

Subject: Vision Zero Road Safety Strategic Plan

Report to: Public Works Committee

Report date: Tuesday, April 8, 2025

Recommendations

1. That Regional Council **APPROVE** the Vision Zero Road Safety Strategic Plan (the Road Safety Plan) attached as Appendix 1 to Report PW 16-2025; and
2. That an amendment to the 2025 Operating Budget **BE APPROVED** by Regional Council at its meeting on April 24, 2025, subject to the provision of required public notice in advance in accordance with the Niagara Region's Public Notice Policy C-RC-005, to seek approval for a one-time transfer of \$1,498,348.93 from the Vision Zero Road Safety Program Reserve to the Road Safety operating budget, in order to fund works to implement the Road Safety Plan including as outlined in Appendix 2 to Report PW 16-2025.

Key Facts

- This report seeks Council approval for the Road Safety Plan, which aims to reduce and eventually eliminate injuries and fatalities on the Regional road network.
- Between eight and nine fatal collisions occur each year on Regional roads. Data indicates a recent increase in the number of injury collisions year over year.
- The Road Safety Plan identifies the most common factors involved in collisions in Niagara and outlines actions to reduce their frequency and severity.
- A three-pronged data-driven Action Plan identifies high-collision locations and will recommend countermeasures to reduce collisions. Pending Council approval, countermeasure implementation will begin in Spring 2025 and progress will be monitored through key performance indicators (KPIs).
- This report recommends that an amendment to the 2025 Operating Budget be approved by Regional Council at its meeting on April 24, 2025. The amendment seeks to transfer \$1,498,349 from the Vision Zero Road Safety Program Reserve into the Road Safety operating budget to fund activities outlined in the Road Safety Plan. The transfer will have no impact on the 2025 general tax levy.
- Going forward, transfers from the Vision Zero Road Safety Program Reserve will take place through the regular budget process. This amendment is necessary

because 2024 marked the first year in which net revenues were available from automated enforcement, however, the amount of available funds was unknown at the time staff were preparing the 2025 budget.

Financial Considerations

Financial Considerations of the Road Safety Plan

This section provides an estimate of costs for implementing the recommendations of the Road Safety Plan, which outlines a two-year workplan.

The total estimated cost of road safety initiatives recommended by the Road Safety Plan is \$5,610,864. This sum represents a combination of operating and capital investments that provide for the following:

- Road safety reviews of planned roads projects and high collision areas.
- Construction of countermeasures in high collision areas identified through reviews.
- Implementation of Region-wide countermeasure programs (e.g. speed bollards/traffic calming).

Details of the action plan identified for 2025 (cost of \$3,248,349) and for 2026 (cost of \$2,362,515) can be found in Appendix 2 to Report PW 16-2025.

2025 road safety initiatives will be funded from:

- Previously approved capital funding of \$1,750,000 through Project 20001939 (Road Safety Strategic Plan) to support initiatives such as safety review implementation and the purchase of traffic calming equipment.
- The recommended transfer of \$1,498,349 from the Vision Zero Road Safety Program Reserve to the 2025 Vision Zero Road Safety Programs operating budget within Transportation Services to support initiatives such as the conduct of new safety reviews, a sightline review study, and education campaigns.

2026 road safety funding will be proposed as follows:

- A 2026 capital budget request in the amount of \$1,500,000 to fund construction of specific countermeasures resulting from In-Service Road Safety Reviews completed this year.

- A 2026 operating budget request in the amount of approximately \$862,515 funded from the Vision Zero Road Safety Program Reserve to support roadside safety reviews and continued education campaigns.

Transfer Required from Vision Zero Road Safety Reserve

A one-time transfer of \$1,498,349 from the Vision Zero Road Safety Program Reserve is recommended to fund the 2025 road safety initiatives. This transfer will have no impact on the 2025 general tax levy.

The amount in the Vision Zero Road Safety Program Reserve of \$1,498,349 equates to the Region's share of 2024 net revenues from automated enforcement. The proposed use of these funds aligns with the Niagara Region Courts Inter-Municipal Agreement, which mandates that net revenues from automated enforcement be reinvested into road safety programs.

As 2024 is the first year to see net revenues from automated enforcement, the timing did not align to include these funds in the 2025 Operating Budget. As a result, a one-time budget amendment is required.

