RED LIGHT CAMERA PROGRAM

Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness

Transmittal Report

Audit Report

Management’s Response

Jeffrey Griffiths, C.A., C.F.E
Auditor General, City of Toronto
Red Light Camera Program – Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness

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<td>Reason for Confidential Information:</td>
<td>This report involves the security of property belonging to the City or one of its agencies, boards, and commissions. This report is about litigation or potential litigation that affects the City or one of its agencies, boards, and commissions.</td>
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**SUMMARY**

Red light cameras are used in many jurisdictions around the world to enhance enforcement efforts aimed at the reduction in red light running and the resulting accidents. The City of Toronto's program was initiated in November 2000 with the installation of 10 cameras rotating between 38 intersections. Currently, the City has 87 cameras operating among 114 locations.

The Auditor General’s 2010 Work Plan included a review of the effectiveness of the Red Light Camera program. The objectives were to determine if the cameras were effective in reducing the number and severity of accidents related to red light running. Controls over the laying of charges and collection of fines as well as the costs and revenues associated with the program were also reviewed.

The audit report contains 10 recommendations along with a management response to each of the recommendations. The implementation of these recommendations will improve the overall effectiveness of the City’s Red Light Camera program and has the potential to increase revenue by approximately $2.5 million.
RECOMMENDATIONS

The Auditor General recommends that:

1. City Council request the General Manager, Transportation Services, review the current Red Light Camera evaluation process to ensure that it is current, complete and as effective as possible. Such a review include an analysis of evaluation practices in other major North American Cities. The General Manager, Transportation Services, update the 2006 evaluation of the Red Light Camera program.

2. City Council request the General Manager, Transportation Services, as required by the operating agreement with the Province of Ontario, report to the Province on the collision history of monitored sites.

3. City Council request the General Manager, Transportation Services, re-evaluate the current location of all red light cameras based on predetermined criteria. The results of this evaluation be compared to an even distribution of cameras on a ward-by-ward basis as requested by Council. Such information be reported to City Council.

4. City Council request the General Manager, Transportation Services, as requested in April 2008, report back to Council “with an update on the status of the red light camera operations”. In preparing the report, information detailing financial results of the Red Light Camera program be provided as well as revised estimates for future program costs and revenues.

5. City Council request the General Manager, Transportation Services, explore opportunities for program cost sharing with other parties benefiting from the Red Light Camera program, particularly the Province of Ontario and the motor vehicle insurance industry.

6. City Council request the City Solicitor in consultation with the General Manager, Transportation Services, and the Chief of Police request the Province of Ontario to amend legislation to permit Parking Enforcement Officers to issue tickets in relation to licence plate visibility.

7. City Council request the Treasurer, as part of the review of the enforcement of parking tags issued to out-of-province vehicles, include in the review the City’s current inability to issue tickets for red light camera offences.

8. City Council request the General Manager, Transportation Services, ensure that all road markings at red light camera intersections are maintained to the extent necessary to allow the issuance of tickets for red light violations.

9. City Council request the Director, Court Services, in consultation with the City Solicitor report back to Council by December 2012 on the impact of the Early Resolution procedures and on other options, including administrative penalties, if the number of trials requested in relation to red light camera charges does not decrease substantially.
10. City Council request the Director, Court Services and City Solicitor, in accordance with the request of Council, report back to Council “on the average in-court fine” for red light camera infractions.

11. City Council adopt the recommendation contained in Attachment 1 to this report.

12. City Council authorize the public release of the information contained in the Attachment 1 to this report at the discretion of the City Solicitor in consultation with the General Manager, Transportation Services.

Financial Impact

The revenue generating opportunities identified in this report are in some cases dependant on other parties. However, the implementation of the recommendations will provide the impetus to address issues which will ultimately result in approximately $2.5 million in additional revenue.

CONTACT

Jerry Shaubel, Director, Auditor General’s Office
Tel: 416-392-8462, Fax: 416-392-3754, E-mail: JShaubel@toronto.ca

Mayssa Mirshak, Audit Manager, Auditor General’s Office
Tel: 416-392-0886, Fax: 416-392-3754, E-mail: MMirshak@toronto.ca

SIGNATURE

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Jeff Griffiths, Auditor General

10-TSD-01

ATTACHMENTS

Attachment 1 – Confidential Information: Red Light Camera Program

**Appendix 1:** Red Light Camera Program – Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness

**Appendix 2:** Management’s Response to the Auditor General’s Red Light Camera Program – Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness
RED LIGHT CAMERA PROGRAM

Although Red Light Cameras Have Contributed to a Reduction in Accidents, Opportunities Exist to Improve Financial Results and Program Effectiveness

August 25, 2011

Auditor General’s Office

Jeffrey Griffiths, C.A., C.F.E.
Auditor General
City of Toronto
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EXECUTIVE SUMMARY

The Auditor General’s 2010 Audit Work Plan included a review of the effectiveness of the Red Light Camera program.

