
Subject: Vision Zero Road Safety Program

Report to: Public Works Committee

Report date: Tuesday, November 5, 2019

Recommendations

1. That Regional Staff **BE AUTHORIZED** to implement initiatives under the Vision Zero Road Safety Program; including Automated Speed Enforcement (ASE), Red Light Cameras (RLCs), and Community Safety Zones; subject to successful negotiations with the LAMs with respect to the Niagara Region Courts Intermunicipal Agreement
2. That Regional Staff **BE AUTHORIZED** to initiate discussions with the Local Area Municipalities (LAMs) and amend the Niagara Region Courts Intermunicipal Agreement related to the Vision Zero Road Safety Program; and **DIRECTED** to report back to Council on the outcome of those discussions.
3. That the Vision Zero Road Safety Program **BE REFERRED** for consideration as part of the 2020 Budget Process.

Key Facts

- The purpose of the report is to seek Regional Council approval to adopt the Vision Zero Road Safety Program that strives to eliminate traffic fatalities and serious injuries on Niagara regional roads; while increasing safe, healthy, equitable mobility for all road users. An upcoming Niagara Road Safety Annual Report from 2013 – 2018 will be forthcoming in Q1 2020 which supports the need for the Vision Zero Road Safety Program.
- For many years, Niagara Regional Staff have been dealing with concerns raised by residents regarding speeding on Regional roads. Speeding is a primary crash factor and a leading road safety problem, often contributing to fatal crashes and serving as an aggravating factor in most crashes.
- A review of Niagara Region's collision data to-date shows that the total number of collisions are continuously increasing on Niagara regional roads. On average, collisions are increasing by 9 –10% per year.
- Vision Zero is a multi-national road traffic safety project that aims to achieve a road network with no fatalities or serious injuries involving road traffic.

- The implementation of the Vision Zero Road Safety Program will impact Regional Transportation, Business Licensing and Court Services Operating Budgets, which have been estimated at a gross cost of approximately \$5 – \$5.8 million per year dependant upon timing and duration of implementation. The costs are conservatively estimated to be fully recovered from fine infraction revenue, however this is dependant upon the ability of Niagara Region to recover its costs which would require an amendment to the Niagara Region Courts Intermunicipal Agreement net revenue sharing formula which is currently based on a 50/50 sharing between the Region and the LAMs. Therefore, negotiations with the LAMs are required.

Financial Considerations

Infractions issued under the Vision Zero Road Safety Program will be processed through Niagara Region Provincial Offences Court which is administered by Court Services. Under the current revenue sharing arrangement prescribed by the Niagara Region Courts Intermunicipal Agreement between the Region and the 12 local area municipalities (LAMs), 50% of net revenues are retained by Niagara Region and 50% of net revenues are shared with the LAMs.

Subject to Council approval, Staff will engage the LAMs to review the Niagara Region Courts Intermunicipal Agreement as it pertains to revenues from the Vision Zero Road Safety Program to ensure the program is fiscally sustainable to the Region. Currently, the revenue sharing formula provided in the Agreement would result in a negative cash flow unless significant increases in the number of tickets issued above the breakeven point noted below are realized.

Staff will report back to Committee/Council after consultation with the LAMs on the Niagara Region Courts Intermunicipal Agreement to ensure the program has long term financial sustainability to Niagara Region. It should be noted that the Vision Zero Road Safety Program will not proceed without an agreed upon formula that provides a positive cash flow to Niagara Region. It would be staff's recommendation that all infraction revenue in excess of all operating costs (Regional and Court Services) be to the benefit of the Region for potential reinvestment in the program, including consideration for local/municipal program elements.

Costs associated with administering the Vision Zero Road Safety Program will be incurred by other Regional departments in addition to Court Services. To obtain an annual break even (cost neutral) point before Intermunicipal cost sharing is considered, the following number of tickets will need to be issued under the program in the next three years:

Table 1 – Break-even Ticket Issuance

	2020	2021	2022
Number of Tickets Issued	31,000	32,500	27,000

This assumes a partial year operation in 2020 of the Vision Zero Road Safety Program (RLCs - six (6) months and ASE - nine (9) months). Subsequent years assume a full year operation of both RLCs and ASE. The field studies conducted in Q3 2019 indicated a number of speeding infractions within School Zones on Regional Roads in excess of 50,000 in support of a net positive cash flow for the Vision Zero Road Safety Program.

Transportation and Business Licensing Costs

Costs associated with administering the Vision Zero Road Safety Program include: equipment, ticket processing (Joint Processing Centre), MTO charges, consulting, staffing (2 FTEs) and administration estimated at approximately \$2.3 million per year. The anticipated cost for the partial 2020 year of operation of the program for Transportation and Business Licensing is \$1.7 million.

Court Services Costs

Costs associated with court administration, including processing tickets, prosecution, adjudication, and collection services associated with the Vision Zero Road Safety Program include: additional staffing (12 FTEs), call in (per diem) prosecutors, ticket processing charges, victim fine surcharges, and adjudication costs estimated at approximately \$2.7 – \$3.5 million per year. The anticipated cost of the partial 2020 year of operation of the program for Court Services is \$1.8 million. Note that the Court Services anticipated costs include a victim fine surcharge, which is a mandatory cost imposed for every ticket issued that is payable to the Province. This expense is anticipated to be between \$1 – \$1.4 million annualized.

