



Automated Speed Enforcement (ASE) Program

Enhancing Road Safety Through Technology

May 6, 2025

Markham Vision Zero

Road Safety Plan



**Safer Streets
Safer Communities
Saves Lives**



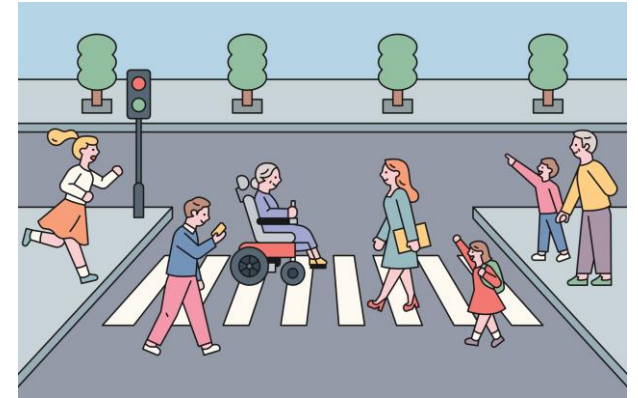
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Introduction - Automated Speed Enforcement (ASE)

- Automated Speed Enforcement (ASE) programs have been extensively implemented across various municipalities in Ontario, proving to be a streamlined and impactful method for enforcing speed limits.
- ASE aligns with Markham's Vision Zero Road Safety Plan, enhancing safety for pedestrians, cyclists, and drivers. By addressing speed-related risks, ASE supports the goal of reducing traffic injuries and fatalities, contributing to a safer community.
- Since May 2024, Engineering has been developing a Vision Zero Road Safety Plan (RSP) which focuses on reducing serious injuries and fatalities through a data-driven approach and strong public engagement.
- Drawing on compelling data that demonstrate the positive impact of ASE programs on public safety, Staff recommend accelerating the integration of ASE into the City's RSP and are seeking Council endorsement of an Automated Speed Enforcement (ASE) Program in the City of Markham.



Background - Automated Speed Enforcement (ASE)

How ASE Works

1. Speed Detection - ASE system uses technology to detect vehicle speed.
2. Image Capture - If a vehicle exceeds the speed limit, the system captures a photo.
3. Violation Processing - Violation details (speed, time, location) are recorded.
4. Review & Processing – Joint Processing Centre Provincial offences officers review the captured image details for violations.
5. Penalty Order: which contains a digitized copy of the image and an enlargement of the license plate, is sent only by mail to the registered plate holder.



Penalties and Vehicle Owner Liability

- The registered vehicle owner is liable for penalties, regardless of who was driving the vehicle at the time of the violation. ASE penalties do not impact the driver's demerit points or driving record.

Background - Automated Speed Enforcement (ASE)

- ASE has proven to be effective in many Ontario **municipalities** and there is no “one-size-fits-all” approach to deploying the type of ASE cameras (fixed or mobile).

Option 1 - Fixed ASE Camera Deployment

Fixed ASE cameras offer a constant and visible deterrent and promote long-term speed compliance.



Option 2 - Mobile ASE Camera Deployment

Mobile ASE cameras units are susceptible to vandalism, reducing effectiveness and increasing maintenance cost of the program.



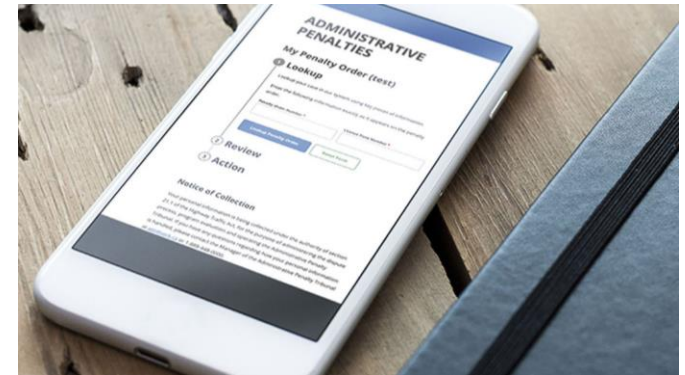
Background - Automated Speed Enforcement (ASE)

