
Subject: Updated Speed Limit Policy and Signs in School Zones

Report to: Public Works Committee

Report date: Tuesday, March 4, 2025

Recommendations

1. That Regional Council **APPROVE** the adoption of the Speed Limit Policy attached as Appendix 1 to Report PW 12-2025; and
2. That staff be **DIRECTED** to implement the speed limit changes as outlined in Appendix 4 to Report PW 12-2025.

Key Facts

- This report seeks Council approval for the updated Speed Limit Policy and provides the updated Speed Limit Review Procedure, which includes changes to signage in school zones, Community Safety Zones (CSZ), and associated Automated Speed Enforcement (ASE) areas, for information purposes.
- In response to community concerns, Council directed staff to review signage in ASE areas to evaluate its effectiveness and ensure clarity.
- The review led to four recommendations: (1) Amend the current Speed Limit Policy to require constant speed limits; (2) Establish warrant criteria for determining how school zones are set; (3) Establish warrant criteria for posted speed limits within school zones; and (4) Update signage within school zones for improved clarity and consistency.
- The review identified the need for changes to the posted speed limits in 20 school zones, along with priority signage improvements at 25 locations over the next two years.
- Consultation with staff from the Niagara Student Transportation Service (NSTS) and Niagara's Local Area Municipalities informed this review and recommendation.
- Pending Council approval, the planned improvements are expected to begin in Spring 2025 and be completed over the course of two years.

Financial Considerations

Retrofitting signage in existing school zones is estimated to cost approximately \$12,000 per school zone. Initial implementation will focus on the 25 locations that coincide with existing Council approved CSZs, resulting in a total cost of approximately \$300,000.

It is anticipated that signage for 15 of the 25 locations will be implemented in 2025 for a total estimated cost of \$180,000 which has been accommodated in the 2025 Transportation Services operating budget within the Vision Zero Road Safety program. The remaining 10 locations are expected to be completed in 2026 at a total estimated cost of \$120,000 and will be included in the proposed 2026 Transportation Services operating budget within the Vision Zero Road Safety program.

Analysis

Review of Signage in Automated Speed Enforcement Areas

In response to community concerns, Council directed staff to review signage in Automated Speed Enforcement (ASE) areas to evaluate its effectiveness and ensure clarity.

Since the launch of ASE in Niagara Region, residents have expressed concerns that the current signage and speed limits in School Zones and CSZs are confusing for drivers. In response, Regional Council directed staff to review and improve signage in these areas.

Currently, ASE cameras in Niagara are used exclusively in CSZs, which are designated in areas where public safety is of special concern.

Staff conducted a review of current conditions to identify opportunities for reducing 'sign clutter' and improving clarity and consistency. The review focused on three key objectives:

- Reduce Complexity and Variation – Over time, a variety of scenarios have been implemented across the Region. By reducing these variations and establishing a more consistent appearance and experience, the Region can simplify signage for drivers.
- Establish clear criteria – Develop criteria to define when a school zone is needed on regional roads and when a speed reduction is required within the zone.

- Improve visibility and reduce 'sign clutter' – Adopt an approach to establishing speed limits that minimize the number of signs, reducing visual clutter, enhancing the visibility of key signs for drivers, and incorporating traffic calming measures to clearly highlight school areas.

Outcome of Review – Four Recommendations

Based on the review, staff have developed four (4) recommendations to improve consistency and clarity for driving requirements within school zones.

During the review staff observed the greatest cause of confusion and uncertainty resulted from fluctuating speed limits which resulted in an increased number of signs. The following measures will help clarify posted speeds, reduce sign clutter, and maintain the effectiveness of safety measures in school zones:

(1) Amend the current Speed Limit Policy - Remove fluctuating speed limits and replace them with consistent, constant speed limits.

The updated Regional Speed Limit Policy (Appendix 1) changes the existing fluctuating speed limits in school zones to a constant speed limit throughout the day. This all-day constant speed limit will help drivers understand the expected behavior and simplify the number and types of signs required. Eliminating fluctuating speed limits will significantly reduce sign clutter.

(2) Establish warrant criteria for School Zones - Create clear criteria for the approval of school zones, ensuring consistency across the Region.

To ensure consistency, the proposed warrant process requires that at least two of the following criteria be met to establish a school zone: the school fronts on a Regional Road; the school is adjacent to a Regional Road (i.e., the school building is within 150 meters of the road); the school has a primary access or student pick-up/drop-off zone on or accessed from the Regional Road; or there is an existing or planned supervised school crossing on the Regional Road. Additional details on the rationale for each criterion can be found in Appendix 3.

(3) Establish warrant criteria for posted speed limits within School Zones - Develop criteria for determining appropriate speed limits within school zones.

