



School and Playground Zone Speed Limits Report

February 27, 2018

Transportation Planning and Engineering

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I. Introduction

This report has been produced in response to the December 12, 2017 Council motion:

that Administration bring forward a report on the methodology for deciding where school zone and playground zone speed limits will be applicable, including consideration of the Transportation Association of Canada Guidelines for school zone speed limits and provide recommendations for proposed changes to Bylaw 38-2014 which would amend the playground and school zone times so that they are aligned with those of other municipalities in the region, to the extent that these align with best safety practices, and with consideration to the needs of our rural schools.

This report provides a summary of the political and administrative background of playground and school zones in Strathcona County. It also provides information about traffic safety best practice, other municipal experiences and stakeholder perspectives on school and playground zones. Finally, it presents the options available in amending playground and school zone times, weighs their relative costs/benefits, and recommends a course of action.

The decision to apply playground and school zones and/or to change their applicable times is a complex one, with many factors to consider.

A. Council Background- School and Playground Zones

In the last 3.5 years, there have been several reports to Council related to school and playground zones:

October 21, 2014: Council Meeting

As part of the Speed Control Bylaw update, Administration recommends the adoption of all day school zones from 0730-1630 in rural areas and 0800-1630 in urban areas.

https://www.strathcona.ca/files/files/at-lls-2014-10-21-report-10_1.pdf

At that time, Council did not support this recommendation and opted to remain with provincial standards.

<https://www.strathcona.ca/files/files/at-lls-2014-10-21-minutes.pdf>

January 26, 2016 Priorities Committee Meeting

Trina Boymook (EIPS) and Justine Wright (EICS) present to Council for request for reconsideration of all day school zones.

<https://pub-strathcona.escribemeetings.com/Meeting?Id=fbc5b7fb-bb81-4ff0-802e-c0014847a741&Agenda=Merged&lang=English#28>

February 7, 2017: Council Meeting

Moved by: V. Bidzinski: THAT Administration prepare proposed amendments to the Speed Control Bylaw 38-2014 so that the 30 kilometers per hour speed limit for school zones begins at 8:00 a.m. and ends at 4:30 p.m. for urban schools and begins at 7:30 a.m. and ends at 4:30 p.m. for affected rural schools; and that the proposed amendments be brought back to Council by the end of the first quarter in 2017. The motion was defeated.

<https://pub-strathcona.escribemeetings.com/Meeting?Id=8fbaaf38-4c1e-46c1-bba7-c8192a6a3612&Agenda=Agenda&lang=English#67>

II. Methodology for the Application of School and Playground Zones

A. The Alberta Traffic Safety Act (ATSA) – Playground and School Zones

Playground and school zone speeds are established under the Provincial Traffic Safety Act. Default playground and school zone effective times are established under the Use of Highway and Rules of the Road Regulation.

The province allows for municipalities to set their own bylaws to change playground and school zone effective times from default times to better fit their context, should they wish. This has resulted in inconsistent laws regarding playground and school zone effective times across the province.

Currently, Strathcona County follows provincial default effective times for school and playground zones:

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

Moving away from the provincial default times requires all zones to be signed with additional informational tabs that reflect the chosen bylaw.

B. Methodology used to define playground and school zones in the County

As best practices mandate, Strathcona County has used and has asked developers to use the Transportation Association of Canada's (TAC) Engineering Design Guidelines (2006) for the implementation of both school and playground zones (see Appendix A) since 2011.

TAC scoring matrix considers such things as:

- Type of site and number and age of children using it
- Classification of the fronting road and importance of the road as an entrance to the site
- Fencing separating the road and the site
- Presence of sidewalks on one or both sides of the road

As with all guidelines, engineering judgement is also always considered in the final decision.

Previous to this, playground and school zones were placed according to the professional judgement of the engineers or upon request of Council at the time. This has resulted in inconsistency in our municipality regarding the application of school and playground zones (see also Section II. D).

C. Playground/School Zone vs Playground/School Area

Playgrounds and schools can be classified as areas or zones, depending on the level of risk, determined through the TAC matrix.



In a playground or school area, the advisory sign is posted without a black and white speed sign attached to the post. It is intended as a warning to alert drivers that a facility is near and to be cautious that children may be close by. However, the speed limit does not change from the previously posted limit.



A playground or school zone has a black and white 30 km/h sign attached below the advisory sign. Drivers must stay within the maximum posted speed during the times the zone is in effect.



D. School and Playground Signage Review Project – 2011-2013

In 2011 through to 2013, all greenspaces, schools and playgrounds were reviewed and evaluated through the TAC warrant matrices. As a result of that study, a two phase process was proposed.

In Phase One, all trail crossing locations not associated with a playground, all zones less than 50 metres long, and all previously double signed school and playground signs were removed and brought in line with the TAC warrant recommendations.

Phase Two would have brought current school and playground zones in line with TAC guidelines would result in the removal of reduced speed limits at a large number of schools and playgrounds (>70%) throughout the County (outlined by Ward in Appendix B).

Phase Two has not been implemented by administration to date for a number of reasons:

- Administration believes that its implementation would be strongly opposed by residents who have told us, through day to day communication and specific public engagement events, that they strongly support the playground and school zones currently in place in our community.

