

City Operations

Edmonton

# Automated Traffic Enforcement Report 2023

[saferoads@edmonton.ca](mailto:saferoads@edmonton.ca)  
[edmonton.ca/VisionZero](https://edmonton.ca/VisionZero)

## TABLE OF CONTENTS

1. Introduction	PG 1
2. Safe Mobility Strategy 2021 - 2025	PG 2
3. Automated Traffic Enforcement Technology Guideline	PG 2
4. Automated Enforcement Summary	PG 3
5. Mobile Speed Enforcement	PG 3
6. Intersection Safety Devices	PG 6
7. Automated Enforcement Targets	PG 10
8. Automated Enforcement Revenue	PG 11
9. Other Speed Management Initiatives	PG 11
10. Conclusion	PG 14

## Introduction

This report has been prepared by the City of Edmonton in accordance with Alberta's [Automated Traffic Enforcement Technology Guideline](#). This report provides all required data and information as specified in Section Q - Annual Public Report of the guideline and demonstrates the main guiding principles behind the use of Automated Traffic Enforcement (ATE) in Edmonton. This report also describes the automated enforcement program measures and targets that align with long term transportation safety outcomes as outlined in Section D - Transportation Safety Outcomes of the guideline.

The City of Edmonton is committed to achieving Vision Zero, the internationally recognized goal of zero traffic-related fatalities and serious injuries, through safe and livable streets by 2032.

Safe speeds are fundamental to achieving this goal by giving people more time to react to the unexpected, reducing crash frequency and severity, and increasing the driver's field of vision. Automated enforcement, including Mobile Photo Enforcement (MPE) and Intersection Safety Devices (ISDs) are proven countermeasures to reduce speeding, therefore playing an important role in combination with other safe mobility programs to make streets safer and more livable for all. Research to investigate the safety impacts of MPE conducted by the City of Edmonton's Research Chair in Urban Traffic Safety at the University of Alberta has shown that efficient and effective strategic deployment of MPE reduces both speed and crashes, underscoring the significance of this tool for improving traffic safety.<sup>1</sup>

---

<sup>1</sup>Agina, S., Momeni Rad, F., El-Basyouny, K. Linking Deployment Outcomes to Program Impacts for Mobile Photo Enforcement. *Safety*, 2023, 9, 88. <https://www.mdpi.com/2313-576X/9/4/88>

## Safe Mobility Strategy 2021 - 2025

The City of Edmonton's *Safe Mobility Strategy 2021-2025* is an innovative approach designed to accelerate our journey to Vision Zero.

The *Safe Mobility Strategy* sets out deliberate actions to address the systemic factors that contribute to serious crashes, including unsafe speeds. In Edmonton, safe speeds are encouraged through a combination of measures including driver feedback signs (DFS), engineering upgrades, education and awareness campaigns, and automated enforcement in coordination with in-person enforcement by the Edmonton Police Service (EPS). The locations with predominant speeding and red light problems are selected for automated enforcement after in-depth traffic analysis and consideration of engineering and design standards.

'*Strategic Collaboration with the Edmonton Police Service*' is a Key Action in the *Safe Mobility Strategy*, which includes supporting the strategic location selection and scheduling of both in-person traffic enforcement and City-led automated enforcement. The *Safe Mobility Strategy 2021-2025*, is included as [Attachment 1](#).

## Automated Traffic Enforcement Technology Guideline

In response to the revised [Automated Traffic Enforcement Technology Guideline](#) in 2021 and 2023 the City of Edmonton established new processes and made the following changes in practice:

- Data collection and annual reporting was addressed by collecting the average daily traffic data at all locations and implementation of supplementary equipment where traffic data during deployment was not available.
- All sites that were previously approved based on 'conventional enforcement by the EPS deemed unsafe' and 'complaints from community members' criteria and locations where the speed limit is less than 50 km/h (with the exception of designated Playground Zones which have a speed limit of 30 km/h, and construction zones) were deactivated and removed from deployment schedule.
- Ticket review software was updated to ensure only one ticket can be issued to the same vehicle within a five-minute period.
- The new site approval process with accompanying datasets was developed to comply with the new requirement and site assessment form supplied in the revised guideline. As a result, 560 mobile speed enforcement sites and 105 intersection safety device locations were approved by EPS. In addition, the site assessment for each site, outlining the reason and criteria for selection and approval was posted at [edmonton.ca/enforcement](http://edmonton.ca/enforcement) through the [Safe Streets Map](#).
- In 2023, a total of 305 automated enforcement sites were renewed including 245 Mobile Photo Enforcement sites and 60 Intersection Safety Device locations.
- Also in 2023, 24 Mobile Photo Enforcement sites were removed from Anthony Henday Drive. The City is conducting an analysis to identify new locations to replace these sites.
- The Provincial Audit of the ATE program was conducted in early 2023, and results showed full compliance with the program including all requirements of the Automated Traffic Technology Guideline.
- The 2023 Traffic Safety Plan, included as [Attachment 2](#), indicating the commitment of the City to provide a transparent and accountable automated enforcement program, was created.

