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<b>TO:</b>	<b>GENERAL COMMITTEE</b>
<b>SUBJECT:</b>	<b>AUTOMATED SPEED ENFORCEMENT CAMERAS IN SCHOOL AND COMMUNITY SAFETY ZONES</b>
<b>PREPARED BY AND KEY CONTACT:</b>	<b>S. ROSE, CET, TSOS, MANAGER OF TRAFFIC SERVICES R. BATES, MANAGER OF COURT SERVICES</b>
<b>SUBMITTED BY:</b>	<b>D. FRIARY, DIRECTOR OF OPERATIONS W. COOKE, DIRECTOR OF LEGISLATIVE AND COURT SERVICES/CITY CLERK</b>
<b>GENERAL MANAGER APPROVAL:</b>	<b>A. MILLER, RPP GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT  D. MCALPINE, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES</b>
<b>CHIEF ADMINISTRATIVE OFFICER APPROVAL:</b>	<b>M. PROWSE, CHIEF ADMINISTRATIVE OFFICER</b>

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### **RECOMMENDED MOTION**

1. That staff in the Operations Department advise the City of Toronto's Joint Processing Centre that the City of Barrie is seeking to participate in the Automated Speed Enforcement (ASE) program, with the goal of operating two (2) mobile ASE cameras and rotating them between community safety zones and school zones across Barrie's 10 Wards.
2. That staff in the Operations Department report back to General Committee with details concerning the next steps of implementation required regarding the installation, operations and maintenance costs of the cameras and related signage, Joint Processing Centre operating costs and Provincial costs.

### **PURPOSE & BACKGROUND**

#### **Purpose**

3. The purpose of this report is to provide the context and information needed for City Council to make an informed decision on whether to further investigate implementing Automated Speed Enforcement cameras in school and community safety zones.
4. The report also provides information regarding speeding statistics related to school and community safety zones, the estimated costs associated with implementing a program, and information obtained from other jurisdictions.

#### **Background**

5. Automated Speed Enforcement is a system that uses a camera and a speed measurement device to detect and capture images of vehicles travelling faster than the posted speed limit. It is particularly effective in reducing collisions in school and community safety zones.

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6. The City of Edmonton conducted a number of studies with the University of Alberta regarding its automated speed enforcement program and found that – through the program – severe collisions have been reduced by 32% and speed related collisions have been reduced by 27%.
7. On November 21, 2016, City of Barrie Council adopted motion 16-G-256, as follows:
- “19-G-256      **PHOTO RADAR IN SCHOOL ZONES AND COMMUNITY SAFETY ZONES**
- That should new Provincial legislation empowering municipalities to install safety cameras in community safety zones and school zones to help protect school children, seniors, pedestrians and cyclists, be passed, staff in the Operations and Legislative and Court Services Departments report back to General Committee with the requirements and implications associated with implementing such a program.”
8. On May 30, 2017, the Province of Ontario passed the Safer School Zones Act, 2017 to permit municipalities to implement automated speed enforcement technology in school and community safety zones. However, the legislation and the associated regulations did not come into force until November 29, 2019.
9. In May 2019, the City of Toronto issued a Request for Proposal on behalf of all Ontario municipalities for the five-year provision of ASE services.
10. The City of Toronto awarded the contract to Redflex Traffic Systems (Canada) Limited. Redflex will be responsible for the supply, installation, testing, operation, maintenance and decommissioning of automated speed enforcement system and maintenance of ASE image processing services.
11. This process ensures the same equipment is used throughout the Province at all sites identified by municipalities and provides cost savings associated with group purchasing.
12. The City of Barrie would be required to enter into a contract with the City of Toronto to utilize the ASE system, including the Joint Processing Centre.
13. All costs associated with an ASE program in Barrie would be the responsibility of the City of Barrie.

