

Red Light Camera Program – Supplemental Report

Background:

The report entitled "Red Light Camera Program" was presented at the June 19, 2018 Finance and Administration Committee meeting. At the meeting, the committee asked staff to seek out additional information and report back at the next committee meeting. This report provides the additional information that was requested.

Emergency Services

There were several questions raised at the committee meeting regarding the potential of emergency vehicles receiving red light camera tickets for driving through a red light. The Ontario Highway Traffic Act ("HTA") does not provide an exception to emergency vehicles approaching a red light at a traffic signal and it requires that all emergency vehicles come to a complete stop prior to entering the intersection. Specifically, Section 144 of the HTA states:

(18) Every driver approaching a traffic control signal showing a circular red indication and facing the indication shall stop his or her vehicle and shall not proceed until a green indication is shown.

(20) Despite subsection (18), a driver of an emergency vehicle, after stopping the vehicle, may proceed without a green indication being shown if it is safe to do so.

City of Greater Sudbury Emergency Services staff is required to obey the HTA and come to a complete stop at a red light prior to proceeding through an intersection. This legislated requirement reduces the risk of collision while on route to an emergency call.

It should be noted, the probability of an emergency vehicle being required to stop at a traffic signal unnecessarily is reduced by the way traffic signals are programmed within the City. By default, traffic signals remain green on the main street if no vehicles or pedestrians waiting to cross the main street are detected and red light camera systems are typically deployed on a main street approach.

The committee also asked how many tickets are being issued to emergency services vehicles throughout the province. Staff was unable to find any municipal reports providing this statistic; however, there were several news articles which provided some information. A summary of the articles is provided below:

Toronto

An October 2015 CTV news article states that over an 18 month period (January 2014 to July 2015) there were 61 instances where Toronto police vehicles were captured going through a red light when they were not on an emergency call. The article does not state the total number of instances where a police vehicle was captured going through a red light and captured by a red light camera system. In 2014, the City of Toronto issued 45,394 red light camera tickets. If the 61 instances over an 18 month period are factored to consider a 12 month period instead, it would be expected that 41 tickets were issued to City of Toronto police vehicles during 2014. This represents 0.09% of all tickets issued.

City of Hamilton/Halton Region

A December 2015 news article in The Hamilton Spectator states that during 2015, 57 red light camera tickets (41 in the City of Hamilton, 16 in the Region of Halton) were issued to emergency services vehicles. A May 2012 news article in The Hamilton Spectator stated that in 2011, 49 red light camera tickets were issued to City of Hamilton emergency services vehicles. A May 2014 CBC News Article indicates that the City of Hamilton issued 15,569 red light camera tickets in 2013. Staff was unable to find any statistics on the total number of tickets issued in the Region of Halton.

If the number of tickets issued to City of Hamilton emergency vehicles is averaged per year and it is assumed the total number of tickets remained consistent, the 45 red light camera tickets issued per year to emergency services vehicles would represent 0.3% of the total annual red light camera tickets in the City of Hamilton.

If this percentage were applied to the assumptions made in the Red Light Camera Program report (1 conviction/site/day = 2,190 total convictions per year), it would be expected that 7 tickets per year would be issued to emergency services vehicles.

Ottawa

A May 2009 news article in the Ottawa Citizen states that more than 60 red light camera tickets were issued to emergency services vehicles in the past year. A June 2016 new article in the Ottawa Sun states that 17,658 red light camera tickets were issued in 2015. If the number of tickets issued to emergency services vehicles remained consistent from 2009 to 2015, it would represent 0.4% of the total annual red light camera tickets in the City of Ottawa.

If this percentage were applied to the assumptions made in the Red Light Camera Program report (1 conviction/site/day = 2,190 total convictions per year), it would be expected that 9 tickets per year would be issued to emergency services vehicles.

Staff was unable to find emergency vehicle statistics for the remaining jurisdictions with red light camera systems.

During the review of these articles, it was noted that many of the jurisdictions had internal policies for how red light camera tickets issued to municipally owned vehicles would be reviewed. If the red light camera program were adopted in the City of Greater Sudbury, similar internal policies would need to be developed as well as training materials on the potential consequences of running red lights.

Collision Statistics

It was asked at the committee meeting how the City of Greater Sudbury compares to other municipalities in terms of the number and severity of angle collisions. The Province of Ontario issues the Ontario Road Safety Annual Report. This annual report amalgamates collision data from across the province and provides collision statistics and trends. However, this report does not provide information on the types of collisions (ex. angle or rear end collisions). In order to compile the statistics, staff reviewed published statistics of Ontario municipalities. The table below summarizes the average annual number of angle collisions at all locations throughout each municipality as well as the percentage of the overall collisions that angle type collisions represent.

