TAC Road Safety Engineering Award Application
Nominee: City of St. Albert
Project: Safe Journeys to School Initiative

This nomination provides the following information about the City of St. Albert's *Safe Journeys to School* (SJ2S) initiative:

- Background and Objectives
- Structure and Governance
- Overview of Consultant Project Findings
- Measurement of Success
- Innovative Aspects
- Transferability between Jurisdictions

Background and Objectives

In 2013, a young boy was fatally injured while traveling to school. The St. Albert community came together in mourning and was galvanized around the issue of school traffic safety. The City Council, rather than reacting hastily to the incident, took a thoughtful step back and decided to take a substantial look at school traffic safety in the whole community.

In 2014, the City of St. Albert (City), Alberta, in conjunction with its partners in school traffic safety, commissioned a comprehensive review of traffic safety for its schools, using a holistic 4-E approach (Engineering-Education-Encouragement-Enforcement).

The objectives of the review were to:

- Gather information and feedback through extensive community engagement at all 26 St. Albert schools (including Elementary, Junior High and High School), towards identifying enhancements that will mitigate student traffic safety risks.
- Identify the most effective engineering, education, enforcement and encouragement strategies to enhance student travel safety among all schools.
- Develop recommendations and specific action plans to enhance student and school traffic safety at each of the 26 existing schools and two new school sites.

Structure and Governance

To oversee the school traffic safety review, the City Council the City formed a Joint Public Steering Committee (JPSC), consisting of the following members:

- Tim Osborne (Chair) - Councillor, City of St. Albert
- Serena Shaw (Vice-Chair) - Trustee, Greater St. Albert Catholic Schools
- Ronald St. Jean - Board Trustee, Conseil scolaire Centre-Nord
- Sherri Davidson - Transportation Manager, Sturgeon School Division
- Gerry Martins - Trustee, St. Albert Public Schools
- Kevin Murray - Inspector, St. Albert RCMP
- General Manager, Planning and Engineering, City of St. Albert
- Chris Jardine - General Manager, Community & Protective Services, City of St. Albert
- Cindy de Bruijn - Public member
- Paul Godsmark - Public member
- Ken MacKay - Public member
- Nicole Burrows - Public member
- Joanna Hampton - Public member
- Theresa Labron - Public member

New "no stopping" regulations

Having a joint public steering committee with members of the public made the project more collaborative and a truly public initiative. Regular meetings were held to oversee the consultant study, debate important issues and provide direction.

Overview of Consultant Project Findings

Following detailed stakeholder and public consultation, collision analysis, site visits during pick-up / drop-off periods and every school and best practice research, the Consultant's review recommended over 75 city-wide measures and over 300 school-specific measures for the consideration of the JPSC. The City-wide measures were divided into eight thematic areas, shown in the blue boxes in FIGURE 1. Some of the key City-wide recommendations included:

- Separation of private-vehicle and school bus pick-up and drop-off areas
- Plan school sites for improved circulation and conflict reduction
- Continued implementation of school zone flashers (during school hours)
- Curb extensions and raised crosswalks at key points with crossing demand
- Conversion"no parking" in the vicinity of schools to "no stopping"
- Development of a safe routes to school program
- Expansion of student crossing guard program; piloting the use of adult crossing guards
- Development a culture that includes cycling and respect for all road users
- Continuation of collaboration between the steering committee agencies