The anticipated gross operating expenditure costs of the program from 2020 – 2022 are noted in Table 2 below (including victim fine surcharges). As mentioned previously, 2020 assumes six months of operation for RLCs and nine months of operation for ASE.

Table 2 – Three Year Operating Expense Budget Impacts (in millions)

	2020	2021	2022
Transportation and business licensing	\$ 1.7	\$ 2.3	\$ 2.3
Niagara Region Court Services	1.8	2.7	3.5
Total	\$ 3.5	\$ 5.0	\$ 5.8

Business cases will be included for consideration as part of the 2020 Operating Budget deliberations for Court Services as well as the Transportation and Business Licensing Divisions of Niagara Region on the Vision Zero Road Safety Program initiative.

Once the Region generates a positive cash flow from the Vision Zero Road Safety Program, the intent is to reinvest the Region’s surplus, if any, in the expansion of the

program and/or investment in the infrastructure deficit subject to the annual budget decision of council.

Analysis

With the implementation of the objectives outlined in the approved the Transportation Master Plan (TMP) and in support of Council's 2019 – 2022 Strategic Priorities, this report presents Transportation Services' implementation strategy for the Vision Zero Road Safety Program through the recommendation of a set of extensive, proactive and targeted initiatives, informed by data and aimed at eliminating serious injury and fatalities on Regional roads.

On average, approximately 2,650 collisions are reported annually on Niagara Regional roads between years 2013 – 2018, resulting in approximately 405 collisions annually categorized in fatal (personal and/or property damage). These injuries and deaths affect not only the victims and their families, but also impact healthcare, community, and social services. Many of these collisions can be prevented through strategic and effective road safety initiatives (Vision Zero Road Safety Program) that include: infrastructure planning and design changes; enforcement; and public education.

However, no loss of life as a result of traffic collisions is acceptable under the Vision Zero philosophy. The Vision Zero philosophy is a significant departure from the traditional approach to road safety. This transformative change will take several years to fully establish itself.

The Vision Zero Road Safety Program will draw solutions from the 5Es of engineering, enforcement, education, engagement and evaluation. The plan will focus the solutions on six (6) emphasis areas: pedestrians, cyclists, motorcyclists, school-aged children, older adults and aggressive and distracted driving. The Vision Zero Road Safety Program will focus on a set of the most effective actions including:

Speed management strategy: Higher speeds contribute to higher risk of serious injuries and fatalities by reducing driver reaction time, increasing the vehicle stopping distance, and inflicting more severe blunt force trauma on victims upon impact. The proposed speed management strategy is comprised of six integrated speed reduction tools aimed at mitigating risks associated with high speeds. These include: road design improvements, police partnership, deployment of speed signs, speed limit reductions, automated speed enforcement and public education.

Road design improvements: Geometric modifications to the design of the road are known to be one of the most effective ways of achieving the intended target speed for the context and improving road user behaviour. There will be a greater focus on this safety countermeasure, including integration of safety improvements, road realignments and enhanced road illumination.

Proactively addressing high-risk mid-block crossings: Mid-block crossings are prevalent with pedestrian collisions. Recommendations will be brought forward in staff reports on new traffic signals, pedestrian crossovers (PXOs) and enhanced signage.

Proactively addressing collisions at signalized intersection: angle collisions are high in Niagara Region. The implementation of Red Light Camera as a default safety feature will mitigate traffic fatalities and serious injuries.

Education and engagement plan: The overarching goals of the education and engagement component of the Vision Zero Road Safety Program are to inform and consult with the public, building support for infrastructure improvements, and instituting a shift in social norms and road user behaviour.

Next steps to initiate the work of the Vision Zero Road Safety Program will include: an analysis of statistic data collected on Regional Roads (collision data, speeds, volumes, classifications of vehicles); Regional Council priorities; and input from key road safety stakeholders and partner agencies including, local municipalities, Niagara Region Public Health, Niagara Regional Police, District School Board of Niagara (DSBN), Niagara Catholic District School Board (NCDSB) and Niagara Student Transportation Services.

Strategic Priorities

Alignment to Niagara Region Transportation Master Plan and Council's 2019-2022 Strategic Priorities

Niagara Region is undergoing significant change and by 2041 will have grown and evolved on economic, demographic, social and technological fronts. This recommendation will support growth and enhance Niagara globally by promoting an integrated network of roads and highways for the safe movement of people and goods.

Also, this is a step forward to adopting a Vision Zero Road Safety Plan in Niagara Region; helping to reduce aggressive driving and speeding in areas within Niagara Region that have higher concentrations of school children and families.

Other Pertinent Reports

PW 35-2019 Automated Speed Enforcement – Safer School Zones Act

PW 36-2019 Red Light Camera

PW 38-2019 Community Safety Zones

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Appendices

None.