Parachute Vision Zero

Case study series

Issue 14: June 2026

Parachute Vision Zero Canadian Landscape 4.0

parachute.ca/visionzero

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Acknowledgements

Throughout this publication, findings from the grey literature are upplemented by interviews with key stakeholders involved in the Vision Zero experience, including traffic safety officers, engineers, enforcement officers and other subject matter experts involved in adoption, implementation and advocacy of Vision Zero.

We extend our thanks to all the stakeholders who have contributed their time and insights:

- **Richard Adam**, Acting Assistant Director, Transportation, Engineering and Public Works, City of Victoria
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- **Laura Thue**, Research and Policy Advisor, Safe Mobility / Parks and Roads Services, City of Edmonton
- **Mark Wilson**, City Councillor, City of Temiskaming Shores

Parachute Vision Zero Canadian Landscape 4.0

Parachute Vision Zero creates case studies that feature a variety of issues and examples of Vision Zero from across Canada and around the world. We hope these practical, evidence-based case studies will help educate, inform and inspire those who are interested in road safety and getting to zero. We share when we publish new case studies through our e-newsletter, ***Word on the Street****.*

Vision Zero has continued to gain traction across Canada since it was first adopted in 2015 by the City of Edmonton. Since then, additional Canadian municipalities and provinces have adopted Vision Zero.

In 2022, Parachute published the Canadian Landscape 3.0, which profiled 36 jurisdictions. This included reviewing the current status of all jurisdictions that have adopted and implemented Vision Zero; presenting the key features of their programs; and discussing the unique successes and challenges faced by these jurisdictions.

This issue of the Vision Zero Canadian Landscape (4.0) revisits the previously profiled jurisdictions that have continued implementing Vision Zero. It adds 24 new areas that have since adopted Vision Zero, bringing the total to 44 jurisdictions. This focus is responsive to earlier feedback from our Parachute Vision Zero Network stakeholders, who had requested a better understanding of how to approach Vision Zero, and the facilitators and barriers to embracing a systems approach to increase road safety and end road fatalities and serious injuries.

We hope this report will illuminate the successes and challenges faced by programs at different stages of Vision Zero adoption, implementation and evaluation, and provide relevant insights for other jurisdictions looking to strengthen their own Vision Zero efforts and accelerate progress toward safer roads for all.

Note: The grey literature and interviews featured in this paper were conducted between May 2025 and January 2026. Jurisdictions that have made new materials available or that have adopted Vision Zero since that time may not be included. In addition, most interviews took place prior to certain contextual implications (e.g., the Ontario provincial ban of Automated Speed Enforcement as of November 2025.) Additionally, aspects of some jurisdictions' Vision Zero strategies have remained unchanged since 2022.

Background

Vision Zero

Vision Zero was initiated in Sweden in 1997, in response to a philosophical belief that traffic fatalities were an unacceptable tradeoff for being able to travel (Elvebakk, 2007; Kim et al., 2017). It has since been successfully deployed in jurisdictions around the world, including in Germany, the United Kingdom, and various cities in the United States and Canada (Mendoza et al., 2017; Peterniak et al., 2016). Vision Zero is premised around the following principles: that serious injuries and fatalities on the road are preventable and should not be accepted as an inevitable cost of transport; that any number of traffic fatalities or serious injuries is considered unacceptable; that road users and those who are responsible for the built environment or vehicle design all have a role to play in preventing traffic fatalities and serious injuries; and that it is possible to eliminate or reduce human error through changes to the built environment (Elvebakk, 2007; Kim et al., 2017; Peterniak et al., 2016). In a review of Vision Zero adoption in Canada, Peterniak et al. (2016) described a Vision Zero approach as including the following fundamental characteristics: "Aggressive casualty and injury reduction goals, co-ordinated, and multidisciplinary action, increased priority and resources allocated toward road safety improvement, and a specific ethical policy framework" (p. 1).

Currently, 1.19 million people around the world die annually from road crashes (World Health Organization, 2023). In 2023, 1,964 Canadians were killed on our roads and 26,503 were hospitalized with serious injuries (Canadian Institute for Health Information, 2025). In Canada, the Canadian Council of Motor Transportation Administrators (CCMTA) is responsible for providing transportation safety advice to the Council of Deputy Ministers and regularly maintains and updates the national road safety strategy as part of its activities (CCMTA, 2026; CCMTA, n.d.). The newest iteration of this strategy is the Road Safety Strategy 2035, which is built on the Safe System Approach (SSA) and a vision of "towards zero" (CCMTA, 2026). The CCMTA's role is aligned with its mandate to facilitate both safe and efficient movement of people and goods, and provincial and territorial collaboration on matters of road safety (CCMTA, n.d.).

On Oct. 28, 2021, the World Health Organization (WHO) and the United Nations regional commissions launched the Global Road Safety Plan for the Decade of Action for Road Safety, in collaboration with other organizations part of the UN Road Safety Collaboration (WHO, 2021). The plan is a blueprint for achieving the 2030 target to halve road deaths and injuries. The Global Plan describes what is needed to achieve that target and urges governments and partners to implement an integrated SSA to road safety. Given the alignment between Vision Zero and the SSA, Canada is in an ideal position to continue to support jurisdictions as they embrace and adopt Vision Zero.

Several Canadian provinces and municipalities have initiated a Vision Zero strategy or are considering adopting such a strategy (Peterniak et al., 2016). A full list of Canadian provinces, regions and cities with a Vision Zero action plan may be found on the Parachute Vision Zero website: **https://parachute.ca/en/program/vision-zero/vision-zero-map/**

The Safe System Approach

The Safe System Approach (SSA) is a framework for injury prevention that is grounded in the principles of ethics, responsibility, safety and mechanisms for change (CCMTA, 2026; World Road Association, n.d.). The SSA sees road safety as a shared responsibility; it is the result of interactions among various components that influence how people travel and behave on the roads, and their risk of being involved in a collision (Transportation Association of Canada, 2023).

As outlined in the Transportation Association of Canada's (TAC) Primer (2023), the six elements of the SSA are:

Safe land use planning: The SSA integrates road safety policy into community planning land development. Land use planning promotes road safety by making more sustainable modes of transit (e.g. walking, biking and public transit) more accessible. This reduces the need for private vehicle use and minimizes time spent on high-speed roadways. In turn, it creates safer, more supportive conditions for vulnerable road users, including pedestrians, cyclists, children and older adults.

Figure 1. Vision Zero and the Safe System Approach (TAC, 2023)

Safe speeds: Speed management interventions acknowledge the fallibility and fragility of the human body and aim to create environments in which traffic collisions result in minimal physical trauma. Small reductions in speed can significantly improve safety (see Figure 2) by reducing impact forces, providing drivers additional time to stop and increasing visibility (National Association of City Transportation Officials, 2025). This pillar seeks to:

i. **Establish appropriate speed limits**: "Speed limits should reflect road features and functions, and the known physical tolerances of road users" (TAC, 2023, p.5).

ii. **Engineer roads to encourage adherence to safe speeds**: The transportation system should be designed in a way that ensures travel speeds are both context-sensitive and survivable for all users (TAC, 2023).

iii. **Enforce safe speed**: Speed enforcement involves collaboration with law enforcement and the use of automated speed detection equipment to ensure safe vehicle speeds (TAC, 2023).

iv. **Educate road users**: Educational programs designed to help road users understand the impact of driving at unsafe speeds can increase compliance with speed limits (TAC, 2023). Other measures include the installation of signs reminding road users to adhere to speed limits (NACTO, 2025).

Safe road users: The SSA acknowledges that designing and building safer roads is insufficient if road users do not adhere to the rules of the road. This element of the SSA addresses human behaviour, focusing on strategies that discourage unsafe driving behaviours such as distracted and aggressive driving. It emphasizes the shared responsibility between road designers and road users, considering the unique needs of pedestrians, cyclists, older adults, children and other road user groups, as well as emerging micro-mobility modes.

Safe vehicles: This element of the SSA focuses on regulating and maintaining vehicles that minimize the risk of collisions and the severity of outcomes when they do occur. The SSA recognizes that vehicle size, design and speed potentially all influence collision outcomes. Safe vehicles rely on two main elements: robust, roadworthy design and the integration of safety-enhancing technologies. Increasingly, vehicles and road systems will be connected through intelligent transportation systems, featuring automated driver assistance and smart infrastructure, thereby creating a more adaptive and responsive safety network.

Safe road design: Ensures that roads are designed, operated and maintained in a manner that supports road safety, thereby reducing the risk and severity of injury in the event of collisions (TAC, 2023). Safe road design encourages vehicles to travel at

appropriate speeds and provides ample, protected spaces for walking, cycling and rolling (NACTO, 2025). Interventions include:

- **Separating different modes**: Different types of road users (e.g., pedestrians, cyclists, drivers) are physically separated to reduce conflict and injury risk. Examples include the installation of protected bike lanes and pedestrian islands.

- **Separating traffic streams**: Vehicles travelling at different speeds or in opposite directions are divided with physical barriers to prevent head-on and high-speed collisions.

- **Designing for safe speed limits**: Roads are built to support safe speed limits that match the context and protect vulnerable users.

- **Designing self-explanatory roads**: Roads are designed to signal how they should be used, helping drivers make safer decisions. Using consistent designs to reduce the stress levels of road users and minimize chances for human error.

Post-crash care: A secondary prevention strategy that focuses on enhancing emergency response by making it easier and quicker for emergency first responders to reach traffic collision victims, quickly stabilize them and transport them to medical facilities to receive effective trauma and rehabilitative care. This element seeks to reduce the level of harm that follows injury (e.g. disability or premature death). Measures may include providing priority lane access to emergency vehicles, studying traffic collision sites and implementing evidence-based interventions based on traffic incident analysis.

The Safe Systems Pyramid

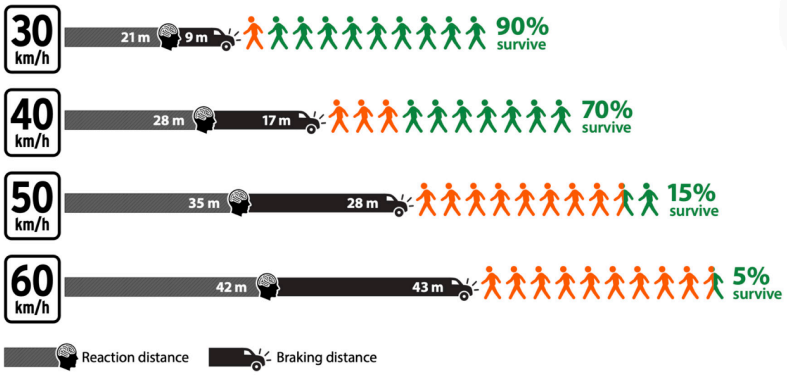


Figure 2. The Effect of Speed Reduction on the Risk and Severity of Traffic Collisions (City of Guelph, 2025)

The Safe Systems Pyramid (SSP) is another framework in transportation safety introduced by Ederer et al. in 2023. Based upon Frieden's Health Impact Pyramid and the Hierarchy of Controls, the SSP integrates public health into transportation engineering

and planning. The five tiers of the pyramid, from base to apex, represent increasing individual effort and decreasing population health impact. The framework is explicitly designed to guide practitioners, particularly within Vision Zero programs. Interventions at the base of the pyramid (i.e. interventions targeting socioeconomic factors and the built environment) provide the most significant population impact and require the least amount of individual effort to achieve the intended protective effect. As such, road safety professionals should prioritize projects addressing socioeconomic factors, followed by those focusing on the built environment, latent safety measures, active safety measures, and education. Overall, the SSP emphasizes collaboration, the promotion of protective factors and the prevention of risk factors (Ederer et al., 2023).

The five tiers of the pyramid, from base to apex as defined by Ederer et al., 2023, are:

Socioeconomic factors: Socioeconomic factors, including income, employment, education and housing, influence whether people need to travel, how far they need to travel and the type of transportation they use. In turn, these foundational conditions shape the broader context in which transportation behaviours and risks occur. These issues tend to extend beyond the traditional domain of traffic engineers; however, they remain deeply connected to transportation safety. Examples of interventions include affordable housing near transit, zoning reform to reduce vehicle kilometres travelled, occupational safety policies and safety features in commercial vehicles.

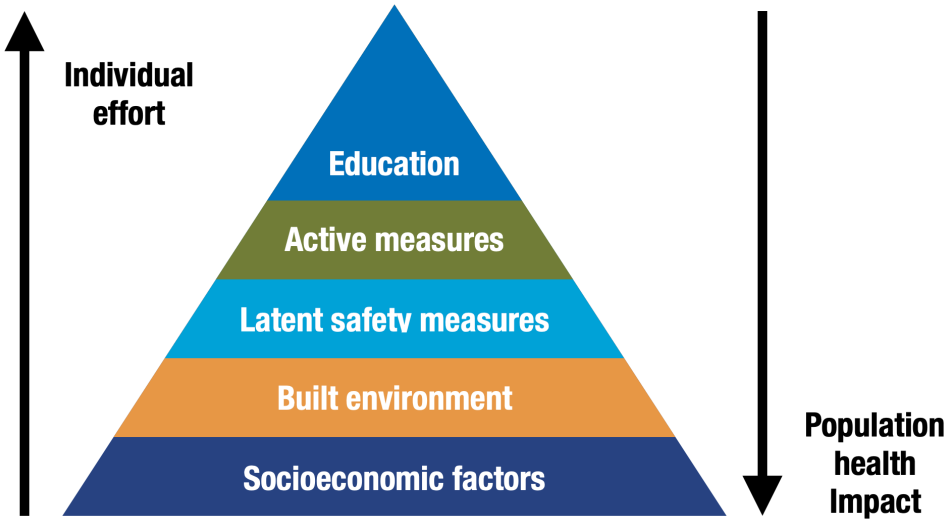


Figure 3. The Safe Systems Pyramid (Centers for Disease Control and Prevention [CDC], 2024)

Built environment: The second tier of the SSP focuses on physical infrastructure and urban design that directly shape travel behaviour and collision outcomes. Modifications to the built environment reduce the likelihood and severity of crashes by influencing user interactions and the transfer of kinetic energy. These interventions

have a significant impact on the population; however, they are often the most expensive and time-consuming to implement. High up-front costs and paradigm shifts often make these types of interventions unpopular, so strong political will is often required. Modifications include elements such as land use, population density and accessible mobility, which influence the distance travelled by road users and their choice of transportation mode. Compact, walkable communities reduce reliance on vehicles, lowering exposure to high-speed roadways altogether. Interventions at this tier also address equity by making alternative modes of transportation more accessible, addressing the disproportionate access to personal vehicles among low-income populations and their elevated risk of experiencing more severe collision outcomes. Design elements can also separate users in time and space or physically protect them when conflicts occur. Intervention Examples include separated controlled access for high-speed travel, cycle paths, sidewalks, signal phasing, guard rails, raised intersections and crossings and roundabouts.

Latent safety measures: Latent measures are highly effective, passive safety interventions that work without requiring real-time action from users. However, their impact depends on widespread individual uptake, making them a level below built environment and socioeconomic factor interventions for population-level impact. Examples include Automated Speed Enforcement (ASE), airbags, automatic braking, lane departure warnings and collision alerts. Many vehicle-based latent features such as automated emergency braking are primarily available in high-cost models, raising equity concerns.

Active safety measures: Active measures are individual-level interventions that require users to take deliberate action. They are effective but highly dependent on behaviour, effort and context. For example, helmets and seatbelts protect only when used consistently. Similarly, in-vehicle warnings require drivers to respond correctly and in time. On the environmental side, interventions such as in-person police enforcement rely on human judgment and discretion and are not uniformly applied, which limits their equity and consistency.

Education: Educational interventions aim to raise awareness and shift behaviour through information and training. These are the least expensive, least politically controversial and easiest to implement but also the least effective when used alone. They depend heavily on individual behaviour change, which is shaped by broader contexts. If a person needs frequent reminders to slow down or follow road rules, it's worth questioning whether the built and social environments are conducive to safe behaviour. Educational measures should be used when structural changes are not feasible and are most effective when layered with interventions from lower tiers. Intervention examples include public safety campaigns (e.g., "Slow Down"), school-based road safety education, driver training programs, promotional efforts for walking, cycling and public transportation, and outreach during policy rollouts, such as speed limit changes (Ederer et al., 2023).

The Six Es of mobility safety

The six Es of mobility safety have faced increasing public scrutiny for their limitations and are being gradually phased out as a standalone framework (Ederer et al., 2023). However, elements of the six Es continue to appear in Vision Zero planning efforts. The most commonly used six Es are: Engineering, Enforcement, Evaluation, Education, Engagement and Equity (City of Calgary, 2024).

Engineering refers to the design and operation of roads in a way that can prevent collisions from occurring or reduce collisions.

Education refers to raising awareness of various road safety issues, informing attitudes of the public and promoting safe road behaviour.

Enforcement refers to strong communication and partnership between cities and police services, and enhanced enforcement targeting road safety risks such as speeding, impaired driving, following too closely, distracted driving and other high-risk driving behaviours.

Evaluation is required to ensure efficiency and effectiveness in road safety planning, and the implementation of only evidence-based measures.

Engagement often includes two-way communications and encouraging interaction with stakeholders and the public through a variety of different means, including public involvement initiatives, social media, public consultation opportunities and surveys, among others.

Equity recognizes the need to understand the different barriers and power imbalances that affect groups of people, and address them through policies and targeted programs in order to allow everyone the opportunity for healthy, fulfilling lives (City of Calgary, 2024).

Summary of Vision Zero Canadian landscape

Canadian cities, regions, and provinces or territories implementing Vision Zero (44 total)

- Brantford, Ont.
- British Columbia
- Burnaby, B.C. – NEW
- Calgary, Alta.
- Chatham-Kent, Ont. – NEW
- Coquitlam, B.C. – NEW
- Delta, B.C. – NEW
- Devon, Alta. – NEW
- Drummondville, Que. – NEW
- Durham Region, Ont.
- Edmonton, Alta.
- Fort Saskatchewan, Alta.
- Gatineau, Que. – NEW
- Guelph, Ont.
- Halifax, N.S.
- Hamilton, Ont.
- Kamloops, B.C. – NEW
- Kingston, Ont.
- Kitchener, Ont. – NEW
- Lacombe County, Alta. – NEW
- Lethbridge, Alta. – NEW
- London, Ont.
- Manitoba
- Middlesex Centre, Ont. – NEW
- Mississauga, Ont.
- Montréal, Que.
- Niagara Region, Ont. – NEW
- North Bay, Ont. – NEW
- Ottawa, Ont.
- Peel Region, Ont.
- Peterborough, Ont. – NEW
- Québec – NEW
- Regina, Sask. – NEW
- Saanich, B.C. – NEW
- St. Albert, Alta.
- Strathcona County, Alta. – NEW
- Surrey, B.C.
- Temiskaming Shores, Ont. – NEW
- Toronto, Ont.
- Vancouver, B.C.
- Victoria, B.C. – NEW
- Windsor, Ont. – NEW
- Winnipeg, Man. – NEW
- York Region, Ont. – NEW

Canadian cities, regions, and provinces or territories implementing Vision Zero

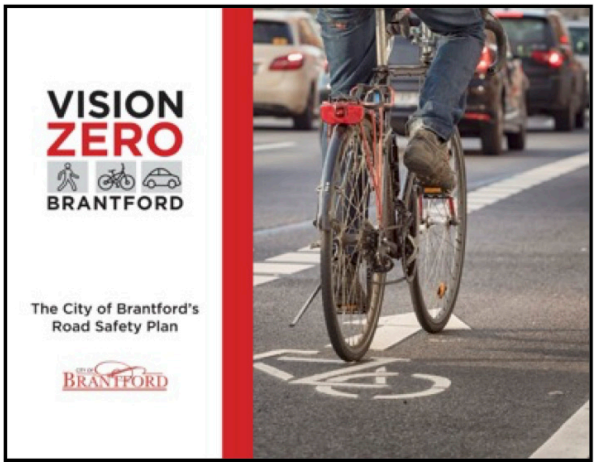
Brantford, Ont.

Background

The City of Brantford has a population of 104,688, according to the 2021 census, and has increased by 6.2 per cent since 2016 (Statistics Canada, 2023a). Its population density is 1,061.2 people per square kilometre (Statistics Canada, 2023a). Of a 25-per-cent census sample, 91.3 per cent mainly commuted to work by car, truck or van, followed by 3.5 per cent who walked to work (Statistics Canada, 2023a).

Brantford experienced an average of 1,574 collisions per year from 2017 to 2021, with distracted driving being a contributing factor in 31.3 per cent of all injury and fatal collisions, according to the City of Brantford's 2021 Annual Collision Report (City of Brantford, 2023). In 2021, there were 1,293 collisions resulting in two fatalities and 130 collision-related injuries, a 37.5-per-cent reduction from the 208 injury collisions reported in 2019 (City of Brantford, 2023). These statistics should be read considering the COVID-19 pandemic's impact on traffic volumes.

Vision Zero: The City of Brantford's Road Safety Plan



Brantford adopted the Vision Zero initiative in 2018. Since then, Brantford has created **Vision Zero: The City of Brantford's Road Safety Plan (2021-2026)** , which aims to address a number of goals and priorities for the city, including promoting safe, healthy and age-friendly built environments (City of Brantford, 2021). The five-year plan outlines the projects the City of Brantford and community partners have committed to delivering to achieve the Vision Zero goals. The plan focuses on three pillars to emphasize road safety: engineering, education and enforcement. In addition to these three pillars, the city has ongoing evaluation and community engagement plans (City of Brantford, 2021).

Key features of the plan

Engineering: Engineering measures target the design and operation of the city streets and involve the physical and built environment in which people live (City of Brantford, 2021). Brantford has identified and implemented a number of traffic calming measures that can improve road safely, such as pedestrian crossovers, raised crosswalks, raised intersections, speed humps/cushions, roundabouts, realigned intersections and pavement markings (City of Brantford, 2021; Jacklyn, 2023). The city has also implemented several neighbourhood traffic safety plans, consulting local residents to improve safety in specific neighbourhoods within the city (Jacklyn, 2023).

Education: To deliver messaging to the community regarding the importance of road safety and to change road user behaviour, the plan outlines three key educational activities that include signage, public engagement and information sharing (City of Brantford, 2021). Brantford participates annually in Bike Month, promoting cycling as a form of active transportation (Jacklyn, 2023). A number of local schools participate in Bike to School Week (Jacklyn, 2023).

Enforcement: To complement the physical changes to the built environment, enforcement measures can be incorporated to ensure that road users are complying with the rules of the road and adjusting their behaviour to protect the health and safety of those around them (City of Brantford, 2021). Enforcement actions include red light cameras, use of Automated Speed Enforcement (ASE) cameras and increased police presence in targeted areas (City of Brantford, 2021; Jacklyn, 2023).

Evaluation: For each of the three pillars, the plan clearly outlines key indicators to measure and evaluate the success of the countermeasure. Examples of these evaluation metrics for education, for example, include number of page views; number of website updates; number of social media posts regarding Vision Zero; number of interactions with social media posts (City of Brantford, 2021). In 2023, the city evaluated air quality and noise levels in collaboration with Liveable Cities (Jacklyn, 2023).

Key stakeholders

The planning and implementation of the City of Brantford's Vision Zero Road Safety Plan involved city council, various city departments and the general public (R. Smith, personal communications, July 11, 2025).

What the city has to say

Interview with Rob Smith, C.E.T., Acting Manager of Traffic Services, City of Brantford

PARACHUTE: How long has your Vision Zero strategy been in place, and what are its goals?

ROB SMITH: The City of Brantford adopted the Vision Zero initiative in 2018 to make Brantford streets safer through improved education, enforcement, engineering, evaluation and engagement.

The Vision Zero Road Safety Plan was adopted in April 2021. In preparing Vision Zero: The City of Brantford's Road Safety Plan, the city has outlined the following four goals to accomplish before 2026:

1. Establish an understanding of the costs associated with road collisions in the city for the following areas to help evaluate the progress of road safety initiatives: cost of insurance claims, cost to repair municipal assets (staff operating costs and material costs); and healthcare costs.

2. Partner with community organizations to stress the importance of road safety and reinforce that it is a shared responsibility among the city, community partners and members of the public:

    - Shift the focus of road safety to reframe it as a public health issue;

    - Increase understanding in the community about actions different stakeholders can take to contribute to road safety;

    - Focus on educating all road users, including drivers, transit users, pedestrians, and cyclists, on how they can contribute to improving road safety in the city.

3. Reduce the number of total road collisions on municipal roads by 10 per cent from the 2019 figures by the end of 2026:

    - Reduce the number of total collisions on roadways by 10 per cent;

    - Reduce the number of collisions involving cyclists and pedestrians by 25 per cent; and

    - Reduce the number of personal injuries resulting from collisions by 25 per cent.

4. Reduce the number of fatalities resulting from collisions to zero.

Each year, the City of Brantford will identify the various actions being undertaken to contribute to the four goals identified for the 2021 to 2026 period. The actions being undertaken by the city will be grouped based on the three pillars of the strategy: Engineering, Education and Enforcement.

In addition to identifying the actions being undertaken to improve road safety, the city will provide evaluation metrics to ensure that the progress toward Vision Zero can be tracked on an ongoing basis.

PARACHUTE: What major activities are you undertaking to meet these goals?

ROB SMITH: The city has been completing neighbourhood traffic safety reviews, which are holistic reviews of existing traffic control and the need for traffic safety improvements in a neighbourhood area. Public engagement is an important step in the review process. The resulting traffic safety plan often includes improvements such as traffic calming measures, pedestrian crossovers, reduced speed limits and traffic control enhancements.

The city now has 10 red light cameras installed and will be implementing ASE cameras later this year. Initially, there will be five ASE systems, one per ward, which will be rotated to a new location every three-to-four months.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

ROB SMITH: Through public engagement, staff learn directly from affected residents where neighbourhood safety concerns are identified, such as school walking routes, and can then develop a plan that enhances safety for all road users.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

ROB SMITH: City council is key to the success of the Vision Zero strategy. Councillors have been supportive of the neighbourhood traffic safety review process and implementing automated enforcement technology. We also need support from the public, so enhanced public engagement and education are keys to success. The "Let's Talk Brantford" online forum has been a great tool to present safety initiatives to the public and receive feedback.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

ROB SMITH: City council disbanded the Vision Zero Road Safety Committee. Staff now report directly to the Committee of the Whole – Operations with traffic reports related to Vision Zero initiatives.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

ROB SMITH: Yes, Operational Services has annual funding for On-road Active Transportation Initiatives and Neighbourhood Traffic Calming.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

ROB SMITH: The evaluation of traffic calming measures post-installation is a step in the process that needs to be considered more in the future.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

ROB SMITH: Council support is a key consideration. Staff must be mindful that some members of council are more supportive of traffic calming measures than others, so public engagement and buy-in is key to the success of the project. As more traffic calming measures are implemented throughout the city, residents see their benefits and are generally more accepting of them. This in turn has helped council support additional traffic calming initiatives.

Success of traffic calming has increased public interest and has put a strain on available funding. Staff need to prioritize traffic calming measures that will have the most impact and defer other measures until funding is available.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

ROB SMITH: The city had implemented traffic calming on only a few streets before adopting the Vision Zero Road Safety Plan. The city now has vertical traffic calming measures on many streets and we continue to add more. The city has installed almost 100 Pedestrian Crossovers (PXO) that have been implemented as part of the neighbourhood traffic reviews. ASE is the next big project that is being implemented in Q4 2025. Buy-in and support from city council is critical to the success of every project.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

ROB SMITH: Residents and council have been slow to warm up to the concept of traffic calming. Since implementing the Vision Zero Road Safety Plan, the importance of road safety and reducing speeding on city streets has become a greater priority for the council.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

ROB SMITH: Resistance from the public towards the implementation of traffic calming and active transportation initiatives is the biggest challenge. Unfortunately, the minority that oppose a project tend to be the most vocal, so it's difficult to get support from council when they're only hearing opposition from their constituents.

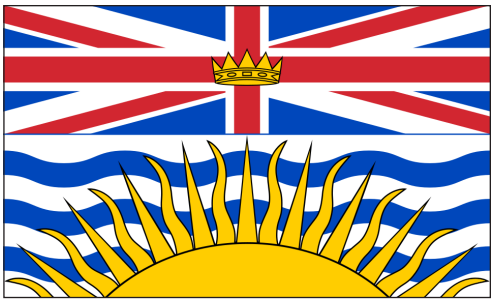
PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

ROB SMITH: Work closely with your council to ensure that they understand the benefits of adopting Vision Zero, so they, in turn, can communicate with their constituents on the benefits of your road safety projects when they're being implemented.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

ROB SMITH: The city's traffic calming policy allows for the installation of vertical traffic calming measures on local and collector roadways. We currently do not have any method to control speeding on arterial roadways, other than traditional speed enforcement by the police. Implementation of ASE is our next initiative, focusing on arterial roadways that have been identified as high risk due to volume, pedestrians, public facilities, et cetera. The hope is that ASE will reduce the operating speeds throughout the city and result in fewer collisions.

British Columbia



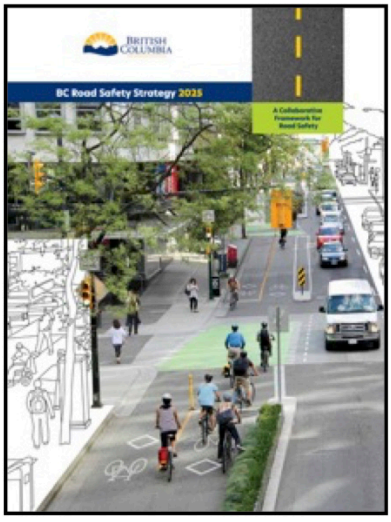
Background

The Province of British Columbia (B.C.) has a population of 5 million, according to the 2021 census, and has increased by 7.6 per cent since 2016 (Statistics Canada, 2023b). Its population density is 5.4 people per square kilometre (Statistics Canada, 2023b). Of a 25-per-cent census sample, 79.9 per cent mainly commuted to work by car, truck or van, followed by 9.3 per cent who used public transit to go to work (Statistics Canada, 2023b).

In 2023, the rate of injury associated with traffic collisions on public roads was 233.7 per 100,000 people and the fatality rate was 5.7 per 100,000 people (RoadSafetyBC, 2024). While there has been an overall decrease in the rate of injury-related collisions since 2019, the fatality rate has increased between 2019 (5.3 per 100,000 people) to 2023, with the exception of 2020 (4.8 per 100,000 people) (RoadSafetyBC, 2024). B.C.'s traffic fatality rate in 2023 exceeded the national average of 4.9 per 100,000 population and was higher than rates reported in Ontario and Québec, though lower than other provinces and territories (Transport Canada, 2025). In contrast, British Columbia's injury rate of 233.7 per 100,000 people was below the Canadian average of 296.5 and among the lowest injury rates nationwide (Transport Canada, 2025). Altogether, transport incidents cost the provincial government $575 million in 2023 (BC Injury Research and Prevention Unit, 2025).

BC Road Safety Strategy 2025

B.C.'s approach to Vision Zero was initially articulated in 2013 through their BC Road Safety Strategy 2015 and Beyond (Lacombe & Arason, 2013). In this issue, B.C. was explicit in its support of "zero traffic fatalities and serious injuries", as set out in their vision (Dilgir, 2014; Lacombe & Arason, 2013). B.C's strategy supports the Safe System Approach (SSA) and emphasizes principles of collaboration, innovation and sustaining successful activities (Lacombe & Arason, 2013; Macleod, 2014).



Adopted in 2021, the current **BC Road Safety Strategy** (BCRSS) 2025 aims to reduce road traffic deaths and injuries by 50 per cent by 2030 and is built on three pillars:

- **Working together for the future of road safety**: This pillar focuses on how the road safety sector is working together using the SSA and public health perspective to solve road safety issues.

- **Tools to make our roads safer**: This pillar highlights how enforcement, infrastructure, data and other tools can be used to make our roads safe.

- **Inspiring British Columbians to make safe road choices**: This pillar emphasizes how the public can contribute to reductions in fatalities and injuries (RoadSafetyBC, 2025a).

The Province of B.C. is set to release a new road safety strategy, BCRSS 2030, in spring 2026.

Key features of the plan

Data collection and analysis: B.C. is expanding new reporting tools and ways to share data with the public, with researchers and between data-collecting agencies (RoadSafetyBC, n.d.; Insurance Corporation of British Columbia [ICBC], n.d.-a). Through their partnerships, RoadSafetyBC, The Insurance Corporation of British Columbia (ICBC) and the police are sharing information to support more informed decision-making. B.C. is also using business intelligence, and leveraging data and technology, to provide a better understanding of what is happening on the roads. RoadSafetyBC collects and reports 10 years of statistics related to motor vehicle crashes, injuries and fatalities (RoadSafetyBC, n.d.).

Engineering: The B.C. Ministry of Transportation and Transit has installed high-friction surface treatments at intersections with a history of crashes to help prevent or reduce skidding and rear-end collisions (RoadSafetyBC, n.d.). Collision and claims data helped determine which locations were the highest risk. This surface treatment is expected to have a significant impact in reducing collisions, especially in wet road conditions. Early indications from a sample of video data taken from these locations show that rear-end conflicts have reduced by 33 per cent (RoadSafetyBC, n.d.). Intersection safety cameras also have a proven record of curbing red-light runners and the serious crashes they cause. The province operates 140 red-light cameras at high-crash intersections in 26 communities. Of these cameras, 35 also enforce speed (RoadSafetyBC, 2025b). Camera locations were selected after examining risk factors – including crash frequency, severity and type, and the potential for improvement – at 1,400 intersections in B.C. High-risk intersections are closely monitored to ensure cameras are placed at locations that will see the greatest safety gains (RoadSafetyBC, n.d.).

Education: Awareness and education campaigns provide British Columbians with important road safety tips and information. Many campaigns are accompanied by targeted and effective law enforcement actions carried out by the Royal Canadian

Mounted Police (RCMP) and other police agencies. While road safety laws are in place year-round, these well-publicized enforcement efforts remind drivers that their behaviour and habits on the road matter (RoadSafetyBC, n.d.). With respect to road user education, the ICBC offers online resources for drivers, cyclists, pedestrians and motorcyclists, including an online refresher test to assess driving knowledge (ICBC, n.d.-b). In recent years, there has been more focused attention on road interactions with commercial vehicles, along with recognition that roads are often places where people work. Government agencies and the private sector are acting to reduce these types of collisions by giving all road users the information they need to make smart and safe choices. Some of these education efforts include mandatory entry-level training, and education campaigns such as "Be Truck Aware" and "Cone Zone" (RoadSafetyBC, n.d.).

Enforcement: To ensure that the rules of the road are enforced for all road users, every region of the province has specific Integrated Road Safety Units that are made up of full-time, dedicated traffic enforcement officers from both the RCMP and independent municipal police agencies. Funded in partnership with ICBC and the federal government, these units target high-risk driving behaviours that are the most frequent contributors to casualty crashes in B.C.: speeding, aggressive driving, impaired driving, distracted driving and not wearing seatbelts. (RoadSafetyBC, n.d.).

Evaluation: The primary source for evaluation data related to B.C.'s Vision Zero strategy is the province's annual Motor Vehicle Related Fatalities report, which looks back on the most recent 10 years of available injury and fatality data from police reports (Government of British Columbia, 2018). Evaluation is also carried out by the ICBC: collision data contributes to ICBC's decision regarding funding for community road safety projects as part of its Road Improvements Program.

Engagement: To promote ongoing collaboration, an enhanced governance structure has been established for the BCRSS Steering Committee that will support targeted, results-oriented projects focused on improving road safety in the province (RoadSafetyBC, n.d.). Through evidence-based analysis, the Steering Committee will identify key road safety challenges impacting British Columbians. Project-specific subcommittees will be convened to examine a specific issue and develop potential actions. This collaborative, issue-focused approach is designed to draw on the expertise and experience of more than 60 partner organizations and agencies, with the purpose of addressing key road safety issues in B.C. (RoadSafetyBC, n.d.).

Equity: The BCRSS 2025 recognizes the unique road safety challenges faced by Indigenous communities and understands the importance of working in conjunction with Indigenous partners to help reduce fatalities and serious injuries (RoadSafetyBC, n.d.). As such, the Steering Committee is committed to working together with Indigenous Peoples in B.C. to better understand the barriers and challenges Indigenous communities face and look for avenues to address these road safety issues. For

example, Vancouver Coastal Health's 2019 Vision Zero Seed Grant supported First Nations, municipalities and regional districts in promoting road safety. Through a multipronged and community-based approach, Wuikinuxv Nation installed road safety signs and engaged with community members to develop an ongoing, community-led road safety awareness program that includes the first-ever First Nations chapter of Mothers Against Drunk Driving (MADD) (RoadSafetyBC, n.d.).

Additionally, the British Columbia Vision Zero in Road Safety Grant Program provides funding to local governments, Indigenous communities and non-governmental organizations to create safer roads and community spaces. Since the grant program was established in 2021, the province has awarded more than $3.2 million in funds to 206 projects, 73 of which were led by Indigenous communities. (Vision Zero BC, 2024).

Key stakeholders

Stakeholders who contributed to BCRSS 2025 include various municipalities and police services, BC Health Authorities, BC Medical Association, the Provincial Health Office, ICBC, WorkSafeBC, the University of British Columbia, MADD, and many others (Amit et al., 2016; Lacombe & Arason, 2013). Altogether, more than 160 road safety partners contributed to the plan (RoadSafetyBC, n.d.).

Accountability for delivering the Road Safety Strategy lies with the province, formally led by the Office of the Superintendent of Motor Vehicles (RoadSafetyBC, n.d.).

From a governance perspective, B.C.'s Road Safety Steering Committee sets the direction for five standing working committees focused on advising and implementing aspects of road safety such as safe vehicles, safe roads and communities, research and data, safe road users, and education and awareness (MacLeod, 2014). The Steering Committee previously included senior executives from stakeholder organizations such as BC Coroners, the Ministry of Transportation and Transit, the Ministry of Justice, as well as First Nations representation; the working committees include other diverse organizations (Lacombe & Arason, 2013; MacLeod, 2014; RoadSafetyBC, n.d.). The steering committee now includes representatives from the Ministry of Public Safety and Solicitor General, the Ministry of Transportation and Transit, the Ministry of Health and the ICBC, all of whom have a provincial mandate for road safety (S. Stewart, personal communications, July 11, 2025).

What the province has to say

Interview with Sharon Stewart, Executive Director of Policy & Corporate Priorities at RoadSafetyBC

PARACHUTE: How long has your Vision Zero strategy been in place, and what are its goals?

SHARON STEWART: No change to 2022 landscape.

PARACHUTE: What major activities are you undertaking to meet these goals?

SHARON STEWART: No change to 2022 landscape.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

SHARON STEWART: No change to 2022 landscape.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

SHARON STEWART: No change to 2022 landscape.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

SHARON STEWART: The original steering committee included 13 organizations representing five core areas: infrastructure, licensing, health, enforcement and safe behaviours (RoadSafetyBC and WorkSafeBC). After a strategic planning session in the summer of 2023, B.C.'s governance structure was changed to reduce the size of the committee.

The new steering committee, based on discussion and feedback with members and partners, includes representatives from the Ministry of Public Safety and Solicitor General, the Ministry of Transportation and Transit, the Ministry of Health and the Insurance Corporation of British Columbia, all of whom have a provincial mandate for road safety. The Steering Committee engages with key partners to ensure that a comprehensive understanding of needs and challenges from the many organizations involved in road safety work is taken into account.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

SHARON STEWART: The budget for the BC Road Safety Strategy (BCRSS) work sits within the specific ministry organizations who hold mandates for road safety deliverables, these being the Ministry of Public Safety and Solicitor General, the Ministry of Transportation and Transit, the Ministry of Health and the Insurance Corporation of British Columbia.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

SHARON STEWART: The existing BCRSS 2025 is a framework that focuses on reducing rates of fatalities and serious injuries (**Road safety data - Province of British Columbia**). The next iteration of the provincial road safety strategy will provide specific priority actions and associated key performance indicators and deliverables that will be used to assess progress over the five-year duration of that strategy. It will still include a Vision Zero approach with the overall goal of reducing serious injuries and fatalities.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

SHARON STEWART: A significant factor in road safety work is the shared responsibility and mandate for road safety across multiple ministries and other organizations. This makes collaboration and alignment of principles and approaches vital to road safety successes.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

SHARON STEWART: We restructured the steering committee for efficiency and action, while maintaining a level of engagement and involvement from all previous steering committee organizations. The key focus of the steering committee over the past year has been preparing to update the existing strategy.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

SHARON STEWART: Please see below. Additional information can be found in the Jurisdictional Update section of the Canadian Council of Motor Transportation Administrators website.

B.C. Key Themes and Accomplishments (2022 to 2025):

Driver licensing and road safety programs

- Graduated Licensing Program (GLP) modernization:
    - 2025: Motor Vehicle Act updates to Graduated Licensing programs for vehicles and motorcycles introduced (Bill 12)
    - Bill 12 proposes removing the second road test, replacing it with a 12-month restriction period and enhanced monitoring; introduces a Motorcyclist Licensing Program that all new riders will be required to complete.

- Remedial programs modernization:
    - New contracts for the Responsible Driver Program and Ignition Interlock Program with affordability plans so that funding is not a barrier to participation.

Infrastructure and road safety enhancements

- ICBC Road Improvement Program:
    - 2023 to 2025: More than 670 projects funded, including roundabouts, rumble strips, signage and pedestrian safety upgrades.
    - Road safety audits and technical support provided to local authorities.
    - Results from a 2024 study of road improvement projects showed a 15- per-cent reduction in crashes that resulted in an injury or fatality and an 11-per-cent reduction in property only damage crashes at the sample sites.
- Median barrier policy:
    - New policy requiring barriers on multi-lane highways with speeds over 70 km/h and flush medians.
- ICBC enhanced traffic enforcement funding:
    - Funding to provide traffic enforcement officers to augment existing traffic enforcement throughout the province.
    - Enhanced targeted enforcement of high-risk driving behaviours: distracted driving, speeding, impaired driving.
- Strategic Investment Fund pilot projects (2024):
    - Video analytics used to monitor traffic, GHG emissions, pedestrian and wildlife activity in Saanich, Kelowna, Cathedral Grove and Cowichan Valley.

Public awareness and education

- ICBC campaigns:
    - Annual campaigns on distracted driving, impaired driving, speeding and pedestrian safety.
    - Interactive activations at events such as the Vancouver Auto Show and BC Lions games.

- Vision Zero Grant Program:
    - 2022 to 2025: Funded more than 160 projects in communities across B.C., including Indigenous and rural areas, to improve safety for vulnerable road users.
- Everyone Rides Grades 4 to 5 & e-bike education:
    - Cycling education for youth and adults to promote active transportation and reduce vehicle kilometres travelled.

Technology and digital transformation

- Highway 5 North pilot – Average speed over distance:

  Automated Licence Plate Recognition-based data collection to analyze driver behaviour and inform safety improvements.

Legislation and regulatory updates

- Motor Vehicle Act amendments (2023 to 2025):
    - Became the first province in Canada to define vulnerable road users to include pedestrians, cyclists and other prescribed road users.
        - Drivers must always take proper precautions around pedestrians, cyclists and other vulnerable road users.
        - It is an offence to fail to take proper precautions or to fail to provide the required minimum safe passing distances.
        - Police can issue violation tickets and fines for contraventions of the new vulnerable road user safety laws. Penalties range from:
            - Failing to take proper precautions with vulnerable road users: $109 and 3 driver penalty points.
            - Failing to maintain prescribed minimum passing distances: $368 and 3 driver penalty points.
    - The minimum passing distances are:
        - Highways 50 km/h or less: 1 m
        - Highways more than 50 km/h: 1.5 m

- Introduced speed limiters, in-cab warning devices and protections for vulnerable road users.
- Enabled pilot projects for micromobility and automated vehicles.
- Commercial transport regulation changes:
    - Introduced higher penalties for infrastructure crashes and updated vehicle inspection standards.
- Electric kick scooter pilot:
    - Launched in 2025 with 26 participating communities; data collection underway to inform future regulation.

Equity, accessibility and inclusion

- Mobile outreach services:
    - Piloted mobile credentialing for individuals with physical or psychological barriers.
    - Expanded mobile credentialing to Indigenous communities via ServiceBC vans.
- Service dog policy expansion:
    - 2025: Broadened to include therapy and emotional support animals during road tests.
- Driver examiner gender selection:
    - Applicants can request examiner gender to reduce trauma and support inclusivity.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

SHARON STEWART: COVID-19 and staff turnover caused a pause in work; additionally, there is recognition that the current strategy is a framework and that future versions need actions with deliverables and key performance indicators.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

SHARON STEWART: The **BC Road Safety Community Toolkit** may be a helpful resource in sourcing strategies and solutions for a variety of road users and situations.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

SHARON STEWART: The BCRSS 2025 will be replaced with the BCRSS 2030 in spring 2026. The new strategy will move from a framework to a plan for action, identifying specific priorities for the next five years. The BCRSS 2030 will remain centred on the SAA, expanding BC's Safe Systems grid to include safe land use planning and post-crash care.

Burnaby, B.C.

Background

The City of Burnaby is the third-largest city in British Columbia, with a population of 249,125, according to the 2021 census (Statistics Canada, 2023c). The population has increased by seven per cent since 2016 and its population density is 2,750.7 people per square kilometre (Statistics Canada, 2023c). Of a 25-per-cent census sample, 71 per cent mainly commuted to work by car, truck or van, followed by 21.5 per cent who used public transit (Statistics Canada, 2023c).

According to ICBC data, Burnaby averaged 16,673 traffic collisions per year between 2020 and 2024, steadily increasing to 19,5457 reported collisions in 2024 (ICBC, 2025). An average of 4,791 or 28.7 per cent of the collisions resulted in serious injury or death annually from 2020 to 2024, increasing each year with the exception of 2023 (ICBC, 2025).

Connecting Burnaby: Burnaby Transportation Plan (2021)

Approved on Dec. 13, 2021, Burnaby's updated transportation plan, **Connecting Burnaby**, provides a 30-year roadmap that will shape how people move through the city safely (City of Burnaby, 2021). The plan reimagines transportation through a sustainability lens, prioritizing climate action and equitable mobility. A central pillar of this plan is Vision Zero, a long-term commitment to eliminate all traffic-related fatalities and serious injuries by 2050. Burnaby has adopted a systems-based approach grounded in the belief that traffic-related serious injuries and fatalities are preventable and that safe, healthy, and equitable mobility should be accessible to everyone. The strategy emphasizes both Safe Streets and Safe Users. Burnaby's approach also addresses contributing factors such as road design, policy and regulatory frameworks, road user behaviour and vehicle safety standards (City of Burnaby, 2021).

A key focus is protecting vulnerable road users, particularly pedestrians and cyclists, through proactive safety measures and collaboration with partners such as TransLink, the RCMP, Fraser Health and other community stakeholders (City of Burnaby, 2021). To measure progress, the city has established interim targets, including a 20 per cent reduction in serious injuries and deaths by 2030, a 75 per cent reduction by 2040, and a 100 per cent reduction by 2050, using 2019 as the baseline year. These targets are designed to guide policy decisions, evaluate progress, and encourage behavioural change (City of Burnaby, 2021).

Key features of the plan

Safe speeds: Burnaby is enhancing road safety through infrastructure improvements, updated bylaws, speed management policies and strengthened enforcement practices (City of Burnaby, 2021). The city has implemented traffic calming measures, including speed humps, raised crosswalks and curb extensions, near schools and parks to reduce vehicle speeds and enhance pedestrian safety. As of February 2024, the city has installed speed humps near 36 schools and 36 parks, to reach 200 by 2026 (City of Burnaby, 2024). The City of Burnaby has also extended school zone hours to 7 a.m. to 10 p.m., from the previous 8 a.m. to 5 p.m. (City of Burnaby, 2024). These actions aim to reduce speeds to 30 km/h, significantly reducing the risk and severity of crashes (City of Burnaby, 2024). The city engages with residents through studies and consultations, such as the Sperling and Duthie Traffic Calming Study and the Edmonds Speed and Traffic Management Study, to identify areas where speed management measures are needed (City of Burnaby, 2022; City of Burnaby, 2025). Public feedback is integrated into the planning process to ensure that community concerns are addressed effectively.

Safe vehicles: Technology is rapidly transforming Burnaby's transportation landscape, increasing the availability of transportation options and services (City of Burnaby, 2021). Burnaby advocates for modern vehicle safety standards, urging manufacturers to equip their vehicle models with driver-assistance technologies such as adaptive cruise control, automated emergency braking, lane-keeping systems and pedestrian detection, which have been proven to reduce collision risk and severity. While higher-level autonomous vehicles remain prohibited under British Columbia's Motor Vehicle Act (RSBC 1996, c. 318, Part 12.1), Burnaby continues to collaborate with provincial and federal partners on regulated pilot projects and future policy planning (City of Burnaby, 2021).

Safe road users: The strategy addresses high-risk road user behaviours, such as speeding, impaired driving, distracted driving and failure to yield, through a co-ordinated approach grounded in the 4Es behaviour change model: educate, encourage, enable and empower (City of Burnaby, 2021). Education efforts focus on increasing awareness of sustainable transportation options and promoting safe travel practices, particularly those that protect vulnerable users, such as seniors, children and cyclists. Encouragement strategies emphasize the individual and community-wide benefits of active travel, aiming to inspire shifts in how people move through the city. At the same time, enablement works to remove practical barriers by providing the infrastructure and programs, such as age-friendly walking routes and shared mobility systems, to make safe travel modes accessible. These efforts are reinforced by enhanced enforcement in partnership with the RCMP, which targets illegal driving behaviours and improves safety in transit and commercial vehicle operations.

Safe road design: Burnaby's Transportation Plan emphasizes safe road design as a key strategy to protect all users, particularly pedestrians and cyclists. The plan integrates traffic calming measures, protected bike lanes, safer intersections and accessible pedestrian infrastructure to reduce the risk and severity of collisions. Infrastructure improvements adhere to universal design principles, featuring elements such as aligned curb ramps and accommodations for individuals with visual or hearing impairments. The city is also creating an All Ages and Abilities (AAA) cycling network with physically separated lanes and intersection treatments designed for maximum safety. By prioritizing thoughtful and inclusive road design, Burnaby aims to create a safer and more accessible transportation system for everyone.

Post-crash care: Emergency vehicle access is also prioritized in road design and traffic calming efforts. These design choices are supported by year-round maintenance and informed by ongoing safety audits to identify gaps (City of Burnaby, 2021).

Key stakeholders

Burnaby's Vision Zero strategy is supported by strong collaboration across multiple sectors. Key stakeholders include local First Nations communities (Musqueam, Squamish, Tsleil-Waututh and Kwikwetlem Peoples), TransLink, the RCMP, and senior levels of municipal and provincial governments. Other organizations involved include Metro Vancouver, Vancouver Fraser Port Authority, Fraser Health Authority, Burnaby School District 41, post-secondary institutions, other academic institutions, rail companies, ICBC, transportation-related non-profit organizations, local businesses and community associations, enforcement and emergency service providers, and the trucking, taxi and commercial transit providers. The City of Burnaby also recognizes the need to partner with neighbouring communities, including Vancouver, Port Moody, Coquitlam and New Westminster (City of Burnaby, 2021).

Calgary, Alta.

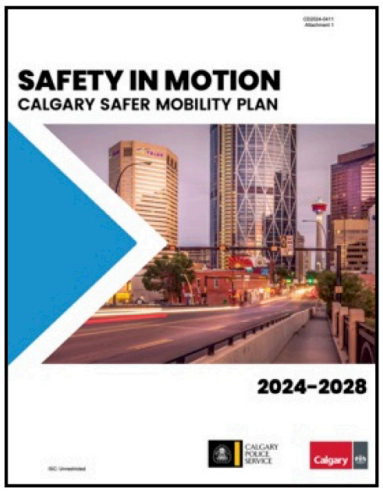
Background

The City of Calgary has a population of 1,306,784, according to the 2021 census, increasing by 5.5 per cent since 2016. Its population density is 1,592.4 people per square kilometre (Statistics Canada, 2023d). Of a 25-per-cent census sample, 83.2 per cent mainly commuted to work by car, truck or van, followed by 8.8 per cent who used public transit (Statistics Canada, 2023d).

In 2024, there were 571 serious injury collisions and 29 fatal collisions, signifying a 53-per-cent increase compared to the 2021 to 2023 average of 19 (City of Calgary, 2025). Pedestrians were involved in 121 serious injury collisions and 13 fatal injury collisions, with pedestrian serious injury collisions decreasing from 135 in 2023. However, Calgary experienced a 160-per-cent increase in pedestrian fatalities in 2024 compared to the 2021 to 2023 average of five pedestrian fatalities per year. Cyclists were involved in 34 serious injury collisions and zero fatal collisions in 2024, showing a 17-per-cent decrease in cyclist-involved fatality and serious injury collisions, compared to 41 in 2023. Altogether, the societal cost of collisions was estimated to be $1.4 billion in 2024 (City of Calgary, 2025).

Calgary's Safer Mobility Plan, 2024-2028

In July 2013, Calgary approved the Safer Mobility Plan 2013-2017, which cited the SSA and five of the six Es of mobility safety (City of Calgary, 2017). At the time, formal adoption of Vision Zero was posited as a future direction. Even though the city already recognized the importance of working toward zero fatalities and serious injuries, it also knew that implementing Vision Zero would mean more than adopting the target; it would require additional resources and a thoughtful effort to reduce speeds in urban areas, among various other road safety efforts (City of Calgary, 2017).



Calgary's latest **Safer Mobility Plan (SMP) 2024-2028** builds on the 2019-2023 Safer Mobility Plan, which supports Vision Zero through the Safe System Approach (SSA), employing the six Es of mobility safety (City of Calgary, 2024). The dual-target plan aims to reduce traffic fatalities and serious injuries by 25 per cent over five years, including a 25-per-cent reduction for vulnerable road users, using 2023 collision data as a baseline. Key focus areas include safety around schools and communities, speed management, reducing distracted and

impaired driving, noise reduction, legislative changes, and integrating new technologies such as e-bikes and e-scooters. A key new feature is the formal collaboration between the City of Calgary and Calgary Police Services (CPS), reinforcing a model of shared responsibility (City of Calgary, 2024).

Key features of the plan

The SMP applies the SSA by employing the six Es of mobility safety:

Engineering: Traditionally, the city has deployed automated traffic enforcement (ATE) devices such as photo radar and red-light cameras in high-risk locations (City of Calgary, 2024). The new SMP prioritizes the addition of proactive safety efforts. Actions include implementing interventions at high-risk locations and sharing regular information between partners on road design, traffic calming and signal timing reviews. An external study was launched in 2024 to identify high-injury networks, and eight In-Service Road Safety Reviews were conducted at high-collision locations (City of Calgary, 2025). Preliminary data support the efficacy of leading pedestrian intervals (LPIs), left-turn arrows, temporary curb extensions, and median/centreline hardening. Other engineering interventions include the installation of over 50 permanent safety and accessibility features and 35 temporary speed cushions along seven corridors in 2024 (City of Calgary, 2025).

