



MEMORANDUM

To: Mayor and Members of Council

From: Loy Cheah, Acting Director, Engineering Department

Prepared by: David Porretta, Manager, Traffic Engineering

Date: June 21, 2021

Re: School Zone Traffic Safety Update (All Wards)

PURPOSE:

This memorandum advises Council of new and ongoing initiatives and strategies currently being employed by York Region and the City to improve safety within school zones. Most notably, Regional Council recently approved a staff report, entitled “Reduced Speed Limits in School Zones on Regional Roads”, to adopt a new Provincial school zone speed limit sign and to reduce speed limits in school zones by 10 km/h, which affect eleven schools in Markham.

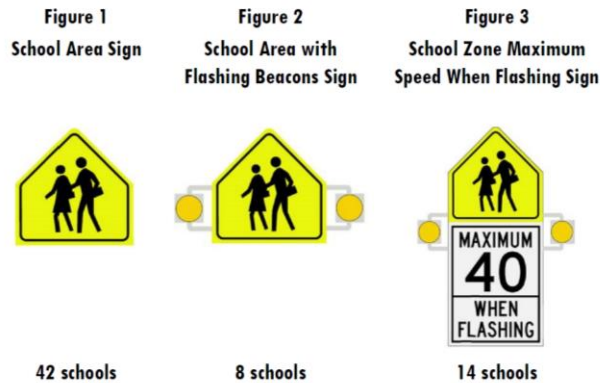
BACKGROUND:

York Region staff recommend a consistent approach to school zones on Regional roads

On May 27, 2021, Regional Council approved a staff recommendation to apply a consistent approach in school zones adjacent to Regional Roads, through use of a single new school zone maximum speed sign introduced by the Province, and a reduction of speed limits in school zones by 10 km/h. These measures will be implemented prior to September 2021. The staff report and affected school zones are included as “Attachment 1”.

York Region is providing consistency in its application of school zone signs on Regional roads

There are 64 elementary and secondary school zones adjacent to Regional roads. As noted in Figures 1, 2 and 3, several versions of signs are currently used to identify these school zones; standard school zone signs; school zone signs with flashing beacons; and school zone signs that have temporary speed limit reductions that are only in effect when beacons are flashing. This lack of consistency and transparency creates driver uncertainty and challenges with enforcement.



The Province has amended the Highway Traffic Act Regulation 615 to allow a new school zone maximum speed sign with a reduced speed limit that includes the times, days and months to inform motorists when the reduced speed limit is in effect (see Figure 4). This new sign will provide a consistent application in the Region's school zones where time-specific speed limits occur. It also improves transparency and resolves challenges with enforcement.

Figure 4
New School Zone Maximum Speed Sign



York Region is implementing a 10 km/h speed limit reduction in school zones

School zones on Regional roads currently have speed limits of 50 km/h and 60 km/h, with select locations where speed limits are reduced to 40 km/h when lights are flashing. The Regional network predominantly consists of multi-lane arterial roads with significantly higher traffic volume and operating speeds compared to the local municipal network. Recognizing the unique operational characteristics of school zones, York Region is proceeding with a 10 km/h speed limit reduction in school zones within their road network, intended to enhance safety on the Regional road network and strengthen active school travel initiatives.

Eleven schools in Markham are affected by this new Regional policy as they are adjacent to Regional roads. The speed limits of the school zone segments of these Regional roads will be reduced to 40 km/h and 50 km/h correspondingly. These locations are listed in Attachment 1.

York Region's two-year Automated Speed Enforcement (ASE) pilot is currently underway

On February 24, 2020, staff reported to the Development Services Committee regarding York Region's automated speed enforcement (ASE) pilot program. The pilot is a two-year pilot, involving the

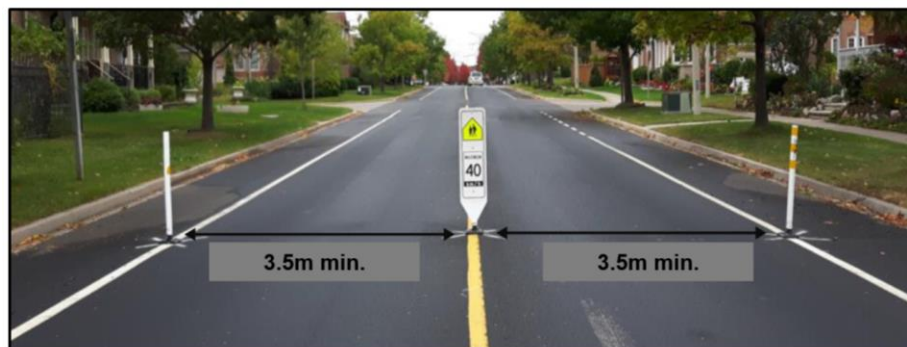
procurement of one mobile ASE unit being deployed on a rotating schedule between 12 school zones across the nine local municipalities.