In order to transfer \$1,498,349 from the Vision Zero Road Safety Program Reserve to the 2025 Vision Zero Road Safety Programs operating budget within Transportation Services, an amendment to the previously adopted 2025 Operating Budget is required.

Future budgets will include the forecasted net revenues from automated enforcement, eliminating the need for further budget amendments related to the Vision Zero Road Safety Program Reserve.

As per Budget Control By-Law No. 2017-63, "Budget Amendment" means a change to the Operating or Capital Budget that results in an increase to expenses funded by Reserves. Budget amendments require Council's approval and require notice to be provided in accordance with Niagara Region's Public Notice Policy C-RC-005. With this amendment being recommended for approval by Regional Council at its meeting on April 24, 2025, it allows Region staff appropriate time to ensure the 10-day public notice requirement is met prior to that meeting.

Analysis

Road Safety Plan Aims to Improve Safety on Regional Roads

The Road Safety Plan (Appendix 1) serves as the roadmap to reduce and eventually eliminate injuries and fatalities on Regional Roads. It aligns with the Vision Zero initiative, a global framework adopted by cities and regions to improve road safety.

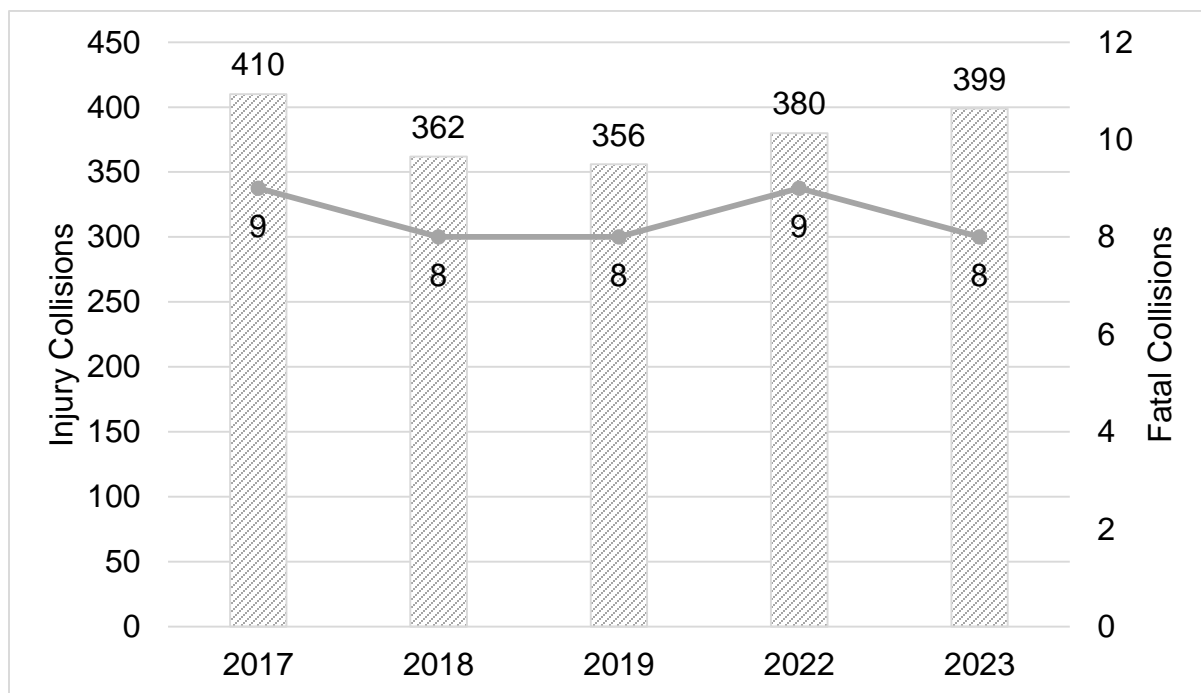
Recent Increase in Injury Collisions

Between eight and nine fatal collisions occur each year on Regional roads. Data indicates a recent increase in the number of injury collisions year over year.

Analysis of injury and fatal collision data identified key trends. After a decline from 2017 to 2019, injury collisions have increased in recent years, while fatal collisions have remained consistent (see Figure 1). The increase has been primarily driven by a rise in collisions involving intersections, distracted driving, and collisions occurring on rural roads.