- Many older residential areas of Sherwood Park have very wide roads designed to support higher travel speeds. Playground and school zones do provide some traffic calming effect. New areas are built to Design and Construction Standards that result in narrower roads with traffic calming features already in place. Playground and school areas are more feasible in this context.
- Evolving best practice in road safety is moving towards lower speed limits in residential areas (see E. below and Section III. A.3).

E. Pedestrian Safety Research

Reduced speeds play a fundamental role with respect to making the system safer for pedestrians. It is well-established that speed reduction reduces both the likelihood of a crash and the severity of a crash, should one occur.

According to the Canadian Council of Motor Transport Administrators (Expert Working Group on Pedestrians, 2013): "The current speed limit of 50 km/h on most residential streets is not congruent with research findings and best practices related to speed management and risk reduction, particularly in relation to children" (p.65)¹.

What is less clear is whether reducing the speed limit alone will actually result in lower traffic speeds at our playgrounds and schools. Without sustained enforcement or design changes to the road, decreased speed limits are unlikely to have a large impact on driver behaviour.

Our own 40 km/h pilot project on Mission Street and Manor Drive (2004) found only a small speed reduction of about 3 km/h persisted in the long term once targeted education and enforcement initiatives were completed.

However, there is a growing recognition that even a small decrease in speed can have a big impact on safety. The evaluation of the South Australian default urban speed limit reduction in 2003 found that the 3.8 km/h mean speed decrease was associated with 40% reduction in fatalities, a 20% reduction in the seriously injured and a 23-26% reduction in the less severely injured².

Engineers also consider this best practice research when applying playground and school zones.

¹ http://ccmta.ca/images/publications/pdf/CCMTA_Pedestrian_Report_Eng_FINAL.pdf

² Kloeden, C., Woolley, J., and McLean, J. (2007), "A follow-up evaluation of the 50 km/h default urban speed limit in South Australia". Proceedings, Australasian Road Safety Research, Policing Education Conference, Melbourne, 2007.

III. Other Considerations for the Adoption of All Day School Zones

A. Alignment with Strathcona County's strategic planning documents

1. *Strathcona County 2030: Powering our New Tomorrow*

Strathcona County's strategic vision is to be "Canada's Most Livable Community". The "wordle" below was created using 169 resident responses gathered through the neighbourhood traffic safety focus groups and recent traffic calming projects. A wordle gives greater prominence to words that appear most frequently in responses.

Figure 1: What one word would you use to describe a livable neighbourhood from a traffic perspective?



All day 30 km/h speed limits at schools and playgrounds are consistent with best practice in creating a safe pedestrian environment.

2. *Integrated Transportation Master Plan (ITMP)*

Strathcona County's ITMP (2012) establishes a vision and direction intended to guide policy and decision making related to the County's transportation network.

ITMP VISION: Strathcona County has a resilient, safe, multi-modal transportation system, integrated with land use planning, to accommodate growth, provide greater travel mode choice, and manage traffic congestion (2012).

All day 30 km/h speed limits at schools and playgrounds are also consistent with the goals of the ITMP to provide a safe road network that encourages walking and other active forms of transportation.

3. Traffic Safety Strategic Plan (TSSP)

The TSSP was unanimously adopted by Council in 2014. This document guides traffic safety decision making in the County.

TSSP Vision: No one is seriously injured or killed while travelling on Strathcona County's road network.

TSSP Mission: Strathcona County is committed to the proactive implementation of integrated, evidence-based, and collaborative road safety strategies to create an increasingly safe and sustainable transportation environment.

As previously outlined in Section II E, evidence strongly supports 30 km/h speed limits to support pedestrian safety. The TSSP is driven by a Safer System approach, which advocates for speed limits which create a forgiving environment for road users, assuming collisions will occur. To that end, 30 km/h is considered an appropriate speed limit wherever vulnerable road users (pedestrians and cyclists) and vehicles interact.

Figure 2: Pedestrian/vehicle collision outcomes based on speeds



* Adapted from Manitoba Public Insurance

However, it is also important to recognize that approaching traffic safety in an evidence-based and data driven way means focusing traffic safety initiatives and resources where they are most likely to have the greatest safety benefit. To that end, resources are best used where we have the greatest likelihood of serious and fatal collisions in our community.

Residential Traffic Safety Statistics

Between January 1, 2007- December 31, 2016, there was one fatal collision on a residential street in Strathcona County. The victim was an adult, and the collision was unrelated to speed. In the same timeframe, 59 fatal collisions occurred outside of residential neighbourhoods.

In this same timeframe, there have been 347 collisions in Strathcona County which resulted in a major injury(s). Eighteen (5%) of these collisions occurred in a residential neighbourhood. Only one residential major injury collision involved a cyclist and three involved a pedestrian.

Pedestrian and Bike Collisions – 17 Years and Under

Between 2007-2016, there were 112 collisions on public roadways involving a pedestrian and/or cyclist under 18. Of these, 33 (29%) occurred on a residential road. Of these 11.6% (13) occurred at a location currently signed as a playground or school zone.

Pedestrian and Bike Collisions – 17 Years and Under in a School/Playground Zone

Of the 112 collisions involving a pedestrian or cyclist under 18 years old, 11 collisions occurred in a school zone, and two occurred in a playground zone.