Education: Education initiatives align with the Alberta Traffic Safety Calendar to promote awareness and safe behaviours throughout the year (City of Calgary, 2024). Key efforts include school programs such as the Active and Safe Routes to School program and the Mobility Safety Education and Toolkit for elementary students. The city has expanded its Mobility Safety Education program under the new plan through partnerships with schools, translations, a video contest and a newly released online Toolkit for school-aged children, which includes a webpage, activity book, conversation guide and a crosswalk safety video (City of Calgary, 2025). The Emergency Management and Community Services (EMCS) Traffic Safety Team also plays a role in educating the public around playground zones and noise/speed concerns. These efforts are strengthened through partnerships with organizations such as MADD and local communities, ensuring targeted, inclusive and culturally relevant education (City of Calgary, 2025).

Enforcement: Traffic enforcement is enhanced under the new plan with the establishment of an EMCS Peace Officer Traffic Safety Team. Launched in 2025, the EMCS Team is equipped to conduct traffic stops and issue tickets for traffic issues related to vehicle noise, moving bylaw violations and speed violations, in school and playground zones (City of Calgary, 2025). The addition of the EMCS team aims to

enhance traffic safety by lessening the burden on the CPS, allowing them to address more severe traffic issues (City of Calgary, 2025).

Evaluation: The program's evaluation occurs monthly throughout the year via meetups between the City of Calgary and CPS (City of Calgary, 2025). Annual meetings are used to set yearly tasks, assess progress and realign actions as needed. The 2025 Annual Report highlights recent activities, updated collision statistics, progress updates on the plan's two focus area targets and recent successes (City of Calgary, 2025).

Engagement: The plan emphasizes collaboration with residents, schools and community groups to build public support, raise awareness and co-develop solutions that improve traffic safety across Calgary (City of Calgary, 2025). Activities led by the CPS and the city's EMCS Traffic Safety Team include the Community Speed Watch event, the Residential/Collector Speed Reduction Program, the Active and Safe Routes to School Program and the Safe Student Travel Advisory Group (SSTAG). The Community Speed Watch event enables volunteers to measure speeds and interact directly with road users. The Speed Reduction Program encourages residents to request speed limit reductions in their area and the 311 line enables residents to submit traffic inquiries for consideration by the city in future policy decisions. The plan also emphasizes the importance of empowering school-aged children and staff by providing them with the knowledge and tools needed to adopt safer travel habits, as well as a voice on the SSTAG school-board-led committee. Public outreach is also supported through quarterly media campaigns, social media engagement and signage initiatives, such as the "Report Impaired Driving" campaign and community-requested sandwich boards (City of Calgary, 2025).

Equity: The City of Calgary has committed to collaborating with community partners to ensure that safety messaging reaches a broader audience of Calgarians, particularly those in underserved areas (City of Calgary, 2024). The city and CPS are translating safety messaging and using the Calgary Equity Index to prioritize engineering treatments in equity-deserving communities (City of Calgary, 2024).

Key stakeholders

Key stakeholders in Calgary's plan include the internal partnership between the CPS, the EMCS Traffic Safety Team and the Safer Mobility Operations Team (SMOT), as well as partnerships with other safety organizations, communities and external stakeholders (City of Calgary, 2024). These include the Alberta Motor Transport Association (AMTA), Mothers MADD, community associations, Calgary school boards (CBE, CSSD), the Government of Alberta (Transportation, Health Services, and Justice departments), and other law enforcement partners, such as the RCMP and the Tsuut'ina Nation Police Service (City of Calgary, 2024).

What the city has to say

Interview with Joanna Domarad, Mobility Safety Operations Leader, City of Calgary

PARACHUTE: Did you learn anything from your previous strategy that informed the development of the updated version?

JOANNA DOMARAD: Yes, we continue to learn and implement changes. The most significant change with the new plan is that it is more multidisciplinary. Although we have previously collaborated with the Calgary Police Service (CPS), this plan is the first that was formally co-developed with the CPS. This was a big step forward for us as the previous plan was more administrative based. From a transportation perspective, the release of this plan helps formalize and strengthen collaborations that can serve to meet the needs of the CPS reporting structure as well as our municipal reports.

PARACHUTE: What are the most notable changes in your new Vision Zero strategy?

JOANNA DOMARAD: We have built upon our previous work and now have more formalized processes and structures for our collaboration with schools through the Safe Student Travel Advisory Group (SSTAG). This is a forum where various partners, including the CPS and departments within the City of Calgary, meet with the school boards across Calgary to deliver road safety improvements near schools. What's nice about this forum is that it is a common intake process for various road safety concerns that come to us from residents. It is also more structured toward targeting the areas that need immediate action and embedding our Active and Safe School Program within that as well. As a result, communication and collaboration have improved significantly.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

JOANNA DOMARAD: The City of Calgary has had a Vision Zero strategy in place for seven years now. The goals of the strategy are to reduce serious injuries and fatalities on our roadways. Our current five-year target is to reduce the number of serious injury and fatal collisions by 25 per cent by 2028.

PARACHUTE: What major activities are you undertaking to meet these goals?

JOANNA DOMARAD: We are working from many different angles. We continue to review our network to identify areas of highest need and act on them through engineering measures. We're also working closely with communities, award offices and the CPS to deliver some of the other strategies in more of a holistic way. There's a new group that was formed last year called the Emergency Management and Community Services (EMCS) Traffic Safety Team, who work closely with schools, assisting

with the enforcement of safer speeds in playground zones. The group is composed of peace officers who are employed by the city and collaborate with police, increasing the resources that are available to work with schools to improve road safety.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

JOANNA DOMARAD: The plan is heavily focused on improvements for vulnerable road users. One of the sub-targets of the plan focuses on vulnerable road users to ensure we are addressing their needs. We have equity metrics and are also ensuring that they align with our highest areas of need by reviewing our data. These issues are primarily addressed through engineering measures. We also work closely with various partners, such as the Centre for Newcomers in Calgary, to share road safety messaging and help community members develop the tools needed to navigate our network and identify what challenges they're facing. We also provide our materials in multiple languages to ensure they are accessible.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

JOANNA DOMARAD: In the development of the specific strategy, it was mainly the City of Calgary and the CPS who were involved. However, we have ongoing engagement with the community through various forums. While there was no formal engagement of the public in the plan's development, we get several requests through our 311 line. A huge volume of those requests lead to regular interactions with citizens, bringing up issues that they're facing on our network, and us acting where appropriate. We also engage with the city council in terms of securing ongoing funding to deliver our programs.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

JOANNA DOMARAD: There is the Safe Mobility Plan Implementation Committee that we meet with regularly, along with the CPS and the EMCS Traffic Safety Team. We are currently working with them on our public awareness strategies to target pedestrian safety. Last year, Calgary saw an increase in pedestrian fatalities, so pedestrian safety and speed are the current primary focuses of the working group, among others.

We have been in discussions with the CPS as well as other city departments on developing a specific Vision Zero focused group and we continue to work closely with specific community groups on community-driven initiatives.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

JOANNA DOMARAD: Yes, our Traffic Safety Improvements budget is $5 million per year over five years. We collaborate with other groups and programs on projects that embed safety into their operations and deliver some of this work.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

JOANNA DOMARAD: We currently collect and analyze concrete safety data on an annual basis, which is reported to city council. While we're already sharing links to those council documents, we're working on expanding our website to make this data more accessible to the public. This may include aggregate-level data such as collisions, updates from the Safe Mobility Plan and more detailed information on projects and investments – potentially in a dashboard format.

Evaluating past projects is also a key part of our process. While it is difficult to demonstrate that the things we are doing are making a difference since city-wide trends can be influenced by external factors such as population growth or reduced travel during COVID-19, focusing on project-level outcomes demonstrate the effectiveness of our interventions. This ongoing evaluation helps us understand what works best and informs how we design and implement future initiatives.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

JOANNA DOMARAD: Some factors include population growth as we know that it impacts cities overall. Another consideration is road re-classification. We are beginning to see a high prevalence of issues in some areas compared to others and are developing strategies for speed reduction for various types of roads such as arterial roads.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

JOANNA DOMARAD: Engagement and the number of people interested in seeing safety improvements in their communities have increased. Since the beginning, we've been working with a lot of different people in communities, some of whom advocate for changes. At this point, more people have a better understanding of what's possible and what a safer street looks like, which make conversations easier.

A big step forward was the residential speed reduction in Calgary, which lowered limits to 40 km/h in 2021. This was especially important in areas deeper into communities, around schools and residential roads, where we're trying to better accommodate

vulnerable road users. Over time, average speeds have dropped and the residential speed reduction helped reach drivers who typically go right up to the speed limit.

A lot of the concerns raised by communities about speed weren't about people exceeding the speed limit, but rather that the posted limit was too high to begin with. Lowering the speed limit helped address those concerns and created a greater sense of safety. We now have an ongoing program reviewing collector road speeds across the city to lower speeds where it makes sense. We receive a high volume of speed reduction requests through 311 and we're doing more localized reviews to determine the most appropriate action for specific streets. Ideally, we'd love to do a city-wide review and implement changes across the board, but it is dependent on resources and capacity.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

JOANNA DOMARAD: When it comes to speed reduction, we are trying to learn more about how to support communities best. Calgary didn't have a speed hump/speed cushion program and last year we began exploring what a program could look like and what associated funding would be needed. We used temporary materials to install them in areas of the greatest need and assessed the effectiveness of the intervention as well as community support, deployment logistics and costs. The speed humps proved effective in reducing speeds, and although some of the temporary materials didn't really last very long, we are trying to develop a program for permanent speed hump deployment and will hopefully receive funding for it.

Another area of success has been road dieting, which involves reducing the number of lanes on roadways that were initially over designed. We have found this intervention to be very effective in the areas it has been implemented. Most of the time it does not result in negative consequences, such as additional congestion, since the overall design of the roadway improves driver behaviour and expectations of different road users. Road diets are something that we continue to do and, in most situations, we have seen very positive outcomes as a result.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

JOANNA DOMARAD: One of the biggest challenges has been limited funding and resources, which makes it difficult to implement a proactive strategy. We can always be doing more and sometimes it is difficult to prioritize. Balancing reactive fixes with proactive planning remains an ongoing tension in the strategy's implementation. While there are many areas in the city with similar levels of risk, priority often must go to locations with existing severe outcomes, leading to a more reactive approach.

This creates tension between addressing urgent safety issues and responding to valid community concerns that may not meet the same threshold of urgency.

Public feedback plays a large role, and while community concerns are valid, they don't always align with the highest-risk areas. It also raises equity concerns, as some communities with fewer resources or less visibility may be overlooked despite facing similar risks. This is where the equity lens becomes crucial, ensuring that decisions aren't just driven by the loudest voices, but that all communities, including those that may be underrepresented or underserved, are considered fairly.

Another challenge is consistently embedding best practices all design standards and projects. While new knowledge and approaches are available, it requires a lot of effort to make sure that best practices are being systematically integrated into all our design plans.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

JOANNA DOMARAD: Focus on what you can do. Sometimes the tasks get overwhelming when you look at it from a city-wide perspective as there is so much work to do. It's important to focus on what you can do and remember that you can only make improvements and create change within the means and resources available to you.

It is difficult to carry on when we see people dying on our roads. Even when it's discouraging and we are not seeing results, we need to keep the larger goal in mind and continue moving forward one project at a time to make a difference. Every step counts and it's important to celebrate the small wins along the way.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

JOANNA DOMARAD: In general, we would like to continue closing the gap and making progress toward safer roadways, using the best practices and strategies for each specific context. One big piece of that is the new Streets Manual, which is going to have a significant impact across the organization.

The Streets Manual is an update to our older design guidelines, the Design Guidelines for Subdivision Servicing. This new manual is being built from the ground up, embedding best practices, safer speeds and infrastructure that reflects the relationship between speed and safety.

While it's not specifically connected to our Safer Mobility Plan, the core safety principles behind it such as the Safe System Approach are influencing the work. The Streets Manual is drawing from a broader set of best practices and frameworks, including Complete Streets concepts, to make sure new street designs accommodate all road users and make roads safer for everyone. The vision moving forward is about embedding those principles more deeply and consistently into how we plan, design and build our roadways.

Chatham-Kent, Ont.

Background

Chatham-Kent is a municipality in southwestern Ontario encompassing the County of Kent and the City of Chatham. The municipality has a population of 103,988, according to the 2021 census, and has increased by 2.3 per cent since 2016. Its population density is 42.4 people per square kilometre (Statistics Canada, 2023e). Of a 25-per-cent census sample, 93 per cent mainly commuted to work by driving a car, truck or van, followed by 4.2 per cent who walked to work (Statistics Canada, 2023e). The municipality occupies 2,500 square kilometres, and 3,385 kilometres of Ontario roads that serve both local agricultural vehicles and inter-regional travel through their connection to provincial highways (Municipality of Chatham-Kent, 2024).

Between 2018 and 2022, the municipality reported 38 motor vehicle collision fatalities and 148 serious injuries (Municipality of Chatham-Kent, 2024). In 2022, Chatham-Kent experienced a rate of 7.7 persons killed in collisions per 100,000 population, nearly double that of the provincial average per capita of 3.9 persons per 100,000 population. Unbelted occupants made up most of traffic fatalities (39.3 per cent), followed by collisions resulting from impaired driving (21.1 per cent) (Municipality of Chatham-Kent, 2024).

Road Safety Action Plan (2024)

The council of the Municipality of Chatham-Kent adopted the **Road Safety Action Plan** on Nov. 6, 2023, in response to a concerning proportion of fatal and major injury collisions. The plan is informed by the Safe System Approach (SSA) and Safe Systems Pyramid (SSP), emphasizing a shift from preventing collisions to preventing serious injuries and deaths (Municipality of Chatham-Kent, 2024).

The plan is grounded in principles of shared responsibility, multi-level collaboration, and data-informed, equity-focused decision-making (Municipality of Chatham-Kent, 2024). Following these principles, the road safety program identifies five key emphasis areas, informed by collision data from 2018 to 2022 and real-life safety experiences. These include: collision types (roadway departure collisions and nighttime/dusk collisions on unlit roadways); infrastructure (speed limits); people (impaired driving, seatbelt use and pedestrian safety);

and vehicles (cyclists, off-road vehicles and motorcycles) (Municipality of Chatham-Kent, 2024).

Key features of the plan

The Road Safety Action Plan proposes 25 actionable items across five tiers of the SSP.

Education: Chatham-Kent is partnering with Chatham-Kent Public Health and Chatham-Kent Police Service to create a co-ordinated road safety Education Campaign Strategy promoting RideCK as a reliable and safe alternative to impaired driving, reinforcing the idea that mobility choices can directly impact injury prevention. The municipality has also committed to developing a public-facing Vision Zero Dashboard that will offer transparent updates on progress, collisions and key performance indicators, helping residents stay informed and engaged.

Active safety measures: The municipality is reviewing speed limits in urban zones through a safe systems lens, lowering speed limits in strategic areas to reduce the risk of collisions and the severity of outcomes. A School Zone Safety Program will examine opportunities to reduce speeding near schools and promote safe walking and biking routes for children.

Latent safety measures: The action plan proposes the implementation of passive safety features, such as installing pavement edge lines on rural arterial roads, to help guide drivers more safely. The municipality is also exploring the feasibility of ASE and red-light cameras as part of a data-driven strategy to prevent crashes at high-risk locations.

Built environment: A Complete Streets Policy is being developed to better serve drivers, cyclists and pedestrians through design that balances safety and mobility. Rural roadway standards will be updated to include safer edge treatments and clear zones, and targeted programs will expand and improve pedestrian crosswalks, sidewalks and cycling infrastructure. Signalized intersections are set for upgrades with features such as pedestrian countdown timers and improved crossing speeds, while right-turn channelization will restrict or redesign high-risk turns. Transit stop locations are also being reviewed to prioritize pedestrian safety, notably by avoiding mid-block stops without nearby protected crossings. Road lighting at high-collision locations will also be enhanced to improve nighttime visibility.

Socioeconomic factors: The plan emphasizes equity and systemic change through multi-sector collaboration. The municipality aims to integrate road safety into its broader planning efforts by establishing a Road Safety Task Force that encompasses multiple departments and agencies. Collaboration with the Chatham-Kent Police Service and Chatham-Kent Public Health supports cross-cutting work, particularly

in areas such as education, enforcement and equitable access to safe infrastructure (Municipality of Chatham-Kent, 2024).

Key stakeholders

Key stakeholders include municipal leadership, the Chatham-Kent Police Service, Chatham-Kent Public Health, the Road Safety Task Force, community groups, CK Transit (RideCK), and provincial and industry partners (Municipality of Chatham-Kent, 2024). Together, they support planning, enforcement, education, infrastructure improvements, and data monitoring to advance Vision Zero goals.

Coquitlam, B.C.

Background

The City of Coquitlam has a population of 148,625, according to the 2021 census, and has increased by 6.7 per cent since 2016. Its population density is 1,216.7 people per square kilometre (Statistics Canada, 2023f). Of a 25-per-cent census sample, 80.2 per cent mainly commuted to work by car, truck or van, followed by 12.8 per cent who used public transit to get to work (Statistics Canada, 2023f).

Between 2020 and 2024, the ICBC reported an average of 7,615 collisions per year, with an average of 1,462 crashes resulting in an injury or fatality (ICBC, 2025). Following a significant increase between 2020 (1,221) and 2021 (1,584), traffic collisions declined in 2022 (1,486) and remained relatively stable in 2023 (1,489), before rising again in 2024 (1,529) (ICBC, 2025). The city's hilly terrain, as well as the numerous arterial roads passing through Coquitlam to connect surrounding cities, pose challenges for transportation planning (City of Coquitlam, 2023a).

Strategic Transportation Plan and Road Safety Strategy

The City of Coquitlam endorsed Vision Zero and the Safe System Approach (SSA) in May 2023, announcing the development of a Road Safety Strategy to be integrated in the updated Strategic Transportation Plan (City of Coquitlam, 2023a).

The proposed strategy aligns with the City of Coquitlam's **2024-2027 Strategic Plan** priority under community safety to "make the city's road network safer for all types of users including drivers, pedestrians, and cyclists, and people living with disabilities" with the following recommended action items:

- Develop and implement actions from the Road Safety Strategy.
- Increase the network of separated and protected micro-mobility lanes to create safe cycling and rolling opportunities for all ages and abilities.
- Continue to improve pedestrian accessibility, safety, and comfort through a suite of measures such as additional street lighting, Rectangular Rapid Flashing Beacon crosswalks, pedestrian letdowns and other infrastructure on city roads and parks.
- Support the RCMP's Strategic Plan, including through educational campaigns, social media messaging and increased enforcement to support compliance (City of Coquitlam, 2024).

Community engagement is ongoing as Coquitlam works to update the Strategic Transportation Plan. Preliminary reports presented to council suggest the plan will aim to create a people-focused transportation system that prioritizes the sustainable and innovative movement of complete and connected communities, ensuring safe, accessible, equitable and reliable transportation for all (City of Coquitlam, 2023b).

Three ambitious goals under discussion to guide the plan are:

- achieving a 50 per cent mode share through active transportation and public transit
- eliminating transportation-related greenhouse gas emissions,
- reaching zero serious traffic injuries and fatalities by 2050 (City of Coquitlam, 2023b).

Key features of the plan

Coquitlam's Road Safety Strategy will reflect a holistic view of the transportation system and incorporate elements of the SSA including safe road design, safe vehicles, safe speeds and safe road users (City of Coquitlam, 2023c).

Key stakeholders

A network of internal and external partners have been listed as key stakeholders in the development of Coquitlam's Road Safety Strategy. Internal partners involved include the city's Departments of Engineering and Public Works, Fire Rescue Services, Bylaw Enforcement, Police Services and Community Planning (City of Coquitlam, 2023d). External Partners include Kwikwetlem First Nation, regional transit authorities (e.g., TransLink), RoadSafetyBC, the British Columbia Automobile Association (BCAA), the British Columbia Trucking Association (BCTA), Canadian Automobile Association (CAA), the British Columbia Ministry of Transportation and Transit, ICBC, the RCMP and Fraser Health (City of Coquitlam, 2023d).

What the city has to say

Interview with Anagha Krishnan, Team Lead of Road Safety and Operations, City of Coquitlam

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

ANAGHA KRISHNAN: Coquitlam Council has supported staff's proposal through the Road Safety Program and Transportation Plan update of targeting zero deaths and serious injuries on Coquitlam streets. While council has not officially adopted Vision Zero, they have supported staff's proposal that no one should be seriously injured or

die on Coquitlam streets. While there was no specific incident, staff identified that a more reactive approach to road safety, responding after fatalities, was occurring. Recognizing that deaths and serious injuries can be prevented by adopting a more proactive approach to road safety, and aligning with other leading cities that are successfully implementing Vision Zero strategies, influenced the proposal and support to council.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

ANAGHA KRISHNAN: Coquitlam is currently in the process of developing its comprehensive Road Safety Program with a Vision Zero goal. Our goal is to achieve zero serious injuries and fatalities on our streets by 2050, which was presented and supported by council in May 2023.

PARACHUTE: What major activities are you undertaking to meet these goals?

ANAGHA KRISHNAN: Our Road Safety Program currently under development would have actions related to speed management, infrastructure improvements, policy and planning initiatives as well as co-ordination with other internal and external agencies. We have also completed an Advanced Network Screening Analysis of collision data. This proactive approach identifies future high-risk locations, moving beyond reactive blackspot identification. The analysis will guide project prioritization for maximizing safety benefits and also assist other departments such as the RCMP. Additionally, we have initiated road safety audits and in-service road safety reviews for improving safety of our existing infrastructure.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

ANAGHA KRISHNAN: Equity and vulnerable users are integral to our Road Safety Program. Our Advanced Network Screening Analysis revealed a strong correlation between high-risk intersections and areas with identified equity needs. We are prioritizing infrastructure improvements at these locations, as research shows this is the most effective way to enhance safety and promote equity. Safety is a priority consideration for city-wide active transportation and transit improvement projects to ensure the safety of our most vulnerable road users.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

ANAGHA KRISHNAN: Our key stakeholders include a broad range of internal city departments and external partners such as ICBC, RCMP, School District 43 and Fraser Health. We engaged them through targeted one-on-one meetings to understand their roles, perceptions and priorities regarding road safety. This was followed by two

collaborative workshops, in September and November 2023, which facilitated cross-departmental understanding and identified existing initiatives to build upon for our Road Safety Program. We also conducted public engagement, co-ordinated with our transportation plan update, to gather community feedback on safety concerns.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

ANAGHA KRISHNAN: No, we do not have a Vision Zero committee at this time but this might be explored as part of the Road Safety Program action to meet regularly and discuss co-ordination items.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

ANAGHA KRISHNAN: We have a Safe Mobility Program fund that is used for safety improvements in the city. It is financed by general revenue, casino funds, grants and the Canada Community Building Fund (formerly Gas Tax).

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

ANAGHA KRISHNAN: Coquitlam is a smaller city with limited resources. To measure our program's success, we'll track road trauma statistics. Apart from that, we plan to monitor speed compliance at various locations to assess changes in driver behaviour. We will also quantify success by the number of safety improvement projects implemented at identified high-risk intersections, ensuring our proactive efforts are translating into tangible changes on the ground.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes, and if so, can you please describe what these were?

ANAGHA KRISHNAN: Our **traffic calming policy** is restrictive to certain raised features that effectively reduce speeds. While we are committed to proactive safety, this policy sometimes limits the immediate implementation of proven solutions such as raised crosswalks or speed tables on certain routes. We are actively working to address this, leveraging data from our Advanced Network Screening Analysis to advocate for and strategically implement the most impactful infrastructure improvements, even as we navigate existing policy frameworks to ensure safety for all road users.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

ANAGHA KRISHNAN: Since initiating our program, Coquitlam's approach to road safety has notably shifted toward proactive prevention. The completion of our

Advanced Network Screening Analysis is a major change, allowing us to identify future high-risk locations for serious injuries and fatalities, moving beyond our traditional reactive "blackspot" approach. This data-driven insight is largely informing our project prioritization. Furthermore, we've begun embedding safety reviews into our design work and undertaking road safety audits, fundamentally changing how we identify and address safety concerns across the city.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

ANAGHA KRISHNAN: Beyond identifying and improving high-risk corridors through our Advanced Network Screening Analysis, we've also prioritized road safety in active transportation improvements and other capacity improvement projects, notably with the Guildford Way protected bike lanes and their innovative protected intersection design, and upcoming routes such as Nelson Street and Pipeline Road.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

ANAGHA KRISHNAN: Our Road Safety program is still under development, requiring co-ordination with the city's broader Transportation Plan update. This integration is crucial to ensure alignment and leverage resources, but it also means our comprehensive program's full implementation timeframe is tied to the completion and approval of this larger, multi-phased plan, which is a complex and extensive undertaking.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

ANAGHA KRISHNAN: Strong collaboration with stakeholders is crucial; when everyone understands the strategy's goals, it helps integrate Vision Zero principles into your broader transportation planning, making safety a foundational element in all city development. Crucially, focus on a few impactful and actionable items rather than attempting too many initiatives at once. Prioritize a proactive, data-driven approach to identify high-risk areas and implement infrastructure improvements that respond to them.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

ANAGHA KRISHNAN: Our next step is the completion and adoption of Coquitlam's Road Safety Program by late 2026, which outlines our core focus areas and actions. Over the next five years, we aim for tangible reductions in serious injuries and fatalities through the systematic implementation of this strategy, driven by targeted infrastructure improvements at high-risk locations identified by our Advanced Network

Screening Analysis. A key accomplishment will be to evolve our traffic calming policy to more effectively deploy proven speed reduction measures and to see a significantly expanded and safer active transportation network. Ultimately, we envision Vision Zero principles being seamlessly integrated into all our planning and design work, making safety a foundational consideration across the city.

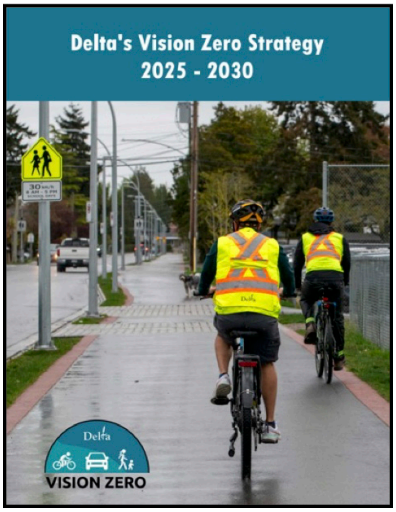
Delta, B.C.

Background

The City of Delta has a population of 108,455, according to the 2021 census, and has increased by 6.1 per cent since 2016. Its population density is 603.7 people per square kilometre (Statistics Canada, 2023f). Of a 25-per-cent census sample, 84 per cent mainly commuted to work by car, truck or van, followed by 9.4 per cent who used public transit to go to work (Statistics Canada, 2023f).

According to data from the Delta Police and the ICBC, approximately 22 people are killed and seriously injured in collisions each year, along with 1,500 total injury collisions (City of Delta, 2024).

Delta's Vision Zero Strategy, 2025-2030



Delta's city council approved the creation of a Vision Zero Strategy in October 2020. Delta's Vision Zero Strategy (2025-2030) was adopted four years later, in September 2024 (City of Delta, 2024). The three-phase plan aims to reduce road fatalities and serious injuries by improving road safety and accessibility, as well as enhancing community engagement and education. The city has set a target to reduce deaths and serious injuries by at least five per cent annually, reaching a 25-per-cent reduction by 2030. It has begun implementing pilot projects in areas of highest need (City of Delta, 2024).

Delta's Vision Zero Strategy employs the Safe System Approach (SSA), guided by three principles: "reducing fatalities and serious injuries on Delta's roads; improving connections to schools, parks and community services; and addressing the needs of vulnerable road users, including older adults and children."

The strategy's notable features include a five-year implementation plan (2025-2030), strong collaboration with partners such as the Delta Police, ICBC, and TransLink and a commitment to data-driven planning and public engagement. Delta's community engagement strategy involved two Vision Zero Open Houses held in March 2023 and the creation of the "Let's Talk Delta" platform, which gathered residents' perceptions of road safety. Altogether, these features support co-ordinated efforts and align with broader city plans to enhance walkability and build on existing road safety initiatives for lasting impact.

Key strategies include designing and maintaining safer streets, addressing unsafe behaviours through enforcement and education, improving pedestrian crossings and bike lanes, and ensuring accessibility for all users. The approach promotes shared responsibility among all road users, including drivers, cyclists and pedestrians, and uses evidence-based decision-making to guide investments.

Focus areas include protecting older adults and youth, managing vehicle speeds and vulnerable road users (e.g. pedestrians, cyclists, and motorcyclists), targeting high-risk locations (such as dangerous intersections) and analyzing injury patterns across different travel modes. Overall, the plan aligns with the city's broader initiatives to promote walkability and build on existing road safety efforts, aiming to achieve a long-term impact (City of Delta, 2024).

Key features of the plan

Safe land use planning: Delta's approach is rooted in data-driven decision-making, community engagement, collaboration and ongoing monitoring and evaluation. The strategy relies on traffic collision data and resident feedback to guide actions. The city has a dedicated monitoring and evaluation framework that tracks key performance metrics, enabling timely adjustments to the plan.

Safe speeds: Managing vehicle speeds is critical to preventing crashes and reducing the severity of injuries. Delta's strategy emphasizes controlling speeds through education and enforcement. Key actions include speed humps, speed limit reductions, roundabouts and traffic circles, as well as public education and targeted enforcement to address community concerns about speeding.

Safe vehicles: Vehicle safety has improved significantly due to technological advancements such as automated braking systems, pedestrian detection, lane assist and autonomous vehicle features. Delta's strategy supports building partnerships to promote the adoption of enhanced safety features in vehicles, contributing to overall road safety.

Safe road users: The City of Delta, in collaboration with partners such as ICBC and the Drlta Police Department, aims to build a culture of road safety by increasing awareness and supporting compliance through annual campaigns focused on safe road use behaviours and the risks of not following the rules of the road. Key measures include age-friendly route programs, leading pedestrian interval (LPIs), longer crossing times, median refuge islands, school safety campaigns, separated cycling facilities, initiatives to support micro-mobility users, strengthening stakeholder relationships and studying vulnerable road user safety.

Safe road design: Road design plays a crucial role in influencing user behaviour, and transportation professionals can guide safer choices through thoughtful infrastructure. Examples of interventions include fully protected left-turn phases, speed reader boards,

improved sight lines and high-friction pavement to help vehicles stop more quickly, especially in poor weather conditions (City of Delta, 2024).

Key stakeholders

Key stakeholders in Delta's plan include the Delta Police Department, Fraser Health Authority, ICBC, the Ministry of Transportation and Transit, as well as other community stakeholders and agencies (City of Delta, 2024). Their involvement ranges from providing data and resources to participating in public engagement activities and enforcement efforts.

Town of Devon, Alta.

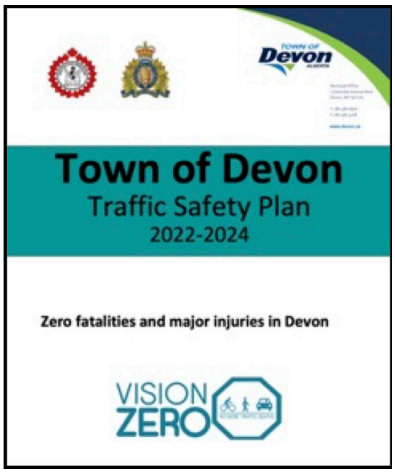
Background

The Town of Devon has a population of 6,545, according to the 2021 census, which represents a 0.5-per-cent decrease since 2016. Its population density is 459.1 people per square kilometre (Statistics Canada, 2023g). Of a 25-per-cent census sample, 91.5 per cent mainly commuted to work by car, truck or van, followed by 8.1 per cent who walked, cycled, or used public transit or another method of travel to go to work (Statistics Canada, 2023g).

Between 2017 and 2022 there were no traffic fatalities recorded by the RCMP; however, the number of traffic collisions has been rising from just one in 2017 to 71 collisions in 2020 and 99 in 2021, with the majority of collisions occurring in residential areas (Devon Dispatch, 2022).

Town of Devon Traffic Safety Plan, 2022-2024

The Town of Devon introduced its first Traffic Safety Plan in 2008, providing a strategic plan for monitoring the number of collisions, deaths and injuries on community roads, and offering guidance to local law enforcement (Town of Devon, 2022). The **Town of Devon's Traffic Safety Plan 2022-2024** was endorsed by council on Jan. 24, 2022 (Devon Dispatch, 2022). The plan is guided by the Alberta Traffic Safety Plan Calendar and the Safe System Approach (SSA) (Town of Devon, 2022). The vision is to eliminate all serious injury and fatal road collisions on community roads to create a safe and healthy community. Key priorities include education and communication, and the use of new technologies to support automated enforcement efforts (Town of Devon, 2022).



Key features of the plan

The Town of Devon employs the SSA to achieve its Vision Zero goals, along with five of the Es of Mobility Safety:

Engineering: The Town of Devon is continuing the use of temporary and permanent speed-feedback equipment to target aggressive driving. This includes reviewing infrastructure of automated traffic enforcement (ATE) locations to assess where engineering and technology changes may support a safer environment, and the

installation or maintenance of ATE in locations where engineering and technology changes cannot be implemented.

Education: Road safety education programs are expected to help reduce serious injury and fatal collisions over the long term as their uptake increases, influencing significant behavioural changes.

Enforcement: Law enforcement efforts will continue to target speeding, impaired driving and the wearing of seatbelts. New initiatives focused on tailgating, distracted driving and identifying drivers at high risk for traffic-related offences are being expanded and developed.

Evaluation: Evaluation will focus on optimizing the use of automated photo-enforcement equipment and efficient and effective use of Police and Community Peace Officer resources. The RCMP is working alongside Community Peace Officers to support evaluation of resource allocation and the development, implementation and evaluation of law enforcement initiatives.

Engagement: The Town of Devon is working closely with the Transportation Association of Canada and its surrounding municipalities to increase public engagement and involvement in the co-design of road safety initiatives (Town of Devon, 2022).

Key stakeholders

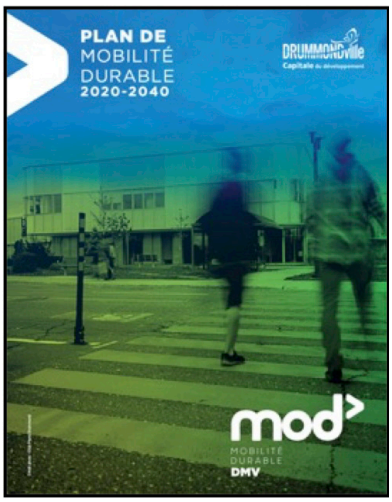
Key stakeholders in the Town of Devon's Traffic Safety Plan are the RCMP and Community Peace Officers, as well as the general public (Town of Devon, 2022).

Drummondville, Que.

Background

The City of Drummondville has a population of 79,258, according to the 2021 census, and has increased by 5.1 per cent since 2016; its population density is 320.7 people per square kilometre (Statistics Canada, 2023h). Of a 25-per-cent census sample, 92.1 per cent mainly commuted to work by car, truck or van, followed by 4.1 per cent who walked to work (Statistics Canada, 2023h).

Plan de mobilité durable (Sustainable Mobility Plan) 2020-2040



Drummondville adopted its Safe Mobility Policy in 2019 with the release of the city's Sustainable Mobility Plan 2020-2024 (City of Drummondville, 2024). The **Plan de mobilité durable 2020-2040** (PMD) is grounded in the principles of accessibility, safety, comfort and efficiency, aiming to enhance the quality of life of all residents (City of Drummondville, 2019a). Central to the PMD is the adoption of Vision Zero, which seeks to eliminate all traffic-related fatalities and serious injuries in the City of Drummondville by 2040 (City of Drummondville, 2019a). This commitment entails a shift toward a safe system paradigm, emphasizing shared responsibility among road designers, operators and users to address risks across the entire transportation network proactively.

The PMD aims to significantly reduce reliance on single-occupancy vehicles and promote healthier, more sustainable transportation modes (City of Drummondville, 2019a). The plan outlines four key objectives:

- increase active and public transportation use by 20 per cent by 2040
- a safety-first approach to street design
- apply the "complete streets" principle to ensure inclusive public spaces
- build a structured, reliable, and efficient multimodal transport network.

These efforts are rooted in a broader vision that sees transportation as a key driver of climate resilience, public health, economic efficiency and social inclusion (City of Drummondville, 2019a).

As of June 2024, the City of Drummondville had implemented approximately 90 per cent of the 64 actions outlined in their Plan d'Action en mobilité durable 2020-2024 City of Drummondville, 2024; City of Drummondville, 2019b). Drummondville is now working on developing a new set of action items to realize their 2040 Vision Zero goals.

Key features of the plan

Disclaimer: The City of Drummondville's Sustainable Mobility Plan is published in French. To preserve the meaning of the language, the features of their plan have been described under the following four themes, as outlined in their plan:

Accessibility: The plan ensures that all residents can access key destinations including workplaces, schools, healthcare facilities, services and leisure activities through direct, convenient and universally accessible travel options. Public space development follows the "complete streets" principle, reallocating road space better to serve pedestrians, cyclists, and transit users. Drummondville's flat terrain and compact city layout, with most activities within a 20-minute bike ride, provide a strong foundation for the growth of active transportation.

Safety: Safety is a central pillar of the plan, aiming to eliminate serious and fatal collisions through proactive infrastructure design. This includes safer intersections, dedicated bike lanes, secured school zones and improved pedestrian crossings. The city is transitioning from traditional road safety management to a prevention-based approach, particularly for protecting vulnerable users such as children, cyclists and pedestrians.

Comfort: The plan prioritizes user comfort by enhancing infrastructure quality and improving the travel experience. This includes intuitive pathways, enhanced public transit stops, longer pedestrian signal times and well-maintained cycling and walking routes, especially during winter. Aesthetic and functional improvements (e.g., greening streets, shaded waiting areas) also contribute to making sustainable mobility more appealing.

Efficiency: To make sustainable transportation competitive with private vehicles, Drummondville aims to reduce travel times and improve network. A key objective is to increase the modal share of active and collective transportation by 20 per cent by 2040. Investments will focus on high-frequency transit corridors, feeder routes, and multimodal hubs. Complementary cycling networks and improved way finding also enhance overall efficiency (City of Drummondville, 2019a).

Key stakeholders

Drummondville's plan is the product of broad consultation with internal departments and external partners. Key stakeholders include public agencies and institutions (e.g.

MRC de Drummond, Sûreté du Québec, Cégep de Drummondville, Commission scolaire des Chênes and local health services), community and environmental organizations (e.g. Conseil régional de l'environnement and local business associations), city departments and leadership who are responsible for plan development, monitoring and ongoing community engagement. A permanent committee will oversee the plan's implementation, supported by annual performance reports and a multi-phase action plan spanning 2020–2040 (City of Drummondville, 2019a).

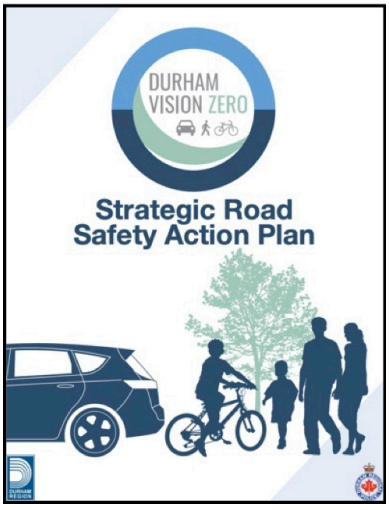
Durham Region, Ont.

Background

Durham Region has a population of 696,992, according to the 2021 census, and has grown by 7.9 per cent since 2016 (Statistics Canada, 2023i). Its population density is 276.5 people per square kilometre. Of a 25-per-cent census sample, 89.1 per cent mainly commuted to work by car, truck or van, followed by 5.6 per cent who travelled to work by public transit (Statistics Canada, 2023i).

When Durham Region's current Strategic Road Safety Action Plan was released in 2019, the region reported an average of more than 6,700 reported collisions per year, costing regional road users and residents $225 million a year in direct and indirect costs (Durham Region, 2019). Between 2019 to 2023, the region recorded an average of 1,179 collisions per year resulting in injury or fatality, with a significant decrease experienced throughout 2020 to 2022 due reduced travel during the COVID-19 pandemic (Durham Region, 2024). In 2019, there were 1,460 injury and fatal collisions compared to 1,255 in 2023, a 14-per-cent decrease (Durham Region, 2024).

Strategic Road Safety Action Plan (SRSAP)



In April 2019, Durham Region developed the **Strategic Road Safety Action Plan** (SRSAP), which incorporates Vision Zero, with the goal of reducing fatalities and injury collisions by 10 per cent within five years (2019-2023) (Durham Region, 2024; Durham Region, 2019). The eight emphasis areas chosen for the SRSAP are intersections, aggressive driving, distracted driving, young drivers, pedestrians, impaired driving, cyclists and commercial vehicles. Three types of inputs (public opinion, collision data analysis and partner agency information) were used to select these emphasis areas (Durham Region, 2019).

Durham Region reports exceeding their 10-per-cent target reduction (1,377 collisions) by six per cent with an average of 1,291 injury and fatal collisions between 2019, 2022 and 2023. Data from 2020 and 2021 were excluded as they were impacted by the COVID-19 pandemic (Durham Region, 2024).

The region is currently working on its next Road Safety Action Plan to be implemented over the next five years (2025-2030). While still under development, the new RSAP

(2025-2030) is expected to follow a Safe System Approach (SSA) framework and to include new, ambitious targets that will build upon the Vision Zero program's strong foundation to transition toward systemic transformation (S. Almasi, personal communication, July 18, 2025).

Key features of the plan

Data collection and analysis: To develop the SRSAP, data analysis was conducted on collision data for 2012 to 2016 to look at the overall size of various collision types, recent increase in cycling collisions and fatal and injury collision data (Durham Region, 2019). The region is aware that additional data collection and analysis is needed to understand the nature of these collisions and demographics better (Durham Region, 2019).

Engineering: Some collision prevention can be achieved through engineering actions, such as implementing turning movements and reducing angle collisions at intersections (Durham Region, 2019). Recent engineering interventions include no right turn on red restrictions at various intersections, 40 km/h speed limits in three neighbourhoods, new all-way stops, pedestrian crossovers, roundabouts, leading pedestrian interval (LPI) and protected left-turn phasing to improve safety for all road users (Durham Region, 2024).

Education: Educational strategies are lead by Durham Regional Police Services, Corporate Communications, Health and other road safety partners (Durham Region, 2024). Activities include social media posts, positive ticketing, interactive question-and-answer activities, promotional items, presentations, assemblies and contests (Durham Region, 2019). The plan also outlines using these strategies to educate youth and parents about the dangers of impaired, distracted and aggressive driving (Durham Region, 2019).

Enforcement: The Vision Zero Task Force collaborates with Durham Regional Police Services to enhance enforcement levels in community safety zones, implementing a zero-tolerance policy for speed limit violations (O'Meara, 2022). Increased and/or better targeted enforcement is an effective countermeasure to address many of the emphasis areas such as aggressive driving (Durham Region, 2019).

Evaluation: The region monitors and evaluates the effectiveness of the countermeasures implemented by measuring the number of fatal and injury collisions (Durham Region, 2019).

Engagement: To identify key emphasis areas, an online survey was distributed to residents of Durham, and a public information meeting was held to gather the public's input on road safety (Durham Region, 2019).

Key stakeholders

Durham Region's SRSAP has a Steering Committee which included Durham Region, Durham Regional Police, Ontario Provincial Police (OPP), Ontario Ministry of Transportation (MTO), Durham Region Cycling Coalition, Town of Ajax, Town of Whitby, Township of Brock, City of Pickering, CAA, Town of Uxbridge, City of Oshawa, Municipality of Clarington, Durham Region Transit, City of Toronto, Township of Scugog, Northumberland County, MADD Durham Region, Heads Up! Durham, Durham Catholic District School Board, Durham District School Board, Student Transportation Services of Central Ontario, Durham Student Transportation Services and Durham College (Durham Region, 2019). To implement the SRSAP, a Vision Zero Task Force and an Implementation Committee has been created with partners from the region, Durham Regional Police Service, Road Safety Group, Health Department and Communications. Lastly, a Durham Safety Stakeholders and Ambassadors group will be formed to advocate for road safety within the Region (Durham Region, 2019).

What the region has to say

Interview with Shahram Almasi, MASc, P.Eng., RSP1, Project Engineer, Road Safety – Vision Zero, The Regional Municipality of Durham

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

SHARAM ALMASI: Durham Region formally adopted its Vision Zero strategy in April 2019 through the launch of the Strategic Road Safety Action Plan (SRSAP), branded publicly as "Durham Vision Zero." The strategy spans an initial five-year period (2019–2023) and reflects a long-term commitment to eliminate traffic-related fatalities and serious injuries across all modes of transportation.

The initial goal was a minimum 10-per-cent reduction in fatal and injury collisions over five years, intended as a realistic, data-driven approach toward the ultimate objective of zero people injured or killed in Durham. This target equated to preventing approximately 150 injury or fatal crashes, based on baseline data from 2012 to 2016.

Durham's strategy is grounded in the SSA and incorporates the "five Es" (Engineering, Enforcement, Education, Evaluation and Engagement). Eight emphasis areas were selected based on collision data and stakeholder input, including vulnerable road users, aggressive driving, impaired driving and intersection safety. For each emphasis area, tailored countermeasures were developed and tracked.

By the end of 2022, dozens of safety projects had been completed, including pedestrian safety upgrades at 83 intersections and several new programs launched such as Automated Speed Enforcement (ASE) and red-light cameras. New countermeasures

were applied systemically and at specific locations to address an issue. Interim results suggest that the region was on track to meet or exceed its 10-per-cent reduction target, though final evaluation of 2023 data is pending.

PARACHUTE: What major activities are you undertaking to meet these goals?

SHARAM ALMASI: Durham Region is pursuing a multi-pronged strategy grounded in the SSA and the "five Es" to advance its Vision Zero goals. Key activities span infrastructure improvements, speed management, enforcement (both automated and traditional), public education and policy integration.

Engineering and road safety improvements
The region has retrofitted high-risk intersections with measures such as protected turn lanes, reflective signal backboards and red-light cameras. More than 80 intersections have received pedestrian upgrades, including ladder crosswalks, audible signals and countdown timers. Rural roads have seen paved shoulders and "Safety Edge" treatments, while school zones were enhanced with physical traffic calming.

Automated and targeted enforcement
Automated Speed Enforcement (ASE) was launched in 2022 in community safety zones, rotating across 34 sites. Early results show improved speed compliance. Red-light cameras were also installed at 12 high-risk intersections. These efforts are reinforced by traditional enforcement from Durham Regional Police Services (DRPS), which conducts targeted blitzes based on collision trends.

Speed management and design
Durham has reduced speed limits in village centres and expanded community safety zones near schools and senior facilities. Radar speed feedback signs and updated Arterial Corridor Guidelines support safer travel speeds through design rather than just enforcement.

Education and outreach
Public campaigns target aggressive, distracted and impaired driving, with special emphasis on young drivers. The Region also supports Active and Sustainable School Travel, engaging thousands of students annually. Vision Zero messaging is integrated into events such as Bike Month and Canada Road Safety Week.

Policy integration and collaboration
Vision Zero principles are embedded in the Transportation Master Plan and land use planning. Road safety impact assessments are part of new development reviews. The region collaborates with public health, police, school boards and community members through its Vision Zero Task Force and working groups.

Data-driven decision making
Durham has modernized its collision data system and launched a public-facing dashboard to monitor trends and evaluate outcomes. Performance metrics – such as reductions in right-angle collisions at red-light camera sites – are used to guide next steps.

Together, these activities demonstrate a systems-based and evidence-informed approach to road safety. Preliminary data for 2021 to 2023 suggest a downward trend in injury and fatal collisions, indicating early success and ongoing momentum toward Durham's Vision Zero targets.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

SHARAM ALMASI: Equity and the protection of vulnerable road users are core elements of Durham Region's Vision Zero strategy. From the outset, the Strategic Road Safety Action Plan (2019–2023) prioritized interventions that address the needs of those at highest risk, particularly pedestrians, cyclists, youth, older adults and residents of communities with elevated collision exposure.

Two of the plan's eight emphasis areas are dedicated to pedestrians and cyclists, supported by targeted infrastructure such as crossrides, pedestrian refuge islands, longer crossing times and accessible signals. These measures align with OTM Books 15 and 18 and the Accessibility for Ontarians with Disabilities Act (AODA), access and safety for all ages and abilities.

Durham applies an informal equity lens by geographically distributing safety improvements across urban, suburban and rural areas. For example, red-light cameras and ASE were deployed in both high-traffic corridors and smaller communities, ensuring equal protection for students in rural school zones and those in urban centres.

The plan also addresses age- and ability-related vulnerabilities. Education campaigns focus on high-risk groups such as young drivers, while senior safety is supported through age-friendly design (e.g., improved signage, benches and signal timing). Automated enforcement programs minimize enforcement bias and redirect fine revenues into further safety investments.

Community engagement efforts – including public surveys, road safety summits and partnerships with schools and cultural groups – ensure the strategy reflects diverse lived experiences. Vision Zero communications are adapted to reach a range of audiences, including newcomers and non-drivers, supporting Durham's broader equity and inclusion goals.

While equity was not explicitly framed in the original 2019 plan, the region is moving toward more formal integration through data-informed prioritization and alignment

with its Community Safety and Well-Being Plan. As the Vision Zero program evolves and relaunches in 2026-2027 into the next chapter, future iterations will continue to embed equity considerations in both planning and performance measurement.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

SHARAM ALMASI: Durham Region's Vision Zero strategy was built through broad, multi-sector engagement, recognizing that lasting road safety improvements require shared ownership across agencies and communities. Key stakeholders include internal regional departments i.e. Works Department, Corporate Communications, Health, Durham Regional Police Services (DRPS), local municipalities, cycling groups, MADD, school boards, public health, community groups, transportation experts and the public.

Internal leadership and interdepartmental co-ordination
The Works Department (Transportation Division) led strategy development, supported by regional staff in planning, transit, finance and communications. Public Health played a key role in shaping educational components, while a formal Steering Committee guided the plan's development.

Law enforcement and emergency services
DRPS was involved from the outset – providing data, identifying enforcement priorities and aligning traffic safety campaigns with the Safe System Approach. DRPS leadership remains actively engaged through the Vision Zero Task Force, contributing to planning, data-sharing, and operational co-ordination.

Local municipalities and councils
All eight local area municipalities were consulted on the draft strategy and endorsed the plan. Ongoing engagement occurs through inter-municipal staff meetings, coordination on cross-jurisdictional issues (e.g., school zones, sidewalk projects), and aligned initiatives such as local ASE programs.

Education sector and school boards
School boards and Student Transportation Services contributed insight on school zone safety, while principals and teachers support education and Active School Travel programs. Engagement extended to post-secondary institutions – particularly after high-profile incidents – leading to co-ordinated actions such as Community Safety Zone designations.

Community engagement and public input
Public consultations included surveys, open houses and stakeholder workshops involving residents, cycling groups, safety advocates and victims' families. Community input directly influenced emphasis areas and action items. Public involvement is sustained through media campaigns, social media, online feedback tools (e.g.,

Your Voice Durham) and recognition programs such as the Vision Zero Durham Champions.

Experts and external partners
Technical consultants (e.g., CIMA+) supported data analysis and design guidance. The region also consulted with the MTO and participated in knowledge exchanges via the Ontario Traffic Council and national organizations such as Parachute.

Sustaining engagement
Ongoing implementation is guided by the Vision Zero Task Force, which meets once a month. The Implementation Committee was meeting once or twice a year prior to COVID but has been difficult to sustain since. A relaunch of Durham Vision Zero to set the plan for the next five years in 2026/27 will also reboot engagement with various groups. These groups were meeting regularly to co-ordinate efforts, monitor progress and maintain alignment across partners. Each stakeholder benefits from shared success – reduced collisions for police, fewer injuries for health, safer commutes for schools – reinforcing continued collaboration.

This inclusive, collaborative model has been instrumental in building support for Vision Zero and ensuring it is not just a regional initiative, but a shared mission across Durham's communities.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

SHARAM ALMASI: Yes, Durham Region established two formal bodies to govern and co-ordinate its Vision Zero efforts: the Vision Zero Task Force and the Implementation and Monitoring Committee. These committees reflect the Safe System principle of shared responsibility and ensure multi-sector alignment throughout the strategy's development and execution.

Vision Zero Task Force
This high-level committee provides strategic oversight and inter-agency collaboration. It includes senior representatives from:

- Regional Council (one or two political champions from the Works Committee)
- Works and Transportation Department (e.g., Commissioner or Traffic Engineering leadership)
- Durham Regional Police Service (typically senior Traffic Services leadership)
- Durham Public Health (focused on injury prevention)
- Local municipalities (rotating or invited traffic staff from area municipalities)

- School boards / Student Transportation Services
- Community representatives (including a cyclist advocate and senior citizen representative)

The Task Force meets once a month to review collision trends, advise on priorities and foster co-ordinated action. It has influenced enforcement strategies, school zone safety enhancements and public policy advocacy (e.g. supporting expanded ASE use).

Implementation and Monitoring Committee
This staff-level committee meets less frequently to discuss lesson learned, concerns and new initiatives. Members include:

- Regional traffic engineers and data analysts
- DRPS enforcement staff
- Local municipal transportation co-ordinators
- Public health and school board staff
- Regional communications and outreach specialists

They co-ordinate implementation of engineering countermeasures, enforcement campaigns, education initiatives and data monitoring. The committee reports to the task force and ensures that cross-departmental actions remain aligned.

Additional input channels
Advisory bodies such as the Durham Active Transportation Committee and the Community Safety and Well-Being Plan working group also inform Vision Zero through parallel mandates related to mobility and injury prevention.

Together, these committees provide the structure and accountability needed to deliver a sustained, multi-disciplinary Vision Zero program. Their composition reflects the "five Es" of road safety – engineering, enforcement, education, engagement, and evaluation – integrated under a Safe System governance model.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

SHARAM ALMASI: Durham Region does not maintain a single, standalone Vision Zero budget line, but has committed substantial and sustained funding through its departmental capital and operating budgets to support Vision Zero initiatives. The Strategic

Road Safety Action Plan (2019–2023) is funded primarily through the Regional Works Department's Capital Roads and Traffic Operations budgets.

When the plan was adopted in 2019, council approved an enhanced capital allocation for road safety countermeasures – such as roundabouts, protected turn lanes, pedestrian signals, and crosswalk upgrades – demonstrating institutional support for Vision Zero. Annual budget deliberations since then have continued to fund implementation measures including school zone safety upgrades, education campaigns and enforcement programs.

Durham has also established a Road Safety Reserve Fund, used to support the rollout of ASE and red-light cameras. These programs are self-financing: fine revenues offset operating costs and are reinvested into further safety improvements, in line with provincial guidelines.

While not labelled as a "Vision Zero fund," the region has also accessed external grants (e.g., from the Ontario Road Safety Community Partnership Program and federal Active Transportation Fund) to support aligned initiatives, such as school zone improvements and cycling infrastructure.

Importantly, Vision Zero principles are embedded in Durham's Safe System capital planning. Safety enhancements are incorporated into all road projects by default – for example, traffic calming and median installations are budgeted within broader reconstruction projects. This integrated approach ensures that Vision Zero is treated as a core function of transportation planning, not an add-on.

