"The City of Calgary Council directed Land Use Planning and Policy to complete a review of Calgary Board of Education (CBE) and Calgary Roman Catholic Separate School District (CCSD) schools sites (21 school sites) located throughout the City of Calgary regarding any potential hazards to pedestrians, vehicles and cyclists that impact the safety of students traveling to and from school. In addition, a detailed literature review of relevant documents and best practices from around the world was conducted, and detailed interviews with stakeholders were conducted.

The outcome of this work is the creation of The Calgary School Sites Toolkit, outlining the most common transportation and planning-related concerns occurring at school sites in Calgary. From this list of issues, potential solutions have been developed to mitigate for these concerns. The intent of this Toolkit is to serve as a reference document that can be used to address common issues, as they appear at existing schools across Calgary, and to facilitate the planning of future school sites in Calgary to proactively address potential concerns.

This Toolkit is intended to serve as a reference guide, allowing users to selectively research specific areas of concern and identify potential mitigation measures. In the selection of any mitigation measure, context sensitivity and the specific needs of stakeholders should be considered prior to further evaluation or deployment of any solutions package."

(Executive Summary, Calgary Schools Sites Review Toolkit, 2015)

#### **Common Concerns**

The word cloud below includes common concern noted by stakeholders. Larger font sizes indicate increased level of importance.



(Excerpt from page 13 of the Calgary School Sites Review Final Report Toolkit, 2015)

### Mitigation Strategy Toolkit Overview

The three key categories of concern related to pick-up/drop-off areas, pedestrians, cyclists and roadway concerns. Key concerns within those categories, in decreasing order of priority, are:

- road safety
- illegal parking
- remove bus zone from frontage
- sidewalk improvements

#### **Mitigation Strategies**

The four E's – Engineering, Education, Encouragement and Enforcement – were followed in the development of possible mitigation strategies. Strategies based on the four E's typically do not operate in isolation and in many cases can influence each other to help achieve a shift towards desired behaviours. For example an engineering solution may be more effective if paired with education about safe travel behaviour, enforcement and/or encouragement for displaying desired behaviours.

Many of the mitigations strategies recommended in the toolkit are related to physical changes to the street, traffic control changes and changes to site operations. Any proposed adjustments to facilities within the road right of way would require engineering assessment by The City of Calgary. Mitigation strategies focused on operations, such as adjusting school bell times or reconfiguring school parking would typically be developed with and implemented by the subject school.

Strategies associated with education and encouragement may be implemented by multiple stakeholders with varying levels of involvement and typically require local champions for implementation. Any proposed enforcement strategies would require collaboration with and implementation by the Calgary Police Service and the Calgary Parking Authority.

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# Mitigation Strategy Toolkit Overview

## Recommended mitigation strategies detailed in the toolkit are listed below.

|                                       |  | T  |   |
|---------------------------------------|--|--|---|
| Adult / Student<br>Patrollers         | Expand Student<br>Parking Lot  | Closely Park School<br>Buses                             | Radar Speed Display<br>Sign                   |
| (OPERATIONS)                          | (OPERATIONS)   | (OPERATIONS)   | (ENGINEERING)                                 |
| Bike Racks                            | 15-Minute Parking  | Traffic Calming  | Painted Centre Line                           |
| (OPERATIONS)                          | (ENGINEERING)  | (ENGINEERING)  | (ENGINEERING)                                 |
| Off-Street Loading Zone               | Illuminated Pedestrian-<br>Activated Device                            | Expanded Bicycle<br>Network                              | Vehicle Loading Zone                          |
| (OPERATIONS)                          | (ENGINEERING)  | (ENGINEERING)  | (ENGINEERING, OPERATIONS)                     |
| Bus Loading Zone                      | Median Barrier   | Post-and-Chain<br>Fence                                  | Traffic Circle                                |
| (ENGINEERING, OPERATIONS)             | (ENGINEERING)  | (ENGINEERING, OPERATIONS)                                | (ENGINEERING)                                 |
| Boulevard Barrier                     | Winter Maintenance   | Vehicle Parking Zone                                     | Widen Roadway                                 |
| (ENGINEERING)                         | (OPERATIONS)   | (ENGINEERING, OPERATIONS)                                | (ENGINEERING)                                 |
| Encouragement                         | Narrow Roadway   | Enforcement  | Education                                     |
| (OPERATIONS)                          | (ENGINEERING)  | (CALGARY POLCE SERVICE)                                  | (OPERATIONS)                                  |
| Curb Extension                        | No Stopping Zone   | Raised Crosswalk   | Widen Sidewalks                               |
| (ENGINEERING)                         | (ENGINEERING)  | (ENGINEERING)  | (ENGINEERING)                                 |
| Designated On-Street<br>Staff Parking | Review Traffic Control<br>Devices, Size, Location<br>and Applicability | Review and Clarify<br>Joint Use Sites<br>Agreement       | Median Island or<br>Median Extension          |
| (ENGINEERING)                         | (ENGINEERING)  | (PLANNING)   | (ENGINEERING)                                 |
| Close-Off Staff<br>Parking            | Offset Bell Times and<br>Coordinate Between<br>School Boards           | Review Available<br>School and Public<br>Transit Service | Signalized<br>Pedestrian- Activated<br>Device |
| (OPERATIONS)                          | (OPERATIONS)   | (OPERATIONS)   | (ENGINEERING)                                 |