## Automated Enforcement Summary

Automated traffic enforcement is deployed in Edmonton at approved sites in accordance with the Automated Traffic Enforcement Technology Guideline set out by the Province of Alberta. The City's automated enforcement program is delivered and managed by the Safe Mobility Section within the City Operations Department with oversight and direction from the Edmonton Police Service. The program consists of Mobile Photo Enforcement, photo radar and photo laser units which move among active enforcement sites, and Intersection Safety Devices, which are deployed at fixed locations.

Please find below a summary of the outcomes of the City of Edmonton's automated enforcement program for 2023, prepared by the City of Edmonton Safe Mobility Section.

### Mobile Speed Enforcement

The City of Edmonton operates 18 photo radar units and 17 photo laser units to enforce speeding violations at approved automated enforcement sites.

The City has made a significant effort to ensure that the automated enforcement program is transparent and focused on safety. Mobile speed enforcement vehicles have bright yellow wraps or decals to be more visible to drivers and are parked so that they can be seen without obstruction by the direction of traffic they are monitoring.

Edmontonians may:

- Explore the [Safe Streets Map](#) which shows all automated enforcement sites, mobile speed enforcement sites, intersection safety device locations and their site assessments
- Read the [2022 Automated Traffic Enforcement Annual Report](#)

Once sites have been approved, the deployment of available automated enforcement visits across eligible sites is carried out through the application of an optimization tool designed by the University of Alberta. The tool considers several factors for each site and provides the optimal distribution of visits to maximize the safety impact. The factors considered by the deployment tool for each site include:

- Frequency and severity of crashes
- Frequency and severity of vulnerable road user crashes
- Speed compliance rates
- Number of speed complaints filed by residents
- Number of children and seniors in the area
- Historical violation rates

### Mobile Photo Enforcement General Statistics

To assess the impact of mobile speed enforcement, traffic flow data, violation rates, ticket numbers and crash data for 2019 to 2023 were gathered for each site, as provided in [Attachment 3](#). General statistics for the mobile photo enforcement program are summarized in Table 1.

There are a number of key highlights related to the performance and outcomes of the mobile photo enforcement program in 2023:

- The deployment of available automated enforcement sites was strategized to distribute visits to a large number of sites in order to maximize the safety impact. In 2022, there was a decrease in the number of sites visited (compared to 2021) due to the fact that the City ceased enforcement at 174 sites with a speed limit of 40 km/h in accordance with Provincial Guidelines. The number of sites visited was further reduced in 2023 as more sites were deactivated in 2022 due to the new site criteria specified in the 2021 Automated Traffic Enforcement Technology Guideline, as well as roadway and LRT construction impacting the ability to actively enforce those areas. No new sites were added due to a Provincial moratorium on creating new sites.
- There was a 2.6% increase in the total number of hours of enforcement, due to the contractor's increased compliance to operating hours specified in the contract.
- The total number of violations decreased between 2019 and 2022, but increased in 2023. The increase in violations may be due to a number of factors, including mild weather in 2023 and refinements to the scheduling optimization tool, which improves our ability to intentionally schedule enforcement at high violation areas.
- Enforcement in playgrounds has been increasing since 2019, both in terms of the number of sites visited and the hours of enforcement. Although the number of total violations in playground zones has increased, the violation rate (i.e. the number of violations per hour enforced) has decreased steadily since 2019.
- The number of vehicles receiving multiple tickets per year decreased between 2019 and 2022, but increased in 2023. However, there has also been an increase in the number of vehicles monitored during this time; when considered as a proportion of the vehicles monitored, the number of repeat violators is similar to the proportions seen in 2020-2022 (ranging from 15 to 20 repeat violations per 10,000 vehicles monitored).