Audit Objectives

The objectives for this review were to determine whether:

- the Red Light Camera program is effective in reducing collisions at signalized intersections;
- controls over laying charges and collecting fines are adequate and effective; and
- revenues and costs associated with the program are accurately reported and accounted for.

Red light program is meeting its primary objective of reducing collisions

From an operational perspective the program is meeting its primary objective of reducing accidents and related personal injuries. The evidence compiled by the City of Toronto’s Transportation Division clearly indicates that while there has been an overall reduction (six per cent) in accidents resulting in injuries at all signalized intersections throughout the City, those intersections with red light cameras experienced a more significant decline in collisions (25 per cent).

A comparison of the five year average before the red light cameras were installed (1995-1999) to the five year average after the cameras were installed (2001-2005) shows a decrease of 17 per cent in all property damage collisions and 25 per cent in all fatal and injury collisions at the red light camera sites. The most significant reduction was in angle collisions with reductions of 60 per cent in property damage collisions and 66 per cent in fatal and injury collisions.
Some program improvements are possible but not all within City’s control

While the Red Light Camera program has met its objectives our review, however, did identify a number of issues which require attention. These issues relate to the need to:

- Update the evaluation of the Red Light Camera program performance including its safety benefits;
- Ensure that the actual costs and revenues of the red light camera program are accurately reported to City Council;
- Evaluate whether or not those third parties benefitting from the Red Light Camera program can contribute to the operating costs. Organizations benefitting would include the insurance industry and the Province from reduced health care costs;
- Consider a re-evaluation of red light camera locations;
- Address factors preventing the issuance of certain red light camera tickets. For example, tickets could not be issued for approximately 34 per cent of red light photographs which clearly showed an infraction had taken place;
- Address the fact that vehicles from outside the Province of Ontario cannot be issued red light camera tickets;
- Explore opportunities to reduce the growing demand on the courts system by addressing red light camera tickets through alternative processes such as those used for certain by-law infractions; and
- Ensure that outstanding reports requested by Council are prepared as soon as possible.

Program has been a net cost to the City

Results have improved over time and in 2010 revenues covered approved costs of the program

The Red Light Camera program was approved based on its potential to reduce injury collisions attributed to red light running and on the understanding that fine revenues would be sufficient to cover the costs of operating the program. From 2000 to 2009, the program has been a net cost to the City. However over the past few years the program has shown progressively improving financial results to the extent that in 2010 the program resulted in a net revenue of $800,000. This improvement appears to be a result of program expansion and an increase in the fine for red light violations.
A major portion of the costs of the program are for the most part contractually fixed and determinable. However, revenue projections by City staff in a report to Council in 2006 were overstated. The reasons why revenue projections have not been met are generally because of:

- reductions in red light running;
- delays in the installation of red light cameras;
- the inability of City staff to issue red light camera tickets in certain cases; and
- collection of less than the full fine amounts in certain cases.

While program revenues are only starting to cover costs, there are of course non-financial benefits which are significant but difficult to quantify. Benefits include:

- Fewer fatalities and injuries
- Reduced burden on the health care system
- Reduced burden on emergency services
- Reduced property damage collisions
- Improved traffic flow due to less collisions
- Reduced insurance claims.

Finally, attention should be directed to eliminating external barriers to the issuance of red light camera tickets to existing offenders. Certain of these improvements will require consultation and agreement with third parties but are important to ensure the program achieves its goal of deterring red light running.

While the purpose of the Red Light Camera program is not to generate additional annual revenue for the City, conservatively we estimate an additional annual revenue amount of $2.5 million could be attained by implementing the recommendations in this report. An analysis of this amount is provided on Exhibit 1.

It is important to emphasise that this additional revenue does not involve any further action in regard to increased enforcement. What it does involve, however, are improvements to a process to issue tickets to individuals who have already been identified as committing a red light running offence.
As indicated, a significant number of red light running tickets were not issued to offenders. Presumably many of these individuals may not even be aware that they committed an offence. Even if they had been aware, the perception very likely would be that there are no repercussions to running a red light. In these cases, the safety component of the program is significantly compromised.

**BACKGROUND**

A red light camera is a traffic enforcement camera that captures an image of a vehicle passing through an intersection against a red traffic light. By automatically photographing vehicles that run red lights, the camera produces evidence that assists authorities in the enforcement of traffic laws.

Red light cameras are used in many countries including the US, the UK and Australia, as well as the Provinces of British Columbia, Alberta, Manitoba and Quebec.