Of these 13 collisions:

- One was a major injury collision (15 year old cyclist on Main Boulevard, in a school zone, out of effective times). Eleven were minor injury collisions. One collision involved no injuries.
- 62% of the collisions (8) involved a cyclist; 38% involved a pedestrian (5)
- 91% (10/11) of the school zone collisions occurred between the hours of 7am to 9pm
 - 55% (6) occurred during current school zone effective times
 - 45% (5) occurred outside of current school zone effective times
- Both the playground zone collisions occurred during current playground zone effective times.

B. Neighbourhood Traffic Safety Action Plan (NTSAP) 2017

The NTSAP was adopted in May 2017 after extensive consultation with residents. The NTSAP sets out eight specific actions based on resident priority and best

practice. These actions have been designed to be realistic, sustainable and actionable by December 2018 in order to provide measureable improvement in the safety and livability of our neighbourhoods.

Three of these actions have particular relevance to consideration of changes in school and playground zones:

Action #1: *Research a residential speed limit decrease, including the results from other jurisdictions who have implemented the practice to recommend a best course of action for our community.*

Many municipalities are opting to decrease residential speed limits to align with the Safe System/Vision Zero philosophy embraced by many municipalities across Europe and North America. Many of our residents support decreasing residential speed limits.

Action #3: *Upgrade pedestrian facilities at multiuse trail crossings, playgrounds, schools and key pedestrian corridors. Include physical traffic calming features (such as raised features, refuge islands, and/or curb extensions) in conjunction with scheduled rehabilitation as appropriate.*

While reduced speed limits can have some impact on traffic speeds, they depend on driver compliance for safety benefits. Physical upgrades to pedestrian facilities at playgrounds and school zones will provide a safety benefit 24/7 by decreasing crossing distances for pedestrians, improving visibility for drivers and pedestrians and eliminating parking on crosswalks.

Action #5: *Consider alternative resourcing and delivery models for residential traffic enforcement in a way that is responsive to resident needs while minimizing impacts to arterial enforcement operations.*

Under the present manned-only enforcement model and with current playground and school zone rules, sustained residential traffic enforcement is not feasible. Further, given the low incidence of major collisions in the residential areas, a data driven approach suggests enforcement resources are more likely to produce the greatest safety benefit outside of residential areas.

Any decision to reduce speed limits in our residential areas will come with resident expectation that there will be enforcement to support the change. How this demand will be met is an important consideration.

C. Stakeholder Perspectives

1. School Traffic Safety Partnership (STSP)

The STSP was formed in 2014 to address school-related traffic safety issues. Partners from Strathcona County, Elk Island Public and Catholic School divisions, New Horizons School, École Claudette et Denis Tardif, Elk Island Public Schools Committee of School Councils, Catholic Education Parent Advisory Council, RCMP and Enforcement Services and the Provincial Office of Traffic Safety meet regularly to address traffic safety at County schools.

In 2017, the STSP released a position statement:

"the Strathcona County School Traffic Safety Partnership supports the implementation of all day school zones in our community. Specifically, we recommend a bylaw where speeds in all school zones are limited to 30 km/h from 7:30 a.m. to 4:30 p.m."

The full position statement is included in Appendix C.

2. Enforcement

Strathcona County RCMP and Enforcement Services support best practice in traffic safety, and as such, support all day decreased speed limits at schools and playgrounds.

However, as mentioned in Section III B, the RCMP and Enforcement Services have concerns about their ability to meet resident demand for increased policing in these zones.

3. Residents

The County has not undertaken resident engagement specifically regarding school zone effective times. Some residents have raised concerns to Administration about current school zone effective times which do not provide a benefit for children in some rural schools who have earlier start and end times for the school day. Concerns have also been raised regarding early dismissal days, when school zones are not in effect during school peak times.

In Traffic Safety Surveys undertaken in 2013 and 2015, the majority of residents agreed that traffic safety was a concern in their neighbourhood. For those residents, speed was identified as the number one concern. For many residents, any action that will reduce speeds in residential areas is likely to be supported.

However, extending school and playground zone effective times into morning and/or evening commute times as well as off peak school times is likely to create some push back from a significant proportion of residents.

IV. Other Municipal Experiences

Table 1: Summary of School/Playground Zone Bylaws for Alberta Municipalities

City/Town	Effective Time	
	Start	End
Town of Beaumont	7:30 AM	4:30 PM
City of Grande Prairie	7:30 AM	4:30 PM
City of Lethbridge	7:30 AM	4:30 PM
Regional Municipality of Wood Buffalo	7:30 AM	4:30 PM
City of Airdrie	7:30 AM	5:00 PM
City of St Albert	8:00 AM	4:00 PM
City of Edmonton*	8:00 AM	9:00 PM
City of Fort Saskatchewan	8:00 AM	4:30 PM
Town of Stony Plain	8:00 AM	4:30 PM
Town of High River	8:30 AM	5:00 PM
City of Medicine Hat*	7:30 AM	9:00 PM
City of Calgary*	7:30 AM	9:00 PM
City of Red Deer*	8:00 AM	9:00 PM
City of Leduc/City of Spruce Grove	8:00 AM	9:30 AM
	11:30 AM	1:30 PM
	3:00 PM	4:30 PM
*Schools and Playground zones combined		

67% of the population of Alberta live in a municipality with some kind of bylaw extending reduced speed limits at schools to cover the entire school day; 58% live in a municipality with harmonized playground/school zone limits.