**Table 1. Mobile Photo Enforcement General Statistics (2019 - 2023)**

	Year	2019	2020	2021	2022	2023
<b>MONITORED</b>	Total Sites Visited	413	439	535	475	422
	Total Hours	52,827	53,015	53,016	54,745	56,203
	Number of Vehicles Monitored	12,300,400	8,889,761	7,282,519	8,446,403	10,558,439
	Playground Zone Sites Visited	152	215	220	262	278
	Playground Zone Hours	5,568	6,270	10,353	13,313	17,764
<b>SPEED</b>	Total Violations*	383,294	145,835	140,287	139,491	165,300
	Total Tickets*	332,303	124,470	120,110	113,248	135,442
	Ticket Conversion Rate	86.7%	85.3%	85.6%	81.2%	81.9%
	Violations per Hour	7.26	2.75	2.65	2.55	2.94
<b>HIGH SPEED (21+)</b>	High Speed Violations 21+ km/h Over the Speed Limit	41,712	19,750	19,384	21,691	27,918
	Total Speeding Tickets 21+ km/h Over the Speed Limit	34,760	15,989	15,739	16,787	22,256
	Violations per Hour	0.79	0.37	0.37	0.40	0.50

PLAYGROUND ZONES	Playground Zone Violations	46,618	17,268	21,360	22,916	25,320
	Playground Zone Tickets	43,340	15,883	19,305	20,014	21,274
	Violations per Hour	8.37	2.75	2.06	1.72	1.43
REPEAT	Number of License Plates Receiving Multiple Tickets	58,970	15,475	14,463	13,227	17,492
	Maximum Number of Tickets per 1 License Plates	32	15	21	18	20

\*A violation is defined as a vehicle captured exceeding the threshold speed on a given roadway. A violation results in a ticket only following a thorough review process whereby a determination is made to issue a ticket to the registered owner of the offending vehicle.

Table 2 illustrates the impact of mobile photo enforcement on speeds and driving behaviour. In 2022 and 2023, mobile photo enforcement was deployed to the same 375 sites for at least one hour. At those sites, the average violation rate per site increased by 0.07 violations per hour, the average traffic speed per site increased by 0.64 km/h, and the average compliance rate per site dropped by 0.58%.

The overall increase in speeding indicators can be attributed to a number of factors. First, mild weather and low snowfall in 2023 could have contributed to higher rates of speeding. Specifically, there tend to be less speeding violations in winter months when there is higher snowfall and snow on the ground; the mild weather in the winter months of 2023 allowed drivers to feel comfortable travelling at higher speeds for longer periods throughout the year. Second, improvements made to the deployment optimization tool have allowed for the intentional scheduling of high-violation locations. This involves targeting sites during peak periods of the day when the highest number of speed violations are expected. This was done in an effort to optimize our resources and maximize the safety benefits derived from automated enforcement.

**Table 2. Comparison between 2022 and 2023**

<b>Sites Visited in Both 2022 &amp; 2023</b>	375
<b>Average Change in Hourly Traffic per Site</b>	+28
<b>Average Change in Violation Rate per Site</b>	+0.07
<b>Average Change in High Speed Violation Rate per Site</b>	+0.01
<b>Average Change in Average Traffic Speed per Site</b>	+0.64
<b>Average Change in Compliance Rate per Site</b>	-0.58%

Table 3 provides the crash statistics for the 422 mobile enforcement sites visited in 2023.

### Interpreting Crash Statistics

It is important to highlight that in September 2022, collision reporting centres were launched in Edmonton. This event marked a significant change in the crash data collection and reporting process

for citizens as well as how the data is managed and reported. Particularly, this change had two impacts on data:

- The number of minor injury crashes reported each year increased significantly. This is because collision reporting centres have a slightly different definition for minor injuries compared to EPS.
- Crash reports take much longer to reach the City of Edmonton from the collision reporting centres, compared to the previous process with EPS. As a result, the complete list of 2023 crashes has not been finalized yet.

Additionally, changes in traffic volumes have also impacted crash trends. At the start of the COVID-19 pandemic in 2020, Edmontonians were asked to stay home as a public health safety measure. As a result, 2020 and 2021 were outlier years in terms of vehicle volumes, travel patterns and crash numbers. For these reasons, both the three year average (including years with reduced crashes due to COVID) and the 2022 statistics are provided in the table below for comparison.

