EX18-16

August 1, 2018
September 12, 2018

To: Members
Executive Committee

Re: Safety in School Zones

RECOMMENDATION

1. That Administration undertake an audit of existing school zones to review signage locations, parking and drop off locations and overall safety, prior to the implementation of any further recommendations.

2. That the City Solicitor be instructed to prepare the necessary amendments to Bylaw No. 9900, *The Regina Traffic Bylaw, 1997*, as recommended in this report, effective August 30, 2019.

3. That this report be forwarded to the August 27, 2018 meeting of City Council for approval.

CONCLUSION

In response to Council motion *MN16-4*, the Traffic School Zone Safety Committee made up of subject matter experts, reviewed school zone safety issues and considered school zone signage, speeding, pedestrian and vehicle movements, parking concerns, violations and fines, educational opportunities and school site layout concerns. The committee also considered the implementation, feasibility, costs, enforceability, expected compliance, levels of safety improvement and impact on the community, including the road user in their recommendations.

Administration is supportive of the committee's recommendations and concurs that an audit of existing school zones to review signage locations, parking and drop off locations and overall safety is essential prior to the implementation of any further recommendations. Upon City Council approval, Administration would begin conducting the audit in the fall of 2018. It is anticipated that the audit will require six months to complete.

Upon completion of the audit, the following changes to school zones are proposed:

Amendments to the Traffic Bylaw (Effective August 30, 2019)

- A speed limit change to 30 kilometres per hour from 7 a.m.to 7 p.m. in school zones and playground zones to enhance pedestrian safety, while reducing evening hours to better reflect the presence of children at schools.
- Prohibiting U-turns in school zones, increasing the visibility of the school zone and introducing traffic calming initiatives, will also improve pedestrian safety.

- To establish fines for speeding in school zones, to align with the provincial Traffic Safety Act fine amounts.

Other Recommended Changes that Administration will Undertake

- Pedestrian crosswalks in school zones should follow national standards and be upgraded to the higher visibility pavement markings of the 'zebra crossing'.
- Education and collaboration with the Province on future school sites will help ensure safety is addressed in a proactive manner going forward, while enhancing violation fines for school zone related offences will ensure citizens understand the importance of complying with school zone regulations and discouraging inappropriate driver behaviour.
- Signing of school zones and school areas to be consistent with national guidelines and best practices.

Additionally, Administration would recommend changes to the Traffic Bylaw in order to align the City's current fee and fine structure with the Provinces fee and fine structure, as outlined in the *Traffic Safety Act*.

BACKGROUND

At the April 25, 2016 meeting of City Council, the following motion *MN16-4* was passed:

1. That Administration undertake to form a committee made up of City traffic staff, School Board representatives and representatives from the Regina Police Service to consider, but not be limited to the following:

a. Reducing the speed in school zones.
b. Signage indicating that the passing of vehicles is not allowed within school zones.
c. Adding a pedestrian signal where appropriate to a school zone.
d. Adding bulb outs or other traffic calming methods.
e. Adding signage to indicate when a school zone comes to an end.
f. Declaring the area directly in front of a school a fire or emergency only parking zone so that school age children have a clear sight path to a safe crossing.
g. Suggest methods to handle parent drop off zones that can be used in most school zones.
h. Consider the hours that a school zone would be in effect. For example, whether a 7-7 time slot for school days and no school zone for weekends and summer vacation would be effective.

2. This Committee be struck and meet in the fall of 2016 with a report back to Executive Committee in the spring of 2017 with recommendations.

In 2016, Administration formed a committee consisting of City of Regina (City) Traffic staff, Regina Public and Separate School Boards, Regina Police Services (RPS), Saskatchewan Government Insurance (SGI), Canadian Automobile Association (CAA), Saskatchewan Safety Council and parent representatives to consider safety improvements in school zones. The committee met throughout the 2016/2017 school year to discuss traffic safety improvements for school zones. City staff provided technical presentations on pedestrian safety and school zone best practices and conducted jurisdictional reviews from other municipalities.

The committee was supportive of a multi-faceted approach to improving safety in school zones through the use of appropriate engineering controls, education and enforcement. Committee members demonstrated a desire to create school zone standards that increased the visibility of school zones, crosswalks and were supportive of reductions to speed limits. However, the committee's structure and governance limited its ability to issue final recommendations with respect to engineering controls or priorities for budget allocation and was hesitant to comment on engineering best practices or develop engineering guidelines.

