

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON SEPTEMBER 24, 2019
FROM:	KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	AUTOMATED SPEED ENFORCEMENT CONTRACT AWARD

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Automated Speed Enforcement Program:

- a) Redflex Traffic Systems (Canada) Limited, **BE AWARDED** the contract for the provision of Automated Speed Enforcement Services for a five (5) year period, starting when the contract is executed, in accordance with the terms and conditions of the Request for Approvals executed by the City of Toronto on behalf of the City of London and other participating Automated Speed Enforcement municipalities in accordance with Section 14.4 (g) of the Procurement of Goods and Services Policy, noting that there is an option to extend the contact at the discretion of the City of London for an additional five (5) years;
- b) Civic Administration **BE AUTHORIZED** to enter into an agreement with the City of Toronto to undertake centralized municipal processing of Automated Speed Enforcement offence notices;
- c) Civic Administration **BE AUTHORIZED** to enter into an agreement with the Ontario Ministry of Transportation related to the operation of the Automated Speed Enforcement Program;
- d) Civic Administration **BE AUTHORIZED** to undertake all administrative acts that are necessary in connection with this program;
- e) Approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with Redflex Traffic Systems (Canada) for the work;
- f) The Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations;
- g) Civic Administration **BE DIRECTED** to bring forward the necessary Traffic and Parking By-law amendments to designate Automated Speed Enforcement areas as Community Safety Zones; and,
- h) Civic Administration **BE DIRECTED** to place the net revenue from the Automated Speed Enforcement Program in the automated enforcement reserve fund; noting that any revenue shortfalls will be funded from this reserve fund, if necessary.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

For additional information, please refer to the following committee reports:

- Civic Works Committee – April 25, 2016, [II, 2. School Zone Speed Limit Policy](#)
- Civic Works Committee – May 9, 2017, [II, 11. Vision Zero – London Road Safety Strategy](#)
- Civic Works Committee – November 21, 2017, [III 15. Safer School Zones Act](#);
- Civic Works Committee – May 15, 2018, [4.1 Automated Speed Enforcement](#)
- Civic Works Committee – February 20, 2019, [2.12 Red Light Camera Program, 2018 Annual Report](#)
- Civic Works Committee – May 14, 2019, [2.6 Area Speed Limit](#)
- Civic Works Committee – September 24, 2019, Area Speed Limit Update

COUNCIL'S 2019-2023 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of **Strengthening Our Community** and **Building a Sustainable City**. Automated Speed Enforcement could enable Londoners to move around the city safely and easily in a manner that meets their needs by improving safety for all modes of transportation in accordance with Vision Zero principles.

BACKGROUND

On May 22, 2018, Municipal Council passed the following resolution:

That the Civic Administration BE DIRECTED to undertake the following actions with respect to automated speed enforcement:

- a) consult with the London Road Safety Coalition, appropriate Advisory Committees, local school boards and other stakeholders with respect to the potential implementation of automated speed enforcement in community safety zones and school zones;
- b) consult with relevant staff at the Town of Canmore, Alberta with respect to their experience implementing Canmore's "I Drive Safely" program, which includes automated speed enforcement; and,
- c) report back to the appropriate Standing Committee with respect to:
 - i) a proposed approach to automated speed enforcement in community safety zones and school zones;
 - ii) establishment of speed limits at or below 40 km/hr for community safety zones and school zones;

- iii) the proposed budget for an automated speed enforcement program;
- iv) the proposed allocation for any revenues collected as a result of automated speed enforcement in excess of the costs of the program (eg. Other vision zero road safety initiatives); and,
- v) preliminary data gathered about the effectiveness of existing measures deployed in school zones (pedestrian crossovers, road markings, lower speed limits, etc.).

