

# Report to Infrastructure, Investment and Development Services Committee

**TO:** INFRASTRUCTURE, INVESTMENT AND DEVELOPMENT SERVICES COMMITTEE

**PREPARED BY AND KEY CONTACT:** S. ROSE, MANAGER OF TRAFFIC AND PARKING SERVICES, T. HANRAHAN, SUPERVISOR OF TRAFFIC AND PARKING SERVICES AND R. BATES, MANAGER OF COURT SERVICES

**SUBMITTED BY:** D. FRIARY, DIRECTOR OF ROADS, PARKS AND FLEET  
D. MCALPINE, DIRECTOR OF LEGISLATIVE AND COURT SERVICES/CITY CLERK

**GENERAL MANAGER APPROVAL:** R. FORWARD, MBA, M.SC., P. ENG., OF INFRASTRUCTURE AND GROWTH MANAGEMENT  
P. ELLIOTT-SPENCER, MBA, CPA, CMA, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES

**CHIEF ADMINISTRATIVE OFFICER APPROVAL:** C. LADD, CHIEF ADMINISTRATIVE OFFICER

**DATE:** JUNE 8, 2016

**SUBJECT:** RED SIGNAL/LIGHT CAMERA INVESTIGATION

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## **RECOMMENDED MOTION**

1. That the Report to the Infrastructure, Investment and Development Services Committee dated June 8, 2016 concerning the Red Signal Camera Investigation be received for information purposes and no further action be taken with respect to the implementation of Red Signal/Light Cameras.

## **PURPOSE & BACKGROUND**

### Purpose

2. The purpose of this report is to provide information regarding the process associated with implementing a red signal/light camera program. The report also provides information regarding the types of collisions typically associated with red signal/light running, the costs associated with implementing a program and the information obtained from other jurisdictions. The report does not recommend the implementation of Red Signal/Light Cameras in the City of Barrie at this time.

### Background

3. In 2015, Council adopted motion 15-G-202 regarding an Investigation of the Feasibility of Implementing Red Signal/light cameras, as follows:

#### **“INVESTIGATION OF THE FEASIBILITY OF IMPLEMENTING RED LIGHT CAMERAS**

That staff in the Roads, Parks and Fleet Department in consultation with representatives of the Barrie Police Service and Legislative and Court Services Department report to General Committee on the feasibility of implementing red light cameras effective January 2017.”

# Report to Infrastructure, Investment and Development Services Committee

## **What is the goal of a Red Signal/Light Camera Program?**

4. The goal of Red Signal/Light Camera Enforcement Programs is to improve motorist and pedestrian safety by reducing the number of right angle collisions at intersections. A Red Signal/Light Camera program targets motorists who run red signals in an attempt to reduce the incidence of this unsafe behavior, the potential for collisions and the severity of such collisions. Red signal/light cameras are intended to cause people to slow down: motorists know that the camera is there and if they try to go through a red light they'll most likely get photographed. Changing motorist behaviour, reducing collisions and saving lives are the key reasons the cameras are used.
5. Right angle collisions are the type of collision that is typically connected to running a red signal. As collisions involving red signal running typically result in a side impact to a vehicle from the vehicle that ran the red signal which was travelling quickly, they often involve more severe injuries and damage to the vehicles. Depending on the relative number and type of collisions, not every signalized intersection is a suitable candidate for a red signal/light camera.
6. Various reports indicate that red signal/light cameras can reduce the frequency of right angle collisions by as much as 25% at the intersection where a camera is installed. An increase in the number of rear end collisions in the order of 15% has been noted in a number of reports, with the frequency of the rear end collisions more frequently occurring after the initial installation of the cameras. Recent reports have indicated a "halo effect" of a Red Signal/Light Camera Program, where the reduction in right angle collisions is experienced community-wide but only after a period of at least five years.
7. Red signal/light cameras are used to enhance police efforts in preventing motorists from disobeying a red light. The cameras do not replace police officers at intersections. Many countries including Australia, Austria, Belgium, Germany, Israel, the Netherlands, Singapore, South Africa, Switzerland, Taiwan, the United Kingdom and the United States use red signal/light cameras. Cameras are also used in British Columbia, Alberta, Manitoba and Quebec. In Ontario, the Red Signal/Light Camera program includes Halton, Hamilton, Toronto, Ottawa, Peel, Waterloo and York Region.
8. However, it is recommended that all of the engineering alternatives related to the intersection operations should be checked first, as engineering solutions are more immediate and may be simpler and easier to implement than red signal/light cameras, according to "So You're Considering a Red Light Camera Program? Lessons and Insights from Over a Decade of Camera Operation in South and Central Ontario", a paper prepared for presentation at the 2014 Conference of the Transportation Association of Canada.

