



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 8.1
Transportation Standing Committee
December 13, 2018
February 25, 2019
March 28, 2019

TO: Chair and Members of Transportation Standing Committee

Original Signed

SUBMITTED BY:

Brad Anguish, P.Eng., Director, Transportation & Public Works

Original Signed

Jacques Dubé, Chief Administrative Officer

DATE: October 12, 2018

SUBJECT: Feasibility of Red Light Cameras and Electronic Speed Detection Devices

INFORMATION REPORT

ORIGIN

Item 13.1 of the March 26, 2018 meeting of the Transportation Standing Committee; MOVED by Councillor Cleary, seconded by Deputy Mayor Mason, THAT the Transportation Standing Committee request a staff report on the feasibility, benefits, and authority to install red light cameras and electronic speed detection devices.

LEGISLATIVE AUTHORITY

Section 4(g) of the Terms of Reference for the Transportation Standing Committee provides that the duties and responsibilities of the Committee include “providing input and review of road and pedestrian safety”.

BACKGROUND

Image-capturing enforcement tools such as red light cameras and electronic speed detection devices are intended to supplement police resources and positively alter driver behaviors.

Red light cameras (RLCs) capture an image of a vehicle that has entered a signalized intersection on a red light. Vehicles that are within the intersection when the light turns red, do not trigger the RLC. When it is determined that an offence has occurred, an infraction notice is mailed to the registered owner of the vehicle.

RLCs are intended to reduce the frequency of red light running violations, the frequency of collisions, and collision severity. Angle collisions are considered the most severe type of collision and RLCs can significantly reduce the frequency of these collision types. During the initial implementation stage there is a risk of an increase in rear-end collisions; however, these are considered a lower severity. As motorists become accustomed to the RLCs, the number of rear-end collisions should decrease and could also extend the benefits to other intersections that do not have RLCs. Overall, RLCs can result in a net safety improvement.

Electronic speed detection devices, also known as photo radar, measure the speed of passing vehicles and triggers the camera to take a picture of any vehicle travelling above the speed limit. Like RLCs, a notice of infraction is sent to the registered owner of the vehicle.

Photo radar technology has been effective in increasing compliance with posted speed limits and reducing the risk of fatal and serious injury collisions. It can offer a deterrent effect beyond that of a reasonable police presence on a roadway. Photo radar is more commonly used on major roadways.

DISCUSSION

Legislative Framework

Red light cameras and electronic speed detection devices have previously been reviewed for use in Halifax. While HRM is not prohibited from implementing such technology, Provincial legislation is currently inadequate for the Municipality to use the images for the purpose of issuing tickets under the Act.

Under the current *Motor Vehicle Act (MVA)*, a motorist is required to obey all traffic signals as well as operate their motor vehicle within the posted speed limits. Section 93(2)(e) specifically requires a motorist to stop at a red light. Sections 102 through 106A require motorists to obey the posted speed limits. Tickets for violating these provisions can only be issued to the *person actually driving* the vehicle – not the *registered owner* of the vehicle.

In 2007, the Nova Scotia Legislature passed Bill No.7, *An Act to Amend Chapter 293 of the Revised Statutes, 1989, the Motor Vehicle Act*, SNS 2007 c 45, (the “*MVA Amendments*”). Sections 14 through 16 of the *MVA Amendments* specifically authorize the use of red light cameras and electronic speed detection devices and provide that the images arising therefrom can be used as evidence for the purpose of issuing tickets to and prosecuting the *registered owner* of the offending vehicle rather than the *driver* (based on the number plate of the vehicle captured by the image). It is a defence if the owner can satisfy the court that he/she was not driving the vehicle and that no other person was driving the vehicle with the owner’s consent. These sections of the *MVA Amendments* have; however, never been proclaimed in force and are therefore inoperative.

In the Spring of 2018, the Province announced that it would be developing a new *Traffic Safety Act (TSA)* to replace the existing *Motor Vehicle Act*. During the stakeholder engagement process, HRM staff requested (amongst other things) that the new *TSA* include provisions similar to the *MVA Amendments* to facilitate the effective use of red light cameras and electronic speed detection devices. On October 11, 2018, the Province of Nova Scotia passed the new *TSA*, but it also has not yet been proclaimed into

force. Sections 311-312 of the *TSA* are substantially similar to sections 14 to 16 of the 2007 *MVA Amendments*. Section 292 of the *TSA* provides that where fine revenues from convictions based on evidence from electronic enforcement systems exceeds the costs of acquiring and using the systems the Municipality is required to use the surplus fine revenue solely for the purpose of enhancing road safety. It is unknown how long it will be before the Province proclaims the *TSA* into effect. Until such time as the law becomes effective, there is little value in implementing red light cameras and electronic speed detection devices in the Municipality.

Road Safety Review

HRM's Strategic Road Safety Framework has included intersections and aggressive driving (speeding) as 2 of its 7 emphasis areas. Staff will be conducting an in-depth review of fatal and injury collisions to identify top priority locations requiring safety improvements. If red light running and/or speeding are identified as probable causes to these collisions, image-capturing enforcement could be considered as a potential countermeasure (once the legislation allows for it).

There are various countermeasures aside from enforcement that could be used to address red light running and/or speeding issues. Low cost intersection improvements could include signal timing optimization and increased signal conspicuity (signal head placement, backboards, etc.). Speed controlling measures could include physical changes to the road geometry by way of infrastructure upgrades, pavement markings, signage, etc. Some of these options may provide a more cost-effective solution in comparison to the implementation of an image-capturing enforcement system. A statistical and feasibility analysis will be conducted at each location to determine the most appropriate countermeasure.

Feasibility Analysis

On the basis that the above legislation changes and a road safety review identifies a benefit to the use of an image-capturing enforcement program, staff would need to prepare a detailed feasibility analysis prior to implementation. This would include:

- A review of the financial implications associated with the program;
- Identification of necessary staff resources, including facility requirements;
- The process for program operation, including legal aspects.

For reference, the City of London estimated a total 5-year cost of \$3,800,000 to operate RLCs at 10 intersections throughout the city (not including expected fine revenue). In 2017, London was one of nine municipalities participating in a Red Light Camera Working Committee which utilizes a central processing facility to review all RLC infractions in Ontario. Their funding model also includes costs for a separate operational contract, vehicle license information, court administration, city resources, and education campaigns. Although some of the above components could be similar to a program in HRM, the implementation of a new processing centre could add significant cost.

FINANCIAL IMPLICATIONS

There are no new financial implications associated with this report.

COMMUNITY ENGAGEMENT

Community engagement was not undertaken as part of this report. If this technology is implemented in the future, a key element to the success of the program will be a public education campaign.

ATTACHMENTS

No attachments included.

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Sam Trask, P.Eng., Transportation & Road Safety Engineer 902.490.5525