Item c) ii) was addressed in the May 14, 2019 Civic Works Report titled “Area Speed Limit” and resulted in the following May 21, 2019 Council resolution:

That the following actions be taken with respect to the Area Speed Limits:

- a) the Civic Administration BE DIRECTED to consult with the Transportation Advisory Committee, the Community Safety and Crime Prevention Advisory Committee and others with respect to the development of an Area Speed Limit Policy;
- b) a public participation meeting BE HELD before the Civic Works Committee, after the above-noted input has been received;
- c) the Civic Administration BE REQUESTED to also report back at a future meeting of the Civic Works Committee, no later than the end of Q3 of 2019, with respect to enacting tools now provided by the Province through Bill 65, specifically:
 - i) reducing the speed limit in community safety zones in order to improve pedestrian safety;
 - ii) increasing fines for speeding in school zones and community safety zones; and
 - iii) implementing Automated Speed Enforcement systems in school zones and community safety zones.

it being noted a submission from Councillor M. Cassidy, with respect to this matter, was received. (2019-T07/T08) (2.6/9/CWC).

This report addresses items a), b), c) i) and ii) to v) of the May 22, 2018 resolution and items c) iii) of the May 21, 2019 resolution. The remaining items are addressed in the “Area Speed Limit” report to the Civic Works Committee.

DISCUSSION

Speeding, commonly defined as exceeding the posted speed limit or driving too fast for conditions, is a primary crash factor and leading road safety problem



contributing to one-third of fatal crashes and serving as an aggravating factor that increases crash severity. Vision Zero London includes engineering, enforcement and

education (3Es) to address speeding and other road safety concerns. Traditional enforcement through London Police Services is an effective tool; however, resource limitations impact when and where enforcement occurs. Automated Speed Enforcement (ASE), commonly referred to as photo radar, can be a financially effective method to modify driver behaviour similar to what has been observed with London's red light camera program.

Consultation

The London Middlesex Road Safety Committee (LMRSC), the Transportation Advisory Committee (TAC) and the Community Safety and Crime Prevention Advisory Committee (CSCPAC) all support the need for increased enforcement and automated speed enforcement (ASE). On June 25, 2019 Council forwarded the following TAC resolution to Civic Administration to review and report back to the Civic Works Committee:

That Civic Administration BE REQUESTED to consider installing signage and housing in ALL school zones in the City of London, with a rotation of the cameras, with respect to the Automated Speed Enforcement; it being noted that the Transportation Advisory Committee heard a verbal update from J. Kostyniuk, Traffic and Transportation Engineer with respect to this matter.

Request for Proposals

London has been an active member of the provincial Automated Speed Enforcement (ASE) Steering Committees. The City of Toronto took the lead in issuing a Request for Proposals (RFP) for the Provision of Automated Speed Enforcement Services that all participating municipalities could use. The RFP closed June 13, 2019 with four (4) proposals being submitted. The RFP process was conducted as a two envelope system whereby the proponents were required to submit two (2) separate envelopes. Envelope one (1) was the technical proposal submission and envelope two (2) contained the cost of services. The cost of services envelope were only opened for those proponents who met the 75% percent threshold (52.5 out of 70 points).

London was part of the evaluation team along with Toronto, Brampton, Mississauga, Ottawa and York Region. Based on the RFP final technical proposal score and the cost of services score, the team recommended award of the contract to Redflex Traffic Systems (Canada) Limited, noting that the Redflex proposal offers the best value to the participating municipalities. The approximate cost associated with the contract is in the order of \$1,000,000 per year.

ASE Operational Methodology

The Safer School Zones Act (Bill 65), which introduced ASE as a tool for municipalities, limits the use of ASE to community safety zones where the speed limit is below 80 km/h and school zones. The Ontario Highway Traffic Act allows municipalities to designate the following:

- Community Safety Zone (CSZ): "a part of a highway under its jurisdiction as a community safety zone if, in the council's opinion, public safety is of special concern on that part of the highway".

- School Zone: “a portion of a highway under its jurisdiction that adjoins the entrance to or exit from a school and that is within 150 metres along the highway in either direction beyond the limits of the land used for the purposes of the school”.

Speeding fines in CSZs are double that of other highways. It should be noted that a “school zone” may fall within a CSZ. The ASE Working Group, of which London is a member, recommends that ASEs be introduced to school zones first and that the larger community safety zones be added, if necessary, once the program is well underway.