## **History of Red Signal/Light Cameras in Ontario**

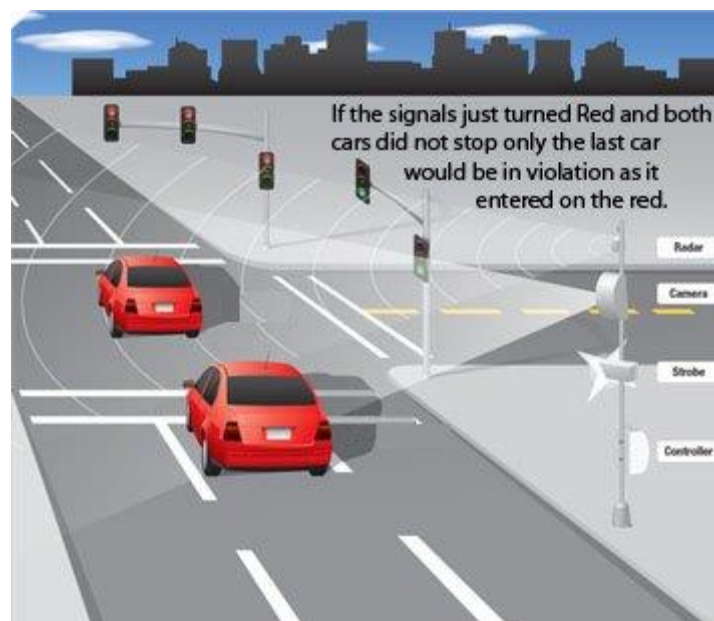
9. In December of 1998, the *Red Light Cameras Pilot Projects Act, 1998*, Bill 102, received Royal Assent. The Act amended the *Highway Traffic Act* enabling six municipalities (City of Ottawa, City of Hamilton, City of Toronto, Regional Municipality of Halton, Regional Municipality of Peel, and the Regional Municipality of Waterloo), for a period of two years, to use evidence obtained from red signal/light cameras to issue violation notices. The intent of the pilot was to conduct a comprehensive statistical evaluation study of the Red Light Cameras Pilot Project to assess the combined benefits that stepped-up police enforcement and red light cameras had on the frequency of red light running.

# Report to Infrastructure, Investment and Development Services Committee

10. An evaluation report with data from before and after the implementation of red light cameras pilot project indicated that the red light cameras contributed to a reduction in all collision types involving personal injuries and fatalities by close to seven per cent at the locations with the cameras while contributing to an over 18% increase in property damage only collisions. The study authors concluded that red light cameras contributed to a decrease in right angle collisions resulting in injuries or fatalities by 25% and an almost 18% in property damage only collisions. Finally, the results indicated that the cameras contributed to an almost five per cent increase in fatal and injury related rear end collisions and close to 50% increase in property damage only rear-end collisions. It should be noted that the locations involved in the studies may have included locations with higher speeds of traffic and any change in collisions was specific to the intersection.
11. In August 2004, the Province passed legislation allowing the six municipalities to operate red light cameras indefinitely. In June 2007, the provincial government amended the Regulations under the *Highway Traffic Act*, to permit designated municipalities to use additional cameras at designated locations.
12. Currently, there are 205 intersections in Ontario with red light cameras (77 in the City of Toronto).

## What is a red light running violation?

13. A red light running violation is when a motorist enters an intersection after the light has turned red. In Ontario, motorists already in an intersection when the signal changes to red (when waiting to turn, for example) or those who enter an intersection while the signal is amber/yellow, are not red light runners. A vehicle must be travelling a minimum of 27 km/hr for a violation to be issued. The following image depicts when a red signal violation would occur



