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**Subject:** Vision Zero: Automated Speed Enforcement Preliminary Results and Next Steps

**Report to:** Public Works Committee

**Report date:** Tuesday, April 9, 2024

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## Recommendations

1. That Regional Council **AUTHORIZE** the expansion of the Automated Speed Enforcement (ASE) program by 4 cameras annually in 2025 and 2026, subject to confirmation of available funding from fine collections, to improve road safety in the 12 Community Safety Zones (CSZs) previously approved by PW 34-2023 and in approximately 12 additional CSZs on local road networks.
2. That the Commissioner of Public Works **BE AUTHORIZED** to enter an extension of the agreement with Redflex Traffic Systems (Canada) Limited, in a form satisfactory to the Director of Legal and Court Services, for an extended term of approximately 60 months from date of execution, in the amount of an upset limit of \$1,863,835 (including 13% HST).

## Key Facts

- The purpose of this report is to provide preliminary results related to changes in driver behaviour following the launch of the ASE program, and to propose further development of the program.
- ASE enforcement began in September 2023. Preliminary results indicate that driver speed in the enforcement locations was reduced by an average of 7 km/hr (13% reduction). The number of speeding violations captured per hour decreased from 181 in September to 60 in December (67% reduction).
- These reductions demonstrate a change in driver behaviour that helps improve road safety in CSZs when ASE is present.
- Staff recommend expanding the ASE program by 4 cameras annually in each of 2025 and 2026 to further enhance road safety.
- Future ASE rotation will include 12 additional Regional CSZs beginning in early 2025 as well as approximately 12 CSZs on local road networks in mid-2025 to early 2026.
- A working group of Regional and Local Area Municipal (LAM) staff will be established to explore advancing the ASE initiative as a future shared-service with

the objective of enhancing road safety across Niagara, ensuring consistent standards are in place for ASE use, and making effective use of existing resources.

## **Financial Considerations**

The initial ASE program included four cameras on Regional roads rotated between 13 CSZ locations. The ASE program was designed to operate as cost neutral over the course of a full budget year, with program costs offset by fines. Should collected fines exceed operational program costs, the Niagara Region Courts Intermunicipal Agreement (NRCIMA) requires that excess funds be divided equally between the Region and the Local Area Municipalities and directly re-invested into road safety initiatives by all parties.

Preliminary financial results from 2023 and early 2024 show that the program has operated as cost neutral to date. By the end of 2024, staff estimate collected fines will outpace operational costs. Staff are recommending expansion of the program in 2025 to add an additional four cameras at an incremental cost of approximately \$250,000 using the Region's 50% share. Collected fines will continue to offset operational costs. Should Council approve this course of action, the budget for the program expansion will be considered as part of the 2025 budget process.

Furthermore, Niagara Region currently has a Joint Processing Center (JPC) processing allocation of 45,000 annual ASE tickets. Subject to approval of this report, staff will request an increased allotment to 60,000 annual tickets beginning in 2025. Should this be approved by the JPC, staff recommend the program be expanded once again in 2026 to an additional four (4) cameras, also at an incremental cost of approximately \$250,000 using the Region's 50% share.

Redflex Traffic Systems (Canada) Limited is the Region's camera provider. The Region holds a contract with Redflex to supply, install and operate ASE technology. The upset limit of \$1,863,835 (including 13% HST) determined for the contract extension with Redflex is for 60 months starting July 15, 2024 and includes the additional cameras for program expansion 2025 and 2026 which will be added only if fine collections can support them in future years, as follows:

	Current Program – 4 Cameras – 60 months	2025 Expansion – 4 Cameras – 54 months	2026 Expansion – 4 Cameras – 42 months	Total Contract
Contract cost (including non- recoverable HST)	574,738	594,687	509,016	1,678,441
Annual Cost	114,948	132,152	145,433	392,533
Annual Budget	114,948	To be funded from fines	To be funded from fines	

## Analysis

The implementation of ASE is an important component of Niagara Region's Vision Zero initiative, striving to reduce and eventually eliminate traffic fatalities and serious injuries on the Regional road network. Niagara Region averages 117 fatal or injury collisions per year related to aggressive driving.

Niagara Region first adopted Vision Zero in 2019. In September 2022 Regional Council authorized the use of four (4) ASE cameras which are being rotated through the 13 Community Safety Zones in place at time of approval (PW 34-2022). The ASE program began enforcement in September 2023. A listing of pertinent reports are attached in Appendix 3.

