

Variable Speed Zones in Other Jurisdictions

Recommendation

That the February 26, 2020, City Operations report CR_7410, be received for information.

Previous Council/Committee Action

At the July 2/3, 2019, City Council meeting, the following motion was passed:

That Administration provide a high level report to Committee, in conjunction with related scheduled reports, with information from jurisdictions that employ the one hour after sunset approach to variable playground zone times or any jurisdictions that employ a “when pedestrians are present” speed zone approach including:

- Type of roads where they exist (collector, arterial)
- Number and type of collisions broken down by time of day
- How long the zones have been in place in the jurisdiction.

Executive Summary

In Alberta, the default playground and school zone effective times and speeds are established under the *Traffic Safety Act*, which states that the default time for playground zones is from 8:30 a.m. to one hour after sunset. While the Province allows municipalities to set their own bylaws to change playground and school zone effective times, there are five jurisdictions in Alberta still employing the default.

This report provides a summary of municipalities in Alberta employing the one hour after sunset effective time for playground zones and Canadian provinces that use a “when pedestrians are present” speed zone approach.

Report

In Alberta, playground and school zone speeds are established under the *Traffic Safety Act*, and default playground and school zone effective times are established under the *Traffic Safety Act, Use of Highway and Rules of the Road Regulation*.

The Province allows municipalities to set their own bylaws to change playground and school zone effective times to better fit their local context. The default times provided within the *Traffic Safety Act* are:

- Playground zones: 8:30 a.m. to one hour after sunset.
- School zones (on school days):
 - between 8 a.m. and 9:30 a.m.
 - between 11:30 a.m. and 1:30 p.m.
 - between 3 p.m. and 4:30 p.m.

Edmonton, Calgary, Medicine Hat and Red Deer have harmonized their school and playground zone hours; however there are several municipalities that employ the default “one hour after sunset” approach to playground zone effective hours. The table below provides a summary of the varying hours between school and playground zones for these municipalities when reduced speed limits are in effect:

Jurisdiction	School Zone Hours	Playground Zone Hours
St. Albert	8:00am - 4:00 p.m.	8:30am - One Hour After Sunset
Strathcona County	7:30am - 4:30 p.m.	8:30am - One Hour After Sunset
Leduc	8:00am - 9:30 a.m. 11:30am - 1:30 p.m. 3:00pm - 4:30 p.m.	8:30am - One Hour After Sunset
Lethbridge	7:30am - 4:30 p.m.	8:30am - One Hour After Sunset
Grande Prairie	7:30am - 4:30 p.m.	7:30am - One Hour After Sunset

Number & Types of Collisions

The table below provides a review of the collisions that occurred within school and playground zones located within St. Albert and Strathcona County.

Jurisdiction	Collisions within School Zone Hours	Collisions Outside of School Zone Hours	Collisions within Playground Zone Hours	Collisions Outside of Playground Zone Hours
St. Albert (2017)	9	10	0	0
Strathcona County (2017)	12	16	13	6

Leduc, Lethbridge and Grande Prairie are currently not tracking this information.

In 2017, collisions within school zones were 12 percent of the total pedestrian collisions in St. Albert. St. Albert is developing an updated policy on playground zones and is considering the costs and benefits of aligning playground zone hours to dedicated time period.

In Strathcona County, collisions within playground or school zones accounted for two percent of the total collisions that occurred in 2017. In September 2018, Strathcona County adopted 7:30 a.m. to 4:30 p.m (all-day) school zones and is not planning changes to playground speed zones.

Harmonized school and playground zones

Between 2014 and 2016, the City of Calgary harmonized their school and playground zones to occur between 7:30 a.m. and 9:00 p.m. Prior to this, Calgary had school zones in effect from 7:30 a.m. to 5:30 p.m., and playground zones in effect from 8:30 a.m. to one hour after sunset.

Following this change, Calgary found that both speeds and collisions decreased. In a 2017 survey conducted by their Administration, Calgary determined that “66 percent of respondents agreed that the change to a new consistent time period was a good idea and 81 percent felt that having one zone with consistent times made it easier for them to remember than having separate zones”.

Calgary’s harmonized approach to school and playground zones is the same as Edmonton’s approach, including the same hours of 7:30 a.m. to 9:00 p.m.

Other Jurisdictions

Elsewhere in Canada, British Columbia and Nova Scotia have employed “when pedestrians/children are present on Highway” speed zones:

- In British Columbia, regulations allow for 30km/hr signage during specific time periods, such as 8 a.m. - 5 p.m. “School Days” and 50 km/hr when Children On Highway between 8 a.m. - 5 p.m. on School Days. These changes were introduced in 2003.
 - From 2013 to 2017, British Columbia reported a five year average of 5 fatalities and 530 injuries in 30km/hr or less speed limit zones
- Nova Scotia implemented a province wide “when children present” speed zone in 2012. This applies any time children are present, 24 hours a day, seven days a week.
 - “When children present” is defined as when children are on the highway in the school area or outdoors, within 30 meters of the Highway, in the school area.

In this context, “highway” refers to a rural, high-speed roadway. The City of Edmonton does not have this type of roadway in its transportation network.

Road Types

Expert analysis and best practice guidelines are used to determine locations for school and playground zones. While the guidelines do not limit zones to particular types of roads, they provide a scoring system to help engineers and safety practitioners evaluate the suitability of a road for a school or playground zone. This includes consideration of the type of site and age of children using it, the importance of the road as entrance to the site, fencing separating the road and the site, and the presence of sidewalks on one or both sides of the road.

Conclusion

Within Alberta, 67 percent of the population live in a municipality with bylaws that extend reduced speed limits at schools to cover the entire school day and 58 percent of the population live in a municipality (Calgary, Edmonton, Red Deer and Medicine Hat) with harmonized playground/school zone limits. An increasing number of municipalities are considering the local context to support harmonized school and playground zones and are applying consistent hours when the reduced speed limits are in effect. Maintaining uniformity in the effective time for playground/school zones assists drivers' awareness of when the zones are in effect and reduces signage requirements.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmonton is a safe city			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmonton is a safe city	Road Safety Strategy, Fatalities	TBD (2019) 19 (2018) 27 (2017) 22 (2016)	17 (2020)
	Road Safety Strategy, Serious Injuries	TBD (2019) 319 (2018) 341 (2017) 325 (2016)	293 (2020)
	Road Safety Strategy, Collision Injuries/1,000 people	TBD (2019) 3.4 (2018) 3.9 (2017) 3.5 (2016)	3.0 (2020)
	Road Safety Strategy, Collisions at Intersections/1,000 people	TBD (2019) 13.9 (2018) 14.6 (2017) 14.4 (2016)	13.5 (2020)

Others Reviewing this Report

- M. Persson, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development
- B. Andriachuk, City Solicitor