Set by Province (O. Reg 355/22), ASE penalties have four components:

1. Rate of Speed Fee (1–19 km/hr. over limit is charged \$5.00 per km/hr. over)
2. Victim Component Fee
3. License Plate Search Fee: (Flat Fee: \$8.25 charged by MTO)
4. Administrative Fees:
 - i. Late Fee: \$20.00 (per plate denial fee set by MTO)
 - ii. No-Show Fee: \$60.00 (for missed hearing/screening dates)

Example:

- A car is driving 58 km/hr. in a posted 40 km/hr. zone
 - = 18 km/hr. over X \$5.00 = \$90.00
 - + Victim Component Fee = \$20.00
 - + License Search fee = \$8.25
 - = \$118.25 Total Speeding Infraction Cost



Municipal Programs - Automated Speed Enforcement (ASE)

- Currently, the Region of York has deployed a mix of fixed and mobile ASE cameras on regional roads.
- There are five fixed ASE cameras on Regional roads in Markham, as follows:

Regional Road	School
14th Avenue, West of McDowell Gate	Trillium School
Bayview Avenue, North of Willowbrook Road	Thornlea Secondary School
Highway 7, East of Robinson Street	St. Patrick Catholic Elementary School
Leslie Street, South of Highway 407	St. Robert Catholic High School
McCowan Road, North of Carlton Road	Markville Secondary School



Regional ASE Camera located on Yonge St, south of Elgin St near Thornhill Public School

Effectiveness - Automated Speed Enforcement (ASE)

ASE Improves Road Safety

- Automated Speed Enforcement (ASE) has proven to be an effective tool in improving road safety by reducing speeding in high-risk areas such as school zones and community safety zones.
- The use of automated speed enforcement has resulted in better speed compliance, fewer collisions and less severity in the collisions that do occur.
- The presence of ASE also promotes long-term behavioral changes in drivers, encouraging greater compliance with posted speed limits.
- While results may vary depending on the location, many municipalities have successfully implemented ASE programs with positive outcomes.



Effectiveness - Automated Speed Enforcement (ASE)

Key Outcomes from Ontario Municipalities

1. City of Toronto

- % of vehicles exceeding the speed limit decreased by 80%
- Vehicle operating speed decrease by an average of 7 km/h in locations with an ASE device
- ASE cameras decrease the number of occurrences of excessive speeding (driving 20 km/h or more over the limit was reduced by 87%)

2. City of Ottawa

- ASE cameras increased compliance with the maximum posted speed limit by 200%
- ASE cameras led to an 11% decrease in the 85th percentile speed (the speed at which 85% of the traffic is travelling or below)
- ASE cameras decreased the number of motorists travelling at 15 km/h over the maximum posted speed limit by 72%



Effectiveness - Automated Speed Enforcement (ASE)

Key Outcomes from Ontario Municipalities

3. City of Mississauga

- ASE has led to an average increase of 26% in motorists' compliance with posted speed limits, especially in high-traffic areas where speeding is a concern
- The program has led to an average decrease of 8 km/h in vehicle operating speeds across various locations
- The percentage of vehicles speeding by more than 20 km/h over the limit has dropped by 80%.

4. Region of York

- Average speeds have decreased from 68 km/h to 56 km/h since enforcement began.
- Speed limit compliance has increased by 26 per cent, from 16 per cent to 42 percent
- The Region has noted that ASE can reduce collisions by 48%



ASE Implementation Requirements

Prior to launching an ASE program, the City must fulfill several prerequisites to ensure legal compliance and operational readiness.

These include:

1. Council endorsement of an ASE Program in Markham
2. Designating Community Safety Zones (CSZs);
3. Enacting a By-law for Administrative Monetary Penalties (AMPs) for ASE
4. Execution of key provincial agreements with Ministry of Transportation (MTO) and Ministry of the Attorney General (MAG)
5. Establishing a Joint Processing Centre (JPC)



ASE Implementation Requirements

What are Community Safety Zones (CSZ)?