The Regional Municipality of Wood Buffalo has passed a bylaw making playground zones effective 8:30 am to 8:30 pm. Edmonton, Calgary, Red Deer and Medicine Hat have amended their playground effective hours in order to use them in a harmonized playground/school zone model. All other municipalities listed have remained with provincially mandated playground zone effective times.

A. Edmonton

Prior to 2014, the City of Edmonton did not use playground or school zones. In September 2014, all day school zones were implemented at all elementary schools in the City, with an effective time of 8:00 am to 4:30 pm on school days.

Evaluation of the 30 km/h school speed zones shows injury collisions were reduced by 43 percent, injury collisions involving vulnerable road users (i.e. pedestrians and

cyclists) were reduced by 71 percent, and the average speed in zones was reduced by 12 km/h. Zones are closely monitored with significant enforcement through the use of mobile photo radar.

Due to the positive results found at elementary schools, school zones were extended to include Jr. High Schools in September 2017.

Public engagement in Edmonton in 2017 found 85% were in favour of reduced speed limits to include playgrounds (standalone and adjacent to school), and 84% were in favour of a single speed limit zone with extended times at schools and playgrounds.

In September 2017, the decision was made to implement a harmonized model in the City, where all schools and playgrounds are signed as playgrounds with effective hours of 7:30 a.m. to 9 p.m. daily. This project involved the creation of 178 new 30 km/h zones at outdoor playgrounds with play equipment, sports fields, ball diamonds, tot lots, and indoor or enclosed facilities such as arenas and swimming pools, as well as at all existing school zones.

B. Calgary/Medicine Hat/Red Deer

In 2014, Calgary combined school and playground zones to create a uniform one that reduced speed limits from 50 km/h to 30 km/h around schools and playgrounds from 7:30 a.m. to 9 p.m. daily.

The City of Medicine Hat adopted the same regulations in September 2016.

The City of Red Deer passed a bylaw changing playground zone effective times to 8:00 am to 9:00 pm daily. Playground zones are used instead of school zones in almost all cases in Red Deer, so operationally they are very similar to Edmonton. The few existing school zones are effective 8:00 am to 4:30 pm. Zones are closely monitored with significant enforcement through the use of mobile photo radar

C. Fort Saskatchewan/St. Albert

As of January 1, 2015, school zone speeds in Fort Saskatchewan are effective from 8:00 a.m. to 4:30 p.m. on school days. Similarly, school zones in St. Albert are in effect from 8:00 am to 4:00 pm. Neither city has passed a bylaw changing from provincial effective times for playground zones.

V. Options for Consideration

Administration considered four options in response to this Council Motion. Please see Appendix D for detailed information regarding the estimated costs of the options. If the decision is made to change any speed limit or speed limit effective times, timelines to implement the signing changes at the schools would be by August 31, 2018 in all cases.

A. Implement all-day school zones: 7:30am to 4:30pm

(No change to playground zone effective times)



Table 1: Advantages and Disadvantages of Adopting All-day School zones

Option A: Adopt a bylaw which creates all-day school zones (7:30 am to 4:30 pm)	
Cost: Approximately \$5000	
Advantages	Disadvantages
Addresses current concerns about school zone effective times for both urban and rural students on regular and early dismissal school days.	Does not provide reduced speed limit for children/youth accessing the playground and sports facilities on evenings, weekends and during the summer.
Less costly. Can be resourced within existing budgets.	Inconsistent with Edmonton's school zone model.
Single time frame and tabs on the signs will add clarity for drivers.	Will have a small impact on traffic flow on many collector roads during morning peak times.
Consistent with school stakeholder requests. Likely to be supported by the majority of residents.	Some drivers will be unhappy with reduced speed limits at times they do not feel are necessary for safety.
More consistent with Safe System practices than the current model.	Will create an increased demand for enforcement that cannot be satisfied without taking resources from our arterial network.
Consistent with municipal trend towards all-day reduced speed limits at schools, while still considering Strathcona County's traffic safety context.	
Traffic flow impacts may discourage drivers from shortcutting near schools.	

B. Implement harmonized playground/school zones



Table 2: Advantages and Disadvantages of Adopting a Harmonized Signing Model

Option B: Adopt a bylaw creating playground effective times of 7:30 am to 9:00 pm, and sign all schools as playgrounds	
Cost: Approximately \$30 000	
Advantages	Disadvantages
Addresses current concerns about school zone effective times for both urban and rural students on regular and early dismissal school days AND provides reduced speed limit for children/youth accessing the playground and sports facilities on evenings, weekends and during the summer.	More costly to implement at this time than an all-day school zone model. This cost was not included in our budget and will require a capital amendment or take away resources from other planned traffic safety projects.
Consistent with Edmonton's school zone model.	Will create a very high demand for enforcement that cannot be satisfied without taking resources from our arterial network.
Harmonized zones and tabs on the signs will add a high degree of clarity for drivers.	Will have a greater impact on traffic flow on many collector roads during morning and evening peak times.
Consistent with and exceeds school stakeholder requests.	Some drivers will be unhappy with reduced speed limits at times they do not feel are necessary for safety.
More consistent with Safe System practices than the current model.	
Traffic flow impacts may discourage drivers from shortcutting through neighbourhoods, as many collector roads would have reduced speed limits at all peak times.	