*Primary objective of the red light camera program is resident safety*

In Ontario, the Red Light Camera program, although announced in 1998, began in November 2000 as a pilot project in six municipalities, including the City of Toronto. The primary objective of the pilot, a resident safety initiative, was to determine if red light cameras were an effective and efficient means of reducing the number and severity of red light running accidents.

*City of Toronto has 87 cameras operating among 114 intersections*

The City of Toronto’s program began with 10 cameras rotating between 38 intersections. Based on the success of the program as reported to Council on July 20, 21 and 22, 2004, the initiative was eventually expanded to the current 87 cameras operated among 114 of the City’s 2,177 signalized intersections.

The Set Fine for running red lights is established by the Chief Justice of the Ontario Court of Justice. Other amounts added to the Set Fine, which include a victim surcharge fee and court costs, are established by the Province in the amounts as noted in Table 1 below. Since the program was announced in 1998 fine amounts have been as follows:

**Table 1: Red Light Camera Fine Amounts**

<table>
<thead>
<tr>
<th>Date</th>
<th>Set Fine</th>
<th>Victim Surcharge</th>
<th>Court Costs</th>
<th>Total Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1998</td>
<td>$155</td>
<td>$35</td>
<td>$0</td>
<td>$190</td>
</tr>
<tr>
<td>June 2005</td>
<td>$150</td>
<td>$25</td>
<td>$5</td>
<td>$180</td>
</tr>
<tr>
<td>January 2010</td>
<td>$260</td>
<td>$60</td>
<td>$5</td>
<td>$325</td>
</tr>
</tbody>
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The final fine amount paid and court costs are retained by the City while the victim surcharge amount is remitted to the Province.

**City recovers some costs through operating a processing centre for other city red light camera programs**

In addition to managing its own red light camera operations, the City of Toronto operates a “joint municipal processing centre” on behalf of the cities of Hamilton and Ottawa and the Regional Municipalities of Peel and Waterloo. The processing centre reviews all photographs, processes evidence, issues Offence Notices and prepares court documents for all participating municipalities. The City of Toronto has agreements with the partnering municipalities for sharing costs in relation to the operation of the joint municipal processing centre.

In a recent report to City Council dated May 2, 2011, entitled “Amendment to Contract 47012243 for the Supply, Installation, Operation Maintenance, and Decommissioning of Red Light Camera Systems in the City of Toronto” it was indicated that “the cost of red light camera operations are generally offset from revenue generated by tickets issued during the operation of red light cameras and processing centre fees collected from the partnering municipalities.”

The Transportation Services Division of the City is responsible for the operation of the Red Light Camera program. The installation, operation and maintenance of the cameras are contracted out and remain under the direction of City staff.

The City currently operates 77 red light camera systems provided by Traffipax Traffic Safety Systems and owns equipment which operates a further 10 red light cameras. These 10 cameras were acquired from Affiliated Computer Systems.

Both maintenance contracts with Traffipax Safety Systems and Affiliated Computer Systems were recently extended. The contract with Traffipax Traffic Safety Systems was extended in 2011 for a five-year term and the contract with Affiliated Computer Systems was extended for four years in 2008. The five-year contract with Traffipax Traffic Safety Systems is approximately $2.3 million on an annual basis while the four year annual maintenance contract with Affiliated Computer Systems is approximately $760,000 per year.

The City also has an operational agreement with the Province of Ontario. This agreement allows the City, for a fee, to access motor vehicle registration information which is necessary to lay charges. The amount paid to the Province on an annual basis is in the range of $51,000.

Finally there are costs incurred by the Court Services and Legal Divisions of the City. Once a ticket is issued to the registered owner of the vehicle, the Court Services Division is responsible for the tracking and collection of fines. Responsibilities include the accounting for payments received, booking trial dates for disputed tickets and arranging for licence plate denials for vehicles with unpaid tickets. The Legal Division is responsible for prosecuting tickets on behalf of the City.
### AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

**Audit objective**

The primary focus of this review was to determine whether the City's Red Light Camera program has:

- been effective in reducing the number and severity of traffic accidents at signalized intersections;
- adequate controls on the imposition and collection of related fines; and
- accurately accounted for and reported all costs and revenues of the program.

