
Posted Speed Limit Review

Recommendation

That the Standing Policy Committee on Transportation recommend to City Council:
That the Administration develop a detailed framework for revising posted speed limits on neighbourhood streets including school and playground zones.

Topic and Purpose

This report provides City Council with information on trends and best practices other municipalities are utilizing in setting posted speed limits on neighbourhood streets and addressing school and playground zones.

Report Highlights

1. The posted speed limit may not align with current individual and neighbourhood community values, or expectations.
2. Traffic collisions with vehicle operating speeds of 50 kph result in an 80% chance of severe injury or death for vulnerable road users.
3. Many municipalities have reduced, or are considering reducing the posted speed limit on neighbourhood streets.
4. There are national guidelines for establishing school and playground areas and zones; several municipalities establish playground zones with reduced speed limits.
5. The impact on commute time of reducing posted speed limits on neighbourhood streets is minimal.
6. A preliminary scope for developing the detailed framework has been identified.

Strategic Goals

This report supports the Strategic Goals of Moving Around and Quality of Life by investigating revisions, including reductions, to posted speed limits on neighbourhood streets which improve safety for all modes of transportation and creates a more people-focused atmosphere in residential, school, and playground environments.

Background

In April 2003, City Council approved Policy C07-015, Reduced Speed Zones for Schools. There is currently no policy regarding playground zones in the City of Saskatoon. The posted speed limits are governed by Bylaw No. 7200, The Traffic Bylaw. The bylaw states that the posted speed limit is 50 kph, with exceptions being specifically listed within Schedule 4 of the bylaw.

City Council, at its meeting held on May 28, 2018, considered the Motion - Councillor A. Iwanchuk (April 4, 2017) Neighbourhood Traffic Reviews report, and resolved, in part:

- “2. That the Administration report back on how posted limits on residential streets may be achieved, including a review of other municipalities with regard to posted speed limits, and how school zones and playground zones are being considered.”

Report

Speeding Issue

Since 2013, the Administration has been working closely with local residents, community associations, and area Councillors to complete 40 Neighbourhood Traffic Reviews (NTR)'s, with another 10 currently underway. The major concern raised by residents is vehicles speeding on neighbourhood streets. Approximately 500 speed studies or assessments have occurred in direct response to vehicle speeds in neighbourhoods.

The Administration uses the 85th percentile vehicle speed to confirm a speeding issue. If the 85th percentile speed is greater than the posted speed limit plus 10% (i.e. 55 kph on a residential street), then the street is eligible for traffic calming.

However, frequently the 85th percentile speed does not exceed the posted speed limit, let alone the posted speed limit plus 10%, and as a result is not eligible for traffic calming. This perception of speeding is a result from the vehicle operating speeds 'feeling' too fast for residents. This indicates that the posted speed limit is an issue, as it does not align with current individual and neighbourhood community values or expectations.

In 2018, the Saskatoon Police Service Traffic Unit (18 police officers) issued over 6,300 speeding tickets in the seven months between January 1 and July 31.

Traffic Safety

Approximately 15,000 people die or are severely injured each year on Canada's roads. In Saskatoon, between 2007 and 2016, 69 people have been killed and 12,666 people have been injured on City roads. Vulnerable road users (pedestrians and cyclists) are most at risk for severe injury or death due to traffic collisions. The number of fatal and severe injury collisions in Saskatoon between 2012 and 2016 for vulnerable road users is illustrated in Attachment 1.

There is a direct relationship between a vulnerable road user's ability to survive and the severity of injury with vehicle speed when involved in a collision as shown in Attachment 2. By lowering the speed limit from 50 kph to 40 kph, the survival rate would improve by 40%.

Lowering the posted speed limit in neighbourhoods and acknowledging the vulnerability of road users is aligned with the safe systems approach which recognizes that system designers (i.e. transportation engineers), road users (i.e. all modes) and system operators (i.e. roadways and operations, traffic signal specialists, police, transit operators) must work together on safety. At the core of the safe systems approach is the fact that the human body has limited capacity to tolerate the impact from collisions.

Municipalities Speed Limit Trends for Residential Streets

A jurisdictional review regarding posted speed limits on residential streets in 12 other municipalities was completed and is summarized in Attachment 3. Some municipalities have already reduced residential speed limits (including Okotoks, Alberta who reduced residential speed limits to 40 kph in 2015 and saw a 31% reduction in total vehicle collisions) and others are considering speed limit reductions on neighbourhood streets to improve safety for vulnerable users.

Speed Limit Trends for School and Playground Areas and Zones

Council Policy C07-015, Reduced Speed Zones for Schools (April 7, 2003) guides the City's current practice for the creation of school zones. Highlights of the policy include:

- A posted speed limit of 30 kph is installed at all elementary and high schools;
- In effect from 8 a.m. to 5 p.m., Monday to Friday from Sept. 1st to June 30th; and
- End of school zone is marked with a sign indicating maximum speed.

Playground areas (i.e. awareness signs only) are installed based on requests and an engineering review of the conditions for the playground, however, the posted speed limit is not reduced.

A national guidebook, School and Playground Areas and Zones: Guidelines for Application and Implementation, was published in October 2006 by the Transportation Association of Canada (TAC). This document outlines best practices and includes the following descriptions:

- Area – A section of roadway adjacent to a school or playground that is denoted by school area or playground area signage only to create awareness.
- Zone – A section of roadway adjacent to a school or playground that is denoted by school area or playground area signage with a reduced speed limit sign.