C. Make no change

Table 3: Advantages and Disadvantages of Maintaining Current School Zone Model

Option C: Make no change	
Cost: none	
Advantages	Disadvantages
Will not impact on traffic flow on many collector roads during morning or evening peak times.	Does not address current concerns about school zone effective times for both urban and rural students on regular and early dismissal school days.
Allows traffic safety resources to be spent on arterial roads where there is a far greater concentration of serious collisions.	Not consistent with Safe System practices or the majority of municipalities in the province.
	Not consistent with school stakeholder requests. Likely to disappoint some residents.

VI. Conclusion and Recommendation

Strathcona County has used the Transportation Association of Canada's (TAC) Engineering Design Guidelines (2006) for the implementation of both school and playground zones (see Appendix A) since 2011. As with all guidelines, engineering judgement is also always considered in the final decision.

In 2011 through to 2013, all greenspaces, schools and playgrounds were reviewed and evaluated through the TAC warrant matrices. As a result of that study, all trail crossing locations not associated with a playground, all zones less than 50 metres long, and all previously double signed school and playground signs were removed and brought in line with the TAC warrant recommendations.

Administration has not moved forward with bringing all school and playground zones applied prior to 2011 in line with TAC guidelines, as this would result in the removal of reduced speed limits in a large number of current school and playground zones throughout the County (outlined by Ward in Appendix B).

The decision to apply playground and school zones and/or to change their applicable times is a complex one, with many factors to consider.

A Safe System approach, globally accepted as the gold standard in pedestrian safety, suggests that speed limits should be set at 30 km/h where vulnerable road

users and vehicles interact to provide a road environment that is forgiving in case of road user error. Thus, any action which reduces speed limits in residential areas can be seen as a positive and proactive decision.

However, a Safe System approach also advocates using traffic safety resources in a data driven way, with a focus on reducing serious and fatal collisions. Collision data indicates that we have an excellent safety record in school zones in Strathcona County, and that we do not have a pressing safety concern to address.

A. Recommendation

Upon extensive consideration, Transportation Planning and Engineering recommends the amendment of Speed Control Bylaw 38-2014 to create all-day school zones effective times from 0730 hours to 1630 hours.

Professional engineering judgement suggests this is a reasonable compromise between safety and efficiency. Collision data does not support the need to impact traffic flow at school sites on weekends, evenings and during the summer, or at playgrounds in the morning peak time for safety.

As discussed in the Neighbourhood Traffic Safety Action Plan, neighbourhood shortcutting may be better addressed through the continued implementation of improved pedestrian facilities and consideration of reducing residential speed limits generally, rather than just in playground and school zones. This would ensure that shortcutting traffic is not pushed to local roads.

Adoption of all-day school zones:

- Increases the forgivingness of our road system at schools on school days;
- Addresses stakeholder concerns about effective hours not coinciding with peak traffic times at schools;
- Is consistent with provincial trend towards all-day speed reduction at schools; and
- Can be resourced through existing budgets and will not have a big impact on our ability to address more urgent safety concerns.
- No changes to the playground speed zones are recommended.

VII. Appendices

A. TAC Guidelines

TAC Points

INSTALLATION CRITERION	MAXIMUM POINT VALUE (MPV)	DESCRIPTION	WEIGHT FACTOR (WF)	SCORE (MPV × WF)
School Type Or Playground Type	40	elementary	1.0	T* =
		middle / junior high	0.4	
		high school	0.2	
		post secondary / college / university	0.0	
		Frontage	Playground Capacity (number of children)	
		≥50m	16 or more	
			5 to 15	
			1 to 4	
Fencing	20	< 50m	Any Facilities	F =
		fully traversable	1.0	
		partially traversable	0.5	
		non-traversable	0.1	
Road Classification	20	Urban	Rural	C =
		local		
		minor collector	local	
		collector	collector	
		major collector / minor arterial	arterial	
		major arterial / expressway		
			freeway / highway	
Property Line Separation	10	abuts roadway	1.0	L =
		within 50m	0.5	
		further than 50m	0.0	
Entrance	5	main entrance / multiple secondary entrances	1.0	E =
		secondary entrance	0.6	
		none	0.0	
Sidewalks	5	none (or non-property side)	1.0	S =
		school side	0.6	
		playground side	0.4	
		both sides	0.0	

* T is School Type or Playground Type, not the sum

Points:	0	10	20	30	40	50	60	70	80	90	100
School:	Nothing					Area	Area or Zone		Zone		
Playground:						Area					Zone

Modified TAC Points

Site Length	Penalty	Points:	0	10	20	30	40	50	60	70	80	90	100
15 to 20m	-10 points	School:	Nothing					Area		Zone			
less than 15m	-20 points	Playground:						Area				Zone	

B. List of Playground and School zones in Strathcona County by Ward

Note: This information was compiled in 2011/12. Over the last few years, contexts have changed and some recommendations may need updating. They are presented here for a general understanding of the implications of strict adherence to TAC Engineering Design Guidelines.