Because the complete list of 2023 crashes has not been finalized yet, it is difficult to assess the change in crash numbers. While the preliminary analysis shows that total crashes are much lower than in 2022, we expect the number of crashes in 2023 to increase once all crash reports have been received. The number of crashes that resulted in fatalities or major injuries that occurred at automated enforcement sites marginally increased in 2023; comparatively, preliminary analysis showed that there has been a 5.6% increase in crashes that resulted in fatalities or major injuries city-wide in 2023.

**Table 3. Crash Statistics for Mobile Photo Enforcement Sites**

Crash Type*	2020-2022 (Yearly Average)	2022	2023*
<b>Total Crashes</b>	685	825	687
<b>Fatal Crashes</b>	1	1	1
<b>Major Injury Crashes</b>	13	16	18
<b>Fatal &amp; Major Injury Crashes</b>	14	17	19

\*2023 crash numbers are subject to change as reports are still being received at the time of submission of this report.

## Intersection Safety Devices

Intersection Safety Devices are installed at 105 locations/approaches (76 intersections)<sup>2</sup> to enforce red light running and speeding.

### Intersection Safety Device Statistics

In order to assess the impact of ISDs, traffic flow data, violation rates, ticket numbers and crash data for 2019 to 2023 were gathered for each site, as provided in [Attachment 4](#). General statistics for the intersection safety devices are summarized in Table 4.

<sup>2</sup> As of December 2023, 17 sites are currently not operational due to LRT construction and the Yellowhead Freeway Conversion project.

It is important to note that between 2019 and 2020 there was an increase in the number of ISD sites across the city, resulting in an increase in ISD days of operation, and subsequent violation and ticket numbers during that time.

There are a number of key highlights related to the impact of ISDs in Edmonton. Most notably, there has been a steady decline in a number of key indicators including:

- Speeding tickets per daily traffic (i.e. vehicles monitored per ISD day)
- High speed tickets for 21+ km/h over the speed limit per daily traffic
- Number of license plates receiving multiple speeding tickets

There was a decrease in daily traffic (i.e. number of vehicles monitored per ISD day) in 2020 due to COVID restrictions; however, the number of vehicles monitored per ISD day has increased steadily over the past four years. Notably, the daily traffic recorded in 2023 exceeded that recorded in 2019 by 8%.

There was a high number of red light tickets in 2022; however, this decreased substantially in 2023. The number of red light tickets issued is often impacted by weather conditions such as snowfall and the amount of snow on the ground. In particular, the high number of red light tickets in 2022 could be attributed to higher than average snowfall in January and November of 2022, and the low number in 2023 could be attributed to lower than average snowfall in January, November and December of 2023. The City continues to encourage drivers to slow down and drive to the conditions of the road, so they can safely come to a stop when required at intersections.

**Table 4. ISD Sites General Statistics (2019 - 2023)**

	Year	2019	2020	2021	2022	2023
<b>MONITORED</b>	Total ISD Days	24,185	37,188	37,667	35,954	33,253
	Number of Vehicles Monitored	315,111,321	436,346,470	476,181,954	479,328,213	467,620,677
	Vehicles Monitored per ISD Day (Daily Traffic)	13,029	11,734	12,642	13,332	14,063
<b>SPEED</b>	Total Speeding Violations	312,606	412,958	330,041	330,988	331,902
	Total Speeding Tickets	271,127	353,419	276,973	265,141	261,384
	Speeding Violation Conversion Rate	86.73%	85.58%	83.92%	80.11%	78.75%
	Speeding Tickets per ISD Day	11.21	9.50	7.35	7.37	7.86
	Speeding Tickets per 100,000 Monitored Vehicle	86.04	81.00	58.17	55.32	55.90
	Speed Tickets per Daily Traffic	20.81	30.12	21.91	19.89	18.59



<b>HIGH SPEED (21+)</b>	High Speed Violations 21+ km/h Over the Speed Limit	17,020	22,354	17,825	18,382	19,172
	Total Speeding Tickets 21+ km/h Over the Speed Limit	13,019	16,058	11,891	11,553	11,632
	Speeding Tickets 21+ km/h per ISD Day	0.54	0.43	0.32	0.32	0.35
	Speeding Tickets 21+ km/h per 100,000 Monitored Vehicle	4.13	3.68	2.50	2.41	2.49
	Speed Tickets 21+ per Daily Traffic	1.00	1.37	0.94	0.87	0.83
<b>RED LIGHT</b>	Total Red Light Violations	51,202	56,960	62,315	67,465	48,936
	Total ISD Red Light Tickets	26,094	27,905	28,211	32,201	22,706
	Red Light Violation Conversion Rate	50.96%	48.99%	45.27%	47.73%	46.40%
	Red Light Tickets per ISD Day	1.08	0.75	0.75	0.90	0.68
	Red Light Tickets per 100,000 Monitored Vehicle	8.28	6.40	5.92	6.72	4.86
	Red Light Tickets per Daily Traffic	2.00	2.38	2.23	2.42	1.61
<b>REPEAT</b>	Number of License Plates Receiving Multiple Speeding Tickets	49,041	66,328	49,403	46,508	44,900
	Number of License Plates Receiving Multiple Red Light Tickets	910	1,189	1,175	1,445	848