# Report to Infrastructure, Investment and Development Services Committee

## How do the cameras work?

14. A Red Light Camera (RLC) is installed to photograph vehicles that run red lights. The cameras are on 24 hours a day, 7 days a week. They are connected to the traffic light (signal) and to sensors that are installed just before and after the painted white stop line/bar. Each camera operates in a single direction only and covers a maximum of two lanes of traffic.
15. The RLC takes two photographs. The first photo is taken when a vehicle with a red light is about to enter an intersection. The second photograph shows the offending vehicle in the intersection. Both photos show the rear of the offending vehicle only and must clearly show a licence plate in order for a charge to be filed.
16. The system constantly monitors the traffic light (signal), and the camera takes a picture of any vehicle that doesn't stop at the red light. Signage is required to be posted at all locations with RLCs.
17. The cameras photograph only those vehicles entering an intersection after the light has turned red. Motorists who enter during a yellow light and are in the intersection when the light changes won't be photographed. The camera records the:
  - date
  - time of day
  - exact time the car crossed the stop line and the length of time that the red was active
  - vehicle speed
  - license plate

## Who receives the ticket?

18. No matter who was driving the vehicle at the time, the registered licence plate holder receives the ticket.
19. A RLC does not distinguish between motorists. Funeral processions, parades and emergency vehicles (police, fire and ambulance) are not exempt from these charges under the *Highway Traffic Act*. As such, should one of these vehicles proceed through a red light, the registered owner would receive a violation notice.
20. As plate information for out-of-province motorists may not be available, charges may not be able to be filed against these motorists.

## Who supplies the cameras and how are they installed?

21. The camera system supplier used in Ontario is Traffipax. The camera is an industrial 35-mm camera, manufactured particularly for unattended operation in an outdoor environment. The cameras are housed in a ½ metre x ½ metre x ½ metre enclosure and are mounted on a pole, 20 metres in advance of the intersection. They are mounted approximately 3.6 metres above the ground. RLCs are able to record violations in the dark.

# Report to Infrastructure, Investment and Development Services Committee

## **Who processes the photos?**

22. The City of Toronto operates the Joint Municipal Processing Centre, the only RLC violation processing centre in Ontario. Municipalities pay the City of Toronto to process evidence, issue offence notices and prepare court documents.

## **Who has access to the red light camera photos?**

23. Motorists themselves are not observed or recorded through RLCs. RLCs will only photograph a vehicle's rear licence plate. In the event that individuals are inadvertently captured on film, it will not be possible to identify them from the photos included on the tickets.
24. Photos gathered for evidence are used only to verify that an offence has occurred and to record license plate numbers. Provincial Offence Officers at the Joint Municipal Processing Centre retain the photos. If a defendant requests a trial, the Centre must help the Crown Prosecutor by providing the original violation photos and certified plate registration information. These photos, when entered into evidence, become public record.

## **What is the penalty associated with running a red signal/light?**

25. The fine for running a red signal/light detected by a camera system is \$325. Demerit points are not issued with violations detected by the red light cameras.
26. The set fine for running a red light when caught by a police officer is \$325. Failing to stop for a red light where a police officer issues a ticket results in three demerit points.
27. If the fine goes unpaid, the licence plate associated to the offence cannot be renewed.

## **How are violations processed?**

28. All evidence gathered from RLCs is processed as follows
  - Digital photos are downloaded from RLC locations and are sent to a Joint Municipal Processing Centre in Toronto where they are processed
  - Trained officers review every picture to verify vehicle information and ensure that it went through the red light (an offence has occurred);
  - The license plate number must be clearly identifiable and validated from the digital image
  - An Offence Notice Form is completed and mailed to the registered owner of the vehicle (only when it is clear that the vehicle ran a red light)
  - The municipal court system is responsible for trials and appeals
29. The registered license plate holder receives the ticket, whether or not the individual was driving the vehicle at the time.

## **Where do the fines go?**

30. Should the set fine of \$325 be paid, the municipality's court services operation receives the net proceeds associated with \$260 of the total plus a proportionate share of \$5 in court costs. The Province of Ontario collects \$60.00 as a Victim Fine Surcharge.