Looking ahead, the region is considering formalizing a dedicated Vision Zero program line in future budgets to enhance transparency and long-term funding stability. Regardless of format, the region's ongoing investment reflects a strong and embedded commitment to achieving safer roads for all.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

SHARAM ALMASI: Yes, Durham Region actively collects and analyzes data to measure the impact of its Vision Zero strategy. The region tracks both outcome and process indicators, with a strong emphasis on transparency and evidence-based decision-making.

Collision reduction as a primary indicator
The key success metric is the reduction in fatal and injury collisions. Since launching the Strategic Road Safety Action Plan in 2019, Durham has observed a downward trend in severe collisions on regional roads. Preliminary data through 2022 suggest the region is on track to meet or exceed its target of a 10-per-cent reduction in fatal

and injury crashes, equivalent to preventing approximately 150 serious collisions over five years.

Specific impact metrics

- **Red-light cameras**: Installed at 12 intersections, early results show a measurable decrease in right-angle (T-bone) collisions, aligning with the expected 25-per-cent reduction based on prior studies.

- **Automated Speed Enforcement (ASE)**: Initial rounds issued thousands of speeding tickets in school zones and Community Safety Zones. By the second deployment, repeat offences declined and speed compliance rates improved, indicating behaviour change.

- **Speeding and aggressive driving**: Radar feedback signs and enforcement data show speed reductions in targeted areas, with 85th percentile speeds dropping by several km/h, lowering the risk of severe injury.

- **Vulnerable road users**: Pedestrian fatalities have declined since 201, and collision rates at upgraded crosswalks and intersections have improved. Cyclist safety is also being monitored, with infrastructure improvements and reduced injury severity despite higher cycling volumes.

Process and Implementation Metrics

The region also tracks:

- Number of safety countermeasures completed (e.g., 83 intersections upgraded for pedestrian safety)

- Number of ASE and red-light cameras sites installed and operational

- Engagement reach (e.g., more than 45,000 participants in commuter challenges; thousands of students engaged in Active School Travel)

- Public awareness and behaviour shifts, gauged through enforcement data, surveys and education campaign reach

Data tools and reporting

Durham maintains internal and public-facing dashboards (e.g., Community Safety & Well-Being Plan dashboard) to monitor safety indicators. Annual or biennial collision reports are submitted to regional council to evaluate trends and guide future priorities. These evaluations inform resource allocation and allow timely course corrections.

Accountability and continuous improvement
The success of the program is measured not only in statistical reductions but in system-wide improvements, such as safer speeds, increased public support, expanded safety zones and cross-sector collaboration. The region's data-centric approach reflects the Safe System ethos: performance is continuously assessed and efforts are redirected based on where the risk remains highest.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

SHARAM ALMASI: Yes, several unique contextual factors influenced the design and implementation of Durham Region's Vision Zero strategy. These include:

- **Urban-rural diversity**: Durham's large geography combines urban centres with expansive rural townships. The Vision Zero plan had to be flexible, targeting high-speed rural roads with design-forgiveness strategies (e.g. paved shoulders, Safety Edge) while addressing pedestrian and cycling safety in denser urban environments through infrastructure such as crosswalks and protected lanes.

- **Rapid growth**: With a fast-growing population and new development nodes (e.g. near GO stations), the region had to proactively integrate Complete Streets and traffic calming into new builds while anticipating shifts in travel behaviour and demand.

- **Multi-jurisdictional road network**: The region had to co-ordinate across three road authorities (local, regional, provincial). This required alignment of policies, data sharing and joint initiatives with municipalities and MTO to ensure consistent safety messaging and interventions.

- **Driving culture**: As a car-oriented region with historically higher speeds and enforcement tools, there was a need to shift public attitudes. Public education was key in gaining support for lower speed limits and automated enforcement, particularly in suburban and rural communities.

- **Existing infrastructure**: Many arterial roads were originally built for throughput rather than safety. Retrofitting these roads with crossovers, pedestrian islands and signal enhancements was a priority, especially where vulnerable users were most at risk.

- **Seasonal and wildlife risks**: Winter weather and rural wildlife collisions added further complexity. Vision Zero countermeasures had to account for snow visibility, skid risk and rural crash types, including targeted signage and enforcement adjustments.

These contextual realities shaped a locally attuned strategy that applies Safe System principles in a context-sensitive way, ensuring the plan could address Durham's diverse mobility challenges.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach, and buy-in from stakeholders)?

SHARAM ALMASI: Since launching its Vision Zero strategy in 2019, Durham Region's program has transitioned from a planning framework into a fully operational, adaptive system. Key developments include new project implementation, expansion of scope, refinement of the approach and significantly strengthened stakeholder and public engagement.

New projects and expanded tools

- **Automated enforcement**: ASE and red-light cameras, initially proposed for exploration, were implemented in 2021 and 2022. These now operate at 30-plus school/community zones and 12 key intersections respectively, reshaping the region's enforcement landscape.

- **Community safety zones**: The number of CSZs on regional roads grew from a handful to more than 30, enabling speed reductions and ASE deployment.

- **Active Transportation infrastructure**: Pedestrian crossovers, crossrides and buffered bike lanes – previously rare – are now standard features in new projects, supported by the 2021 Cycling Plan and embedded in the region's Complete Streets framework.

- **School zone safety**: Programs such as "Slow Down, Kids at Play" signs and expanded Active and Sustainable School Travel efforts have deepened community and school engagement.

Shifts in scope and strategy

- **From planning to execution**: The program evolved from conceptual recommendations to continuous delivery, with high-impact countermeasures prioritized based on feasibility and urgency.

- **Data-driven monitoring**: A new PowerBI collision dashboard enables real-time data analysis, accelerating response to emerging safety trends and enhancing program agility.

- **Systemic speed management**: The region is now considering broader speed limit reviews (e.g., 40 km/h residential zones) and permanent speed reductions on high-risk corridors, an evolution from site-specific treatments to systemic change.

Stronger buy-in and broader integration

- **Stakeholder support**: DRPS, local municipalities, school boards and new partners such as EMS have shifted from cautious endorsement to active participation. Vision Zero has been referenced in local plans and is supported by councils across the region.

- **Public demand**: Community attitudes have evolved from unfamiliarity to active demand for safety interventions. Residents increasingly request ASE, crosswalks and traffic calming, enabling faster program rollout with fewer barriers.

New challenges and adaptive responses

- **COVID-19 impacts**: The region adapted to changes in traffic volumes and behaviours during the pandemic, accelerating enforcement and public messaging around aggressive driving.

- **Increased delivery traffic**: Post-pandemic growth in freight and delivery activity prompted a renewed focus on commercial vehicle safety and signal optimization.

Institutionalization and cultural shift

- Vision Zero is now embedded in Durham's broader policies – referenced in the Strategic Plan, Official Plan, and Transportation Master Plan – and increasingly linked with health and climate goals.

- **The cultural tone has shifted**: from justifying the strategy in 2019, to leveraging its demonstrated success to expand it in 2025.

In short, Durham's Vision Zero program has matured into a sustained, systems-based initiative that is increasingly integrated across departments, policies and public expectations. These changes have laid a solid foundation for continued progress in the next phase of implementation.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

SHARAM ALMASI: Yes, Durham Region's Vision Zero program has achieved several measurable and strategic successes since its launch in 2019, reinforcing both the effectiveness and momentum of the initiative.

Reduction in fatal and injury collisions

By 2023, the region achieved its initial goal of a ≥10-per-cent reduction in fatal and injury collisions. Preliminary data indicate that annual fatalities on regional roads have declined compared to pre-Vision Zero baselines—translating directly into lives saved. This outcome validates the region's investment and confirms the program is having a meaningful impact on public safety.

Successful implementation of red-light cameras
All 12 red light camera locations were activated by mid-2022 and early results show significant reductions in red-light violations, up to 50 per cent at some sites. Public support has grown, aided by clear communication and data transparency (e.g. highlighting the 658 red-light running collisions in the three years prior). Durham's seamless entry into the provincial red light camera program is a governance and communications success.

Automated Speed Enforcement (ASE) effectiveness
ASE has reduced speeding violations by approximately 30 per cent between deployment rotations. In school zones, improved speed compliance and anecdotal reports from principals affirm that traffic is calming around vulnerable users. The program is now expanding, supported by fine revenue reinvested into safety improvements – a self-sustaining model of enforcement.

83 pedestrian safety upgrades completed
From 2019 to 2022, the region completed safety enhancements at 83 intersections, including new signals, crosswalks and curb extensions. This rapid delivery of infrastructure upgrades directly supports safer walking conditions, particularly near schools and transit stops.

Expansion of School Travel Safety programs
The Active and Sustainable School Travel program has engaged nearly 8,000 students, increasing participation in walking/cycling and reducing traffic congestion during school drop-off times. Complementary initiatives, such as lawn sign campaigns and pop-up safety events, have broadened reach and visibility.

Zero fatalities in certain categories
In recent years, Durham recorded zero cyclist fatalities and no serious pedestrian injuries at several previously high-risk intersections following improvements. These "zero outcome" milestones are powerful indicators that Vision Zero interventions are working.

Recognition and leadership
Durham's Vision Zero program has been featured as a case study by Parachute and referenced in Ontario Traffic Council knowledge-sharing events. The region has been recognized by stakeholders and council for effective implementation, with staff engagement, process reforms and community buy-in cited as model practices.

Innovation and tactical successes
The Region has piloted low-cost, high-impact interventions, such as painted curb extensions and dilemma-zone detection technology, that have demonstrated safety benefits and are now being considered for broader deployment.

Cultural and institutional shifts
Public support for Vision Zero has grown considerably, with residents actively requesting interventions such as ASE and pedestrian crossovers. Internally, Vision Zero principles are now embedded into road design reviews, project planning and cross-departmental policies, including health, climate and development frameworks.

In sum, Durham Region's Vision Zero program has progressed from concept to practice, delivering real-world safety gains, shaping public expectations and positioning the region as a leader in evidence-based, community-driven road safety.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

SHARAM ALMASI: Durham Region's Vision Zero program has faced several key challenges in its implementation, reflecting both the complexity of road safety transformation and the evolving nature of public policy. These challenges generally fall into two categories: cultural/political resistance and resource/technical constraints.

Challenge 1: Public and political resistance to change
Early in the program, Vision Zero measures – particularly those involving speed management and enforcement – faced public skepticism and political caution. Concerns included:

- **Perceived inconvenience**: Residents questioned the need to reduce speed limits on arterial roads, fearing increased travel time.

- **Pushback on enforcement**: The introduction of ASE and red-light cameras drew criticism from some as "cash grabs."

- **Behaviour change resistance**: Despite education efforts, some drivers continued to speed or engage in distracted driving, highlighting the difficulty of altering ingrained behaviours.

How it was addressed:
The region responded with targeted public engagement, data-driven storytelling and political advocacy. Staff used evidence (e.g. survival rates at different impact speeds) and real-world examples to demonstrate the rationale for changes. Pilot projects and temporary measures (e.g. speed boards, seasonal traffic calming) were used to demonstrate benefits before permanent implementation. Council champions played a key role in rallying support. Over time, as projects proved effective and disruptions minimal, public and political acceptance grew significantly.

Challenge 2: Resource and technical constraints
Delivering on Vision Zero required sustained resources, inter-agency co-ordination and navigation of regulatory barriers. Key issues included:

- Funding limitations: Vision Zero competed with other capital priorities. Not all high-risk locations could be addressed immediately, requiring phased implementation and prioritization.

- Staffing capacity: Initially, there was no dedicated Vision Zero co-ordinator. Traffic staff managed safety projects alongside core duties, slowing some timelines.

- Legal and technical hurdles: Certain actions, such as ASE deployment or default speed limit changes, depended on provincial legislation. Some interventions (e.g. roundabouts or protected crossings) required lengthy design and construction timelines due to utility relocations, land acquisition or procurement issues.

- Data limitations: Early in the program, inconsistencies in historical collision data made it difficult to target interventions precisely.

How it was addressed:
Durham adopted a pragmatic, phased approach, prioritizing low-cost, high-impact interventions while aligning Vision Zero upgrades with planned capital works to maximize cost-efficiency. New staff positions were created to support delivery, including a dedicated Road Safety Engineer. Technical and legal barriers were tackled through collaboration and advocacy. Durham joined provincial working groups and lobbied for changes to legislation (e.g. ASE framework, signage rules for default speed limits). On data, the region developed a new Power BI dashboard and improved its collision database for better monitoring and faster response.

Additional challenges:
- Enforcement limitations: DRPS had finite capacity for proactive traffic enforcement. ASE and red-light cameras helped fill this gap.

- Evaluating impact: Establishing clear causal links between safety measures and collision reductions is complex due to natural variability in crash data. Multi-year trend analysis and comparison to control sites are used to strengthen evaluation efforts.

- COVID-19 disruptions: The pandemic disrupted project schedules, consultation processes and traffic patterns (e.g. increased stunt driving on empty roads). The region pivoted by digitizing engagement, adapting timelines and accelerating some projects during lower-traffic periods.

Conclusion:
While Durham Region encountered challenges in implementing Vision Zero – ranging from public resistance to resource limitations – it responded with flexibility, evidence-informed decision-making and strategic communication. The program has evolved to be more resilient, supported and institutionally embedded. These early roadblocks have

strengthened the foundation for long-term success, and the region continues to adapt and improve as it works toward the goal of eliminating serious injuries and fatalities on its roads.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

SHARAM ALMASI: Durham Region's experience implementing Vision Zero offers a number of practical lessons for jurisdictions beginning their road safety transformation. Vision Zero is not a checklist – it's a long-term cultural and systemic shift. The following advice reflects both early learnings and strategic adaptations from Durham's journey.

Anchor Your strategy in data and evidence
Start with a thorough analysis of local collision data to identify priority risk factors and locations. This ensures your efforts are evidence-driven, targeted, and defensible. Durham's initial five-year collision review shaped its emphasis areas (e.g. intersections, young drivers, speed/aggression), guiding both policy and project prioritization.

Complement quantitative data with qualitative insights: public complaints, near-miss reports and frontline staff observations. Robust data builds credibility and enables tracking of progress over time. Invest in modern data tools and consider designating a staff analyst to maintain a reliable evidence base for decision-making.

Secure strong political commitment and identify champions
High-level endorsement is essential. Begin with a council resolution adopting Vision Zero principles and establishing a measurable target. This provides a clear mandate across departments and elevates road safety as a corporate priority.

Just as important is identifying champions – elected officials, senior staff, or agency leads – who will consistently advocate for Vision Zero. In Durham, support from regional council, Public Health, and the police helped reinforce the program across institutional boundaries. Champions lend momentum, help navigate political risks and sustain focus during challenging moments.

Establish a multi-agency task force or governance committee
Vision Zero cannot succeed in silos. Durham's cross-sector Vision Zero Task Force – bringing together engineering, enforcement, health, transit and education stakeholders – was critical to program integration and co-ordination.

We recommend formalizing such a group with clear roles, a regular meeting schedule and shared accountability. Encourage open data-sharing, candid discussion of challenges, and joint problem-solving. This collaboration builds trust and ensures all five Es – Engineering, Enforcement, Education, Engagement and Evaluation – are reflected in your strategy.

Engage the public early, often and authentically
Vision Zero is ultimately about people, not just infrastructure. Involve community members from the outset through surveys, town halls and school-based engagement. Durham's early consultation not only shaped the strategy but built a sense of shared ownership.

Continue engaging during implementation using accessible language and relatable narratives. Translate technical measures into human terms (e.g. "lower speeds = safer kids walking to school"). Share successes and setbacks transparently. A well-informed public becomes a powerful ally in advancing difficult decisions, such as lowering speed limits or expanding automated enforcement.

Set clear, measurable and achievable goals
Vision Zero's ultimate goal is zero deaths and serious injuries but jurisdictions need clear interim targets to track progress and sustain support. Durham set a 10-per-cent reduction in serious and fatal collisions over five years, paired with implementation goals (e.g. 12 red-light cameras by 2022).

We advise aligning outcome goals with process indicators to maintain momentum and accountability. Ensure goals are specific, time-bound and relevant to your context. Revisit and refine them over time: Vision Zero is a continuous improvement process.

Embed Vision Zero in everyday processes (adopt Safe System thinking)
Treat safety as a system-wide design responsibility, not just an enforcement issue. In Durham, safety considerations became embedded in road reconstruction projects, Transportation Master Plan updates, and even the Official Plan. Vision Zero became a lens applied across planning, public health, and environmental policies.

We recommend reviewing road design standards to align with TAC's Safe System principles (e.g. forgiving roadways, speed harmonization, conflict reduction). Integrate safety reviews into capital programming, development review, and project scoping. This institutionalization helps protect Vision Zero from being sidelined by budget cycles or leadership turnover.

Ensure dedicated staff and resources
Vision Zero needs both people and funding to succeed. At launch, Durham's program was managed by existing staff juggling multiple responsibilities. Over time, new positions were added, including a dedicated road safety lead: this proved vital for sustaining delivery, tracking data and co-ordinating stakeholders.

Start with a core staff lead or small team. Earmark modest funding for early wins (e.g. signage, signal upgrades, tactical interventions) and pursue grants or cost-sharing opportunities. Frame Vision Zero as an investment: every collision

avoided saves public health, emergency services and societal costs. This strengthens your case for sustained funding.

Prepare for resistance and stay the course
Vision Zero inevitably disrupts the status quo. In Durham, initial pushback came around speed reductions, camera enforcement and perceived impacts on mobility. These tensions are common. Changing culture and behaviour takes time.

Our advice: hold firm to the principle that no loss of life is acceptable. Use data and storytelling to show that trade-offs (e.g. a few seconds of travel time) are worth the safety benefits. Expect criticism but use it as an opportunity to educate. Over time, results and positive media coverage will shift public opinion.

Leverage peer learning and shared frameworks
Other jurisdictions have walked this path: learn from them. Durham benefited from Ontario Traffic Council workshops, Parachute case studies, and TAC guidance documents. These resources offer tested strategies and common pitfalls to avoid.

Consider joining regional or national safety networks. Peer learning accelerates local progress, especially when navigating legislative barriers (e.g. ASE authorization, default speed limits).

Communicate successes and challenges openly
Vision Zero is a journey. Celebrate milestones, e.g. reductions in injury collisions, safety improvements completed or high compliance rates in school zones. Use multiple channels (e.g. newsletters, dashboards, social media) to communicate progress.

At the same time, be candid about challenges and data limitations. When targets aren't met, acknowledge it and explain how you'll adjust. This transparency builds trust and reinforces your commitment to continuous improvement.

Adopting Vision Zero means committing to a culture where road deaths are not tolerated and safety is prioritized in every decision. Durham Region's experience shows that success requires evidence, leadership, collaboration, persistence, and transparency. Progress is possible – and worthwhile.

Start small but think big. Build a coalition. Lead with data. Centre the human cost. And above all, stay true to the goal: safe streets for everyone.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

SHARAM ALMASI: Over the next five years (2025–2030), Durham Region's Vision Zero program aims to build on its foundation and transition from early implementation to systemic transformation. The region's next Road Safety Action Plan will set new, ambitious targets – potentially a 20-per-cent reduction in fatal and serious injury collisions by 2030 – while formalizing an equity-focused, Safe-System-based framework to guide its evolution.

Strategic priorities and goals

- **New collision reduction targets**: Following a comprehensive evaluation of the 2019–2023 plan, Durham will establish updated emphasis areas and adopt bolder interim targets, aligned with a long-term vision of zero fatalities.

- **Equity integration**: A formal Vision Zero Equity Action Plan will prioritize interventions in communities with higher vulnerability and crash risk, informed by socio-demographic and geographic data.

- **Safe System design policy**: The region intends to institutionalize safety reviews in all road projects through a standardized Vision Zero Design Policy, ensuring new infrastructure reflects Safe System principles from the outset.

Infrastructure and mobility enhancements

- **Expanded safe infrastructure**: Construction of more roundabouts, raised crossings and traffic calming features is planned, particularly near schools and vulnerable road user zones.

- **Cycling and walking networks**: Sidewalk and protected cycling infrastructure will be expanded on regional roads, with a goal of universal sidewalk coverage in urban areas and enhanced crossing frequency in pedestrian-heavy corridors.

- **Vision Zero retrofits**: Critical corridors and intersections will be redesigned for safety, including pilot projects for protected intersections and pedestrian-first designs.

Technology, enforcement and education

- **Automated enforcement expansion**: Durham will increase the number of ASE and red-light camera sites, explore emerging tools such as average speed enforcement and consider school bus stop-arm cameras.

- **Data-driven policing and AI tools**: New tools such as hotspot analytics, near-miss detection (via video) and adaptive signal controls will be used to proactively address safety risks.

- **Targeted education campaigns**: Future initiatives will address e-mobility (e-scooters, e-bikes), senior road safety and public empowerment in post-collision advocacy, integrated into broader sustainability and public health messaging.

Monitoring, evaluation and governance

- **Advanced performance metrics**: The region plans to adopt per-capita and exposure-based metrics, implement near-miss tracking and seek partnerships for real-time injury data through healthcare systems.

- Regional and community partnerships: A GTA-wide Vision Zero co-ordination network and a grassroots Road Safety Community Council are under consideration to enhance regional alignment and local engagement.

- Normalization of safety culture: By 2030, the goal is to make safe behaviours – slower driving, pedestrian right-of-way and multimodal respect – second nature across Durham.

The next five years will focus on scaling up interventions, embedding safety in policy and design, addressing equity head-on and modernizing how we measure and manage risk. Durham envisions a future where traffic deaths, especially among children, seniors, and vulnerable users, are not just reduced, but eliminated. Our commitment remains unwavering: no loss of life is acceptable and every decision will continue to reflect that principle.

Edmonton, Alta.

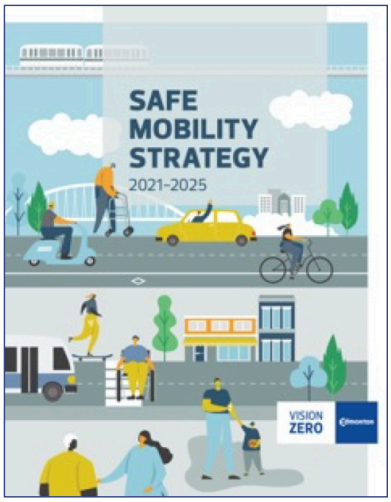
Background

The City of Edmonton had a population of 1,010,899 in 2021, having grown steadily by 8.3 per cent since 2016 (Statistics Canada, 2023j). Edmonton has a population density of 1320.4 per square kilometre. Within a 25-per-cent census sample, 85.1 per cent mainly commuted to work by car, truck or van, followed by 8.1 per cent commuting to work using public transit (Statistics Canada, 2023j).

Since 2010, total collisions in Edmonton have generally declined (City of Edmonton, 2024a). As in other jurisdictions, collisions dropped sharply in 2020 (15,804) and 2021 (17,363), largely due to reduced travel. Collisions increased in 2022 (20,162) and 2023 (20,039) but remained below pre-pandemic levels in 2019 (21,943). In 2023, Edmonton recorded 20,039 collisions, resulting in 345 serious injuries and 24 fatalities – the highest since 2017. Pedestrians were involved in 73 serious injuries, the highest since 2013, and five fatalities, above the five-year average of four. Cyclists experienced 27 serious injuries, the highest since 2014, with no fatalities. Motorcyclists were involved in 29 serious injuries and three fatalities, with injuries decreasing from 2022 (35) and fatalities increasing (1) (City of Edmonton, 2024a).

Safe Mobility Strategy 2021-2025

Edmonton's Office of Traffic Safety was the first municipal traffic safety office in North America, beginning in 2006, and in 2015 it became the first major Canadian city to adopt Vision Zero (Thue et al., 2016). In its **Safe Mobility Strategy 2021-2025**, Edmonton sets a concrete target of zero traffic-related injuries and fatalities by 2032 (City of Edmonton, 2020).



Key features of the plan

Engineering: The city leverages Community Traffic Management, a form of public engagement that takes place during neighbourhood renewal planning that helps to identify locally appropriate solutions to include in the plan (City of Edmonton, n.d.d). A High Injury Network was identified by plotting crash locations on a map for each mode of transportation – walking, cycling, driving and motorcycling. This helps us find specific corridors where serious and fatal injury crashes

are occurring overall and by mode (City of Edmonton, 2020). A number of roadway improvements for different road user types have been made since Edmonton adopted Vision Zero, including right-turn redesigns for drivers, speed check signs, signal visibility improvements and installation of protected bike lanes (City of Edmonton, n.d.c; City of Edmonton, n.d.d; City of Edmonton, n.d.g). In 2021, Edmonton reduced the speed limit to 40km/h on most residential and downtown area streets to prevent and reduce the severity of road crashes (City of Edmonton, 2022).

Education: Road safety education in Edmonton includes knowledge exchange across jurisdictions as well as education programs for road users that take into account their attitudes and beliefs about road safety (e.g., "Four Things to Know" campaign to improve driver awareness of cyclists) (City of Edmonton, n.d.c).

Enforcement: Data are being used to identify areas with high levels of road safety violations and to target limited enforcement resources accordingly. At times, enforcement resources may be directed to specific locations such as safe school zones and behaviours including driving while impaired, distracted driving and speeding. Additionally, the City of Edmonton uses automated traffic enforcement (ATE) cameras and runs positive enforcement campaigns that reward safe driver behaviours (City of Edmonton, 2024b; City of Edmonton, 2020).

Evaluation: Edmonton's annual motor vehicle collision reporting distinguishes counts, rates and analyses related to fatal and injury collisions from those of all collisions, which helps to demonstrate the efficacy of Vision Zero (City of Edmonton, 2024a). The City of Edmonton has established outputs that will be tracked to measure success in the community, which include number of safe crossings projects completed, number of school safety projects completed, number of engineering improvements on the high injury network, number of traffic safety community activation projects and number of hours of enforcement in high crash neighbourhoods (City of Edmonton, 2020).

Engagement: The City of Edmonton is developing programs, tools and supports to help residents play an active role in creating safer, more livable streets in their community (City of Edmonton, 2020; City of Edmonton, 2022).). This includes initiatives such as Vision Zero Street Labs, which bring together residents' lived experience and city staff technical expertise to develop tailored traffic safety solutions, and the Safe Speeds Toolkit, which gives communities access to practical tools, local data and educational resources to address speeding concerns. Another tool that the city launched in 2021 is the Vision Zero School Kit, which aims to engage schools in building awareness of street safety in school zones through resources, painting crosswalks and creating road safety lawn signs (City of Edmonton, 2020; City of Edmonton, 2022).

Equity: The engagement plan for the Safe Mobility Strategy was built to be an inclusive process based on a Gender-Based Analysis Plus (GBA+) (City of Edmonton, 2020). It included a broad engagement process for the community as a whole and a targeted engagement process for individuals whose voices are typically overlooked or unheard. In addition, Edmonton has outlined its key actions for 2021-2022, which include the goal of strengthening and establishing relationships with organizations and individuals from equity-seeking communities to continually work toward removing barriers and creating solutions to safety issues (City of Edmonton, 2020).

Key stakeholders

Key partners in the planning and implementation of the Safe Mobility Strategy include various city departments, Alberta Health Services, Edmonton Police Service (EPS), the University of Alberta, local school boards and other public and private-sector partners from across disciplines (City of Edmonton, 2020).

What the city has to say

Interview with Laura Thue, PhD., Research and Policy Advisor, Safe Mobility/ Parks and Roads Services, City of Edmonton on behalf of the Safe Mobility Team at the City of Edmonton

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

LAURA THUE: The City of Edmonton's Vision Zero program has been in place since 2015. With the introduction of the Road Safety Strategy 2016-2020, Edmonton became the first major city in Canada to adopt Vision Zero. The launch of the Safe Mobility Strategy 2021-2025 followed, representing a shift toward a more system-wide, people-centred approach to achieving Vision Zero. The City of Edmonton's goal is to achieve Vision Zero – the elimination of traffic fatalities and serious injuries on our streets – by 2032.

PARACHUTE: What major activities are you undertaking to meet these goals?

LAURA THUE:

- **Speed limit reduction initiative**: In August 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.
    - **Speed limit reduction evaluation**: A comprehensive evaluation was conducted and found statistically significant reductions in speeds and crashes, including serious crashes. In collaboration with the University of Alberta, a research study detailing the outcomes of the evaluation, titled "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.

  - The City of Edmonton was the recipient of the Transportation Association of Canada's 2024 Road Safety Achievement Award for the Speed Limit Reduction Initiative.

- **Safe Crossings program**: This program implements engineering infrastructure upgrades to ensure that all Edmontonians, and in particular the most vulnerable road users including pedestrians, cyclists, users of micro-mobility, seniors and children, are safe when crossing our streets. This program includes the use of temporary, adaptable materials in modern and creative ways to increase the number of locations upgraded without increasing overall program cost. Since Vision Zero was adopted in 2015, more than 560 crossings have been upgraded with more planned or under construction.

- **Community activation**: The city has initiatives in place to provide everyone with an opportunity to get involved and help make their streets safer including the Vision Zero Street Labs Program and access to temporary Speed Check Signs upon request.

  - **Vision Zero Street Labs**: This program is designed to address traffic safety concerns at the neighbourhood level. This program uses adaptable traffic calming measures on residential and collector roads to address traffic safety concerns. Deploying these adaptable measures allows the city to trial traffic safety solutions in a timely and effective manner with the ability to make adjustments as needed. Each Street Lab is tailored to the unique needs of the community to creatively address problems such as speeding, shortcutting and other unsafe driving behaviours. Adaptable measures include:

    - Curb extensions
    - Two-stage crossings
    - Centre medians
    - Adaptable speed humps
    - Adaptable traffic diverters
    - Adaptive sidewalks

  - **Request a speed check sign**: A speed check sign is a community-led, city-enabled tool to address concerns about unsafe driving speeds at the neighbourhood level. It is designed to help change the culture and attitudes around speeding in our communities.

- **School and playground zones**: All school zones have been converted to playground zones. The speed limit is 30 km/h between 7:30 a.m. and 9 p.m. every day where playground zone signs are posted. In addition, over time, the city has worked to increase safety near schools by installing engineering upgrades such as zebra crossings, stop signs, new pavement markings, retro-reflective sleeves on sign poles, adaptable traffic calming measures, speed check signs and rapid flashing beacons.
    - Most recently, a new project is underway to further increase safety in playground zones, including those around schools. This project includes investigating and piloting new strategies to improve safety around schools located on arterial roads.
- **Safe Routes to School**: Introduced in 2023, the Safe Routes to School Program serves to further improve safety along routes to schools beyond the immediately surrounding roads. 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.
- **Towards 40**: In 2023, the city 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. Several projects are now underway across the city.
- **Speed humps and tables**: In 2023, the Speed Humps and Tables Program was launched. This program installs speed humps or speed tables along priority corridors where there is a need to encourage safer speeds.
- **Speed check signs**: The city uses speed check signs (also known as driver feedback signs) to share vehicle speed information with drivers and alert them to when they are speeding. In 2024, there were 237 speed check signs deployed across the city on major roadways, in neighbourhoods and near playgrounds. In addition, portable speed check signs are available upon request.
    - **Speed Check Sign evaluation**: The City of Edmonton's Research Chair in Urban Traffic Safety at the University of Alberta, conducted research on the effectiveness of speed check sign use on different roads and intervention types. Results showed significant crash reductions in all scenarios ranging from 31 per cent to 41.6 per cent. Speed check signs were more effective in reducing crashes along arterial roadways compared to collectors. Also, the combined use of speed check signs and mobile photo enforcement had a slightly higher impact on safety.

- **Automated enforcement**: Red light cameras are placed at intersections to reduce red-light running and increase safety for all road users.

- **High Injury Network**: This network can be leveraged to influence capital project planning and implementation such as for the Edmonton Bike Plan and Arterial Street Renewal, the deployment of operational resources, for example, snow and ice control equipment, and the deployment of enforcement resources including automated and in-person speed enforcement to high crash locations.

- **Traffic Safety Culture Study**: Initial large scale traffic safety culture surveys were administered in Edmonton in 2014, 2016, and 2018 to ask residents to share their attitudes, perceptions, and self-reported behaviours related to traffic safety concerns ranging from speed, distraction, impairment, and other risky behaviours, to pedestrian, cyclist, and motorcyclist safety and how safe people feel travelling around Edmonton. In 2025, an updated survey was conducted to identify shifts that may have occurred since 2018, which may then help us to better understand current crash trends. The findings will be used to identify priority areas of risk to help inform countermeasures to achieve Vision Zero.

- **Academic Research Collaborations**:

    - **Urban Traffic Safety Research Chair**: The City of Edmonton's Urban Traffic Safety Research Chair was established at the University of Alberta in 2011. Since that time, the city has collaborated on numerous successful research projects with the research chair, which have included a focus on urban speed management and automated enforcement.

    - **Safe Mobility Academic Working Group**: This group, of which the research chair is a member, is a multidisciplinary research partnership with the University of Alberta that brings together academics from diverse disciplines, including urban planning, public health, psychology and human behaviour, and engineering. The purpose of this group is to enable holistic and integrated research by means of sharing academic expertise and collaborating with the City of Edmonton on research initiatives that will result in tangible safety and livability outcomes.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

LAURA THUE: A Crash and Equity Analysis Technical Report, completed to support the development of the Safe Mobility Strategy, found that some communities experience greater exposure to traffic and crashes and face greater mobility challenges than others. Some areas and groups are exposed to more traffic travelling through their neighbourhoods, and/or may lack equitable access to transit or infrastructure to support safe travel by way of non-motorized forms of transportation. With these considerations in

mind, equity is at the core of the Safe Mobility Strategy and is reflected in the programs and initiatives designed to eliminate fatalities and serious injuries on our streets. Examples include:

Safe Crossings Program: Using a GBA+ lens, this program uses an evidence- based prioritization process to provide equitable access to safety. This is important because based on findings highlighted in the Safe Mobility Strategy, the city does not tend to hear from residents in communities that experience the most crashes.

Proactive Safety Reviews: For the past three years, we have used a Proactive Safety Review process to select neighbourhoods for the Vision Zero Street Labs Program. We use a combination of equity and safety factors for the evaluation, which enables us to consider neighbourhoods from whose residents may be underrepresented in traffic safety concerns and inquiries submitted through 311.

More generally, the needs of vulnerable road users are embedded in the foundation of our safe mobility programs including those previously highlighted (e.g. Safe Crossings Program, Speed Limit Reduction Initiative, school and playground zone safety, and so on).

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

LAURA THUE:

- **City council**: Safe Mobility regularly engages with members of city council to ensure they are well informed about traffic safety initiatives in their wards. Communication takes place via email, in-person meetings and through more formal reports to Council as required.

- **City of Edmonton teams**: Safe Mobility routinely collaborates with other teams across the city that play a role in planning, building, operating and maintaining our streets. For example, Safe Mobility engineers have contributed their safety expertise to policies and design standards such as the Complete Streets Design and Construction Standards.

- **Edmonton Police Service (EPS)**: Safe Mobility meets at least quarterly with members of EPS Traffic Services to provide updates and identify strategic collaboration opportunities. Safe Mobility also provides data to EPS to help inform decision making.

- **School Safety Committee**: Safe Mobility and other partners meet regularly to discuss safety concerns around schools. Partners include City of Edmonton Staff (e.g. parking enforcement, bylaw, urban planning), the Edmonton Police Service,

School Boards (Public, Catholic and Francophone), the Alberta Motor Association (AMA), Alberta Health Services (AHS) and Ever Active Schools.

- **Edmontonians**: Safe Mobility engages with the community to address traffic safety concerns through various channels including the Vision Zero Street Labs program. Safe Mobility further strives for transparent communication by sharing information with the public about how various projects and programs are assessed and prioritized, as well as by providing access to data on the city's Open Data Portal and via other sources such as the Safe Crossings Dashboard and the Safe Streets Map.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

LAURA THUE: The Safe Mobility Team is responsible for the implementation of the Vision Zero program at the City of Edmonton. Led by a Senior Leadership Team, the Safe Mobility Team is multidisciplinary in nature and is made up of people with diverse expertise in areas including engineering, enforcement, data analytics, community activation, communications and public engagement.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

LAURA THUE: Yes. Previously, the Vision Zero Program was funded solely by automated enforcement fine revenue. Increasing restrictions on the use of automated enforcement in Alberta have resulted in a significant decline in municipal enforcement revenue and as a result, starting in 2025, traffic safety initiatives and programs are now also supported by the tax levy.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

LAURA THUE:

- Annual collision data is available on the city's Open Data portal. From 2015, when Vision Zero was adopted, to 2023, the number of total collisions has decreased by more than 21 per cent.

- Reducing collisions and injuries is only one way of measuring success. Because the factors that can contribute to collisions are complex, we use many different kinds of data to understand where our programs are having an impact.

- **Changing the default speed limit to 40 km/h**: An evaluation of speeds at 219 locations before and after the speed limit change showed a 1.6 km/h reduction in speed (85th percentile) compared to previous speeds. While this might not seem like

a big decrease, this resulted in a 25-per-cent reduction in crashes, and a 31-per-cent decrease in injuries and fatalities in areas where drivers slowed down. Even small speed reductions can have large safety benefits, especially for vulnerable road users.

- **Speed check signs**: A 2023 study found that speed check signs resulted in an average of a 4.5-per-cent improvement in speed compliance across the city, but compliance was higher in playground zones.

- **Vision Zero Street Labs**: Traffic calming measures installed in residential neighbourhoods have resulted in a number of safety improvements for all road users. For example:

    - In the Ambleside neighbourhood, there was a 10.6-per-cent decrease in average speeds and a 23.1-per-cent increase in speed limit compliance as a result of the installation of curb extensions and a two-stage crossing.

    - In the McKernan neighbourhood, where speed humps were installed and a centre median was widened and extended, there was a 30-per-cent increase in speed limit compliance, an 18-per-cent decrease in speeds, a 38-per-cent increase in bicycles traveling on the road, and a five-per-cent decrease in bicycles crossing in crosswalks.

- **Traffic Safety Culture Study**: as previously mentioned, this survey asks residents to share their attitudes, perceptions and self-reported behaviours related to traffic safety. This data allows us to better understand the current state of traffic safety culture in Edmonton so that we may explore strategies to continue to grow a more positive safety culture in our city.

- The City of Edmonton continues to introduce, test and evaluate new programs to identify opportunities to increase safety. For example, as playground zone improvements are a priority, the city is launching two projects to trial innovative solutions at schools experiencing complex challenges. One project will test reduced speed limits on arterial roads during school hours, using flashing beacons and bold pavement markings to signal to drivers that they are entering a school area. A second project will physically block illegal parking and stopping in areas that compromise visibility and safety at crosswalks. The results of trialing these creative approaches will help inform expansion to other locations throughout the city to respond to the real-life challenges people face every day.

**Note: In September 2022, Collision Reporting Centres (CRCs) were launched in Edmonton, which marked a significant change in the crash data collection and reporting process for residents as well as for how collision data is managed and reported.*

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

LAURA THUE: Increasing provincial restrictions on the use of automated enforcement and subsequent declining revenues to fund traffic safety initiatives.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

LAURA THUE: As shared in 2022, the most significant change to the program since Vision Zero was adopted in Edmonton in 2015 was the introduction of the Safe Mobility Strategy in 2021.

More recent changes include the introduction of new initiatives and programs described herein such as the Towards 40 and the Speed Humps and Tables programs, along with a new special project to pilot innovative strategies and tools to enhance safety in playground zones, including those around schools.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

LAURA THUE:

- As previously highlighted, the evaluation of the Speed Limit Reduction Initiative found a 1.6 km/h reduction in speed (85th percentile) compared to previous speeds. Significantly, this change resulted in a 25-per-cent reduction in crashes, and a 31-per-cent decrease in injuries and fatalities in areas where drivers slowed down.

- In addition to the significant investment the city has made to improve safety around schools over time, since the implementation of the new Safe Routes to School Program, 11 projects have been completed, making travel to school safer for many children and their families. Nine additional projects are planned for 2025.

- There are now six Towards 40 Program projects underway across the city, which will increase compliance to the speed limit and make the roads safer for everyone.

- To date, 25 Speed Humps and Tables projects have been completed to help reduce speeds in Edmonton neighbourhoods. Another 22 projects are planned for 2025.

- Numerous Street Labs have been installed in neighbourhoods across the city to help reduce speeding and shortcutting and increase safety for all road users.

- As introduced earlier, the City of Edmonton is currently developing a new Playground Safety Plan which includes trialling new measures targeted at schools and playground zones.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

LAURA THUE: Increasing provincial restrictions on the use of automated enforcement and subsequent declining revenues to fund traffic safety initiatives.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

LAURA THUE:

- Build a strategic plan that is data informed and evidence-based and which supports a holistic approach to achieving safety and livability together.
- Ensure there is a dedicated budget in place to support planning and implementation of the programs and tools necessary to advance the journey towards Vision Zero.
- Build strong relationships with political leaders, senior administration and key transportation partners including those who play an influential role in planning, design, construction and road maintenance, as well as other areas such as transit and active transportation, to ensure comprehensive and integrated support for the goal of achieving Vision Zero.
- Share safety-related data such as crash data and speed data with transportation partners to help inform and prioritize their work and support Vision Zero.
- Build relationships with other levels of government to support aspects of the safe system that fall outside of municipal jurisdiction, for example, safer vehicles.
- Engage the public and bring them along on the journey to help grow a more positive traffic safety culture.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

LAURA THUE:

- Continue to strengthen and grow existing programs that have proven successful.
- Proactively explore new opportunities to address changing trends such as piloting leading - edge technologies and supporting growing micro-mobility.

- Respond to shifts in the traffic safety environment, for example, in the wake of increasing restrictions on the use of automated enforcement in Alberta, explore new speed management and enforcement opportunities.

- Continue to grow a positive traffic safety culture where safety is the top priority, not just among the public, but among all of those responsible for planning, building and maintaining a safe system for all road users.

Fort Saskatchewan, Alta.

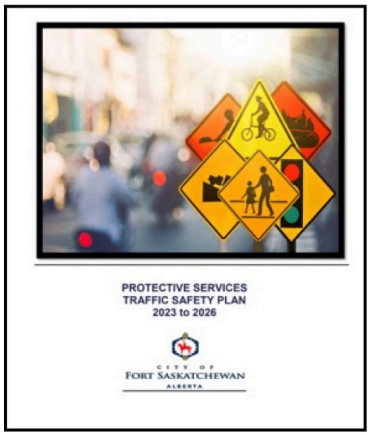
Background

The City of Fort Saskatchewan has a population of 27,088, as per the 2021 census (Statistics Canada, 2023k). In addition, it is estimated that 93.1 per cent of individuals commute to work by car, truck or van, followed by 2.6 per cent who walk or use a transportation method other than vehicle, public transit, walking or bicycle (Statistics Canada, 2023k).

In 2023, the City of Fort Saskatchewan reported 417 traffic collisions, including 19 serious injury collisions and no fatal collisions (City of Fort Saskatchewan, n.d.). While no fatalities occurred, the number of serious injury collisions increased substantially compared to the 2019–2022 average of approximately four per year. (City of Fort Saskatchewan, n.d.).

Protective Services Traffic Safety Plan 2023 to 2026

In January 2018, the City of Fort Saskatchewan formally adopted Vision Zero (City of Fort Saskatchewan, 2018) and published its first Vision Zero plan - City of Fort Saskatchewan Protective Services Traffic Safety Plan 2019-2022.



In 2022, the city published the **Protective Services Traffic Safety Plan 2023-2026**, which builds on the previous plan and is guided by the Safe System Approach (SSA) and five of the Es of mobility safety: Education, Enforcement, Engineering, Evaluation and Engagement (City of Fort Saskatchewan, 2022). The plan focuses on addressing high-risk locations and driver behaviours, with a particular emphasis on reducing vehicle speeds to improve overall safety.

Key features of the plan

Engineering: In 2022, speed limits in residential areas were reduced to 40 km/h based on collaborative analysis by the Engineering Department and Protective Services (City of Fort Saskatchewan, 2022). Pedestrian safety was enhanced with the installation of flashing beacons at crosswalks, contributing to a notable decrease in pedestrian collisions. A formal traffic calming policy is now applied to new road developments, while major infrastructure upgrades such as widening Veterans Way

(Highway 15 and 21) and adding an underground pedestrian walkway reflect the city's commitment to long-term safety planning. Additionally, Protective Services has proposed dedicating a portion of traffic fine revenue to fund further safety improvements across engineering, enforcement and education domains.

Education: The city implements a range of initiatives to increase awareness and promote safer road use among all users. These include deploying speed display signs and mobile trailers to encourage drivers to comply with speed limits and running "Option 4" programs that combine enforcement with education by allowing those who have received a ticket to attend learning sessions in place of a fine or demerit points. The city also delivers community-based programming alongside Protective Services such as bicycle rodeos for children, school presentations on topics such as pedestrian safety and impaired driving, and public awareness campaigns through weekly messages and seasonal initiatives. In addition, collision data are regularly analyzed and shared with key stakeholders to inform targeted education efforts and improve overall traffic safety strategies.

Enforcement: Fort Saskatchewan employs a combination of conventional and automated enforcement to ensure compliance with traffic laws and reduce road harm (City of Fort Saskatchewan, 2022). Protective Services focuses traditional enforcement efforts on high-risk zones such as school areas and known collision hotspots, guided by the Alberta Traffic Safety Calendar. A dedicated Peace Officer was appointed to oversee commercial vehicle enforcement, with the goal of completing 150 inspections per year. Automated tools, such as photo-lasers that use light detection and ranging (LiDAR) and intersection safety cameras, are used in accordance with updated provincial guidelines. Enforcement priorities are continuously refined using risk and harm reduction assessments to maximize impact.

Evaluation: The city monitors crime and collision data, which is shared quarterly with officers, the Policing Committee and other stakeholders (City of Fort Saskatchewan, 2022). In addition, the city also monitors whether the "Option 4" program is working by tracking whether ticket offenders' driving behaviour has changed following their education session (B. Ward, personal communication, July 5, 2019).

Engagement: Fort Saskatchewan continues to engage the public by including them in the Traffic Safety Working Group, which brings together municipal departments, industry representatives and members of the public to review data, share concerns and co-develop traffic safety solutions (City of Fort Saskatchewan, 2022). Residents are also encouraged to share their traffic concerns through the "Fort Report", which is an online service tracker.

Key stakeholders

Key stakeholders involved with Vision Zero in Fort Saskatchewan include the Traffic Safety Working Group, comprising city departments, the School Transportation Board, Policing Committee, industry representatives and members of the public (City of Fort Saskatchewan, 2022).

Gatineau, Que.

Background

Gatineau, Que. has a population of 291,041, according to the 2021 census. The city's population has increased by 5.4 per cent since 2016 and its population density is 851.4 people per square kilometre (Statistics Canada, 2023l). Of a 25-per-cent census sample, 81.4 per cent mainly commuted to work by car, truck or van, followed by 10.7 per cent who used public transit to go to work (Statistics Canada, 2023l).

Approche Intégrée en Sécurité Routière, 2019-2021

The City of Gatineau Police Service (SPVG) first endorsed a three-year road safety strategy in 2015 and officially implemented the **Approche Intégrée en Sécurité Routiére** in 2019 (Service de police de la Ville de Gatineau, 2019). The strategy focused on young drivers (under the age of 25), vulnerable road users, operators of heavy vehicles, construction workers, older adults and all other road users. The strategy recognizes collision factors impacting these populations, such as reckless and impaired driving, street layouts and road sharing. To act on those factors, interventions were based on four of the Es of mobility safety: Engineering, Education, Enforcement and Engagement (Service de police de la Ville de Gatineau, 2019).

The City of Gatineau has carried some elements of Approche Intégrée en Sécurité Routiére into their complete streets policy, **Politiques des rues conviviales- de la Ville de Gatineau**, which was adopted in September 2021. Specifically, objective three of the policy outlines the city's commitment to ensuring the security of all road users, regardless of their age or ability. The policy focuses on intersection safety, accessibility, and access to more sustainable modes of transportation (e.g. walking, cycling, and public transit) (Ville de Gatineau, 2021).

Key features of the plan related to the Vision Zero

Safe Land Use Planning: Gatineau integrates road safety into community planning to promote sustainable mobility and protect vulnerable road users. Key actions include prioritizing people and active transportation in street design, embedding sustainable mobility in the city's Land Use and Development Plan, and developing streets to support walking, cycling, and public transit (Service de police de la Ville de Gatineau, 2019).

The city has reinforced compact mixed-use development near transit hubs through Transit-Oriented Development Zones and ensured sufficient space for public transit infrastructure (Ville de Gatineau, 2021). Measures also seek to improve multimodal transport by building pedestrian and cycling networks, secure bike lockers, and revised RV/trailer parking rules. A comprehensive mobility plan co-ordinates safety, micro-mobility, transit and parking strategies (Ville de Gatineau, 2021).

Safe speeds: Objective four of the Politiques des rues conviviales emphasizes the importance of establishing speed limits that fit the context of the environment (Ville de Gatineau, 2021). The City of Gatineau's speed limits are based on the visibility, reaction times and impact that humans can withstand. The city has set a 30km/h speed limit for all primary school and playground zones, 40km/h on local residential roads and 50km/h or higher on major arterial and collector roads (Ville de Gatineau, 2021).

Safe vehicles: Gatineau's Politiques des rues conviviales highlights the need for infrastructure adaptations for heavy vehicles, while the Approche Intégrée en Sécurité Routiére identifies the growing challenge of heavy vehicle collisions (Service de police de la Ville de Gatineau, 2019; Ville de Gatineau, 2021). It also notes emerging safety considerations for electric and autonomous vehicles, signalling future integration of technological advancements and vehicle safety standards into its road safety strategy (Service de police de la Ville de Gatineau, 2019).

Safe road users: Gatineau promotes safe road use by fostering shared responsibility among all users. Efforts include public education and awareness campaigns, encouraging respectful road sharing and targeting high-risk populations such as young drivers, seniors and heavy vehicle operators (Service de police de la Ville de Gatineau, 2019). The city addresses collision factors such as distraction, impairment, speeding, aggression, fatigue and environmental hazards through targeted enforcement and police operations. Other actions include enhancing bike and accessible parking regulations, offering cycling safety subsidies, and securing school corridors with travel plans and awareness initiatives to protect children (Service de police de la Ville de Gatineau, 2019).

Safer road design: The city ensures roads are designed to promote travel at safe speeds, using traffic calming (e.g., sidewalk extensions, raised intersections, narrowed widths) and streetscape features to influence driver behaviour (Ville de Gatineau, 2021). Other measures include universal accessibility standards for pedestrian facilities, continuous networks that prioritize pedestrians at intersections and protected, direct cycling routes with parking requirements, repair stations and winter-maintained cycling lanes. Safety is enhanced through adequate lighting, intersection treatments, physical separation from traffic on busy roads and urbanized collector/arterial roads with sidewalks and paths. The city employs a new street classification with 12 tailored street types, updates its Cycling Network Master Plan and develops master plans and policies for pedestrians and sidewalks. It also evaluates and expands its four-season cycling network and

conducts studies (e.g., Vanier Road widening) that integrate safety and environmental considerations (Ville de Gatineau, 2021).

Key stakeholders

Key stakeholders involved in the City of Gatineau's road safety strategy included both internal and external partners of the SPVG (Service de police de la Ville de Gatineau [SPVG], 2019). Internal partners include the Traffic and Special Events Unit, Police Division, the Neighbourhood Resolutions and Preventative Actions Unit, including a multidisciplinary team, the Division of Research, Development and Organizational Strategy, Communications and Community Relations Unit, and Parking, Adult School Patrol and Animal Control Units. External stakeholders include departments within the City of Gatineau (Infrastructure, Communications), Sûreté du Québec, the MRC des Collines-de-l'Outaouais public security, Ottawa Police Service, the RCMP, Contrôle routier Québec, Québec Ministry of Transportation (MTQ), the Québec Automobile Insurance Corporation (SAAQ), and the Société de transport de l'Outaouais (STO) (SPVG, 2019).

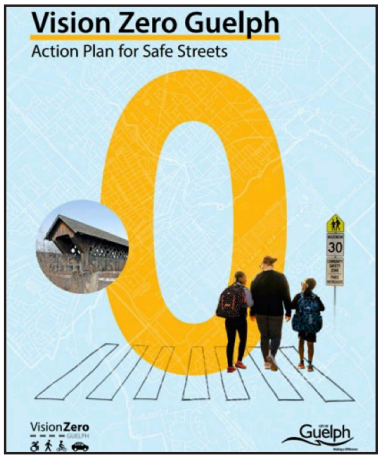
Guelph, Ont.

Background

Guelph has a population of 143,740, according to the 2021 census, and has grown by 9.1 per cent since 2016. Its population density is 1,644.1 people per square kilometre (Statistics Canada, 2023m). Of a 25-per-cent census sample, 87.4 per cent mainly commuted to work by car, truck or van, followed by 5.1 per cent who walked (Statistics Canada, 2023m).

Between 2018 and 2022, there were a total of 7,281 collisions, an average of 1820 collisions per year. In this same five-year time period, there were 12 fatalities and 89 reported collisions resulting in serious injuries (City of Guelph, 2025a; City of Guelph, 2025b;). In 2023, there were 1,628 collisions in the City of Guelph, decreasing by nearly 20 per cent compared to 2022 (City of Guelph, 2025a). Of these collisions, 10 resulted in serious injury and one led to a fatality, indicating an approximately 28-per-cent decrease from 2022. Pedestrians were involved in four serious injury collisions and one fatal collision, while motorcyclists were involved in three serious injury collisions. Altogether, the societal cost of collisions was estimated to be $63 million in 2023 (City of Guelph, 2025a).

Vision Zero Action Plan for Safe Streets (2025)



In May 2022, the City of Guelph published the **Road Safety: City of Guelph Transportation Master Plan** (City of Guelph, 2022). With this plan, the city committed to achieving the Vision Zero target using the Safe System Approach (SSA). The plan committed to a transportation system accessible to all ages and abilities across all modes of transportation, including walking, biking, driving, transit and mobility devices. The plan aims to reduce the likelihood of collisions and the consequences of collisions by protecting vulnerable road users and improving street function and design (City of Guelph, 2022).

In March 2025, the **Vision Zero Action Plan for Safe Streets (2025)** was officially adopted, building upon the previous **Community Road Safety Strategy** (City of Guelph, 2025b). Guided by the SSA and Safe Systems Pyramid (SSP), the Vision Zero Action Plan outlines 68 actions across eight focus areas aimed at eliminating all traffic-related deaths and serious injuries. The focus areas are:

- Plan better ways to grow
- Identify risk

- Protect vulnerable people
- Design safe streets
- Reduce speeds
- Be data-driven
- Work together
- Learn together

The Vision Zero Action Plan is grounded in equity and evidence-based practices to advance road safety and protect all road users in Guelph, specifically those that are most vulnerable and at the greatest risk (City of Guelph, 2025b).

Key features of the plan

Safe land use planning: Guelph embeds safety into urban development by aligning land use planning with road safety goals (City of Guelph, 2025b). For example, Action 1 and 2 aim to have all new development applications reviewed to support the development of complete streets and promote various types of transportation, prioritizing identified high-risk areas. The plan also outlines the development of a Connectivity Index to conduct ongoing assessments of the completeness and connectivity of the various transportation networks in Guelph. Additionally, the Transportation Demand Management Action Plan will serve as a social marketing strategy to reduce single-occupancy vehicle trips to active transportation and public transit in an effort to reduce travel in peak routes and times.