The RFP included the deployment of ASE equipment as both semi-fixed or mobile, noting that all ASE equipment is located on the City’s boulevard. Semi-fixed equipment involves the installation of the ASE housing in various locations with the camera hardware rotated through the housings. Mobile equipment are self-contained and offer the most flexibility as they can be placed anywhere where enforcement is required. Semi-fixed equipment is more expensive (+28 to +60%) than mobile units as they need permanent electrical services installed to each housing. The Financial Impacts section of this report includes more discussion on semi-fixed verses mobile units.



Figure 1: Semi-Fixed ASE Installation



Figure 2: Mobile ASE Installation

An important consideration when developing the ASE program is the impact that it will have on the City’s Provincial Court Administration (POA) office’s capacity to accommodate the increased number of infractions. For the first year of the ASE program, it is proposed that two mobile units be used, in order to provide operational flexibility while managing program cost and court resource impacts, and that up to an additional five (5) mobile units be introduced in the second year of the program, if needed. The ASE equipment will first be deployed in school zones where speed studies have identified a significant speeding problem. The equipment will typically remain in place for four (4) weeks before moving to a new area.

Since this is a new program in Ontario, it is proposed that warning notices be sent out for the first three months of the ASE program. This will allow for staff to ramp up for when infractions will be issued, including training of additional staff if needed.

As stated above, the ASE equipment will be installed in school zones that have a significant speeding problem. It is recommended that all school zones be designated as CSZs to further assist in modifying driver behaviour by doubling fines for speeding. The creation of CSZs was included with the area speed limit public consultation process. Two-thirds of the respondents supported the creation of CSZs.

Financial Implications

A financial model of the estimated operating costs and revenues is presented in Appendix A. The estimated cost, excluding HST, to operate an ASE program from Years 1 to 5 is \$4,840,000 and \$4,450,000 for Years 6 to 10. The estimated costs include additional resources for the POA office to process the increased volume of infractions. If additional cameras are added, then an additional courtroom may be needed along with the staff to process the infractions, which will increase the City's costs significantly.

Costs incurred in the first five years are expected to be recovered from the ASE infraction revenue. For years 6 to 10 there is estimated to be a net minor budget shortfall of \$25,000. Anticipated shortfalls can be funded from the Automated Enforcement Reserve Fund, which includes contributions from the Red Light Camera program and currently has a balance of \$470,000. It is recommended that any net surplus from the ASE program should be placed in the Automated Enforcement reserve fund for other safety initiatives or to fund any automated enforcement program shortfalls.

Semi-Fixed Versus Mobile Deployment

The Transportation Advisory Committee (TAC) suggested that the signage and housing be installed at all school zones and that the camera equipment be rotated around to the housings. This suggestions relates to the semi-fixed ASE option rather the recommended mobile option. There are 131 elementary or secondary schools in London with most schools having more than one school zone. A camera is not required for each semi-fixed installation; however, it is expected that a camera would occupy the housings at least once per year to justify the investment in the housing. The additional cost to install one housing and two signs at half of the schools is \$2,600,000 and, to include all schools, the additional cost is \$5,700,000. The same number of cameras as the mobile option is assumed based on POA limitations; therefore, the same number of violations and estimated revenue would be generated for each option. Therefore, a large financial shortfall would occur beyond that available in the Automated Enforcement Reserve Fund. The installation of the ASE housings at each school as suggested by the TAC may help further reduce speeding; however, additional funds would be required from the 2020-2023 Multi-Year Budget.

Town of Canmore, Alberta

As directed by Council, staff have reviewed the 'I Drive Safely' program used in Canmore, AB. The Town of Canmore has a population of 14,000 and is located between Banff and Calgary. The Town has an ASE program where speeders are fined but also includes a "good ticket" lottery for those drivers who were not speeding. The Town's ASE contractor sends the Town a list of license plates of vehicles that were travelling below the speed limit. From this list the Town selects a few "winners" who are eligible to receive a gift card from a local business. Due to privacy concerns the license plates of the "winners" is sent to Service Alberta, which sends out the letters to the registered owner indicating that they have won a gift card from the Town. Recipients are then required to return to visit the Town offices twice to receive their gift card. The first visit is to prove that they are the owner of the vehicle. As the Town does not keep the gift cards on hand, a second visit to the Town offices is required to pick-up the gift card.

A representative from the Town stated that they have not seen a huge impact from the “good ticket” lottery. Winners are happy; however, those that oppose the ASE program feel that this is a waste of resources.