### *How Automated Speed Enforcement Works*

ASE cameras capture digital images and record the speed of drivers in Community Safety Zones. This information is provided to a municipally run Joint Processing Centre (JPC) where Provincial Offence Officers confirm a speeding violation has occurred and issue tickets to those in violation of the posted speed limit. Niagara Provincial Offences Court is responsible for managing those charges including prosecution of disputed charges and collection of fines.

The camera vendor is responsible for the installation and maintenance of the ASE camera units, including managing instances of vandalism. Costs paid to the vendor are based on a flat daily rate for each camera as well as a one-time installation cost when a pole-mounted camera is used. The vendor does not receive additional money based on increased ticket volumes.

### *ASE Program Preliminary Results*

Information on driver speeds was collected before, during, and after the operation of ASE. Complete information regarding ticket outcomes, such as dispute rates and associated impacts on fine recovery, is not yet available. Preliminary results indicate a change in driver behavior and improved road safety when ASE is present. Key findings include:

- Driver speed was reduced by an average of 7 km/hr (13% reduction) after the use of ASE. More information can be found in Appendix 1.
- Speeding violations per hour decreased from 181 in September 2023 to 60 in December 2023 (-67% reduction).
- Improvements in driver speed were maintained after ASE cameras were rotated to new locations.
- 15,668 tickets were issued to speeding drivers between September and December 2023 with an average fine of \$124.57. Approximately 63% of fines have been collected to by the courts to date.

### *Recommended Direction*

**Program Expansion** – This report recommends the expansion of the ASE program by 4 cameras in 2025 and another four cameras 2026. These new cameras will be rotated between the 12 Regional CSZs previously approved in report PW 34-2023 that currently do not have ASE cameras (see Appendix 2) beginning in early 2025. Rotation through 12 CSZs on local road networks is anticipated for mid-2025 to early 2026, with specific locations to be determined by local municipal staff in coordination with the Automated Enforcement Working Group referred to below.

Program expansion is proposed to be funded through, and will be subject to, the Region's share of net 2024 and 2025 funding from fines.

**Vision Zero Road Safety Strategic Plan (RSSP)** – the RSSP represents the Region’s strategic roadmap for achieving Vision Zero objectives. The RSSP is being finalized and will be reported to Council in late Q2 or early Q3 2024. ASE will form one individual component of the overall RSSP and will be identified as a program under the ‘Distracted and Aggressive Driving’ emphasis area. The RSSP will outline how any collected fines that exceed ASE operational program costs be re-invested in road safety in the coming years.

**Automated Enforcement Working Group** – Region and Local Area Municipal staff will jointly establish a working group to explore advancing automated enforcement as a shared-service. The initial priorities for the working group will include defining roles, developing site selection criteria, evaluating ASE and RLC early program results, and investigating the feasibility of transitioning to an Administrative Penalty System (APS) and/or development of a Niagara-based ticket processing centre.

**Vendor Agreement Extension** – Report PW 2-2020 previously authorized the Commissioner of Public Works to enter both the original 5-year term (2019-2024) as well as the 5-year extension (2024-2029) of the vendor agreement. In the intervening years, the international trade treaties governing co-operative procurements have been updated. Renewed authority for the extension as a sole-source procurement is required to ensure that Niagara Region’s continued participation fully aligns with the updated purchasing provisions set out in Niagara Region’s Purchasing Bylaw.

### *On-Road Signage*

Five of the 13 CSZs in Niagara previously used ‘flashing beacons’ to lower speed limits to 40 km/hr prior to the use of ASE. The removal of ‘flashing beacons’ is required as ASE is implemented as cameras do not capture that the beacons are active and that the lower speed limit was legally in place at the time of an infraction. Removing ‘flashing beacons’ is consistent with practice in other municipalities.

‘Flashing beacons’ were replaced with signs that display the months and times of the lower speed limit before implementation (7 a.m. – 5 p.m., Monday-Friday, September-June).

Starting in January 2024, required on-road signage was enhanced using a ‘new’ starburst sign to highlight to drivers changes in school zone signage and the presence of the ASE camera. This starburst will be used in future camera rotations. Staff will

explore options to further enhance on-road signage within the requirements of MTO and JPC regulations and agreements.

## **Alternatives Reviewed**

Alternatives to the recommendations of this report follow:

1. Do not authorize the expansion of the ASE program or defer consideration of expansion into the future. This is not recommended as early results demonstrate safety benefits associated with the implementation of ASE in Community Safety Zones.
2. Do not support the expansion of the ASE program onto local roads as a future shared service between the Region and LAMs. This approach is not recommended as it would forego opportunities for efficiency where LAMs can leverage existing contracts and could lead to inconsistent automated enforcement models being implemented across the Region.

