

## **SCHOOL SITE TRAFFIC SAFETY REVIEW**

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### **EXECUTIVE SUMMARY**

Calgarians are concerned about congestion and traffic safety near schools. Fewer children are walking and biking to school. More are being transported in private vehicles resulting in challenging traffic conditions around schools and the adjacent homes. This travel mode shift has created more challenging traffic conditions for students to navigate and can have a negative impact on those living adjacent to schools.

In 2012, October 15, Council approved NM2012-42, School Sites Review, which directed Administration to investigate school site safety concerns and develop recommendations. A steering committee, with representatives from City departments, school boards, the provincial government, and Calgary Police Service, guided the work and MMM Group Ltd, (MMM) was hired to conduct investigations. Findings were detailed in a final report and a mitigation strategy toolkit.

Processes and programs used by The City to mitigate existing and potential future safety concerns at schools include the Community Traffic Calming program, the Traffic Safety program and the Corporate Planning Applications Group (CPAG) development review process. City transportation partnered with Calgary Police Service, Environmental and Safety Management, Community Planning, and Calgary Neighbourhoods to support related education, enforcement and community initiatives.

Approximately 25 per cent of applications sent to the Community Traffic Calming program relate to traffic concerns around school sites. Moving forward, schools will be able to submit applications directly to the program and Administration will continue coordinating with related initiatives mentioned above.

Since 2013, Administration reviewed plans for 33 new school sites. Many of these plans incorporate the mitigation measures identified in the School Sites Review study. The toolkit will continue to inform the development review process to help mitigate common school site safety concerns.

### **ADMINISTRATION RECOMMENDATION(S)**

That the Standing Policy Committee (SPC) on Transportation and Transit recommends that Council:

1. Receive this Report for information;
2. Direct Administration to continue working through existing programs to mitigate school traffic safety concerns;
3. Direct Administration host a briefing session for CPAG staff involved in the review of new school sites; and
4. Direct Administration host a briefing session for development industry professionals interested in the report findings.

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### RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2016 OCTOBER 12:

That Council:

1. Receive this Report for information;
2. Direct Administration to continue working through existing programs to mitigate school traffic safety concerns;
3. Direct Administration host a briefing session for CPAG staff involved in the review of new school sites;
4. Direct Administration host a briefing session for development industry professionals interested in the report findings; and
5. **Direct Administration to make available a toolkit for schools and community associations to utilize in addressing various traffic safety reviews at schools, no later than Q2 2018.**

### PREVIOUS COUNCIL DIRECTION / POLICY

Recommendations from PFC2013-0052 were adopted at the 2013 February 11 Combined Meeting of Council. Administration was provided with \$150,000 from the Council Innovation Fund to hire a consultant to conduct school site review work.

On 2012, October 15 Council approved NM2012-42, School Sites Review, with amendments. Administration was directed to develop a work scope and plan including cost estimates to:

1. "Review completed and planned school construction during the past twenty years (including elementary, middle and high school) to identify areas of concern common to school sites in developed and developing communities;
2. Review school safety concerns common to school sites pre-dating 1987;
3. Make recommendations concerning pedestrian safety, staff and parent parking and student drop-off and pick-up areas; and
4. Make recommendations to engage the Calgary School Boards, Alberta Education and Infrastructure Alberta in resolution of identified issues, in conjunction with the principles as outlined in Plan It Calgary for complete communities."

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### **BACKGROUND**

City data collected from 2001 and 2011 indicate the portion of Calgary students driven to school in private vehicles increased from 36 to 47 per cent while the number who walked or cycled decreased from 35 to 21 per cent. Similar trends are noted throughout North America.

The shift towards increased use of private vehicles is a challenge for older schools designed when more students walked or were bussed to school. Schools are also faced with an increased need for parent parking and traffic management. Factors contributing to increased use of private vehicles include vehicle ownership, school catchment areas, specialty school programs and increased concern about student's personal safety. Also, busy schedules often result in a need for parents to combine trips for multiple destinations and for travel reliability. Increased access to private vehicles makes them a convenient choice for travel.