Municipality	Year Range	Annual Average		
		Total Collisions	Angle Collisions	Percentage
Greater Sudbury	2012-2016	2,465	320	13%
Ottawa	2014-2016	14,648	2,031	14%
Region of Waterloo	2012-2016	6,136	552	9%
Region of Peel	2010-2012	6,324	485	8%
York	2013-2015	N/A	N/A	12%

While the City of Greater Sudbury on an annual basis has less total angle collisions, the percentage of angle collisions is second highest when compared to the other four municipalities.

The committee also asked what impact the red light camera program has had on collision rates.

The statistics show that following the installation of red light cameras the reductions of right angle collisions are as follows:

City of Toronto – 60% reduction

City of Ottawa – 50% reduction

York Region – 70% reduction

Region of Waterloo – 27% reduction, 60% reduction in all turning collisions, 23% increase in rear end collisions

The City of Greater Sudbury had 40 angle type collisions between 2012 and 2016 at the three signalized intersections which have been recommended to have a red light camera system installed. Of these 40 collisions, 10 resulted in injury and the remaining 30 resulted in property only damage. Using an average 60% reduction in the right angle collisions based on the experiences of other municipalities after installing red light cameras, it would be expected that the City would have experienced 6 fewer injury collisions and 12 fewer property only damage collisions during the same 5 year period at these three intersections.

Funeral Processions

Concerns were raised by the committee about the impact the red light camera program may have on funeral processions. Following the committee meeting, staff held discussions with Gerry Lougheed Jr. of Lougheed Funeral Homes and Dave Laplante of Co-Operative Funeral Homes. Both Mr. Lougheed and Mr. Laplante are supportive of the red light camera program and the positive benefits it will provide to the community. In terms of the operational impact it may have on the funeral homes, they each stated that while it has been the community practice to allow funeral processions to travel through red lights, it is their current practice to advise families to obey all of the rules of the road while in a funeral procession and to not drive through red lights.

Staff also had discussions with the City of Hamilton. In Hamilton, funeral processions are ticketed through the red light camera program, however it is their practice to suspend the red light camera ticket if the person can provide proof that they were part of a funeral procession (ex. provide an obituary or any other evidence that they have attended the funeral). It must be noted that the practice in Hamilton is to ticket all owners of vehicles crossing on a red light, which means that all people (include those who receive tickets as part of a funeral procession) appear in Provincial Offences Court to address their matters albeit by providing evidence in order to suspend their tickets.

Exception is made for people from out-of-town, who reach out to the prosecutors ahead of the proceeding with their evidence of attending the funeral and the prosecutors address these matters in absentia by seeking suspensions.

Should the red light camera program be implemented in the City of Greater Sudbury, each of the funeral homes has volunteered to help the City verify whether or not the ticket issued is related to a funeral procession. The details of this process would be finalized with the funeral homes as the red light camera program is developed.

Red Light Camera Ticket Rate

The committee also asked what impact traffic volumes have on the frequency of red light camera tickets issued. The rate in which red light camera tickets are issued at signalized intersections is difficult to calculate. Due to environmental issues such as traffic volumes, perceived wait times, and geometric considerations, compliance at each signalized intersection can vary greatly. A 2015 report by the City of Toronto detailed the number of red light camera tickets issued at over 75 intersections. Staff reviewed the total traffic volumes over the 8 peak hours of the day at these intersections and found they ranged from 7,506 to 39,450 vehicles. However, in 2014 these same intersections issued between 8 and 1,944 red light camera tickets. Staff found that the number of tickets issued doesn't always correlate to the intersections with the higher traffic volumes. For example, in the City of Toronto, Albion Road at Silverstone Drive had 1,448 red light camera tickets issued in 2014 with a peak 8 hour traffic volume of 12,828 vehicles. Meanwhile, Sheppard Avenue at Wilson Heights Boulevard had 127 red light camera tickets issued in 2014 yet it has a peak 8 hour traffic volume of 32,661 vehicles.

The three proposed intersections in Sudbury have a peak 8 hour volume between 14,000 and 17,000 vehicles. While these traffic volumes are similar to many of the intersections in the City of Toronto, it is hard to determine whether the rate of tickets issued will fall on the high or low side of what Toronto is experiencing. The primary focus of red light camera installations is to increase intersection safety by reducing the number of vehicles which fail to stop at red lights. To this point, 'Table 4' of AECOM's report (Attachment 1) lists the 55 intersections within the City of Greater Sudbury where a red light camera installation would provide the greatest potential for safety change which is based on collision history, severity of the collisions and traffic volumes.

Miscellaneous Questions

The committee also had a series of questions which did not fall into a specific category. These questions and responses are presented below.

Would it be possible to provide the AECOM report to the committee?

The AECOM report is provided as Attachment 1 to this report.

How will it be possible to see a police officer controlling an intersection with a red light camera? What does a red light camera ticket look like?

A sample red light camera offence notice is provided in Attachment 2.

What percentage of vehicles caught on a red light camera system have unreadable license plates?

Staff was unable to find a statistic which stated what percentage of vehicles caught on a red light camera system had an unreadable license plate.

