

**To:** Warden and Members of County Council

**From:** Director of Public Works

## Community Safety Zone Criteria and Warrant Process

### RECOMMENDATION

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1. That Oxford County Council authorize the proposed Community Safety Zone criteria and warrant process to assess a possible future County-wide implementation plan as outlined in Report No. PW 2021-25, entitled “Community Safety Zone Criteria and Warrant Process”.

### REPORT HIGHLIGHTS

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- The purpose of this report is to seek County Council authorization of the proposed Community Safety Zone (CSZ) criteria and warrant process developed by staff for future County-wide implementation.
- CSZs, combined with the use of Automated Speed Enforcement (ASE), has been identified as a potential traffic-calming measure on County roads that extend through communities and settlement areas as part of previous speed management and road safety undertakings.
- CSZ designations are intended for parts of the roadway where public safety is of a special concern and allow for increased monetary penalties for speeding infractions within these zones.
- Documented evidence from traffic data analysis will support prioritization and implementation of CSZs and will further inform site selection criteria for the potential implementation of a County-wide ASE program.

### Implementation Points

If approved by County Council, the proposed County-wide CSZ criteria and warrant process will be utilized to further evaluate designated areas for potential implementation of CSZs as part of future budgets and operational work plans.

The findings and recommendations from this CSZ evaluation will be presented to County Council for further consideration and enactment of applicable by-law amendments.

## Financial Impact

The recommendation contained in this report will not have an impact on the 2021 Budget.

Financial and staffing/third party resources to undertake CSZ evaluation will be considered as part of the 2022 Operational budget submission. Implementation plans that will result from the evaluation will be considered in future business plans and budgets.







## Communications

The proposed CSZ criteria and warrant process was reviewed with Area Municipality staff on May 6, 2021 and there were no concerns with the proposed approach identified.

Report No. PW 2021-25 will be circulated to Area Municipalities, Ontario Provincial Police and Woodstock Police Services, local school boards and hospitals.

CSZ evaluation and potential implementation will be undertaken in consultation with Area Municipalities and Police. Public Works will work with the Communications team to develop a public education campaign and appropriate communications for each municipality as CSZs are implemented.

## Strategic Plan (2020-2022)

					
<b>WORKS WELL TOGETHER</b>	<b>WELL CONNECTED</b>	<b>SHAPES THE FUTURE</b>	<b>INFORMS &amp; ENGAGES</b>	<b>PERFORMS &amp; DELIVERS</b>	<b>POSITIVE IMPACT</b>
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## DISCUSSION

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### Background

As part of County-wide speed management, traffic calming and road safety initiatives, CSZ implementation across the County road network combined with the use of ASE has been identified as potential traffic calming and road safety measures for future implementation.

The Ontario Highway Traffic Act (HTA) permits the use of ASE in school zones and CSZs and gives authority to municipal Councils to designate a part of a highway as a CSZ where public safety is of a special concern. The HTA also allows for increased monetary penalties for speeding infractions within CSZs in order to promote deterrence of speeding behaviour.

CSZs must be designated by a municipal by-law in order to be enforceable and must identify the specific zone limits and time periods (times/days/months) when increased penalties are in effect. The designation of the entire length of a particular roadway (versus shorter defined road segments) is generally not an intended application of the CSZ concept. Furthermore, public safety risks must be evident for the part of the roadway segment selected as a CSZ.

Historically, the County has implemented CSZ designations on Oxford Road 119 through Kintore and on Oxford Road 12 through Sweaburg. These two locations were designated as CSZs in May 2000 for a one year trial period through By-law No. 4015-2000. There are no records of any data collection during the one-year trial period and/or subsequent reports; however, the CSZ regulatory signage has remained in place. No further CSZ designations have been implemented on County roads since that time.

## **Comments**

To support the designation of CSZs across the County road network, staff has prepared CSZ guideline criteria and a warrant process for Council's authorization. The intent of adopting County-wide CSZ implementation criteria is to identify areas, supported by documented evidence, where public safety is of a special concern.

Implementation of CSZs in areas of special concern and where safety risks are evident through traffic data analysis will also inform site selection criteria for development of a potential County-wide ASE program.

## **Community Safety Zone (CSZ) Criteria and Warrant Process**

The following proposed CSZ criteria and warrant process is based on two major components and was developed from similar CSZ municipal policies adopted by the Region of York and the Region of Durham.

The first component identifies areas for special consideration (Warrant 1) and the second component considers road safety (Warrant 2). Only areas within the County road network that meet *both* warrants will be considered for CSZ designation.

### **Warrant 1: Designated Areas of Special Consideration**

CSZs must only be implemented at locations of special concern and that are obvious to the road user. CSZs shall only be considered at the following locations where posted speeds are 70km/hr or less and be a minimum length of 500 m:

- Elementary or Secondary Schools (including those with identified official school zones),
- Community centres, recreation areas, playgrounds, hospitals,
- High pedestrian traffic locations (100 pedestrians/hr in any 8 hour period), and/or
- Senior centres/residences.

Designated areas for special consideration (Warrant 1) must be satisfied before continuing onto the second component (Warrant 2).

**Warrant 2: Road Safety**

The road safety warrant is comprised of a collision component and a risk component, either of which must be satisfied to meet Warrant 2.

