TO: CHAIR AND MEMBERS
CIVIC WORKS COMMITTEE
MEETING ON FEBRUARY 20, 2019

FROM: KELLY SCHERR, P. ENG., MBA, FEC
MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER

SUBJECT: RED LIGHT CAMERA PROGRAM
2018 ANNUAL REPORT

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following 2018 Annual Report for the Red Light Camera Program BE RECEIVED for information in support of Vision Zero London.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Civic Works Committee – January 5, 2016. II, 2. Red Light Camera Program Implementation
Civic Works Committee – May 15, 2018. IV, 1. Automated Speed Enforcement

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of Strengthening Our Community by providing a safer city.

BACKGROUND

Purpose

The London Road Safety Strategy (LRSS) defined a system and process for setting out the targets, policies, and action plans to guide the City and its partners in creating safer roads in order to reduce the number and severity of motor vehicle collisions. One of the six target areas identified related to reducing red light running, as the crashes that result from this behaviour often result in serious injury or even fatality.

Context

The installation of Red Light Cameras (RLCs) began in mid-2017 and the full complement of ten intersections has now been implemented. This 2018 Annual Report provides a preliminary look at the first year of RLC operations within the City.
DISCUSSION

Multi-Municipality Agreement

On January 1, 2017, the Red Light Camera Agreement was established between the Ontario Ministry of Transportation (MTO), the City of London, and seven other Ontario municipalities. Under the Agreement, all RLC records are transported to the Joint Processing Centre operated by the City of Toronto, where they are scrutinized by Provincial Offenses Officers who issue a citation if warranted.

Vision Zero London – Public Awareness and Education

As part of the MTO Agreement requirements and Council direction, the City engaged in an annual public awareness campaign and educational program to promote activities on road safety. A public outreach and awareness plan was created using Vision Zero as the guiding principle. This plan creates opportunities to help Londoners understand their role reducing the number of motor vehicle collisions in the city and making the roads safer for everyone. The educational aspects of the campaign will continue through 2021, which marks the completion of the current RLC program.

Red Light Camera Locations

The following table shows the location of London’s RLCs and the date they were commissioned. The data is up to and including November 2018. No data is yet available for Oxford Street E & Adelaide Street N, which was commissioned in December 2018.

Table 1: Red Light Camera Locations

<table>
<thead>
<tr>
<th>RLC Location</th>
<th>Commissioning Date</th>
<th>Infractions Issued to Date</th>
<th>Average per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioners Road East &amp; Wellington Road South</td>
<td>August 9, 2017</td>
<td>926</td>
<td>1.9</td>
</tr>
<tr>
<td>Dundas Street &amp; Clarke Road</td>
<td>July 4, 2017</td>
<td>1,170</td>
<td>2.3</td>
</tr>
<tr>
<td>Exeter Road &amp; Wharncliffe Road South</td>
<td>September 18, 2017</td>
<td>231</td>
<td>0.5</td>
</tr>
<tr>
<td>Huron Street &amp; Highbury Avenue</td>
<td>August 9, 2017</td>
<td>296</td>
<td>0.6</td>
</tr>
<tr>
<td>Oxford Street W &amp; Wonderland Road North</td>
<td>July 18, 2017</td>
<td>456</td>
<td>0.9</td>
</tr>
<tr>
<td>Oxford Street E &amp; Adelaide Street North</td>
<td>December 11, 2018</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Queens Avenue &amp; Adelaide Street</td>
<td>July 18, 2017</td>
<td>1,366</td>
<td>2.7</td>
</tr>
<tr>
<td>Queens Avenue &amp; Talbot Street</td>
<td>June 25, 2018</td>
<td>560</td>
<td>3.5</td>
</tr>
<tr>
<td>Springbank Drive &amp; Wonderland Road South</td>
<td>June 18, 2017</td>
<td>597</td>
<td>1.1</td>
</tr>
<tr>
<td>Windermere Road &amp; Richmond Street</td>
<td>August 9, 2017</td>
<td>740</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>6,342</strong></td>
<td></td>
<td><strong>1.6</strong></td>
</tr>
</tbody>
</table>
Collision History

Red light running usually results in right-angle collisions. The recent five-year and current year-to-date collision history was examined for this collision type on a city-wide basis, as shown in Table 1 and Figure 1. Right-angle collisions are arguably more problematic in their negative impacts than other collision types as injuries and fatalities and are more strongly correlated with right-angle collisions. In turn, red light running is a major contributing factor in right-angle collisions at signalized intersections.