Section 128(5) of the Highway Traffic Act enables the Region to establish, through by-law, school zones and prescribe speed limits within those zones. To promote

consistency, simplify understanding for motorists and simplify enforcement efforts, a 10 km/h Speed Limit reduction will be applied to school locations that meet at least three of the following four criteria: the school fronts on a Regional Road and has a primary access or student pick-up/drop-off zone on or accessed from the Regional Road; there is a controlled or supervised pedestrian crossing servicing the school; the road has a two- or three-lane cross-section; or there are at least 100 student pedestrians walking to the school within a 24-hour period. Additional detail on the rationale for each criterion is provided in Appendix 3.

(4) Update signage within School Zones - Improve signage to enhance clarity and consistency across the Region.

All School Zones will have consistent signage, making them easily recognizable to drivers. Existing school areas and school crossing signs will be enhanced with auxiliary treatments to improve visibility and clarity. Appendix 5 provides a series of typical layout drawings and examples of how these improvements will be implemented.

Changes to Posted Speed Limits in 20 School Zones

As part of the review, staff assessed speeds and signage for 32 schools based on the updated policy and procedure. Findings indicate the need for changes to the posted speed limits in 20 school zones, including:

- 10 locations where fluctuating speed limits will be converted to constant speed limits.

Of these, one (1) location that otherwise would not meet the criteria for lowered limits is recommended for exemption rather than applying the new standard retroactively.

- Seven (7) locations where the current constant speed limit will be reduced by 10 km/hr.

Of these, one (1) location that otherwise would not meet the new criteria for lowered limits is recommended for exemption rather than applying the new standard retroactively.

- Two (2) locations where fluctuating flashing speed limits will be converted to fluctuating signed speed limits.

These locations would otherwise not meet the criteria for lowered limits but are recommended for exemption rather than applying the new standard retroactively.

- One (1) location where an existing school zone will be removed as the school was recently relocated.

Staff recommend that Council approve exemptions for the four (4) locations referenced above, recognizing the existing speed reductions already in place and reflecting the surrounding road environment. Moving forward, staff will use the updated policy and procedure to establish speed limits and school zones. Current and future treatments for all locations can be found in Appendix 4 of this report.

Niagara Student Transportation Service and Local Area Municipalities

Consultation with staff from the Niagara Student Transportation Service (NSTS) and Niagara's Local Area Municipalities helped inform the policy update.

As part of the review, proposed changes were discussed with staff from local area municipalities and the NSTS as the liaison for school boards. NSTS encouraged lower speed limits be considered wherever possible, to promote safer walking environments and lowered reliance on student busing. Discussions with local area municipal staff focused on opportunities for additional traffic calming measures but did not result in changes to recommendations.

Improvements to begin in Spring of 2025

Pending Council approval, the planned improvements are expected to begin in Spring 2025 and be completed over the course of two years.

The first phase, starting in Spring 2025, will involve reducing speeds and updating signage in 15 school zones. Signage in the remaining 10 priority areas will be updated in 2026, with a review of schools not located in CSZs be considered for 2027 and beyond.

Alternatives Reviewed

Reducing speed limits in all school zones by 10 km/h, generally to 40 km/h, was not recommended. A blanket approach to setting speed limits would not account for the variations in the surrounding road environment.

Maintaining time-based speed limit changes, such as using static signs from 7 a.m. to 5 p.m. or flashers, is not recommended. This approach contributes to 'sign clutter' and driver confusion, which have been central to recent complaints. Additionally, traffic monitoring in Niagara shows that flashers have a limited effect on reducing speeds (an average decrease of -3.4 km/h), compared to ASE, which leads to a more significant reduction (-11.4 km/h) at locations where both measures were implemented.

Implementing traffic calming measures that alter the vertical profile of the road, such as speed humps or raised crosswalks, is not recommended. These measures are not suitable for regional roads (i.e., arterial roads) due to several factors, including safety risks at higher operating speeds, impacts on winter maintenance (e.g., snow plows), and potential delays in emergency services response times. This approach aligns with practices across the GTA and Golden Horseshoe region.

Relationship to Council Strategic Priorities

The enhancement of school zone signage and update to the speed limit policy are components of the Vision Zero Road Safety initiative which is an identified action under the 'Equitable Region' strategic focus area. The Equitable Region focus is to "provide opportunities for a safe and inclusive Niagara by listening and responding to our community needs and planning for future growth".

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Appendices

Appendix 1	Draft Speed Limit Policy
Appendix 2	Draft Speed Limit Review Procedure (Information Only)
Appendix 3	School Area and Speed Limit Reduction Criteria
Appendix 4	School Zones and Speed Limit Reductions Summary
Appendix 5	School Zone Enhanced Signage and Traffic Calming Measures
Appendix 6	Other Pertinent Reports