#### Potential Timeframe

14. The timeframe for implementation of an ASE program could be up to 24 months or longer, as it is subject to the following steps:
- Receiving initial approval from Council and contacting the City of Toronto, requesting to participate in the ASE program;
  - Reporting back to Council and obtaining budgetary approval for funding of the installation, operations and maintenance costs of the cameras and related signage, as well as the Joint Processing Centre operating costs and Provincial costs;
  - Entering into an operational agreement with the Ministry of Transportation Ontario for the use of automated speed enforcement on Barrie roads, as well as access to the MTO's licence plate registry;

- Entering into an agreement with Redflex Traffic Systems/the City of Toronto for the supply, installation, operation and maintenance of the ASE unit(s) in Barrie;
- Entering into an agreement with the City of Toronto for the operation and cost-sharing of the Joint Processing Centre, which issues the Certificate of Offence;
- Notifying the Ministry of the Attorney General to ensure that violations can be properly registered into the local court system and that necessary preparations (including Justice of the Peace availability) are made for any court cases;
- Installing vendor cameras after all specified infrastructure upgrades are completed (e.g., induction loop installation/changes, any needed speed limit signage alterations, and additional sign and pavement markings, as necessary);
- Implementing a public information campaign, including installing the required signage, for a minimum of 90 days per location;
- Conducting training related to infraction notices processed through the Provincial Offences Act Courts and administered by the City of Barrie; and
- Addressing ongoing operational matters, including through monitoring safety data, participating as a member of the Working Group and Committees, and responding to FOI, public and Council inquiries.

#### Further Context

What is a school zone?

15. A school zone is a designated area of road near a school. As described in the Highway Traffic Act, school zones are to be designated through by-laws passed by municipal councils. Typically, school zones occur within 150 metres of the front of a school and have reduced speed limits that are put into effect either during specific periods of the day or 24/7.
16. City Council policy mandates a 40km/hour posted speed limit in front of elementary schools, as well as for roadways where – due to their geometric design – there is an increased probability of danger when a car drives at 50 km/h or a higher speed limit.
17. On major roads where elementary schools are present, a "40 km/h when flashing" speed limit has been implemented. Barrie currently has these "40 km/h when flashing" speed limits – which follow varying time schedules – in 23 elementary school locations.

What is a community safety zone?

18. A community safety zone is established by municipal council through a by-law, and covers road areas where there is a higher risk to, or concern for, drivers, pedestrians, cyclists and/or others who share the space. Certain Highway Traffic Act fines (including speeding) are doubled in community safety zones and many community safety zones are located close to schools.
19. Barrie currently has over 75 sections of road designated as community safety zones in accordance with the Community Safety Zones By-law 2003-160, as amended.

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How does Automated Speed Enforcement (ASE) work?

20. ASE is designed to work in tandem with other strategies, including engineering measures, education initiatives and traditional police enforcement. ASE is focused on altering driver behaviour to decrease speeding and increase safety in the schools and community safety zones.
21. The ASE system is comprised of three main parts:
  - A speed measurement component.
  - A data processing/storage component.
  - An image capture component that includes a data box with the posted speed limit, the speed of the vehicle, the location, the time of day, and other information.
22. If a vehicle exceeds the posted speed limit in an ASE-enforced area, the ASE system captures an image.
23. The images are then reviewed by Provincial Offence Officers at the Joint Municipal Processing Centre, which is operated by the City of Toronto. Currently, it is the only violation processing centre in Ontario for ASE enforcement. Municipalities pay the City of Toronto to process evidence, issue offence notices and prepare court documents, on the basis of a cost-sharing formula.
24. All evidence gathered from ASEs is processed as follows:
  - Digital photos are downloaded from ASE locations and are sent to the Joint Municipal Processing Centre in Toronto;
  - Trained officers review every picture to verify vehicle information and review the speed data associated with the vehicle to ensure an offence has occurred;
  - The licence 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;
  - The municipal court system is responsible for trials and appeals.
25. The ticket, which contains a digitized copy of the image and an enlargement of the plate portion, is then mailed to the registered plate holder within 30 days of the offence, outlining next steps and the cost of the associated fine.
26. The registered licence plate holder receives the ticket, whether or not that individual was driving the vehicle at the time.
27. Upon conviction, there is a monetary fine. Demerit points are not issued and the registered owner's driving record is not impacted.

Who receives the ticket?