# Report to Infrastructure, Investment and Development Services Committee

## How is a Red Signal Camera program implemented?

31. The timeframe for implementation of a RLC program is up to 24 months or longer as it is subject to the following steps:
- Receiving initial approval from Council and writing a letter to the Minister of Transportation requesting to participate in the RLC program;
  - Drafting a business case/plan outlining the need for the RLC based on traffic studies conducted to determine site locations and obtaining confirmation from the camera vendor on site suitability;
  - Reporting back to Council and obtaining budgetary approval for funding of the installation, operations and maintenance costs of the cameras and related intersection signage, Joint Processing Centre operating costs and Provincial costs;
  - Notifying the Ministry of Transportation/City of Toronto with the justification for the locations (collision history) and advising of approval by Council of a request to enter into a Processing Agreement as a new RLC Program participant;
  - Obtaining confirmation from the City of Toronto Joint Processing Centre/approval in principle that it is capable of accepting and managing additional RLC violations and determine any resource impacts and obtaining approval from other municipal participants;
  - City of Toronto receiving approval from Toronto City Council to add another municipality to the RLC program;
  - Executing an agreement with the City of Toronto for processing of RLC violations, after it obtains permission from their Committee and Council (and making arrangements to receive MTO data elements to allow the Joint Processing Centre to match photo of licence plate with the correct name and address of the plate owner);
  - Entering into a sole source agreement with the current vendor for RLCs leasing, installation and maintenance and obtaining confirmation from the camera vendor on site suitability;
  - Signing a operational agreement with the Ministry of Transportation agreeing to specific conditions including requirements to install site specific signage, undertake a public information program and monitor the safety effectiveness;
  - MTO making regulatory amendments to Reg. 277/99 under the *Highway Traffic Act* to identify the municipality as a RLC participant and the sites/location codes within the municipality (The City of Toronto will notify MTO on behalf of the municipality (Note: Amendments are only undertaken twice/year in January and July));
  - Notifying the Ministry of the Attorney General to ensure that appropriate access for registering violations into the local court system and necessary preparations (including Justice of the Peace availability) are made for any court cases;
  - Installing cameras by vendor after any specific infrastructure upgrades are completed (induction loop installation/changes, sign and pavement markings);
  - Implementing the public information campaign;
  - Administering and training related to infraction notices processed through the Provincial Offences Act Courts administered by the City of Barrie; and

# Report to Infrastructure, Investment and Development Services Committee

- Addressing on-going operational matters including monitoring safety data, participating as a member of the Working Group and Committees, as well as responding to FOI, public and Council inquiries.

## ANALYSIS

32. When examining the feasibility of implementing of a Red Light Camera Program, a number of questions need to be answered. The following section provides information regarding these matters.

### **Does Barrie have a particularly high occurrence of right angle collisions that often result in injuries or fatalities that may be prevented by a RLC program?**

33. During the period of 2004 to 2015, on average, 2,000 collisions occurred annually in the City of Barrie. Annually on average, 75 of the collisions resulted in the charge of “fail to yield right of way” being laid by a Police Officer at a signalized intersection. This represents 3.75% of the total collisions. “Fail to yield right of way” is the charge most commonly associated with running a red signal. Other reasons for a fail to yield right of way charge include driving through an amber light, improper left or right hand turns, and failure to obey other traffic signals.

34. In 2015, there were a total of 2,582 collisions involving 5,500 individuals. A total of 91 of the collisions (approximately 3% of the collisions) resulted in the charge of “fail to yield right of way” being laid by a Police Officer, a charge. Based on the information provided by Police Officers at the time of the charge, of the 91 collisions, there were 0 fatalities, 0 majority personal injuries, 6 minor personal injuries and 9 minimal personal injuries. In the case of 91 collisions, 16 involved minor or minimal damage to vehicles. The Police Officer’s discretion is used to determine the extent of injury or property damage.

35. Of the 5,500 individuals involved in collisions, the highest categories of charges related to:

- 922 were motorists driving straight ahead;
- 687 while the motorist was stopped;
- 294 while a motorist was slowing down/stopped; and
- 255 while a motorist was turning left.

None of these types of vehicle manoeuvres is associated with red signal/light running.

36. In 2013 and 2014, there were 0 fatalities associated with the charge of “fail to yield right of way”.

37. While collisions are undesirable, based on the historical data, a very small proportion of the collisions are associated with red signal running.

# Report to Infrastructure, Investment and Development Services Committee

## What are the intersections that have the highest number of right angle collisions? Has red signal/light running been observed at these intersections?

