to Council prior to any decision being taken.

The fall 2022 traffic data collection exercise will be accommodated within the Transportation Business Unit Operating budget.

The additional school crossing guard location at the Woodspring & Aspenwood intersection would cost less than \$1,000 to the Capital budget for necessary signage. The additional crossing guard location would impact the School Crossing Operating budget, and the additional contract position would add approximately \$12,000 per year of cost to the Public Works Crossing Guard budget.

Attachments

Appendix A – Policy Amendments

Appendix B – Traffic Bylaw Amendment

Approval

Rachel Prudhomme, Director, Engineering Services

Peter Noehammer, Commissioner, Development & Infrastructure Services

Contact

For more information or questions regarding this report, please contact Mark Kryzanowski, Manager, Transportation Services, at 905-895-5193 extension 2508 or mkryzanowski@newmarket.ca