28. No matter who was driving the vehicle at the time, the registered licence plate holder receives the ticket.

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29. Motorists themselves are not observed or recorded through the ASEs. ASEs 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.
  30. Emergency vehicles (police, fire and ambulance) are not exempt from these charges under the *Highway Traffic Act*. As such, should one of these vehicles exceed the posted speed limit, the registered owner would receive a violation notice unless determined by the Processing Centre to be clearly involved in an emergency response situation.
  31. As plate information for out-of-province motorists may not be available, charges may not be able to be filed against these motorists.

What is the penalty associated with ASE?

32. Vehicle owners would receive fines that incrementally become more severe, depending on how fast above the posted speed limit they were travelling. For example, fines could range from \$21 for going one km/h over the posted speed limit to \$1,105+ for 50 km/h or more over the posted limit. Demerit points are not issued with violations detected by the ASEs.
33. If the fine goes unpaid, the licence plate associated to the offence cannot be renewed.

Where do the fines go?

34. The total fine payable is made up of three specific amounts. The fine, court costs of \$5.00 under O. Reg. 945 and victim fine surcharge. Should the fine be paid, the municipality's court services operation receives the gross proceeds but pays the Province of Ontario 100% of the Victim Fine Surcharge. The remaining revenue amount (fine and court costs) is reduced by a proportionate amount of overall operating costs of POA Court operations. The net proceeds flow back to the municipality.

## **ANALYSIS**

35. When examining the feasibility of implementing ASE enforcement, a number of questions need to be answered. The following section provides information regarding these matters.

Does Barrie have a particularly high occurrence of excessive speeds in school or community safety zones?

36. Based on recent traffic data within the variable flashing 40 km/hr community safety zones/school zones, staff prepared a chart showing how many vehicles are exceeding the posted speed limit at least by 10 km/hr or more every day. The below sites were chosen as variable flashing 40 km/hr sites, as they typically see a higher numbers of vehicles per day within school zones. Some sites have no data, as any new data collection during COVID-19 would be non-typical and no data was collected during the past 8 months.
37. As the data reveals there are 10 roadways in proximity to schools that are close to or exceeding the 85<sup>th</sup> percentile; this means that at least 85% of the traffic is travelling at the noted speed or below. This figure is a quick indicator of vehicle speeding when it appears to be 10 km/hr over the posted speed limit.
38. It should also be noted that, as the data is only from variable flashing 40 km/hr sites, the actual numbers of speed violations is likely higher than what is represented. This occurs because, for approximately two and a half hours of each weekday, the posted speed limit is reduced to 40 km/hr;

however, this reduced speed limit window is not reflected within the calculations due to the way the data is formatted.

<u>School</u>	<u>Volume</u>	<u>Posted Speed</u>	<u>Avg Speed</u>	<u>85%ile</u>	<u># Veh &gt;10km/h</u>
1) Portage View Public School- Anne St N	12,500 v/d	50 km	51.3 km/h	59.9 km/h	n/a
2) Heritage Christian Academy School- Ardagh Rd	12,000 v/d	50 km	57 km/h	63 km/h	3,563
3) Allandale Heights Public School- Bayview Dr	7,500 v/d	50 km	45.1 km/h	51.1 km/h	83
4) Willow Landing Elementary School-Big Bay Point Rd	15,000 v/d	50 km	57 km/h	61 km/h	3,816
5) Elementary School Catholic Frere-Andre-Cundles Rd E	17,000 v/d	50 km	56.2 km/h	64.2 km/h	n/a
6) Cundles Heights Public School- Cundles Rd E	18,000 v/d	50 km	54 km/h	60.4 km/h	1,080
7) Emma King Elementary School- Cundles Rd W	2,000 v/d	50 km	45 km/h	51 km/h	23
8) Timothy Christian School- Essa Rd	8,000 v/d	60 km	58.6 km/h	66.4 km/h	3,546
9) Ferndale Woods Elementary School- Ferndale Dr S	12,000 v/d	50 km	56.6 km/h	59.2 km/h	1,608
10) Oakley Park Public School- Davidson St	4,500 v/d	50 km	n/a	n/a	n/a
11) Maple Grove Public School- Grove St E	6,000 v/d	50 km	n/a	n/a	n/a
12) Sister Catherine Donnelly Catholic School- Hanmer St E	6,500 v/d	50 km	50 km/h	57 km/h	373
13) St. Marguerite D'Youville Elementary School	3,000 v/d	50 km	48.9 km/h	55.4 km/h	141
14) Johnson Street Public School- Johnson St	5,000 v/d	50 km	48 km/h	55 km/h	97
15) St. Mary's Catholic School- Leacock Dr	6,000 v/d	50 km	50 km/h	56 km/h	282
16) Assikinack Public School-Little Ave	7,000 v/d	50 km	52.9 km/h	59.1 km/h	1,378
17) Monsignor Clair Catholic Elementary School-Livingstone St E	14,000 v/d	50 km	39 km/h	57 km/h	304
18) Terry Fox Elementary School-Livingstone St E	12,500 v/d	50 km	39 km/h	57 km/h	305
19) Elementary School La Source- Madeline Dr	4,500 v/d	50 km	53.3 km/h	60.6 km/h	785
20) Holly Meadows Elementary School- Mapleton Ave	8,500 v/d	50 km	47.6 km/h	54.2 km/h	328
21) Saint Gabriel the Archangel Catholic School- Prince William Way	5,000 v/d	50 km	58 km/h	66 km/h	1,587
22) Trillium Woods Public School- Elmbrook Dr	18,000 v/d	60 km	n/a	n/a	n/a
23) Saint John Paul II Separate School- Ashford Dr	12,000 v/d	50 km	62 km/h	69 km/h	6,282