Ward 1			
Road Name	Location	Existing	TAC Recommendation
Malvern Dr.	Madonna Elementary School Field	Playground Zone	No Facility
Parker Dr.	Woodbridge Lake Park	Playground Zone	No Facility
Strathcona Dr.	Westboro Elementary School Field	Playground Zone	No Facility
Brighton Bay	Brighton Bay Playground	No Facility	Playground Area
Glenmore Ave.	Smeltzer House Grounds	No Facility	Playground Area
Main Blvd.	Clover Bar Junior High School Field	No Facility	Playground Area
Oak St.	Oak St. Broadmoor Lake Park	No Facility	Playground Area
Brentwood Blvd.	St Theresa School	Playground Zone	Playground Area
Gilles Rd.	Gillies Dr. Playground	Playground Zone	Playground Area
Haythorne Rd.	Woodbridge Farms Elementary School	Playground Zone	Playground Area
Main Blvd.	Mills Haven Elementary School Field/Playground	Playground Zone	Playground Area
Malvern Dr.	Malvern Playground/Field	Playground Zone	Playground Area
Oak St.	Kinsmen Leisure Centre Playground	Playground Zone	Playground Area
Parker Dr.	Woodbridge Farms Elementary School	Playground Zone	Playground Area
Strathcona Dr.	Westboro Park Playground/Field/Tennis Crt/Rink	Playground Zone	Playground Area
Village Dr.	St. Theresa Elementary field/Tennis Crt	Playground Zone	Playground Area
Village Dr.	Village Lake Park	Playground Zone	Playground Area
Woodbridge Way	Woodbridge Farms Elementary School Playground	Playground Zone	Playground Area
Woodbridge Way	Woodbridge Lake Park Playground	Playground Zone	Playground Area
Brentwood Blvd.	St Theresa Junior High School	School Zone	School Area
Festival Way	St Theresa Junior High School	School Zone	School Area
Main Blvd.	Clover Bar Junior High School	School Zone	School Area

Ward 2			
Road Name	Location	Existing	TAC Recommendation
Cranberry Dr.	Lakeland Ridge/ Holy Spirit School Field	Playground Zone	No Facility
Crimson Dr.	Lakeland Ridge/ Holy Spirit School Playground	Playground Zone	No Facility
Georgian Way	Glen Allen ES Playground/Field	Playground Zone	No Facility
Granada Blvd.	Wes Hosford Elementary School	School Zone	No Facility
Christina Pl.	Greenspace by Christina Pl.	No Facility	Playground Area
Cimmaron Way	Clover Bar Ranch Lake	No Facility	Playground Area
Crystal Way	Crystal Way Playground	No Facility	Playground Area
Jim Common	Clover Bar Ranch Park	No Facility	Playground Area
Chelsea Way	Carson Park	Playground Zone	Playground Area
Cimmaron Way	Clover Bar Ranch Lake Playground	Playground Zone	Playground Area
Cranberry Dr.	Lakeland Ridge/ Holy Spirit School Field	Playground Zone	Playground Area
Cranberry Dr.	Lakeland Ridge/ Holy Spirit School Field	Playground Zone	Playground Area
Cranford Dr.	Cranford Dr. Playground	Playground Zone	Playground Area
Garland Cres.	Garland Cres. Playground	Playground Zone	Playground Area
Georgian Way	Glen Allen Recreation Complex	Playground Zone	Playground Area
Georgian Way	Wes Hosford Elementary School Playground	Playground Zone	Playground Area
Gilmore Ave.	Gilmore Park	Playground Zone	Playground Area
Glamorgan Dr.	Granville Park	Playground Zone	Playground Area
Greengrove Ave.	Glen Allen Recreation Complex field	Playground Zone	Playground Area
Jim Common	Clover Bar Ranch Park Playground	Playground Zone	Playground Area
Coachman Way	Clover Bar Ranch Lake Playground	Playground Area	Playground Zone