At the September 13, 2017 Executive Committee meeting report *EX17-26* was presented. The committee was to be restructured to ensure consistent representation from respective subject matter experts, as well as establish clear governance for committee decisions, which would allow the committee to provide recommendations on safety improvements in school zones. Report *EX17-26* can be found in Appendix A.

It was resolved *that a special committee consisting of City of Regina (City) Traffic staff, Regina Public and Separate School Boards, Regina Police Services (RPS), Saskatchewan Government Insurance (SGI), Canadian Automobile Associate (CAA), Saskatchewan, Safety Council, and parent representatives provided recommendations for future consideration by Executive Committee in Q2 of 2018.*

DISCUSSION

The Traffic School Zone Safety Committee met between November 2017 and March 2018 to develop joint recommendations on school zone safety improvements. Other interested parties have also been informed of the proposed recommendations.

The committee recommendations were focused on applying industry best practices for mitigating vehicle versus pedestrian children collisions in school zones by effectively using engineering controls, education and enforcement. The City has a relatively small population with low volume of incidents in school zones. As such, the City needs to rely on industry guidelines developed from larger data sets to forecast expected safety improvement metrics that can be evaluated against unique city scenarios and correspondingly apply improvement measures. The copy of the Traffic School Zone Safety Committee Terms of Reference can be found in Appendix B.

The committee conducted a review of the current state of Regina school zones, including:

1. Consistency and visibility of school zone signage
2. Vehicular speeds and compliance with speed limits
3. Pedestrian accessibility and visibility
4. Vehicular movements
5. Parking and loading activities
6. Parking fines and traffic violations
7. Education opportunities
8. School site designs and layouts

The analysis of these issues informed the committee's recommendations found below. The committee also carefully considered implementation feasibility, costs, enforceability, expected

compliance, levels of safety improvement and impact on the community, including the road user in their recommendations.

Before finalizing the recommendations, Administration met on April 10, 2018 with the Regina School Pedestrian Safety Committee whose members include representatives from Saskatchewan Government Insurance (SGI), Canadian Automobile Association (CAA), Saskatchewan Safety Council and parent representatives, to provide the committee's findings and recommendations. These representatives were a part of the initial engagement on school zone safety and were supportive with the final committee recommendations.

Supporting details on alternate options considered for recommendations and the various financial, timing and administrative implications are contained in Appendix C.

Administration will conduct an audit of all existing school zones and determine any required signage changes to ensure compliance with national standards and best practices, including but not limited to zone limits, sightlines and no stopping restrictions. Schools across the community were developed at different times and the signage would have been put in place based on the standards of the day. Through the review process, Administration should remove signage from school zone locations that no longer qualify as a school zone with a reduced speed. These would become school areas with signs indicating schools were present, but a speed reduction is not required. Remaining school zones should establish clear limits, including the end of the zone by the erection of an appropriate sign.

The committee determined this complete review of existing schools is the foundation for further recommendations. Properly established school zones will ensure a consistent experience for drivers and pedestrians throughout the city, while serving to protect vulnerable children and reducing unwarranted restrictions on motorists. Further, completing this work in advance of other changes will ensure decreased implementation costs for labour and material, while reducing the amount of consecutive changes to school zone signs which could serve to confuse drivers.

The following issues were reviewed by the committee. The preliminary recommendations for safety in school zones will help outline the items to be reviewed as part of a safety audit. Following the audit of all schools, a report will be brought forth to council recommending changes to the Traffic Bylaw and addressing any concerns or implementation issues that arise from the safety audit.

Issues Reviewed by the Committee

School Zone Speed Limits and Effective Hours

The committee's evaluation of collision data and speed statistics indicated the majority of vehicles currently make a reduction to their speed in school zones during the hours children are commonly visible. The review of this data, given the current speed limit of 40 kilometres per hour, did not find the current condition to be inherently unsafe.

A primary factor in the committee's recommendation for 30 kilometres per hour was the increased survival rates for pedestrians struck at 30 kilometres per hour compared with

40 kilometres per hour. School zones by their nature have a high concentration of vulnerable persons; young children are still developing impulse control and depth perception and are more likely to act contrary to instruction or to misjudge the risk to their person. A reduction to 30 kilometres per hour increases the survivability of pedestrians for all collisions, but is also the primary factor for improving survivability for collisions, which are not effectively controlled by other means such as engineering controls.

Secondly, reducing the speed limit to 30 kilometres per hour is consistent with the recent direction of other comparable Canadian municipalities and is further consistent with the City of Regina speed reductions in construction zones on 50 kilometres per hour roads.

