

Appendix C

Traffic Safety in School Zones – Detailed Discussion

Review of Existing School Zones

Administration should undertake a review of all school zones in the city, to ensure proper signage and compliance with national standards and best practices. This would include not only the locations and types of signage installed, but would also include designating or maintaining some locations as school zones with a corresponding reduced speed, while others would be designated as a school area only, without a corresponding speed reduction. Existing school zones whose start and end locations are either too long or too short, would also be identified and designed and revised accordingly.

This review is expected to take six months to complete, during which time a portion of preparatory work can also be undertaken to prepare infrastructure for upcoming sign changes. This review can commence in 2018, with completion in 2019. Staffing capacities limit substantive work on the review until fall 2018, due to current commitments to the 2018 capital construction projects.

Completion of this review will ensure the City of Regina follows both national standards and industry best practices. By taking this approach, school zone signage in Regina will be standardized within the City and in accordance with other jurisdictions. This should also promote improved driver compliance by not only being consistent, but by applying the appropriate treatment for different schools based on locations of school, road classification, age of students (elementary and high school), fencing, entrances, and location of sidewalks. Implementing speed limit changes without completion of this review, could lead to driver confusion or frustration and subsequent reduced driver compliance.

Annual Audit Program

Administration should also develop an ongoing annual audit program where school zones are proactively inspected and reviewed on a regular cycle, to ensure they are adjusted to address any changing conditions or guidelines. This would require ongoing funding of approximately 13k each year on a go forward basis. Initial parameters for an audit can commence in 2018 with existing budgets.

Items Reviewed by the Committee

1. School Zone Speed Limits and Effective Hours

Option 1 - Maintain the status quo, where school zones remain at 40 kilometers per hour, as established by the *Traffic Bylaw* and remain in effect from 8 a.m. to 10 p.m. daily.

This option has no financial implications and no sign change work is required.
(Not Recommended)

Advantages:

This option provides the same level of safety currently experienced in school zones, while maintaining consistency for Regina road users' expectations and no additional expenditures for sign infrastructure changes. A large-scale review is not necessary and Administration can focus on several of the highest priority locations only.

Disadvantages:

This option does not provide for any enhancement to safety and does not address community demand for speed reductions. Evening school zone hours are viewed as overly restricted by residents, as they do not correspond to the likelihood of the presence of children in the school zone.

Based on the requested direction to implement improvements to school zone safety, Administration does not recommend this option.

Option 2 - Reduce the speed limit within school zones to 30 kilometres per hour and adjust the timeframe to 7 a.m. to 7 p.m.

The required review and design work is expected to take six months to complete, while the sign installation work is expected to take four months to complete. Initial preparatory work to prepare for required sign installation changes can begin towards the end of the review and design phase, resulting in a timeline reduction of approximately six weeks for an overall estimated timeline of eight and one-half months. Total cost for this option is estimated at \$205,000.

Required bylaw changes will be considered by the Traffic Bylaw Working Group and brought forward to Council for approval, in advance of the 2019/2020 school year. 2018 resource commitment to current programs and capital construction preclude substantial commencement of this endeavour until fall 2018, with completion for the 2019 start of the school season.
(Recommended Option)

Advantages:

This option improves the likelihood of survival for pedestrians struck by vehicles within the school zone and aligns with other municipality's reduction to 30 kilometres per hour. The school zone would also be in effect during the before and after school hour programs and during heavy commuting times, while limiting late evening hours. Completing a review of school zones prior to implementing the speed reduction, will increase compliance and limit driver frustration where they would otherwise be required to reduce their speed unnecessarily.

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.

Disadvantages:

Drivers who typically commute to work in the morning between 7 and 8 a.m. and currently are permitted to travel at speeds of 50 kilometres per hour in school zones, would be required to drive 30 kilometres per hour. This is a 20 kilometres difference from the status quo and will be a larger adjustment than the other periods of the day, where the speed is reduced by only 10 kilometres per hour.

Based on the direction to improve school zone safety, while balancing impacts on all road network users, Administration recommends this option.

Option 3 - Maintain the 40 kilometres per hour speed limit and adjust the timeframe to 7 a.m. to 7 p.m.

Required bylaw changes will be considered by the Traffic Bylaw Working Group and brought forward to City Council for approval, in advance of the 2019/2020 school year. Sign changes for the new hours is estimated to cost \$130,000 and take three months to complete. It is estimated an additional \$35,000 would be required in subsequent years to respond to make adjustments to newly installed signage where it is non-compliant with standards or best practices.

(Not Recommended)

Advantages:

This option provides the same level of speed safety currently experienced in school zones, while maintaining speed consistency for Regina road users' expectations. The school zone would also be in effect during the before and after hour school programs and during heavy commuting times, while limiting late evening hours. Some cost savings in sign materials, as only time of day tabs are changed.

Disadvantages:

This option does not provide the increased survivability for vehicle versus pedestrian collisions. Regular commuting traffic will experience speed reductions between the hours of 7 a.m. to 8 a.m.

Without reviewing the existing school zone signage, Administration expects lower compliance rates, as some school zones may not warrant a speed reduction or current school zones may be considered excessively long if not remedied prior to speed reduction.

The committee supports the recommendation of Option 2. The recommendation for 30 kilometres per hour was based on the increased survival rates for pedestrians struck at this rate of speed compared to 40 kilometres per hour.