Ward 3

Road Name	Location	Existing	TAC Recommendation
Alder Ave.	Brentwood Elementary School field	Playground Zone	No Facility
Conifer St.	Conifer St. Playground	Playground Zone	No Facility
Cypress Ave.	Conifer St. Playground entrance S	Playground Zone	No Facility
Falcon Dr.	Brentwood Elementary School Playground/Soccer field/Basketball Court	Playground Zone	No Facility
Fir St.	Sherwood Heights Junior High School field	Playground Zone	No Facility
Greenwood Way	Greenwood Way Playground	Playground Zone	No Facility
Heron Rd.	Brentwood Elementary School Playground	Playground Zone	No Facility
Maywood Rd.	Greenwood Way Playground	Playground Zone	No Facility
Sandpipes Dr.	Father Kenneth Kearns Playground/field	Playground Zone	No Facility
Cypress Ave.	Cypress Ave. field entrance	Playground Area	No Facility
Estates Dr.	Estates Field	No Facility	Playground Area
Nottingham Blvd.	Pond by Nottingham Blvd.	No Facility	Playground Area
Nottingham Inlet	Greenspace & pond by Nottingham Blvd. & Inlet	No Facility	Playground Area
Circlewood Dr.	Circlewood Playground & greenspace	Playground Zone	Playground Area
Conifer St.	Ecole Campbelltown Elementary School field	Playground Zone	Playground Area
Cottonwood Ave.	Cottonwood Park Playground/Baseball Field	Playground Zone	Playground Area
Estates Dr.	Estates Dr. N Playground	Playground Zone	Playground Area
Falcon Dr.	Brentwood Elementary School Rink/Tennis Court	Playground Zone	Playground Area
Fir St.	Cottonwood Park Playground	Playground Zone	Playground Area
Fir St.	Sherwood Heights Playground/Field/Rink/Community Hall	Playground Zone	Playground Area
Meadowood Dr.	Meadowood Crt. Playground	Playground Zone	Playground Area
Normandy Dr/Ln	Normandy Playground	Playground Zone	Playground Area
Nottingham Blvd.	Nottingham Blvd. Park/Greenspace	Playground Zone	Playground Area
Peacock Dr.	Peacock Playground & trail to Oriole Cres.	Playground Zone	Playground Area
Pine St.	Cottonwood Park & Playground N side	Playground Zone	Playground Area
Privet Ct.	Privet Crt. Playground	Playground Zone	Playground Area
Spruce Ave.	Our Lady of Perpetual Help School Playground/Field	Playground Zone	Playground Area
Spruce Ave.	Sherwood Heights Community Hall/Baseball field	Playground Zone	Playground Area
Willow St.	Willow St. Playground	Playground Zone	Playground Area
Fir St.	Sherwood Heights Junior High School	School Zone	School Area
Heron Rd.	Brentwood Elementary School	School Zone	School Area

Ward 4

Road Name	Location	Existing	TAC Recommendation
Meadowview Dr.	McGhan Park S & trail network	Playground Zone	No Facility
Lakeland Village Blvd.	Lake Vista Dr. Playground entrance SW	Playground Area	No Facility
Lakewood Cross.	Lakeland Playground	Playground Area	No Facility
Meadowview Dr.	McGhan Park E	No Facility	Playground Area
Blueberry Cres.	SE Meadowview Dr. Playground	Playground Zone	Playground Area
Clarkdale Dr.	Clarkdale Lake Park/Clarkdale Park	Playground Zone	Playground Area
Davenport Dr.	Davidson Creek Park Playground	Playground Zone	Playground Area
Davenport Pl.	Davidson Creek Park	Playground Zone	Playground Area
Meadowview Dr.	McGhan Park N & trail network	Playground Zone	Playground Area
Meadowview Dr.	SE Meadowview Dr. Playground	Playground Zone	Playground Area
Summercourt Way	Summercourt Playground	Playground Zone	Playground Area
SummerField Wynd	Summerton Cr. Playground N	Playground Zone	Playground Area
Summerton Cres.	Summerton Cr. Playground E	Playground Zone	Playground Area
Sunflower Cres.	Sunflower Park Playground	Playground Zone	Playground Area
Sunflower Ln.	Sunflower Park Playground	Playground Zone	Playground Area

Ward 5			
Road Name	Location	Existing	TAC Recommendation
Twp Rd. 524	Uncas Elementary School Playground/Field	Playground Zone	No Facility
Main Blvd., Ardrossan	Holy Redeemer Catholic School Playground/Baseball field	No Facility	Playground Area
Hwy 16	Brookville Community Hall/Playground	No Facility	Playground Area
Rge Rd. 211	Good Hope Community Hall/Playground	No Facility	Playground Area
Rge Rd. 220	Partridge Hill community hall/Playground	No Facility	Playground Area
Shadow Ridge	Shadow Ridge loop rink	No Facility	Playground Area
Main Blvd., Ardrossan	Field across Ardrossan Recreation Complex	Playground Zone	Playground Area
Main Blvd., Ardrossan	Main Blvd. Playground	Playground Zone	Playground Area
Queen St., Ardrossan	Ardrossan Recreation Complex	Playground Zone	Playground Area
Queen St., Ardrossan	Field across Ardrossan Recreation Complex	Playground Zone	Playground Area
Rge Rd. 221A	Ardrossan Recreation Complex	Playground Zone	Playground Area
Rge Rd. 212	Brookville Community Hall/Playground	Playground Zone	Playground Area
Rge Rd. 213	Uncas Elementary School Playground/ Baseball Field	Playground Zone	Playground Area

Ward 6			
Road Name	Location	Existing	TAC Recommendation
Fountain Creek Circle	Fountain Creek Playground	No Facility	Playground Area
Fountain Creek Cres.	Fountain Creek Dr. Playground	No Facility	Playground Area
Hwy 630/Wye Rd.	Wye Community Hall/Field	No Facility	Playground Area
Rge Rd. 231	Strathcona Christian Academy Elementary School	No Facility	School Area
TWP Rd. 520	Colchester Hall/Baseball Field	Playground Zone	Playground Area
Wyeclyff	Wye Elementary School Playground/Field ES field	Playground Zone	Playground Area
Fountain Creek Blvd.	Fountain Creek Blvd. Playground	Playground Zone	Playground Area