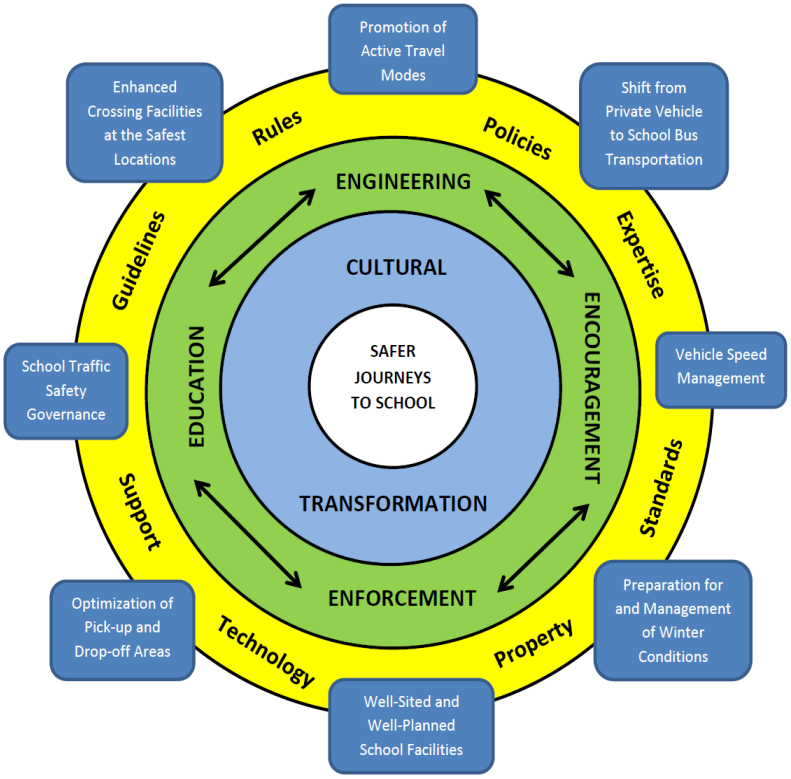

FIGURE 1 HOLISTIC FRAMEWORK ("WHEEL") FOR SAFER JOURNEYS TO SCHOOL

Measurement of Success

School traffic safety studies typically do not include quantitative collision prediction due to the low number of collisions and injuries. For the SJ2S Project, the project included a review of all collisions involving pedestrians, cyclists and school buses. The collisions in the vicinity of the 26 schools were identified and analyzed for trends; however, none of the trends were found to be statistically significant.

The City has an aspirational goal of continuing to striving towards the prevention of all fatal and serious injury collisions involving school travel, as shown in the holistic framework. However, in the absence of significant trends, the City has identified a number of surrogate measures to measure the effectiveness of the implemented measures. The choice of metric depends on the measure being implemented. They include:

- *Traffic volumes*: pedestrian, cyclist, school bus and vehicle, to estimate mode shift
- *Speed measures*: reduction due to speed management measures
- *Traffic tickets issued*: especially for stopping/parking, further to the suggested changes
- *Traffic conflicts*: the City is considering developing a system in which public citizens can systematically report close calls (since collision data is scarce). Staff may also conduct traffic conflict studies as part of the evaluation.

An objective that the project already successfully achieved and exceeded was in the extent of public engagement: ***800 attendees at open houses, over 1,000 comments received, and over 2,400 public surveys completed***. Another primary indicator of the success of the initiative is the ability for it to be implemented. Within four months of the presentation of the Final Consultant Report to the City Council in March 2016, the administration prepared a "Project Charter Action Plan" for the implementation of the recommendations. This consisted of a seven year list of actions and the associated anticipated budgets. It is enclosed in APPENDIX A. The City Manager's 2016-2018 Budget Presentation Specifies the amount proposed to Council for the Safe Journeys to School Safety Implementation as $835K (as part of the Total Municipal Growth Capital Budget, funded through combined sources of Grant, Tax, and Reserves).

The commitment of Council to the implementation following approval of the Action Plan is exemplified in the statement: "The safety of students as they travel to and from their homes and schools is of paramount importance to our community". "Council appreciates the work that went into the Safe Journeys to School Action Plan, as well as the contributions of the stakeholders who inspired and informed the document." - *City of St. Albert Mayor Nolan Crouse*

In 2015, starting within days of the Action Plan approval, a total of 33 improvements to signs, markings, signals and sight obstruction removals were implemented at 16 schools. This list is included in APPENDIX B and ranges from new crosswalk locations, textured crosswalks and school zone flashers to changes in the parking regulations. An amount of $257,000 was approved by City Council in 2015 to complete these actions.