The walk zone used by Calgary's school boards ranges from 1.2 to 2.4 kilometres depending on student age. However, schools in low density or older communities and schools with special programs, such as private or charter schools, often have more students living outside this zone resulting in an increased of students being driven to school.

Increased school traffic has resulted in concerns around speeding, parking, congestion and safety of young pedestrians on residential streets. According to Alberta Health Services children under nine are still developing the cognitive skills needed to assess speed and distance. Children have more difficulty responding to complex traffic conditions.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

A project steering committee was established in 2013 to direct work for NM2012-42. It included representatives from various City departments, the public and separate school boards and the Government of Alberta.

The consultant, MMM, was hired to investigate safety concerns related to pedestrians, vehicles and cyclists at 21 sample school sites. The schools were selected in consultation with the steering committee and represent characteristics of public and private elementary, junior high and senior high schools in older and newer communities. The schools were not selected based on the number of safety issues they experienced.

Investigations included cursory assessments of school layouts and operations, site visits and stakeholder engagement through workshops and surveys. Current industry practice and local policies related to school safety were also reviewed. Detailed engineering assessments of individual sites were not included in the project scope as the focus was on identifying general concerns and potential solutions that could be further investigated if studies were conducted at individual schools. Findings are summarized in a final report (Attachment 1) and a mitigation strategy toolkit (Attachment 2).

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Data for collisions that occurred near Calgary schools from 1996 to 2015 was analyzed. The data include automobile collisions with pedestrians, cyclists, other motorized vehicles and property (Attachment 3). Results indicate the number of overall collisions per school per year did not change significantly over the 20 years. Approximately two collisions occurred per school per year during the same time frame.

The number of overall collisions that resulted in injury decreased significantly over the same time period but the number of collisions that resulted in pedestrian injury did not. Pedestrians were typically injured in 20 school area collisions per year from 1996 to 2015. Almost all collisions that involved pedestrians resulted in pedestrian injury.

Pedestrians are more vulnerable than motorists and are more frequently injured when in collisions. Local data presented in the 2014 Calgary Safer Mobility Plan indicate collisions involving pedestrians and cyclists account for 1.6 per cent of all collisions but account for 16.3 per cent of all collisions that resulted in injury or fatality.

Detailed analyses of pedestrian collision trends in Calgary, conducted for the 2015 Calgary Safer Walking Report, indicate that from 2008 to 2012:

- The proportion of collisions involving those 12 and under was highest in September (17 per cent) and most of these collisions (83 per cent) occurred on local or collector streets.
- Most collisions involving pedestrians 12 and under that resulted in injury occurred near school start and end times and almost half occurred at mid-block locations.

There is no one size fits all solution to addressing safety concerns at school sites. A combination of grassroots, school and government initiatives focused on education, encouragement, engineering and enforcement are recommended.

To mitigate congestion near school sites, The City will:

- Partner with Alberta Education to develop targets related to safety and active travel.
- Continue to work with Alberta Infrastructure and area developers through key stages of development to encourage designs that increase the probability of achieving the pedestrian and cyclist safety targets.
- Collaborate with school boards and stakeholders such as the Alberta Motor Association to coordinate initiatives such as educational campaigns, targeted enforcement, student patrol programs and walk to school programs.
- Conduct detailed assessments of safety needs and implement measures at existing schools through existing City programs and initiatives in consultation with school administration.

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### Existing School Sites:

Approximately 25 out of 100 requests received by the Community Traffic Calming program over the last five years relate to traffic associated with Calgary school sites. These concerns will continue to be addressed through the Community Traffic Calming program, which uses a systematic data driven approach to identify and mitigate safety issues. Program work entails collaboration with relevant community, school and city stakeholders to identify mitigation measures and opportunities to coordinate with other initiatives and programs. Common traffic calming measures used include pedestrian infrastructure enhancements, curb extensions, speed humps, parking restrictions and staggered school bell times.