- Community Safety Zones (CSZ) Designations aim to create safer environments for pedestrians by reducing speed limits and increasing enforcement, thereby lowering the risk of accidents and promoting safer streets for pedestrians, cyclists, and motorists.
- Under **Ontario's Highway Traffic Act (HTA)**, municipalities have the authority to designate Community Safety Zones in areas where public safety is of special concern.
- The designation serves as a legal tool to enhance enforcement and deter unsafe driving behaviors in areas such as near schools, parks, and senior facilities.

Community Safety Zone





ASE Implementation Requirements

To proceed with the ASE program, the City must enact a By-law establishing a System of Administrative Monetary Penalties (AMPs) for ASE violations. This is a required step before entering into agreements with the Ministry of Transportation (MTO) and the Ministry of the Attorney General (MAG).

Key elements of the By-law include:

- Authorizes issuance of a Penalty Order (PO) within 23 days of a speeding violation.
- Specifies mandatory PO content (e.g., file number, owner details, violation info, penalty amount, payment/appeal options).
- Outlines PO service and payment timelines (30 days unless appealed).
- Defines the AMPS adjudication process, including Screening and Hearing Reviews, and officer powers.
- Penalty amounts are set by the Province and consist of four components under O. Reg. 355/22.

**Administrative
Monetary Penalty
System**

ASE Implementation Requirements

The City must execute the following key provincial agreements with:

1. Ministry of Transportation (MTO)

- The City must execute an agreement to access vehicle registration data for the purpose of issuing ASE infractions
- The agreement also requires the City to submit annual and semi-annual reports detailing the number of Penalty Orders issued, disputed, and paid.



2. Ministry of the Attorney General (MAG)

- A separate standardized agreement is required to formalize the City's obligation to remit the Victim Fine Surcharge to the province.
- This includes monthly and semi-annual reporting on amounts collected and outstanding.
- The agreement also outlines procedures for initiating plate denial requests through MAG's Defaulted Fine Control Centre for unpaid Penalty Orders.





ASE Implementation Requirements

Joint Processing Centre (JPC) Requirement

- The City must also establish a Joint Processing Centre (JPC) responsible for managing ASE camera data and issuing penalty notices to vehicle owners.
- The City of Markham can either establish and operate its own JPC, or partner with another municipality that operates an existing JPC.
- Currently, the City of Toronto, Region of York and the Town of Newmarket are operating or are in the process of establishing JPCs.

Benefits of JPC Partnership

- Avoids major upfront investments in equipment, software, and dedicated staffing.
- Leverages an operational system to facilitate an efficient ASE program.
- Gains support from trained personnel experienced in ASE ticket review and processing.



ASE Implementation Requirements

- Currently, the City of Toronto, York Region and the Town of Newmarket are operating, or are in the process of establishing JPCs.

Toronto JPC

- Launched December 2019 and served 12 municipalities
- One-time joining fee and a per-Penalty Order (PO) fee
- Volume caps imposed have prompted some municipalities (e.g., Barrie, Brampton, Ottawa) to establish their own JPCs

York Region JPC

- Launched JPC in late 2024 and is currently only providing services for internal use only
- Additional operational, cost and possible expansion details have not yet been released

Newmarket JPC

- No joining fee, customizable services, per-penalty order (PO) fee
- Currently providing JPC services to itself and Vaughan, Whitchurch-Stouffville, Georgina
- In contract discussions with 5 additional municipalities

ASE Implementation Next Steps

Q2 / Q3 -2025: ASE Implementation

- Council Endorsement of the ASE program in Markham
- Complete a comprehensive evaluation of all publicly operated Elementary and Secondary School Zones, utilizing data-driven criteria to identify CSZ candidate locations for the initial phase of the program
- A total of eight (8) fixed ASE camera locations will be identified for the initial roll-out – one in each ward.
- The ASE camera will be installed at a fixed location and remain operational 24 hours a day, 7 days a week. The site will be subject to ongoing evaluation to assess the effectiveness of the program, with consideration given to relocating the camera should sustained improvements in driver speed compliance be observed
- Finalize 2026 Operating Budget requirements and amounts for the ASE program



ASE Implementation Next Steps

Q3 - Q4 2025: Complete Regulatory & Contractual Requirements

- Staff will obtain the necessary ASE authorizations with MTO and MAG
 - The MTO agreements authorize the use of license plate information gathered by ASE technology and vehicle owner details from the MTO licence plate database.
 - The MAG agreement deals with the financial component of the program including the responsibility to collect/remit payment to the Provincial Victims' Justice Fund, use of the Default Fine Control Centre to recover unpaid fines (licence plate denial), and report requirements to the Province.
- Execute agreements to utilize the Town of Newmarket's Joint Processing Centre and its ASE Camera Vendor.
- Complete Privacy Impact Assessment with Information and Privacy Commissioner (IPC).