Since the implementation of the measures (up to 6 months), indicators of success are as follows:

- Injuries: No student – or anybody for that matter – has been killed or seriously injured during their journey to/from school.
- Complaints: Only one public complaint was received regarding any of the 33 measures.
- Collisions: To be properly measured after at least one year.

Innovative Aspects

There are several innovative aspects of the Safe Journeys to School Initiative. A few of them are described as follows:

- Proactive, not reactive: The City could have focused only on the school near the incident that occurred; instead, it took an objective, balanced and holistic look at all 28 schools.
- Governance: With the structure of the *Joint Public Steering Committee* described earlier, the project benefited by receiving direction from members of the public.
- Scope: The geographic scope of the project looked at a child's typical journey to school, not just the roadways adjacent to school frontage.
- Extent and Range of Consultation: 6 different methods of consultation were used, to be as inclusive and complete as possible. These methods are illustrated in the chart on the right, and included an interactive online tool that received extensive use.

- "Evidence-based" site visits: Rather than the typical process of conducting site visits at the start of the study, the site visits were arranged to occur following both the collision analysis and the stakeholder consultation, so that they could include an investigation of the collision sites and specific concerns raised by the public.

- Encouragement: Strategies for encouraging changes in behaviour were specifically identified in the review, rather than only the traditional enforcement approaches.
- Technology Measures: Several innovative recommendations were identified, including:
    - Automated pedestrian detection
    - Development of an Application for reporting snow accumulation on sidewalks
    - Exploration of on-board collision avoidance systems for school buses
- Project Funding: The funding for the Consultant study came from the City's speed-on-green program, i.e. revenue from traffic violations was put back into traffic safety.

Transferability Between Jurisdictions

The concepts and processes that guided the Safe Journeys to School Initiative are highly transferrable between jurisdictions. Since the initiative began, the City has been contacted by other municipalities to learn more about the process and findings.

Furthermore, the City has been approached to present aspects of the review through technical papers conferences and presentations and professional networking events:

- Edmonton's International Conference on Urban Traffic Safety (April 27, 2015)
- ITE Northern Alberta Section Luncheon Meeting, Edmonton (May 6, 2015)
- TAC Annual Meeting, Charlottetown, PEI (September 28, 2015)
- CITE Annual Conference, Kelowna, BC (June 2016 – Abstract Accepted)
- Pro Walk/Pro Bike/Pro Place Conference (September 2016 – Abstract Submitted)

The project has so many facets that most presentations/papers have featured a different aspect of the project.

With growth, health trends and weather patterns, the success of Safe Routes to School programs in the United States, and local public pressure, municipalities are increasingly involved in and challenged by school traffic safety. For example, several Alberta municipalities were interviewed during the best practice research component of the review. They were interested in finding out more about the St. Albert initiative and shared the several issues that they are facing.

The Safe Journeys to School Initiative contributes to the National Road Safety Vision with an aspirational goal of moving continually towards safer journeys to school. Based on conversations subsequent to the review, other municipalities are highly likely to conduct similar reviews. Several are in the process of seeking to obtain a portion of the traffic fine reviews collected in their jurisdiction to help fund such a review.

Conclusion

In summary, the City of St. Albert's Safe Journeys to School Initiative is deserving of the TAC Road Safety Engineering Award on the basis of its:

- Collaborative and holistic approach
- Governance with a joint public steering committee
- Comprehensive nature, including the extent of public consultation
- Application of lessons learned from existing reviews to future school sites
- More effective development of engineering measures due to early engagement
- Commitment shown through development of action plan and numerous measures implemented within months
- The City's plan to continue implementation for 7 years and monitor the effectiveness of the changes using a range of customized effectiveness measures
- Innovative and sustainable funding model, using the Speed on Green program revenues
- Transferability to other jurisdictions due to the prevalence of school safety issues in most if not municipalities