38. During the period of January to February, 2016, a study was conducted of 13 intersections to determine whether red signal/light running was occurring. The 13 intersections were chosen by staff based on the collision history, characteristics of the intersection location and traffic patterns.
39. Traffic movements at each intersection were recorded on a single day, through visual observation by City staff from 7:30 am to 8:30 am and 4:30 pm to 5:30 pm. The two hour long periods were deemed to be the most likely for red signal running as they are the peak period for traffic in the City of Barrie. The following chart outlines the results of the study:

RED SIGNAL RUNNING STUDIES				
INTERSECTION	NORTHBOUND	SOUTHBOUND	WESTBOUND	EASTBOUND
	THROUGH	THROUGH	THROUGH	THROUGH
Mapleview Dr. @ Veterans Dr.	1 – PM	3 – AM 3 – PM		3 - AM
Bayfield St. @ Hanmer St.	1 – AM 1 – PM	3 – AM 3 – PM		
Fairview Rd. @ Essa Rd.	3 – AM 3 – PM			1 – PM
Mapleview Dr. @ Yonge St.	1 – AM 3 – PM		2 – AM	
Mapleview Dr. @ Costco	2 – PM		1 – AM 1 – PM	1 – PM
Bayfield Dr. @ Heather St.	3 - AM	2 - PM		
Big Bay Point Rd. @ Yonge St.			1 – PM	1 – AM 2 – PM
Ferndale Dr. @ Livingston St.	2 – AM	2 – PM		
Huron Rd. @ McKay Rd. 5	1 - PM	2 – AM	1 - AM	
Dunlop St. @ Miller Dr.	1 – AM		1 – AM 1 – PM	1 – AM
St Vincent St. @ Hanmer St.	1 – AM			
Dunlop St. @ High St.				1 - PM
Ferndale Dr. @ Operations Centre	NO VEHICLES RECORDED RUNNING RED SIGNAL			

Source: City of Barrie Roads, Parks and Fleet Department, Traffic Services

## What costs are associated with implementing a RLC Program?

40. The contract associated with the current camera vendor for the Red Signal/Light Camera Program expires at the end of 2016. The current participating municipalities have issued and are in the process of awarding a new contract that would begin in 2017. As a result, the information on costs in the report has been based on the current model.



# Report to Infrastructure, Investment and Development Services Committee

41. There are several aspects to the costs associated with a RLC Program, as follows
- The lease arrangement where the current vendor supplies, installs, operates and maintains all camera systems on behalf of participating municipalities;
  - A processing fee based on the number of cameras installed and the proportionate share of the total charges is paid to support the Toronto Joint Processing Centre operations;
  - Fees paid to the Ministry of Transportation to retrieve licence plate holder data;
  - The incremental costs associated with Provincial Offences court administration;
  - Additional City resources associated with operating the RLC Program; and
  - The costs of an education and awareness campaign.
42. Currently, the only option for a lease arrangement is for a five year period, with a minimum of approximately 10 cameras and the fee is paid whether or not a red light camera violation is ever recorded at the site.
43. Based on information from current and proposed RLC Program participants, the operating cost of a Program with 10 cameras (not including staff resources or any site upgrades) is in the range of \$520,000-\$600,000/year.
44. As the contract with the current vendor expires in 2016, there may be changes to the costs and or parameters associated with the program.

## **What additional staff resources would be required to implement and administer a RLC Program?**

45. Each municipality participating is required to provide a technical resource for the RLC Working Group and Steering Committee. According to the Lessons Learned Paper, the following are required from the municipality to start a RLC Program:
- A project manager to oversee all of the activities;
  - A project administrator to deal with the day to day issues of billing, public comment and contract management;
  - Traffic/engineering staff to make decisions about road safety and site selection;
  - A solicitor to deal with a number of contracts;
  - A purchasing representative to manage procurement and comment on contracts;
  - A financial administrator to set up and audit various accounts associated with the program;
  - Representatives of prosecutions and court services to deal with processing of the violation notices, court requests, court administration/proceedings and payments of fines;
  - Media or communications person to prepare the required public information campaign; and
  - A police contact to coordinate activities.

# Report to Infrastructure, Investment and Development Services Committee

46. In order to conduct the required traffic study research and provide the reporting required by the Province on an ongoing basis, staff in Roads, Parks and Fleet believe that a Supervisor and a Red Signal Technician would need to be hired.