**Council made specific requests related to this review**

We also considered Council’s request made during its review of the Auditor General’s 2010 work plan at its January 26, 27, 2010 meeting, that we “consider reviewing the following as part of his review of the Red Light Camera operations:

1. *the average fine applied by Justices of the Peace on a guilty plea;*
2. *the average fines for guilty pleas on police-issued tickets for running red lights as compared to guilty pleas for red light camera offences; and*
3. *the number of red light camera offences that are withdrawn.***


Our review included an analysis of collision data from 1995 to 2010. We also analyzed red light camera ticket activity from January 1, 2005 to December 31, 2010, with specific focus on tickets issued since January 1, 2010 to determine the impact of the total fine increase from $180 to $325.
Audit methodology

The audit methodology included the following:

- review of legislation
- review of Council reports
- interviews with staff in Transportation Services, Court Services, Legal Services, and Financial Planning
- review and analysis of various documents and records
- review of red light camera reports from other jurisdictions including:
  - California State Auditor
  - Cities of Stockton and Los Angeles, California
  - City of Winnipeg Audit Department 2006 report entitled “Photo Enforcement Program Review”

Compliance with generally accepted government auditing standards

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence that provides a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
AUDIT RESULTS

The Effectiveness of the Red Light Camera Program

Red Light Camera Pilot Project was evaluated by the Province in 2003

The Red Light Camera Pilot Project Act was passed by the Ontario Legislature in December 1998 to enable designated municipalities in the Province of Ontario to operate red light cameras for a two-year period. The cities of Toronto, Hamilton, Ottawa and the Regional Municipalities of Halton, Peel and Waterloo, in November 2000, participated in the original two-year pilot project, called the Red Light Camera Enforcement Pilot Project.

In December 2003, a report entitled “Evaluation of the Red Light Camera Enforcement Pilot Project”, commissioned jointly by the participating municipalities and the Ministry of Transportation, was issued. The evaluation was conducted independently by the firm of Synectics Transportation Consultants Inc.

Provincial evaluation concluded the program was effective in reducing collisions

The evaluation report is comprehensive and its conclusion states that “based on the results of the report, the Red Light Camera Enforcement Pilot Project has been shown to be an effective tool in reducing fatal and injury collisions, thereby preventing injuries and saving lives. For these reasons it is the opinion of the evaluation study team that the pilot project has been worthwhile and would continue to be of benefit to any participating municipality.

It is recommended that collisions continue to be monitored and examined on a yearly basis to validate that the trend continues as presented in the evaluation study results.”

In addition to our review of the 2003 evaluation report, we have also reviewed various reports on the effectiveness of red light cameras. The common theme in the majority of these reports relate to the fact that red light cameras reduce accidents. These reports also reinforce the need for an ongoing structured effectiveness evaluation.
Program is meeting objectives

From a City of Toronto operational perspective the program is meeting its objective of reducing accidents. The evidence compiled by the City’s Transportation Services Division clearly indicates that, while there has been an overall reduction in accidents at all signalized intersections throughout the City, those intersections with red light cameras experienced a more significant drop in collisions.

Collisions at camera sites were reduced between 17 and 66 percent

A comparison of the five-year average before the cameras were installed (1995-1999) to the five-year average after the cameras were installed (2001-2005) shows a decrease of 17 per cent in all property damage collisions and 25 per cent in all fatal and injury collisions at the camera sites. The most significant reduction was in right angle collisions with reductions of 60 per cent in property damage collisions and 66 per cent in fatal and injury collisions.

Figure 1 shows angle accident rates before and after the installation of red light cameras in Toronto. Angle accidents were selected for this chart because they are the type of collision most directly attributed to red light running.

Figure 1: Average Annual Angle Accident Rates at Red Light Camera Sites

Source: Transportation Services Division

While Figure 1 clearly indicates the effectiveness of the program across the City, there is a need to more clearly evaluate the program on an individual red light camera site basis.
Program is evaluated on a city-wide basis only

The City’s current evaluation process includes an analysis of the average number of tickets issued throughout the City at those intersections were a red light camera is situated, related fine revenue and accident rates by type. This evaluation is for the most part focused on an evaluation which is City wide.

The last comprehensive evaluation of the Red Light Camera program by the City was in 2006. Ongoing structured effectiveness evaluations, which are recommended in most research studies, are an integral and essential management information tool and should form the basis of operational decisions such as the location and re-location of cameras.

Evaluation by camera site could help identify need to adjust camera locations

In addition to City-wide performance measures, additional measures should be conducted on an individual red light camera basis. For example, Figure 2 shows the pattern of activity at one location where a red light camera was installed in June 2008. The graph indicates a reduction in tickets issued over a two year time frame.

Figure 2: Number of Red Light Tickets at the Intersection of Jane Street and Bala Avenue

Finally, the operating agreement between the City and the Province of Ontario specifically requires that the City “report the collision history of monitored sites to the MTO.” This provision of the agreement has not been complied with since 2007.
**Recommendations:**

1. City Council request the General Manager, Transportation Services, review the current Red Light Camera evaluation process to ensure that it is current, complete and as effective as possible. Such a review include an analysis of evaluation practices in other major North American Cities. The General Manager, Transportation Services, update the 2006 evaluation of the Red Light Camera program.