What costs are associated with implementing ASE enforcement?

39. Staff from Operations and Legislative & Court Services met with members of the Toronto Joint Processing Centre who provided approximate costs as outlined below. It was also discussed that should the City wish to proceed a Council motion requesting participation should be sent prior to May 2021 for inclusion or risk further delays in participating in the program.

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40. Based on information available, there are two ASE camera options. The first option is a mobile camera program; it includes a single camera per one direction, which could be moved to different locations (not including staff resources or any site upgrades). This option would cost approximately \$35,000/year per camera and a \$325 fee to relocate between sites. The second option is a fixed camera program, where the camera does not move and is hardwired in place. This second option would approximately cost \$34,000 in civil works, plus the same annual cost as the mobile camera (\$35,000/year) for an approximate annual total of \$69,000 per fixed camera. Staff are recommending a pilot of two mobile cameras at an approximate cost of \$70,000-\$80,000 per year.
41. The City's variable flashing 40 km/hr speed-limit signs would need to be de-energized and retrofitted with traffic signage stating times and dates of reduced speed limits, to make signage compatible with the processing centre's capabilities (the centre is not currently able to measure whether signs are flashing when ASE photos are taken).
42. There are several additional aspects that drive costs associated with an ASE Program, including:
- The arrangement where the current vendor supplies, installs, operates and maintains all camera systems on behalf of participating municipalities;
  - A startup fee paid to support Toronto's Joint Processing Centre (TJPC) operations; as new members join the program, existing members receives a portion of their startup costs back. This fee is based on the proportionate share of ticketing and operating costs of approximately \$100,000;
  - License plate retrieval data fee payable to the Ministry of Transportation;
  - The incremental costs associated with court administration of Provincial Offences;
  - Additional traffic signage is required to modify existing flashing 40 km/hr zones and also to warn of upcoming speed camera usage;
  - Additional City resources associated with operating the ASE Program; and
  - The costs of an education and awareness campaign to reach the broader community. Additional communications would be planned leveraging existing tools i.e. TWIB, social media, website and media contacts.

What additional staff resources would be required to implement and administer ASE enforcement?

43. Based on the Lessons Learned Paper for Red Light Cameras, the following municipal staff will be required from existing staff resources to start an ASE Program:
- A temporary 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 staff to make decisions about road safety, system operations and site selection;
  - A solicitor to deal with a number of contracts;
  - A purchasing representative to manage procurement and comment on contracts;



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- 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.
44. The vendor, Redflex, has revealed through experience that a full-time equivalent (FTE) would be needed to conduct the required traffic study research, site preparations and provide the reporting required by the Province on an ongoing basis; Should a decision be made to implement the program a Transportation Systems Technologist would be required to help administer the program.