\*A violation is recorded when a vehicle is captured exceeding the threshold speed or running a red light on a given roadway. A ticket is issued for a violation only after undergoing a comprehensive review process, whereby a determination is made to issue a ticket to the registered owner of the offending vehicle.

Table 5 provides average violation rates and speeds per site between 2022 and 2023 and demonstrates the impact of ISDs on speeds and driving behaviour. During this time nearly one billion vehicles were monitored by ISDs across the city. The results are as follows:

- The average speeding violation rate per site dropped by 0.73 violations per 100,000 vehicles
- The average speeding violation rate for 21+ km/h over the speed limit per site increased by 0.12 violations per 100,000 vehicles
- The average red light violation rate per site dropped by 2.81 violations per 100,000 vehicles
- The average traffic speed per site dropped by 0.3 km/h

Despite the increase in high speed violations, when we account for the higher daily traffic (i.e. number of vehicles monitored per ISD day), there was a reduction in all indicators including the rate of high speed violations.

It is also worth noting that, although there was an increase in speeding violations at mobile enforcement sites, there was a decrease in speeding violations per 100,000 vehicles at ISD sites, during the same period. This could be attributed to the fact that consistency of the locations reduces the anticipatory deterrent effect that uncertainty of the locations has on driver behaviour, which

was also reflected in the lower number of repeat violations. This also shows the impact of continuous traffic monitoring and the change in behaviour associated with automated enforcement.

**Table 5. Comparison between 2022 and 2023**

<b>Average Change in Speeding Violations per 100,000 Vehicles per Site</b>	-0.73
<b>Average Change in Speeding 21+ km/h Violations per 100,000 Vehicles per Site</b>	+0.12
<b>Average Change in Red Light Violations per 100,000 Vehicles per Site</b>	-2.81
<b>Average Change in Average Traffic Speed per Site</b>	-0.3 km/h

### Interpreting Crash Statistics

The statistics provided in Table 6 and Table 7 indicate that there was a decrease in crashes at ISD-monitored intersections across the city in 2023; however, the 2023 numbers are subject to change. Given the current data, there was a decrease in both total crashes at ISD intersections and crashes resulting in major injuries or fatalities.

Notably, crashes at ISD sites that resulted in major injury or fatality show the opposite pattern as to what has been seen across the city. Specifically, there was a remarkable decrease in crashes resulting in major injuries or fatalities at the ISD sites. In contrast, city-wide data indicated an increase in the same type of crashes at intersections when comparing 2023 to the average of 2020-2022.

**Table 6. Intersection Crash Statistics for ISD Sites**

<b>Intersection Crashes</b>	<b>2020-2022 (Yearly Average)</b>	<b>2022</b>	<b>2023*</b>
<b>Total Crashes</b>	2,638	3,078	1,944
<b>Fatal Crashes</b>	1	2	2
<b>Major Injury Crashes</b>	31	42	26
<b>Fatal &amp; Major Injury Crashes</b>	32	44	28

\*2023 crash numbers are subject to change as reports are still being received at the time of submission of this report.

**Table 7. Through Lane Crash Statistics for ISD Sites**

<b>Intersection Through Lane Crashes</b>	<b>2020-2022 (Yearly Average)</b>	<b>2022</b>	<b>2023*</b>
<b>Total Crashes</b>	804	927	605
<b>Fatal Crashes</b>	1	2	0
<b>Major Injury Crashes</b>	11	13	6
<b>Fatal &amp; Major Injury</b>	12	15	6

Crashes			
---------	--	--	--

\*2023 crash numbers are subject to change as reports are still being received at the time of submission of this report.

## Case Study to Showcase the Safety Value of ISDs

In December 2018 a new ISD was installed at 111 St and Whitemud Drive to address the high number of crashes seen at the intersection. As shown in Figure 1, since the installation of the ISD, the number of crashes per year have dropped significantly. Before the ISD was installed, the intersection averaged 12 crashes per year. This has dropped to an average of only 5 crashes per year after installation.