2. City Council request the General Manager, Transportation Services, as required by the operating agreement with the Province of Ontario, report to the Province on the collision history of monitored sites.

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**Location of Red Light Camera Sites**

A report entitled “Red Light Camera Operations” was approved at the Council meeting of July 20, 21 and 22, 2004:


In addition to the approval of the recommendations made by the then Acting Commissioner of Works and Emergency Services, Council “requested that the Acting Commissioner of Works and Emergency Services consider the allocation of at least one red light camera per Ward or a similar equitable distribution system.” In addition, in approving the expansion of the red light cameras in 2006 City Council also approved the installation of new cameras “to ensure that the installation of the new red light cameras is evenly distributed amongst the City’s 44 Wards and red light cameras are rotated so that at least one camera location per Ward is active at any time.”

In order to ensure that the impact of the red light cameras throughout the City is maximized, the allocation of red light cameras on a City-wide basis is appropriate.

However, the even distribution of red light cameras throughout the City’s 44 Wards may not result in the most appropriate and effective red light camera locations.

In determining red light camera locations, Transportation Services staff review collision data and traffic patterns. Based on this evaluation, the optimum location of red light cameras is determined. The results of this evaluation however, may not equate to an even distribution of red light cameras on a ward-by-ward basis throughout the City as requested by City Council. In order to comply with Council, the movement of red light cameras to higher risk locations may not be possible.

**Recommendation:**

3. City Council request the General Manager, Transportation Services, re-evaluate the current location of all red light cameras based on predetermined criteria. The results of this evaluation be compared to an even distribution of cameras on a ward-by-ward basis as requested by Council. Such information be reported to City Council.

**Is the Cost of the Program Offset From Revenue Generated By Tickets?**

In 2006, Council adopted a report relating to the extension of a contract with Affiliated Computer Systems:

The report indicated that the “cost of this project is being generally offset from revenue generated by tickets issued during the operation of red light cameras and processing centre fees collected from other partnering municipalities.” Further, in a report to Council dated March 18, 2008 entitled “Contract and Resource Approval Required for Red Light Camera Operations”, it was indicated that “the red light camera program is estimated to be self funding.”

Finally, in a more recent report dated May 2, 2011 relating to the contract extension with Traffipax Traffic Safety Systems, it was further indicated that “the cost of red light camera operations in the City of Toronto are generally offset from revenue generated by tickets issued during the operation of red light cameras and processing fees collected from partnering municipalities (cities of Hamilton and Ottawa and the Regional Municipalities of Peel and Waterloo).”


The Red Light Camera program is a safety program that was approved on the basis that fine revenues would be sufficient to cover the costs of operating the program. From 2000 to 2009, the program has been a net cost to the City. However over the past few years the program has shown progressively improving financial results to the extent that in 2010 the program resulted in a net revenue of $800,000. This improvement appears to be a result of program expansion and an increase in the fine for red light violations.

The program, up until 2010, has not been able to recover its costs due to shortfalls in revenues. The contributing factors are:

- reductions in red light running
- delays in the installation of red light cameras;
- the inability of City staff to issue tickets in certain cases; and
- collection of less than the full fine amounts in certain cases.
The program was initially approved with ten cameras. The only costs to be recovered from fine revenue at that time were Transportation Division’s costs since Court Services indicated they could absorb any additional activity without additional resources.

When the program was expanded starting in 2008, Court Services indicated they would need additional resources to handle the increased volume of tickets. The additional resources amounted to $400,000 per year and include costs for court staff, City prosecutors, the recovery by the Province for judicial time and court administrative costs. In evaluating the program staff have been accounting for the costs of Transportation Services plus the additional resources of $400,000 allocated to Court Services.

Although fine revenues have not been sufficient to cover these costs in the past, there has been an improving trend. With the increase in the Set Fine in 2010, the program began recovering the costs approved by Council, so it is paying for itself on the basis of incremental costs.

Table 2 provides the costs and revenues of the program for the years 2008 – 2010. As noted above, the costs for Court Services include only the incremental costs incurred when the program was expanded beginning in 2008.