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

45. The Provincial Offences courts operated by the City of Barrie would be responsible for receiving the charges related to ticketing, 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, and requesting plate denials for non-payment. Prosecutors from the Legislative and Court Services Department would be responsible for processing and responding to disclosure requests, conducting resolution meetings, and participating in trials and appeals.
46. Given the recent approval of ASE systems, the capacity of the courts to absorb additional charge volume is not clear. It is anticipated that the charges brought about by ASE infractions would add pressure to the court system.

Will there be revenues generated to offset costs?

47. Although the collection of fines should not be the rationale for the implementation of an ASE program, fine revenue may offset a portion of the costs associated with such a program. At this time, there is insufficient experience to determine the number of charges required for all program operating costs to be recoverable.
48. The number of convictions will not be the same as the number of motorists speeding within a community safety zone/school zone, as there may be occasions when a licence plate is not visible due to weather conditions, plates blocked by a trailer, low visibility because of dirt, a motorist being from out-of-province, etc.

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

49. A number of initiatives have been implemented to improve road safety, including road diets, monthly blitzes by BPS, and traffic calming measures.
50. The ongoing review of traffic operations/engineering alternatives is used to identify further options for improving traffic safety. Matters to be reviewed include collision history reviews, operational reviews and new forms of traffic calming measures.





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Does Barrie Police Service support the use of ASEs?

- 51. Barrie Police Services indicated that it would support the use of any initiative that would enhance road safety. It was noted by Barrie Police Services that it would be the responsibility of the City of Barrie to implement and manage the ASE Program, it would not be involved in the Program.
- 52. Representatives of the Barrie Police Service, note that since ASEs 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.
- 53. 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 ASE violations).

Conclusion

- 54. Staff are of the opinion that an ASE program could improve community safety by reducing speeding in school and community safety zones. In order to proceed further with this option, staff are recommending that The City of Toronto's Joint Processing Centre be advised that Barrie is seeking to participate in the Automated Speed Enforcement (ASE) program with the goal of operating 2 mobile ASE cameras within Community Safety Zones/School Zones rotated across all ten wards.
- 55. Staff would report back to General Committee after further discussions with the City of Toronto for authorization to proceed once further details on implementation and costs are available.

**ENVIRONMENTAL AND CLIMATE CHANGE IMPACT MATTERS**

- 56. There are no environmental and/or climate change impact matters directly related to the recommendation.

**ALTERNATIVES**

- 57. The following alternatives are available for consideration by General Committee:

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**Alternative #1**

General Committee could recommend that staff implement an ASE Program for community safety and school zones without gathering further information.

This alternative is not recommended. Further information is required from the City of Toronto determine Barrie's specific and complete costs and resource requirements to implement this program. .

**Alternative #2**

General Committee could decide not to proceed with further investigation of an ASE program for community safety and school zone cameras.

This alternative is available but is not recommended. Further exploration of an ASE program will provide General Committee and Council with additional details to allow it to consider whether to implement a program that is could improve community safety.

**Alternative #3**

General Committee could decide to have staff investigate with the City of Toronto a program that would have an increased amount of mobile speed cameras or fixed cameras.

This alternative is not recommended. Given the costs, two (2) mobile cameras were identified as a starting program to monitor and review the effectiveness of a program.

**Alternative #4**

General Committee could recommend that staff investigate participating in programs with other processing centres that may be emerging.

This alternative is available. It has not been recommended as no other joint processing centre is currently operating and it may delay the implementation of a program that takes up to 24 months to implement with an existing centre.

**FINANCIAL**

58. There are no direct financial implications associated with the recommended motion as it is directing staff to start the discussions with the City of Toronto and report back with further details. Information regarding the estimated financial implications of an ASE Program are identified in paragraphs 38 through to 45. If the recommended motion is approved, staff would be reporting back with detailed information concerning the costs associated with implementation.

**LINKAGE TO 2018-2022 STRATEGIC PLAN**

59. The recommendations included in this Staff Report are related to the following goal contained in 2018-2022 Strategic Plan:
- ✓ Fostering a safe and healthy community
60. The recommendation identified would enhance vehicle speed operations in the vicinity of school zones, should Council decide to proceed with implementation upon receiving further details about the program.