The recommendation to reduce the speed is part of a holistic solution that considers the recommendation to simultaneously implement adjusted school zone hours to better align with the periods of the day when young children are unaccompanied in the school zone.

The recommendation to move from the current school zone hours of 8 a.m. to 10 p.m.to a 7 a.m. to 7 p.m. time period reflects a desire to ensure enhanced coverage during morning student drop offs during the busy a.m. peak commuting period, while reducing the impact to motorists in the late evening when unaccompanied children are not expected in school zones.

The committee considered various hours for school zones, however the next most preferred option was 7 a.m. to 9 p.m. as to provide extended coverage into the evening hours when schools are used by community groups for various activities. In considering the average age and typical levels of supervision for children at these evening activities, it was determined to proceed with the recommendation of the 7 p.m. school zone end time to mitigate impact on motorists in school zones that are largely inactive in the evenings.

In recommending the 7 p.m. end time however, it is imperative that Administration work with the School Administrators to ensure adequate education and communication with parents regarding the reduction in evening hours for school zones. In doing so, parents will be able to make appropriate determinations regarding the needed supervision levels for their children.

Currently school zones typically see lower levels of proactive enforcement by Regina Police Service (RPS) officers in the evening, which corresponds to the lower levels of activity at these locations. However, where required, instances of dangerous driving behaviours in these areas in the evening hours can still be addressed by RPS through violations other than those directly related to exceeding school zone speed limits.

Finally, the committee did not recommend any changes to the current days in a year the school zones are in effect. The committee determined a consistent approach was preferred, rather than limiting the zones to weekdays or to the school calendar year. Additionally, although playground zones and areas were beyond the scope of the committee, it was recognized that a level of consistency would also need to be applied between these two types of zones. Both school zones and playground zones typically involve young children that should be provided a consistent level of protection. As playgrounds are active throughout the year, including summers and weekends it was determined the preferred approach to school zones would not preclude uniformity with playground zones.

The committee recommended that all existing school zones are reviewed prior to the implementation of bylaw changes. This would ensure the limits of school zones are properly established and that only qualifying school zones are signed as school zones at the new speed reduction and hours. Non-qualifying zones would be signed as school areas with no corresponding speed reductions, as appropriate. The committee believes it is important that the 30 kilometres per hour speed limit is constrained to areas that warrant a school zone and that these zones are neither too extensive, nor too short.

Timing:
Required work for review, sign design and installation has an estimated timeline of eight and one half months. This work can begin in fall 2018.

Corresponding bylaw changes will be considered by the Traffic Bylaw Working Group in late 2018 and brought forward to Council for approval, in advance of the 2019/2020 school year.

Pedestrian Crosswalks

That Administration continue the existing process for evaluating intersections for appropriate pedestrian controls, including pedestrian corridors following the Transportation Association of Canada's (TAC's) national standards. New installation locations should be aligned with national standards and best practices. Existing locations should be upgraded to conform to national standards based in conjunction with other infrastructure renewal activities or as prioritized, based on condition and function.

That Administration continue to engage the existing Pedestrian Safety Committee and School Administrators as needed, when reviewing and implementing pedestrian crosswalks in school zones.

That Administration, where in alignment with national standards and best practices, provide an enhanced level of conspicuity for pedestrian crossings in school zones.

Committee discussions indicated support for continuing the current practice of following standard guidelines for the installation of pedestrian crossing amenities. The committee believes this approach will provide for appropriate crossing locations both within school zones and the neighbourhoods surrounding schools.

The committee believes it will be important for Administration to continue to work with School Administrators and the Pedestrian Safety Committee to highlight existing pedestrian amenities for parents, so they instruct their children accordingly to plan their travel to school to take advantage of these amenities.

Timing:
Pedestrian crosswalks can be implemented in 2018 and on a go-forward basis as per available existing capital budget. The engagement with the School Pedestrian Safety Committee and School Administrators can commence in September 2018 and continue throughout subsequent school years. Enhanced conspicuity of crosswalks in school zones at new locations and retrofit locations can begin in 2019.

Prohibition of U-Turns in School Zones

That U-turns within school zone limits be prohibited and engineering controls be implemented, such as signage or physical barriers, as needed at locations where compliance challenges exist on a go forward basis.

Rationale:
The committee determined vehicle U-turns in school zone are common during pick up and drop off times, and pose a substantial risk to children. U-turns are contrary to pedestrian expectations and are particularly dangerous for children who find these movements challenging to predict. U-turns require drivers to track vehicles and pedestrians in multiple directions which is made more challenging by the small stature of children in school zones.