- Collision Component:
  - Collision ratio < 1:900 (collisions/year : Average Annual Daily Traffic) averaged over 3 recent years

OR

- Road Safety Component:
  - Road safety risk factor will be determined based on the following scoring matrix shown in Table 1.
  - Designated areas of special concern identified in Warrant 1 with a safety risk scoring of 15 or greater will meet the road safety component of Warrant 2.

**Table 1: Road Safety Scoring Matrix**

<b>Risk Factor</b>	<b>High (Score 3)</b>	<b>Moderate (Score 2)</b>	<b>Low (Score 1)</b>	<b>Score</b>
Operating speed (km/h) (85 <sup>th</sup> percentile)	70 or >	60	50 or <	
Average Annual Daily Traffic (AADT)	Over 20,000	10,000 to 20,000	Under 10,000	
Number of travel lanes	4 or >	3	2	
Length of sidewalks	<25%	25% to 75%	>75%	
Truck volume	>5 %	3-5 %	<3 %	
Pedestrians crossing in any 8 hours	>100	50 to 100	< 50	
Intersection and entrances per kilometre	> 10	4 to 10	< 4	
<b>TOTAL SCORE</b>				

## CSZ Implementation Guidelines

In addition to identifying parts of roadways where public safety is of special concern, other guidelines for CSZ implementation are provided in the Ontario Traffic Manual (OTM) to ensure regulatory compliance and effective enforcement.

The limits (length) of a CSZ is not a legislative requirement; however, a zone that is too long can result in enforcement not being appropriately targeted. Additionally, if the zone is too short, it may not be clear whether a driver has committed an offence within the zone. The zone length will also determine the location and quantity of regulatory signage required to delineate CSZ limits.

A minimum zone length of 500 m has been specified in the above-proposed CSZ criteria and warrant process. It is anticipated that in most cases, maximum CSZ limits will range from 1.5 to 2.0 km based on typical lengths of reduced speed zone limits in many of the rural communities.

The number and locations of CSZs will be critical to successful enforcement. Policing resources and verification that enforcement can be undertaken safely without undue risk to either motorists or Officers must be considered and can be validated through ongoing collaboration with Police Services. Traditional enforcement activities can potentially be supported with the permitted use of ASE in CSZs.

## Automated Speed Enforcement (ASE)

County Council was provided with a status update of the ASE program in Ontario in Report No. [PW 2020-19](#) following the passing of the ASE regulatory framework in December 2019.

At that time, development of a County-wide ASE program was deferred due to some uncertainty with respect to legislative policy, viability and cost benefit of ASE. Staff expected to gain a better understanding of the effectiveness and feasibility of ASE following the Parliamentary 180-day review of ASE implementation by the City of Toronto and City of Ottawa who had initiated the program.

The Parliamentary 180-day review of the ASE program that was anticipated for August 2020 was subsequently postponed indefinitely as result of the COVID-19 pandemic. However, some additional municipalities (City of London, Region of Waterloo, City of Hamilton) have since proceeded with initiation of municipal ASE programs.

The 2021 Public Works Business Plan and Budget includes a goal and objective for the development of a potential County-wide ASE program for Council's consideration with the intent of evaluating the viability and cost benefit of ASE implementation and potential inclusion in the 2022 Operations budget.

Establishing CSZs will be an integral component of developing a County-wide ASE program by prioritizing areas of special safety concern that can be effectively enforced utilizing ASE. As a result, ASE program development is expected to extend into 2022 for potential implementation in 2023.

## CSZ Evaluation and Implementation

If endorsed by County Council, the CSZ criteria and warrant process will first be applied by staff across the County road network to areas for special consideration (Warrant 1).

Warrant 2 analyses will then be prioritized based on areas within the County road network that have previously undergone a speed management and road safety review and where ASE/CSZ has been identified as a potential traffic-calming measure for future implementation. As noted, the road safety analyses as part of the second warrant will involve review of collision and other traffic data (pedestrian and traffic volume, operating speeds, road characteristics). Much of the traffic data is readily available; however, additional data collection may be required in specific locations.

Areas that were previously identified as potential ASE locations (Report No. [PW 2019-37](#)) will also be evaluated using the proposed CSZ criteria and warrant process. Designated areas of special consideration (Warrant 1) will be further evaluated using the road safety component of the warrant process (Warrant 2).

It is recognized that CSZ evaluation will be a significant undertaking and is expected to be part of the future work plans in conjunction with the potential development of a County-wide ASE program. Required financial and staffing/third party resources for this work will be considered as part of 2022 budget preparations.

The findings and recommendations of the CSZ evaluation will be presented to Council for further consideration and subsequent by-law amendments.

## **Conclusions**

CSZ designations are expected to promote traffic calming and act as a speed deterrent to drivers when faced with the possibility of increased monetary penalties for speeding infractions within these zones. Utilization of ASE and traditional enforcement will also be key to the effectiveness of CSZs.

Adoption of County-wide CSZ criteria will provide documented evidence of areas of a special safety concern and will serve as a consistent approach that follows engineering best practices and guidelines to ensure regulatory compliance.

## **SIGNATURES**

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Original signed by

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Original signed by

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