Safe speeds: The city has implemented a city-wide speed limit reduction from 50 km/h to 40 km/h on residential roads; 40 km/h in elementary school zones on all arterial roads, and on collector roads with more than 3,000 vehicles per day; and 30 km/h in elementary school zones on all local roads and on collector roads with fewer than 3,000 vehicles per day (City of Guelph, 2025b; City of Guelph, n.d.). To enforce speed compliance, Action 39 and 40 aim to administer, evaluate and expand the use of Automated Speed Enforcement (ASE) and the red-light camera program. The City of Guelph has also committed to performing speed limit reviews for arterial roads, reviewing and updating the city's Traffic Calming Policy every five years as well as the signal progression timing to promote speed limit compliance, especially in identified high-risk areas (City of Guelph, 2025b).

Safe vehicles: Action 22 outlines the city's commitment to purchase Guelph Transit buses with collision avoidance systems to protect vulnerable road users, while Action 50 involves investigating the installation of telematics systems within the city's fleet

vehicles to record, evaluate and adjust driver behaviour (City of Guelph, 2025b). Guelph is also committed to advocating to Transport Canada to advance autonomous vehicle safety standards, driver assistance systems and intelligent speed assistance systems in Canada.

Safe road users: The City of Guelph is committed to reviewing and supporting enhanced driver education, training initiatives and testing with the MTO as well as advocating to the MTO to enhance minimum maintenance standards in ways that maximize the mobility and safety for pedestrians and cyclists during winter (City of Guelph, 2025b). Action 53 outlines the commitment to supporting the Guelph Police Service in enforcement initiatives, identifying unsafe travel behaviours of all road users and collaborating on designing and implementing road safety awareness campaigns.

Safe road design: The Vision Zero Action Plan outlines specific projects to improve road infrastructure and prevent death and serious injuries. For example, the city will be implementing cycling facility improvements at intersections and implementing Guelph's first neighbourhood bike boulevard and expanding the use of leading bike intervals (LBIs) over the next three to five years. Guelph is also committed to developing a Pedestrian Master Plan that enhances pedestrian safety within the built environments as well as expanding pedestrian infrastructure such as leading pedestrian intervals (LPIs). The city will continue to implement the Sidewalk Infill Program on an annual basis, designing and constructing new sidewalks in neighbourhoods that currently lack them. Over the next three to five years, Guelph will look to create a city-wide strategy for planning and designing roundabouts, consider implementing a no right turn on red policy specifically in identified high-risk areas, and implement the Downtown Infrastructure Renewal Program, which involved increasing buffers between pedestrian walkways and the roadway (City of Guelph, 2025b).

Evaluation: Throughout the Vision Zero Action Plan, the City of Guelph emphasizes the importance of evidence-informed decision making and continuous system learning. The plan outlines multiple key performance indicators that are evaluated annually to measure progress of achieving Vision Zero. These include:

- Annual number of people killed/seriously injured as a result of a motor vehicle collision per 100,000 population
- Number of road safety audits performed per year
- Number of safety improvements installed on the High-Risk Network per year
- Percentage change in vehicle speeds along the High-Risk Network
- Resident awareness of Vision Zero User perception of safety by modality

In 2024, Guelph launched their Vision Zero Collision Dashboard to display and share data and information related to collisions, emerging trends and progress towards the key performance indicators. The dashboard will be updated annually to reflect the latest collision data, including new micro-mobility data (City of Guelph, 2025b).

Key stakeholders

The City of Guelph's Vision Zero Action Plan was created and will be implemented in partnership with Wellington-Dufferin-Guelph Public Health, Guelph Police Service, and the Ministry of Transportation Public Outreach and Education Office (POEO) (City of Guelph, 2025b).

What the city has to say

Interview with Liraz Fridman, Road Safety Supervisor and Nico Koenig, Transportation Safety Specialist

PARACHUTE: Did you learn anything from your previous strategy that informed the development of the updated version?

LIRAZ FRIDMAN and NICO KOENIG: Five years ago, when the Community Road Safety Strategy (CRSS) was developed, our Road Safety Team consisted of one staff member. At that time, Vision Zero was not yet endorsed in our Transportation Master Plan and we had limited capacity to implement a program such as Vision Zero. The CRSS was implicit around Vision Zero and Safe System Approach terminology and ideas. The CRSS focused on "low hanging fruit" such as reducing speed limits and adding more signage and not on larger capacity and resources that Vision Zero programs have, i.e. ASE, land use planning and collaboration with other sectors and city departments. Since then, Vision Zero was formally adopted by the City of Guelph in the Transportation Master Plan and we were able to grow our team and create a larger action plan.

From the previous strategy, a clear lesson we learned is the need for a multidisciplinary approach because road safety is much larger than transportation engineering. As a result, we strived to involve as many partners as possible in the development of the new Vision Zero Action Plan. While the new plan remains a guide for transportation engineering, it aims to involve other departments and municipal plans as much as possible to emphasize various sectors who are not traditionally involved in road safety.

Another learning from our previous strategy is how to embed equity within the plan. Once we identified where the concerns were from an equity lens, we could think about how to embed that into the action plan in a meaningful way and apply it to the interventions we are putting on the roadways. Within the new plan, equity is not as loud,

but rather embedded in a way that we don't have to specifically outline it in every project because it is the foundation of everything we're doing related to road safety.

PARACHUTE: What are the most notable changes in your new Vision Zero strategy?

LIRAZ FRIDMAN and NICO KOENIG: We tried to integrate public health and public health approaches into a municipal strategy by using the Safe Systems Pyramid as the foundation of our plan. This framework emphasizes the effectiveness of focusing on improving the built environment over educational campaigns and directs our thinking to what we can do in the future.

Additionally, there was a broad shift from thinking of the document as a standard operating procedure for traffic engineering and reframing it as a communication document. We intentionally designed the new plan to appear more like an infographic and used plain language to tell a story and make it accessible for a broad audience to engage with Vision Zero.

Another major shift has been our language around being proactive and understanding risk levels. We realized that we didn't have a clear understanding of how to be both proactive and risk informed. While the intent was there, it wasn't clearly expressed in the CRSS. We now have a map and a dataset to display areas of high risk and have made a deliberate effort to use plain language when talking about our high-risk network. This network essentially directs our attention for where to focus our work, but it also sends a strong message to the public that we're prioritizing these areas as well as pedestrian safety.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

LIRAZ FRIDMAN and NICO KOENIG: The principle of Vision Zero was endorsed as part of the Transportation Master Plan recommendations in 2022. The new Vision Zero Action Plan was officially adopted in March 2025. The plan is a guiding municipal document within City of Guelph that outlines short-, medium- and long-term actions to be taken by municipal staff to eliminate serious injuries and fatalities on our roads. It is also a formative communication document meant for public audiences to understand what Vision Zero means for Guelph.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

LIRAZ FRIDMAN and NICO KOENIG: We have an Equity and Transportation working group that helps us work through these topics. Our plan explains what risk and exposure means for different road users in terms of socioeconomic status, physical characteristics and being outside of a vehicle.

The City of Edmonton was used an example to guide us in mapping marginalization index data on top of traffic calming service requests. This shows that if you live in a low-income area, you are more likely to be hit in a collision as a pedestrian or a cyclist and less likely to receive a service request.

Twelve of the actions focus on areas that are traditionally underrepresented in our traffic calming data base and those identified as higher risk. Equity factors are built into our high-risk network, so they're automatically prioritized in community engagement and capital plans.

We also prioritize the experiences of vulnerable road users, such as older adults. We completed a survey of people's experiences and have added a few notes in our action plan to highlight how people's experiences are different, and some people are at higher risk than others to help people's understanding of equity.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

LIRAZ FRIDMAN and NICO KOENIG: We have a Vision Zero Committee that includes representatives from the City of Guelph, Guelph Police Service, Wellington-Dufferin-Guelph Public Health and MTO. This group was instrumental in providing strategic direction to the plan and met regularly over the last year to ensure collective recommendations were reached.

We also collaborated with sustainable transportation, transit services and 12 different departments within the City of Guelph to build relationships and identify areas of work that overlapped with Vision Zero. The Accessibility Advisory Committee was also consulted for general support of the action plan.

We did not have a traditional approach to community engagement as there was an extensive amount of engagement done in the development of the Transportation Master Plan. We used our community engagement opportunities to further understand people's perceptions and concerns related to Vision Zero. We did an exercise previously done by the City of Minneapolis where we asked community members "what do safe streets mean to you?" This exercise was an opportunity to introduce the concept of Vision Zero, gain interest, understand diverse community perceptions of safe streets and feature the community within the action plan itself.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

Refer to the answer above.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

LIRAZ FRIDMAN and NICO KOENIG: We have a road safety initiatives budget that was in place before we had adopted Vision Zero. In addition to that budget, we now have revenue generated from our automated programs i.e. red-light cameras and ASE. These funds are put into a reserve account that funnels money back into road safety initiatives such as traffic calming measures, LPIs and speed limit reductions. This reframes the "cash-grab" narrative around ASE by putting the reserve funds back into the community.

The budget varies from year to year. The annual contribution to our road safety account typically amount to $500,000, which can be carried over to the following year, but we strive to implement as many road safety interventions per year as possible.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

LIRAZ FRIDMAN and NICO KOENIG: Our Vision Zero Dashboard was created before the action plan to display the actions we are implementing in key focus areas. We also have the Guelph Collision Dashboard that shows specifically where collisions are happening within the city.

We have specific key performance indicators (KPIs) outlined in our action plan. We have baseline data we will use to measure the success of our strategy, but that data is not yet publicly available. We are currently working on a strategy to communicate the impact of the program and identify what information various audiences (e.g. councillors, public) need and what format is best (e.g. dashboard, annual report).

Many of our action items are not physically tangible as they are related to provincial advocacy and building relationships with other groups. We are still determining the best way to frame and disseminate our success since the progress of these action items are difficult to measure.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

LIRAZ FRIDMAN and NICO KOENIG: There weren't any contextual factors that informed or changed the development of the plan. However, Guelph is a university city with a mix of old town and suburban environments that were built around auto-dependency. There is also a community culture of innovation that has led to an elevated willingness to be experimental and support the principle of Vision Zero.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

LIRAZ FRIDMAN and NICO KOENIG: Since our strategy is so new, we are mainly focused on communication, implementation and project management right now. Currently, we are collaborating with multiple city departments and partners to set priorities and plan how the actions will be implemented. However, there is a new intention to revisit some existing policies that can be improved, such as warrant criteria for pedestrian crossings.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

LIRAZ FRIDMAN and NICO KOENIG: When the Vision Zero Action Plan was approved in March 2025, it was paired with a new Community safety zones policy. Traditionally, these zones are limited to areas around schools, but the new policy allows them to be implemented in other areas, such as fast-moving arterial road, identified through the high-risk network. This enables the city to use measures such as ASE to reduce speed in these areas.

Another success has been the promotion of the new plan. We have been busy rolling the plan out to external groups, making connections and facilitating learning on both sides. These connections have been multidisciplinary in nature, including public health, active transportation and transportation engineers.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

LIRAZ FRIDMAN and NICO KOENIG: The way in which provinces and municipalities are working together is changing. For example, the recent provincial ban of ASE in Ontario requires municipalities including Guelph to remove a proven, evidence-based intervention that has been highly effective in reducing vehicle speeds.

One ongoing challenge in implementing traffic calming measures in Guelph is balancing equity and the accessibility needs of various groups. Strategies that effectively slow traffic can unintentionally create barriers for certain groups. For example, people who are visually versus physically impaired may have conflicting needs for street design. Additionally, interventions such as ASE can shift speeding to nearby streets, creating spillover effects. The challenge is how to effectively implement road safety measures on a neighbourhood level, knowing that interventions will have disproportionate impacts on one or more groups.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

LIRAZ FRIDMAN and NICO KOENIG:

- Use data to do everything

- Don't be afraid to do big things and have them fail. You're never going to learn how to do things in a novel way if you're scared about the outcome. Yes, we're focused on preventing serious injuries and fatalities, but sometimes a failure will also be a valuable learning experience.

- People often hesitate to use the term "Vision Zero" because achieving absolute zero can feel unrealistic. However, the focus should be on continuous improvement – recognizing that even if the numbers fluctuate, making consistent progress toward safer streets still represents success.

- Many infographics and academic studies have been reproduced in many ways. You don't need to reinvent the wheel. Take some of the best practices that tell good stories and reuse them.

- Ask yourself "is driving a risk?" If you don't answer that question, you are going to keep reproducing a system that prioritizes people in cars and not people outside of vehicles. If you are interested in Vision Zero, you must be willing and ready to go against our existing car-centric culture.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

LIRAZ FRIDMAN and NICO KOENIG: In an ideal world, we will have completed all 68 of our action items. Moving forward, a key priority is to establish a strong evaluation framework that allows us to measure progress, learn what's working and adapt our approach based on evidence. Taking time to reflect at one-, three-, and five-year milestones will help identify successful strategies that can be scaled or replicated in other communities. We also want to see a shift in public perception and have more residents understand and value Vision Zero and recognize the importance of investing in safer streets.

On a broader scale, we would like to see stronger provincial and federal leadership and support for road safety and Vision Zero. Vision Zero cannot be achieved by municipalities alone; it requires commitment, funding and alignment across jurisdictions. Encouraging the province to make a clear, evidence-based commitment to Vision Zero would be a major step forward.

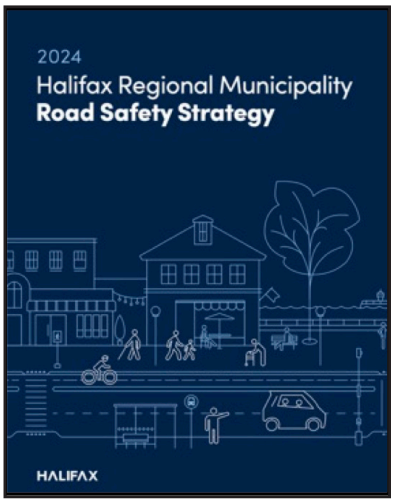
Halifax Regional Municipality, N.S.

Background

Halifax Regional Municipality (hereafter "Halifax") has a population of 439,819 according to the 2021 census, demonstrating a 9.1-per-cent increase from 2016 (Statistics Canada, 2023o). Its population density is 80.3 people per square kilometre. Of a 25-per-cent census sample, 81.5 per cent mainly commuted to work by car, truck or van, followed by 8.1 per cent who use public transit (Statistics Canada, 2023o).

Between 2020 and 2024, Halifax saw 26,183 collisions, an average of approximately 5,237 collisions per year (Halifax Regional Municipality, 2025). Throughout the same time period, there was an average of 894 non-fatal injury collisions per year, with 1,166 non-fatal collisions in 2024 being the highest number recorded on the Halifax Road Safety Dashboard. Approximately 11 fatalities have occurred per year from 2020 to 2024, generally decreasing each year, with the exception of 2024, which had 13 recorded fatalities compared to seven in 2023 (Halifax Regional Municipality, 2025). Road user behaviours such as impaired, distracted and aggressive driving are contributing factors in 40 per cent of fatal and serious injury collisions (Halifax Regional Municipality, 2024).

Halifax Road Safety Strategy



In June 2018, Halifax adopted the **Strategic Road Safety Framework** for 2018 to 2023, with the objective of moving towards zero road injuries and fatalities by 2038 (D'Entremont, 2018; Halifax, 2018b).

In 2024, Halifax launched the updated **Halifax Regional Municipality Road Safety Strategy**, committing to eliminating all traffic-related fatalities and serious injuries by 2038. Building on its 2018 Strategic Road Safety Framework, the new plan adopts the Safe System Approach (SSA), focusing on safe speeds, safe road users, safe vehicles, safe road design, post-crash care and safe land-use planning. The strategy emphasizes principles of evidence-based decision making, equity and inclusion, with targeted interventions for high-risk intersections, school zones and areas frequented by pedestrians and cyclists (Halifax Regional Municipality, 2024).

Key features of the plan

Safe land use planning: Halifax integrates road safety into land use and transportation planning through its Integrated Mobility Plan, which supports the development of complete communities with connected, healthy, affordable and sustainable travel option (Halifax Regional Municipality, 2024).

Safe speeds: Halifax plans to advance safe speeds by continuing to implement 40 km/h speed limits in eligible residential areas, reflecting the human tolerance for impact and the increased vulnerability of pedestrians and cyclists. Recognizing provincial jurisdictional constraints, the municipality also commits to advocating for legislative change that would either lower default speed limits in residential and business districts or grant municipalities greater autonomy to set speed limits below 50 km/h without provincial approval.

Safe vehicles: Halifax supports safer vehicles by enforcing provincial vehicle safety regulations, ensuring that vehicles operating on municipal roads meet minimum standards for roadworthiness and safety, The municipality is also committed to monitoring advancements in vehicle safety technology and assessing opportunities to adopt proven safety features within municipally owned fleets.

Safe road users: Halifax promotes a shared culture of road safety through co-ordinated education, engagement and enforcement that reflects the diverse needs and vulnerabilities of all road users. The Road Safety Team, in partnership with Corporate Communications, delivers targeted safety messaging across online and offline platforms, informed by collision data and public engagement to address high-risk behaviours, locations and populations. Halifax also prioritizes collaboration with community organizations, advocacy groups and government partners to strengthen campaign reach and impact. The Road Safety External Stakeholder Committee, established in 2023, supports ongoing dialogue with key stakeholders, while police partners align enforcement with Vision Zero principles through data-informed, high-visibility enforcement campaigns that emphasize deterrence and shared responsibility for road safety.

Safe road design: Halifax prioritizes safer road design through a combination of maintenance, targeted retrofits and the application of complete streets principles in both new and redesigned roadways. This includes improving pavement quality, signage and visibility, as well as integrating protected cycling facilities and separated pedestrian infrastructure where feasible. Intersection safety reviews are conducted where collision data indicates elevated risk, with the municipality testing or adopting new infrastructure treatments when evidence demonstrates safety benefits.

The Road Safety Program continues to implement engineering countermeasures such as crosswalk upgrades, traffic calming measures and school-area safety

assessments. Major transportation plans, capital projects and new community designs are systematically reviewed through a road safety lens to ensure that safety is prioritized across all stages of planning and implementation.

Post-crash care: The municipality emphasizes strong co-ordination and data-sharing with key partners, including Nova Scotia Health, Emergency Health Services, Halifax Regional Police, the RCMP and Halifax Regional Fire & Emergency. By strengthening inter-agency collaboration and information exchange, Halifax aims to continuously improve emergency response effectiveness and system learning following serious collisions (Halifax Regional Municipality, 2024).

Key stakeholders

Within the Road Safety Strategy, Halifax outlines primary stakeholders associated with each component of the SSA. Key stakeholders include Halifax Regional Police, RCMP Regional Halifax Detachment, the Province of Nova Scotia, Halifax Transit, Nova Scotia Health – Public Health and Emergency Care, Emergency Health Services, Halifax Transit Fleet, and Halifax Regional Fire & Emergency. Various municipal departments are also involved, such as Traffic Management, Design & Construction Services, Infrastructure Planning, Transportation Planning, Municipal Corporate Fleet, Corporate Communications and Municipal Project Planning and Asset Management (Halifax Regional Municipality, 2024).

Hamilton, Ont.

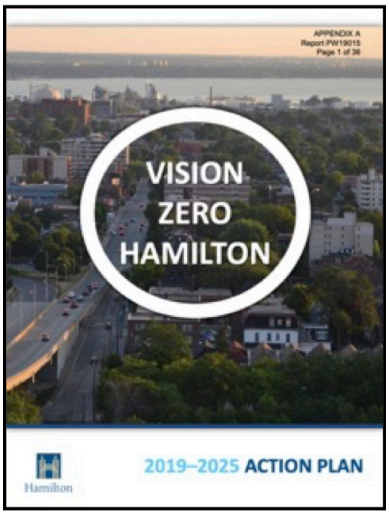
Background

The City of Hamilton has a population of 569,353 per the 2021 census. The population in Hamilton has increased by six per cent since 2016. The City of Hamilton has a population density of 509.1 square kilometre (Statistics Canada, 2023p). Based on a 2-5 per-cent census sample, 85.4 per cent mainly commuted to work by car, truck or van, followed by 7.4 per cent who took public transit (Statistics Canada, 2023p).

As per the 2022 annual collision report, Hamilton experiences an average of approximately 8,180 collisions annually, with 8,087 collisions reported in 2022 (City of Hamilton, 2023a). Collisions in 2022 increased by 18.7 per cent compared to 2021 but remained 18.3 per cent below 2019 levels. Fatal and injury collisions in 2022 were 1.5 per cent lower than in 2021, slightly higher than in 2020 (0.5 per cent), and 21.8 per cent lower than in 2019, with 16 fatal collisions recorded (City of Hamilton, 2023a). Recent data from the City of Hamilton's Vision Zero Dashboard show a continued decline in severe outcomes, with fatal collisions decreasing to 14 in both 2023 and 2024, and non-fatal injury collisions declining from 976 in 2023 to 961 in 2024 (City of Hamilton, 2025a).

Vision Zero Action Plan 2019-2025

Hamilton's Strategic Road Safety Program (SRSP) was re-established in August 2014 which aims to "provide a safe road network for all road users and to eliminate incidents that result in injury or fatality" (Ferguson & White, 2019, p.4).



In February 2019, Hamilton officially adopted a Vision Zero oriented road safety action plan, titled the **Vision Zero Action Plan 2019-2025**, as part of its SRSP (D. Ferguson, personal communication, July 3, 2019; Ferguson & White, 2019). The Vision Zero Action Plan 2019-2025 follows five of the Es of mobility safety (Ferguson & White, 2019).

In addition to five of the Es, Hamilton's Vision Zero Action Plan draws from the core principles and elements defined by the Vision Zero Network, a campaign that seeks to advance Vision Zero among U.S. communities

and facilitates networking and knowledge sharing (Ferguson & White, 2019; Vision Zero Network, n.d.). These principles and elements are listed as: political commitment, multi-disciplinary leadership, action plan, equity, co-operation & collaboration, system-based approach, data driven, community engagement and transparency (City of Hamilton, 2019). Within this framework, the action plan proposes varied initiatives under five of the Es such as dynamic speed boards and a distracted driving and speeding campaign (Ferguson & White, 2019). Secondary emphasis areas for programming focus on users, behaviours and data quality: aggressive driving, intersections, vulnerable roads users, young drivers and collision data improvements (Ferguson & White, 2019).

The City of Hamilton is currently developing its next Vision Zero Action Plan, which will run from 2026 to 2031 (City of Hamilton, 2025b).

Key features of the plan

Data collection and analysis: Collision data including frequency of collisions and vulnerable road users affected are collected by the Hamilton Police and shared with the City of Hamilton (Ferguson & White, 2019). According to the program, Hamilton has shifted its approach to network screening over the years to focus on identifying locations with high injuries or fatalities; an example of a fatal and severe injuries heat map is provided in the Vision Zero Action Plan (D. Ferguson, personal communication, July 3, 2019; Ferguson & White, 2019). Hamilton provides open data to the public that includes raw collision information and enables users to produce a map of collisions that occur in the city (City of Hamilton, 2023b).

Engineering: The City of Hamilton is implementing engineering best practices to encourage safer streets through design with all road users in mind. Pedestrian-friendly intersections have been created over the years through the use of pedestrian crossovers, accessible push buttons, pedestrian countdown signals and ladder crosswalk markings (Ferguson & White, 2019). Road design features for drivers, such as dynamic radar feedback signs and speed humps, are also being used across Hamilton (Ferguson & White, 2019). As of September 2025, the following have been implemented in the City of Hamilton:

- 81 speed humps
- 678 speed cushions
- 181 pedestrian crossovers
- 72 community safety zones (City of Hamilton, 2025a).

The city has also implemented speed limit reductions in school zones (30 km/h) and 212 designated neighbourhoods (Ferguson & Field, 2020; City of Hamilton, 2025a).

Education: The city has facilitated road user education by creating various campaign and initiatives to address topics such as distracted driving, speeding, back to school safety, winter driving; raising awareness about yielding behaviours at pedestrian crossovers Ferguson & Field, 2020). Online resources on a variety of topics are available from the Hamilton Police Service (Hamilton Police Service, n.d.). The City of Hamilton has explored collaborating with MTO and other municipal partners to develop digital mapping providers to road awareness of identified road safety priority topics (Ferguson & Field, 2020).

Enforcement: The city uses ASE, dynamic speed signs and red-light cameras as part of their enforcement strategy (City of Hamilton, 2025b). According to the Vision Zero Dashboard, 51 red light cameras have been installed at Hamilton's intersections as of 2025 (City of Hamilton, 2025a).

Evaluation: A collision report is produced annually to present temporal and spatial trends, as well as data around the involvement of vulnerable road users in collisions and driver behaviour. As of 2021, the **Vision Zero Dashboard** allows users to track progress on a number of different safety initiatives, including the implementation of community safety zones, speed cushions, traffic signals and more.

Engagement: When developing Hamilton's Action Plan, a safety survey was conducted among Hamiltonians to understand their opinions about the safety of Hamilton's roads, and public workshops and an open house were also conducted to inform the plan (Ferguson & White, 2019; City of Hamilton, 2019). In the future, the public will be engaged on Vision Zero through diverse channels such as surveys, community events, and interactive web components; engagement efforts will also extend to other stakeholders such as other levels of government and the private sector (City of Hamilton, 2019). Hamilton recently engaged local residents, visitors and businesses through a survey to help shape the next Vision Zero Action plan, guiding road safety initiatives from 2026 to 2031 (City of Hamilton, 2025b) .

Key stakeholders

The Hamilton Strategic Road Safety Committee includes members from Hamilton Police Services, Hamilton Public Health, MTO, City of Hamilton Public Works Department, the Hamilton Public and Catholic school boards, Hamilton Fire Department, Hamilton Street Railway, Chair of Seniors Advisory Committee and the Chair from the Hamilton Cycling Committee (Ferguson & Field, 2020). Additional stakeholders

may be engaged for specific project work (e.g., McMaster University' s involvement in video analytics of intersections), or to provide advisory capacity for specific stakeholder groups, such as schools or city paramedics (D. Ferguson, personal communication, July 3, 2019).

Kamloops, B.C.

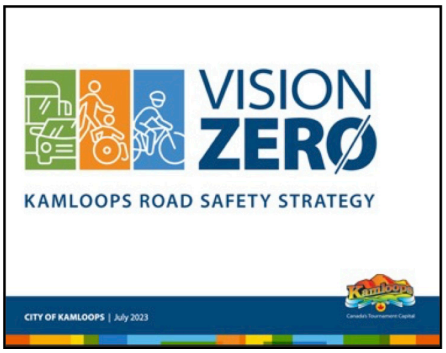
Background

The City of Kamloops has a population of 97,902 per the 2021 census, showing an increase of 8.4 per cent since 2016. Its population density is 328.6 per square kilometre (Statistics Canada, 2023q). Of a 25-per-cent census sample, 87.4 per cent mainly commuted to work by car, truck or van, followed by 5.1 per cent who walk to work (Statistics Canada, 2023q).

Between 2020 and 2024, the ICBC reported an average of 5,805 collisions per year, with an average of 898 crashes resulting in an injury or fatality (ICBC, 2025). The City of Kamloops experienced an increase of injury or fatality crashes in 2022, compared to 2020 and 2021 pandemic rates. However, 2023 and 2024 showed a decreasing trend, with 864 and 764 crashes resulting in injury or fatality, respectively (ICBC, 2025).

Vision Zero: Kamloops Road Safety Strategy (2023-2026)

In 2023, the City of Kamloops Council adopted the **Kamloops Vision Zero Strategy and Action Plan** (City of Kamloops, 2023). The strategy uses the Safe System Approach (SSA) and comprises 27 individual strategies across five emphasis areas, aiming to achieve a target of zero fatalities or serious injuries caused by collisions by 2039. Emphasis areas are:



- Evidence-based safety decisions
- Safety and livability
- Equitable safety
- Safety by design
- Creating a safety culture

Underlying Kamloops' Vision Zero work is a strong foundation of planning, governance and equity-focused action (City of Kamloops, 2023). The city has hired a dedicated road safety engineer, that performs in-service road safety reviews and audits, and supports community-based near-miss reporting. Data are central to decision-making, with

programs for collecting multimodal traffic volume and speed data, expanding crash data sources and publishing annual Vision Zero reports. Equity is embedded in the approach through creating accessible streets for people with disabilities, implementing Safe Routes to School and tracking and seeking input from equity-seeking communities to ensure the transportation network serves all users (City of Kamloops, 2023).

Key features of the plan

Safe land use planning: Through the City of Kamloops Official City Plan (known as KAMPLAN) and the Transportation Master Plan, the city promotes compact, mixed-use and complete communities that shorten travel distances and encourage walking, cycling and transit use (City of Kamloops, 2023). Transportation safety reviews are required for land development applications, ensuring new developments address multimodal safety, access and conflict points early in the planning process. Kamloops also aims to reduce vehicle dependence and shift to sustainable transportation modes including transit, walking and cycling through accelerating and enhancing their active transportation network.

Safe speeds: The city is developing a comprehensive speed management program and traffic calming policy that emphasize context-based speed limits aligned with land use, street function and Safe System principles.

Enhancements to the city's current approach will place greater focus on livability, crash survivability and the role streets play in supporting safe and equitable communities. Kamloops will collect and analyze operating speed data along the high-injury network and in representative neighbourhoods to identify locations where speeds exceed safe levels. This work will inform street design changes, enforcement priorities and the establishment of safe speeds that support a complete streets approach and the city's sustainability goals.

Safe vehicles: The city is committed to advocating for and providing education on safe vehicles, helping to reduce the likelihood and severity of crashes.

Safe road users: Kamloops employs six strategies to address human behaviours that contribute to crashes. These include collaborating with partners to reduce impaired and distracted driving, supporting transportation safety education for children and youth, co-ordinating community safety events and supporting motorcycle operator training programs. The city also encourages staff and partners to model safe travel behaviour to support culture change within the community. This includes strengthening and formalizing fleet safety policies, monitoring staff driving practices, recognizing safe driving behaviour and providing training as needed.

Safe road design: Infrastructure design is a major part of Kamloops' Vision Zero strategy. Key measures include safety upgrades along the high-injury network,

updating design standards to align with complete streets and Safe System principles, and creating safer intersections and corridors through modern roundabouts and separated bike lanes. To reduce conflicts and crash risk, the city is improving access and turn management by assessing high-risk left turns, limiting driveway access near intersections and expanding the use of protected-only left-turn signal phases. High-speed right-turn channels are being redesigned to reduce turning speeds and improve sight lines, while safety for people walking and cycling is strengthened through enhanced crossings, pedestrian refuge islands and dedicated cycling infrastructure, supported by maintenance priorities, improved lighting and collaboration with provincial partners on safety upgrades to provincially controlled roads.

Post-crash care: Kamloops is expanding their participation in post-crash reviews by reviewing fatal and serious incident reports provided by police over a five-year period. Supplementary reports will be developed by city staff and lessons learned from these incidents are applied to similar roadways within the jurisdiction (City of Kamloops, 2023).

Key stakeholders

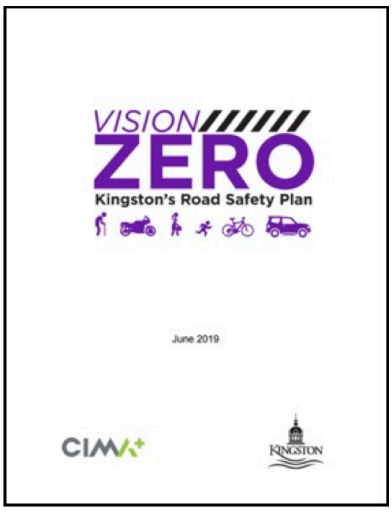
The City of Kamloops acknowledges that achieving Vision Zero requires shared expertise, support and action across sectors. The city emphasizes collaboration with social services, non-profit organizations, community groups and the B.C. Ministry of Transportation and Transit to advance road safety through co-ordinated education, engagement, enforcement and infrastructure improvements (City of Kamloops,

Kingston, Ont.

Background

The City of Kingston has a population of 132,485 per the 2021 census and has grown 7.0 per cent since 2016. Its population density is 293.4 per square km (Statistics Canada, 2023r). Of a 25-per-cent census sample, 81.5 per cent mainly commuted to work by car, truck or van, followed by 8.5 per cent who travelled by walking (Statistics Canada, 2019r).

Vision Zero: Kingston's Road Safety Strategy



In April 2016, Kingston City Council considered a recommendation to approve the installation of red-light cameras in the city. Council deferred the motion and instead asked for staff to create the terms of reference for the development of a strategic road safety plan (CIMA, 2019a). The terms of reference were accepted by council in March 2017 and shortly afterwards, the consulting firm CIMA+ was retained to lead the study (CIMA, 2019a).

In September 2019, the City of Kingston approved the **Vision Zero: Kingston's Road Safety Plan** (RSP) (CIMA, 2019a). The plan identifies seven emphasis areas: intersections, distracted driving, aggressive driving, impaired driving, pedestrians, cyclists and young demographic. The plan also acknowledges five of the Es of mobility safety (Engineering, Enforcement, Engagement, Evaluation and Education). The goals of the plan are to see "at least a 10-per-cent reduction in fatal and injury collisions involving any type of road user and at least a 10-per-cent reduction in collisions with vulnerable road users such as pedestrians, cyclists and motorcyclists" (CIMA, 2019a, p.13) over the next five years.

Key features of the plan

Data collection and analysis: To determine the types of collisions occurring, causal effects and locations of collisions in the city, a detailed analysis of Kingston's collision data for a five-year period (2012 to 2016) was required (CIMA, 2019a). To analyze the data, various criteria such as age, impact type and cause of collision were used. Additional collision data and data from public surveys were used to identify the seven emphasis areas. Moving forward, the city plans to review existing

data, develop updated and more detailed collision data and prepare an annual road safety report that reports on collision and road safety data.

Education: To promote Vision Zero, the project team worked with City Communications to create social media ads, print media, postcards, roadside signs and information for the city's website. They also promoted Vision Zero through radio ads, local television and an educational video. Education countermeasures, with the purpose of changing road user behaviour, include a campaign for young pedestrians (ages 18 to 25), a drive safe campaign, the Distracted Driving Program and the Road Safety Challenge.

Enforcement: Enforcement countermeasures typically include automated enforcement, photo radar and police enforcement. Countermeasures applied in the City of Kingston include the strategic traffic enforcement – zero tolerance policy, Automatic Licence Plate Reader (ALPR), Automated Speed Enforcement (ASE), photo radar, enforcement using sobriety testing, and education and enforcement blitzes.

Engagement: The City of Kingston's Public Engagement Framework states how the public and other key stakeholders can be involved and participate collaboratively in problem-solving and decision-making processes. To reach residents, a road safety survey was distributed to Kingston residents by email and interested participants were directed to the online road safety survey. Other engagement tools include Q and A online forms and "pop-up" Vision Zero engagement events.

Engineering: The engineering countermeasures are either sign-specific or targeted to all roadways within the city. Countermeasures integrated within planned active transportation and intersection projects may be implemented in a short time frame. Examples of engineering countermeasures outlined in the plan include sign inspection and repairs, installation of traffic controls, pavement markings, roundabouts, dedicated turning lanes and reduced lane width.

Evaluation: Evaluating existing countermeasures is important to the overall success of the RSP. For the first five years of the RSP, staff will be monitoring the progress and degree of success of the initiatives and report the progress in an annual road safety report (CIMA, 2019a).

Key stakeholders

Key stakeholders include the project team and the Road Safety Advisory Group (RSAG) made up of local partners and stakeholder agencies. Participants who contributed to the RSP include representatives from the City of Kingston, Kingston Police, OPP, MTO, Kingston Coalition for Active Transportation (KCAT), Cycle Kingston, Kingston, Frontenac and Lennox & Addington (KFL&A) Public Health, Municipal Accessibility Advisory Committee (MAAC), Drivers Against Distraction (motorcycle safety), Algonquin & Lakeshore Catholic District School Board, Limestone District School Board, Tri-Board Transportation, CAA and Young Drivers of Canada (CIMA, 2019a).

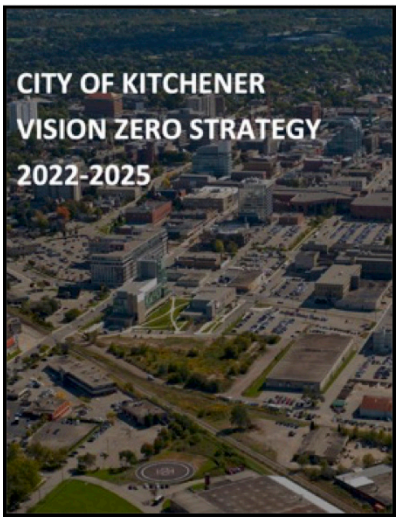
Kitchener, Ont.

Background

The City of Kitchener has a population of 256,885, according to the 2021 census, increasing by 10.1 per cent since 2016. Its population density is 1,877.6 people per square kilometre (Statistics Canada, 2023s). Of a 25-per-cent census sample, 88.5 per cent mainly commuted to work by car, truck or van, followed by 5.7 per cent who traveled using public transit (Statistics Canada, 2023s).

Approximately 1,200 traffic collisions occur annually on the streets of Kitchener, with more than 200 of those collisions resulting in injury per year (City of Kitchener, 2021). According to the City of Kitchener's Vision Zero Dashboard, collision injuries have decreased from 2019 to 2023, with the exception of an increase in 2021, with a total of 101 (City of Kitchener, 2024). A significant decrease was experienced in 2023 with 58 recorded collisions leading to injury. The City of Kitchener has recorded three consecutive years without a traffic-related fatality between 2022 and 2024 (City of Kitchener, 2024).

City of Kitchener Vision Zero Strategy, 2022-2025



In 2020, the City of Kitchener began efforts to build a Vision Zero plan for 2022-2025. (City of Kitchener, 2021). The plan is informed by community member feedback and a review of existing Vision Zero plans from Toronto, Hamilton, Vancouver, Edmonton and Ottawa. It also draws on examples from U.S. cities, including San Francisco, New York City, Chicago, Portland, Seattle, Washington, D.C., Boston and Los Angeles, as well as European leaders such as Sweden and the Netherlands (City of Kitchener, 2021).

Kitchener adopted its **Vision Zero Strategy** in December 2021 as a four-year plan (2022–2025) rooted in the belief that no loss of life on city streets is acceptable (City of Kitchener, 2021). The plan has three main areas of focus: vulnerable street users (including school children, seniors, pedestrians and others); high risk locations (including school zones, residential zones and hot spots); and high-risk driving (including aggressive driving, distracted driving and speeding) (City of Kitchener, 2021).

Key features of the plan

Kitchener's Vision Zero Strategy is guided by five of the Es of mobility safety:

Engineering: Engineering measures used by the City of Kitchener include speed humps and cushions, pedestrian crossovers, refuge islands, sidewalk infill and other traffic calming and geometric design changes (City of Kitchener, 2021). These efforts are guided by complete streets guidelines, active transportation and cycling network plans, school route safety initiatives and formal traffic calming programs, with projects selected based on speed, volume and collision history (City of Kitchener, 2021). In 2024, this approach resulted in 400 metres of sidewalk infill, four pedestrian crossovers, three pedestrian refuge islands, intersection improvements, 26 speed humps or cushions, and an expanded seasonal traffic calming program that added 40 roadway narrowing and 10 solar-powered speed advisory signs (McCrimmon-Jones & Payne, 2025).

Education: Kitchener delivers extensive public education initiatives to address high-risk driving behaviours and promote safe travel. In collaboration with Waterloo Regional Police Service (WRPS), Region of Waterloo Public Health and Paramedic Services, and the City of Waterloo, the city launched a high-risk driving campaign that achieved more than eight million impressions across television, digital promotions and social (McCrimmon-Jones & Payne, 2025). Additional programs include the Vision Zero 2024 campaign, Active Transportation Education Campaign, and school-based initiatives such as the Sidewalk Smarts Program, delivered to seven Kitchener schools in early 2025 (McCrimmon-Jones & Payne, 2025).

Enforcement: Kitchener's enforcement approach is led by the Waterloo Regional Police Service and focuses enforcement and education targeting impaired driving, distracted driving, seatbelt use, speeding and aggressive driving (City of Kitchener, 2021). Efforts include monthly road safety initiatives, R.I.D.E. programs, traffic services special enforcement teams, increased rural enforcement and a focus on high-complaint locations, supported by education campaigns and community partnerships (City of Kitchener, 2021).

Kitchener reviews collision data through the Selective Traffic Enforcement Program (STEP), where representatives from the Region of Waterloo, area municipalities and Waterloo Regional Police Services meet quarterly to identify high-risk locations and target enforcement efforts (McCrimmon-Jones & Payne, 2025). The city also plans to expand use of ASE in school and community safety zones, alongside a review of transitioning to an administrative monetary penalty system to improve program efficiency (City of Kitchener, 2021).

Evaluation: The city collects annual traffic data on roughly 300 roadways and strengthens evaluation through collision network screening, hot spot identification,

and project impact assessments, including before-and-after studies of safety measures (City of Kitchener, 2021) In partnership with the University of Waterloo, Kitchener applies predictive analytics to prioritize high-risk locations for severe collisions and track improvements over time (City of Kitchener, 2021; McCrimmon-Jones & Payne, 2025). Additionally, the **Vision Zero Dashboard** serves as key platforms for sharing progress and data, helping residents stay informed and involved (McCrimmon-Jones & Payne, 2025).

Engagement: Engagement tools include public surveys, the Vision Zero Engage webpage, project boards and advisory committees, including the Active Transportation and Trails Advisory Committee and its Vision Zero Sub-Committee (City of Kitchener, 2021; McCrimmon-Jones & Payne, 2025). Opportunities for involvement include the annual Vision Zero Day open house, and programs such as the Road Model Program that encourage community advocacy. Kitchener also collaborates with provincial and federal agencies to advance road safety policies, such as higher fines for high-risk driving and mandated vehicle safety features (City of Kitchener, 2021).

Key stakeholders

The main project team consisted of staff from City of Kitchener Transportation Services and Corporate Communications and Marketing, WRPS and Regional of Waterloo School Travel Planning Other organizations consulted include Region of Waterloo Transportation Services Division, Grand River Transit, Region of Waterloo Public Health and Emergency Services, City of Kitchener Engineering Division, Operations – Roads and Traffic Division, Parks and Cemeteries Division, Fleet Division, as well as the City of Waterloo and City of Cambridge to guide priorities and co-develop solutions. The city also partnered with the University of Waterloo Transportation Engineering team, alongside the City of Waterloo, Region of Waterloo and Miovision Technologies, in a three-year collaboration to apply research, predictive analytics and network screening to identify high-risk locations and optimize safety improvements (City of Kitchener, 2021).

What the city has to say

Interview with Aaron McCrimmon-Jones, Manager, Transportation Safety & Policy, City of Kitchener

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

AARON MCCRIMMON-JONES:

- The strategy was driven by a belief that no loss of life on city streets is acceptable.
- Kitchener experiences more than 1,200 traffic collisions annually, with 200+ injuries and an average of one fatality per year.
- Vulnerable road users were disproportionately affected, prompting a data-driven approach to prevention.
- We leveraged an existing and recognizable brand, and applied a proven framework to the City of Kitchener context.
- There are important differences between the Vision Zero approach and more traditional road safety plans.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

AARON MCCRIMMON-JONES: The Vision Zero Strategy was adopted in December 2021 as a four-year plan (2022 to 2025). The objectives of the four-year strategy include:

- A declining trend in the number of collisions involving serious injuries or fatalities;
- Using data-driven decision making and focus resources in areas with the highest expected impact;
- Achieving increased public awareness about Vision Zero;
- Enhancing our collaboration and data sharing with key stakeholders such as Police and Public Health;
- Ongoing engagement with Kitchener residents and other stakeholders.

PARACHUTE: What major activities are you undertaking to meet these goals?

AARON MCCRIMMON-JONES:

- **Evaluation**: Annual collision analysis and hotspot identification.
- **Engineering**: Data-driven hot spot improvement program through the use of speed humps, pedestrian crossovers, refuge islands, sidewalk infill and other safety measures.

- **Education**: High-risk driving campaigns with more than eight million impressions across various platforms.

- **Engagement**: Public surveys, advisory committees and online dashboard.

- **Enforcement**: Targeted traffic enforcement via the STEP (Selective Traffic Enforcement Program) partnership with Waterloo Region Police.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

AARON MCCRIMMON-JONES: To help prioritize street safety improvements and to better use our available resources and funding in the most efficient way, we developed Emphasis Areas. Emphasis Areas are our key areas of opportunity to improve road safety. Our three emphasis areas are:

- Vulnerable street users

- High-risk locations

- High-risk driving behaviours

Data analysis, research from other municipalities and public and stakeholder engagement demonstrated that vulnerable street users should be a key focus area. For example, in Kitchener, more than 84 per cent of collisions involving vulnerable street users result in injuries or fatalities, while approximately 13 per cent of collisions involving vehicles only result in injuries and fatalities: this shows that that vulnerable street users are severely overrepresented in injury and fatal collisions.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

AARON MCCRIMMON-JONES: Engagement with key stakeholders is a critical component to any vision zero plan. Through the development of our strategy, we met with advisory committees to council, conducted public surveys and established a project team with key stakeholder representation. We also developed a partnership with the University of Waterloo. The university has been supporting the city with network screening analysis, applying best practices in countermeasure selection and severe collision predictive modelling.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

AARON MCCRIMMON-JONES: A Vision Zero sub-committee was established to provide community feedback. The sub-committee operates under the Active

Transportation and Trails Advisory Committee. This is an advisory committee to council made up of councillors and residents, with staff support.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

AARON MCCRIMMON-JONES: The strategy is funded through reallocation of the existing Formal Traffic Calming budget using a more data-driven and equitable approach. Some action items are supported by existing resources, while others may require future budget approvals.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

AARON MCCRIMMON-JONES: Collision trends and severity, hotspot effectiveness evaluations, and public engagement metrics. We have also created a Vision Zero Dashboard for transparency: **https://experience.arcgis.com/experience/fc332f28d0ac4c498fc712d1e2e2a870/**

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

AARON MCCRIMMON-JONES:

- Kitchener's road network includes 1,600 lane kilometres under city jurisdiction, with additional roads managed by regional and provincial authorities.
- COVID-19 impacted travel patterns, influencing collision data from 2020–2021.
- We incorporated other established street safety initiatives such as Complete Streets.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

AARON MCCRIMMON-JONES:

- Zero fatalities reported in 2022, 2023 and 2024.
- Declining trend in serious injuries.
- Expanded traffic calming efforts using a data-driven approach to justify changes.
- Significant increase in the number of locations seeing safety improvements year over year.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

AARON MCCRIMMON-JONES:

- Zero traffic fatalities for three consecutive years.
- A 15-per-cent reduction in average vehicle speeds on residential roads.
- Declining trend in serious injuries.
- Kitchener's Vision Zero Dashboard can be accessed here: **https://experience.arcgis.com/experience/fc332f28d0ac4c498fc712d1e2e2a870/**

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

AARON MCCRIMMON-JONES:

- Limited resources require strategic prioritization of enforcement and infrastructure improvements.
- Getting to zero requires significant commitment and resources.
- Vision Zero's European success has not translated to many North American cities, which can be used to argue against its effectiveness.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

AARON MCCRIMMON-JONES:

- For generations, the North American way of life has revolved around the car and auto-centric design. Speed and free-flowing traffic has been prioritized over safety. Radical choices are required in terms of the reallocation of space, otherwise a Vision Zero plan will not work.
- Even after a Vision Zero plan is adopted and approved, opposition will continue to be everywhere once physical change starts.
- Adopting a Vision Zero plan is usually fairly straightforward and it looks good on paper and from a public perception standpoint. The more challenging phase comes during implementation, once physical change starts happening and funding is required.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

AARON MCCRIMMON-JONES:

- Expand LiDAR-based analytics to inform intersection improvements.
- Continue infrastructure upgrades and school zone safety.
- Continue to use data for a more equitable approach in determining safety improvement locations.

Lacombe County, Alta.

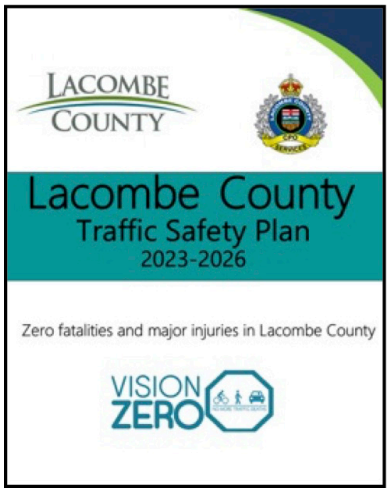
Background

Lacombe County has a population of 10,283, according to the 2021 census, and has decreased by 0.6 per cent since 2016. Its population density is 3.7 people per square kilometre (Statistics Canada, 2023t). Of a 25-per-cent census sample, 91.3 per cent mainly commuted to work by car, truck or van, followed by 5.8 per cent who walked to work (Statistics Canada, 2023t).

Between 2016 and 2020, there were 2,900 collisions that occurred within Lacombe County, with an average of 580 collisions per year. Of those collisions, 282 resulted in injury and 16 were fatal (Lacombe County, 2023). Within this five-year period, there has been an overall decrease of the number of collisions as well as serious injuries and fatalities. The largest contributing factor was animal-related, with 43 per cent of collisions on rural highways involving an animal. Other contributing factors included driver behaviour and weather (Lacombe County, 2023).

2023-2026 Traffic Safety Plan

Lacombe County has used Vision Zero principles to guide their road safety strategy and Community Peace Officer Program since 2020 (Lacombe County, 2023). The Traffic Safety Plan 2023 - 2026 was adopted by council in November 2023, making Lacombe County one of the first municipalities in Alberta to formally adopt Vision Zero. Guided by the Safe System Approach (SSA) and five of the Es of mobility safety (Engineering, Education, Enforcement, Engagement and Evaluation), the county aims to eliminate all traffic-related fatalities and serious injuries in their jurisdiction (Lacombe County, 2023).



Key features of the plan

Engineering: Engineering in Lacombe County focuses on the design and operation of the road system to prevent collisions or reduce their severity (Lacombe County, 2023). Guided by the SSA, this includes designing roads that support safe speeds through appropriate speed limits and effective speed management strategies. Lacombe County aims to continue implementing measures such as temporary digital speed-feedback signs to help reinforce safe driving behaviours and reduce collision risk, particularly at high-risk locations.

Education: In Lacombe County, education initiatives complement engineering measures. Lacombe County's Traffic Safety Plan outlines that, while education programs may initially reach a smaller proportion of road users and have limited immediate impact on collision reduction by itself, sustained and consistent education is expected to lead to meaningful behavioural change over time.

Enforcement: Within Lacombe County, enforcement efforts focus on high-risk behaviours including speeding, distracted driving, following too closely and intersection-related violations. Enforcement activities are co-ordinated with local law enforcement partners and aligned with the provincial traffic safety calendar to maximize impact. Through a collaborative and targeted approach, Lacombe County aims to improve compliance with traffic laws, address high-risk driving behaviours and make efficient use of limited enforcement resources.

Evaluation: Lacombe County continues to assess the effectiveness of digital speed sign boards and evaluate the use of police and community peace officer resources. Through a systems-based and collaborative approach, limited resources will be targeted toward proven enforcement initiatives, supporting best practices and contributing to safer roads and safer drivers.

Engagement: Engagement and communication emphasize involving residents, stakeholders and partners to strengthen Lacombe County's road safety culture. Road safety considerations will be increasingly integrated into public consultation processes related to transportation and infrastructure projects, improving public understanding of risks and solutions. Lacombe County is also collaborating with international, national, provincial and regional road safety organizations, including the Transportation Association of Canada (TAC) and neighbouring municipalities, to advance the use of the SSA (Lacombe County, 2023).

Key stakeholders

The successful development and implementation of Lacombe County's Traffic Safety Plan relies on collaboration with a range of key stakeholders. These include Public Safety and Emergency Services (Public Security Division), Alberta Transportation and Economic Corridors, local RCMP detachments, Lacombe County council, neighbouring municipalities and community members (M. Sproule, personal communications, July 29, 2025).

What the county has to say

Interview with Mark Sproule, Manager of CPO Services and Deputy Director of Emergency Management, Lacombe County.

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

MARK SPROULE: Lacombe County was motivated to adopt Vision Zero in alignment with provincial trends and evidence indicating that serious injuries and fatalities are largely preventable. The county has historically experienced a significant volume of collisions, including 16 fatalities and 282 injuries between 2016 and 2020. Many of these incidents were attributable to high-risk behaviours such as speeding, distracted driving and failure to wear seatbelts. Recognizing that no loss of life is acceptable, council and administration felt it was essential to adopt a framework explicitly focused on eliminating deaths and serious injuries rather than only reducing overall collision counts.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

MARK SPROULE: Vision Zero principles have formally guided Lacombe County's Traffic Safety Plans since 2020. The most recent plan, covering 2023 to 2026, was adopted by council in November 2023. The goals of this plan are to:

- Eliminate fatalities and major injuries on county roads.
- Promote a culture of safe driving.
- Apply a safe system approach that recognizes human error and vulnerability.
- Align local enforcement and education with the Alberta Traffic Safety Calendar.

PARACHUTE: What major activities are you undertaking to meet these goals?

MARK SPROULE: Major activities include:

- Ongoing proactive traffic enforcement, with approximately 83 per cent of Community Peace Officer time dedicated to traffic safety.
- Deployment of digital speed-feedback signage and targeted traffic calming measures.
- Co-ordinated enforcement initiatives in school zones, intersections and high-collision corridors.
- Public education campaigns integrated with the Provincial Traffic Safety Calendar.
- Use of stealth enforcement vehicles to address high-risk driving behaviours.

- Continuous collaboration with the RCMP and Alberta Transportation to share data and align enforcement priorities.

- Hosting two-day Commercial Vehicle Safety Checks twice annually, focused on improving commercial vehicle safety and conducting CVSA inspections under the Commercial Vehicle Safety Alliance, of which Lacombe County is a member. These large-scale checks are conducted with enforcement partners, including the RCMP, Provincial Traffic Sheriffs and partnering municipalities.

- Hosting a two-day voluntary Farm Vehicle Safety Check aimed at educating the agricultural community about vehicle safety and compliance, reinforcing a culture of safety in Lacombe County's rural areas.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

MARK SPROULE: The county's Vision Zero approach emphasizes protection of vulnerable road users, including pedestrians, school children and cyclists. School zones are prioritized for enforcement and traffic calming. Public education materials are designed to be accessible to diverse audiences. The plan also integrates seasonal priorities, such as winter driving safety, which disproportionately impact rural residents and those with limited transportation alternatives.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

MARK SPROULE: Key stakeholders include Public Safety and Emergency Services (Public Security Division), Alberta Transportation and Economic Corridors, local RCMP detachments, Lacombe County Council, neighbouring municipalities, and community members.

Stakeholder engagement has included:

- Incorporating collision data from the RCMP and Alberta Transportation and Economic Corridors.

- Consultation with council through formal agenda items.

- Public information sharing via County News and the county website.

- Participation in regional enforcement co-ordination (RCMP Annual Performance Plan, APP).