Table 2: Red Light Program Costs and Revenues 2008 – 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs $ million</th>
<th>Revenue $ million</th>
<th>Net Cost/(Revenue) $ million</th>
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<tr>
<td>2008</td>
<td>3.2</td>
<td>(2.8)*</td>
<td>0.4</td>
</tr>
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<td>2009</td>
<td>3.4</td>
<td>(3.2)</td>
<td>0.2</td>
</tr>
<tr>
<td>2010</td>
<td>4.3</td>
<td>(5.1)</td>
<td>(0.8)</td>
</tr>
</tbody>
</table>

*Includes accrued revenue of $0.4 for 2008 and prior years

Given the progress in cost recovery, it would be appropriate to fully evaluate the program costs particularly to ensure that there is an accurate allocation of court services costs to the program. Care should be taken in the use of this information in that a portion of the allocated costs will remain irrespective of whether or not the program continues.
Reports requested by Council are now due and should be provided

Further, City Council adopted a report on April 28 and 29, 2008, entitled “Contract and Resource Approval Required for Red Light Camera Operations” which required that the General Manager, Transportation Services, “to report to the Public Works and Infrastructure Committee in two and a half years time, with an update on the status of the red light camera operations”. This report is now overdue and should be prepared as soon as possible. The contents of the report should include an updated financial analysis of the program.


In determining the costs of the program, an analysis of actual court costs attributable to the Red Light Camera program should be compiled and the full program results be included in the requested report to Council. Such reporting should also indicate the complete safety and financial implications that may result should the program be cancelled.

Recommendation:

4. City Council request the General Manager, Transportation Services, as requested in April 2008, report back to Council “with an update on the status of the red light camera operations”. In preparing the report, information detailing financial results of the Red Light Camera program be provided as well as revised estimates for future program costs and revenues.
While the City has no legal obligation to operate a Red Light Camera program, its benefits should not be judged solely on its financial results. There are significant other benefits associated with the program which should be considered. These benefits are considerable although difficult to quantify.

Benefits include:

- Fewer fatalities and injuries
- Reduced burden on the health care system
- Reduced burden on emergency services
- Reduced property damage collisions
- Improved traffic flow due to less collisions
- Reduced insurance claims.

It is clear that significant benefits associated with the program accrue to the Province, through reduced health care costs, and the motor vehicle insurance industry, through reduced accident claims costs. These two parties, in particular, may have a direct financial interest in ensuring that the Red Light Camera program continue and possibly expand. However, the operating agreement with the Province clearly indicates that all operational costs shall be funded by the City.

Red light cameras have now been operating in the province for more than a decade and have demonstrated their effectiveness in reducing collisions. Given this, steps should be taken to determine if the safety improvements can be translated to financial support for the program particularly from the Province and the insurance industry.

**Recommendation:**

5. City Council request the General Manager, Transportation Services, explore opportunities for program cost sharing with other parties benefiting from the Red Light Camera program, particularly the Province of Ontario and the motor vehicle insurance industry.
Potential to Reduce the Number of Tickets Not Processed for Various Reasons

(1) Licence Plate Visibility

In 2010, approximately 38,000 tickets were issued to registered owners of vehicles running red lights. For the same period, approximately 21,000 tickets where an offence took place were not issued for a wide variety of reasons. A number related to situations where the licence plate of the vehicle running a red light was not visible. The Highway Traffic Act addresses certain licence plate visibility issues. Actions to provide more efficient enforcement would increase revenue.

Parking enforcement officers who are required to transcribe licence plate information in the course of issuing a parking ticket could efficiently enforce certain licence plate visibility issues. Consideration should be given to requesting the Province to change legislation such that parking enforcement officers can effectively and efficiently include the enforcement of licence plate visibility issues in their day to day duties.

The attached Confidential Attachment 1 contains an additional recommendation related to licence plate visibility. The recommendation in the confidential attachment should be made public at a time considered appropriate by the General Manager, Transportation Services.

As noted in Exhibit 1, we conservatively estimate an additional annual revenue amount of $1.7 million could be obtained by implementing this recommendation.

This additional revenue does not involve any further action in regard to increased enforcement. What it does involve, however, is improvements to a process to issue tickets to individuals who have already been identified as committing a red light running offence.
Recommendation:

6. City Council request the City Solicitor in consultation with the General Manager, Transportation Services, and the Chief of Police request the Province of Ontario to amend legislation to permit Parking Enforcement Officers to issue tickets in relation to licence plate visibility.

(2) Road Markings Not Visible

In 2010, approximately 5,300 red light camera tickets could not be issued due to “stop bar not visible.” Management in the Transportation Services Division indicated that approximately 50 per cent of the “stop bar not visible” incidents were caused by the stop bar painted across each intersection not being sufficiently visible in a photograph. This circumstance was due to the fact that the reflective white paint marking the stop bar had degraded.

We were advised that prioritizing red light camera locations within the annual repainting contracts would result in a cost increase elsewhere in Transportation Services budget. However, the increased cost of the pavement marking program would be more than offset by the increased number of tickets issued. This would also enhance the safety aspect of the program as more individuals running red lights would be issued tickets.