As illustrated in Figure 1, a general downward trend emerges with respect to right-angle collision frequencies starting with the introduction of the Vision Zero and RLC programs in 2017 and continuing through 2018. At RLC locations, the overall monthly average injury rate was also reduced by 48% since the installation of the cameras. This measure considered injuries resulting from all collision types at the RLC camera locations.

Figure 1: Right-Angle Collision History 2013-2018 (City-wide)

Table 2: Right-Angle 5-Year Collision Average vs. Post-RLC Reductions

<table>
<thead>
<tr>
<th>Collision History</th>
<th>2017 Reduction</th>
<th>2018 Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Intersections</td>
<td>9%</td>
<td>26%</td>
</tr>
<tr>
<td>Signalized Only</td>
<td>10%</td>
<td>28%</td>
</tr>
<tr>
<td>Injury / Fatal</td>
<td>24%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Note that the 2018 data included in the above figure and table use 2018 data includes collisions reported to the end of September 2018. Year-end values were projected using trend analysis.

Overall, the first year of the RLC program shows promise with respect to a reduction in both the number of collisions and the monthly average injury rate. While additional data is required to confirm the preliminary results, it appears that the City’s various public outreach campaigns and the use of RLC cameras may be contributing to improved roadway safety. It should be noted that the above only considers data from the first year of a five-year program, however, and additional monitoring is required.
Financial Update

The 2017 to 2021 budgeted five-year cost to run the RLC program was $3.8 million, while the RLC violation revenue (excluding the victim surcharge) over the same period was anticipated to be approximately $4.5 million.

Table 3 details the revenues and expenses associated with the RLC program. Expenses largely include contract administration, infraction processing, and educational campaigns. While the program was designed to be cost-neutral, the initial financial information identified below indicates a positive variance at this time. The surplus results from greater than anticipated fine revenues and lower than expected program costs.

<table>
<thead>
<tr>
<th>Item</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLC Expenses</td>
<td>($241,000)</td>
<td>($448,000)</td>
</tr>
<tr>
<td>Infraction Payments</td>
<td>$269,000</td>
<td>$923,000</td>
</tr>
<tr>
<td>Variance</td>
<td>$28,000</td>
<td>$475,000</td>
</tr>
</tbody>
</table>

It is anticipated that with a continued 3E approach (education, engineering, and enforcement) to road safety, driving attitudes and awareness will improve and that the program will cease to generate revenues above the cost of delivering the RLC program. The surplus experienced in earlier years of the contract would thus balance future negative variances in later years. In the interim, the surplus revenue will be put into a reserve fund that will be used to address potential deficits in future years or for other road safety initiatives (e.g. education, engineering, automated speed enforcement, etc.).

2018 Activities and Next Steps

As of December 2018, the last of the ten RLCs within London was commissioned. There are no plans for additional RLC locations at this time. The number of RLCs and locations will be reviewed at the conclusion of the current contract in 2021.

AUTOMATED SPEED ENFORCEMENT

London is also pursuing another automated enforcement initiative that is in the process of being enabled by new provincial regulations. City staff are part of a working group of Ontario municipalities led by the City of Toronto that is exploring Automated Speed Enforcement (ASE) for communities across the province. In late 2018, the City of Toronto began testing ASE locations to inform the development of a new ASE program. It is anticipated that the Request for Proposals (RFPs) and testing proof-of-concept deployments will begin in the first half of 2019. City of London staff will participate in the RFP evaluation process for the ASE program as part of the working group. Following this process, implementation of the ASE program in Ontario is anticipated in late 2019. More information on this initiative will follow in future reports as it progresses.
CONCLUSION

The City’s current RLC program is now in its second year of a five-year joint contract with other municipalities across Ontario. While the results of the RLC program are still preliminary, collisions over the period between January 2012 and September 2018 show a general positive reduction against the previous one-year period and the five-year average. The relevant collision rates to the RLC program will continue to be monitored for the duration of the five-year contract.

Acknowledgments

This report was prepared by Jon Kostyniuk, P.Eng. of the Roadway Lighting and Traffic Control Division and Mark Ridley, CET of the Transportation Planning and Design Division.

SUBMITTED BY: 

REVIEWED AND CONCURRED BY: 

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RECOMMENDED BY: 

KELLY SCHERR, P.ENG., MBA, FEC 
MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER 

February 11, 2019/jdk

cc: Community Safety and Crime Prevention Advisory Committee
    London Middlesex Road Safety Committee
    London Police Service
    Transportation Advisory Committee