## What are the implications on the courts operated by City of Barrie staff?

47. The Provincial Offences courts operated by the City of Barrie would be responsible for receiving the charging documents, inputting the charges into the Integrated Court Operating Network (ICON), receiving requests for trial or other dispute mechanisms, scheduling and administering court proceedings, processing payments of fines, requesting plate denials for non-payment. Prosecutors from the Legal Services Department would be responsible for processing and responding to disclosure requests, conducting resolution meetings, and participating in trials and appeals.
48. The following chart provides statistics related to all of the RLC charges laid in Toronto during 2014 and 2015:

	2014	2015
# of charges laid via RLCs	33,326	30,164
# and % pre-paid (no court action)	9,685 (29%)	10,277 (34.1%)
# and % processed "fail to respond" – no action by defendant	6,032 (18%)	6,279 (20.88%)
# and % settled via early resolution	N/A	5,528 (18.3%)
% exercising walk in guilty plea	2 (0.01%)	0 (0%)
Other (not specifically identified)	833 (2%)	
# and % set for trial	16,774 (50.3%)	8,080 (26.8)
<u>At trial</u>		
# and % plead guilty and found guilty	13,498 (80.4%)	4,632 (57.3%)
Plead not guilty but found guilty	72 (0.4%)	95 (0.12%)
Found guilty by failing to show up for trial	2,728 (8.1%)	1,193 (14.8%)
Withdrawn – court not able to obtain a translator	458 (1.6%)	520 (6.5%)

Source: Toronto Red Light Camera Operations Processing Supervisor

## What fine revenue could be generated to offset costs?

49. Although the collection of fines should not be the rationale for the implementation of a red light camera program, fine revenue may offset a portion of the costs associated with such a program.
50. Based on the business case prepared for the City of Kingston, approximately 180 convictions/year/camera are necessary in order for the program operating costs to be recoverable (excluding staff time). Other reports indicate a similar number of convictions are required to cover the costs.
51. The number of convictions is not the same as the number of motorists running a red signal as there may be occasions when a licence plate is not visible due to weather conditions, plates blocked by a trailer, not visible due to dirt, the motorist is from out-of-province, etc. Kingston's business case assumes that only 20% of the violations that occur will be suitable for a conviction to be filed.

# Report to Infrastructure, Investment and Development Services Committee

- 52. The number of violations varies greatly on a daily basis at each intersection since red signal running is a random occurrence.
- 53. The current fine for running a red signal is \$325. \$60 of that amount is returned to the Province of Ontario. The remaining revenue would be subject to the cost sharing arrangement with the local municipalities that form the Barrie Court Service Area unless a specific alternative arrangement was made.
- 54. Based on 2015 information provided for the City of Toronto, 34% of defendants are paying the fine without disputing the charge or requiring other administrative processes. 45% are disputing the charge (through early resolution or trial). Almost 21% fail to respond to the charge. At trial, Toronto's conviction rate appears to be in the order of 75%, with the majority resolving on the trial date, possibly with reduced fine amounts applied. It is also important to note that at trial, the judiciary has the ability to reduce the amount of the fine applied.
- 55. Several potential revenue scenarios were developed utilizing the information above as well as assumptions related to decisions concerning penalty amounts when matters were disputed, net revenues after expenditures and payment trends. The scenarios are presented below

	<u>Scenario #1</u> 2 violations per day from 8 of 10 cameras	<u>Scenario #2</u> 2 violations per day from each of the 10 cameras	<u>Scenario #3</u> 5 violations per day from 8 of 10 cameras	<u>Scenario #4</u> 5 violations per day from each of the 10 cameras
Potential Revenues	\$ 594,000	\$ 742,337.00	\$ 1,499,274.00	\$ 1,855,842.50

Note: Revenues associated with disputed convictions and where a defendant has failed to respond may take over a year (or longer) to be collected.

- 56. While the information above indicates that the cost of the program may be recoverable in some of the scenarios, it is important to note that both violation levels and the fine revenue generated by a RLC program are difficult to accurately predict. Excess revenues are not a certainty and a successful program should result in a decrease in the number of violations and a corresponding reduction in revenues as time passes.
- 57. Information obtained from staff at the City of Toronto suggests that it could take several years to recover the initial set up costs, even if the intersections chosen for a RLC Program have a high level of red signal running. It is also important to note that costs would be incurred for leasing, maintaining and operating equipment, even if a single conviction is never registered at the site.
- 58. Based on the data collected to date, it is questionable whether the intersections identified would generate a sufficient number of convictions/year/camera to cover the costs associated with implementing a program (not including staff time).
- 59. A detailed business case for the City of Barrie has not been undertaken at this time and is a recommended best practice before any municipality proceeds with the implementation of a RLC Program.