Will a red light camera ticket impact the vehicle owner's insurance rates?

The research staff completed suggests that a red light camera ticket should not result in increased insurance rates since no demerit points are issued. However, it is recommended that individuals contact their own insurance provider to verify if a red light camera ticket will impact their rates.

References:

Toronto police vehicles caught going through red lights while not on emergency calls, CTV News Toronto, Accessed online, October 26, 2015:

<https://toronto.ctvnews.ca/toronto-police-vehicles-caught-going-through-red-lights-while-not-on-emergency-calls-1.2628528>

Red Light Cameras – Status Update and Phase 3 Contract Award (Request for Proposal No. 9148-15-5000 - 2017 to 2021), City of Toronto, Access online, August 31, 2015:

<https://www.toronto.ca/legdocs/mmis/2015/pw/bgrd/backgroundfile-83498.pdf>

Emergency vehicles and red light camera tickets a contentious issue, The Hamilton Spectator, Accessed online, December 17, 2015: <https://www.thespec.com/news-story/6199770-emergency-vehicles-and-red-light-camera-tickets-a-contentious-issue/>

Sometimes we all pay when a city vehicle runs a red light, The Hamilton Spectator, Accessed online, May 10, 2012: <https://www.thespec.com/news-story/2115094-sometimes-we-all-pay-when-a-city-vehicle-runs-a-red-light/>

Number of Hamilton drivers ticketed for running red lights doubles, CBC News, Accessed online, May 21, 2014:

<https://www.cbc.ca/news/canada/hamilton/headlines/number-of-hamilton-drivers-ticketed-for-running-red-lights-doubles-1.2649514>

Emergency services see red over traffic tickets, Ottawa Citizen, Accessed online, May 25, 2009: <https://www.pressreader.com/canada/ottawa-citizen/20090525/281530811983770>

4,900 caught red-handed but no ticket, Ottawa Sun, Accessed online, June 14, 2016: <http://ottawasun.com/2016/06/14/4900-caught-red-handed-but-no-ticket/wcm/6fb42e5a-c2e1-4185-befa-01f40e98227b>

City of Ottawa 2016 Tabular Transportation Collision Data, Accessed online: <http://data.ottawa.ca/dataset/collisiondata2016>

City of Ottawa 2015 Tabular Transportation Collision Data, Accessed online: <http://data.ottawa.ca/dataset/collisiondata2015>

City of Ottawa 2014 Tabular Transportation Collision Data, Accessed online: <http://data.ottawa.ca/dataset/collisiondata2014>

Region of Waterloo Annual Collision Report 2016, Accessed online: <https://www.regionofwaterloo.ca/en/living-here/resources/Roads-and-Traffic/Collision-Reporting/Annual-Collision-Report-2016.pdf>

Region of Peel Traffic and Road Safety Performance Report 2014, Accessed online: <https://www.peelregion.ca/council/agendas/2015/2015-01-22-rc-agenda.pdf>

Region of York 2016 Annual Traffic Safety Report, Accessed online: <https://www.york.ca/wps/wcm/connect/yorkpublic/18f6fe47-02ea-4e3b-9fde-445e2bb9e6b4/2016TrafficSafetyReport.pdf?MOD=AJPERES&CACHEID=18f6fe47-02ea-4e3b-9fde-445e2bb9e6b4>

Red Light Cameras Statistics, City of Toronto, Website, Accessed Online: <https://www.toronto.ca/services-payments/streets-parking-transportation/traffic-management/pavement-markings/red-light-cameras/>

City of Ottawa, "City increases the number of intersections with red light cameras", May 22, 2018, Accessed Online: <https://ottawa.ca/en/news/city-increases-number-intersections-red-light-cameras>

Red Light Cameras , York Region, Accessed Online: http://www.york.ca/wps/portal/yorkhome/transportation/yr/traffic/redlightcameras!/ut/p/a1/jZDBbslwDlafaLXJgOaadBC0DFptB0luKHRJGaltUlhWiadfmHbdmG-Wvt - bJAgQI7q01kVnR9Vf-vI8liyl5LzDVb1nBbIsGYVySmumkUCDgnAX4rhvXz1jwUkblutBXIWsxtwo_EgYIDGuBZE0B-9s11s1aCDusAe5PdEQuZLPiuwQl5TLNd5s3imflYkvwNsyA_wx01J2vb-

[IP6zf0pa5n29szdRNp4eaRIN2uigQ9b5SwQxTVNmvbe9zlo_wHkQ11eOrhneDI94Mqvl/dl5/d5/L2dBISEvZ0FBIS9nQSEh/#.WzEtivsrK71](https://www.regionofwaterloo.ca/en/living-here/red-light-cameras.aspx)

Red Light Cameras, Region of Waterloo, Accessed Online:

<https://www.regionofwaterloo.ca/en/living-here/red-light-cameras.aspx>