## **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".

Advancing opportunities for shared services is an identified action under the 'Effective Region' strategic focus area. The Effective Region focus is to "transform service delivery in a way that is innovative, collaborative and fiscally-responsible".

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**Appendices**

Appendix 1	Automated Speed Enforcement: Preliminary Results
Appendix 2	Previously Approved Regional Community Safety Zones
Appendix 3	Other Pertinent Reports

**PW 11-2024 Appendix 1 – Automated Speed Enforcement Preliminary Results**

Regional Road	Name	Speed Limit Before (km/h)	Speed Limit During (km/h)	Speed Limit After (km/h)	Average Speed Before ASE	Average Speed During ASE	Average Speed Change (Before-During)	Average Speed After ASE	Average Speed Change (During-After)
RR20	Lundy's Lane	Flat 50	Flat 50	Flat 50	53	51	-2	49	-2
RR87	Main Street	Flashing 40	Flat 50	Signed 40	51	47	-4	40	-7
RR14	Station Street	Flat 50	Flat 50	Flat 50	56	52	-4	51	-1
RR54	Rice Road	Flat 40	Flat 40	Flat 40	54	41	-13	44	+3
RR124	Central Avenue	Flat 40	Flat 40		49	46	-3		
RR81	Main Street East	Flashing 40	Signed 40		56	42	-14		
RR24	Victoria Avenue	Flashing 40	Signed 40		55	48	-7		
RR55	Niagara Stone Road	Flashing 40	Signed 40		57	46	-11		
						<b>Average</b>	<b>-7</b>		

Speed Limit Terms:

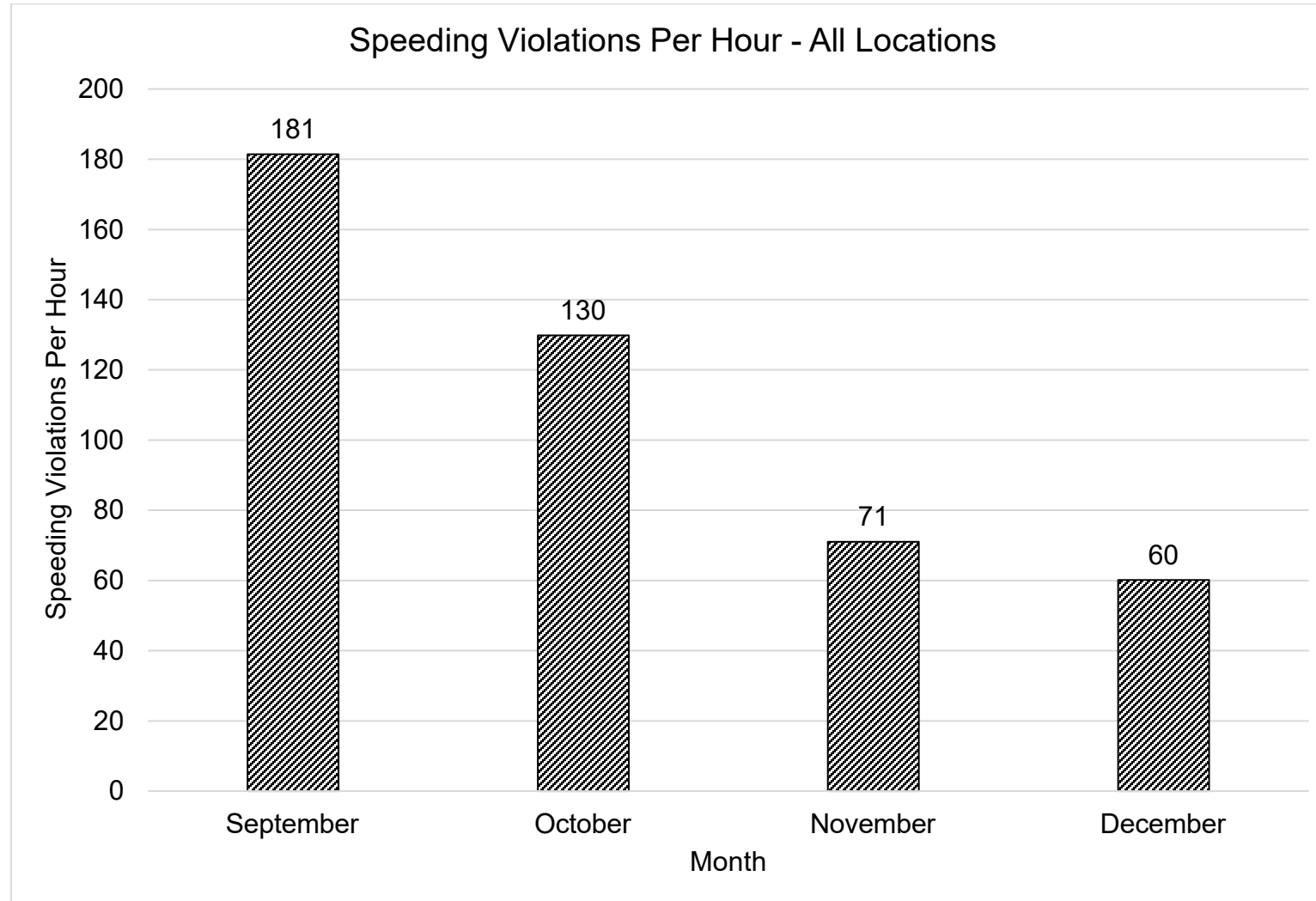
Flat Consistent speed limit at all times of day