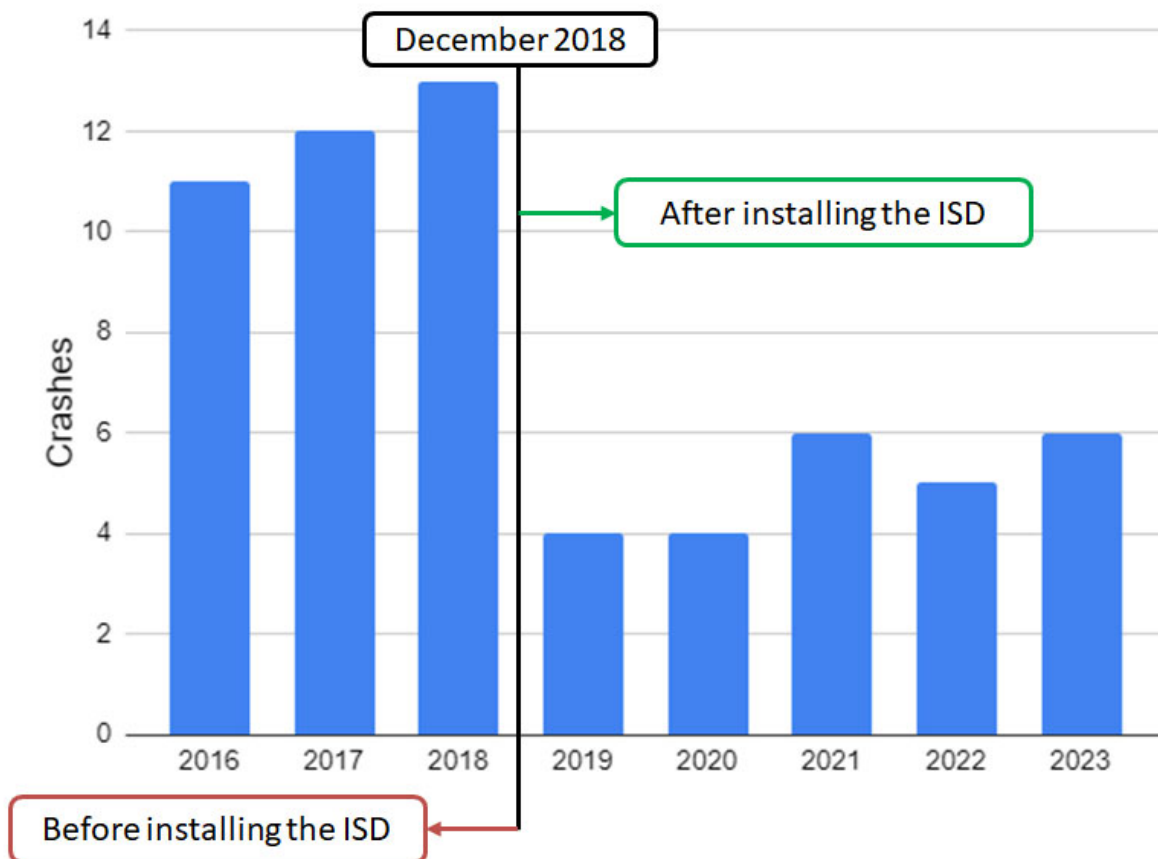


Figure 1. Crashes per year at the ISD site at 111 St & Whitemud Drive EB

## Automated Enforcement Targets

The City of Edmonton's Traffic Safety Plan tracks three performance measures for the automated enforcement program which are:

- Repeat violators: the percentage of license plates that had at least one ticket from the current quarter and had at least one ticket in the past year.
- High speed violations: the percentage of total violations that exceed 21+ km/h over the speed limit.
- Location impact: the percentage of total deployment hours spent conducting enforcement at high injury network sites. The City's high injury network includes streets and intersections where crashes and traffic-related serious or fatal injuries have occurred more frequently

over the last several years and is publicly available on the [Safe Streets Map](#). The City uses this information to prioritize improvements, identify high risk areas, and create solutions to make our streets safe for all Edmontonians.

Table 8 illustrates the City of Edmonton's performance on the three measures defined above against the targets for each measure.