Had the City been able to issue tickets for say 50 per cent of the 5,300 “stop bar not visible” instances, the total amount of the tickets would have been in the range of $.7 million. Staff estimate that the additional costs of more frequent painting would be in the range of $30,000.

(3) Out-of-Province Vehicles

In 2010, 1,200 tickets related to out-of-province vehicles were not issued due to the fact that licence plate registrations were not available. The revenue relating to these tickets would be somewhere in the range of $318,000.
The inability to issue tickets to out-of-province vehicles is similar to the situation where parking tags issued to out-of-province vehicles are cancelled. We understand that the Revenue Services Division at the City is currently reviewing methods for enforcing parking offences in relation to out-of-province vehicles. The ability to issue tickets to out-of-province vehicles running red lights should be included in this process.

**Recommendations:**

7. City Council request the Treasurer, as part of the review of the enforcement of parking tags issued to out-of-province vehicles, include in the review the City’s current inability to issue tickets for red light camera offences.

8. City Council request the General Manager, Transportation Services, ensure that all road markings at red light camera intersections are maintained to the extent necessary to allow the issuance of tickets for red light violations.

**Requests for Fine Reductions, While an Inherent Part of the Judicial Process, are Problematic in a Number of Ways**

The attached Confidential Attachment 1 relates to Fine Reductions.

Given the high conviction rate for red light camera tickets and the additional costs incurred for individuals requesting trial, disputed red light camera tickets could be handled much more efficiently. This is being addressed through the Good Government Act 2009 which will change how tickets are disputed starting on March 1, 2010. As a result of new Early Resolution procedures being implemented at that time, the number of trial requests is expected to decline significantly.
While the Early Resolution procedures should help control costs, there are other options. One of these currently being piloted in other entities is to levy administrative penalties, rather than fines, for non-criminal offences. Staff have indicated that this type of solution has proven to be an efficient way of enforcing the law in some jurisdictions and removes the offence from the court system. The City should explore the potential for the application of such a process to enforce red light camera, and potentially other violations and, following discussion with the appropriate Provincial officials, report back to Council on whether such a change is feasible and appropriate for the City.

**Recommendation:**

9. City Council request the Director, Court Services, in consultation with the City Solicitor, report back to Council by December 2012 on the impact of the Early Resolution procedures and on other options, including administrative penalties, if the number of trials requested in relation to red light camera charges does not decrease substantially.

**In-Court Fines are Determined By Justices of the Peace**

The attached Confidential Attachment 1 relates to in-court fines.

City Council has requested staff to report back on the level of in-court fines. This report is outstanding.

**Recommendation:**

10. City Council request the Director, Court Services and City Solicitor, in accordance with the request of Council, report back to Council “on the average in-court fine” for red light camera infractions.
Council’s Request for Information

Council requested during its review of the Auditor General’s 2010 work plan at its January 26, 27, 2010 meeting that we “consider reviewing the following as part of his review of the Red Light Camera operations:

1. *the average fine applied by Justices of the Peace on a guilty plea;*

2. *the average fines for guilty pleas on police-issued tickets for running red lights as compared to guilty pleas for red light camera offences; and*

3. *the number of red light camera offences that are withdrawn."

Staff have previously been requested to report on the average in-court fines. We were not able to collect information relating to fines imposed on police issued tickets as the information necessary to perform this analysis is not readily available.

CONCLUSION

This report presents the results of our review of the Red Light Camera program.

The introduction of red light cameras throughout the City has reduced the number and severity of traffic accidents at intersections. During the initial years, the program resulted in a net cost to the City. As a result of program expansion and fine increases, the program has now reached a point where it covers the operating costs.
In addition to the fact that the program is now covering its operating costs, there are non-quantifiable benefits associated with the program which are important and significant and cannot be overlooked in any program evaluation.

Finally, subject to the Province agreeing to certain legislative change, there are opportunities identified in this report to increase revenues by an amount of approximately $2.5 million. If the recommendations contained in this report are implemented the program will become much more economically viable and self sustaining, thus supporting its continuation and possible expansion to increase public safety.
Exhibit 1

Red Light Camera Program
Potential Annual Additional Revenue

<table>
<thead>
<tr>
<th>Issue</th>
<th>Maximum Revenue Attainable*</th>
<th>Conservative Estimate of Revenue Attainable*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licence plate visibility</td>
<td>4.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Out-of-province licence plates</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Stop bar markings</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>$5.0 million</td>
<td>$2.5 million</td>
</tr>
</tbody>
</table>

*Based on fine of $260 and court costs of $5.
# Management’s Response to the Auditor General’s Review of Red Light Camera Program