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

MARK SPROULE: While Lacombe County does not have a standalone Vision Zero committee, oversight of the Safe System Approach is integrated into CPO Services operations. The strategy is guided by the Manager of CPO Services, the Director of Community Services, the County Council (through regular reporting) and operational collaboration with RCMP detachments.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

MARK SPROULE: Although there is not a dedicated budget line item labelled specifically as "Vision Zero," the concept is fully integrated into the general operating budget of the Community Peace Officer Services department. Funding is allocated to support Vision-Zero-related activities, including the purchase and deployment of traffic calming signs, maintenance and operation of the stealth enforcement vehicle and operational costs associated with joint enforcement efforts such as stop checks, annual commercial vehicle safety checks and farm vehicle inspections. This approach ensures that Vision Zero principles are embedded in day-to-day operations and resourced consistently.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

MARK SPROULE: Success is measured through:

- Collision trends, including counts of fatalities and serious injuries.
- Enforcement statistics (such as speed and distracted driving offences).
- Deployment records of digital speed signs and traffic calming tools.
- Community feedback and engagement metrics.
- Compliance rates in high-risk areas (including seatbelt use and distracted driving).

Collision and enforcement data are compiled and reviewed to evaluate progress and inform updates to the Traffic Safety Plan.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes? If so, please describe them.

MARK SPROULE: Yes. Lacombe County's rural geography presents unique challenges, including:

- High volumes of traffic on single-lane highways.

- A significant percentage of collisions involving wildlife.
- Extended response times due to distance.
- Seasonal weather impacts.

Additionally, in developing the plan, the county adapted the Town of Devon's Traffic Safety Plan as a structural template. Permission to do so was requested and received in 2019, ensuring consistency with other Alberta municipalities and alignment with recognized best practices under the Public Security Peace Officer Program.

PARACHUTE: Since you initiated your program, what has changed (for example, new projects, project scope, approach and buy-in from stakeholders)?

MARK SPROULE: Since adopting Vision Zero principles, Lacombe County has:

- Increased use of digital speed-feedback equipment.
- Enhanced collaboration with the RCMP and neighbouring municipalities.
- Expanded proactive enforcement in school and construction zones.
- Improved data-driven targeting of high-risk behaviours.
- Gained broad council support and recognition of Vision Zero as a guiding policy.
- Developed a structured approach that builds on Devon's successful Traffic Safety Plan, demonstrating a commitment to consistency, evidence-based practices and collaboration across jurisdictions.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

MARK SPROULE: The county has observed:

- Improved compliance in school zones and intersections.
- Strong public engagement with speed-feedback signage.
- Enhanced co-ordination with the RCMP, avoiding duplication of enforcement.
- Positive feedback from residents regarding visible enforcement presence and education campaigns.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

MARK SPROULE: Challenges include limited enforcement resources relative to the geographic area and addressing habitual high-risk behaviours such as distracted driving despite repeated education and enforcement.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

MARK SPROULE: We recommend:

- Grounding your strategy in current data to ensure resources target the most serious risks.
- Building broad support across council, enforcement and community stakeholders.
- Integrating Vision Zero principles into existing plans rather than treating them as separate initiatives.
- Recognizing that changing behaviour requires persistent, long-term commitment to education, enforcement and engineering.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

MARK SPROULE: In the next five years, we aim to:

- Continue reducing fatalities and serious injuries toward zero.
- Continue to use advances in technology to support traffic calming within Lacombe County.
- Enhance public education and engagement.
- Strengthen data collection and analysis capabilities.
- Broaden collaboration with regional partners to ensure consistent messaging and enforcement.

Lethbridge, Alta.

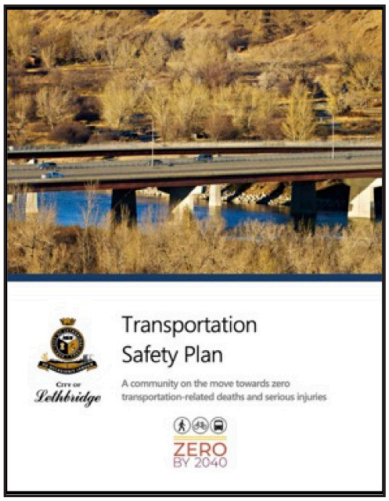
Background

According to the 2021 census, the City of Lethbridge has a population of 98,406, which has increased by 6.1 per cent since 2016. Its population density is 812.5 people per square kilometre (Statistics Canada, 2023u). Of a 25-per-cent census sample, 91.6 per cent mainly commuted to work by car, truck or van, followed by 3.6 per cent who walked to work (Statistics Canada, 2023u).

Within Lethbridge, approximately 435 injury collisions occur each year, with every two collisions resulting in severe injury, and an average of two fatal collisions occurring per year (City of Lethbridge, 2020a). When compared to similarly sized municipalities in Alberta such as St. Albert, Red Deer and Strathcona County, Lethbridge has a higher annual injury rate per 1,000 population than most cities. Collisions cost society approximately $130 million every year in Lethbridge (City of Lethbridge, 2020a).

Transportation Safety Plan

The City of Lethbridge adopted the **Transportation Safety Plan** in October 2020, with a vision of moving toward zero transportation-related deaths and serious injuries (City of Lethbridge, 2020b). The city aims to reach zero fatalities and serious injuries by 2040, with an interim target of a 50 per cent reduction by 2030 (City of Lethbridge, 2020a). The plan is built on the Safe System Approach (SSA) and guided by four principles: sustainability, adaptability, fostering a positive culture and equitability. Based on data, community engagement and best practices, the plan identifies five focus areas: distraction, speed and aggressive driving, intersections, safe vehicles with a focus on public transit and autonomous vehicles, and vulnerable road users. Thirty strategies and 64 actions are outlined in the plan to create a safer transportation system in Lethbridge for all road users (City of Lethbridge, 2020a).



Key features of the plan

Safe land use planning: The safe land use planning component focuses on integrating safety into land use and transportation planning decisions to reduce collision risk and support safer travel for all road users (City of Lethbridge, 2020a). This includes considering safety outcomes in long-term planning and development

applications and adopting and implementing Complete Streets principles to ensure streets are designed to accommodate all users, regardless of age, ability or mode of travel.

Safe speeds: Lethbridge is focused on reducing the risk and severity of collisions by improving public understanding of the dangers of speeding, aligning posted speed limits with road design and using roadway features to achieve target speeds. Lower speeds are prioritized in urbanized areas where access points are more frequent and vulnerable road users are more prevalent. These aims are supported through implementing traffic-calming measures and narrowed lanes, piloting safe system and reduced residential and downtown speed limits, expanding variable speed zones, enhancing the use of speed display devices and piloting average, or point-to-point, speed cameras to increase the perceived risk of non-compliance.

Safe vehicles: Lethbridge is committed to promoting safer travel choices, strengthening vehicle safety standards where possible and preparing for emerging autonomous vehicle technologies. This includes providing public information on the relative safety of different travel modes, supporting increased public transit use through service improvements, incentives and safety-focused marketing, and educating the public about vehicle safety features. Actions also include reviewing city and partner vehicle fleets to assess safety features and shifting planning and policies to prepare for connected and autonomous vehicles through consultation, readiness assessments and participation in pilot projects.

Safe road users: The Transportation Safety Plan focuses on improving road user behaviour and awareness to reduce collision risk and support safer shared use of the transportation. Strategies include expanding public education through the city's website and social media, using targeted campaigns to reinforce safe and compliant behaviour, and promoting the proper use of safety equipment such as approved motorcycle helmets. Actions also address emerging micro-mobility by strengthening legislation and regulations for e-bikes and e-scooters, upgrading infrastructure to reduce conflict points, improving advance warnings where conflicts are likely to occur and encouraging all road users to safely share common road space.

Safe road design: The City of Lethbridge is committed to reducing conflicts and improving safety at intersections and along corridors where different road users interact. Strategies aim to provide adequate space, protected movements, improved compliance with traffic control and lower vehicle speeds through safety-oriented intersection design. Actions include updating guidelines for protected left turns, all-way stops and pedestrian crosswalks, improving traffic signal visibility, expanding the use of roundabouts, implementing LPIs and replacing high-speed right-turn channels with designs that improve visibility and reduce turning speeds. The plan also prioritizes safer and more accessible infrastructure for vulnerable road users by enhancing pedestrian crossings, expanding protected cycling facilities, improving accessibility features, adapting roadways to better support active modes

and implementing targeted measures for children, older adults and people with disabilities (City of Lethbridge, 2020a).

Key stakeholders

The development of the Transportation Safety Plan was guided by a steering committee made up of representatives from City of Lethbridge departments, including transportation, planning and development services, communications, regulatory services, police services, emergency medical services and fire services (City of Lethbridge, 2020a). External partners include Alberta Health Services – South Zone and the Alberta Motor Association. Several additional stakeholders and partners were engaged at various stages of the plan's development. Consulting support was provided by TranSafe Consulting Ltd., with support from B & A Planning Group and WATT Consulting Group (City of Lethbridge, 2020a).

What the city has to say

Interview with Qasim Muhammad, Traffic Safety Specialist, Infrastructure Services, City of Lethbridge

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

QASIM MUHAMMAD: Persistent harm: 2,574 reported collisions in 2019 with around 18 per cent involving injuries; daily injury collisions; annual societal costs estimated at $130 million. Injury rates were higher than several peer Alberta cities. Priority risk factors identified by residents and police include distraction, speeding and aggressive driving.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

QASIM MUHAMMAD: Strategy development (2019-2020), presented/advanced through 2021; now embedded in city practice and reporting. Goal: Zero deaths and serious injuries by 2040, with an interim 50-per-cent reduction by 2030.

PARACHUTE: What major activities are you undertaking to meet these goals?

QASIM MUHAMMAD:

Engineering: Roundabouts; curb extensions, leading pedestrian intervals (LPIs) citywide rollout; protected-only left-turn policy work; "smart" right-turn channel conversions; the rectangular rapid flashing beacons (RRFB) crosswalks; Variable

Speed Limits (VSLs) on Whoop-Up Drive; school/playground zone harmonization; traffic calming and 40 km/h residential speed pilot in three areas.

Education/enforcement: Distraction and speed campaigns, youth programs and targeted enforcement prioritized by police and partners. Partnering with school boards, the Alberta Motor Association (AMA), and Alberta Health Services (AHS) to create safer walking/cycling routes and add RRFBs and signage around schools. City-led surveys and observational studies to understand driver behaviour, risk perception and compliance, informing targeted education campaigns. Development of a formal structure for safety-related communication, including co-ordinated campaigns across social media, schools and enforcement partners.

Management systems: Network screening, safety audits, corridor reviews and behaviour/observational studies.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

QASIM MUHAMMAD: Equity is a guiding principle; the plan centres around vulnerable road users (VRU) (pedestrians, cyclists, motorcyclists, children, seniors and people with disabilities) with specific actions (Safe Routes to School; reflective wearables; protected bike lanes; accessibility upgrades; larger signage near seniors' homes; adoption of regulations for e-bikes/e-scooters). We engaged diverse groups, including Piikani Nation, Siksika Nation, Blood Tribe, Métis Local, the Canadian National Institute of Blind (CNIB) and Inclusion Lethbridge.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

QASIM MUHAMMAD: Steering partners: City departments for transportation, planning, regulatory and communications; police; EMS; Fire; Alberta Health Services (South Zone); Alberta Motor Association. Wider stakeholders: Alberta Transportation (AT), RCMP, schools, post-secondary institutions, community associations, business groups, taxi fleets, cycling groups, and Indigenous partners. Public engagement occurred in October 2019 (in person) and March to June 2020 (online).

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

QASIM MUHAMMAD: The Transport Safety Plan (TSP) was built by a multi-agency Steering Committee as mentioned earlier. Implementation and updates flow through Council Standing Policy Committees (e.g., Assets & Infrastructure; Safety & Social) rather than a separate permanent Vision Zero Committee.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

QASIM MUHAMMAD: There is no single, standalone "Vision Zero" budget line published. Delivery is funded through the city's Operating Budget and Capital Improvement Program (CIP) on a project basis, supplemented by grants (e.g. The Road Safety Communications, culture, and School Travel Plan initiative is supported through grant funding, while additional federal assistance is being provided under the Enhanced Road Safety Transfer Payment Program (ERSTPP).

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

QASIM MUHAMMAD: Our primary key performance indicator is Fatal and Serious Injury collisions vs. 2030/2040 targets. We also are looking at mode/Vulnerable Road User injury trends; intersection and speed risk. The city is implementing linked police-health datasets, behaviour/observational studies, enhanced network screening, road safety audits, corridor reviews and culture surveys. The 40 km/h residential speed pilot has been a success with more than a 95-per-cent compliance rate.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

QASIM MUHAMMAD: Topography and weather: the river valley/bridges and winter conditions drive use of Road Weather Information Systems (RWIS) and Variable Speed Limit (VSLs) (e.g., Whoop-Up Drive) to manage safe speeds on bridges, slopes and during adverse weather. We also experience aggressive driving behaviours, normalized speeding perception and high percentage of rear end collisions.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

QASIM MUHAMMAD: Leading pedestrian intervals (LPIs) introduced and expanded citywide for several years. The 40 km/h residential speed pilot launched (2023) and expanded to two more neighbourhoods; school/playground zones moved to consistent 30 km/h, 7:30 a.m. to 9 p.m. daily. We run ongoing Whoop-Up Drive rehabilitation with speed management and heavy-truck restrictions during phases. There's also the Intersection Safety Improvement program, school travel plans development for all primary schools in the city and hiring of a road safety specialist. We make regular TSP updates to council committees.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

QASIM MUHAMMAD: Demonstrated quick-build, low-cost safety: LPIs, RRFBs, speed feedback displays, traffic calming curbs and targeted speed management on key corridors; the city's improved alignment with the 4 Es (Engineering, Enforcement, Education and EMS).

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

QASIM MUHAMMAD: Data integration (provincial collision datasets, timeliness/quality) identified by the TSP; city is working with the province to resolve.

Culture and compliance: City notes education/buy-in as an area to strengthen; media and city messaging emphasize that success of lower-speed pilots depends on motorist compliance. The city identified that road safety education and awareness lack in the local drivers and a compelling educational campaign is required.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

QASIM MUHAMMAD: Advice to new Vision Zero cities (practical, from Lethbridge's playbook)

- Set explicit interim targets (e.g., 50-per-cent KSI reduction by 2030) and report against them.
- Pair speed management with design (road diet, VSLs, protected phasing) and run pilots with before/after data.
- Centre VRUs and equity, write actions for children, seniors, people with disabilities, and Indigenous partners into the plan, then fund them.
- Install proven low-cost treatments quickly (LPIs, RRFBs, left-turn protection, TC curbs) while bigger projects are designed (For broader Canadian framing, see TAC's Vision Zero/Safe System primer).

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

QASIM MUHAMMAD:

Scale what works: Complete LPI network build-out; convert remaining high-speed right-turn channels; add roundabouts where warranted; finalize and, if results support, expand 40 km/h to more residential areas.

Close the data gap: Finish police-health linkage; formalize annual KSI dashboards; publish pilot evaluations.

VRU program: Protected bike lanes on high-collision corridors; Safe Routes to School; accessibility upgrades per plan.

Sustain the culture work: Monitor, evaluate and expand on grant-funded 2025 communication and school-travel planning project.

Embed in capital planning: Ensure TSP countermeasures are a standing screen in CIP and development.

London, Ont.

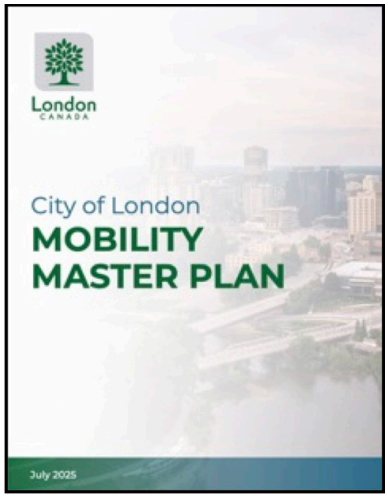
Background

The City of London has experienced a 10-per-cent population increase from 2016, with a population of 422,324 per the 2021 census and a population density of 1,004.3 per square km (Statistics Canada, 2023v). Based on a 25-per-cent census sample, 85.9 per cent mainly commuted to work by car, truck or van, followed by 6.4 per cent who took public transit (Statistics Canada, 2023v).

In 2024, London Police Service reported approximately 13,354 motor vehicle collisions in London (London Police Service, n.d.). Of these incidents, 1,752 resulted in injuries and 12 were fatal (London Police Service, n.d.). Compared to 2023, traffic fatalities declined by 45 per cent, and the number of injury collisions decreased from 1,947 (London Police Service, 2025).

2025 Mobility Master Plan

In May 2017, the City of London's Municipal Council formally adopted Vision Zero (Elmadhoon, 2018). The principles were embedded to the implementation of the **2014-2019 London Road Safety Strategy**.



In July 2025, the city published a new **City of London Mobility Master Plan** to inform road safety and safe mobility from 2025 to 2050 (City of London, 2025). Community engagement was an integral part of the development of the new plan, reflecting the perspectives of the public, Indigenous communities and various community organizations. The goal of the new plan is that "by 2050, Londoners of all identities, abilities and means will have viable mobility options to allow them to move throughout the city safely and efficiently, as well as providing connectivity to the region. The movement of people and goods will be environmentally sustainable, affordable, and supportive of economic growth and development" (City of London, 2025, p. 5). London also seeks to have a minimum of 32.5 per cent of trips made by waking, cycling and transit (City of London, 2025).

The new plan outlines five guiding principles: environmentally sustainable; financially sustainable; equitable; healthy and safe; and integrated, connected and efficient. Additionally, the City of London has identified eight areas of focus:

- Use the mobility system to support London's desired future land use
- Put people first in London's mobility system
- Manage road capacity strategically
- Make transit the option of choice for more trips
- Make walking and cycling preferred mobility options to meet daily travel needs
- Support London's role as a regional hub
- Provide a mobility system that enables more equitable participation in city life
- Prepare for change (City of London, 2025).

Key features of the plan

The City of London in 2025 identified specific action items under eight areas of focus:

Use the mobility system to support London's desired future land use: The actions within this focus area align land use and transportation planning to support higher-density, mixed-use and connected communities. Key measures include developing new neighbourhood guidelines to address street layout, block design, transit integration and mixed-use development, and identifying and implementing neighbourhood connectivity improvements, including land acquisition for walkways and cycling shortcuts. Other actions include amending The London Plan and the zoning bylaw to support active mobility infrastructure, strategic growth areas, increased density, car share and electric-vehicle charging, as well as updated parking standards; updating the design specification and requirements manual to reflect new cycling and neighbourhood connector standards; and revising the site plan control bylaw and transportation impact assessment guidelines to ensure new developments safely and effectively accommodate walking, cycling and transit (City of London, 2025).

Put people first in London's mobility system: The city's actions focus on embedding safety, accessibility and comfort into everyday travel. This includes integrating a multi-modal level-of-service framework into planning policies and design standards; strengthening year-round maintenance through a priority winter cycling network, a winter maintenance service review and planning for expanded operations capacity; and ensuring safe, accessible travel during construction through new multimodal mobility management standards and improved detour communications. The plan also advances Vision Zero through a safe mobility action plan, enhanced traffic-calming measures, speed-limit and roundabout reviews, side guards for heavy-duty city-owned trucks and targeted public education campaigns. Additional

measures focus on expanding and upgrading street lighting, enhancing streetscapes, and empowering communities through placemaking toolkits, external funding opportunities and a communications plan to support ongoing public engagement.

Manage road capacity strategically: Actions within this area focus on optimizing existing road space before pursuing expansion and balancing the movement of people and goods. Measures include implementing projects identified in the road projects plan; restarting the Discover Wonderland Road environmental assessment with expanded limits and a long-term rapid transit conversion option; evaluating roundabouts and at-grade rail crossings through the safe mobility action plan; and improving traffic signal operations through adaptive signal pilots, ongoing traffic data collection and development of transportation management centre policies. Additional actions strengthen access management by reducing conflicting driveways and requiring internal pick-up, drop-off and loading areas in new developments; mitigate construction-related disruptions through updated contract provisions, contractor incentives and bylaw amendments for heavy loads; develop context-sensitive curb space management strategies; and support more efficient last-mile delivery by establishing a micro-mobility working group and exploring bylaw updates to accommodate smaller human-powered and electric delivery vehicles.

Make transit the option of choice for more trips: To boost transit use in London, the city's Mobility Master Plan stresses a system that is convenient, reliable and accessible for all. Planned improvements include dedicated rapid transit lanes, queue-jump lanes, transit signal priority and enhanced transit shelters. Service-level actions aim to expand coverage, frequency and hours of operation, particularly in new growth areas and industrial zones, while doubling revenue vehicle hours by 2050 compared with 2019. Safe access to transit stops will be supported through sidewalks, cycling connections, pedestrian crossovers and improved lighting. Accessibility initiatives include reviewing subsidized fare programs for children under 12, youth, seniors, people with visual impairments, low-income residents and post-secondary students.

Make walking and cycling preferred mobility options to meet daily travel needs: The plan builds on existing pedestrian routes, cycling facilities and off-road pathways while filling gaps and upgrading infrastructure to meet modern safety and accessibility standards. Improvements will include continuous sidewalks, separated cycling lanes, pedestrian crossovers, wayfinding signage, secure bike parking and connections to transit stops. Programs and communications will complement infrastructure to promote walking, rolling and cycling for daily trips, recreational use and school travel. Supporting shared micro-mobility services, seasonal maintenance and inclusive design ensures all residents, including children, seniors, newcomers and people with disabilities, can use the active transportation network safely and comfortably.

Support London's role as a regional hub: The plan supports expanded inter-community transit, improved bus stop accommodations and collaboration with neighbouring municipalities and other levels of government to advance regional initiatives. This includes enhanced passenger rail (in Southwestern Ontario) and the extension of the existing Toronto to Québec City high speed rail. It also proposes developing Mobility Hubs and gateway parking to improve connections between regional and local travel. To support freight activity, the plan establishes a priority goods movement network, updates road design standards for trucks, including long combination vehicles, and directs higher truck volumes to designated corridors.

Provide a mobility system that enables more equitable participation in city life: London's Mobility Master Plan places equity at the centre of transportation decision making to ensure all residents can access jobs, services and community life (City of London, 2025). Key actions include applying an equity tool to transportation projects and programs, integrating equity considerations into traffic calming, winter maintenance and neighbourhood connectivity planning, and developing a Transportation Equity Opportunity Zones index to identify areas facing mobility barriers. The plan also calls for proactively addressing gaps in sidewalk connections and traffic safety, particularly in underserved areas. Engagement with equity-denied groups, including youth, Indigenous communities and faith-based organizations, will help inform mobility improvements and reduce systemic barriers. Additional measures focus on making transit stops and services more accessible, consulting with the Accessibility Community Advisory Committee on accessible parking and transit design standards, and ensuring people of all ages and abilities have safe, affordable and appropriate travel options.

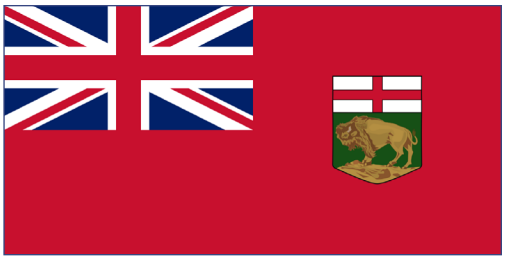
Prepare for change: The City of London outlines actions to address climate change, emerging technologies and long-term system resilience. To support the city's goal of net-zero greenhouse gas emissions by 2050, the plan calls for applying a climate lens framework to transportation projects, transitioning the London Transit Commission fleet to zero-emission buses, advancing electric vehicle procurement for municipal fleets and developing an electric mobility plan. It also supports partnerships to promote walking, cycling, transit use, carpooling and the adoption of electric vehicles. To prepare for evolving mobility trends, the city will establish frameworks to manage new technologies such as connected and automated vehicles and shared micro-mobility services. In response to climate impacts, the plan proposes updating design standards to build more sustainable and resilient infrastructure, testing low-carbon materials, improving standards for tree growth and integrating weather protection measures for pedestrians (City of London, 2025).

Key stakeholders

The City of London partnered with London Transit as well as the Middlesex London Health Unit to develop the Mobility Master Plan (City of London, n.d.). To gain input

and feedback on mobility initiatives, the city also recruited local residents to join the London's Mobility & Transportation Working Group and hosted multiple community engagement sessions (City of London, n.d.).

Manitoba



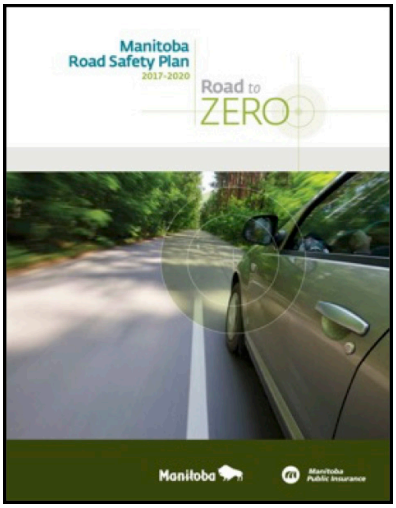
Background

As per the 2021 census, the Province of Manitoba has a population of 1,342,153, increasing by five per cent since 2016 (Statistics Canada, 2023w). Its population density is 2.5 people per square kilometre (Statistics Canada, 2023w). Of a 25-per-cent census sample, 86.1 per cent mainly commuted to work by car, truck or van, followed by 5.7 per cent who used public transit to go to work (Statistics Canada, 2023w).

In Manitoba, 103,066 collisions were reported in 2022, resulting in 95 deaths and 241 serious injuries (Manitoba Public Insurance [MPI], 2024). The number of people killed was 27 per cent higher than the previous five-year average, while the number of people seriously injured was 36 per cent lower. As in previous years, rural areas accounted for the majority of fatalities, even though most injuries occurred in urban locations. Distracted driving remained the most frequently recorded contributing factor in fatal collisions, while speed and impairment continued to play a significant role in deaths and serious injuries (MPI, 2024).

Based on 2023 data, Manitoba's traffic fatality rate is 5.4 per 100,000 population, above the Canadian average of 4.9. Manitoba's traffic fatality rate is higher than those in Ontario, Québec and Nova Scotia, but lower than in all other provinces and territories (Transport Canada, 2025). Manitoba has one of the highest injury rates in Canada, with 517.7 injuries per 100,000 population. This is above the national average of 296.5 and higher than all provinces and territories except Nova Scotia and Yukon (Transport Canada, 2025). The Social Costs of Collisions in Manitoba were estimated to be $1.8 billion in 2019 (MPI, 2021).

Manitoba Road Safety Plan 2017-2020



Manitoba set out its commitment to Vision Zero in the **Manitoba Road Safety Plan 2017-2020**, known as the "Road to Zero" report (Manitoba & MPI, 2017). In the plan, Manitoba describes its approach as "Towards Zero" rather than "Vision Zero" and states that "Towards Zero maintains that while not all types of crashes may be prevented, traffic deaths and severe injuries are preventable" (Province of Manitoba & MPI, 2017, p.12). This approach is aligned with the Safe System Approach (SSA) and priorities outlined in the strategy include safe

vehicles, safe roads, safe road users and safe speeds (Province of Manitoba & MPI, 2017).

Key features of the plan

Safe speeds: The province has committed to lowering risk through new speed management strategies and changing the province's culture around speed. In 2020, MPI deployed 25 highly visible speed display boards in 13 communities, using radar to detect vehicle speeds and display them on LED signs to encourage compliance, particularly when transitioning to lower posted speeds in school zones or community entry areas. Manitoba Transportation and Infrastructure (MTI) also provides temporary speed reader boards to municipalities, which are deployed for a few months at a time in school areas and speed transition zones to further encourage safe driving. The province has updated its Technical Guideline for Speed Limit Reviews to reflect best practices in determining speed limits. Reduced Speed School Zones have also been established, with 51 implemented on provincial roads since 2013, including 15 between 2017 and 2020, allowing communities to lower speeds near schools and improve safety for children and other vulnerable road users (MPI, 2021).

Safe vehicles: Manitoba's strategy focuses on improving road safety through technology, inspections and regulations. The plan prioritizes adopting automated and autonomous vehicle technologies, expanding research on emerging safety systems, addressing infrastructure and transition challenges, and using vehicle telematics to promote safer driving. MPI ensures vehicles are properly repaired, including calibration of advanced driver assistance systems, and conducts inspections of private, commercial, and Vehicle-for-Hire fleets to maintain safety standards. Temporary registration permits are being limited to reduce unsafe vehicles, while MPI supports commercial fleets through orientation programs. Manitoba is also preparing for autonomous vehicle testing, developing regulations and permits to safely integrate new vehicle technologies on provincial roads (MPI, 2021).

Safe road users: The plan outlines Manitoba's focuses on evolving the province's traffic safety culture, reducing driver distraction and impaired driving, promoting proper use of occupant restraints and improving youth road safety. To achieve these priorities, MPI has launched public awareness campaigns such as Save the 100, which encourages Manitobans to take personal responsibility for road safety. MPI implemented the High School Driver Education program (Driver Z) to provide interactive, practice-focused learning for young drivers. Mandatory Entry-Level Training (MELT) ensures commercial drivers meet minimum safety standards when obtaining a Class 1 driver's licence. Cyclist and pedestrian safety have been enhanced through education, grants and tools such as the Bicycle Facility Selection flowchart and the Active Transportation Planning Guide for Manitoba Municipalities, while safe trail use has been promoted through collaboration with local trail developers and organizations such as TransCanada Trails to ensure proper signage and crossings along provincial highways. Manitoba has also strengthened traffic safety laws, including amendments to the Highway Traffic Act and the Drivers and

Vehicles Act, and participated in federal, provincial and territorial working groups to improve Criminal Code impaired driving legislation and enforcement (MPI, 2021).

Safe road design: Manitoba prioritizes improving safety for all vulnerable road users through smart road design, aligning active transportation strategies at municipal and provincial levels, building capacity for research and data collection on site-specific solutions, and implementing a formalized, systemic approach to infrastructure improvements. The province supported municipalities and Indigenous communities in creating safer school zones and speed reduction measures, including temporary and permanent speed reader boards, while enhancing municipal knowledge of road safety through training programs. MTI also co-ordinated transportation infrastructure with land development and prioritized highway safety through its Traffic Safety Strategic Plan, considering pedestrians, cyclists, transit and commercial traffic (MPI, 2021).

Key stakeholders

Key stakeholders for the Vision Zero plan include Manitoba's Provincial Road Safety Committee (PRSC), comprising representatives from Manitoba Infrastructure; MPI; Manitoba Justice; Manitoba Health, Seniors and Active Living; and Manitoba Association of Chiefs of Police. In addition, the PRSC has established technical working groups focused on priority road safety issues and these groups include representation from Manitoba Infrastructure; Manitoba Justice; Manitoba Health, Seniors and Active Living; Manitoba Municipal Relations; MPI; City of Winnipeg; Winnipeg Police Service; RCMP; CAA; Bike Winnipeg; and Coalition of Manitoba Motorcycle Groups (C. Eden and G. Matson, personal communications, July 25, 2019).

What the province has to say

Interview with Russ Andrushuk, Assistant Deputy Minister, Engineering and Technical Services, Manitoba Transportation and Infrastructure

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

RUSS ANDRUSHUK: The Manitoba Road Safety Plan - Road to Zero strategy was developed from 2017 to 2020, in collaboration with by MPI and Manitoba Transportation and Infrastructure (MTI). Its primary goals included achieving an annual downward trend in fatalities and serious injuries per 100,000 population over a 10-year period, as well as reducing the societal cost of collisions in Manitoba on a per capita basis. A final progress report on the strategy was completed in March 2021. However, the document was not renewed or updated beyond that point, in part due to data limitations stemming from the COVID-19 pandemic, and other contributing factors. In

2024, a Road Safety Section was established at MTI, with a renewed focus on reducing fatal and serious injury collisions. While specific targets have not yet been set, they are expected to be developed as the section evolves.

PARACHUTE: What major activities are you undertaking to meet these goals?

RUSS ANDRUSHUK: To support MTI's road safety goals, several major initiatives are currently underway. A key milestone has been the creation of a dedicated Road Safety Section within MTI, which is helping to build a stronger culture of road safety both within the department and across the province.

In 2025, a comprehensive network screening of intersections and road segments to identify high-risk areas was completed. We also recently developed an in-depth process for department response after every fatal collision. This includes the review of factors that may be associated with the collisions as well as any recommendations for safety improvements.

MTI's road safety team is currently conducting a systemic safety analysis to proactively identify risk factors across the Manitoba provincial road network. This will allow for prioritization of safety improvements based on the presence of roadway features or conditions known to be statistically associated with higher crash risk. In addition, much of our recent road safety work has been to align MTI policies more closely with the Safe System Approach. Looking ahead, we are working toward the development of a detailed Road Safety Action Plan to guide future efforts.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

RUSS ANDRUSHUK: Equity and the needs of vulnerable road users are key considerations in our evolving road safety approach. Recent initiatives include paving highway shoulders, which not only improve overall road safety, but can also provide safer space for cyclists. We are also modifying signalization policies to better accommodate pedestrians. In addition, our use of systemic safety analysis will assist in playing a critical role in promoting equity. Identifying risk factors across the entire road network, not just where collisions have already occurred, helps us proactively address safety concerns in areas that may have been historically overlooked, including rural, lower-traffic or underserved communities. This allows for more equitable allocation of resources, ensuring that safety improvements are not limited to high-profile locations but are distributed based on risk and need.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

RUSS ANDRUSHUK: Our key stakeholders will be identified and actively engaged during the development of the upcoming Road Safety Action Plan. Broad input is

essential to ensure the plan reflects diverse perspectives and addresses the needs of all Manitobans.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

RUSS ANDRUSHUK: We do not currently have a formal Vision Zero or Safe System Approach committee. However, the creation of such a committee is expected to be a key topic of discussion during the development of the upcoming Road Safety Action Plan.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

RUSS ANDRUSHUK: Currently, there is no dedicated budget specifically committed to Vision Zero or Safe System Approach. However, this is an active topic of discussion as we move toward the development of a Road Safety Action Plan.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

RUSS ANDRUSHUK: Yes, MTI has access to collision data, which is used to monitor trends and evaluate the impact of road safety initiatives. We are currently working in collaboration with MPI to enhance the quality and integration of this data, which will support more robust analysis moving forward. The initial Road to Zero strategy included broad targets, with the expectation of a downward trend in fatal and serious Injury collisions. The upcoming Road Safety Action Plan will build on this foundation by trying to establish more specific and measurable targets to better track success and guide future efforts.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

RUSS ANDRUSHUK: Yes, several unique contextual factors have influenced our road safety planning:

- The size of the provincial highway network is a major consideration, with approximately 19,000 km of all-weather roads and an additional 2,300 km of winter roads.
- Much of the network consists of low-volume roads and relatively low collision densities, which presents challenges for traditional data-driven prioritization.
- As a prairie province, Manitoba has a high number of at-grade two-way stop-controlled rural intersections, which are known to carry elevated safety risks.

- There have been noticeable increases in large truck volumes in various locations throughout the network, adding complexity to safety planning and infrastructure needs.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

RUSS ANDRUSHUK: Since the program began, several positive changes have occurred. Road Safety Audits are increasingly becoming standard practice for Functional Design projects, ensuring safety is considered early in the planning process. There is also a growing understanding of road safety principles among staff, which has helped embed safety more deeply into project development. The use of In-Service Road Safety Reviews has expanded, allowing teams to diagnose existing safety concerns before design phases begin. Additionally, road safety is now more fully integrated into capital program planning, reflecting a broader shift toward a Safe System Approach.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

RUSS ANDRUSHUK: One of our key recent successes has been the establishment of a dedicated Road Safety Section within MTI. This new group is focused on advancing Vision Zero principles through a Safe System Approach. The section's creation, as well as support from executive management, marks a significant step forward in prioritizing road safety at a structural level. This will enable more co-ordinated, data-driven and proactive efforts to reduce serious injuries and fatalities across the provincial network.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

RUSS ANDRUSHUK: Yes, we have encountered a few challenges throughout the implementation of our strategy. One significant challenge has been the accuracy and timeliness of collision data, which can delay analysis and decision-making. Secondly, the early stages of our road safety efforts surely could have been improved as these efforts proceeded before the creation of a dedicated Road Safety Section. The dedicated Road Safety Section is expected to play a significant role in addressing road safety for MTI.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

RUSS ANDRUSHUK: We believe there are two pieces of advice that stand out. First, it is important to set clear, achievable targets that can evolve over time. Starting with realistic goals helps build momentum and credibility, which are crucial for long-term success. Second, development of a comprehensive Road Safety Action Plan. Such a plan provides a structured foundation for aligning stakeholders, identifying priorities and guiding implementation though a Safe System lens.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

RUSS ANDRUSHUK: As our Vision Zero program progresses, the next phase will focus on the development of a comprehensive Road Safety Action Plan, created in collaboration with a broad range of stakeholders: This plan will establish clear targets and priorities that are realistic, along with defined roles and responsibilities to ensure accountability and co-ordinated action. We also aim to produce annual collision reports to track and communicate progress toward these targets. This will support transparency and guide continuous improvement in road safety outcomes. Ultimately, the goal is to foster a stronger culture of road safety that is embraced by all Manitobans.

Middlesex Centre, Ont.

Background

The municipality of Middlesex Centre has a population of 18,928 according to the 2021 census and has increased 9.7 per cent since 2016 (Statistics Canada, 2023x). Its population density is 32.2 people per square kilometre. Of a 25-per-cent census sample, 94.5 per cent mainly commute to work by car, truck or van, followed by 3.1 per cent who walk to work (Statistics Canada, 2023x).

In 2025, Middlesex Centre had 395 reported collisions (Middlesex OPP Detachment, 2025). Forty-eight were non-fatal injury collisions, a 5.9-per-cent decrease from 2024 and two were fatal, a 33.3-per-cent decrease from the three recorded fatalities in 2024. There was a significant increase in 2025 for traffic-related charges compared to 2024, including speeding, seatbelt use, impaired driving and distracted driving infractions (Middlesex OPP Detachment, 2025).

2025 Vision Zero Campaign

Middlesex Centre endorsed Vision Zero in 2020 with the initiation of their **Vision Zero Campaign**. Their first campaign introduced community safety zones, which reduced speed limits to 40 km/h in residential zones, installed additional speed radar technology and launched the "Respect the Limit" lawn sign campaign (Cascaden, 2025).

The council of Middlesex Centre approved a $25,000 budget for the implementation of the **2025 Vision Zero Campaign**. Building upon previous years' campaigns, the 2025 campaign employs three of the Es of mobility safety – Engineering, Education and Enforcement – to achieve nine strategic action items. The campaign aligns with various priorities of the municipality's strategic plan, including those under Sustainable Infrastructure and Services as well as Responsible Municipal Government (Cascaden, 2025).

Key features of the plan

Middlesex Centre's Campaign employs three 3 of the Es of mobility safety:

Engineering: The municipality continues to implement flexible interventions such as centre line markers, radar display boards and speed cushions to physically and visually encourage slower driving while allowing for seasonal removal. Temporary measures are used to collect speed data and community feedback to inform

decisions about permanent installations. Traffic calming and complete streets principles are also being integrated into municipal design standards to ensure safer road design in new developments and reconstruction projects (Cascaden, 2025).

Education: Middlesex Centre continues to promote speed awareness initiatives through lawn sign campaigns, online platforms, social media and community events. Road safety messaging is further supported through seasonal safety campaigns and blitzes focused on school zone safety, bus safety and youth road use, aligned where possible with broader provincial and national campaigns (Cascaden, 2025).

Enforcement: The municipality is committed to sharing speed and traffic data collected through monitoring tools with police services to support targeted enforcement efforts. Speed radar display boards are used to remind drivers of the posted speed limit. Between 2023 and 2024, Middlesex Centre saw a decrease in the 85th percentile speeds observed at the speed radar locations. Partnerships with police, school boards and community stakeholders strengthen co-ordinated safety blitzes that combine enforcement with education. Ongoing collaboration with regional partners also supports addressing speeding and pedestrian safety concerns on roadways outside municipal jurisdiction (Cascaden, 2025).

Key stakeholders

Middlesex Centre partners with the Middlesex OPP Detachment, local school boards and community groups to implement Vision Zero initiatives and support a co-ordinated approach to road safety (Cascaden, 2025). These partnerships strengthen enforcement, expand education and outreach, and help identify local concerns, supporting data-informed actions to prevent serious injuries and fatalities (Cascaden, 2025).

Mississauga, Ont.

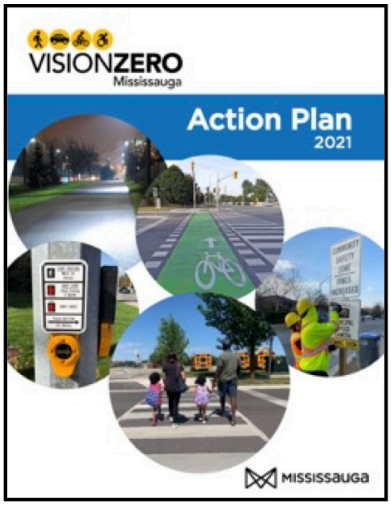
Background

As of 2021, Mississauga has a population of 717,961, signifying a 0.5 per cent population decrease from 2016 and a population density of 2,452.5 per square km (Statistics Canada, 2023y). Based on a 25-per-cent sample, 82.7 per cent of people in Mississauga mainly commuted to work by car, truck or van, followed by 11.4 per cent who commuted by public transit (Statistics Canada, 2023y).

In 2023, there were 5,590 collisions within the City of Mississauga, demonstrating a significant increase compared to the previous five-year average of 4,024 collisions per year (City of Mississauga, 2024). Of the 2023 reported collisions, 13 resulted in fatalities, including five involving vehicle occupants, three involving pedestrians, three involving motorcyclists and two involving cyclists. Between 2019 and 2023, the number of fatality collisions has consistently stayed between 12 and 13, with the exception of a spike to 17 fatalities in 2021. The city recorded 795 collisions that led to injury in 2023, the highest number recorded since 2018 (833), noting that 2020 to 2022 data were impacted by the COVID-19 pandemic (City of Mississauga, 2024).

Vision Zero Action Plan

The City of Mississauga committed to Vision Zero in 2018 through a council-approved motion. Mississauga City Council also passed a resolution to adopt Vision Zero and work toward a goal of zero fatalities and serious injuries as a result of collisions on city streets (City of Mississauga, 2021). The city's pledge to achieve Vision Zero was further strengthened through the Transportation Master Plan approved in 2019. The Transportation Master Plan included 91 action items related to transportation improvements in the city. The Transportation Master Plan provided further direction to advance Vision Zero work (City of Mississauga, 2021).



This led to the development of the **Vision Zero Action Plan**, which was published in 2021 (City of Mississauga, 2021). Vision Zero efforts are categorized into five of the Es of mobility safety, which include education and engagement actions. The plan outlines 99 action items that will be completed in an effort to achieve zero fatal and serious injury collisions (City of Mississauga, 2021). To date, the City of Mississauga has indicated that more than 90 of

the 99 actions are currently in progress, completed, or ongoing (City of Mississauga, n.d.)

Key features of the plan

Data collection and analysis: A key component of the Vision Zero approach is analyzing available data to determine trends, hot spots and areas of focus, which also help achieve equity in road safety efforts. The Vision Zero Action Plan includes many activities to collect data such as the Data Management Program, Transportation Data Plan and the Collision Report Processing. The plan outlines various ways to the city aims to share this data with the community. This includes the proposed development of the Vision Zero Annual Report, Online Dashboard and the Vision Zero Digital Map (City of Mississauga, 2021).

Evaluation: Through collision report processing, traffic volume, speed data and other available data, targets will be used to monitor the reduction of collisions in Mississauga.

Education: To help all road users understand that each have a role to play in keeping the roads safe for our vulnerable road users, the city uses empathy by fostering concern for community members who are at risk. In addition, Mississauga aims to educate the community about road safety through road signs, social media, formal training and other creative outreach and education tactics (City of Mississauga, 2021).

Engineering: Altering the physical built form of the transportation network and prioritizing the safety of pedestrians, cyclists and other vulnerable road users is the new direction Mississauga is taking when designing the build environment. This includes but is not limited to narrowing lane widths, channelized right-turn lanes, roundabouts, protected pedestrian crossings, reducing speed limits, street lighting upgrades, bicycle signals and pavement markings.

Enforcement: The City of Mississauga previously implemented Automated Speed Enforcement (ASE) cameras in school zones and community safety zones. The city continues to collaborate with Peel Regional Police on enforcement blitzes and communications opportunities to encourage safe driver behaviours (City of Mississauga, 2021).

Key stakeholders

Key partners involved in the City of Mississauga's Vision Zero Action Plan included a Vision Zero Program Lead and Vision Zero Working Group; Infrastructure Planning and Engineering; Traffic Management and Municipal Parking; Works, Operations and Maintenance; Strategic Communications and Initiatives; MiWay; Planning and Building;

and Peel Regional Police. City of Mississauga will continue to collaborate with regional partners co-ordinated by Region of Peel Road Safety Staff through the Vision Zero Task Force (City of Mississauga, 2021).

Montréal, Que.

Background

The City of Montréal has a population of 1,762,949, as per the 2021 census, up 3.4 per cent since 2016. The city's population density is 4,833.5 people per square kilometre (Statistics Canada, 2023z). Based on a 25-per-cent sample of the 2021 census, 56.7 per cent of people in Montréal mainly commuted to work by car, truck or van, followed by 28.4 per cent who commuted by public transit (Statistics Canada, 2023z).

The total number of fatal and serious injury collisions has decreased by 65 per cent since 2005. Every year, the City of Montréal experiences an average of 30 fatalities and 140 serious injuries on the road, the majority of which occur at intersections. From 2018 to 2020, Montréal experienced an average of 1.3 fatal collisions per 100,000 people. Impaired driving remains a major cause of traffic collisions (Ville de Montréal, 2025).

Vision Zero Action Plan, 2025-2027

On September 26, 2016, Montréal's city council formally declared its commitment to Vision Zero, leading to the launch of the city's first Vision Zero Action Plan in 2019.

Montréal's third **Vision Zero Action Plan (2025-2027)** renews the city's commitment to eliminating all traffic-related fatalities and serious injuries by 2040, with an interim goal of a 50-per-cent reduction by 2030. While past speed reduction efforts concentrated on local streets, the new plan shifts focus to Montréal's arterial and collector road network, where 90 per cent of serious injury and fatal crashes still occur. The strategy is closely integrated with Montréal's 2050 Land Use and Mobility Plan, which outlines a long-term vision for safe, sustainable, equitable and people-centred transportation (Ville de Montréal, 2025).

The plan identifies five strategic focus areas, including reallocating street space, reducing speeds, improving safety on arterial and collector roads, protecting vulnerable road users and fostering a Vision Zero culture (Badeau, 2025). Measures include 45 targeted actions such as expanding Automated Speed Enforcement (ASE) in school zones and redesigning intersections and corridors to align travel speeds with human injury tolerance in mind. Additional priorities are integrating Vision Zero principles into all municipal planning frameworks and strengthening data collection, analysis

and transparency through annual reporting and open-data tools, including their **Vision Zero dashboard** (Ville de Montréal, 2025).

Key features of the plan

Safe land use planning: Montréal's Vision Zero plan is embedded within the city's broader land use and mobility framework to ensure that safety is a core consideration in urban planning. The 2050 Land Use and Mobility Plan calls for reducing the number and distance of motorized trips by significantly expanding sustainable transportation options, shifting travel toward active and collective modes, and improving the efficiency of remaining vehicle trips through vehicle sharing, carpooling, electrification and energy efficiency (Ville de Montréal, 2025).

Safe speeds: Since the first transportation plan was launched in 2008, the maximum speed limit is 40 to 50 km/h on all local roads. As of 2025, 55 per cent of Montréal's roads have a speed limit of 30 km/h. The city uses ASE to target major arterial roads, where the majority of serious collisions occur. Fifteen of the city's 33 school zones are equipped with mobile photo radar equipment (Ville de Montréal, 2025).

Safe vehicles: The city's plan contains eight action items to improve the safety of vehicles in circulation (Ville de Montréal, 2025). The city is currently developing a new safety policy for heavy vehicles, in collaboration with the Bureau de normalisation du Québec (BNQ) and the Ministère des Transports et de la Mobilité durable (MTQ) (Ville de Montréal, 2025; Bureau de normalisation du Québec, 2024). Inspired by London England's Direct Vision Standard, the policy will create a safety index to classify heavy vehicles by direct vision capability and onboard safety equipment, with inspection requirements before circulation on local roads. The city is applying higher parking tariffs to heavy vehicles in certain neighbourhoods, adding backup cameras to all new STM buses from 2025 onward and exploring pedestrian detection technology for transit vehicles. The city is also working with regional public health units to monitor and regulate the use of electric bikes and e-scooters on bike lanes (Ville de Montréal, 2025).

Safe road users: Montréal promotes a culture of safety through education, community engagement and enforcement. Active mobility education programs teach road rules and safe behaviours, including Vélo Québec's "Cyclistes avertis," offered in more than 100 schools annually, and Piétons Québec's pedestrian safety training. The city provides financial support to Vélo Québec and Piétons Québec so that programs can be offered to children and residents from lower-income communities. The city is launching a fleet of electric bicycles for speed enforcement on cycling lanes, limited by law to 25 km/h (Ville de Montréal, 2025).

Safe road design: Montréal is continuously redesigning roads to ensure that vulnerable users such as children, older adults, pedestrians and cyclists are protected. The

plan includes 14 key action items focused on reducing speed limits on streets with high pedestrian, cyclist and motorist interaction; installing pedestrian refuge islands and curb extensions to improve crossing safety; and prioritizing safety upgrades at collision-prone intersections and corridors. Pedestrian and cyclist traffic lights have also been installed in numerous locations (Ville de Montréal, 2025).

Key stakeholders

The development of the Vision Zero Action Plan was guided by two key bodies: a Vision Zero Advisory Committee and an internal steering committee (S. Benoit, personal communication, Sept. 2, 2025). The advisory committee includes representatives from civil society, academia and public health, including Centre d'écologie urbaine, Coalition Mobilité active de Montréal, Conseil jeunesse de Montréal, Conseil régional de l'environnement de Montréal, Direction régionale de la santé publique, ESG-UQAM, Ex-Aequo, INRS, Piétons Québec, Polytechnique Montréal – Civil, Geological and Mining Engineering Department, Regroupement des aveugles et amblyopes du Montréal métropolitain, Société Logique, Table de concertation des aînés de l'île de Montréal, Vélo Québec and Vivre en Ville. The internal steering committee brings together division heads across transportation, urban planning, infrastructure, police, fire and communications to support implementation. External partners, including the SAAQ, STM and MTMD, are also involved in carrying out specific actions within the plan (S. Benoit, personal communication, Sept. 2, 2025).

What the city has to say

Interview with Stéphanie Benoit, Conseillère en aménagement, Ville de Montréal

PARACHUTE: Did you learn anything from your previous strategy that informed the development of the updated version?

STÉPHANIE BENOIT: The three Vision Zero action plans adopted to date by the City of Montréal are part of a continuum. Each plan allows for progress by building on past achievements.

The first Vision Zero action plan for 2019-2021 brought together key partners and initiated a paradigm shift toward a new approach to road safety. Fatal collisions on the island of Montréal were the subject of detailed analyses to understand their causes and identify recurring collision scenarios. Since 2019, Montréal has been publishing l'État de la sécurité routière (state of road safety), a report that presents the evolution of key monitoring indicators, and an interactive map that allows users to visualize the data.

The second action plan for 2022-2024 primarily aimed to act systematically on all components of the road system to improve the safety of vulnerable users, consolidate the engagement of partners and enhance analytical capacities to intervene proactively.

The third action plan continues the work started in recent years and focuses on the following five priorities:

- **Equitably redistribute street space**: The more automobiles there are on our roads, the greater the risk of a collision resulting in death or serious injury. Montréal is focusing on the development of an efficient public transportation system and protected infrastructure for pedestrians and cyclists.

- **Reduce speed**: Every additional kilometre per hour exponentially increases the risk of killing or injuring a road user. Reducing speed is the most effective measure to lessen the impact of a collision and avoid the worst. This involves street design, lowering speed limits and speed enforcement.

- **Securing arterial and collector streets**: In nine out of 10 cases, collisions resulting in death or serious injury occur on an arterial or collector road. It is on this network that we must intervene to improve the road safety record.

- **Securing the routes of the most vulnerable users**: The entire route to school, the park, the shopping area and healthcare facilities must be secured so everyone can participate in their activities, regardless of their physical abilities.

- **Developing the Vision Zero culture**: Vision Zero involves a cultural shift, new ways of doing things and new tools. It involves designing layouts that, by their design, limit the risk of a collision occurring and resulting in serious consequences.

PARACHUTE: What are the most notable changes in your new Vision Zero strategy?

STÉPHANIE BENOIT: The main difference between the new action plan for 2025-2027 and the previous action plan is the governance structure. The uniqueness of the Vision Zero 2022-2024 action plan is its collaborative governance. A third of actions were carried out by external partners from the city.

The city worked with a researcher specializing in municipal governance issues, Professor Florence Paulhiac from the School of Management Sciences at the Université du Québec à Montréal (ESG-UQAM) in 2023 to review the governance structure. The main recommendations from that mandate were to refocus the Vision Zero action plan around the municipality's responsibilities and strengthen internal collaboration within the municipal structure as a priority. Collaboration with external partners remains an important part of the Vision Zero strategy and has been maintained through a Vision Zero advisory committee. A new internal committee has been established at the city; see the "key stakeholders" question below for detail.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

STÉPHANIE BENOIT: In its 2008 transportation plan, Montréal committed to shifting toward Vision Zero and reducing the number of road accidents by 40 per cent over 10 years.

Montréal officially adopted the Vision Zero approach in 2016 and committed to reducing the number of deaths and serious injuries on the metropolitan area's road network to zero by 2040.

Three Vision action plans have been adopted since then:

- Action Plan 2019-2021
- Action Plan 2022-2024
- Action Plan 2025-2027

The Vision Zero 2025-2027 Action Plan includes an interim target of reducing the number of deaths and serious injuries by 50 per cent by 2030 compared to the average from the last five years, meaning a reduction from 170 to 85 deaths and serious injuries.

PARACHUTE: What major activities are you undertaking to meet these goals?

STÉPHANIE BENOIT: The Vision Zero 2025 Action Plan includes four areas of intervention: The street design, vehicles, user behaviour, data and a culture of road safety.

The plan's key actions include:

- Securing the arterial network: Conduct a comprehensive assessment and prioritize resource allocation for safety projects on the arterial network.
- Test innovative designs such as protected intersections and roundabouts.
- Develop guidelines for planning transportation networks in accordance with Vision Zero.
- Deploy more automated control devices.
- Analyze conflicts between users at intersections.
- Improve processes to ensure that road safety is considered upstream and integrate more safety audits at key stages of project planning and design.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

STÉPHANIE BENOIT: Montréal has developed a socioeconomic vulnerability index to identify disadvantaged areas in its territory. This indicator is taken into account when prioritizing safety projects.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

STÉPHANIE BENOIT: The plan applies to the territory of the agglomeration of Montréal, which includes 15 different municipalities. Among these 15 municipalities, the City of Montréal has 19 boroughs.

Two committees participated in the development of the Vision Zero 2025-2027 Action Plan: the Vision Zero Advisory Committee and the steering committee.