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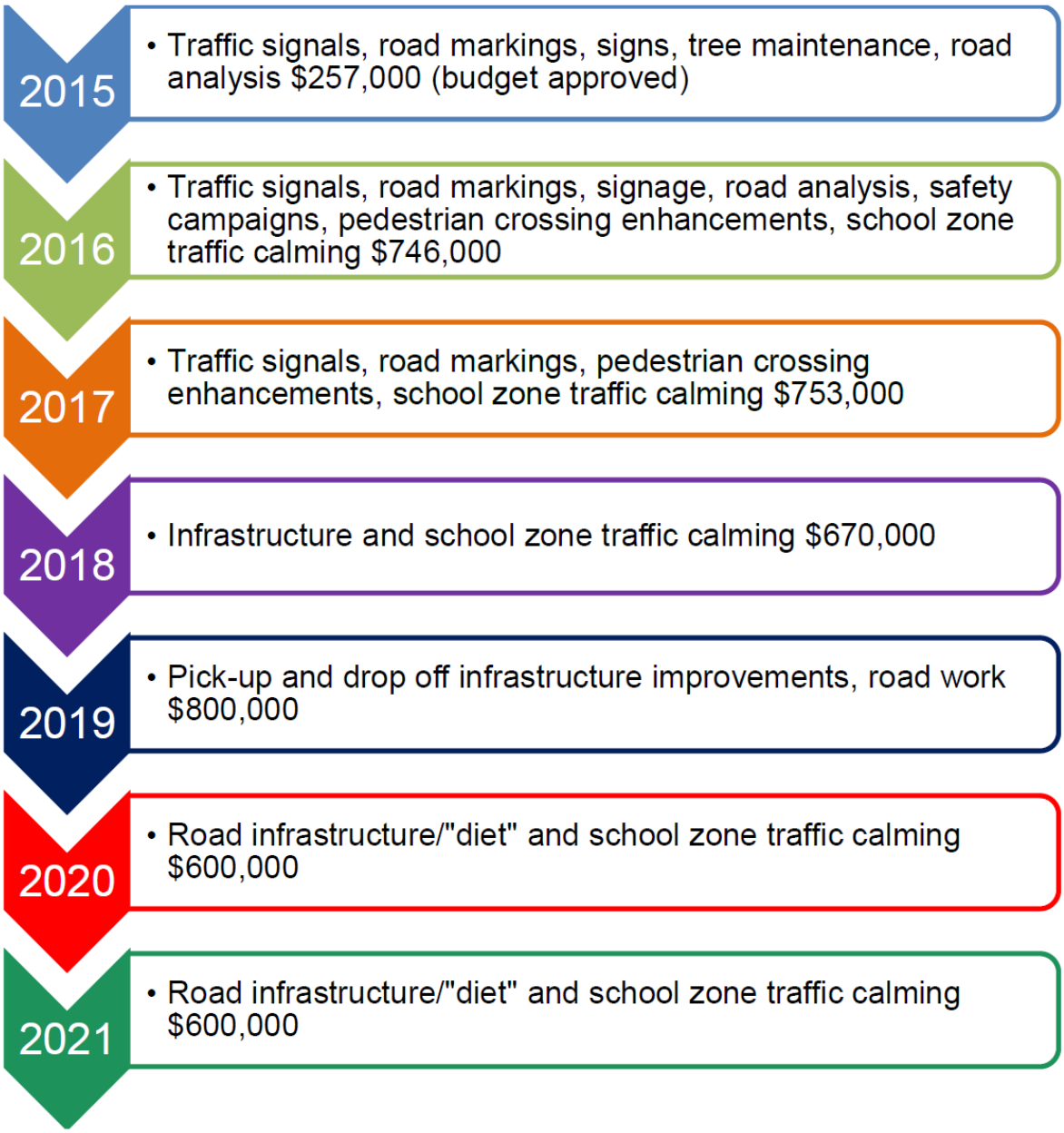
For: Safe Journeys to School Initiative (APPENDIX)

APPENDIX A – CITY OF ST. ALBERT SCHOOL SAFETY ACTION PLAN BUDGETS

(excerpt from City Council Report)