<table>
<thead>
<tr>
<th>Rec No</th>
<th>Recommendation</th>
<th>Agree (X)</th>
<th>Disagree (X)</th>
<th>Management Comments: (Comments are required only for recommendations where there is disagreement.)</th>
<th>Action Plan/Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>City Council request the General Manager, Transportation Services, review the current Red Light Camera evaluation process to ensure that it is current, complete and as effective as possible. Such a review include an analysis of evaluation practices in other major North American Cities. The General Manager, Transportation Services, update the 2006 evaluation of the Red Light Camera program.</td>
<td>X</td>
<td></td>
<td>The General Manager, Transportation Services Division will: 1) Review the red light camera evaluation practices in other major North American cities (fourth quarter 2011); and 2) Update the 2006 evaluation of the Red Light Camera program (second quarter 2012).</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>City Council request the General Manager, Transportation Services, as required by the operating agreement with the Province of Ontario, report to the Province on the collision history of monitored sites.</td>
<td>X</td>
<td></td>
<td>The General Manager, Transportation Services Division will report to the Province on the collision history of red light camera monitored sites (second quarter 2012).</td>
<td></td>
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| 3.     | City Council request the General Manager, Transportation Services, re-evaluate the current location of all red light cameras based on predetermined criteria. The results of this evaluation be compared to an even distribution of cameras on a ward-by-ward basis as requested by Council. Such information be reported to City Council. | X          |              | The General Manager, Transportation Services Division will: 
1) re-evaluate the current location of all red light cameras based on predetermined criteria (second quarter 2012); and 
2) report the findings to City Council (third quarter 2012). | |
| 4.     | City Council request the General Manager, Transportation Services, as requested in April 2008, report back to Council “with an update on the status of the red light camera operations”. In preparing the report, information detailing financial results of the Red Light Camera program be provided as well as revised estimates for future program costs and revenues. | X          |              | The General Manager, Transportation Services Division will report back to Council with an update on the status of the red light camera operations detailing the financial results of the Red Light Camera program (fourth quarter 2012 in consultation with the Director, Court Services and City Solicitor related to recommendations 8 and 9). | |
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<td>5.</td>
<td>City Council request the General Manager, Transportation Services, explore opportunities for program cost sharing with other parties benefiting from the Red Light Camera program, particularly the Province of Ontario and the motor vehicle insurance industry.</td>
<td>X</td>
<td></td>
<td>The General Manager, Transportation Services Division will explore cost sharing opportunities with the province of Ontario and the motor vehicle insurance industry (first quarter 2012)</td>
<td></td>
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<td>6.</td>
<td>City Council request the City Solicitor in consultation with the General Manager, Transportation Services, and the Chief of Police request the Province of Ontario to amend legislation to permit Parking Enforcement Officers to issue tickets in relation to licence plate visibility.</td>
<td>X</td>
<td></td>
<td>The City Solicitor and General Manager, Transportation Services Division will: 1) Review the potential expansion of the parking enforcement officers responsibilities with the Chief of Police; and 2) Request the Ontario Minister of Transportation to amend legislation accordingly (second quarter 2012).</td>
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<td>7.</td>
<td>City Council request the Treasurer, as part of the review of the enforcement of parking tags issued to out-of-province vehicles, include in the review the City’s current inability to issue tickets for red light camera offences.</td>
<td>X</td>
<td></td>
<td>The Director, Revenue Services Division will review the City’s current inability to issue tickets for red light camera offences, in consultation with the General Manager, Transportation Services and the City Solicitor (first quarter 2012).</td>
</tr>
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<td>8.</td>
<td>City Council request the General Manager, Transportation Services, ensure that all road markings at red light camera intersections are maintained to the extent necessary to allow the issuance of tickets for red light violations.</td>
<td>X</td>
<td></td>
<td>The General Manager, Transportation Services Division will ensure that all road markings at red light camera intersections are maintained to the extent necessary to allow the issuance of tickets for red light violations (starting fourth quarter 2011, weather depending).</td>
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<td>9.</td>
<td>City Council request the Director, Court Services, in consultation with the City Solicitor, report back to Council by December 2012 on the impact of the Early Resolution procedures and on other options, including administrative penalties, if the number of trials requested in relation to red light camera charges does not decrease substantially.</td>
<td>X</td>
<td></td>
<td>The Director, Court Services, in consultation with the City Solicitor report to Council on the impact of the Early Resolution procedures and administrative penalties options along with recommendation 9 (fourth quarter 2012).</td>
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<td>10.</td>
<td>City Council request the Director, Court Services and City Solicitor, in accordance with the request of City Council, report back to Council “on the average in-court fine” for red light camera infractions.</td>
<td>X</td>
<td></td>
<td>The Director, Court Services and the City Solicitor report to Council on the average in-court fine for red light camera infractions along with recommendation 8 (fourth quarter 2012).</td>
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