The Vision Zero Advisory Committee includes representatives from civil society, academia and public health. The member organizations are as follows:

Centre d'écologie urbaine, Coalition Mobilité active de Montréal, Conseil jeunesse de Montréal, Conseil régional de l'environnement de Montréal, Direction régionale de la santé publique, ESG-UQAM, Ex-Aequo, INRS, Piétons Québec, Polytechnique Montréal – Civil, Geological and Mining Engineering Department, Regroupement des aveugles et amblyopes du Montréal métropolitain, Société Logique, Table de concertation des aînés de l'île de Montréal, Vélo Québec, Vivre en Ville.

The internal steering committee aims to ensure better integration of the Vision Zero approach within the city. It brings together the division heads of key teams in transportation and urban planning, facility design, road system operation, police service, fire safety service and communications service.

Several external partners including the SAAQ (automobile insurance), the STM (public transit authority) and the MTMD (Québec's Ministère des Transports) are closely involved in specific actions outlined in the plan.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

STÉPHANIE BENOIT: See answer to the "key stakeholders" question.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

STÉPHANIE BENOIT: Yes, a budget of $150 million over 10 years is dedicated to the school perimeter safety program and the senior pedestrian safety program.

A budget of approximately $20,000 per year is dedicated to communications related to Vision Zero.

There is a special and non-recurring budget of $4.7 million from photo radar revenues.

Most actions outlined in the plan are funded through the regular operating budgets of the various projects and teams.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

STÉPHANIE BENOIT: The number of collisions with fatalities and serious injuries is the main tracking indicator. The monitoring indicators integrated into the 2025-2027 action plan include:

- Number of reconfigured intersections
- Number of kilometres of reconfigured streets
- Number of kilometres of protected bike lanes added to the network
- Number of kilometres of unprotected bike lanes added to the network
- Number of kilometres of upgraded bike paths
- Number of intersections newly equipped with compliant traffic lights
- Number of protrusions added
- Number of speed bumps added
- Number of pedestrian streets and permanent school streets added
- Number of school zones where the speed limits are higher than 30 kilometres per hour
- Number of kilometres of streets where the speed limit is 30, 40 or 50 kilometres per hour
- Number of classes that have benefited from an active transportation education program
- Number of awareness campaigns conducted annually and audience reached.

- Number of deaths and serious injuries

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

STÉPHANIE BENOIT: Montréal has a complex governance structure. The action plan concerns the entire Montréal metropolitan area, which includes various municipalities. Among these 15 municipalities, the City of Montréal has 19 boroughs.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

STÉPHANIE BENOIT: Among the main achievements of the Vision Zero 2022-2024 action plan, the following stand out:

- The leadership role assumed by the City of Montréal, in collaboration with the Ministère des Transports et de la mobilité durable, in initiating the development of a safety index for heavy vehicles.

- The development of a **directory of street design practices** that offers design tools for streets that incorporate the principles of Vision Zero and universal accessibility.

- The development of cycling infrastructure, the improvement of traffic lights for pedestrians and cyclists, the implementation of calming measures in neighbourhoods and the securing of areas around schools.

- The implementation of a safety program for senior pedestrians.

- The integration of the principles of the Vision Zero approach into the 2050 Land Use and Mobility Plan.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

STÉPHANIE BENOIT: The main challenges encountered include:

- The cross-cutting nature of road safety issues, the number of stakeholders from different fields involved (teams dedicated to project design, teams dedicated to public policy development, Police Service, Fire Safety Service, Communications.)

- The Vision Zero approach is not yet very well known and understood. The Vision Zero stamp is sometimes used to justify certain choices even when it does not exactly align with the Vision Zero approach. Road safety is sometimes used as an argument to criticize certain developments.

- Resources aimed at specific clientele (children, seniors) rather than broader, overall actions that would cover the entire territory.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

STÉPHANIE BENOIT: Put efforts into internal communication within the organization and with the general public. Strengthen the ties between the teams responsible for public policy and those responsible for project implementation.

Invest time in building partnerships and surround yourself with experts to guide policy development.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

STÉPHANIE BENOIT:

- A diagnosis and priority interventions to secure the arterial network.

- A strong Vision Zero culture, a shared understanding of the Vision Zero approach within the municipal organization and a willingness to implement systemic and comprehensive solutions.

- Transportation network planning that takes into account the principles of Vision Zero. Action 12 of the 2025-2027 action plan seeks to "develop guidelines for planning transportation networks in accordance with Vision Zero."

Niagara Region, Ont.

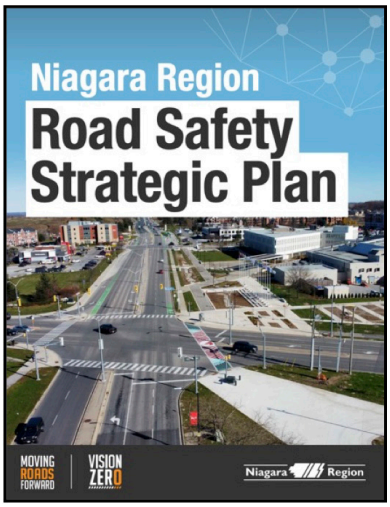
Background

According to the 2021 census, Niagara Region has a population of 477,941, which is a 6.7 per cent compared to 2016 (Statistics Canada, 2023ab). Its population density is 258 people per square kilometre. Of a 25-per-cent census sample, 92.3 per cent mainly commuted to work by car, truck, or van, followed by 3.4 per cent who walked to work (Statistics Canada, 2023ab).

Each year, Niagara Region experiences an average of 350 to 400 injuries and eight to nine fatalities on jurisdictional roadways (Niagara Region, 2025a). From 2017 to 2019 and 2022 to 2023, Niagara Region recorded 1,907 injury collisions and 42 fatal collisions on regional roadways. After a decline from 2017 to 2019, injury collisions on regional roads have increased in recent years and fatal collisions have remained consistent (Niagara Region, 2025a).

Niagara Region Road Safety Strategic Plan (2025)

Niagara Region first endorsed the adoption of Vision Zero in 2019 (Niagara Region, 2021). The Niagara Region Road Safety Strategic Plan, released in July 2025, was developed based on a statistical analysis of regional traffic collision information available between 2017 and 2019 and 2022 and 2023, which identified seven key trends (Niagara Region, 2025a). These trends formed the basis for the plan's seven emphasis areas:



- Intersections
- Distracted and aggressive driving
- Vulnerable road users
- Young and new drivers
- Rural roads
- Commercial vehicles
- Impaired driving

The Road Safety Strategic Plan aligns with the broader Niagara Region strategic plan under the Equitable Region focus area that prioritizes the creation of a "safe and inclusive Niagara by listening and responding to our community and planning for future growth" (Niagara Region, 2025b, p. 8). It includes 43 countermeasures that mainly fall under the categories of engineering, enforcement and educational interventions (Niagara Region, 2025a).

Features of the plan

Niagara Region's Road Safety Strategic Plan applies three of the Es of mobility safety, specially referred to as countermeasure categories throughout the plan.

Engineering: The region is committed to conducting road safety audits on capital projects and in-service safety reviews on high-collision corridors to identify and mitigate risks on both new and existing roads. Infrastructure-focused interventions include expanding leading pedestrian intervals, implementing traffic calming measures, advanced curve warning signage, improving sight lines and updating speed limit policies, particularly in school zones.

Education and Empathy: The region will use targeted campaigns to raise awareness around distracted driving, young driver safety, roundabout use, motorcyclist and farm vehicle safety, and commercial vehicle interactions. A new road safety curriculum for young drivers is also set to be developed with the goal of reducing unsafe driver behaviours. Partnership with the Niagara Safety Village provides elementary school children in Niagara Region with interactive education on road safety as a driver, pedestrian and cyclist.

Enforcement: Enforcement efforts are being scaled through ASE, expansion of community safety zones and participation in truck regulation and by-pass enforcement programs in partnership with MTO and the Town of Lincoln (Niagara Region, 2025a).

Key stakeholders

Key stakeholders in the development of Niagara's Road Safety Strategic Plan include Niagara Regional Police Service, Niagara Region Public Health and local municipalities. The region will establish an inter-agency Road Safety Working Group, merging existing road safety committees to enhance the plan's implementation (Niagara Region, 2025a).

North Bay, Ont.

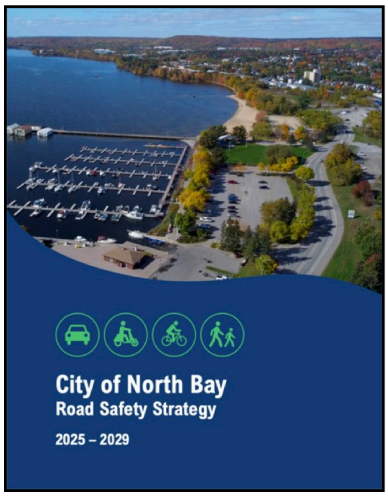
Background

Based on the 2021 census, the City of North Bay has a population of 52,662, an increase of 2.2 per cent since 2016 (Statistics Canada, 2023ac). Its population density is 166.9 people per square kilometre. Of a 25-per-cent census sample, 85.9 per cent mainly commuted to work by car, truck or van, followed by 7.8 per cent who walked to work (Statistics Canada, 2023ac).

Between 2015 to 2019, and 2022, more than 4,900 collisions were reported in the City of North Bay, with more than 800 collisions leading to an injury or fatality (City of North Bay, 2024). The number of collisions resulting in injury or fatality have remained consistent across 2017 to 2019 and 2022, at 15 per cent of all collisions. Within the six-year time period, all of the fatal collisions that occurred in North Bay involved pedestrians. Forty per cent of the fatal and injury collisions that occurred resulted from distracted driving, while 33 per cent were attributed to aggressive driving (City of North Bay, 2024).

City of North Bay Road Safety Strategy (2025-2029)

The City of North Bay began developing the **City of North Bay Road Safety Strategy (2025-2029)** in 2023 in response to the high burden of motor vehicle collisions, which result in life-changing injuries and significant economic consequences (City of North Bay, n.d.; City of North Bay, 2024). The city aims to reduce the number of serious and fatal motor vehicle collisions by at least 15 per cent within five years (City of North Bay, 2024).



The comprehensive strategy adopts the Safe System Approach (SSA) and focuses on collaboration, engineering, enforcement, education and public engagement. The plan outlines six emphasis areas: intersections, distracted driving, aggressive driving, pedestrians, cyclists and school zones. There are 74 countermeasures across the emphasis areas (City of North Bay, 2024).

Key features of the plan

Countermeasures of the City of North Bay Road Safety Strategy are organized based on four of the Es of mobility safety.

Engineering: The Road Safety Strategy outlines 64 engineering countermeasures focused on infrastructure and design changes to reduce fatal and serious injury collisions. Key examples include Automated Speed Enforcement (ASE), red-light cameras, converting intersections to all-way stops or roundabouts; adding protected left-turn signal phases and intersection lighting; installing speed humps and centre medians to calm traffic; and implementing shoulder and centre-line rumble strips. Other measures include expanding sidewalks and adding pedestrian countdown timers and refuge islands and building new cycling infrastructure, such as bike lanes and bicycle signals.

Enforcement: The City of North Bay will look to implement four enforcement countermeasures. These include targeted police initiatives focused on aggressive driving, distracted driving, pedestrian safety and cyclist safety, as well as automated countermeasures such as ASE and red-light cameras.

Education and Engagement: The plan outlines six countermeasures related to education and engagement, including campaigns targeting distracted and aggressive driving, pedestrian and cyclist safety, school zone safety and consistent messaging across neighbouring municipalities. Example campaigns include "Leave the Phone Alone", "Heads Up!", "Speed Kills" and "Keep Your Cool". The city has also committed to providing educational sessions to all enforcement officers to provide additional knowledge on the risks associated with distracted driving, in turn conveying the message to local community members (City of North Bay, 2024).

Key stakeholders

Road safety partners include the City of North Bay, MTO, Conseil scolaire public du Nord-Est de l'Ontario, North Bay Indigenous Friendship Centre, District of Nipissing Paramedic Services, North Bay Fire and Emergency Services, North Bay City, North Bay Parry Sound District Health Unit, Nipissing-Parry Sound Catholic School Board, Canadore College, Nipissing University and Nipissing-Parry Sound Student Transportation Services. The North Bay Accessibility Committee and North Bay Road Safety Committee were also key partners in the development and implementation of the city's Road Safety Strategy (City of North Bay, 2024).

Ottawa, Ont.

Background

The City of Ottawa recorded a population of 1,017,449 in 2021, increasing 8.9 per cent since 2016. Ottawa has a population density of 364.9 per square km (Statistics Canada, 2023ad). According to a 25-per-cent census sample, 76.8 per cent of the population mainly commuted to work by driving a car, truck or van, followed by 11.2 per cent who use public transit (Statistics Canada, 2023ad).

Between 2019 and 2023, Ottawa recorded 598 collisions, or 12 per 100,000 population, that resulted in serious injury or death (City of Ottawa, 2024). That five-year average is down from 2013 to 2017, which had 743 fatal or serious injury collisions, or 15.5 per 100,000 population. The average number of fatalities per year also decreased, from 27 in 2013 to 2017 to 24 between 2019 and 2023 (City of Ottawa, 2024).

Road Safety Action Plan, 2020-2024

Since 2003, the City of Ottawa has implemented two Road Safety Action Plans (RSAP) from 2003 to 2011 and 2012 to 2016. The second plan resulted in a 14-per-cent reduction in fatal and major injury collisions in Ottawa. In 2019, the city published the **2020-2024 Road Safety Action Plan**, built on the success of the previous plans (City of Ottawa, n.d.-a). The plan is guided by the theme of "Think Safety, Act Safely" and focuses efforts and resources where they are needed most to have the greatest impact on reducing collisions resulting in serious injury or death. This most recent plan sets a short-term goal of achieving a 20-per-cent reduction in the average annual rate of fatal and major injury collisions by 2024 and longer-term goal of zero traffic related fatalities by 2035 (City of Ottawa, n.d.-a).

The RSAP is an integrated, comprehensive and proactive strategy based on the Safe System Approach (SSA) that incorporates input and guidance from residents, community stakeholders, road safety advocates and experts. The action plan addresses four key emphasis areas: vulnerable road users (pedestrians, motorcyclists and cyclists), intersections, rural roads and high-risk drivers (speeding, aggressive and impaired driving) (City of Ottawa, n.d.-a).

Key features of the plan

Data collection and analysis: The RSAP is primarily a data-driven initiative (CIMA, 2019b). Traffic and collision data are managed by the Transportation Data Collection and Analytics team using Transportation Engineering Software (TES), which compiles traffic volumes, operating speeds and police collision reports. This

information helps identify where collisions occur, the factors contributing to them and the populations most affected, such as age groups, collision types and causes (CIMA, 2019b). Data are also used to support safety assessments and monitoring initiatives, including rail crossing safety studies and fatal collision reviews conducted through the Fatal Collision Review Committee (City of Ottawa, n.d.-b).

Education: Education initiatives under the RSAP focus on increasing awareness and encouraging safer behaviour among all road users. The "Time is Precious" road safety campaign launched in December 2023 and continued to expand in 2024 with new communications and messaging (Kourouma, 2024). Programs such as "Be Safe Be Seen" distribute reflective gear and lights to increase visibility among pedestrians and cyclists (Kourouma, 2024; City of Ottawa, n.d.-b). Additional initiatives include education and outreach on new and existing pedestrian infrastructure, interactive demonstrations that highlight heavy vehicle blind spots and subsidized motorcycle safety training program (City of Ottawa, n.d.-b).

Enforcement: Enforcement activities are primarily led by the Ottawa Police Service, with support from Ottawa Fire Services, Ottawa Paramedic Service and Ottawa Public Health (City of Ottawa, n.d.-b). These efforts focus on high-risk behaviours such as impaired, distracted and aggressive driving. ASE was intended to expand across the city, with additional cameras installed near schools and parks and pilot projects on high-speed corridors (Kourouma, 2024; City of Ottawa, n.d.-b). Other enforcement initiatives include impaired driving enforcement through R.I.D.E programs and distracted driving campaigns such as "Leave the Phone Alone" (City of Ottawa, n.d.-b).

Engagement: Community engagement is an important component of the RSAP and helps build a culture of road safety among residents. Safer Roads Ottawa organizes and supports numerous community outreach events and engagement initiatives each year (City of Ottawa, n.d.-b). Public opinion surveys are also conducted to assess residents' awareness of and attitudes toward road safety initiatives, including ASE (Kourouma, 2024). These engagement efforts help inform future road safety strategies and program development.

Engineering: Recent engineering initiatives include cycling safety improvements at high-volume cycling and vehicle interaction locations, installation of high-visibility ladder crosswalk markings and joined pedestrian signal phasing at intersections (Kourouma, 2024). Additional measures include protected left-turn signals, traffic calming near schools, rural road safety enhancements such as safety edges and improved shoulder maintenance (Kourouma, 2024; City of Ottawa, n.d.-b). Technology-based improvements, including cycling detection enhancements and the Amber Lock traffic signal feature, are also being implemented to improve safety for cyclists (Kourouma, 2024).

Evaluation: Collision data, program outputs and performance indicators are analyzed to determine whether engineering, education and enforcement measures are achieving intended road safety outcomes (CIMA, 2019b). Road safety audits are conducted on city transportation projects to identify potential safety risks (Kourouma, 2024; City of Ottawa, n.d.-b). Pilot initiatives, such as ASE on high-speed corridors and cycling detection technologies, are also evaluated to guide future implementation and improvements to road safety programs (Kourouma, 2024; City of Ottawa, n.d.-b).

Key stakeholders

Key partner agencies who were a part of the development of the RSAP include the City of Ottawa, Safer Roads Ottawa team, the Steering Committee, the Internal Working Group (Ottawa Police Services, Ottawa Public Health, Transportation Services and Traffic Services) and the Stakeholder Committee (Bike Ottawa, Ottawa Safety Council, MADD Canada and many others). Members of the Steering Committee include Chief, Ottawa Fire Services; Chief, Ottawa Paramedic Service; Chief, Ottawa Police Service; Medical Officer of Health, Ottawa Public Health; General Manager, Transportation Services Department; and Regional Supervising Coroner (CIMA, 2019b).

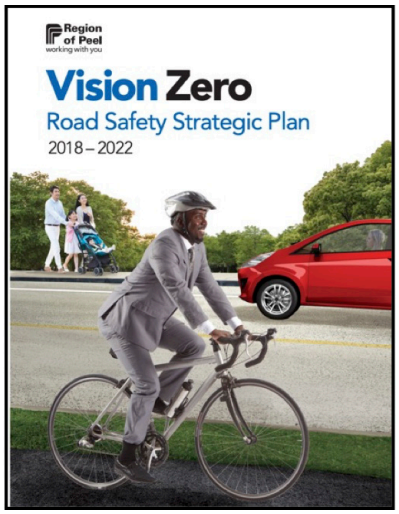
Peel Region, Ont.

Background

Peel Region is a municipality in southern Ontario that encompasses the City of Brampton, Town of Caledon and City of Mississauga (Region of Peel, 2018). According to the 2021 census, Peel Region has a population of 1,451,022, up five per cent since 2016, and a population density of 1,163.2 per square kilometre (Statistics Canada, 2023ae). Of a 25-percent census sample, 85 per cent mainly commuted to work by car, truck or van, followed by 10.3 per cent by public transit (Statistics Canada, 2023ae).

Between 2018 and 2022, the average total collision rate on regional roads increased by five per cent compared to the 2017 baseline (Dedman, 2025). During the same five-year period, the combined fatal and injury collision rate declined by 30 per cent. The fatal collision rate, however, increased slightly by seven per cent. In 2024, the total collision rate increased by 18.7 per cent and the combined fatal and injury collision rate increased by 21 per cent compared to the 2023 baseline year. The fatal collision rate decreased by 27.8 per cent in 2024 relative to 2023 (Dedman, 2025).

Road Safety Strategic Plan, 2018-2022



In December 2017, Peel Region adopted Vision Zero and approved the **Vision Zero Road Safety Strategic Plan (RSSP) (2018 -2022)** in September 2018 with a goal of decreasing fatal and injury collisions on regional roads by 10 per cent by 2022 (Dedman, 2025). Peel's RSSP is structured around six emphasis areas, or characteristics associated with the largest groups of collisions on regional and local roads (Region of Peel, 2018). These are: intersections, aggressive driving (encompassing behaviours such as speeding and tailgating), distracted driving, impaired driving, pedestrian collisions and cyclist collisions (Region of Peel, 2018). In the RSSP action plan, each emphasis area is matched to one or more of the four Es outlined in the plan (Engineering, Education, Enforcement and Empathy) (Region of Peel, 2018). Altogether, the plan includes more than 100 countermeasures that directly counteract the frequency and severity of collisions (Region of Peel, 2018). Peel Region is currently developing an updated RSSP for 2024-2028 (Dedman, 2025).

Key features of the plan

Education: Education initiatives identified in the plan include public education campaigns on distracted driving, impaired driving, aggressive driving and speeding, school zone safety programs, pedestrian safety campaigns, cycling safety campaigns, bike rodeos and roundabout education and outreach (Region of Peel, 2018). The plan also highlights community outreach programs targeting children, older adults, cyclists and pedestrians, as well as partnerships with schools and community organizations to deliver road safety education. These measures are designed to improve awareness of high-risk behaviours, encourage safe road use and support active transportation options.

Enforcement: Enforcement countermeasures focus on reducing unsafe behaviours and ensuring compliance with traffic laws. The strategy includes Automated Speed Enforcement (ASE), red-light cameras, the Eliminating Racing Activities on Streets Everywhere (E.R.A.S.E.) program, Operation Corridor targeting aggressive truck driving and targeted police campaigns for distracted driving, impaired driving and speeding. Enforcement initiatives are often coordinated during high-risk periods and focus on behaviours most commonly associated with serious injury and fatal collisions.

Engineering: Many engineering measures are listed in the plan. Some measures include installing roundabouts, pavement marking improvements, street lighting improvements, community safety zones, traffic calming measures, intersection safety improvements, pedestrian crossovers and refuge islands, median installations and improved signal timing for pedestrians and cyclists. These interventions are intended to reduce vehicle speeds, improve visibility and provide safer conditions for pedestrians, cyclists and motorists.

Empathy: Empathy is highlighted as an essential element of road safety, emphasizing the importance of recognizing and respecting the needs and experiences of other road users. Countermeasures include communication campaigns highlighting the human impact of collisions, public messaging that encourages respectful interactions among drivers, cyclists and pedestrians, and initiatives promoting shared responsibility for road safety. By fostering empathy, these measures aim to create a road culture where users consider the safety of others in their daily decisions (Region of Peel, 2018).

Key stakeholders

Key partners in Peel Region's RSSP include Region of Peel, Peel Public Health, the City of Brampton, Town of Caledon, City of Mississauga, Regional Municipality of York, Peel Regional Police, OPP, MTO, Mississauga Cycling Advisory Committee, Bike Brampton and Brampton Cycling Advisory Committee, Road Today, CAA, MADD, MiWay and

Brampton Transit (Region of Peel, 2018). A Vision Zero Task Force will help to oversee the RSSP through activities such as securing funding, conducting research into new interventions and making periodic adjustments to the plan. This group includes partner agencies listed above and may in the future include other interested and/or influential stakeholders such as school boards. A separate Technical Advisory Committee will deliver countermeasures and will include municipal, enforcement and provincial representation (Region of Peel, 2018).

What the region has to say

Interview with Matthew Aymar, Analyst, Research and Policy, Region of Peel

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

MATTHEW AYMAR: The Vision Zero Road Safety Strategic Plan has been in place from 2018 to 2022. The vision is to eliminate all traffic fatalities and severe injuries, with a short-term goal of a 10 per cent reduction by 2022, while increasing safe, healthy and equitable mobility for all road users.

PARACHUTE: What major activities are you undertaking to meet these goals?

MATTHEW AYMAR: The plan includes data-driven safety analysis, infrastructure improvements, public education campaigns, enforcement strategies and collaboration with stakeholders to implement safety countermeasures.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

MATTHEW AYMAR: The plan emphasizes protecting vulnerable road users such as pedestrians and cyclists by prioritizing safety improvements in high-risk areas and ensuring equitable access to safe transportation. The region is also participating in the province's ASE program and is implementing community safety zones to protect school-aged children.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

MATTHEW AYMAR: Key stakeholders include municipal governments, law enforcement, public health agencies, transportation planners, road safety practitioners and community organizations. Engagement was achieved through consultations, workshops and collaborative planning sessions.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

MATTHEW AYMAR: Yes, the strategy involves a multi-disciplinary committee, known as the Region's Vision Zero Taskforce, composed of representatives from transportation from all the municipalities in the region, law enforcement, public health and community advocacy groups.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

MATTHEW AYMAR: Yes, the plan includes a dedicated budget for implementing safety improvements, conducting public outreach and evaluating program effectiveness.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

MATTHEW AYMAR: The plan uses collision data and injury statistics to measure progress. Success is evaluated through reductions in fatalities and injuries on a per capita basis, and improvements in safety metrics over time.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

MATTHEW AYMAR: Yes, factors such as urban growth, demographic diversity, varying transportation modes, Peel's trucking and logistics industry, and the urban and rural nature of the municipalities were all considered in planning for Vision Zero.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

MATTHEW AYMAR: The program has seen increased stakeholder engagement, expansion of safety projects (ASE, red-light camera), and integration of Vision Zero principles into broader transportation planning. The region has also started a Fatal Collision Working Group, which reviews all fatal collisions in Peel and discusses strategies to mitigate collision risk.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

MATTHEW AYMAR: The Vision Zero Road Safety Strategic Plan (2018-2022) saw a reduction in fatal and injury collisions by 43 per cent in 2022 compared to 2017. The five-year average for each emphasis area also saw reductions across the board. Successes include the implementation of traffic calming measures, increased public awareness and early signs of reduced collision rates in targeted areas.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

MATTHEW AYMAR: Challenges include securing sustained funding, co-ordinating across multiple agencies and overcoming public resistance to changes in road design.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

MATTHEW AYMAR: Start with strong leadership commitment, use data to guide decisions, engage the community early and prioritize equity and vulnerable users.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

MATTHEW AYMAR: Future goals include expanding the scope of safety interventions, enhancing data analytics capabilities and achieving measurable reductions in traffic fatalities and serious injuries.

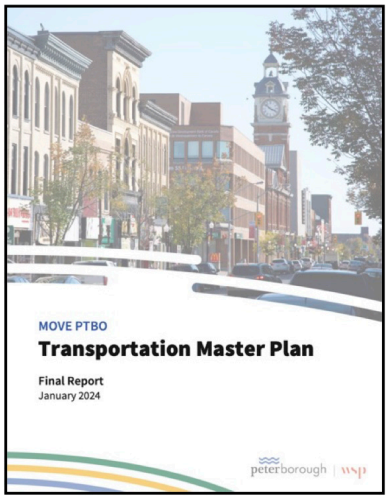
Peterborough, Ont.

Background

The City of Peterborough has a population of 83,651, according to the 2021 census, a 3.2-per-cent increase compared to 2016 (Statistics Canada, 2023ah). Peterborough has a population density of 1,291.8 people per square kilometre (Statistics Canada, 2023af). Of a 25-per-cent census sample, 85 per cent mainly commuted to work by car, truck or van, followed by 7.7 per cent who walked to work (Statistics Canada, 2023af).

Each year, the City of Peterborough experiences an average of 1,542 vehicle collisions, of which 95.5 per cent involve cars and trucks, while 2.7 per cent involve pedestrians and 1.8 per cent involve cyclists (City of Peterborough, 2024). Total collisions in the city increased each year from 2014 to 2018. Collisions declined in 2019 and dropped significantly in 2020, largely due to reduced driving during COVID-19 restrictions (City of Peterborough, 2024).

Move PTBO: Transportation Master Plan (2024)



In January 2024, the City of Peterborough endorsed a new Transportation Master Plan, which includes the Road Safety Strategy (City of Peterborough, 2024). The City of Peterborough Road Safety Strategy shifts away from an automobile-centric city to safer, more sustainable and fiscally responsible road use planning. Co-ordination between transportation and land-use policy is a key feature of the plan. The target of the Road Safety Strategy is to reduce traffic-related fatalities and serious injuries by 50 per cent over the next 10 years, to achieve a 0.5 per cent killed or seriously injured (KSI) ratio by 2031. The city has adopted the Safe System Approach (SSA) and integrates five of the Es of mobility safety: Engineering, Enforcement, Education, Evaluation and Engagement. The plan also outlines five emphasis areas:

- Safe school zones
- Safe neighbourhoods
- Safety for vulnerable road users
- Safe corridors
- Safe intersections

Key features of the plan

The City of Peterborough outlines specific measures under three of the Es of mobility safety: Education, Enforcement and Engineering. Evaluation and Engagement activities are referenced throughout the plan but are not included as specific measures.

Education: The strategy proposes several education initiatives to improve road safety awareness and behaviour. These include expanding outreach through the Active School Travel Peterborough program to promote safe walking and cycling to school and developing school area traffic management plans to better manage parking, pick-up and drop-off areas, school bus loading zones and safe routes for students (City of Peterborough, 2024). Additional measures include establishing community safety zones and expanding radar speed monitoring signs to increase awareness of speed limits. Education campaigns will also address distracted and aggressive driving, with programs targeting both the general public and new drivers. Pedestrian safety initiatives, such as the Walk Safe program, will focus on raising awareness about safe crossing practices, distracted walking and the challenges pedestrians face when crossing busy roads, while highlighting existing safety measures and implications for violations such as failing to comply to instructions from a crossing guard.

Enforcement: The plan outlines several enforcement measures to improve road safety. These include establishing default 40 km/h speed limits in school zones, introducing community safety zones that allow for double fines and enhancing parking enforcement in school areas during school hours. The city also plans to pilot default 40 km/h speed limits on all local roads and had planned to explore Automated Speed Enforcement (ASE) in school zones and neighbourhood community safety zones prior to the Ontario provincial ban. Additional measures include the Safe Under 7 program, which would issue fines to vehicles travelling more than 7 km/h over the posted speed limit instead of the standard 15 km/h threshold. Other actions include ongoing speed monitoring, targeted enforcement based on observed trends and expanded distracted driving enforcement. The plan also proposes investigating the feasibility of red-light cameras and monitoring emerging connected vehicle technologies to support future collision prevention efforts.

Engineering: Engineering measures outlined in the plan include enhanced signage, pavement markings and ladder-style crosswalks in school zones to increase visibility and awareness. The city also plans to establish an annual traffic calming program, accelerate the construction of missing sidewalks and expand the use of radar speed and driver feedback signs. Additional measures include implementing controlled pedestrian crossings on arterial roads, updating road and intersection design standards to incorporate complete streets and safe system principles, and undertaking targeted intersection and arterial road improvements. The plan also proposes reviewing traffic signal timing strategies, implementing access management policies

for arterial roads to reduce traffic conflicts and exploring connected vehicle technologies to support future road safety initiatives (City of Peterborough, 2024).

Key stakeholders

Key stakeholders involved in the development of the new Transportation Master Plan and Road Safety Strategy include representatives from municipal, provincial and federal governments, Indigenous communities, transportation users, elected officials, local residents and other agency partners (City of Peterborough, 2024). Stakeholder consultation took place in four phases, comprising six Technical Advisory Committee Meetings (city and county staff), five Steering Committee Meetings (city and county staff and county elected officials), five Community Working Group meetings, three Public Information Centres and three public surveys with more than1,300 respondents (City of Peterborough, 2024).

Québec

Background

The Province of Québec has a population of 8,501,833, according to the 2021 census. The population has increased by 4.1 per cent since 2016, leading to a population density of 6.5 people per square kilometre (Statistics Canada, 20239ag). Of a 25-per-cent census sample, 82.4 per cent mainly commuted to work by car, truck or van, followed by nine per cent who used public transit (Statistics Canada, 2023ag).

In 2024, there were 1,276 serious injuries and 379 fatalities recorded on Québec provincial roadways (SAAQ, 2025). Of the 379 fatalities recorded, 80 were pedestrians, representing a 24.6-per-cent increase from the 2019 to 2023 annual average of 64 (SAAQ, 2025).

Based on 2023 data, Québec's traffic fatality rate is 4.3 per 100,000 population, below the Canadian average of 4.9 (Transport Canada, 2025). The rate is higher than in Ontario (3.9) and Nunavut (2.5) but lower than in all other provinces and territories. In the same year, Québec recorded an injury rate of 317.1 per 100,000 population, above the national average of 296.5. Provinces and territories with higher injury rates than Québec include Newfoundland and Labrador, Nova Scotia, Manitoba, Saskatchewan, Alberta and Yukon (Transport Canada, 2025).

Plan d'action en securité routière (Road Safety Action Plan), 2023-2028

The Government of Québec released their **Sustainable Mobility Policy 2030** in 2018, with the goal of improving road safety in the province. Within the policy, the province officially adopts Vision Zero, outlining a target of achieving a 25-per-cent reduction in the number of fatal and serious injury collisions by 2030 compared to 2017 levels (Government of Québec, 2018). The government released two supporting documents alongside this policy in 2019, including the **Road Safety Intervention Framework** which supported the development of the province's first Road Safety Action Plan, released in 2021 (Government of Québec, 2019).

In August 2023, the Government of Québec announced it would be embarking on a five-year plan to increase road safety based on Vision Zero

and the Safe System Approach (SSA) (Government of Québec, 2023a). The current **Plan d'action en sécurité routière 2023-2028** outlines six themes and 27 measures to increase the safety of roads, specifically in vulnerable locations, such as school zones and construction sites (Government of Québec, 2023b).

Key features of the plan

All features come from the source Government of Québec, 2023b.

Safe land use planning: Québec's Road Safety Action Plan acknowledges the critical role of municipalities who are responsible for 80 per cent of Québec's road network and promotes integrating transportation planning with urban development to improve road safety. The plan supports municipalities through financial programs (e.g., TAPU, PAFFSR, PAVL) and encourages land-use decisions that reduce reliance on motorized travel and enhance safety for vulnerable users. It also commits to creating tools to help municipalities align land use and transportation planning with mobility and safety goals.

Safe speeds: The plan proposes lowering speed limits to 30 km/h in school zones at all times and revising penalties for speeding near vulnerable users. Automated photo radar enforcement will expand, especially near schools and work zones, supported by legal reforms. The province emphasizes credible speed limits matched to road context and visibility, reinforced by engineering and enforcement.

Safe vehicles: While vehicle design is federally regulated, Québec promotes the uptake of safer technologies, such as photo radar, variable speed signage and intelligent systems for trucks and heavy vehicles. Québec is exploring incentives and standards to support the use of safer fleets.

Safe road users: The plan seeks to addresses unsafe behaviours such as distracted and dangerous driving through targeted awareness campaigns and revised penalties. Vulnerable road users – especially children, older adults, and people with disabilities – are prioritized through infrastructure, education and regulation. School crossing guards, safety education tools and training programs for road workers are all expanded. Municipalities are also supported by the province to lead local road safety engagement.

Safe road design: Québec's plan focuses heavily on adapting road infrastructure to protect all users, particularly vulnerable groups. It proposes mandatory safe design of school zones, pedestrian corridors and intersections using measures such as raised crosswalks, traffic calming and protected cycling paths. Updated design standards will incorporate pedestrian- and senior-friendly infrastructure. A municipal design guide will also be created to support safer road layouts province-wide.

Post-crash care: The plan includes striving for stronger data collection, crash diagnostics and analysis of safety in school zones and work zones. This data will help municipalities assess risks and prioritize interventions. Québec also aims to support emergency response through better co-ordination, communication and surveillance systems. Enhanced protocols and radar technology will seek to improve response times and inform long-term prevention efforts.

Key stakeholders

Key stakeholders supporting Québec's provincial road safety plan include the Ministère des Transports et de la Mobilité durable (MTMD), Société de l'assurance automobile du Québec (SAAQ), Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) and Ministère des Affaires municipales et de l'Habitation (MAMH). Other partners involved include municipal governments, police services, school boards, health and social services agencies, and organizations representing road users, workers and the private sector (Government of Québec, 2025).

Regina, Sask.

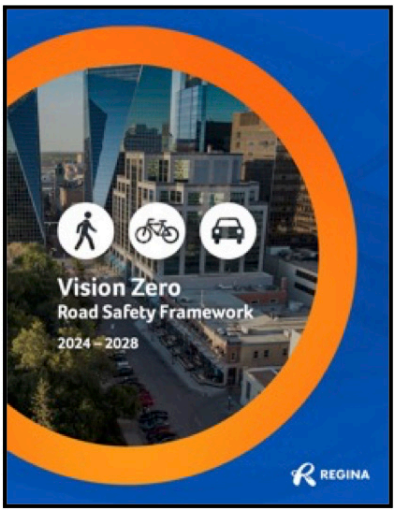
Background

According to the 2021 census, the City of Regina has a population of 226,404, an increase of 5.3 per cent since 2016. Regina has a population density of 1,266.2 per square km (Statistics Canada, 2023ah). Of a 25-per-cent census sample, 90.2 per cent mainly commuted to work by car, truck or van, followed by 3.6 per cent who used public transit and 3.6 per cent who walked (Statistics Canada, 2023ah).

Traffic collision data in Regina shows some fluctuation over 2022 to 2024, with total collisions rising in 2024 while injuries declined slightly compared with previous years (Saskatchewan Government Insurance [SGI], 2024). The city recorded 4,644 collisions, 1,117 injuries and three deaths in 2022, including 64 pedestrian collisions (63 injuries, zero fatalities) and 39 cyclist collisions (37 injuries, two fatalities) (SGI, 2022). In 2023, collisions decreased to 4,527 but injuries rose to 1,122 and fatalities increased to five; that year included 87 pedestrian collisions (82 injuries, four fatalities) and 45 cyclist collisions (41 injuries, one fatality) (SGI, 2023). By 2024, collisions increased to 5,026 while injuries fell to 981 and fatalities dropped to four. That year also saw 80 pedestrian collisions (74 injuries, three fatalities) and 43 cyclist collisions (39 injuries, no fatalities) (SGI, 2024).

Regina's Vision Zero Road Safety Framework, 2024-2028

The City of Regina's five-year **Vision Zero Road Safety Framework (2024-2028)** was approved by council in 2024 with a target of reducing killed or seriously injured (KSI) collisions by at least 10 per cent over the next five years. Regina's strategy employs the Safe System Approach (SSA) to address five key areas of concern: intersection collisions, vulnerable road users, aggressive driving, distracted driving and impaired driving. Key focus areas were informed by partner agencies and previous collision data. An evaluation will occur after the plan has been completed in 2028 to identify successes and areas for future improvement (City of Regina, 2024).



Key features of the plan

Education and engagement: The framework includes 52 initiatives in this category, including school road safety education programs, distracted driving education campaigns and public awareness initiatives encouraging drivers to report impaired driving (City of Regina, 2024). Other engagement strategies include promoting MADD programs that support victims and survivors of impaired driving and initiatives that inform residents about safe driving practices and changes to roadway conditions. The City of Regina also provides free public transit on New Year's Eve as part of their strategy to reduce impaired driving (City of Regina, 2024).

Enforcement: Enforcement countermeasures aim to improve compliance with traffic laws through both police-led and automated enforcement strategies. The plan includes 23 enforcement measures targeting key risk factors such as speeding, distracted driving and impaired driving. Examples include Automated Speed Enforcement (ASE), red-light camera programs and targeted enforcement campaigns focusing on high-risk locations and times of day. Construction zone enforcement and initiatives that prioritize enforcement against impaired or distracted drivers are also included.

Engineering: The framework includes 39 engineering actions such as enhancing zebra crosswalk markings, adding active transportation facilities, installing bicycle conflict zone pavement markings and implementing neighbourhood traffic calming measures. Additional infrastructure improvements include rumble strip pilot projects, upgraded guide rails, enhanced pavement markings and adjustments to traffic signal timing and intersection controls. These changes are intended to create safer road environments, particularly at intersections and for vulnerable road users such as pedestrians and cyclists, by making streets more predictable and safe (City of Regina, 2024).

Key stakeholders

Key stakeholders in Regina's plan include SGI, Regina Police Service, CAA , Saskatchewan Health Authority, Regina Fire Services, MADD, Regina Public Schools, Regina Catholic Schools, Work Safe Saskatchewan, the Saskatchewan Safety Council, Nēwo-Yōtina Friendship Centre, Saskatchewan Parks and Recreation Association, First Nations University of Canada, Métis Nation Saskatchewan and the University of Regina (City of Regina, 2024).

What the city has to say

Interview with Derrick Scott, P.Eng., Senior Engineer, Roadways and Transportation, City of Regina

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

DERRICK SCOTT: Some of the motivating factors behind the adoption of Vision Zero were to follow the best practice of other municipalities, as well as a trend of pedestrian fatalities occurring annually.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

DERRICK SCOTT: Our Vision Zero Framework was adopted by City Council in spring 2024. The framework was approved with a five-year target of reducing the KSI by 10 per cent.

PARACHUTE: What major activities are you undertaking to meet these goals?

DERRICK SCOTT: We're updating development standards to ensure that new development incorporates safety as a fundamental design aspect, as well as introducing new complete streets guidelines and active transportation guidelines. The other major activity is to prioritize some capital projects to improve the safety of key intersections within the city.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

DERRICK SCOTT: Vulnerable road users are one of our five focus areas for countermeasures in the framework. Vulnerable road users have countermeasures that include but are not limited to:

- Development of active transportation design guidelines
- Expansion of active transportation facilities, both on and off street
- Bicycle conflict zone pavement markings
- Curb extensions, both temporary and permanent
- Leading Pedestrian Interval expansions
- Pedestrian and cyclist warning signs at high-risk locations
- Development of complete streets guidelines and standards
- Enhanced zebra crosswalks

- Median refuge islands
- Smart channel right turns
- Community safety zones
- Educational campaigns
- Cycling safety campaigns
- Right turn-on-red restrictions

Past practice had safety improvements identified through requests for service from the public. Vision Zero has put a greater emphasis on being proactive with identifying concerns. Key corridors throughout the city have been identified and prioritized based on risk to pedestrians including the number of collisions, speed of vehicles and gaps in controlled crossings. This is a data-driven process that helped identify high pedestrian corridors as well as corridors with underlying gaps and other safety concerns. A large focus on active transportation has also been focused on school sites where the new standard is to have any crossing within a school zone to be a zebra crossing by default. This is not governed by any public requests but by a focused initiative.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

DERRICK SCOTT: Key stakeholders include the Saskatchewan Government Insurance (provincial mandated vehicle insurer), City of Regina, Regina Police Service, CAA, Saskatchewan Health Region, Regina Fire Services, MADD, Regina Public Schools, Regina Catholic Schools, Work Safe Saskatchewan and the Saskatchewan Safety Council.

We engaged with them through several sessions to get information on what they are currently doing that is related to road safety and any areas that they have expansion plans for.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

DERRICK SCOTT: We have a Vision Zero Task Force, which comprises representatives from the City of Regina, the Saskatchewan Government Insurance, the Regina Police Service and the Canada Automobile Association. These groups have all identified countermeasures that they are leading.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

DERRICK SCOTT: We have a Vision Zero budget with an annual allotment of $1,150,000. Some of the countermeasures are picked up by expanding capital project budgets.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

DERRICK SCOTT: Review and compare KSI statistics throughout the years. Other measures of success include speed reduction from traffic calming measures and public perception of safety.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

DERRICK SCOTT: It is not unique to Regina, but our city is a heavily vehicular-dependent city where the vast majority of travel is done by vehicle. The residents are very sensitive to changes to their commute and any impacted access. Safety improvements that result in increased commute time are difficult to implement and require additional engagement regardless of the increased safety.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

DERRICK SCOTT: Since initiation there has been more inclusion of safety reviews into capital projects and also more questions around just replacing infrastructure like for like. This has caused better planning and co-ordination on projects.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

DERRICK SCOTT: The City of Regina was able to introduce a community safety zone where the speed limit was reduced in an active and walkable community. This community safety zone also incorporated traffic calming measures to increase pedestrian safety along a key commercial district. This work has resulted in increases to safety in the neighbourhood which has a history of pedestrian-involved collisions and fatalities.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

DERRICK SCOTT: One of the challenges that we have faced is a lack of resources allocated to the program.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

DERRICK SCOTT: It is important to gather information and data to support the costs and budgets associated with Vision Zero. Council will need to consider the benefits of the safety improvements against the additional costs. This can be completed using direct and societal costs of the KSI collisions.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

DERRICK SCOTT: We would like to see KSI collisions continue to decrease. We would also like to see the program continue to expand so that a member of the road safety team can be on the project team of all capital projects.

Saanich, B.C.

Background

The District of Saanich has a population of 117,735 per the 2021 census and has grown 3.1 per cent since 2016; its population density is 1,136.6 per square km (Statistics Canada, 2023ai). Of a 25-per-cent census sample, 77.2 per cent mainly commuted to work by car, truck or van, followed by 8.8 per cent who used public transit (Statistics Canada, 2023ai).

Between 2020 and 2024, ICBC reported 4,144 casualty collisions in Saanich, representing an average of approximately 829 collisions per year that resulted in serious injury or death (ICBC, 2025). Casualty collisions increased from 769 in 2020 to 843 in 2021, reaching a peak of 893 in 2022 compared with the lower collision levels observed during the earlier pandemic years. However, 2023 and 2024 showed a decline from this peak, with 801 and 838 casualty collisions recorded, respectively (ICBC, 2025).

Road Safety Action Plan (RSAP) 2024-2029

The District of Saanich Council first endorsed Vision Zero in February 2022, directing staff to develop an action plan in alignment with Vision Zero and the Safe System Approach (SSA) (District of Saanich, n.d.). Formally adopted in October 2024, Saanich's comprehensive **Road Safety Action Plan 2024-2029** (RSAP) prioritizes safe, healthy and equitable mobility for all users with a long-term vision of eliminating all traffic-related deaths and serious injuries (District of Saanich, n.d.). The plan outlines a target of reducing fatal and serious injury collisions by 50 per cent by 2030, which equates to an annual target of 12 or fewer serious injuries and fatalities. The RSAP is based on rigorous crash data analysis from ICBC and the Saanich Police Department, combined with global best practices and input from stakeholders and the community. The plan consists of nine primary actions led by the District of Saanich that have the greatest potential to achieve Vision Zero, along with 21 supporting actions that require more time to implement and rely on collaboration with road safety partners (District of Saanich, 2024).

Key features of the plan

Safe land use planning: Saanich is promoting the transition toward safer transportation options such as public transit, walking and biking. Key action items focus on prioritizing road safety in community plans and policy documents (Action 22) and encouraging increased transit ridership to reduce private vehicle use (Action 17). To increase transit ridership, Saanich will collaborate with BC Transit to introduce initiatives such as youth pass programs, affordable transit options for low-income residents and newcomers, contactless fare payment and trip-planning tools that provide reliable travel information. Other actions include minimizing the number of driveways on high volume streets in new plans and policies (Action 12) and improving sightline at intersections and driveways through policy and bylaw update as well as increased enforcement (Action 13) (District of Saanich, 2024).

Safe vehicles: Saanich is working with partners to advocate for safer vehicle design, while also supporting technological advancements that improve vehicle safety. These include features such as autonomous braking, speed limiters, safe exit assist, as well as reducing in-vehicle dashboard and entertainment functions and requisite bumper heights. Key actions include the transition to safer fleet vehicles (Action 19), prioritizing enforcement to ensure vehicles are roadworthy and safe to operate (Action 21) and advocating for safe vehicle changes to support enhanced road safety (Action 29).

Safe speeds: Speeding is the second-leading cause of collisions in Saanich, contributing to more than 10 per cent of all traffic collisions. Saanich is addressing safe speeds by implementing the Speed Limit Establishment Policy, which aims to reduce speeds around Saanich using speed limit reductions, traffic calming and enforcement to promote the safety of all road users. Other action items include the development of a Traffic Calming Policy & Program (Action 5) and reviewing speed limits to support reduced speeds especially near schools, community centres and seniors' facilities (Action 6).

Safe road users: The District of Saanich is promoting a culture of safety by encouraging behaviour change, supporting strong policies and enforcement and engaging the community in co-creating a safer, more supportive road environment for everyone. Road safety initiatives will be guided by an equity lens, ensuring fair and inclusive access to the transportation system and addressing the needs of groups that are disproportionately impacted by traffic-related injuries or face systemic barriers to safe mobility. Key actions for promoting safe road users include the continued prioritization of enforcement of impaired and distracted driving laws (Action 7) and collaborating with RoadSafetyBC to implement intersection safety cameras (Action 15).

Safe road design: By promoting reduced speed limits and minimizing potential points of conflict through thoughtful road design and planning, Saanich will build a transportation system that inherently reduces crash risk and severity. Key actions include the installation of safe infrastructure at priority locations identified by Network Screenings (Action 1) and building multi-modal streets that prioritize transit and infrastructure for walking, rolling and cycling (Action 2). The district also plans to target rural areas where pavement widths are narro, and the topography limits visibility and sightlines.

Post-crash care: The RSAP outlines plans to continue engaging with service providers and listening to how the district can best support them. Saanich will also be streamlining communication with healthcare workers and emergency service providers to ensure effective communication of important information that can save lives. Key actions include ensuring that emergency service facilities are located to allow efficient response (Action 23). This collective approach will strengthen advocacy and resource mobilization at all levels of government (District of Saanich, 2024).

Key stakeholders

Key road safety partners supporting the implementation of the RSAP include the Ministry of Transportation and Transit, the Capital Regional District (CRD), and neighbouring municipalities such as Victoria, Oak Bay, Esquimalt, View Royal, Central Saanich and Highlands. Additional partners include the Saanich Police Department (SPD), Vancouver Island Health Authority (VIHA), BC Injury Research and Prevention Unit (BCIRPU), BC Transit, Infrastructure Canada, Transport Canada, ICBC, RoadSafetyBC, School District No. 61 (Greater Victoria) and School District No. 63 (Saanich), the BC Highway Patrol (CRD Integrated Road Safety Unit), BC Emergency Health Services and the BC Ambulance Service, along with local community associations and advocacy groups (District of Saanich, 2024).

What the district has to say

Interview with Kathleen Gallagher, RPP, MCIP, Senior Transportation Planner, District of Saanich

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

KATHLEEN GALLAGHER: No, it was a general desire to have safer roads and improve design, but no specific incidents.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

KATHLEEN GALLAGHER: The Road Safety Action Plan (Vision Zero strategy) was adopted by council in October 2024. The vision for road safety is: "Saanich is leading the way as a community with a safe and accessible transportation system for all our residents and visitors, free of transportation-related fatalities and serious injuries." It is our mission to: "…work toward our ultimate vision of zero fatalities and serious injuries by aiming for a 50-per-cent reduction by 2030. To achieve this goal, we will work together with our partners and other levels of government and the public to prioritize, fund, implement and evaluate road safety initiatives using the Safe System Approach and a defined set of Guiding Principles."

PARACHUTE: What major activities are you undertaking to meet these goals?

KATHLEEN GALLAGHER: The District of Saanich is undertaking nine primary and 21 supporting actions to meet our Vision Zero goals.

Our nine primary actions:

- Installing safe infrastructure at priority locations identified by a Network Screening;
- Building multi-modal streets that include transit priority and infrastructure for walking, rolling, and cycling;
- Pursuing infrastructure solutions with demonstrated safety performance;
- Conducting a Saanich-wide crosswalk safety review;
- Developing a traffic calming policy and program;
- Reviewing speed limits to support reduced speeds;
- Continuing to prioritize enforcement of impaired and distracted driving laws;
- Carrying out road safety audits, and
- Improving safety at high crash locations on highways.

For detailed information on the 21 supporting actions, please refer to Saanich's Road Safety Action Plan, 2024-2029.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

KATHLEEN GALLAGHER: The district is committed to improving its programs and practices as they relate to diversity, equity and inclusion. It is guided by the principle that embracing diversity enriches the lives of all people and enhances the cultural fabric of the community. Transportation equity is focused on seeking fairness in the transportation system. It includes the fair distribution of transportation resources, inclusive participation in decision-making processes and recognition of the prevailing injustices that shape different levels of need and power within transportation systems.

Inspired by work undertaken by the Vision Zero Network, four broad strategies were established to address equity in road safety in Saanich.

- Continue to invest in sustainable transportation modes. Investing in sustainable transportation modes, including infrastructure to support active travel and transit, ensures that all people can exercise their right to travel safely in Saanich and participate in the social and economic life of our communities.

- Invest where needs are greatest. Road safety improvements are often focused on locations experiencing the highest number of crashes. While this should continue to be a key approach, consideration should also be given to prioritization based on need and the fair distribution of transportation infrastructure, including for equity-deserving people and neighbourhoods. This will ensure everyone, including our most vulnerable, are supported and road safety concerns are better addressed in underserved areas.

- Engage with a diversity of Saanich residents. Data are important, but they do not tell the full story. Assessing which needs are greatest requires data combined with conversations with Saanich residents. If done well, both the district and the community will better understand needs, uncover new informatio, and be empowered to continue supporting road safety improvements.

- Support enforcement along with other strategies. Vision Zero does not necessarily call for more traffic enforcement. Instead, the focus is broader and supports the SSA by considering not only traditional enforcement of safe road users and appropriate speeds, as examples, but also ensuring safe road design, safe vehicles, supportive land use planning and post-crash patient care.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

KATHLEEN GALLAGHER: Key stakeholders include the Ministry of Transportation & Infrastructure, Capital Regional District (CRD), neighbouring municipalities, Saanich Police Department (SPD), Vancouver Island Health Authority (VIHA), BC Injury Research and Prevention Unit (BCIRPU), BC Transit, Infrastructure Canada, Transport Canada, Insurance Corporation of British Columbia (ICBC), RoadSafetyBC, School District No. 61 & 63, BC Highway Patrol | CRD Integrated Road Safety Unit,

BC Emergency Health Services & BC Ambulance Service, community associations and advocacy groups.

A stakeholder workshop in 2023 and focused discussions held throughout the planning process provided opportunities for the project team to learn more about the roles of different road safety partners and the work they are engaged in to address road safety. This information was key in the development of the plan.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

KATHLEEN GALLAGHER: Yes, we have a Transportation Advisory Committee whose purpose is to advise Saanich Council and staff on matters relating to transportation policy, regulation and programming. Included in their scope is to advise on issues related to road safety that fall within a Safe System Approach.

The membership includes:

- A member of City Council to serve as Chair, appointed by the Mayor.
- A member of a Parent Advisory Group, preferably with experience in Safe Routes to School programming.
- A member with expertise in mobility of people with disabilities.
- A member with transit experience.
- A member who primarily uses active transportation for their daily activities.
- A member employed or with previous experience in the goods movement or taxi/ride-hail industry.
- A member with knowledge or experience in the fields of transportation planning or engineering.
- Where possible, a youth member, described as 16 to 24 years of age.
- Where possible, a senior member.
- Where possible, at least one member who is an Indigenous person.

We also have an Administrative Traffic Committee, which advises on issues relating to road safety and includes:

- One Council Member to serve as liaison, appointed by Council resolution

- Two Police Department representatives
- One Bylaw Enforcement Division representative
- Three Engineering Department Representatives (including the Director of Engineering, or his/her designate to serve as Chair)

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

KATHLEEN GALLAGHER: No, not at this time. We will continue to advocate for this.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

KATHLEEN GALLAGHER: Saanich is committed to implementing the RSAP over a 10-year timeframe. The following steps will be taken to monitor progress with implementation.