Flashing Use of 'flashing beacons' to lower the speed limit from 50 km/hr to 40 km/hr

Signed Use of signs displaying times of day (7 a.m – 5 p.m) to lower the speed limit from 50 km/hr to 40 km/hr



**Speeding Violations**



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## **PW 11-2024 Appendix 2 - Previously Approved Regional Community Safety Zones**

The following Community Safety Zones were previously approved by report PW34-2023 and are proposed as locations for ASE program expansion.

- Fort Erie - Garrison Road - RR3 - Rose Hill Road to Spears Road
- Grimsby – Main Street East – RR 81 – Lawrence Avenue to Durham Road
- Lincoln - Mountain Street - RR18 - Edelheim Road to Beam Street
- Niagara Falls - Lundy's Lane - RR20 - Brookfield Avenue to Main Street
- Niagara Falls - McLeod Road - RR49 - Oakwood Drive to Drummond Road
- Pelham - Highway 20 East - RR20 - Rice Road to Pinecrest Court
- Port Colborne - Killaly Street West - RR5 - West Side Road to King Street
- St. Catharines - Glendale Avenue - RR89 - Pelham Road to Caroline Street
- St. Catharines - Lakeshore Road - RR87 - Bradmon Drive to Read Road
- St. Catharines - Niagara Street - RR48 - Carlton Street to Scott Street
- Thorold - Collier Road South - RR56 - Highway 58 Ramp to St. David's Road
- Welland - Prince Charles Drive North - RR54 - Lacy Avenue to First Avenue

## PW 11-2024 Appendix 3

### Other Pertinent Reports

#### [PW 34-2023 - Community Safety Zones](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=3ef66bf7-5d0c-4241-91d1-7b600bbd87fa&Agenda=Agenda&lang=English&Item=14&Tab=attachments>

#### [PW 34-2022 - Implementation of Automated Speed Enforcement](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=a9972d29-13ff-4e8f-9318-aeae86a746cc&Agenda=Agenda&lang=English&Item=25&Tab=attachments>

#### [PW 49-2021 -Designation of a Community Safety Zone on Regional Road 20 Lundy's Lane in the City of Niagara Falls](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=d58a4bbf-5b58-4a61-9439-46a1d0e3c407&Agenda=Merged&lang=English&Item=14&Tab=attachments>

#### [PW 4-2020 - Vision Zero Road Safety Program: Designation of Community Safety Zones around Schools](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=04564006-29bd-4fd8-a3fa-4da4f79638dd&Agenda=Merged&lang=English&Item=13&Tab=attachments>

#### [PW 2-2020 - Implementation of Automated Speed Enforcement](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=04564006-29bd-4fd8-a3fa-4da4f79638dd&Agenda=Merged&lang=English&Item=12&Tab=attachments>

#### [PW 64-2019 - Vision Zero Road Safety Program](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=277bcf05-71ce-4d77-867e-5e839b3f87be&Agenda=Agenda&lang=English&Item=13&Tab=attachments>

#### [PW 38-2019 - Community Safety Zones](#)

<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=5a991a11-6ca0-4f35-b766-37bd8f2814fd&Agenda=Agenda&lang=English&Item=15&Tab=attachments>