A summary of the TAC best practices is included as Attachment 4. Saskatoon's approach to school and playground areas and zones differs slightly as follows:

City of Saskatoon's Approach	TAC Guidelines
Denotes end of school zone with a '50 kph maximum speed' sign	'End School Zone' sign permitted
Very few playground areas	Promotes use of and provides detailed guidelines for implementing playground areas and zones
Reduced speed school zones adjacent to all elementary and high schools	School zones are generally discouraged for high schools due to the student's ability to understand traffic and to control their own movements

Posted Speed Limit Review

A jurisdictional review regarding school and playground areas and zones in seven municipalities was completed and is summarized in Attachment 5. Highlights include:

- Hamilton, Regina, Red Deer, Edmonton, and Calgary have playground zones with reduced speed limits.
- All have school zones with the exception of Toronto, which has many streets with 30 kph as the posted speed limit. However, schools are still able to request a school zone be implemented.
- There are various times of day that the playground and school zones are in effect, with a trend of the playground zones being in effect every day and for longer.
- Calgary has recently harmonized school and playground zones, and the evaluation study indicated significant safety benefits: the mean speed decreased from 36 kph to 30 kph; overall the number of collisions involving pedestrians within school and playground zones decreased 33%; and the collection rate also decreased.

Impact to Commuter Travel Time

According to Statistics Canada, the average Saskatoon commute is 3.95 kilometres and 19.7 minutes, which typically includes less than one kilometre of travel on neighbourhood streets. Travelling at 30 kph instead of 50 kph on the neighbourhood street portion of the commute would add less than a minute to the average travel time.

Summary of Review and Proposed Framework Outline

The Administration recommends developing a detailed framework for revising posted speed limits on neighbourhood streets, including school and playground zones. A preliminary scope of work specific to the City of Saskatoon is as follows:

Type of Street	Considerations		
	Posted Speed Limit	Schools	Playgrounds
Neighbourhood Streets	<ul style="list-style-type: none"> • Consider reducing posted speed limits 	<ul style="list-style-type: none"> • If posted speed limit is reduced to 30 or 40 kph how are school areas and zones addressed? • Are school zones for high schools maintained? • Should the time of day and days of the week be changed? 	<ul style="list-style-type: none"> • Should playground zones with a reduced speed limit be considered? • What defines a playground? • Are playground zones harmonized with school zones? • If posted speed limit is reduced to 30 or 40 kph, how do we address playground areas and zones?
Collector Streets (i.e. Kingsmere Boulevard, Stensrud Road)			
Arterial Streets (i.e. Taylor Street, Clarence Avenue) with schools or playgrounds	<ul style="list-style-type: none"> • Do not consider posted speed limit reductions • Consider traffic calming at high priority locations 	<ul style="list-style-type: none"> • Are school zones for high schools maintained? 	<ul style="list-style-type: none"> • If playground zones are introduced, should playground zones on arterials be implemented?
Arterial Streets (i.e. 8 th Street, 22 nd Street) with no schools or playground	<ul style="list-style-type: none"> • Do not consider posted speed limit reductions 	<ul style="list-style-type: none"> • Not applicable 	<ul style="list-style-type: none"> • Not applicable
Expressway/Freeway (i.e. Circle Drive, Idylwyld Drive)		<ul style="list-style-type: none"> • Not applicable 	<ul style="list-style-type: none"> • Not applicable

An implementation strategy including the estimate costs would also be provided.

Options to the Recommendation

1. City Council could direct the Administration to take no further action. This is not recommended since there is a significant amount of data demonstrating speeds of 50 kph with higher incidence of severe injury and fatality for pedestrians and cyclists, and many residents have concerns with speeding in the city and have expressed an interest in reducing speed limits on residential streets.
2. City Council could direct the Administration not to develop the framework for a reduced posted limit, but to develop recommendations for school and playground areas and zones.

Public and/or Stakeholder Involvement

A detailed community engagement plan will be developed as part of the framework for reducing posted speed limits on residential streets. The Administration will undertake a statistically relevant survey of the residents of Saskatoon to obtain their opinion on reducing speed limits on neighbourhood streets. The results of the survey will be one factor considered to help form an Administrative recommendation for City Council.

In addition to outlining engagement opportunities for residents, the plan will identify stakeholders to engage, including (at minimum) the School Divisions, Saskatoon Police Service, Saskatchewan Government Insurance, Age Friendly Saskatoon Initiative, and Community Associations.

Communication Plan

A detailed communication plan will be developed in conjunction with the community engagement plan.

Policy Implications

A speed limit reduction would require revisions to Bylaw No. 7200, The Traffic Bylaw. The development of playground zones and areas would require the development of a Council Policy.

Financial Implications

The cost of completing the development of the framework is estimated at \$50,000 and will be funded through Capital Project #0631 – Transportation Safety, if approved during the 2019 Budget Deliberations.

Other Considerations/Implications

There are no environmental, privacy or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

The Administration will plan to bring forward a report in the third quarter of 2019.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Saskatoon Severe Injury and Fatal Collision Summary
2. Vulnerable Road User Survival Rate
3. Jurisdictional Review of Residential Posted Speed Limits
4. School and Playground Areas and Zones - TAC Guidelines
5. Jurisdictional Review of Playgrounds and School Areas and Zones

Report Approval

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