Annual reporting: Saanich will report annually on progress made on the actions identified in the RSAP. Reporting will include progress toward zero traffic fatalities and serious injuries, as well as and an assessment of residents' perceptions of safety on Saanich roads using different modes. It may also include updates on capital investments in road safety, policy and program initiatives, technical studies, partnerships and collaborations.

Progress reporting: A five-year review of the RSAP will be undertaken to identify completed actions, prioritize remaining action, and assess the overall success and impact of progress to-date. Updates to the RSAP and course corrections may be pursued to ensure Saanich remains on track to complete the RSAP action items and achieve the Vision Zero target in 10 years.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

KATHLEEN GALLAGHER: Some unique contextual factors are:

- Saanich is one of 13 municipalities within the Capital Regional District and shares boundaries with the Districts of Highlands and Central Saanich, the Juan de Fuca electoral area and the towns of View Royal, Esquimalt and Oak Bay. This means inter-municipal co-ordination is key.
- Saanich's median household after-tax income is $83,000, which is higher than the regional median of $75,000. In rural Saanich, the median household income is between $100,000 and $125,000 after tax.

- Saanich has a strict Urban Containment Boundary that it adheres to, with development only permitted within designated areas. Saanich has large amounts of rural land, with 51 per cent of its land being outside of the Urban Containment Boundary. Integrating urban and rural needs and viewpoints is a challenge associated with this context.

- The Capital Regional District's 2022 Origin-Destination Household Travel Survey provides data regarding all trip types and found that approximately 26 per cent of all trips in Saanich are made by walking (11 per cent), cycling and micro-mobility (eight per cent) and transit (seven per cent). These numbers are high for a Canadian municipality and create a unique context and demand for sustainable modes of transportation to be facilitated.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

KATHLEEN GALLAGHER: We are currently developing a Traffic Calming Policy to provide direction on the administration and implementation of traffic calming in Saanich.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

KATHLEEN GALLAGHER: The plan was adopted in October 2024, which was a success for our team, and the development of the Traffic Calming Policy is well underway.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

KATHLEEN GALLAGHER: Funding availability. Some residents see our projects and programs as being anti-vehicle.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

KATHLEEN GALLAGHER: We are still in the early days of implementation, so we may have some better advice in future years.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

KATHLEEN GALLAGHER: Through the implementation of this Road Safety Action Plan (RSAP), we are seeking to eliminate traffic fatalities and serious injuries while

ensuring safe, healthy and equitable mobility for everyone. As the Road Safety Action Plan to achieve Vision Zero is a 10-year plan, we should have achieved roughly half of our action items five years from now. A five-year progress report in 2029 will identify how to progress the program.

St. Albert, Alta.

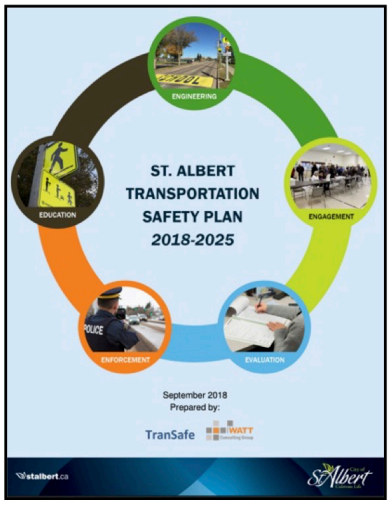
Background

St. Albert, Alta. is a small city in the Edmonton Metropolitan Region. The city has a population of 68,232 per the 2021 census, increasing by four per cent since 2016 (Statistics Canada, 2023aj). St. Albert has a population density of 1,426.4 per square kilometre. Based on a 25-per-cent sample, 92.1 per cent mainly commuted to work via car, truck or van, followed by 3.4 per cent who take public transit (Statistics Canada, 2023aj).

According to the St. Albert Arterial Roadways Collision Summary and St. Albert Neighbourhood Collision Summary, St. Albert experienced 4,611 collisions, 1,075 injuries and three fatalities between 2019 and 2024 (City of St. Albert, n.d.-a; City of St. Albert, n.d.-b). In 2019, the city recorded 967 collisions, resulting in 266 injuries and no fatalities. Collisions decreased substantially in 2020 to 615, with 143 injuries and one fatality. In 2021, collisions rose slightly to 635, while injuries declined to 131 and no fatalities were reported. By 2022, collisions increased further to 834, with 177 injuries and no fatalities. The upward trend continued in 2023, with 864 collisions and 191 injuries, though no fatalities were recorded. In 2024, collisions declined to 696, while injuries also decreased to 167, and two fatalities were reported (City of St. Albert, n.d.-a; City of St. Albert, n.d.-b).

St. Albert Transportation Safety Plan 2018-2025

In 2018, St. Albert included Vision Zero in their **Transportation Safety Plan 2018-2025** (D. Schick, personal communication, June 25, 2019). In the Transportation Safety Plan, the city explicitly references the goal of eliminating transportation related major injuries and fatalities (TranSafe et al., 2018). To achieve this goal, St. Albert leverages the Safe System Approach (SSA) and five of the Es of mobility safety (City of St. Albert, n.d.-c; D. Schick, personal communication, June 25, 2019; TranSafe et al., 2018).



In addition to the above, the plan leverages three additional frameworks. First, the plan supports the five pillars of sustainability, cited as "Social, Economic, the Built Environment, the Natural Environment and Culture" (TranSafe et al., 2018, p. i). Secondly, the plan seeks to realize its vision through the principles of integration, network, sustainability (of funding), protection of the most vulnerable, innovative, respect and evidence-based,

a.k.a. "INSPIRE" (TranSafe et al., 2018). Finally, the activities of the plan are organized by a framework of focus areas, which include intersections, vulnerable road users, vehicle speeds, distraction, young drivers and safer vehicles (via technology) (TranSafe et al., 2018). The target of the plan is to ensure "a year-to-year reduction in fatalities and injuries", with a view to eventually reaching zero fatalities and injuries (TranSafe et al., 2018, p. iii).

St. Albert's Transportation Safety Plan is directly supported by the **Transportation Safety Implementation Plan** that describes the activities specific to each road safety strategy, the partners involved in each and places the activities into a timeline (City of St. Albert, n.d.- c). Updated Network Screening results and budgets may cause the implementation plan to be revisited (City of St. Albert, n.d.-c).

The Transportation Safety Plan is also supported by a system of other transportation-network-related plans that all reinforce the idea of road safety as a priority (D. Schick, personal communication, June 25, 2019). For example, St. Albert's Complete Streets Guideline and Implementation Strategy 2018 proposes to improve safety by designing streets for all types of road users and for the intended posted speed limit (City of St. Albert, 2023). Another example is St. Albert's Intelligent Transportation Systems Strategic Plan 2018, which emphasizes the support of the Transportation Safety Plan's goal of zero fatalities or serious injuries "as a priority" through innovative growth and improvement of the transportation network and will help facilitate data gathering for network screening (Associated Engineering Alberta Ltd. & City of St. Albert, 2018; D. Schick, personal communication, June 25, 2019).

Key features of the plan

Data collection and analysis: The City of St. Albert maintains a database of reportable collisions occurring on both public and private roadways and produces annual reports summarizing incidents on public roadways. A reportable collision is defined as any incident resulting in property damage of $5,000 or more, an injury or a fatality. Collision information is collected by the RCMP, submitted to the provincial government and shared with the city through Alberta Transportation and Economic Corridors. The data presented in the St. Albert Arterial Roadways Collision Summary and St. Albert Neighbourhood Collision Summary dashboards reflect the information available at the time of reporting and may be revised as police investigations continue (City of St. Albert, n.d.-d).

Education: St. Albert's website includes educational resources for road users with respect to speed limits, driving and sharing the road with commercial vehicles, riding and sharing the road with motorcyclists and pedestrian safety (City of St. Albert, 2022a; City of St. Albert, 2022b; City of St. Albert, 2022c; City of St. Albert, 2022d). Education also encompasses activities in the community; an example is the Speed Awareness Program, which uses a radar-equipped trailer to capture and

display road user speeds in areas such as playgrounds and construction zones (City of St. Albert, 2022d). As part of the Transportation Safety Plan, the city intends to look at public education around distracted driving, impaired driving, free-flow right-turn lanes, sharing the road with cyclists and other relevant topics for all types of road users (TranSafe et al., 2018).

Enforcement: St. Albert employs photo enforcement and red-light cameras, and both the criteria for installing photo enforcement sites and their locations are made transparent to the public (City of St. Albert, 2026; City of St. Albert, 2025). As part of the Transportation Safety Plan, enforcement measures will be used to address issues such as distracted driving and red-light violations (City of St. Albert, n.d.-c; TranSafe et al., 2018). The city also continues to review policies and bylaws, e.g., around school zones, parking near crosswalks and speed limits for neighbourhood roadways (TranSafe et al., 2018).

Engagement: To create an appropriate and acceptable Transportation Safety Plan, the City of St. Albert first engaged both internal and external stakeholders (TranSafe et al., 2018). In the future, further engagement of the public will take place on issues such as neighbourhood traffic calming. Other methods of ongoing engagement include promotion of safe driving phone applications (TranSafe et al., 2018).

Engineering: Examples of engineering interventions proposed by the city's Transportation Safety Plan include gateway treatments for transitions to slower-speed areas, appropriate signage for grade crossings of the rail line, separated bicycle lanes, installation of pedestrian countdown signals and accessible pedestrian signals at priority intersections, among others. Roadway design standards will also be revisited, taking the city's Complete Streets Guidelines into account (TranSafe et al., 2018).

Evaluation: Information from network screening in St. Albert can be used to facilitate road safety evaluations, e.g., related to contributing factors to collisions, or to gaps in active transportation routes. Other proposed evaluation activities include the creation of a safety model made up of linked collision data, mapping data and hospital or ambulance data. Finally, evaluations may be conducted to better understand the efficacy of specific activities or pilot projects, such as St. Albert's neighbourhood traffic calming program, curb extensions and speed display signs (TranSafe et al., 2018).

Key stakeholders

Key internal stakeholders include the departments of Municipal Enforcement, Corporate Communications & Design, Community & Social Development, St. Albert Transit, Recreation and Parks, Economic Development, Development Services, Public Works, Planning and Development, Capital Projects, Fire Services, Transportation Branch

– Engineering Services, and the RCMP Traffic Services Units (Dean Shick, personal communication, July 2025). When developing its Transportation Safety Plan, St. Albert looked to Alberta's Traffic Safety Plan 2015, as well as best practices from 11 Canadian municipalities and some international municipalities (TranSafe et al., 2018). St. Albert also aligns its knowledge campaigns with the Province of Alberta's monthly calendar (TranSafe et al., 2018).

External stakeholders are Alberta Health Services (AHS), Alberta Motor Association (AMA), Alberta Motor Transport Association (AMTA), Alberta Transportation (Office of Traffic Safety), Canadian National Institute for the Blind (CNIB), CN Rail, St. Albert and District Chamber of Commerce, Sturgeon School Division, Greater North Central Francophone Education Region No. 2 18, St. Albert Transportation Safety Plan 2018 – 2025, Land Developers, and representative for bicycles. Additional stakeholders were asked to be part of the project but did not partner during the plan development (D. Shick, personal communication, July 2025).

What the city has to say

Interview with Dean Schick, Transportation Manager, City of St. Albert

PARACHUTE: How long has your Vision Zero strategy been in place, and what are its goals?

DEAN SHICK: St Albert developed its Transportation Safety Plan in 2018: the plan's vision is "a community working together so your family arrives safely." The plan's objective is to aggressively pursue a set of strategies (in partnership with others, where appropriate) that will minimize the risk of fatality and injury on our roads and culminate in their eventual elimination. The focus of the Transportation Safety Plan is on injury and fatal collisions.

PARACHUTE: What major activities are you undertaking to meet these goals?

DEAN SHICK: Since 2018, the city has completed many initiatives, inclusive but not limited to:

- Improved network screening focus (annual), which has been used to inform the development of in-service safety review programs to assess and deliver on safety improvement recommendations of intersections.

- From in-service safety review recommendations, intersection improvements have been delivered through a dedicated capital project funding program.

- Increased intersection redesign work has occurred to deliver roundabouts at some key intersection points and redesign of right turn channels to smart channel turns.

- A network speed review was completed.
    - This resulted in a quantifiable recommendation to reduce speeds in neighbourhoods (from 50 km/h to 40 km/h).
    - Within this study was a review of all Playground and School Zones throughout the city, which resulted in some time-of-day changes to reduced speeds and capture of additional zones.
- Implementation of neighbourhood traffic calming programs
- Pedestrian safety improvements, including:
    - Safety messaging campaigns: Push, Point, Pause and Proceed
    - Pedestrian crossing improvements with warning flashers
    - Introduction of leading pedestrian intervals at crossings
- Before the provincial changes, photo enforcement was used in problem areas of speed violations.
- Rail crossing safety improvements have been implemented at all at-grade rail crossings.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

DEAN SHICK: Vulnerable road users were identified explicitly within the Safety Plan as a focus area, along with intersections, vehicle speeds, distraction, young drivers and safer vehicles.

PARACHUTE: Who are your key stakeholders, and how did you engage them in developing and implementing your Vision Zero strategy?

DEAN SHICK: Internal stakeholders (to the city) were engaged through workshops and external stakeholders were invited to complete a survey/questionnaire. No direct consultation with the public was performed, and three key factors contributed to this decision:

- **Previous consultation** – Significant consultation was conducted as part of the Transportation Master Plan and the Transportation Safety Plan is based on its outcomes. Feedback received as part of the Transportation Master Plan has been considered during the development of this plan.

- **Evidence-based approach** – The preparation of the first Transportation Safety Plan for the City of St. Albert has relied largely on data and collision trending in the city. Further focus on strategies aligned with what has been proven to be successful in St. Albert or other jurisdictions.

- **Future consultation** – Consultation with the public will be included as part of the implementation of many of the projects within the Transportation Safety Plan as well as the development of future Transportation Safety Plans.

For a list of the City of St. Albert's internal and external stakeholders, please refer to the "Key stakeholders" section in the plan above. Note that additional external stakeholders were asked to be part of the project but did not partner during the plan development.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee, and what players is that composed of?

DEAN SHICK: No. We have a Traffic Safety Committee internally to the city that is composed of Engineering, Enforcement and Communications staff.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

DEAN SHICK: No. Actions/strategy funding is within other programming, such as intersection improvements, traffic calming or transportation systems management.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

DEAN SHICK:

- Annual network screening is performed; however, there are no specific assessments of individual strategies.

- Success is focused on the reduction of severe collisions and a "no fatality" focus.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

DEAN SHICK: None to speak of.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

DEAN SHICK: One success is that the majority of priorities and strategies of the Safety Plan and its supplemental Implementation Plan have been enacted from 2018 to 2025.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

DEAN SHICK:

- Funding restrictions are a consistent barrier, where other municipal priorities of capital investment exist.

- Being a smaller community, high volume occurrences of safety problems (collisions) don't occur, so the "cost/benefit" may be lower, and a "proactive" approach is not always recognized for funding priority.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

DEAN SHICK: It is more than a statement; it is an objective that requires resources and an action plan.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

DEAN SHICK: The city is in the process of completing an update to its Transportation Master Plan/Mobility Strategy. It is important that safety remain a priority and targeted strategic action area; however, many action items of the previous draft have been incorporated into the day-to-day operational or capital programming. Optimally, the city continues down the path to reduce severe collisions and achieve a zero-fatality rate from motor vehicle incidents.

Strathcona County, Alta.

Background

Strathcona County is an urban-rural mixed area in the Edmonton Metropolitan Region, with a population of 99,225 (Statistics Canada, 2023ak). The population has grown by 1.2 per cent between 2016 and 2021, and has a population density of 84.8 people per square kilometre. Of a 25-per-cent sample of the 2021 census, 89.4 per cent of individuals commuted to work mainly by car, truck or van, followed by 2.2 per cent who walked (Statistics Canada, 2023ak).

Between 2019 and 2024, the number of traffic-related fatalities have fluctuated. There were eight fatalities that occurred in 2019, seven in 2020 and five in 2021, before rising to 11 in 2022 and declining again to seven in 2023 (Hameed, 2019; Hameed, 2020; Hameed, 2021; Hameed, 2022; Hameed, 2023). Major injuries followed a different pattern. They declined from 31 in 2019 to 14 in 2020 and 12 in 2021, before increasing to 28 in 2022 and rising sharply to 66 in 2023, the highest number reported during this period (Hameed, 2019; Hameed, 2020; Hameed, 2021; Hameed, 2022; Hameed, 2023). The cost of these collisions altogether is estimated to be more than $400 million (Strathcona County, 2026).

Traffic Safety Strategic Plan 2020

In 2014, Strathcona County laid out its **Traffic Safety Strategic Plan 2020** (TSSP), following in the footsteps of the Government of Alberta (Strathcona County, 2014). The plan proposed 13 short-term and long-term strategies embodying five of the Es of mobility safety, with a specific strategy looking at older adults. The TSSP also set two targets, including the target of decreasing the annual rate of fatal and major injury collisions per 100,000 population by 15 per cent between 2018 to 2020 as compared to 2011 to 2013. The other target is to "…work co-operatively with Alberta Transportation staff to improve traffic safety and help meet provincial safety targets" for the provincial roads in Strathcona County (Strathcona County, 2014, p. i).

In 2022, Strathcona County released their updated **Integrated Transportation Master Plan 2022**. Within this document, the county outlines their commitment to updating the TSSP every 10 years to ensure road safety policies and strategies address current safety trends and apply these strategies within Strathcona County (Strathcona County, 2022).

As of 2021, nine of 13 strategies outlined in the TSSP had been developed and implemented (Rawson & Disciglio, 2021).

Key features of the plan

All plan features drawn from source Rawson & Disciglio, 2021.

Education: The county delivers road safety messaging through its website and social media channels, including targeted campaigns focused on priority issues such as school-zone safety, pedestrian awareness and seasonal driving risks. Educational messaging is also reinforced through the Traffic Safety Education Sign Program, which provides temporary signs reminding drivers to slow down in residential areas and near schools. Some traffic offenders may also participate in the county's "Option 4" program, which allows individuals to attend an educational session related to their traffic offence instead of paying a fine.

Enforcement: Traffic enforcement on county roadways is delivered through Enforcement Services, which includes Community Peace Officers, and is supported by RCMP General Duty watches. Enforcement activities include traffic stops, commercial vehicle inspections and targeted initiatives addressing high-risk driving behaviours such as speeding and impaired driving. The county also conducts neighbourhood-focused enforcement in areas where residents report traffic safety concerns, helping address localized issues such as speeding and other unsafe driving behaviours.

Engagement: Public engagement in Strathcona County has evolved over the past several years, with regular surveys providing insight into resident perceptions. The 2019 resident survey indicated that 90.3 per cent of residents rated traffic safety in the county as safe and 87.7 per cent agreed that Strathcona County is working to improve road safety.

Engineering: New arterial roads undergo road safety audits during the design phase, while collision data are analyzed to identify existing roads and intersections in need of improvements. In-service road safety reviews are conducted in areas with higher crash risk and recommendations from these reviews are implemented where appropriate. The county has also installed traffic calming measures and intersection safety improvements on targeted roads and neighbourhoods. Additionally, an Intersection Safety Action Plan guides the design and enhancement of intersections to improve overall safety.

Evaluation: Strathcona County monitors progress on traffic safety initiatives using collision data, resident survey results and other performance measures. As part of this process, the county continues to implement actions identified in the Intersection Safety Action Plan, including a detailed evaluation of the Intersection Safety Device (ISD) Program to assess its effectiveness in reducing speeding and red-light

violations. Trend data, program evaluations and public opinion help guide ongoing improvements to engineering, enforcement and education initiatives, ensuring that high-risk areas and intersections continue to receive targeted attention (Rawson & Disciglio, 2021).

Key stakeholders

Key stakeholders include Strathcona County's RCMP and Enforcement Services and the Planning, Engineering and Safety branch of Transportation Engineering and Operations. Other partners include Community Action on Residential Traffic Safety (CARTS), a group of local residents dedicated to improving safety and quality of life in their neighbourhoods by engaging the community to reduce residential traffic; the Strathcona County School Traffic Safety Partnership, which brings together local school boards; along with the RCMP and the county to address school-related traffic safety concerns (Strathcona County, 2026).

Surrey, B.C.

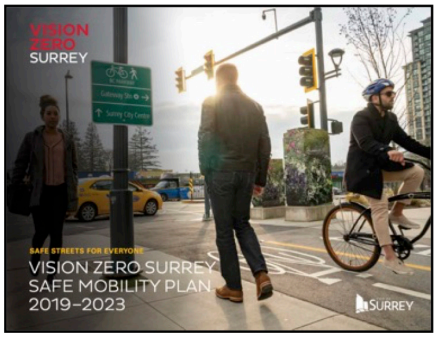
Background

The City of Surrey has a population of 568,322, according to the 2021 census, increasing by 9.7 per cent since 2016; its population density is 1,797.90 people per square kilometre (Statistics Canada, 2023al). Of a 25-per-cent census sample, 82.2 per cent mainly commuted to work by car, truck or van, followed by 13.1 per cent who used public transit (Statistics Canada, 2023al).

Each year, an average of 20 people are killed and 12,000 are injured on Surrey's roads (City of Surrey, 2021). Distracted driving is the leading cause of killed or seriously injured (KSI) collisions (33 per cent), followed by speeding (18 per cent) and impaired driving (16 per cent) (City of Surrey, 2019). Between 2019 and 2020, traffic volumes and total number of collisions decreased, including those involving vulnerable road users. While vulnerable road users represent only five per cent of commuter trips in Surrey, 50 per cent of traffic deaths involve vulnerable road users (City of Surrey, 2021).

Vision Zero Surrey Safe Mobility Plan (2019-2023)

In February 2019, the city officially launched the Vision Zero Surrey Safe Mobility Plan (2019-2023) and held British Columbia's first Vision Zero summit that brought together international experts to share their experiences (City of Surrey, 2019). The city's vision is to have "zero people killed and seriously injured on its roads and human life is valued above all else in the transportation network" (City of Surrey, 2019, p.4). The plan employs four elements of the Safe System Approach (SSA): safe speeds, safe vehicles, safe road users and safe road design. The plan also includes six areas of focus: pedestrians, cyclists, motorcyclists, intersections, high-risk driving and equity (City of Surrey, 2019). The strategy's overall target is to achieve a 15-per-cent reduction in the rate of killed or seriously injured road users per 100,000 population over five years (2019 to 2023).



Key features of the plan

Safe speeds: The City of Surrey manages speed through a combination of road design, enforcement, education and community engagement actions. Key interventions include Automated Speed Enforcement (ASE) in partnership with the Province of British Columbia and ICBC, speed limit reviews based on road geometry and surrounding land use, and traffic calming measures such as speed humps and

speed reader boards that display drivers' speeds to encourage compliance (City of Surrey, n.d.-a; City of Surrey, 2025). The city has also received increasing community requests for lower speed limits, particularly near schools, parks and residential areas. In response, the city is advancing a more comprehensive speed management framework that includes reducing many arterial road speed limits from 70 km/h to 60 km/h, lowering collector road limits from 60 km/h to 50 km/h, and assessing 30 km/h limits on key local bikeways and around schools and parks (City of Surrey, n.d.-a.; City of Surrey, 2025).

Safe vehicles: The Safe Mobility Plan outlines the city's commitment to working with partners to pilot technologies that help combat distracted driving by blocking incoming messages while a person is driving (City of Surrey, 2019). The city is also exploring the use of automated vehicles to better understand their potential impact on road safety. Additional initiatives include collaborating with Commercial Vehicle Safety and Enforcement (CVSE) to improve safety and regulatory compliance within the commercial transport sector, upgrading traffic signal controllers to support vehicle-to-infrastructure communication and improving safety features in the city's fleet vehicles through cross-departmental collaboration (City of Surrey, 2019).

Safe road users: The City of Surrey works closely with law enforcement partners to address high-risk behaviours such as distracted driving, speeding and impaired driving (City of Surrey, n.d.-b). High-visibility traffic enforcement is used to deter unsafe behaviour and encourage compliance with road safety laws. The city also publishes an annual Vision Zero Surrey progress report that analyzes road safety data and shares key findings with residents, partners and stakeholders to support transparency and informed action. In addition, the city delivers targeted road safety education and engagement campaigns in collaboration with partners, using local data and mapping to address high-risk locations and promote safer behaviours (City of Surrey, n.d.-b; City of Surrey, 2025).

Safe road design: Between 2022 and 2025, the city implemented hundreds of safety improvements across the road network to encourage safer speeds and more predictable travel behaviour (City of Surrey, 2025). These included 39 new traffic signals (25 full signals and 14 pedestrian signals), 10 roundabouts and traffic circles, 41 fully protected left-turn signals and five activated flashing crosswalks to improve pedestrian visibility. The city also installed 114 speed humps and 50 new crosswalks. More than 140 traffic signals now include LPIs, which is the highest number of any city in British Columbia. Infrastructure upgrades included 3,100 streetlight fixture upgrades to LED, seven kilometres of new sidewalks and 45 kilometres of protected cycling lanes. The city also conducts road safety reviews and data-driven analyses of high-collision intersections to guide targeted engineering improvements (City of Surrey, n.d.-c; City of Surrey, 2025).

Key stakeholders

Key stakeholders involved in the road safety plan include internal staff from across the City of Surrey, not-for-profit organizations, interest and community groups and Business Improvement Associations (BIAs) representing different neighbourhoods. Other stakeholders include the RCMP, Surrey Fire Services, ICBC, Surrey Schools, Fraser Health Authority, Coroners Service of BC, Road Safety BC, Provincial Health Services Authority and BCIRPU (City of Surrey, 2019). The city also works closely with partners such as ICBC, TransLink, the Surrey Police Service and the Surrey Crime Prevention Society on enforcement, public education and data sharing (City of Surrey, 2025).

Temiskaming Shores, Ont.

Background

Temiskaming Shores has a population of 9,634, according to the 2021 census, a decrease of 2.9 per cent compared to 2016. The city has a population density is 54.5 people per square kilometre (Statistics Canada, 2023am). Of a 25-per-cent census sample, 89.9 per cent mainly commuted to work by car, truck or van, followed by 5.5 per cent who walked to work (Statistics Canada, 2023am).

Between 2018 and 2022, there were 907 reportable motor vehicle collisions with an average of 181 collisions in Temiskaming Shores (City of Temiskaming Shores & TYLin, 2024). Of these collisions, 108 led to non-fatal injuries and four resulted in fatality. Each year, approximately 11 per cent of collisions involve a commercial motor vehicle (City of Temiskaming Shores & TYLin, 2024).

City of Temiskaming Shores Vision Zero Policy

In September 2024, the City of Temiskaming Shores committed to eliminating all traffic fatalities and severe injuries (City of Temiskaming Shores, 2024). Their Vision Zero Policy, guided by the Ontario Traffic Council (OTC) Vision Zero Guide, follows the Safe System Approach (SSA). Other strategies include a systematic approach, pilot programs and quick wins, infrastructure improvements, community engagement and education, enforcement, and long-term planning and sustainability.

The objective of the policy is to eliminate traffic-related fatalities and serious injuries in Temiskaming Shores by adopting a Vision Zero approach that prioritizes the safety of all road users. It also aims to promote equitable access to safe transportation and strengthen community engagement through education, outreach and collaboration (City of Temiskaming Shores, 2024).

The policy serves as a guide for decision making around city design and layout and does not provide timelines or quantifiable targets. As a small jurisdiction, the city seeks to begin with the implementation of small-scale infrastructure improvements in high-risk areas (City of Temiskaming Shores, 2024).

Key features of the plan

The City of Temiskaming Shores focuses on three pillars of the SSA – safe roads, safe speeds and safe road users – in addition to enforcement, engagement and education, and evaluation.

Safe speeds: The City of Temiskaming Shores will support speed management through measures such as roadway design elements, signage and pavement markings, while recognizing that even small changes in speed can significantly affect the likelihood that a collision will result in serious injury or death (City of Temiskaming Shores, 2024).

Safe road users: The Vision Zero Policy outlines the city's commitment to promoting safe road use by educating residents and reinforcing compliance with traffic laws, signs and pavement markings. Through public education, training initiatives and collaboration with licensing authorities, the city aims to reduce human error, while road design is planned to align with driver expectations and capabilities.

Safe road design: The city will ensure streets are planned and maintained to guide users and reduce the risk of collisions. This includes measures to clearly indicate safe operating speeds, alert drivers to unusual or hazardous features, provide information about upcoming conditions, manage movement through conflict points and incorporate forgiving elements that reduce harm when mistakes occur. Road safety audits, overseen by a designated road safety auditor, will be conducted for new and existing road projects to proactively identify potential hazards, assess risks to all road users and recommend design or operational changes that align with Vision Zero principles.

Engagement and education: The policy outlines the city's commitment to implement public awareness initiatives to educate residents on Vision Zero principles and the importance of road safety through local media, social media, community meetings and school-based programs. The city will work with stakeholders such as local businesses, schools, law enforcement and community organizations to inform the planning process and ensure the policy reflects local priorities and builds community support. The city will also promote a culture of road safety by emphasizing shared responsibility among all road users, recognizing that lasting changes in attitudes and behaviours are essential to the long-term success of Vision Zero.

Enforcement: The City of Temiskaming Shores will continue to collaborate with local law enforcement to enforce all traffic laws and reduce high risk driver behaviour such as impaired driving, speeding and distracted driving.

Evaluation: The city will evaluate the Vision Zero Policy by collecting and analyzing traffic data in collaboration with local groups and law enforcement, establishing baseline metrics for fatalities, serious injuries and other key indicators. Staff will supplement this data with resident surveys and feedback to capture near-misses and unreported incidents. The city will track changes in these metrics, monitor compliance with traffic laws, assess public perception of road safety and evaluate the cost-effectiveness of strategies to measure the policy's overall impact (City of Temiskaming Shores, 2024).

Key stakeholders

Stakeholders involved in the City of Temiskaming Shores Vision Zero Policy include City of Temiskaming Shores, Northeastern Public Health, OPP as well as local advocacy groups and businesses (M. McCrank, personal communication, July 3, 2025).

What the city has to say

Interview with Mitchell McCrank, CET, PMP, Director of Transportation Services, and Mark Wilson, City Councillor, City of Temiskaming Shores.

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

MITCHELL MCCRANK and MARK WILSON: The decision was motivated by general safety trends as we had a number of fatal road crashes in our community. A recommendation was brought forward to our council to adopt Vision Zero and create a Vision Zero Strategy.

We also have a Temiskaming District Road Safety Coalition that consistently and actively promotes road safety and was encouraging communities to adopt Vision Zero.

The Temiskaming District Road Safety Coalition consists of administrators of school bus systems, Northeastern Public Health staff, OPP, Temiskaming Shores city councillors, a driving instructor, a representative from city of Temiskaming Shores transport system and MTO.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

MITCHELL MCCRANK and MARK WILSON: Our council adopted our Vision Zero strategy on Sept. 17, 2024. We are in the very early stages and want to keep thinking about how we can reduce road-related deaths and serious injuries by reviewing all our construction and engineering projects through a Vision Zero lens. We felt it was too important of an initiative to wait to adopt until creating a perfect plan, so we went ahead and adopted it and are figuring things out as we go. We want to examine all we are doing to ensure it is viewed through the lens of Vision Zero and the Safe System Approach.

PARACHUTE: What major activities are you undertaking to meet these goals?

MITCHELL MCCRANK and MARK WILSON: It is a significant challenge in a small community because we have a very small budget but we tend to look for the small

wins. We only have five traffic signals in our community but we have made some small adjustments to the signal timing and pedestrian signals. These are smaller, low-cost changes, including additional signage, speed humps and road painting. We are also looking at further speed reductions within residential areas.

We implemented a very successful road diet on roughly two kilometres of a two-lane road in a residential and park area. The speed limit in this section was 50 km/h but we were experiencing high rates of speeding. We've reduced this roadway to a one-lane road instead of two and speeds have dropped as a result. Now that vehicles aren't passing, residents feel safer as they can enter their driveways and walk on the sidewalk along this road comfortably.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

MITCHELL MCCRANK and MARK WILSON: Equity for all remains an aspirational goal at this stage. Our plan does not currently include any concrete or definitive action items aimed explicitly at equity; however, we continue to consider equity and accessibility when reviewing all our projects. We also have an accessibility committee made up of members of our local public health unit and community members with specific accessibility needs.

Cyclists: We have a pretty significant bike network now that we'd like to improve. We know they will be used more if they are made safer but we need a designated budget for that.

Public transit: Our small community has a transit system that serves 120,000 riders a year with daily service from 6 a.m. to 11 p.m., seven days a week. Public transit is considered in our Vision Zero and equitable transportation planning.

Pedestrians: Since we are an amalgamated community, we have two downtown cores where we have been improving the crosswalks and pedestrian crossings. Like other North American municipalities, we were built around cars but we want to ensure that road users can access all modes of transport safely and comfortably.

Mobility devices: We ensure the presence of curb cuts and accessible parking in our downtown cores. Our goal is to guarantee that individuals can move around the roads safely and with accessibility. For example, we relocated some of our accessible parking spots to better meet accessibility needs, allowing road users to leave their cars safely.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

MITCHELL MCCRANK and MARK WILSON: Our stakeholders include Temiskaming Shores staff, Northeastern Public Health staff, OPP, local advocacy groups and businesses.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

MITCHELL MCCRANK and MARK WILSON: We do not. The plan is, for now, to go through myself as Director and once I get my RSP1, to use that as well.

There is a Temiskaming District Road Safety Coalition that advocates for regional road safety and consists of administrators of school bus systems, Northeastern Public Health staff, OPP, Temiskaming Shores city councillors, a driving instructor, a representative from city of Temiskaming Shores transport system and MTO.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

MITCHELL MCCRANK and MARK WILSON: We currently have a $10,000 budget.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

MITCHELL MCCRANK and MARK WILSON: Our evaluation plan is still in progress. Since we are a small community, measuring success will be difficult. We currently use OPP tracking, resident surveys and feedback, and cloud-based data we collect from moving our speed radar signs around. We are exploring methods to begin recording data internally within the city to have quicker and easier access to data we can use for evaluating our program.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

MITCHELL MCCRANK and MARK WILSON: We are a very small municipality with a population of fewer than 10,000 people.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

MITCHELL MCCRANK and MARK WILSON:

- Speed reductions coming, road diet implemented, additional signage, speed hump and more road painting

- Intersection design – We currently have a firm looking at some key intersections for us that have been identified as areas of concern.

- We are continuing the expansion of our active travel path. We want to work on putting up more barriers to make these active travel paths safer, especially in higher speed zones.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

MITCHELL MCCRANK and MARK WILSON: We implemented a very successful road diet on roughly two kilometres of two-lane road in a residential and park area. The speed limit in this section was 50 km/h but we were experiencing high rates of speeding. We've reduced this roadway to a one-lane road instead of two and speeds have dropped as a result. Now that vehicles aren't passing, residents feel safer as they can enter their driveways and walk on the sidewalk along this road comfortably.

We also awarded a contract for intersection design. This project is underway right now and goes back to our goal of looking at all projects with a Vision Zero lens. The contractor is currently reviewing the designs and coming back with suggestions to accommodate the Vision Zero lens.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

MITCHELL MCCRANK and MARK WILSON: We have not faced many challenges yet. We may have some further down the road when focusing on less low-hanging fruit.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

MITCHELL MCCRANK and MARK WILSON: For smaller jurisdictions, approach it with a limited scope. It doesn't have to be a huge thing or large budget. Use pilot programs and quick wins. Do not worry about having a perfect Vision Zero plan. Get it adopted and make sure you are thinking about every project through the Vision Zero and Safe System Approach lens.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

MITCHELL MCCRANK and MARK WILSON: We would like to focus on accessibility in our downtown cores, implement more tools to slow people down, change the mindset of drivers, update vital intersections, prioritize youth areas and implement further road diets. We will continue to focus on low-cost road safety measures until we get some funding for some bigger road infrastructure projects but, for now, we can prepare for when that comes.

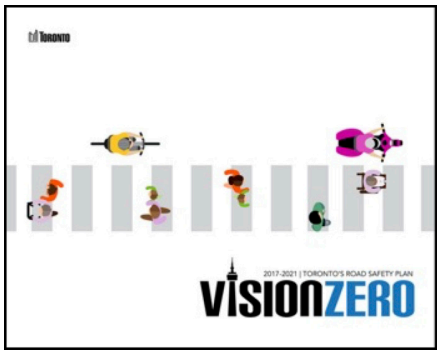
Toronto, Ont.

Background

According to the 2021 census, the City of Toronto has a population of 2,794,356, increasing by 2.3 per cent since 2016. Toronto's population density is 4,427.8 people per square kilometre (Statistics Canada, 2023an). Of a 25-per-cent census sample, 61 per cent mainly commuted to work by car, truck or van, followed by 26.2 per cent who used public transit (Statistics Canada, 2023an).

Over the past decade (2016 to 2025), the City of Toronto Vision Zero Dashboard shows that traffic fatalities and serious injuries in Toronto have generally shown a downward trend with some year-to-year fluctuation, including a notable dip in 2020 followed by a temporary increase in 2021 and gradual declines thereafter (City of Toronto, 2026). In 2025, Toronto recorded 39 fatalities, the lowest since the adoption of Vision Zero in 2016. Serious injuries in Toronto declined to approximately 227 in 2025, down from a peak of 382 in 2018. Across both fatalities and serious injuries, pedestrians consistently represent the largest share of those harmed, followed by motorists (City of Toronto, 2026).

Toronto's Road Safety Plan (TRSP) 2017-2021



Toronto's commitment to Vision Zero was announced in 2016 and the city's approach was set out in its **Toronto Road Safety Plan (TRSP) 2017-2021** (City of Toronto, 2017). The TRSP recognizes the significance of killed or seriously injured (KSI) collisions and focuses on these collisions as the basis of identifying priorities and measuring progress. It uses four headings to organize measures: engineering, enforcement, technology and education. In addition, the TRSP contains six emphasis areas: pedestrians, school children, older adults, cyclists, aggressive and distracted driving, and motorcyclists (City of Toronto, 2017).

In March 2019, Toronto Mayor John Tory announced his intention to roll out **Vision Zero 2.0**, based on data gathered on pedestrian deaths in 2018, as well as other sources such as demographic and road environment data, and public opinion (Pelley & Howells, 2019). Vision Zero 2.0 reaffirms the city's commitment to a target of zero and the Safe System Approach (SSA) and uses five of the Es of mobility safety to define countermeasures (City of Toronto, 2019). Its primary focus areas are developing a speed management strategy, road design improvements, proactively addressing high-risk mid-block crossings, proactively addressing turning collisions at signalized intersections and an education and engagement plan (City of Toronto, 2019).

Key features of the plan

Data collection and analysis: Data are provided by the Toronto Police and were key to identifying issues and priority locations featured in the TRSP (City of Toronto, 2017). For example, geospatial "heat mapping" was carried out to understand better how collisions were dispersed across the city, altogether and by focus area population, and to try to identify the causes of any "heat spots".

Toronto's Vision Zero Map was built to provide a transparent view into the historical locations of collisions in the city side by side with the suite of safety measures that are being deployed through the Vision Zero program (City of Toronto, n.d.-a).

Education: Education initiatives and campaigns in Toronto address issues such as pedestrian jaywalking, helmet use, proper use of pedestrian crossovers and illegal street racing, with resources tailored to different age groups, including colouring books for school children and seminars for older adults (City of Toronto, 2017). More recent initiatives expand this approach to include targeted campaigns on speeding, delivered alongside area-based speed limit reductions, to raise awareness, encourage responsible driving behaviour and promote a positive road safety culture, including the "Dangers of Speeding" and "The Reason for 30" campaigns launched in 2023 (City of Toronto, 2024).

Enforcement: The City of Toronto collaborates with the Toronto Police Service and the OPP to implement data-driven enforcement initiatives focused on high-risk locations and behaviours, including speeding, distracted and aggressive driving, and violations in school zones and at pedestrian crossings (City of Toronto, 2017). Automated tools, including red-light cameras and, prior to the 2025 provincial ban, 150 Automated Speed Enforcement (ASE) cameras, have also supported compliance (City of Toronto, n.d.-b; City of Toronto, 2024). Under Vision Zero 2.0, the city is reducing speed limits on local roads to 30 km/h through a phased, area-based approach from 2021 to 2028, prioritizing high-collision areas, with additional reductions on collector and arterial roads to improve safety and deter dangerous driving (City of Toronto, 2019; City of Toronto, n.d.-c).

Engagement: Consultation with the public and with advocacy groups was a key input into the TRSP (City of Toronto, 2017). Engagement also plays a role in program implementation; an example of this is the "Youth in Control" leadership program from Toronto Public Health which is predicated on peer-based education (City of Toronto, 2017). The city has also released a **Vision Zero Dashboard** that allows residents and partners to quantify the progress the City of Toronto is making towards the Vision Zero goals (City of Toronto, 2026).

Engineering: Engineering measures outlined in the 2024 Vision Zero update include expanded traffic calming installations such as speed humps and speed cushions,

narrower lane widths and speed feedback signs to support 30 km/h neighbourhood limits (City of Toronto, 2024). Pedestrian safety is being improved through new and upgraded crossings, better visibility at crossovers and safer mid-block transit stop designs. At intersections, red-light cameras, raised crossings, zebra markings, LPIs and protected turning phases help reduce conflicts. School safety zones continue to be rolled out with signage, markings and traffic calming features to protect vulnerable road users (City of Toronto, 2024).

Evaluation: Vision Zero 2.0 includes a continuous evaluation process to assess the effectiveness of road safety initiatives and prioritize those that best reduce injuries and fatalities (City of Toronto, 2019). This work will be guided by identifying a high-injury network and evaluating ASE and red-light camera programs. Performance will be tracked using key indicators such as KSI rates, vehicle speeds and reductions in near-miss incidents identified through video analytics (City of Toronto, 2019; City of Toronto, 2024). The city recently evaluated the red-light camera program, which decreased angle injury collisions by 37 per cent where red-light cameras were present (City of Toronto, 2024). Another recent evaluation of ASE in Toronto school zones showed that ASE reduced speeding in school zones by 45 per cent and has the biggest effect on the drivers going at the highest speeds (15 km/h or more over the speed limit) (Howard et al., 2025).

Key stakeholders

Key stakeholders in developing the TRSP included Toronto Public Health; Sunnybrook Health Sciences Centre; Toronto Police Service; the Toronto Centre for Active Transportation (TCAT); the Disability, Access and Inclusion Advisory Committee; CARP; Cycle Toronto; Walk Toronto; the Rider Training Institute; CAA; Toronto District School Board; and Toronto Catholic District School Board (City of Toronto, 2017). The Vision Zero Road Safety Committee includes representatives from each of these partner agencies. Other partners may be involved in specific improvements: for example, Toronto Hydro's involvement reviewing and enhancing street lighting at areas at increased risk of pedestrian collisions, or the Toronto Transit Commission's involvement in the "Stay focused stay safe" education campaign (City of Toronto, 2017).

What the city has to say

Interview with Adam Sweanor, Project Manager - Vision Zero Projects, Transportation Services, City of Toronto.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

ADAM SWEANOR: The Vision Zero Road Safety Plan in Toronto was first adopted by City Council in **June 2016** with the goal to reduce and ultimately eliminate killed or

seriously injured (KSI) collisions on Toronto's roads. This commitment aligns Toronto with a global movement recognizing that no loss of life on our roads is acceptable, which can be accomplished through a systemic data-driven approach to safety.

PARACHUTE: What major activities are you undertaking to meet these goals?

ADAM SWEANOR: The Vision Zero Plan is structured around several key strategic pillars:

Geometric safety improvements: This involves **geometric safety improvements** to redesign road infrastructure to reduce collision risk and severity. Examples include:

- Curb extensions/bulb-outs: Shortening pedestrian crossing distances and increasing visibility.
- Raised intersections and crosswalks: slowing the speed people drive and makes pedestrians more visible.
- Protected cycling infrastructure: Creating safer facilities for people to cycle through the **Cycling Network Plan**.
- Tightening corner radii: Slows the turning movement of people driving improving visibility and reaction times.
- Road diets: Reconfiguring roadways to eliminate and/or narrow vehicle lanes (can include bikeways. wider sidewalks or additional green space).
- Traffic signal improvements: Including leading through phases for pedestrians people on bikes or the implementation of new traffic signals where there is crossing demand.

Enforcement: Using technology and targeted police presence to ensure compliance with traffic laws. This includes:

- Automated Speed Enforcement (ASE) cameras: Deterring speeding in designated Community safety zones, with a focus on school frontages.
- Red-light cameras: Discouraging dangerous intersection violations.
- Targeted enforcement by the Toronto Police Service on high-risk behaviours such as aggressive driving, distracted driving and impaired driving.

Education: Raising public awareness and changing road user behaviour through various **campaigns and programs**.

Speed Management: Implementing measures to reduce vehicle speeds as speed is a critical factor in collision severity. This includes measures from **Toronto's Safe Speeds Toolkit**.

These activities are applied across seven emphasis areas, identified through a data-driven process including collision data analysis, extensive public engagement and city council direction. These areas are: pedestrians, school children, older adults, cyclists, motorcyclists, aggressive driving and distraction, and heavy trucks. This targeted approach ensures resources are directed where they can have the greatest impact. More comprehensive details on major activities are available in the **Vision Zero 2.0 staff report** and various other reports linked on the city's **Vision Zero webpage**.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

ADAM SWEANOR: Equity and the needs of vulnerable road users are fundamental pillars of Toronto's Vision Zero Road Safety Plan.

Every Vision Zero staff report brought to City Council for approval includes an equity impact statement. This represents a commitment from the Transportation Services Division to embed equity considerations directly into the decision-making process for all road safety initiatives.

More specifically, the Vision Zero Road Safety Plan is designed to be a critical component in building a truly safe and inclusive city. It places a particular emphasis on prioritizing safety for vulnerable road users. This includes:

- Pedestrians
- People cycling
- People on motorcycles
- Older adults
- School children
- Persons with a disability

These groups are disproportionately impacted by collisions and face a significantly higher risk of fatality or serious injury when a collision occurs.

A core principle of Vision Zero is to leverage data to inform decision-making. This data-driven approach is crucial for recognizing that the concentration of safety problems is not accidental. Instead, it is often partly due to historical patterns of

disinvestment and underinvestment in equity-deserving communities. These include communities with a higher proportion of people with disabilities, vulnerable road users and specific geographic areas of the city that have historically been underserved.

Toronto's Vision Zero strategy asserts that these communities deserve more than equal attention and resources. This means moving beyond a default approach of using geographic equality in allocating transportation resources or passively relying on communities to explicitly request investments in transportation safety.

As part of the commitment to equity, Transportation Services actively collects and analyzes collision data alongside demographic and socio-economic data to identify communities experiencing disparities in roadway fatalities and serious injuries. This process is complemented by proactive engagement with community representatives to understand their unique transportation safety needs and challenges. The insights gained from this data and engagement inform improvements in project design and delivery, with the explicit goal of eliminating these disparities. Continuous monitoring of outcomes allows for ongoing refinement and improvement of safety interventions. This equity-informed decision-making allows Transportation Services to strategically focus resources on countermeasures and interventions in communities and locations where they will make the most significant difference in saving lives and preventing serious injuries.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

ADAM SWEANOR: Toronto's Vision Zero strategy was developed collaboratively, on the premise that road safety is a shared responsibility. Key stakeholders include:

- **Toronto Transit Commission (TTC)**: As the primary public transit provider, the TTC is a vital partner.
- **Local school boards** (e.g., Toronto District School Board – TDSB, Toronto Catholic District School Board – TCDSB): Critical for addressing the safety of school children.
- **Toronto Police Service (TPS):** Essential for enforcement and collision data.
- **Toronto Public Health**: Crucial for public health perspectives, data analysis and health promotion.
- **Community advocacy groups**: Organizations representing pedestrians (including older adults and children), people on bikes and disability advocates.
- **Business Improvement Areas (BIAs):** Representing local businesses on how best to improve their focus areas.

- **General public**: Through various consultation and community engagement processes.

Engagement with each stakeholder group has been multifaceted and continuous since the plan's inception in 2016:

- Formation of various committees:
    - The Vision Zero Steering Committee includes representatives from various City divisions to ensure inter-divisional co-ordination.
    - Working groups: Specific technical working groups or task forces are often formed for targeted initiatives, bringing together experts from relevant agencies and groups.
- Collaborative planning:
    - Data sharing and analysis: There is ongoing collaboration with the Toronto Police Service for collision data and with Toronto Public Health for health-related data and insights. The TTC's operational data also contribute to understanding transit-related safety concerns.
    - Joint program development: For example, the School Safety Zone program involved close consultation with local school boards such as the TDSB, leading to complementary initiatives such as the TDSB's School Traffic Management program. This provides a holistic approach to student safety, from infrastructure improvements to school-level traffic management plans.
    - Regular meetings and briefings: City staff hold regular meetings and provide briefings to stakeholders on progress, upcoming projects and new initiatives or challenges.
- Dedicated funding for partnerships: When available, specific funding from the Vision Zero budget has been allocated to facilitate collaborative work with partners as part of ongoing partnership agreements. This has included dedicated funding to the Toronto Police to staff a Vision-Zero-specific road safety team.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

ADAM SWEANOR: Within the City of Toronto, there is a Vision Zero Steering Committee. This committee's primary purpose is to advance the Vision Zero program across the Transportation Services Division and ensure its principles are integrated into various departmental operations.

We also have a Vision Zero Delivery Partners' network, which includes Transportation Services reps as well as representatives from key partner agencies. These typically include:

- Toronto Police Service: Essential for insights into enforcement, collision data and operational support
- Toronto Public Health: Providing expertise on public health impacts, injury preventio, and community health
- Toronto Transit Commission
- Toronto District School Board and Toronto Catholic District School Board
- Other city divisions such as Fleet Services and Strategic Communications

The committee's structure ensures that decisions are made with a comprehensive understanding of their implications across various city functions and with input from various external partners. This cross-departmental and inter-agency collaboration is essential to facilitate a holistic Safe System Approach in Toronto.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

ADAM SWEANOR: The City of Toronto has dedicated and committed funding specifically toward its Vision Zero Program. This funding has been consistently increased since the program's inception in 2016, reflecting city council's ongoing commitment to road safety.

The growth of this program has allowed for:

- Expansion of program scope: Enabling more projects and initiatives across all pillars of Vision Zero.
- Acceleration of deliverables: Permitting the implementation of safety improvements at a faster pace.
- Investment in new technologies, such as the expansion of ASE and red-light camera programs.
- Support for staffing: Ensuring adequate personnel to plan, design, implement and monitor various initiatives.

A snapshot of the annual budget can be found as an attachment to the **Fall 2024 staff report**.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

ADAM SWEANOR: The City of Toronto collects and analyzes data to measure the impact and success of its Vision Zero program.

As part of the Fall 2024 staff report, Vision Zero staff shared the trends in serious injuries and fatalities back to the early 2000s to provide long-term historical context. The report also included a detailed analysis to identify the most prevalent **KSI collision types for pedestrians and people on bikes** at both intersection and mid-block locations. This information helps in pinpointing high-risk areas and collision types, informing targeted interventions.

Success is primarily measured by:

- **Reduction in killed or seriously injured (KSI) collisions**: This is the ultimate metric and the core goal of Vision Zero. Data are tracked annually and trends are analyzed.
- **Collision type and location analysis**: Monitoring changes in the types of collisions (e.g., pedestrian, cyclist), locations (intersections, mid-blocks) and contributing factors to assess the effectiveness of specific countermeasures.
- **Emphasis area performance**: Tracking KSI trends within each of the seven emphasis areas to ensure improvements are reaching the most vulnerable road users.
- **Program deliverables**: Tracking the number of infrastructure improvements implemented, enforcement actions taken and educational campaigns conducted.
- **Public perception and awareness**: While harder to quantify, surveys or feedback can gauge changes in public awareness of road safety issues and the Vision Zero program.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

ADAM SWEANOR: Toronto's unique urban context presents several factors that significantly influence the planning and implementation of road safety:

- **Diverse urban fabric**: Toronto is a sprawling and diverse city with varying urban densities, from the dense downtown core with high pedestrian and cyclist volumes to suburban areas with more car-dependent travel. This requires a flexible and adaptable toolkit of Vision Zero measures.

- **Extensive road network and aging infrastructure**: Toronto manages a vast and complex road network, much of which was designed for different transportation priorities. Retrofitting existing infrastructure to meet Vision Zero standards requires significant planning, co-ordination and investment. The age of some infrastructure also means improvements are often bundled with state of good repair capital projects.

- **High population density and diverse user groups**: Toronto has a very high concentration of people cycling and pedestrians. This amplifies the need to protect vulnerable road users and demands solutions that cater to a wide array of mobility needs and behaviours.

- **Dynamic growth and development**: Toronto is one of the fastest-growing cities in North America. Rapid development means new communities, increased traffic and evolving travel patterns, requiring Vision Zero planning to be forward-looking and adaptable to these changes. New developments often present opportunities to integrate Vision Zero principles from the outset.

- **Climate and seasonal challenges**: Toronto experiences all four seasons, including harsh winters with snow and ice. This impacts road conditions, visibility and the safety of vulnerable road users, requiring specific considerations for maintenance, winter cycling infrastructure and pedestrian safety in adverse weather.

- **Multi-jurisdictional complexity**: While the City of Toronto manages most of its roads, provincial highways run through the city, and provincial regulations influence traffic laws. Co-ordination with the MTO is sometimes necessary.

- **Balancing competing demands**: Road space in Toronto is highly contested. Implementing safety improvements often requires reallocating road space previously used by vehicles for parking or travel lanes. This can lead to public discourse and resistance, requiring strong communication and justification based on safety data.

Staff assess each target location to determine the best-suited countermeasure. This can involve:

- **Road classification and geometry**: Is it an arterial road, collector or local street? What are its physical characteristics?

- **Mid-block or intersection focus**: Are collisions more prevalent at intersections or along road segments?

- **Specific risk factors**: Is the issue primarily related to speeding, distracted driving, poor visibility or inadequate crossing facilities?

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

ADAM SWEANOR: Since its initiation in 2016, the Vision Zero program in Toronto has experienced significant evolution, marked by growth in both scope and dedicated funding.

Key changes and advancements include:

- **Increased budget and resources**: The financial commitment to Vision Zero has substantially increased, allowing for a broader range of projects and accelerated implementation.
- **Expanded scope of work**:
    - **Geometric improvements**: A more aggressive and widespread implementation of infrastructure changes such as curb extensions, truck aprons and raised intersections.
    - **Automated enforcement**: Significant expansion of the ASE and red-light camera programs, moving beyond initial pilot phases.
    - **Speed limit reductions**: More widespread application of reduced speed limits across all road classifications.
    - **New delivery streams**: The introduction of capital work delivery outside of the state of good repair program is a major strategic shift, allowing for more proactive and data-driven infrastructure improvements.
- **Enhanced data analysis and targeting**: Updated approaches to collision data analysis, allowing for more precise identification of high-risk locations and vulnerable user groups, leading to more targeted interventions. As well as risk modelling, allowing for proactive identification of high-risk locations before a collision occurs.
- **Evolving stakeholder collaboration**:
    - **Stronger partnerships**: The relationships with key stakeholders such as the TTC, Toronto Police Service and local school boards have deepened, moving toward more integrated planning and deployment of safety initiatives.
    - **Greater public awareness**: As Vision Zero projects become more visible, public awareness of the program has increased, leading to both greater support and sometimes more vocal debate regarding specific interventions, which the city actively manages through communication and engagement.