The “good ticket” lottery was discussed with the ASE Steering Committee prior to the development of the RFP. The Ontario ASE system is set-up to capture only speeding vehicles; therefore, a program similar to Canmore’s is not a viable option.

Other Safety Programs

The following are programs that are in place to improve safety around school zones:

- 40 km/h school zones;
- Pedestrian crossovers (PXOs) and associated education campaign;
- Centreline markers new schools;
- Student silhouettes;
- “Respect the Limit” lawn signs;
- Public Education Empathy Program (PEEP) boards;
- Active and Safe Routes to School (operated by Middlesex London Health Unit, with City staff as an active member);
- Traffic Calming Policy;
- Education campaigns;
 - Respect the Forty;
 - Respect the Limit;
 - Make Eye Contact;
 - Safety Near School Zones;
 - Roundabout Safety; and,
 - Pedestrian Safety.

Speed studies have been conducted in half of the school zones since the lowering of the speed limit in school zones to 40 km/h. The average speeds on these streets varied from 32 km/h to 58 km/h with the overall average speed being 44 km/h. The data suggests that the above initiatives have lowered the speed in some schools zones but that there are still some locations with excessive speeding.

CONCLUSION

Engineering, education and traditional enforcement have helped to improve safety by reducing the number of speeders in school zones; however, more work is required. Automated speed enforcement (ASE) is another tool that can be used to improve safety in school zones and community safety zones. It is recommended that the City enter into agreements with Redflex Traffic Systems (Canada) Limited for the provision of ASE equipment, the City of Toronto for the processing of the ASE infractions and the Province of Ontario for the provision of owner information to issue the ASE infractions to the registered owner of the vehicles. It should be noted that the value of speeding infractions varies depending on the degree to which the driver is exceeding the speed limit and there are no demerit points associated with ASE infractions.

The proposed mobile ASE system using a maximum seven (7) units will allow for the targeting of problem areas. The creation of community safety zones (CSZs) that encompasses school zones will further assist in addressing the speeding concerns; noting that speeding fines are doubled in CSZs and many Londoners support the creation of CSZs.

PREPARED BY:	REVIEWED AND CONCURRED BY:
SHANE MAGUIRE, P. ENG. DIVISION MANAGER, ROADWAY LIGHTING AND TRAFFIC CONTROL	DOUG MACRAE, P.ENG., MPA DIRECTOR, ROADS AND TRANSPORTATION
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER	

Y:\Shared\Administration\COMMITTEE REPORTS\Civic Works\2019\DRAFT\09-24\CWC - ASE Contract Award - September 24 2019 Ver. 2.docx

September 13, 2019/sm

Attach: Appendix A: Automated Speed Enforcement Financial Model

- c: Provincial Court Administration Office
- London Police Service
- Transportation Advisory Committee
- Community Safety and Crime Prevention Advisory Committee

APPENDIX A
AUTOMATED SPEED ENFORCEMENT FINANCIAL MODEL

Description		Costs *	
		Year 1 to 5	Year 6 to 10
Expenses			
ASE Contract (Redflex)	Assume 2 mobile units in Year 1 and 5 additional mobile units between Years 2 to 10.	\$1,010,000	\$1,030,000
ASE Infraction Processing (City of Toronto)	The City of Toronto will process all ASE infractions within Ontario.	\$2,170,000	\$1,985,000
Vehicle License Information (Ministry of Transportation)	The vehicle's registered owner's name and address are required to issue the ASE infraction.	\$210,000	\$180,000
Provincial Court Administration	These costs are incurred by London for processing of the violation payments and the dispute resolution process.	\$1,100,000	\$950,000
Education, Awareness and Signage	The program will include a variety of measures to modify driver's behaviour and roadside signage.	\$120,000	\$100,000
Contingency Allowance		\$230,000	\$215,000
Total Expenses		\$4,840,000	\$4,450,000
Revenues			
ASE Infraction Payments	Assumes improved compliance as the ASE program operates.	(\$4,840,000)	(\$4,425,000)
Total Revenues		(\$4,840,000)	(\$4,425,000)
NET BUDGET		-	\$25,000

* All costs exclude HST