Due to operating impacts and school closures caused by the COVID-19 pandemic, commencement of the Region's ASE pilot was delayed to November 2020. This delay required modifications to the ASE deployment schedule. Deployment of the ASE camera was implemented during the month of February 2021 at St. Patrick Catholic School (Highway 7), located in Ward 4. A second deployment will occur at the same location in September 2022. The program is anticipated to conclude in late 2022, with Regional staff reporting on the results of the pilot and whether the program should continue or be expanded.

The City's Flexible Sign Program has effectively reduced speeds in school zones

The City's municipal road network has design and operational characteristics that are quite different from the Regional arterial road network, particularly in school zones. The vast majority of the 79 school zones located on the local municipal road network are 2-lane residential streets, with a posted speed limit of 40 km/h. In 2017, Council approved the implementation of a School Zone Flexible Sign Program at 24 school zones. This program involves the implementation of in-street sign posts and bollards to reduce vehicle speeds approaching the school zone and increase awareness, where warranted (see Figure 5). The program has been effective at reducing vehicle speeds by 4-5 km/h on average, improving driver compliance and is positively received by the school community. As of 2021, 34 of 79 school zones within the City's road network are equipped with this treatment. Future expansion to other schools will be considered, subject to operating conditions meeting the technical criteria approved by Council in December 2018.

Figure 5
Typical in-street sign post configuration



The City has partnered with the York Region school boards to implement and promote an Active School Travel (AST) initiative

Safety concerns around schools are frequently associated with school traffic congestion generated by students being driven to and from school. While the City has imposed a series of parking and stopping restrictions on streets adjacent to schools to restrict this activity and improve road safety, sustainable enforcement is problematic and the restrictions are not always effective in discouraging pick-up and drop-off activity.

A significant portion of students driven to/from school lives within the prescribed walking area of the school and therefore could either walk or ride a bicycle to school. The benefits of active school travel

(AST) are numerous; in particular, improved physical health and academic performance, reduced vehicular traffic in school zones, and a reduction in vehicle emissions caused by idling. While the City has been encouraging AST for over a decade, the York Region school board approached the City about supporting their pilot program, intended to provide an enhanced, targeted approach to AST.

Implemented in 2019 and partially funded through Green Communities Canada's "Ontario Active School Travel" fund, the pilot program involved nine elementary schools in Markham that expressed interest in participating:

- All Saints Catholic School (Ward 6)
- Castlemore Public School (Ward 6)
- Coppard Glen Public School (Ward 7)
- David Suzuki Public School (Ward 7)
- John McRae Public School (Ward 6)
- Legacy Public School (Ward 7)
- Randall Public School (Ward 8)
- Sir Francis Xavier Catholic School (Ward 8)
- Stonebridge Public School (Ward 6)

The program goal is to strengthen the AST culture and increase the number of elementary school students using active modes of travel to get to and from school. If successful, expansion to additional schools throughout the Region will be considered. The program is comprised of encouragement, education and engineering strategies. Encouragement and education strategies involve engaging with the local schools to implement grassroots initiatives, such as community walkabouts, Walking Wednesdays, Bike to School Week, and Winter Walk Day. In-class activities are also provided, including classroom competitions, student travel surveys, and opportunities to actively engage with other students about the benefits of AST.

Engineering initiatives include the application of "School Zone" road markings, implementation of new or enhanced "zebra" crosswalks, "red-zone" road markings to emphasize where curb-side pick-up and drop-off activity on the street is prohibited, temporary closure of the school "kiss & ride" facility, pedestrian wayfinding signage, and painted messages on sidewalks along designated school walking routes. Subject to additional funding from Green Communities Canada and the status of COVID-19 pandemic on students returning to schools, the pilot is to be further enhanced for the 2021 – 2022 school year.

ATTACHMENTS:

Attachment 1 – York Region staff report to Regional Council, "*Reduced Speed Limits in School Zones*", (May 13, 2021)