ATTACHMENT 1

Table 1.0: Summary of Capital Program Project Charter Action Plan



APPENDIX B – SCHOOL SAFETY MEASURES IMPLEMENTED IN 2015

RECOMMENDED PRIORITY	SCHOOL	TYPE OF MEASURE	MEASURE
1st Priority	Albert Lacombe	Signals	Relocations / Adjusment of Signalized crossing location. Relocate crossing to the east side of Graham Ave
1st Priority	Wild Rose	Signals	Install School Zone Flashers / extend School Zone
1st Priority	Murial Martin	Signals	Install School Zone Flashers
1st Priority	Ecole La Mission	Signals	Install School Zone Flashers
1st Priority	Murial Martin	Road Markings / Signs	Desmarais Cres Crossing - install new crosswalk
1st Priority	Bellerose High School	Road Markings / Signs	Clearly mark pedestrian crossings at high school entrances / exits - install crosswalk lines and signs
1st Priority	Bertha Kennedy	Road Markings	Repaint crosswalk on Larose between Longview and Laydon - zebra bars
1st Priority	Bertha Kennedy	Road Markings	Paint ladder style marking at Larose Dr @ Leddy Ave
1st Priority	Sturgeon Heights	Road Markings / Signs	Install crosswalk on North Ridge Drive at trail crossing
1st Priority	Wild Rose	Road Markings	Install zebra bar style crossing at the main school crossing
Short Term	JJ Nearing	Road Markings / Signs	Install Stop Control and pedestrian crosswalk (zebra bars) on New Maket at New Market
Short Term	Sir George Simpson	Road Markings	Install centerline through the school zone
1st Priority	Bertha Kennedy	Signs	Change No Parking on both sides of Larose near crosswalks

			and bus stops to No Stopping
1st Priority	Ecole La Mission	Signs	No stopping restriction installs on Heritage Dr at crosswalks
1st Priority	Keenooshayo	Signs	Limit On Street Parking Restrictions to peak bus times
1st Priority	Keenooshayo	Signs	Change No Parking signs to No Stopping Signs at crosswalks
1st Priority	Murial Martin	Signs	Provide No Parking Signs on either side of pathway approaching Desmarais Cres
1st Priority	Murial Martin	Signs	Install No Stopping signs on Deer Ridge Dr at Denny Ct
1st Priority	Neil M Ross	Signs	Implement No Stopping signs within 10m of crosswalks
1st Priority	Ronald Harvey	Signs	Install No Stopping signs on the east side of Langley Ave between the north bus bay and south entrance to staff parking. Install No Stopping signs on west side of Langley Ave south of Lester to create a minimum 10 m clear zone
1st Priority	Sir Alexander MacKenzie	Signs	Replace No Parking signs with No Stopping signs
1st Priority	Sturgeon Heights	Signs	Relocate signs at south crosswalk for improved visibility
1st Priority	Vincent J. Maloney	Signs	Install School Area / zone signs approaching Mont Clare
1st Priority	Vital Grandin	Signs	Change No Parking signs to No Stopping Signs at crosswalks
1st Priority	Wild Rose	Signs	Install new pickup/drop off signs on school side of Grenfell Ave
Short Term	Keenooshayo	Signs	Provide School Stacks between school sites
Short Term	Wild Rose	Signs	Relocate the curve warning sign north of the

			school further north
1st Priority	Ecole La Mission	Tree Maintenance	Remove or relocate bush on corner of Heritage and Holly
1st Priority	Leo Nickerson	Tree Maintenance	Trim Boulevard Trees on approaches to the ped signals
1st Priority	Ronald Harvey	Tree Maintenance	Trim landscaping on SW corner of Langley and Larkspur
1st Priority	Sir George Simpson	Tree Maintenance	Trim tree on the NW corner of Grandin / Grandville
1st Priority	Vital Grandin	Tree Maintenance	Encourage property owner to trim shrubs
Short Term	Murial Martin	Analysis	Warrant for pedestrian crossing at Desmariais Cres Note – pedestrian crossing installed