Ward 7			
Road Name	Location	Existing	TAC Recommendation
52343 Rng Rd. 211	Antler Lake Playground	Playground Zone	No Facility
Hwy 630/Wye Rd.	N Cooking Lake Community Hall/park	No Facility	Playground Area
Rge Rd. 221	Soccer field at Rge Rd. 221/ Wye Rd.	No Facility	Playground Area
Antler Lake Rd.	Antler Lake Community Hall/Playground	Playground Zone	Playground Area
S. Cooking Lake Rd.	St. Luke Catholic Elementary School field	Playground Zone	Playground Area
Wellington St. S Cooking Lake	South Cooking Lake Playground	Playground Zone	Playground Area
Rge Rd. 204	Hastings Lake Hall/field	Playground Zone	Playground Area
Ceretzke Rd	Fultonvale Elementary/Junior High School field	Playground Zone	Playground Area
Ceretzke Rd	Strathcona Olympiette Centre	Playground Zone	Playground Area

Ward 8			
Road Name	Location	Existing	TAC Recommendation
Colwill Blvd.	F.R. Haythorne School field/Strathcona Athletic Park	Playground Zone	No Facility
Highcliff Rd.	Heritage Hill Park entrance N	Playground Zone	No Facility
Foxboro Dr.	Greenspace by Foxboro Dr.	No Facility	Playground Area
Foxboro Rd.	Foxboro Park/Playground	No Facility	Playground Area
Hawkstone Ldg.	Heritage Hills Wetland Park E	No Facility	Playground Area
Ridgehaven Cres.	Greenspace on Ridgemont Way	No Facility	Playground Area
Ridgemont Way	Greenspace on Ridgemont Way	No Facility	Playground Area
Courtney Dr.	Craigavon Park	Playground Zone	Playground Area
Craigavon Dr.	Craigavon Park	Playground Zone	Playground Area
Forrest Dr.	Forrest Dr. Playground	Playground Zone	Playground Area
Heritage Dr.	Heritage Hills Park	Playground Zone	Playground Area
Heritage Dr.	Heritage Hills Park	Playground Zone	Playground Area
Highland Way	Heritage Pt. Park	Playground Zone	Playground Area
Regency Dr.	Mcpherson Park	Playground Zone	Playground Area
Ritchie Way	Regency Heights Park	Playground Zone	Playground Area
Calico Dr.	F.R. Haythorne Junior High School	School Zone	School Area
Colwill Blvd.	Bev Facey Community High School	School Zone	School Area
Colwill Blvd.	F.R. Haythorne Junior High School	School Zone	School Area

C. STSP Position Statement



Position Statement: All Day School Zones

Currently, Strathcona County follows the provincial standard for school zone effective times. School zone times are established under the Use of Highway and Rules of the Road Regulation, Sections 4, 5, 7 and 8 and are in effect between the following times on school days: 8 a.m. and 9:30 a.m.; 11:30 a.m. and 1:30 p.m.; 3 p.m. and 4:30 p.m.

Municipalities can pass a bylaw to change school zone effective times should they wish. Many municipalities in the Capital Region have opted to adopt all day school zones, including the City of Edmonton, St. Albert, Fort Saskatchewan and Beaumont.

Research Support for All Day School Zones

According to Parachute Canada, children aged 10 to 14 years have the highest incidence of pedestrian-related injuries. Children aged five to 14 years are at the greatest risk for pedestrian-related deaths. Their number one recommendation to improve community safety is to reduce driver speed (http://www.parachutecanada.org/downloads/injurytopics/ChildPed_Report_07:08.pdf).

This recommendation is echoed by the World Health Organization, who cites speed as the number one risk factor for pedestrian traffic injury, noting that impacts above 30 km/h increase the likelihood of severe injury or death (http://apps.who.int/iris/bitstream/10665/79753/1/9789241505352_eng.pdf?ua=1, p. 18).

Vision Zero Canada recommends that speed limits be set at 30 km/h in places where pedestrians and cyclists mix with cars (<https://visionzero.ca/policies-and-practice/>).

Local Factors which Support All Day School Zones

Strathcona County's Traffic Safety Strategic Plan 2020 is guided by a Vision Zero philosophy: "No one is seriously injured or killed while travelling on Strathcona County's road network".

Provincial school zone effective times are inconsistent with some of the County's school schedules, who start classes before 8 a.m. and dismiss classes before 3 p.m. Further, provincial school zone effective times do not provide safety for children on early dismissal days.

For these reasons, the Strathcona County School Traffic Safety Partnership supports the implementation of all day school zones in our community. Specifically, we recommend a bylaw where speeds in all school zones are limited to 30 km/h from 7:30 a.m. to 4:30 p.m.

D. Detailed Cost Estimates for Options A and B

Option A: Adopt a bylaw which creates all day school zones (7:30 am to 4:30 pm)

- Sign costs: approximately 75 tabs will need to be purchased and installed
- Labour costs: Approximately 4 signs per hour can be installed with a 2 person sign crew and County vehicle.

Option B: Adopt a bylaw creating playground effective times of 7:30 am to 9:00 pm, and sign all schools as playgrounds

- Sign costs: Requires replacement of 75 school signs with Playground signs plus addition of tabs on 75 school and 400 playground signs.
- Labour costs: Approximately 3 signs per hour can be installed for school zones and 4 signs per hour for playground zones with a 2 person sign crew and County vehicle.