ASE Implementation Next Steps

Q4 2025: Public Communication & Engagement Strategy

- Staff will develop and execute a robust communications plan to inform and engage residents and the broader community of the ASE program's rollout. Key components will include:
 - **Media Announcements:** Public updates to raise awareness of the program before and after implementation.
 - **City Website:** A dedicated webpage featuring enforcement locations, FAQs (explaining how ASE works), penalties, and safety benefits.
 - **Social Media Outreach:** Ongoing digital campaigns to promote safety messaging and key program milestones.
 - **Printed Materials:** ASE brochures and flyers distributed through city facilities, libraries, schools, and community centers.
 - **Councillor Newsletter Content:** Program updates and key information highlights.



ASE Implementation Next Steps

2026 Q1: ASE Implement Rollout

- Continuation of public awareness campaign
- Installation of ASE “Coming Soon Signs” and “Community Safety Zone” signs for each of the eight (8) ASE camera locations
- Later replaced with “Municipal Speed Camera In-Use” regulatory signs when activated at any given location
- Installation and testing of the eight (8) ASE cameras (1 per ward)
- Recruitment / Training of screening and hearing officers

- Spring 2026: **ASE Go-Live**





Financial Considerations

- Markham's proposed ASE program is structured to support the broader objectives of the City's Vision Zero Road Safety Plan by promoting compliance with speed limits and enhancing mobility safety.
- Penalty revenue generated through the ASE program will be used to cover program expenses, with any surplus addressed through the annual budget process; while revenue is difficult to predict, staff anticipate full cost recovery for known capital and operating costs.
 1. Startup Costs will cover various aspects the implementation, including camera installation, signage, public engagement (marketing and communications), and a Transportation Engineering FTE position to facilitate technical aspects of the program operation.
 2. Operating Costs will not be incurred until 2026 when the ASE program goes live, and will include costs associated with JPC processing fees, camera leasing costs, regulatory signage and adjudication staff. The 2026 operating costs will be incorporated into the annual budget process.



Recommendation

1. That the both the Report and Presentation entitled “Automated Speed Enforcement (ASE) Program be received;
2. That Council approve the implementation of an Automated Speed Enforcement (ASE) Program in the City of Markham;
3. That Council delegate authority to the City Treasurer and City Clerk to execute any agreement or document in a form satisfactory to the City Solicitor, required to implement or administer the ASE program within the City of Markham, including but not limited to agreements with the Town of Newmarket, ASE Camera Vendor, Ministry of Transportation and Ministry of Attorney General;
4. That Council delegate authority to the Director of Engineering to identify and approve the initial and future ASE installation locations, including adding additional ASE cameras, subject to the annual budget process, with priority given to areas with significant safety concerns;
5. That Council enact an amendment to Traffic By-law 106-71, Schedule 24 (Community Safety Zones), identifying all publicly operated elementary and secondary school locations as Community Safety Zones within the City of Markham as outlined in Attachment 1;



Recommendation

6. That Council enact the proposed By-law to establish a System of Administrative Monetary Penalties for Violations of Automated Speed Enforcement Systems in the City of Markham as outlined in Attachment 2;
7. That Council approve the in-year capital addition to Budget 2025 in the amount of \$495,000, with funding strategy to be identified and implemented by the City Treasurer;
8. That the City Clerk forward a copy of this report to the Regional Municipality of York (York Region), York Region's local municipalities, York Regional Police, York Region District School Board, York Region Catholic School Board, the Ministry of Transportation Ontario, and the Ministry of the Attorney General; and further,
9. That staff be authorized to and directed to do all things necessary to give effect to these resolutions.



Thank you