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.

2. Pedestrian Crosswalks

Administration should continue to use the City's current standards, as they align with the current process for determining crosswalk locations and adheres to national standards and best practices. Further, Administration is supportive of increasing the visibility of the crosswalks in school zones through the use of "zebra crossing" style markings. These markings use multiple, thick white lines parallel to the traffic. This type of crosswalk treatment would be typically reserved for crosswalks in school zones.

3. Prohibition of U-turns in School Zones

Option 1 - Maintain the status quo where 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.

(Not Recommended)

Advantages:

This option provides consistency for Regina road users' expectations and does not result in any loss of directional access.

Disadvantages:

U-turns may be made within school zones at locations not currently prohibited by the *Bylaw*.

Based on known safety concerns with U-turns in school zones, Administration does not recommend this option.

Option 2 – That Administration amend the *Traffic Bylaw* to prohibit U-turns within school zones. Bylaw changes will need to be considered by the Traffic Bylaw Working Group and Traffic Branch prior to being brought forward to City Council in Q2 2019, in advance of the 2019/2020 school year. (Recommended Option)

Advantages:

This option provides for year-round enforceability and reduces dangerous vehicular movements in school zones. This reduces the likelihood of children and drivers being caught unexpectedly when drivers attempt U-Turns in school zones and increases the overall safe movement of vehicles in these areas. This should also help reduce traffic congestion in school zones.

Disadvantages:

Driver knowledge of the *Traffic Bylaw* may be low and as a result, voluntary compliance may be low. Residents in school zones may be inconvenienced in accessing their property.

Based on the safety aspects for both pedestrians and vehicles, Administration recommends this option.

Option 3 - Pavement markings to prohibit U-turns within school zones. Pavement marking designs would take one month to create and the markings could be implemented as part of the annual road maintenance program, when adjacent road markings are being completed.
(Not Recommended)

Advantages:

When visible, pavement markings would provide drivers with a noticeable reminder that U-turns are not permitted within school zones. This would reduce the likelihood of a driver performing such a maneuver in a school zone.

Disadvantages:

Increased operating and maintenance costs to provide pavement markings. Markings may not be visible during winter months and worn away by spring, resulting in enforcement and compliance challenges. Residents in school zones may be inconvenienced.

With this type of marking not being visible during the winter months, which is the majority of the school year, this would have limited effect, as well as limited cost benefit. Administration does not recommend this option.

Administration supports the recommendation of Option 2. U-turns in school zones 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. Pavement markings of centre lines in school zones were also considered, but pose enforcement challenges during winter months when pavement markings are not visible.

4. Overtaking in School Zones

Administration supports the committee recommendation to not establish a prohibition against overtaking or passing vehicles in school zones by sign or bylaw.

It was determined the site specific safety concerns could be better addressed through alternate means, including but not limited to enforcement of speed limits, dangerous driving and the implementation of traffic calming measures within school zones.

5. Parking Restrictions in School Zones

Administration supports the recommendations of establishing parking restrictions in all school zones to ensure sightlines at pedestrian crossings, intersections and driveways are maintained, while ensuring emergency access points as required. Sightline restrictions are a critical component for pedestrian protection. Where sightline restrictions are not required however, Administration is supportive of maximizing the availability of on street parking and school bus drop off to meet the high demands seen in school zones. Although on-street parking may be

limited based on the school location, a review to ensure adequate space for school bus drop off and additional or enhanced signage at some schools may help to ensure driver compliance.

6. Traffic Calming Initiatives

Administration supports the recommendations, whereas Administration is to develop an annual School Zone Safety Improvement Program, which will include location prioritization, design, installation and evaluation of curb extensions in school zones. Available budget in 2018 will provide a start to this program, while ongoing work will require corresponding budget in future years for implementation. It may also be eligible for funding from Automated Speed Enforcement Revenue.

7. Conspicuity of School Zones

Administration supports the recommendations, whereas Administration together with community partners, research best practices and develop initiatives in school zones to enhance the year-round prominence and visibility of school zones. Business case submissions for enhanced conspicuity methods can be brought forward as part of the 2020 budget process or may be eligible for funding from Automated Speed Enforcement Revenue.

8. School Zone Fines

Administration supports the recommendations, whereas Administration is to put forward amendments to the *Traffic Bylaw* for the establishment of increasing fines for speeding and no stopping in school zones, along with increased proactive enforcement for no stopping restrictions.

9. Education

Administration, together with community partners, should work to develop a strategy for targeted advertising campaigns on safety in school zones and support existing educational endeavors for pedestrian safety.

Administration is also supportive of the renewal of an RPS annual safety mascot-type program that will serve to educate the youngest and most vulnerable school children. Additionally, programs such as Safe Routes to School, the Walking School Bus or Bike Trains could be implemented to not only promote school safety, but to also encourage more active lifestyles for students, while reducing reliance on automobiles. Existing school safety patrol programs provide further educational opportunities to students. Business case submissions for educational initiatives can be brought forward through budget processes or may be eligible for funding from Automated Speed Enforcement Revenue.

10. Provincial Collaboration on Future School Sites

Administration supports the recommendations, whereas Administration is to collaborate with the Province and Developers on future school sites, to increase opportunities to achieve enhanced

school zone safety. This would relate to planning in advance of a school being built to determine appropriate access locations, bus zones, drop off zones, laybys, no parking areas and signage.