This pattern, with a decrease in collisions in the late 2010s followed by an increase in the early 2020s, is consistent with trends observed in similar jurisdictions across Ontario.

Figure 1 – Regional Injury and Fatal Collisions (2017-2019, 2022-2023)



Collisions from 2020 and 2021 were not included due to impacts from the COVID-19 pandemic.

These trends underscore the need for a targeted road safety plan to reduce and eventually eliminate injuries and fatalities and enhance the safety of the regional road network.

Common Factors in Collisions

The Road Safety Plan identifies the most common factors involved in collisions in Niagara and outlines countermeasures to reduce their frequency and severity.

More than half of all serious collisions in Niagara are linked to one of two main factors:

- Intersections

Includes locations with traffic signals, stop signs, as well as uncontrolled intersections. Most serious collisions at intersections are related to turning movements and angle collisions, with rear-end collisions being the second most common.

- **Aggressive and Distracted Driving**

Includes behaviors such as failing to properly yield the right-of-way, excessive speeding, and tailgating.

Five additional factors contribute to the most common causes of collisions: Vulnerable Road Users, Young Drivers, Rural Roads, Commercial Vehicles, and Impaired Driving.

The Road Safety Plan identifies countermeasures across these seven areas to reduce collision frequency and severity. Examples include engineering solutions to improve road design, enhanced enforcement of traffic laws, and educational campaigns aimed at raising awareness and changing driver behavior.

Action Plan Recommends Countermeasures

A three-pronged data-driven action plan identifies high-collision locations and will recommend countermeasures (actions) to reduce collisions.

The action plan establishes a structured framework for prioritizing road safety countermeasures through three categories of projects. This data-driven approach ensures that road safety efforts are targeted, transparent, and focused on the highest-impact opportunities for improvement.

Action 1: Incorporate Road Safety in Capital Projects

- Planned road reconstruction projects are prioritized as they provide the best opportunities for meaningful safety improvements. Many of these projects are already located in Niagara's highest-collision areas.
- Road Safety Audits will be conducted for all major road reconstruction projects to incorporate safety best practices in project design. The audits are formal, independent peer reviews aimed at identifying recommended safety improvements.

Action 2: Directly Target High-Collision Areas

- A spatial analysis process, known as Network Screening, will identify locations with the greatest potential for safety improvements. In-Service Road Safety Reviews will be conducted beginning with five priority locations in 2025. Safety reviews evaluate current road safety performance, identify hazards, and recommend countermeasures.

- Recommendations from the previous year's safety reviews will be implemented annually.

Action 3: Network-Wide Countermeasure Programs

- Programs, such as speed display boards and other traffic calming measures, will be deployed based on quantitative criteria to prioritize the best locations for placement.
- A series of education campaigns will be developed to address each emphasis area.

Implementation Begins Spring 2025

Staff have developed an implementation plan for countermeasures using the framework outlined above. These planned actions are detailed in Appendix 2.

An inter-agency Road Safety Working Group will coordinate on the selection and implementation of countermeasures. This group includes key partners such as local municipalities, NRPS, Public Health, and Communications. It builds on the technical advisory committee consulted during the development of the Road Safety Plan.

Monitoring Progress

Progress will be monitored through key performance indicators (KPIs). The Road Safety Plan identifies two KPIs to measure progress in reducing serious collisions on the regional road network:

- Total Fatal and Injury Collisions per 100,000 Residents
- Total Collisions per 100,000 Residents

Where applicable, individual countermeasures will also be evaluated using performance measures specific to their implementation.

Alternatives Reviewed

Do not adopt the Road Safety Plan (Not Recommended).

This is not recommended as the Road Safety Plan outlines actions necessary to reduce the number of fatal and injury collisions on Regional roads.

Relationship to Council Strategic Priorities

The Vision Zero Road Safety initiative 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". The goal of the Road Safety Plan is to improve road safety, and protect the lives of all those that live, work and travel in Niagara.

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Appendices

Appendix 1	Vision Zero Road Safety Strategic Plan
Appendix 2	Action Plan
Appendix 3	Other Pertinent Reports