The Roads Traffic Safety team is consulted during traffic calming work to review and assist with safety improvement plans when needed. They also lead monthly safety operations meetings between key stakeholders that provide a forum for coordinating transportation safety efforts. Regular attendees include enforcement, Transportation Planning, and Alberta Transportation.

Administration will modify the existing Traffic Calming program so that schools may directly submit applications for studies. Studies involving school sites will include safe routes to school reviews in coordination with the Pedestrian Strategy. The mitigation strategy toolkit produced as part of this study will also be distributed to school boards and summarized for public use on Calgary.ca.

### Future School Sites:

The development approvals process is a key mechanism for incorporating safety issue mitigation measures at future school sites. The mitigation strategy toolkit will continue to be a useful resource for this work along with the Site Planning Team Draft School Site Design Standards document (Attachment 4). Study findings are influencing earlier stages of planning, when school site locations are identified. Site features, safety, road types and active travel infrastructure are all considered in this process.

Since 2013 The City of Calgary reviewed 33 plans for new schools. Many incorporate mitigation measures identified in the mitigation strategy toolkit.

In addition to changes at the school site design level, development of school sites may also be influenced by on-going City Charter work.

### **Stakeholder Engagement, Research and Communication**

The School Site Safety Review Steering Committee communicated through emails, telephone conversations and meetings to direct and evaluate consultant work. Committee members, school administration, parents, students and community members were also consulted during the school site investigations through interviews, workshops, letters and a website. Future engagement on the report findings is essential to the implementation of these measures.

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### **Strategic Alignment**

The comprehensive review aligns with 2015-18 Action Plan priorities and Calgary Transportation Plan objectives to foster a well run city and a city that moves. It also furthers 2020 Sustainability Direction objectives of “safety and resiliency and to provide safe, reliable and affordable public infrastructure.”

The review directly supports Section 2.2.4 of the Municipal Development Plan’s city-wide policies for complete communities, specifically Section 2.2.4 b.(ix), “A connected street and mobility network that promotes comfortable, safe and universally accessible travel” and Section 2.2.4 b.(xi), “Public infrastructure and services are provided in a timely fashion and sustained over the long term by stable community populations.”

It also directly supports Key Result 5, “More children walking to school”, from STEP FORWARD, Calgary’s new pedestrian strategy, through implementing Action 38, “Expand Active and Safe Routes to School programs.”

### **Social, Environmental, Economic (External)**

School site planning that includes common safety issue mitigation strategies can help ensure schools remain safe and comfortable gathering and recreation places for students and the broader community.

Mitigating safety concerns at existing and future school sites supports a shift towards walking and cycling. This mode shift supports a reduction in traffic congestion and associated vehicle emissions.

Societal costs related to health and the diversion of educational and community resources to accommodate vehicular travel to school can be reduced by supporting active travel modes.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

Future operating budgets tied to the Pedestrian Strategy will facilitate implementation of findings from this report. Council instructed Administration to bring forward recommended resource needs associated with the Pedestrian Strategy to the Mid-Cycle Action Plan updates. The budget guidelines provided by Council will not fully fund the contemplated action plan. This will result in a longer period of time necessary to respond to school safety concerns.

#### **Current and Future Capital Budget:**

Future capital budgets tied to the Pedestrian Strategy will facilitate implementation of findings from this report. As per the Operating Budget comments, approval of the additional capital funding is unconfirmed at this time.

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### **Risk Assessment**

The risk of not improving safety around schools undermines the City's objectives of achieving Triple Bottom Line and 20/20 Sustainability Objectives related to health, active communities, safe and resilient communities, and transportation choice.

### **REASON(S) FOR RECOMMENDATION(S):**

The recommendations provide Council with an overview of school site traffic safety review work completed in response to NM2012-42 and an indication of how findings will be shared with the broader development community.

### **ATTACHMENT(S)**

1. School Site Safety Review Project Overview
2. Mitigation Strategy Toolkit Overview
3. Supporting Data
4. Site Planning Team Draft School Site Design Standards