**Table 8. Automated Enforcement Performance Measures**

Performance Measures	Repeat Violators	High Speed Violations	Location Impact
<b>Target</b>	Less than 45%	Less than 7.6%	More than 12%
<b>Q1 2023</b>	40.1% - On Target	6.7% - Within Target Range	13.5% - On Target
<b>Q2 2023</b>	38.3% - On Target	9.3% - Opportunity to Improve	13.8% - On Target
<b>Q3 2023</b>	38.8% - On Target	9.5% - Opportunity to Improve	12.3% - On Target
<b>Q4 2023</b>	40.1% - On Target	8.6% - Opportunity to Improve	11.5% - Within Target Range

## Automated Enforcement Revenue

The automated enforcement program in Edmonton generated 29.185 million dollars in 2023. As outlined in [City Policy C579B Traffic Safety Automated Enforcement Reserve](#), automated enforcement revenue generated by the City of Edmonton program is reinvested back into safe mobility initiatives such as crosswalk upgrades, safe street toolkits, road design improvements, and public education campaigns to help reach Vision Zero; and do not go into general City revenues.

## Other Speed Management Initiatives

Projects and programs to encourage safe speeds are a significant focus for the City of Edmonton. Learn more about how the city is making streets safer city wide at [edmonton.ca/VisionZero](https://edmonton.ca/VisionZero).

Lower speeds translate into fewer crashes, injuries and fatalities on our streets and afford greater protection to our most vulnerable road users including pedestrians, cyclists, users of micro mobility, seniors and children and therefore constitute a critical factor in creating a safe system for all people.

Shifting public understanding and expectations as to what constitutes safe and acceptable speeds will further contribute to a larger, more transformational shift in traffic safety culture and help us reach our goal of Vision Zero.

## Driver Feedback Signs

The City of Edmonton uses driver feedback signs (DFS) to share vehicle speed information with drivers and alert them to when they are speeding. In 2023, there were 215 DFS deployed across the City on major roadways, in neighborhoods and near playgrounds. In addition, portable DFS are now

available upon request by citizens as part of the [Safe Speeds Toolkit](#) program. The total number of requests for portable DFS honoured in 2023 was 339, which is up from 329 requests in 2022.

The City of Edmonton's Research Chair in Urban Traffic Safety at the University of Alberta, conducted research on the effectiveness of DFS use on different roads and intervention types. Results showed significant crash reductions in all scenarios ranging from 31.0% to 41.6%. DFS were more effective in reducing crashes for arterials compared to collectors. Also, the combined use of DFS and mobile photo enforcement had a slightly higher impact on safety.<sup>3</sup>

## Speed Limit Reduction

Speed limit reduction is a *Key Action* outlined in the *Safe Mobility Strategy*, reflecting the fact that speed is a factor in every crash. In alignment with the internationally recognized evidence on the relationship between speed and traffic fatalities and serious injuries, in 2021, Edmonton implemented a reduction in the default speed limit from 50 km/h to 40 km/h, with a focus on residential streets, the downtown core and high pedestrian areas.

A comprehensive evaluation of the speed limit reduction initiative was conducted and found statistically significant reductions in speeds and crashes including serious crashes. In collaboration with the University of Alberta, a research article detailing the outcomes of the evaluation, entitled "*Assessing the effectiveness of speed limit reduction in Edmonton: A case study analysis*", was recently published in the prestigious academic journal, *Accident Analysis and Prevention*.<sup>4</sup>

Notably, the City of Edmonton's speed limit reduction initiative has been selected as a finalist for the *Transportation Association of Canada's 2024 Road Safety Achievement Award*. The winner will be announced in May.

Learn more about the speed limit reduction initiative at [edmonton.ca/SafeSpeeds](https://edmonton.ca/SafeSpeeds).

## Engineering

Safe Mobility Engineering proactively builds new streets and upgrades existing streets with design features that are intended to prevent crashes or reduce the severity of outcomes when crashes occur. This includes designing and implementing measures to reduce speeds such as speed humps, speed tables, raised crosswalks, two-stage crossings and curb extensions where appropriate for the type of road.

In 2023, the City of Edmonton introduced the Towards 40 Program which is focused on improving safety in areas where speeding and road safety issues have been identified. The program is designed to increase speed limit compliance and encourage safe driving behaviours using adaptable measures to improve safety.

The Speed Humps and Tables Program was also launched in 2023. This program will install speed humps or speed tables along priority corridors where there is a need to encourage safer speeds.