# Report to Infrastructure, Investment and Development Services Committee

## **Does Barrie Police Service support the use of RLCs?**

60. In October of 2014, the Barrie Police Services provided the correspondence attached as Appendix "A" to the Report to the Infrastructure, Investment and Development Services Committee. The Barrie Police Services Board indicated that it would be the responsibility of the City of Barrie to implement and manage the RLC Program, it would not be involved in the Program and it would support the use of any initiative that would enhance road safety.
61. The Board also indicated that although there wasn't currently any empirical data that suggested that the City of Barrie was in need of a RLC Program, many of the municipalities involved in the Program have indicated that RLCs provide a safety benefit since collisions and injuries have been reduced at intersections where cameras are used.
62. The majority of the reports associated with RLCs and conversations with representatives of the Barrie Police Service, note that since RLCs do not prevent or reduce the risk of other serious collisions, they are not a substitute for on-site police enforcement of the other traffic violations.
63. In May of 2016, staff from Roads, Parks and Fleet met with Staff Sergeant D. Jones to review the 2015 collision data and survey of 13 intersections. After reviewing the details, it was agreed that the data available did not support the implementation of a RLC Program.
64. Representatives of Barrie Police Service indicated that the Service prefers to have Officers on potential scenes as they get all directions and all offenses (not just RLC).

## **What other initiatives have been/could be implemented to improve traffic safety?**

65. A number of initiatives have been implemented to improve road safety including road diets, monthly blitzes by BPS, and traffic calming measures.
66. A review of traffic operations/engineering alternatives at each of the higher collision intersections may identify further options for improving traffic safety. Matters to be reviewed include vehicle clearance intervals, operational constraints such as the visibility of the signal heads and the presence of background distractions.

## **Conclusions**

67. Less than 4% of the collisions in Barrie over the past number of years at a signalized intersection have resulted in the charge most commonly associated with running a red signal.
68. Based on information from current and proposed RLC Program participants, the operating cost of a Program with 10 cameras (not including staff resources or any site upgrades) is in the range of \$520,000-\$600,000/year.
69. While the costs of the program may be recoverable in certain circumstances, both violation levels and the fine revenue generated by a RLC program are difficult to accurately predict. A detailed business case based on additional data would assist in determining the feasibility of recovering costs.
70. Based on the collision data, there doesn't appear to be a substantial safety issue that a RLC program could assist in addressing and it is questionable whether the costs could be recovered. As a result, other traffic engineering initiatives should be reviewed at high collision intersections before a RLC program is considered.

# Report to Infrastructure, Investment and Development Services Committee

## **ENVIRONMENTAL MATTERS**

71. There are no environmental matters related to the recommendation.

## **ALTERNATIVES**

72. The following alternatives are available to the Infrastructure, Investment and Development Services Committee with respect to the recommendation:

### **Alternative #1**

Infrastructure, Investment and Development Services Committee could recommend that a consultant be retained to complete a detailed business case analysis for the implementation of red signal/light cameras.

The information gathered to date indicates that the costs associated with implementing a RLC program are significant and it is uncertain whether they could be recouped through fine revenue, particularly in the short term. Should the Infrastructure, Investment and Development Services Committee wish to proceed further with a RLC, a detailed business case is recommended.

### **Alternative #2**

Infrastructure, Investment and Development Services Committee could recommend that staff in Roads, Parks and Fleet adjust their work plan to increase the priority assigned to the traffic operations/engineering review of intersections with higher levels of collisions.

Staff review intersections as feasible, to determine if there are potential changes such as additional tree trimming or the installation of auxiliary traffic signals to improve the visibility of signals. The resources currently available to undertake such reviews and complete any necessary works are at capacity. The volume of requests related to traffic safety matters has increased significantly without a corresponding increase in the staff to perform the work.

## **FINANCIAL**

73. Detailed information regarding the estimated financial implications of a RLC Program are identified in paragraphs 40 through to 59.

## **LINKAGE TO 2014-2018 COUNCIL STRATEGIC PLAN**

74. The recommendation(s) included in this Staff Report supports the following goal identified in the 2014-2018 Strategic Plan:

Responsible Spending

75. The recommendation in this report supports the goal of responsible spending as it doesn't recommend the implementation of a costly RLC Program where it is uncertain if the Program would generate significant safety benefits and would require substantial cost to implement.