U-turns are currently prohibited at signalized intersections, including pedestrian half signals, at flashing pedestrian corridors when activated, and at intersections controlled by school safety patrols. The recommendation will extend the prohibition to all intersection with the school zone, as well as midblock locations in school zones.

Pavement markings of centre lines in school zones were also considered but pose enforcement challenges during winter months when pavement markings are not visible. The recommendation does not preclude reinforcing the bylaw as needed through the use of signs, markings and barriers based on engineering judgement regarding compliance concerns.

Timing:
Bylaw changes will be considered by the Traffic Bylaw Working Group in late 2018 and brought forward to Council for approval in 2019.

Overtaking in School Zones

The committee does not recommend establishing a prohibition against overtaking or passing vehicles in school zones.

Rationale:
Through a review of the safety concerns posed by vehicles overtaking adjacent vehicles within school zones it was determined the safety concerns could be better addressed through alternate means, including, but not limited to enforcement of speed limits, dangerous driving laws, and the implementation of traffic calming measures in school zones.

Timing:
Enforcement can be undertaken at any time by Regina Police Services upon request from the schools or concerned individuals for any concerns related to the Traffic Bylaw and the *Traffic Safety Act*. Traffic Calming measures should be identified as part of the safety audit. The timing and installation of these will be dependent upon work planned near the school or subject to funding approval through the budget process.

Parking Restrictions in School Zones

The committee does not recommend establishing the area in front of a school as fire or emergency only parking zone.

Parking and stopping restrictions should be put in place to ensure sightlines at pedestrian crossings. Intersections and driveways must be maintained, and emergency access points kept clear at all times. The remaining curbside parking should have an appropriate mix of parking and loading zones, customized to meet the needs of each school. This will include, but is not limited to, bus loading zones, persons with disabilities parking and parent drop off zones.

Working with the school boards, Administration should promote a reduction in congestion due to on-street loading by encouraging staggered loading times or the use of alternate staging areas.

Rationale:
A review of the parking and loading demands in school zones, and considering existing capacity concerns for school bus loading, the committee recommends limiting parking restrictions for sightline safety requirements only.

Timing:
Once the review of existing school zones has been completed, any required changes to parking restrictions/signage will be undertaken as part of the re-establishment of the school zone signage and speed signage changes, if approved.

Traffic Calming Initiatives

That Administration develop an annual School Zone Safety Improvement Program to implement traffic calming initiatives. This program will include location evaluation, prioritization, engineering design, and installation work of curb extensions or other appropriate traffic calming features in school zones.

Rationale:
The committee recognizes traffic calming solutions are critical for improving compliance with speed reductions in school zones. Curb extensions (bulb-outs), when used appropriately can naturally slow vehicular traffic while improving pedestrian visibility and sightlines, as well as shortening the crossing distance for pedestrians at intersections.

Curb extensions have higher associated costs with retrofitting existing roadways and are challenging to absorb into existing budgets. The committee recognizes a multifaceted approach to implementing curb extensions in school zones is ideal, whereby opportunities can be incorporated into planned City infrastructure renewal projects or required in new development locations. High priority locations that fall outside of upcoming renewal projects will require dedicated budget. The committee believes an annual budget should be established, with dedicated funds for infrastructure improvements in school zones, such as curb extensions.

Timing:
There is sufficient staff capacity available in 2018 to commence initial work on the development of an annual program parameters, as well as the evaluation of several priority school zone

locations based on existing data. Subsequent design of appropriate traffic calming features may also be undertaken in 2018, with implementation beyond 2019 dependent on funding through future budget requests. The scope of an ongoing annual program will be subject to funding available in subsequent years.

Conspicuity of School Zones

That Administration, together with their community partners, research best practices and develop initiatives in school zones to enhance the year-round prominence and visibility of school zones. This will be considered in future budget processes if required.

Rationale:
The committee recognizes that a portion of speed violations in school zones are inadvertent and that by increasing the conspicuity of the school zones may reduce these unintended offences. Gateway signs, enhanced pavement markings, and the implementation of school zone coloured vertical infrastructure in school zones were discussed and should be further evaluated by Administration.

Timing:
This work can commence in fall 2018 in conjunction with review and design work to support other school zone changes, with stakeholder engagement in 2019.

School Zone Fines

That Administration put forward amendments to the *Traffic Bylaw, Bylaw No. 9900,* to increase fine amounts for no stopping violations in school zones.