---

<sup>3</sup> Wu, M., El-Basyouny, K. & Kwon, T. (2020). *Lessons learned from the large-scale application of Driver Feedback Signs in an urban city*, *Journal of Transportation Safety & Security*, 13(12):1-19. <https://www.tandfonline.com/doi/full/10.1080/19439962.2020.1726546>

<sup>4</sup> Abohassan, A., Contini, L., Elmasry H., El-Basyouny, K., 2023. Assessing the effectiveness of speed limit reduction in Edmonton: A case study analysis. *Accident Analysis and Prevention*, 195. <https://www.sciencedirect.com/science/article/abs/pii/S0001457523004268?dgcid=author>

The City of Edmonton continuously works to improve safety around schools, along priority corridors and at priority crossings. The Safe Routes to School Program, also initiated in 2023, will further improve safety along the routes to schools beyond the immediately surrounding roads. This year, routes to five schools are being assessed and upgraded. This will improve students' and their families' safety as they walk, bike and roll to school, and increase safety around playgrounds and park spaces frequented by local residents.

Learn more at [edmonton.ca/SafetyByDesign](https://edmonton.ca/SafetyByDesign).

## Education and Community Activation

The City has three programs to give everyone the opportunity to get involved and help make their streets safer: Vision Zero Street Labs, the Safe Speeds Toolkit and the Vision Zero School Kit.

- Vision Zero Street Labs use adaptable traffic calming measures on residential and collector roads to address neighbourhood traffic safety concerns. Deploying these adaptable measures allows the City to trial traffic safety solutions with the ability to make adjustments as needed. Each Street Lab is tailored to the unique needs of the community in order to creatively address problems such as speeding, shortcutting and other unsafe driving behaviours. Adaptable measures include:
  - Curb extensions
  - Shared Streets
  - Two-stage crossings
  - Centre medians
  - Adaptable speed humps
  - Adaptable traffic diverters
  - Vibrant Crosswalks
- The Safe Speeds Toolkit was created to help Edmontonians promote safe speeds and support the implementation of the 40 km/h default speed limit in their neighbourhoods. This program provides citizens with educational resources, access to free community signage designed to encourage drivers to follow the new reduced speed limit and, as noted above, the option to request portable driver feedback signs to be placed in their neighbourhood.
- The Vision Zero School Kit provides activities and resources to encourage safe driving behaviours and to help build street safety awareness around schools.

Learn more [here](#).

Operation 24 Hours is a high-visibility, enforcement campaign coordinated with the Edmonton Police Service, to reduce speed and other traffic violations. In 2023, Operation 24 Hours events were held in May, September and October.

To support the Speed Limit Reduction initiative, the Safe Mobility team developed a suite of tools to address potential misperceptions and alleviate concerns, such as those related to the expectation of longer travel times, the costs of the project, and signage pollution, and to place emphasis on the positive outcomes that lower speed limits have on safety and livability.

Along with the Safe Speeds Toolkit, this suite of tools includes a [web page](#) with up-to-date information, a [Frequently Asked Questions](#) (FAQs) section, and the [Estimated Time of Arrival \(ETA\) tool](#), developed in partnership with the University of Alberta. This tool encourages people to test the impact of the speed limit change on their personal travel times. A series of [Awareness Videos](#) and an interactive [Speed Limit Map](#) to help people understand which roads were included in the speed limit

reduction, along with advertising through dynamic message signs (DMS), and a postcard sent to every household in Edmonton, rounded out the suite of tools.

## Conclusion

Automated enforcement continues to be an essential tool to work in combination with educational and engineering safe mobility programs. The City of Edmonton is proud of the achievements made towards safer and more livable streets.

In 2022, an international study named Edmonton as a top three city across 64 countries for progress towards eliminating crash-related fatalities. According to the [International Transport Forum's report](#), "these cities were able to significantly reduce road fatalities thanks to the implementation of robust and data-driven road safety policies". This highlights that our data-driven approach is on the right track, though there is more work to be done.

More recently, in November 2023, Edmonton's leadership in the journey to achieve Vision Zero was featured on an international scale. The City's work was highlighted in a [special reporting series](#) by NBC Dallas Fort-Worth, Texas, as well as by *NBC Nightly News* with Lester Holt in [Investigating Speeding Deaths](#).

Through the Safe Mobility Strategy, the City will continue to support safe speeds on Edmonton's streets.

---

### KEY CONTACT

Rajna Tufegdzcic Automated Enforcement Manager Safe Mobility, Parks and Roads Services City Operations	780-655-0085	rajna.tufegdzcic@edmonton.ca
---	--------------	------------------------------