# Report to Infrastructure, Investment and Development Services Committee

## Appendix "A"

Correspondence from the Barrie Police Services Board dated October 14, 2014

29 Sperling Drive  
Barrie, ON L4M 6K9

Telephone: (705) 725-7025 ext. 2206  
Fax: (705) 725-7705  
E-Mail: bpsboard@barriepolice.ca

**BARRIE POLICE SERVICES BOARD**



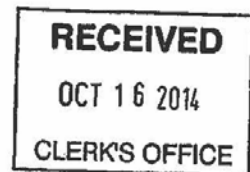
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Community*



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October 14, 2014

Mayor Jeff Lehman  
Members of Barrie City Council  
70 Collier Street, Box 400  
Barrie, ON L4M 4T5



Dear Mayor Lehman and Members of Barrie City Council:

In March 2014, Barrie City Council requested that the Barrie Police Services Board prepare a report on the Red Light Camera Program.

Attached is the report of the Barrie Police Services Board.

Sincerely,

James Dickie  
Acting Chair, Barrie Police Services

# Report to Infrastructure, Investment and Development Services Committee



## BARRIE POLICE SERVICES BOARD

**To :** Barrie Police Services Board  
**From :** Chief Kimberley Greenwood  
**Date :** October 10th, 2014  
**Subject:** Red Light Camera Program

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In March 2014, the City of Barrie Council requested the Barrie Police Service to prepare a report on the *Red Light Camera Program*.

In April 2014, the City of Barrie Traffic and Parking Services met with the Barrie Police Traffic Unit to discuss the *Red Light Camera Program*. At the conclusion of the meeting, the following issues were agreed upon:

- The City of Barrie will be responsible for implementing and managing the program
- Barrie Police Service will not be involved in the program
- Barrie Police Service will support any initiative that will enhance traffic and pedestrian safety

### Background

- In December 1998, the Provincial Government enacted Bill 102, Red Light Cameras Pilot Projects Act, 1998, to allow designated municipalities to use red light cameras for up to two years following date of proclamation
- A pilot project followed which included six (6) Municipalities; the Cities of Toronto, Hamilton and Ottawa and the Regional Municipalities of Halton, Peel and Waterloo
- In August 2004, the Provincial Government passed legislation allowing municipalities to operate red light cameras indefinitely
- Currently, seven (7) Cities and Regional Municipalities are involved in the program; Toronto, Hamilton, Brampton, York, Ottawa, Waterloo and Halton

### Program Start Up

- For the program to be initiated, a motion must be passed by Barrie City Council to implement a *Red Light Camera Program*
- The City of Barrie will then make application to the Ministry of Transportation - Ontario (MTO) for permission to participate in the program
- MTO will decide if the City of Barrie will be designated as a center or not

# Report to Infrastructure, Investment and Development Services Committee

- Once designated, the City of Barrie will be responsible for implementing and managing the **Red Light Camera Program**

## How It Works

### Program:

- City of Toronto oversees the entire program at their Joint Processing Centre
- Cameras are leased by the City of Barrie
- Processing fee is charged by the City of Toronto for each infraction
- Program runs 24 hours a day, 7 days a week, but only operates when a vehicle enters the intersection once the light has turned red
- Fine for infraction is \$325.00 (s.144 (18) Highway Traffic Act)
- \$265.00 goes to the City of Barrie and the Province of Ontario collects \$60.00 as a victim fine surcharge
- Demerit points are not issued

### Camera:

- Red light camera captures the following:
  - Vehicle going through or failing to yield at a red light
  - Speed of vehicle
  - Time that the light turned red prior to vehicle proceeding through red light
  - Photo of offending vehicle
  - Infractions are given to registered vehicle owners regardless of who was driving the vehicle
  - Infractions will be mailed or personally served

## Police Role:

- The Barrie Police Service does not administer any aspect of the program
- If requested by the City of Barrie, the Barrie Police Service will assist to identify high risk intersections that would benefit from the program

Although there is currently no empirical data that suggests that the City of Barrie is in need of a **Red Light Camera Program**, many of the Municipalities involved in the **Red Light Camera Program** have indicated that red light cameras provide a safety benefit since collisions and injuries have been reduced at intersections where cameras are used.

Finally, in keeping with our 2014 – 16 Strategic Business Plan goal of enhancing traffic safety initiatives, the Barrie Police Service will support any initiative implemented by the City of Barrie that will improve safety on our roadways. However, it is the responsibility of the City of Barrie to implement and manage the **Red Light Camera Program**.

**Recommendation:** The Barrie Police Services Board provides this report to the City of Barrie Council as directed.

Report submitted by Staff Sergeant Dave Jones