That Administration increase proactive enforcement of no stopping restrictions in school zones.

Rationale:
The committee believes aligning fine amounts for speed violations to the *Traffic Safety Act* will provide improved consistency between fines issued by Automatic Speed Enforcement and RPS officers in addition to providing stronger incentives for compliance.

The committee has determined that violations of no stopping restrictions in school zones are a common occurrence and are a significant risk to sightlines in school zones. Low voluntary compliance, even in well-signed locations indicates the existing levels of enforcement and the value of the associated infraction's fines do not provide sufficient deterrence. The committee recognizes that increased fine amounts and proactive enforcement are extremely effective in improving driver compliance and these increases would further demonstrate the seriousness with which the Administration views sightline offences in school zones.

Timing:
Bylaw amendments could be brought forward in late 2018 or in 2019 in conjunction with other bylaw amendments.

Education

That Administration work with community partners to develop a strategy for targeted advertising campaigns on safety in school zones to be considered in future budget processes as required.

That Administration put forward a recommendation for RPS to provide an annual safety mascot-type program to be considered in future budget processes.

Rationale:
The committee recognized that education of drivers, parents and children is critical to ensure and reinforce other safety initiatives. The committee believes leveraging existing resources with community partners and coordinating messages is key to effective educational campaigns. Where existing resources are insufficient, the committee believes increased funding should be requested by the appropriate entity.

Timing:
Administration would look to working with the school boards and RPS on educational programs beginning in the fall of 2019.

Provincial Collaboration on Future School Sites

That Administration collaborate with the Province and developers on future school sites to increase opportunities to achieve school zone safety through improved design, including but not limited to the provision of off-street bus loading zones and site-specific amenities, such as on-site daycare loading zones.

Rationale:
The committee recognizes that recent school developments provide new challenges for school zones. Where possible, Administration should provide concerns and recommendations for improvements to the Province and Developers during design phases. This should include road classifications surrounding school zones in addition to appropriate off-street loading amenities and busing procedures.

Timing:
Collaboration is dependent on the timing of any new schools proposed by the Province.

IMPLICATIONS

Financial Implications

A review of all existing school zone limits and no stopping restrictions is estimated at $25,000 in 2018 and can be funded from the existing 2018 Traffic Infrastructure Renewal budget. Sign changes to support recommendations are estimated at $180,000, of which up to $45,000 could be funded from the existing 2018 Traffic Infrastructure Renewal budget, with the remaining requiring additional funding in 2019. Other Operating and Capital expenses associated with the implementation of the remaining recommendations will be brought forward through future budget processes where they cannot be covered in existing budgets.

Additionally, revenue related to Automated Speed Enforcement may be used to fund some of the recommendations, subject to approval by SGI and the City Manager for use of these funds for traffic safety initiatives within city limits.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

The pursuit of an overall action plan for school zone safety supports the strategic priorities of the Official Community Plan (OCP), the Transportation Master Plan and the City's vision of promoting active transportation for residents to get to work and school.

Strategic priorities from the OCP that will be addressed through this work include:

- *Section C, Goal 4 - Ensure that new neighbourhoods and employment areas maximize infrastructure investments and quality of life though a compact and integrated built form.*
- *Section D1, Goal 2 - Support regional economic growth through an effective and efficient transportation system.*
- *Section D2, Goal 4 - Build a resilient city and minimize Regina's contributions to climate change.*
- *Section D3, Goal 1 - Offer a range of year-round sustainable transportation choices for all, including a complete streets framework.*
- *Section D3, Goal 3 - Integrate transportation and land-use planning in order to better facilitate walking, cycling, and transit trips.*
- *Section D3, Goal 4 - Optimize road network capacity.*
- *Section D3, Goal 5 - Promote active transportation for healthier communities.*
- *Section D4 Goal 1 - Meet regulatory requirements and industry best practices for design, construction and operation of infrastructure.*

The recommendations will contribute to achieving the City's outcomes for a connected, safe and accessible community.

Other Implications

None with respect to this report.

Accessibility Implications

Installing curb extensions near schools will reduce the crossing distances for people with accessibility needs.

COMMUNICATION

A communication plan for changes to the Traffic Bylaw will be developed for the fall 2019. Information will be shared with the school boards and community to help inform residents of the changes.

DELEGATED AUTHORITY

The recommendations contained in this report require City Council approval.

Respectfully submitted,



Norman Kyle, Director, Roadways & Transportation

Respectfully submitted,



Karen Gasmo, Executive Director Transportation and Utilities

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