- **Internal alignment**: Increased buy-in and integration of Vision Zero principles across various city divisions beyond Transportation Services, recognizing road safety as a shared responsibility.

- New frameworks and policies: The endorsement of new frameworks, such as the revised traffic control signal approval criteria, demonstrates a proactive approach to enabling more safety improvements.

The **2024 staff report** on page 8 includes a graphic that visually illustrates the program's growth in scope and funding since its inception.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

ADAM SWEANOR: The Vision Zero program has achieved several significant successes, particularly in refining its implementation strategies:

- New framework for traffic control signal approvals (**June 2025**):

  - City council adopted a new framework for approving new traffic control signals. This framework lowered the thresholds for volume and collision justifications by approximately 40 per cent.

  - This change will facilitate staff investigation and approval of additional new traffic control signals when warranted as compared to the previous thresholds, providing safer crossing opportunities.

  - Expanded signal types: This report also provided context for additional signal types, including mid-block and intersection pedestrian signals. These are applicable in situations where a full traffic signal is not required but a safe, dedicated crossing for pedestrians is deemed necessary due to high pedestrian volumes or specific safety concerns. This enhances the flexibility and responsiveness of the city's toolkit for pedestrian safety.

- Programming of permanent capital work outside of the state of good repair program:

  - Historically, the main method to deliver permanent capital safety improvements (e.g., major geometric changes) was by bundling them with existing capital work, typically road reconstruction or utility upgrades. While efficient for maximizing staff resources and budget, this approach limited the delivery of permanent geometric improvements to roads already selected for broader capital projects.

- Starting in 2023, Transportation Services implemented a new strategy using a small-scale construction roster. This roster allows for the delivery of permanent improvements outside of the large-scale state of good repair program.

- This has led to the implementation of a data-driven process to prioritize and implement critical improvements such as curb extensions in locations where major capital work is not programmed in the near term. While the majority of work is still programmed through the state of good repair process, this new stream provides an additional pathway to deliver targeted, data-informed road safety improvements more quickly and efficiently.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

ADAM SWEANOR: One significant and recurring challenge in implementing Toronto's Vision Zero strategy has been navigating public perception and managing community adjustments to geometric improvements.

When the city implements geometric safety improvements, such as narrowing roads, creating tighter corner radii or installing curb extensions, there are often initial complaints and resistance from some segments of the public. People accustomed to the previous road configuration may have difficulty adjusting to these changes, particularly when it requires them to modify ingrained driving behaviours, such as taking corners at a slower speed. This can lead to perceptions of inconvenience, increased congestion or even a misunderstanding of the safety benefits of the changes. The sentiment often stems from a focus on individual convenience over collective safety.

To effectively address this challenge and build public understanding and buy-in, Toronto employs a multi-stage communication and engagement strategy:

- **Proactive councillor notification**: A key strategy is to notify local city councillors in advance of any scheduled geometric changes within their wards. This notification includes a comprehensive information package detailing the specifics of the work, the rationale behind the change and a clear explanation of its intended safety benefits.

  - City councillors are often the first point of contact for constituent concerns. By providing them with robust information upfront, their offices are empowered to address questions and manage initial public apprehension effectively, often before concerns escalate to the Vision Zero projects team.

- **Publicly accessible information**: The city ensures that various measures within the Vision Zero toolbox are clearly listed and explained on the city's Vision Zero website. This includes detailed information, such as construction specification documents, for those who wish to delve deeper.

- Emphasis on data and principles: During engagement, staff consistently emphasize the data-driven nature of Vision Zero and the underlying principles of the Safe System Approach. This includes explaining how speed management, collision reduction and the protection of vulnerable road users are key pillars as part of the Road Safety Plan.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

For jurisdictions that have recently adopted or are considering adopting Vision Zero, Toronto's experience offers several key pieces of advice:

- **Leverage existing knowledge and tools**: The global Vision Zero movement has matured significantly and a vast body of knowledge, best practices and innovative tools are now available. Resources from various other jurisdictions and professional bodies and guidelines (e.g., NACTO, Vision Zero Network, Institute of Transportation Engineers) can assist in creating a road map for a new road safety plan. This can significantly streamline your process, particularly concerning:
    - **Infrastructure design standards**: Adopt and adapt established standards for safe infrastructure.
    - **Practices to promote safe speeds**: Learn from proven speed management strategies.
    - **Engagement and education models**: Study successful public engagement strategies and educational campaigns.
- **Prioritize data-driven decision making**: Establish robust data collection and analysis capabilities from the outset. This includes comprehensive collision data, but also data on road use, demographics and public feedback. Use this data to:
    - Identify high-risk locations and vulnerable road user groups.
    - Prioritize interventions where they will have the greatest impact.
    - Measure the effectiveness of your programs and adapt as needed.
- **Foster strong multi-sectoral partnerships**: Vision Zero cannot be achieved by a single department. Actively engage and build strong, collaborative relationships with all key stakeholders from day one (police, transit, public health, school boards, community groups, advocacy organizations, elected officials). Establish formal committees or working groups to ensure ongoing communication and shared responsibility.

- **Secure dedicated and consistent funding**: Road safety improvements require sustained investment. Advocate for and secure a dedicated and ideally increasing budget for your Vision Zero program. This allows for long-term planning, consistent implementation and the ability to scale up initiatives.

- **Prepare for and manage public perception**: Be proactive in communicating the benefits behind your Vision Zero initiatives. Educate the public on the principles of Vision Zero and the safety benefits of changes. Provide clear, accessible information and involve the community in the process.

- **Adopt a Safe System Approach**: Recognize that human error is inevitable but fatalities and serious injuries are preventable. Design your road system to be forgiving, minimizing the severity of crashes when they do occur. This means focusing on systemic changes rather than solely on individual behaviour.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

ADAM SWEANOR: As Toronto's Vision Zero program matures and progresses, the focus moving forward over the next five years will be on deepening its systemic impact, expanding its reach through diversified delivery streams and continuously integrating new advancements in road safety.

This can include:

- **Continued expansion of new delivery streams**:

    - **Growth of the construction roster process**: Building on the success of the small-scale construction roster, Transportation Services aims to further scale and refine this process. This will enable the proactive delivery of permanent geometric improvements, such as curb extensions, intersection realignment, and truck aprons, in more locations, particularly where major capital roadwork is not immediately planned.

    - **Proactive review of high-risk mid-block crossings**: Transportation Services will intensify our focus on identifying and addressing high-risk mid-block crossing locations. This involves data analysis to pinpoint areas with a high incidence of pedestrian collisions, followed by targeted interventions such as new mid-block enhanced crosswalk markings and improved lighting, to create safer pedestrian environments.

- **Integration of new technologies and methodologies**:

    - **Advanced data analytics**: Leveraging more sophisticated data analytics, including machine learning, to identify emerging risk patterns, predict high-risk locations before collisions occur, and optimize the deployment of countermeasures.

- **Enhancing equity and accessibility**: Continuously refining the equity-informed decision-making process to ensure that Vision Zero investments disproportionately benefit equity-deserving communities and improve accessibility for all road users, including persons with disabilities. This means not just reducing collisions but also creating a truly inclusive transportation network.

- **Strengthening partnerships and collaboration**: Further deepening collaboration with key stakeholders, including exploring new joint initiatives with the TTC for transit-oriented safety, closer integration with Toronto Police Service for data-driven enforcement and expanded programs with school boards for active and safe routes to school.

- **Continuous learning and adaptation**: Transportation Services staff will continue to actively attend international and national conferences, communicate with other jurisdictions and engage with research bodies to share lessons learned and proactively incorporate new directions, tools, and processes into Toronto's overall Road Safety Plan. The Vision Zero program has had an increase in both budget and scope since its original adoption and further expansion is planned as momentum is built around its adoption city-wide.

Vancouver, B.C.

Background

The City of Vancouver has a population of 662,248 per the 2021 census, up 4.9 per cent since 2016, and has a population density of 5,492.6 per square kilometre (Statistics Canada, 2023ao). Of a 25-per-cent census sample, 56.2 per cent mainly commuted to work by driving a car, truck or van, followed by 22.9 per cent who rode public transit (Statistics Canada, 2023ao).

Between 2020 and 2024, ICBC reported 38,838 injury or fatal collisions in Vancouver, with annual totals ranging from a low of 6,722 in 2020 to a high of 8,158 in 2024 (ICBC, 2025). Traffic fatalities between 2018 and 2024 fluctuated but remained generally stable, dropping to eight in 2020 during reduced travel. Twenty-two fatalities were recorded in 2021, followed by declines to 19, 16 and 15 in 2022, 2023 and 2024, respectively (Vancouver Police Department, n.d.-a). Pedestrians consistently accounted for the largest share of fatalities. In 2025, fatalities rose sharply to 31, largely due to 11 pedestrian deaths during the Lapu Lapu Festival; excluding this event, trends indicate relatively stable fatality levels over time (Vancouver Police Department, n.d.-a).

Moving Towards Zero Safety Action Plan (2016)

Vancouver's Vision Zero program is guided by the **Moving Towards Zero Safety Action Plan**, which was introduced in December 2016 (Brown, 2016). The program is based on five of the Es of mobility safety though they are not prominently featured in the action plan (Brown, 2016, City of Vancouver, n.d.-a). Vision Zero is also cited in and supported by **Vancouver's Transportation 2040 Plan**, which sets out specific infrastructure improvements and policy suggestions to enhance road safety for different types of road users, such as pedestrians and cyclists (City of Vancouver, n.d.-b). A mixture of long-term and short-term policy directions have been identified to support Vision Zero (City of Vancouver, n.d.-b).

Though no specific target apart from zero is given, Vancouver anticipates that fatal and injury collisions can be reduced by 15-to-20 per cent through their plan (Brown, 2016). Additional targets for those action items covered by the Transportation 2040 Plan may also be developed (City of Vancouver, n.d.-b).

In 2025, a motion was passed by Vancouver City Council to review and update the 2016 Moving Towards Zero Safety Action Plan, which will be developed throughout 2026 (de Jager, 2025).

Key features of the plan

Data collection and analysis: To implement Vision Zero, the city examined different types of collision, fatality and injury data from sources such as the Vancouver Police Department (VPD), ICBC and Vancouver Coastal Health (VCH) (Brown, 2016; City of Vancouver. n.d.-c). Available data describe the severity of injury, types of road users involved and age of those killed or injured (City of Vancouver, n.d.-a). Data are used to inform engineering and enforcement activities, and to identify priority locations for further planning and analysis (Brown, 2016).

Education: Vancouver offers education on traffic rules, signs and markings; provides notice to the public about its road safety pilots; and is enhancing driver testing content (City of Vancouver, n.d.-d; City of Vancouver, n.d.-b). It partners with VPD and ICBC to carry out education campaigns (Brown, 2016). Road user tips are provided on both the city's and the VPD's websites (City of Vancouver, n.d.-e).

Enforcement: Vancouver is enforcing 30 km/h speed limits on bike routes and is advocating for municipal control over the rest of the city's speed limits (City of Vancouver, n.d.-b). It is also advocating for bylaws and laws that provide more legal protection to vulnerable road users. In addition, the VPD has developed targeted enforcement programs to tackle dangerous behaviours at priority locations (City of Vancouver, n.d.-b).

Engagement: The Transportation 2040 Plan was developed based in part on public input gathered through town halls, workshops and other means (City of Vancouver, n.d.-b). The plan involves ongoing engagement activities between the city and its partners, including healthcare providers, non-profit organizations and the private sector (City of Vancouver, n.d.-b). Vancouver collects feedback from road users, making changes that are responsive to the outcomes of their engagement. The VPD's Traffic Support Team also answers traffic-related questions from the public (City of Vancouver, n.d.-f).

Engineering: The Transportation 2040 Plan recommends features such as high-visibility pavement markings, curb extensions and raised sidewalks for pedestrians, as well as increased space and separated bicycle lanes for cyclists (City of Vancouver, n.d.-b). Recently piloted engineering features included a pedestrian scramble (a signalized intersection that has an exclusive pedestrian-only phase), flashing pedestrian beacons, accessible pedestrian signals and leading pedestrian intervals (LPIs) (City of Vancouver, n.d.- g). In 2023, the City of Vancouver piloted speed reduction on collector and arterial roads across nine school zones. After the successful pilot, the city plans to expand the speed reductions to all remaining school zones located on these specific roads (City of Vancouver, n.d.-h).

Evaluation: The city uses collision data from ICBC and the VPD, as well as hospital and ambulance injury data, to monitor the effectiveness of its programs (City of Vancouver, n.d.-c). Some engineering activities are already being evaluated for their impact on road safety outcomes, including pedestrian signals, countdown timers and increased lighting (Brown, 2016; City of Vancouver, n.d.-g). Activities for monitoring and evaluating Transportation 2040 goals will be developed, including progress reporting and surveys of road users, and there will be flexibility to speed up implementation of road safety measures that are found to be particularly effective (City of Vancouver, n.d.-b).

Key stakeholders

Vancouver's stakeholders include multiple specialized departments of the VPD, the ICBC and the VCH (Brown, 2016; Vancouver Police Department, n.d.-b). Specific projects may also result in other stakeholders being involved, such as the Canadian National Institute for the Blind and Access for Sight-Impaired Consumers, both of which were consulted for the city's accessible pedestrian signals program (Brown, 2016; City of Vancouver, n.d.-g). It is anticipated that partners from government, academia and the private sector will all be engaged in developing evaluation tools associated with Transportation 2040 Plan actions (Vancouver Police Department, n.d.-b). Vancouver has established a Traffic Safety Advisory Group, whose responsibility is to provide multidisciplinary advice around road safety (City of Vancouver, n.d.-i).

What the city has to say

Interview with Liliana Quintero, P.Eng., Senior Transportation Engineer, City of Vancouver

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

LILIANA QUINTERO: We committed to zero fatalities in 2012 as part of our Transportation 20240 Plan. In 2016, we launched the Moving Towards Zero Action Plan and incorporated the goal of zero serious injuries.

PARACHUTE: What major activities are you undertaking to meet these goals?

LILIANA QUINTERO:

Enhanced data: Continue to receive collision data from partner agencies and work with them to see if data collection could be improved and/or provided in a more timely manner.

- Evaluate and prioritize locations: Prioritize top locations for active modes, seniors and school areas. Conduct detailed safety studies at priority locations.

- Engineering action plan:
    - Continuously develop a best safety practices toolkit and validate the toolkit in a Vancouver context.
    - Select the most effective solutions to address priority locations.
    - Pilot new safety measures
- Enforcement: work with VPD to develop targeted enforcement programs to tackle dangerous behaviours at priority locations
- Education and public outreach:
    - Work with VPD and ICBC on safety education campaigns
    - Continue to work with partner agencies
    - Update progress on the Vision Zero safety webpage

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

LILIANA QUINTERO: All safety improvements are ranked to give priority to areas with a high number of vulnerable road users (pedestrians, cyclists, micro-mobility), collisions involving vulnerable road users and disproportionally impacted communities (e.g. seniors, children).

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

LILIANA QUINTERO: We engaged the VPD, ICBC, TransLink, Vancouver School Board, health agencies (Vancouver Coastal Health, BC Ambulance), researchers at UBC/SFU, City of Vancouver citizen advisory committees (e.g. persons with disabilities, seniors, Active Travel Policy Council), among others.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

LILIANA QUINTERO: We hold monthly meetings with VPD and ICBC to review day-to-day emerging items and ongoing projects. We also have a similar meeting for the school portfolio with the VSB and VPD. Lastly, we have a meeting with health partners from VCH to discuss data challenges/needs. In the past, we have had meetings with all safety partners, one or twice a year, to go over major initiatives. But need to reinstate them, given that we are updating our Vision Zero action plan.

PARACHUTE: Do you have a Vision Zero or Safe System Approach budget for your road safety and mobility plan?

LILIANA QUINTERO: Yes, we have a dedicated Vision Zero annual budget. Other existing annual programs complement the available resources (e.g. school program, new signal program, traffic calming program, among others). We work with various agencies (e.g. TransLink, ICBC, Transport Canada) to secure additional funds through their cost-sharing programs.

PARACHUTE: Are concrete data available to show the impact of your program (i.e., differences in the number of traffic-related injuries)? How do you measure the success of your strategy?

LILIANA QUINTERO:

- Traffic related fatalities have been decreasing for the past 20 years
- Serious injury rates per trip have decreased over the past 10 years
- Injuries rates per population also trending down for the past 10 years

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

LILIANA QUINTERO:

- Not building any new roads/adding capacity
- Vancouver residents are very Involved and will provide lots of feedback when it comes to safety improvements
- Most Vancouver residents use active modes to travel

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

LILIANA QUINTERO:

- There is a dedicated annual Vision Zero budget, which we didn't have when developing the action plan back in 2016. The team has also expanded from two people to 12-plus people, plus staff that support partially.
- New pilot initiatives became annual programs. Examples: LPIs, RRFBs, neighbourhood slow zones, school slow zones on arterials.

- Council has made requests to staff to see if it's feasible to expand pedestrian safety programs (LPIs, new signals, RRFBs, slower walking speeds at signals, marked crosswalks) and the school travel planning program (STP). We recently received an additional $5.5 million to expand the pedestrian safety programs in 2025- 2026. Staff are still exploring the options for augmenting the STP.

PARACHUTE: Are there any new successes your program has achieved that you would like to share?

LILIANA QUINTERO:

- Before, we typically used collision data from ICBC and police, which provide us with collision data resulting in property damage, injuries in general and fatalities. But we didn't have information regarding serious injuries. We worked with various health partners (Vancouver Coastal Health, BC Ambulance) to get access to their serious injury data. This allowed us to understand how many serious injuries happen per year, which demographic groups are most impacted and we now have ongoing tracking to understand trend changes.

- Trialing new safety measures and converting them to annual programs after seeing positive results. Examples include leading pedestrian intervals, flashing beacons, neighbourhood slow zones and school slow zones on arterials.

- We revised our street and traffic by-law to revise speed limits on residential roads. In 2020, we removed the time/day limits of 30 km/h speed limits on playground and school zones. This year, we will make all residential streets 30 km/h, which will be paired with neighbourhood gateway signage using a phased approach (starting with 25 neighbourhoods in three years and more in future). Given the size of Vancouver's road network, it is not feasible to sign every local street.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

LILIANA QUINTERO:

- We have done speed reductions on arterials but mostly based on direction from council at select corridors where communities have raised safety concerns and on school zones. We need to develop policies for when it would be appropriate to reduce speed limits on arterials (e.g. downtown, pedestrian/commercial streets, high injury corridors, among other options to consider).

- Implementing speed reductions on arterials such as the recent school slow zones are challenging when it comes to incorporating traffic calming elements (e.g. vertical deflection) to physically enforce the new speed limit, especially on transit, truck or emergency routes. We have observed very modest results with just paint and signs.

Currently trialing vertical deflections at collectors at a limited number of locations where we observed higher speeds as part of the school slow zone project but more work is needed to formalize how these measures are used at other locations and under what context is feasible.

- Complementary tools such as red light and speed cameras to support speed reductions on arterials are outside the city's jurisdiction and managed by the province of B.C. Currently there are limited camera locations in Vancouver and our council has advocated for an expansion.

- Challenges to set blanket speed limits on our own: these would require the Province of B.C. to modify the Motor Vehicle Act, as per the advice we received from our Legal Department and police. The upcoming residential street speed limit reduction will come with challenges, as it would only be enforceable adjacent to signage. This will be limited to neighbourhood entries. Smaller cities (e.g. Victoria) have resorted to signing every block to resolve this issue.

- Limited resources from VPD to do enforcement.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting Vision Zero?

LILIANA QUINTERO:

- Leverage existing capital programs to reach safety goals, especially if creating a new safety program/budget is not an option and or when funding under safety budget only goes so far.

- For funding you can also apply for grants/cost sharing programs from partner agencies. You can also seek opportunities through development, although they are limited to the development site area.

- Get your council on board with Vision Zero: they can help with getting additional budget to expand your safety program.

- Trial new tools that can enhance your safety offerings. Some are simple to adopt such as LPIs, RRFBs, slower walking speeds, neighbourhood slow zones and speed reductions, as examples.

- Keep using the classic tools too: they work well. Daylighting with signage or physical elements, marked crosswalks and keeping markings fresh, signals, speed humps, school travel planning programs.

- Reaching out to peer cities that have tested a tool/initiative you want to trial as well will give you the best advice on the lessons learned and any pitfalls to avoid. It could save you lots of time and grief. They are always happy to help and share.

- The NACTO Vision Zero mailing list is a great tool to seek advice when you aren't sure who can help. Lots of times, you will find cities that have the expertise you need that you may not be aware of.

- Try, for the most part, to base your safety infrastructure investments on data, but there are certain times when requests become too political and you will need to always have a small ad-hoc budget to address them. This emergency fund will be used every year, guaranteed.

- Continue growing/fostering good relationships with key safety partners, such as police, school board, health agencies, transit agency, among others.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

LILIANA QUINTERO: We are working on an updated action plan for the next five years. This round, we want to incorporate policies regarding 30 -40 km/h speed limit reductions on arterial roads, such as criteria on when this is appropriate, as well as looking at what traffic calming could be added to arterials to support a speed reduction with physical elements that can self-enforce the reduced speed.

Victoria, B.C.

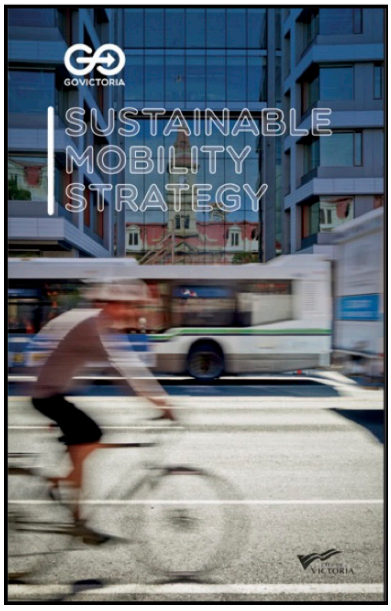
Background

According to the 2021 census, the City of Victoria has a population of 91,867, a 7.1-per-cent increase since 2016; its population density is 4,722.3 people per square kilometre (Statistics Canada, 2023ap). Of a 25-per-cent census sample, 53.3 per cent mainly commuted to work by car, truck or van, followed by 22.5 per cent who walked to work (Statistics Canada, 2023ap).

Between 2020 and 2024 there were 37,949 traffic collisions reported on the City of Victoria's roads (ICBC, 2025). Of those collisions, 4,593 resulted in injury or fatality. Within the same five-year period, 2020 recorded the lowest number of injury or fatality collisions with 858, which increased to 983 in 2023. Since then, the City of Victoria has seen a decline between 2022 and 2024, with 948, 935 and 859 injury or fatality collisions respectively (ICBC, 2025).

GoVictoria: Sustainable Mobility Strategy (2019)

The City of Victoria adopted Vision Zero in 2019 as part of its **GoVictoria: Sustainable Mobility Strategy**, setting ambitious targets that focus on safety, affordability and sustainability (City of Victoria, 2019). Targets outlined in the strategy include:



- By 2023, Victoria planned to effectively manage and prioritize all curb space.
- By 2025, the city aimed to have smart mobility infrastructure that provides real-time safety and performance data to support evidence-based decisions.
- By 2026, the goal is for 95 per cent of household transportation needs to be met using less than 15 per cent of monthly income, emphasizing affordability and access (City of Victoria, 2019).

Long-term objectives for 2030 include systematically eliminating obstructions to improve sidewalk safety and comfort, doubling transit ridership and ensuring that 55 per cent of all trips to, from and within Victoria are made by walking, rolling or cycling (City of Victoria, 2019). The city also aims for 30 per cent of passenger and commercial vehicles to be powered by renewable energy, and for all neighbourhoods to be

"complete by design," meaning that residents can fulfill their daily needs within a 15-minute walk (City of Victoria, 2019).

Ultimately, Victoria is striving to maintain zero annual traffic fatalities and serious injuries, while also reducing average vehicle kilometres travelled per household by 20 per cent and vehicle ownership by 30 per cent from 2017 levels (City of Victoria, 2019).

Key features of the plan

Safe land use planning: The City of Victoria is reshaping its urban environment to minimize exposure to traffic risk. The city promotes compact, connected communities where people can access daily needs within a 15-minute walk or roll, reducing the volume and length of vehicle trips. Growth is focused along transit corridors and urban villages, integrating land use with mobility infrastructure that supports walking, cycling and transit. Actions under this pillar aim to reduce the likelihood and severity of collisions by encouraging shorter, lower-speed trips and separating vulnerable users from high-speed traffic (City of Victoria, 2019).

Safe speeds: The city is implementing a traffic calming program that uses infrastructure such as narrowed lanes and raised crossings to physically slow vehicles. It also supports speed limit reductions and compliance through changes to local bylaws, increased enforcement in high-risk areas and public education.

Safe road users: The strategy outlines that the city is implementing behaviour change campaigns, educational programs in schools and youth cycling skill training to improve awareness and foster a culture of safety among all road users.

Safe vehicles: To support a safer vehicle environment, Victoria is encouraging the use of smaller, low-speed, and electric vehicles better suited to pedestrian-oriented street design. The city is advancing safety by investing in EV infrastructure, supporting fleet electrification and promoting adaptive vehicles for tourism and commercial delivery.

Safe road design: The expansion of the All Ages and Abilities cycling network, along with upgraded sidewalks, protected intersections and accessible crossings, helps separate travel modes and reduce conflict points. Infrastructure changes are prioritized at known high-collision locations, with a focus on self-explanatory road design that guides safe user behaviour.

Post-crash care: The city has committed to ensuring that emergency response routes are maintained and that infrastructure changes are co-ordinated with first responders. These actions support rapid response times and access to care, helping to reduce the severity of injuries and improve long-term outcomes (City of Victoria, 2019).

Key stakeholders

Key stakeholders identified in the Go Victoria strategy include the City of Victoria, BC Transit, emergency services, local businesses, neighbourhood associations, schools, the Accessibility Advisory Committee, accessibility advocacy groups, cycling and transit advocacy groups, community organizations and the general public (City of Victoria, 2019; R. Adam, personal communication, July 15, 2025).

The city conducted extensive public engagement during the strategy development process, including surveys, stakeholder workshops and community events, to gather input on transportation priorities (City of Victoria, 2019).

What the city has to say

Interview with Richard Adam, Acting Assistant Director, Transportation, Engineering and Public Works, City of Victoria

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

RICHARD ADAM: As part of Go Victoria, our sustainable mobility strategy, we adopted the target of reaching and maintaining zero annual traffic fatalities and injuries.

From Go Victoria: "In 2016, 276 people suffered injury as result of traffic collisions on Victoria's roads. Between 2007 and 2016, an average of two pedestrians / cyclists a year died due to traffic collisions. Society pays for poor traffic safety in many ways, including socialized healthcare costs, insurance premiums, lost economic productivity and other costs. Preventing these incidents is completely achievable. Vision Zero is being adopted in countries and cities around the world, in countries such as Sweden and the U.K., who have the world's lowest rates of road injuries and deaths. Individual cities that have adopted Vision Zero programs have seen big reductions in the number and severity of injuries. The City of Edmonton has reduced their serious injuries by 17 per cent, deaths by 40 per cent, pedestrian injuries by 21 per cent and cyclist injuries by 29 per cent. In New York, one of the first cities in North America to introduce a Vision Zero program, annual traffic deaths have fallen by 40 per cent since the program began."

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

RICHARD ADAM: The City of Victoria adopted Vision Zero as part of Go Victoria, our sustainable mobility strategy, in 2020. Our target is to reach and maintain zero annual traffic fatalities and injuries.

Goals include:

- A culture of safety for all road users is embraced by the city and general public.
- The road network design and operations prioritize the protection of human life over all else.
- Emergency response planning and operations are prioritized on our road networks.

PARACHUTE: What major activities are you undertaking to meet these goals?

RICHARD ADAM:

- A culture of safety for all road users is embraced by the city and general public:
    - Educational campaigns via social media, print and radio advertising.
    - Educational guided and self-guided bike tours of new infrastructure.
    - Safety videos to educate the public about new infrastructure.
    - Road safety focus at pop-up events (e.g. Go By Bike Week), including road safety quizzes with safety gear prizes.
- The road network design and operations prioritize the protection of human life over all else:
    - Investment in All Ages and Abilities cycling infrastructure (more than 40 kilometres of AAA routes now in place).
    - Installing or upgrading up to 25 marked crosswalks per year.
    - Reducing speed limits across Victoria (30 km/h on local streets; 40 km/h on most major streets)
    - Installing speed humps, curb extensions and other traffic calming devices (165 speed humps installed since 2021).
    - Intersection safety improvements such as slip lane removals, traffic signal upgrades and daylighting.
- Emergency response planning and operations are prioritized on our road networks.
    - Quarterly meetings with fire, police and ambulance teams to discuss emergency response operations and share designs for upcoming street upgrades.

- Signal pre-emption, where possible, to improve emergency response times.
- Regular communications with emergency response providers around construction and other road network disruptions.
- Design features such as mountable curbs, screw-in bollards and speed cushions to improve safety while providing flexibility for emergency response.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

RICHARD ADAM: Safety and equity are two of the core mobility values outlined in Go Victoria. The plan states that we should prioritize our most vulnerable users, particularly the young and elderly travellers, by making investments to prevent and eliminate traffic deaths and serious injuries, especially along high-collision corridors and intersections. The plan, along with our official community plan, directly prioritizes walking, cycling and transit over single-occupancy vehicle use.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

RICHARD ADAM: Key stakeholders vary widely depending on the type of Vision Zero strategy and related changes to the street, but they include emergency response providers, BC Transit, neighbourhood associations, our Accessibility Advisory Committee, accessibility advocacy groups, cycling and transit advocacy groups, local businesses and schools.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

RICHARD ADAM: No, we do not have a committee.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

RICHARD ADAM: Vision Zero initiatives are wrapped into other committed budget items such as cycling network improvements, crosswalk installations/upgrades, traffic signal installations, transit network improvements, traffic calming initiatives, multimodal corridor improvements and transportation monitoring.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

RICHARD ADAM: The primary measure of success in our Vision Zero strategy is the number of traffic-related deaths and serious injuries on Victoria's roads. We work with

ICBC and the Victoria Police Department to collect, review and analyze this data on an annual basis. We also collect data regarding speeds, traffic volumes and bike/pedestrian counts. We also review intersection safety where needed using video footage to analyze potential conflicts and near misses.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

RICHARD ADAM: While the majority of our road safety initiatives apply to the whole city, we use a data-driven approach when developing implementation plans to prioritize improvements to neighbourhoods and user groups who are at elevated risk.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

RICHARD ADAM: Beginning in 2020, vehicle traffic volumes in Victoria declined dramatically, along with the number of injuries and deaths on our roads. Since then, we have continued to see traffic-related deaths and injuries decline year over year, despite the end of lockdowns or travel restrictions, as the number of people walking and cycling in Victoria increases.

We continue to focus our investments on "Complete Streets"multi-modal corridor improvements that look to improve safety for all modes while repurposing space, slowing speeds and upgrading underground and surface infrastructure.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

RICHARD ADAM:

- Overall, the number of collisions involving injury/deaths on Victoria's roads has significantly decreased and is still trending down (37 per cent fewer in 2023 compared to the peak in 2018).

- All local streets in Victoria will be signed at 30 km/h by the end of 2025.

- Council recently adopted a new Streets and Traffic Bylaw with 30-40 km/h speed limits on almost all of Victoria's streets.

- The share of Victorians' trips taken by walking or cycling has increased to 44 per cent in 2022 from 37 per cent in 2017 – in that same time, driving mode shares decreased from 52 per cent to 46 per cent.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

RICHARD ADAM: Some key challenges we have experienced are:

- Managing public and stakeholder correspondence for high-profile projects and ongoing operational issues, including co-ordinating responses and tracking issues and themes to ensure consistent messaging.

- Working toward departmental alignment, including cross-departmental capacity building.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

RICHARD ADAM:

- Engage with various stakeholders, including emergency response providers, transit, neighbourhood associations, accessibility advocacy groups, cycling and transit advocacy groups, local businesses and schools. Regular meetings, consultations, and collaborative projects are essential to ensure that the Vision Zero strategy is comprehensive and effective.

- Consider the importance of Asset Management in the strategy – rebuilding roads is required for all jurisdictions, and new design standards that include improvements for vulnerable road users improve safety for all road users.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

RICHARD ADAM:

- We will be implementing lower speed limits on major collector and arterial streets across Victoria, as well as continuing with multi-modal corridor improvements and neighbourhood safety improvements such as traffic calming and new/upgraded crosswalks.

- We will also look to pilot more street closures, linear parkways, plazas and pedestrian zones to prioritize and protect people walking.

Windsor, Ont.

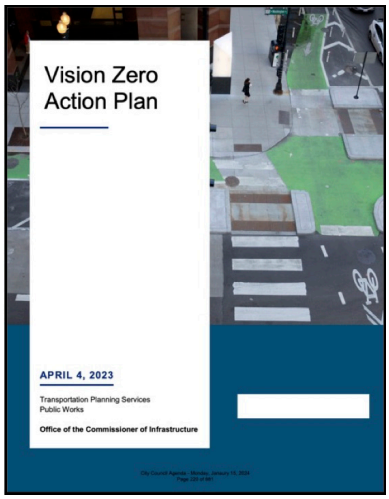
Background

According to the 2021 census, the City of Windsor has a population of 229,660 and a population density of 1,572.8 people per square kilometre (Statistics Canada, 2023aq). The population has increased by 5.7 per cent since 2016. Based on a 25-per-cent sample of the 2021 census, 90.8 per cent of residents mainly commuted to work by car, truck or van, followed by 3.5 per cent who used public transit (Statistics Canada, 2023aq).

Between 2015 and 2019, Windsor recorded an average of 37.2 fatal or major injury collisions per year, with 186 people killed or seriously injured over the five years (City of Windsor, 2024). Vulnerable road users, such as pedestrians, cyclists and motorcyclists, were disproportionately impacted, accounting for 46 per cent of all fatal and serious injury cases despite being involved in just five per cent of total reported collisions. Speed was a contributing factor in 29 per cent of fatal and major injury crashes, while 12 per cent involved alcohol or drug impairment and 10 per cent were linked to inattentive driving (City of Windsor, 2024).

City of Windsor Vision Zero Action Plan 2024

The City of Windsor's **Vision Zero Action Plan**, approved on Jan. 15, 2024, has a clear goal of eliminating all fatal and major injury collisions on Windsor's streets within 15 years (City of Windsor, 2024). Grounded in the Safe System Approach (SSA), the plan acknowledges that the responsibility for road safety is shared between road users and system designers, aiming to achieve the city's Vision Zero goal through safer road design, speed management and vehicle safety. Interim targets aim for a 33-per-cent reduction in five years and a 67-per-cent reduction in ten years, based on a 2015 to 2019 average of 37.2 fatal or serious injury collisions per year (City of Windsor, 2024).



The plan identifies four themes associated with different strategic priority areas:

- driver behaviours
- road user types
- high-risk locations
- infrastructure and process improvements

These focus areas address issues such as speeding, impaired and distracted driving, the protection of vulnerable road users such as pedestrians and cyclists, and targeted improvements at high-injury corridors. To guide implementation, the city has developed 42 recommended initiatives with timelines ranging from short to long term (City of Windsor, 2024).

Key features of the plan

Safe land use planning: Windsor is integrating road safety into its broader land use planning processes to support a safe transportation system. This includes reviewing the city's Official Plan and zoning by-laws to identify opportunities to embed Vision Zero principles. Transportation Impact Studies for new developments are now required to include full multimodal reviews to ensure safety for all users. A Complete Streets Policy is currently under development to guide street design in a way that accommodates all modes of transportation safely and equitably. Additionally, project prioritization criteria are being adjusted to give more weight to safety and collision history, ensuring that high-risk areas receive focused attention in future infrastructure planning (City of Windsor, 2024).

Safe speeds: As speed is identified as a main contributing factor in fatal and major injury collisions, Windsor is responding by reducing speed limits in residential neighbourhoods and on major streets. Interim speed limits of 40 km/h and 50 km/h, and ultimate targets of 30 km/h and 40 km/h, respectively, are being applied based on street classification.

Safe vehicles: The Fleet Review Committee reviews and approves vehicle safety standards to improve safety for future city fleet acquisitions. Periodic driver abstract reviews and internal collision reviews will be conducted for city staff who operate municipal vehicles. These efforts aim to reduce collision risk and improve the city's Commercial Vehicle Operator Registration (CVOR) rating.

Safe road users: Windsor Police Service leads programs such as High Visibility Enforcement, the Selective Traffic Enforcement Program (STEP) and traditional enforcement strategies to address unsafe driving behaviour. The city aims to pilot a parking ticket forgiveness program to reduce impaired driving and supports the development of a Safe Ride Home service, offering free transit during alcohol-oriented events. Education campaigns will focus on addressing inattentive driving, speeding and impaired driving. Youth-focused programs include the Prevent Alcohol and Risk-related Trauma in Youth (PARTY) program and school-based safety initiatives.

Safe road design: The city is targeting high-injury corridors for significant capital improvements. Road design interventions include protected intersections, hardened centrelines, leading pedestrian intervals (LPIs), pedestrian countdown signals and

enhanced crosswalk markings such as ladder crosswalks and stop bars at unsignalized intersections. Other engineering measures include transverse rumble strips, adjustments to traffic signal progression and retroreflective signal backboards to reduce speed and enhance visibility. Policies discouraging right-turn channels and encouraging roundabouts are also being adopted. A Road Diet Program is being launched to reallocate space from vehicles to pedestrians and cyclists, further reinforcing safer, multimodal roadway design.

Post-crash care: The Vision Zero Action Plan outlines the city's plan to establish a Fatal Collision Response Team involving the city, Windsor Police Service, EMS and the Coroner's Office (City of Windsor, 2024). This team will conduct multidisciplinary reviews after fatal collisions to identify opportunities for systemic improvements. The city will also transition to the provincial Authorized Requestor Information Service (ARIS) system for collision data. This change aims to reduce the average time between a crash and database entry from 477 days (2015 to 2019 baseline) to 60 days, allowing for 90 per cent of reports to be entered within 90 days (City of Windsor, 2024).

Key stakeholders

The City of Windsor's Vision Zero Action Plan is led by the Vision Zero Task Force and informed by the Vision Zero Stakeholder Group. Members of the Vision Zero Task Force include various city departments (i.e. Infrastructure Services, Transportation Planning Services, Communications, Building, Engineering, Public Works Operations and Traffic Operations), Essex Windsor EMS, Transit Windsor and Windsor Police Services. The Vision Zero Stakeholder Group is composed of representatives from the Windsor City Council, Windsor Bicycling Committee, Greater Essex County District School Board, Windsor Regional Hospital, Windsor-Essex Catholic District School Board, Downtown Windsor Community Collaborative, Windsor-Essex County Health Unit, University of Windsor and Windsor Police Services. The plan emphasizes transparency, with regular public consultations, annual progress reporting, and formal reviews every 2.5 to 5 years (City of Windsor, 2024).

Winnipeg, Man.

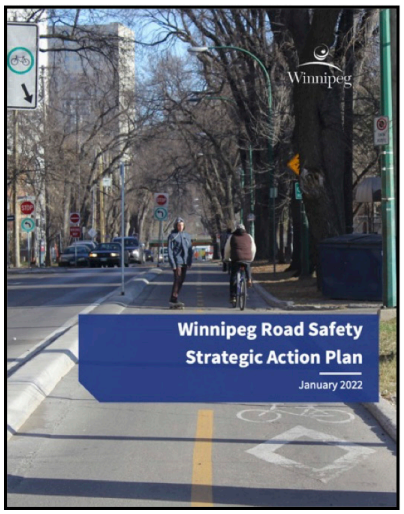
Background

The City of Winnipeg has a population of 749,607, up 6.3 percent since 2016. Its population density is 1,623.3 people per square kilometre (Statistics Canada, 2023ar). Of a 25-per-cent census sample, 82.6 per cent mainly commuted to work by car, truck or van, followed by 9.3 per cent who used public transit (Statistics Canada, 2023ar).

The city's Annual Collision Report, based on Manitoba Public Insurance (MPI) data, indicates that 20,618 collisions occurred on Winnipeg roads in 2022. In 2022, there were 25 fatal collisions, which is the highest recorded number between 2013 and 2022. In 2022, 4,117 collisions resulted in injury, representing the lowest annual total recorded since 2013, with the exception of 2020 and 2021. Additionally, there were 95 victims of serious injury collisions in 2022 and 12 of the 25 fatalities involved pedestrians, with 90-degree collisions responsible for most fatal collisions (City of Winnipeg, 2024).

Winnipeg Road Safety Strategic Action Plan (2022-2026)

Winnipeg's City Council adopted Vision Zero on July 21, 2022, with the approval of the **Winnipeg Road Safety Strategic Action Plan** (RSSAP). The plan comprises 67 actions to help Winnipeg achieve its goal of a 20-per-cent reduction in fatal and serious injury collisions over the next five years (2022 to 2026). It serves as a roadmap for implementing both short-term solutions and long-term investments to ensure the city is doing its part in preventing serious injury and death on our roads (City of Winnipeg, 2022).



Grounded in the Vision Zero and the Safe System Approach (SSA), the plan focuses on five key areas identified through collision data and public input. These are:

- improving safety at signalized intersections
- enhancing pedestrian infrastructure and programs
- advancing cyclist safety through infrastructure and signal strategies
- managing vehicle speeds via new policies

- fostering a strong road safety culture through ongoing education and research partnerships.

It adopts a multidisciplinary, data-driven strategy involving engineering, enforcement, education, emergency services, evaluation and community engagement, with road safety viewed as a shared responsibility (City of Winnipeg, 2022).

Key features of the plan

Safe speeds: The RSSAP contains six actions focused on reducing speed. The city is reviewing speed limits, developing and implementing a speed management policy and implementing traffic calming measures in new and existing residential areas to ensure that speeds are safe and appropriate. Other actions in this focus area include the implementation of a pilot program that reduces speeds from 50 km/h to 30 km/h on four existing neighbourhood greenways and reviewing and updating policy for designating school areas and implementing 30km/h speed limits in school zones. Lastly, the city has formed a strategic partnership with the Winnipeg Police Service involving data sharing to promote data-driven speed enforcement (City of Winnipeg, 2022).

Safe road users: The RSSAP proposes various actions to promote safety culture through education and responsible behaviour. This includes conducting public perception surveys to understand attitudes toward safety and using the results to guide educational campaigns on safe infrastructure use. Collaborative efforts will support programs that reduce distracted and aggressive driving through both education and enforcement and contribute to speed reduction campaigns. The plan also emphasizes the importance of school cycling education in fostering safe habits from an early age. Internally, the City of Winnipeg will offer road safety training and professional development opportunities to its employees.

Safe vehicles: Vehicle safety is addressed indirectly through two actions under the "Actions for improving safety culture" focus area. This includes promoting car seat education programming in partnership with MPI and the Winnipeg Police Service and recommending the expansion of Winnipeg Police Service's commercial vehicle safety inspections.

Safe road design: The city has committed to 40 actions to advance safer road design, including 15 focused on signalized intersections, 14 on pedestrian safety and 11 on cyclist safety. These actions prioritize intersection safety improvements, enhanced pedestrian and cycling infrastructure, updated traffic control policies and strengthened road safety review and design practices. Key measures include changes to signal operations, improved signage and pavement markings, installation of warning devices and the development of policies and guidelines to support safer roadway design and operation (City of Winnipeg, 2022).

Key stakeholders

Key stakeholders in Winnipeg's road safety strategic action plan include city departments, Winnipeg Police Service and Winnipeg Transit. Provincial and insurance partners include MPI, the Manitoba School Boards Association, the Manitoba Heavy Construction Association, the Manitoba Trucking Association, the Manitoba Association of School Superintendents and the Manitoba Association of School Business Officials.

Community and advocacy organizations include Eagle Urban Transition Centre, Immigrant and Refugee Community Organization of Manitoba (IRCOM), Assembly of Manitoba Chiefs, the Manitoba Métis Federation, the Winnipeg Regional Health Authority, Bike Winnipeg, Youth Agencies Alliance, Safe Speeds Winnipeg and the Society for Manitobans with Disabilities. The Coalition of Manitoba Motorcycle Groups, Manitoba Child Care Association, Social Planning Council of Winnipeg, Independent Living Resource Centre, Canadian National Institute for the Blind, Green Action Centre, MADD Winnipeg, Manitoba Association of Parent Councils, the Transportation Options Network for Seniors and Winnipeg Trails were also involved (City of Winnipeg, 2022).

What the city has to say

Interview with Amanda Pushka, Road Safety Engineer, City of Winnipeg

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

AMANDA PUSHKA: Motor vehicle collisions are the leading cause of death and disability in many jurisdictions and result in significant economic costs, pain and suffering, and life altering consequences. Between 2012 and 2018, 98 people were killed and 1,113 suffered major injuries as a result of collisions on Winnipeg streets. Although fatal collisions have decreased year over year, the number of injury-causing collisions has increased. Serious injuries and deaths on the road are preventable – and Winnipeggers are in the midst of a cultural shift to a mindset wherein such incidents are no longer tolerated.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

AMANDA PUSHKA: The Winnipeg Road Safety Strategic Action Plan (RSSAP) was adopted by Winnipeg City Council in 2022. It has a long-term vision of "a transportation system that allows people of all ages and abilities to safely move around without experiencing death or serious injury". Our short-term goal is a "20-per-cent reduction in fatal and serious injury collisions over the next five years".

PARACHUTE: What major activities are you undertaking to meet these goals?

AMANDA PUSHKA: Five focus areas were identified that presented the best opportunities to improve safety for all road users: speeds, signalized intersections, pedestrian safety, cyclist safety and road safety culture. Sixty-seven actions within these five areas were developed to address trends that were identified from collision analysis and important concerns raised by stakeholders. These range from developing new policies to installing innovative countermeasures to establishing educational programs.

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

AMANDA PUSHKA: Improving safety for pedestrians and cyclists is at the core of the strategy and actions that would address risks to pedestrians and cyclists were prioritized. Acknowledging the need for equity-centred approaches, it is important to recognize that Indigenous Peoples and low-income residents are disproportionately represented in collision data. We will also be conducting an equity and safety analysis to further integrate and embed equity into policy and projects.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

AMANDA PUSHKA: Key stakeholders include government agencies and non-profit organizations. These stakeholders were brought together as an advisory committee for the development of the strategy. Partners and stakeholders continue to be engaged through a committee to assist with implementing the action plan now that it's adopted. This includes the Province of Manitoba Transportation and Infrastructure, MPI, Winnipeg Regional Health Authority and Manitoba Shared Health. Non-profit and advocacy organizations participate in ongoing education and outreach initiatives.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

AMANDA PUSHKA: See above.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

AMANDA PUSHKA: Yes. This comes from provincial and municipal funding.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

AMANDA PUSHKA: We are monitoring progress on delivering the actions in the RSSAP, tracking road safety interventions and countermeasures installed and trends

in road collisions and perceptions of safety. We are about to launch a new road safety dashboard.

Some projects and actions also have their own dedicated evaluation and monitoring plans to assess the efficacy of different road safety interventions. For example, we're doing video conflict analysis for changes to traffic signal timings, such as pedestrian scramble and leading pedestrian intervals, doing a near-miss analysis. Evaluation will also include feelings of safety to understand if people perceive a change in safety.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

AMANDA PUSHKA: Much of our local planning needs to consider budget timelines. Our municipal budget is a four-year timeline, and construction projects are forecast seven years in advance. As well, in many cases, we need to seek council approval for a project and public engagement, which can also extend project timelines and limit short-term implementation.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach and buy-in from stakeholders)?

AMANDA PUSHKA: We've seen some improvements in integration and consideration of road safety in projects outside of the strategic action plan and a willingness to try new approaches that have demonstrated road safety improvements in other jurisdictions.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

AMANDA PUSHKA: In preparation for a large construction project at a key downtown intersection, there was a significant review of traffic signals. The aim was to change the signals based on anticipated changes in traffic flow and congestion while the construction was occurring. Because of the RSSAP, this signal timing review across the whole downtown was harnessed as an opportunity to improve safety for pedestrians. Leading pedestrian intervals (LPIs) were included in the new timing plans, in a new blanket approach to the downtown. The result was that leading pedestrian intervals were installed at almost 100 intersections throughout the downtown. There were some concerns about complaints; however, the response from downtown residents, workers and tourists was very positive.

Based on the success of the LPI application in the downtown, we're developing a new city-wide policy for LPIs. We anticipate installations occurring in other neighbourhoods next year, using a set of criteria to prioritize pedestrian safety in all neighbourhoods.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

AMANDA PUSHKA: One challenge we face is that some initiatives or projects have aspects outside of municipal jurisdiction and require changes to legislation or regulations at the provincial level. This can result in longer project timelines or unexpected delays, particularly when there are lengthy approval processes within both municipal and provincial bodies. This can be challenging to navigate and stress relationships with stakeholders or project partners.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

AMANDA PUSHKA: Not at this time. We're still a new team and in the early stages of implementation.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

AMANDA PUSHKA: We are currently in a policy and planning phase of our strategy and hope to move into a building and construction phase in 2026-2027. We anticipate an influx of funding for capital projects in the next two years, which will allow us to initiate more infrastructure projects and establish safer road design and built environment.

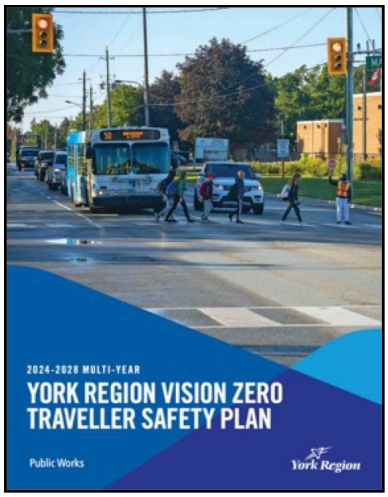
York Region, Ont.

Background

Based on the 2021 census, York Region has a population of 1,173,334, up by 5.7 per cent since 2016. York Region has a population density of 667.3 people per square kilometre (Statistics Canada, 2023as). Of a 25-per-cent census sample, 88.8 per cent mainly commuted to work by car, truck or van, followed by 6.1 per cent who used public transit to go to work (Statistics Canada, 2023as).

In 2019, York Region and its local municipalities reported 10,000 motor vehicle collisions, with 2,500, or 25 per cent, resulting in serious injury or fatality (York Region 2024). The rate of killed or seriously injured (KSI) collisions remained steady at 25 to 27 per cent from 2015 to 2023. Vulnerable road users within York Region such as pedestrians, cyclists, older adults and motorcyclists, experience a disproportionately high rate of severe outcomes, with 76 per cent of collisions involving pedestrians resulting in injury or death (York Region, 2024).

York Region Vision Zero Traveller Safety Plan 2024-2028



The **York Region Vision Zero Traveller Safety Plan 2024-2028** was approved by the York Regional Council on March 21, 2024, to improve road safety and reduce traffic-related fatalities and injuries across the region by 10 per cent over the next five years (York Region, 2024). The plan applies the Safe System Approach (SSA) and was made in collaboration with local cities, towns, various partners, stakeholders and residents. The plan identifies short- and long-term solutions, emphasizing five key areas where countermeasures will have the most significant impact on road safety. These are vulnerable road users, intersections, aggressive driving, distracted driving and impaired driving. Key strategies include the integration of engineering, enforcement, education and engagement, supported by a new web-based data warehouse to guide decisions. More than 100 specific safety countermeasures are planned, prioritized based on feasibility, safety benefits and alignment with other projects (York Region, 2024).

Key features of the plan

Safe land use planning: In alignment with the region's broader Transportation Master Plan, the strategy promotes travel modes that reduce reliance on

single-occupancy vehicles, such as public transit, walking, cycling and micro-mobility options. The plan supports reviewing municipal policies and design guidelines to integrate safety into land use and transportation planning processes systematically. It also recognizes the role of equity and accessibility, understanding that land use policies can impact travel demand, transportation mode choice and safety for all residents, especially in areas with limited infrastructure or access to safe mobility options (York Region, 2024).

Safe speeds: The plan identifies speeding, part of the broader category of aggressive driving, as one of five emphasis areas. Prior to the Ontario provincial ban, the city intended to expand the use of Automated Speed Enforcement (ASE), which has already demonstrated substantial reductions in driver speeds and collision rates during pilot projects. Additional tools include red-light cameras, radar speed boards, pavement markings such as "dragon's teeth" for road narrowing and targeted speed limit reductions in high-risk zones, such as school areas. For example, lowering posted speed limits in school zones by 10 km/h has resulted in a measurable 10-percent reduction in collisions.

Safe vehicles: The York Region plan references the protective value of collision avoidance systems. The plan also draws on connected vehicle data such as patterns of hard braking or rapid acceleration to identify high-risk driving behaviours and inform engineering countermeasures. Furthermore, York Region is monitoring advancements in impaired driving prevention technology including in-vehicle alcohol detection systems.

Safe road users: Three of the five key emphasis areas – vulnerable road users, distracted driving and impaired driving – directly address behavioural factors that contribute to serious and fatal collisions. The plan employs both educational campaigns (e.g. Be Visible Be Seen) and enforcement initiatives (e.g. Project R.I.D.E.) led by York Regional Police to address unsafe behaviours. Through a combination of public engagement, awareness campaigns and targeted law enforcement, the region seeks to shift social norms around driving behaviour and promote a culture of shared road safety.

Safe road design: The plan introduces more than 100 proven engineering countermeasures such as leading pedestrian intervals (LPIs), curb extensions, flashing beacons and signal modifications (such as dedicated left-turn phases). These enhance visibility and separation among road users. Proactive tools, such as rumble strips and high-visibility pavement markings, further reduce crash risk. Additionally, the plan introduces a Systemic Safety Review Program to identify latent risks and apply systemic interventions even in the absence of previous crashes, transitioning from reactive to preventative design practices (York Region, 2024).

Key stakeholders

York Region developed its Vision Zero Traveller Safety Plan through collaboration with various York Region departments, York Regional Police, MTO, York Region District School Board, York Catholic District School Board and CAA. Local municipalities including the Town of Aurora, Town of East Gwillimbury, Town of Georgina, King Township, City of Markham, City of Newmarket, Town of Stouffville and the City of Vaughan were also involved (York Region, 2024).

What the region has to say

Interview with Nelson Costa, Manager, Traffic Safety and Signal Operations, York Region

PARACHUTE: What motivated the decision to adopt Vision Zero? Were there any specific incidents or trends in traffic injuries/fatalities that influenced the design of your strategy?

NELSON COSTA: York Region adopted Vision Zero in response to increasing traffic volumes, rising collision rates and growing concern for traffic safety. From 2015 to 2023, total collisions and traffic volumes grew by approximately 13 per cent, while severe collisions remained steady at 25 per cent, particularly at intersections. Vulnerable road users – such as pedestrians, cyclists, seniors, children and motorcyclists – are especially at risk, with 76 per cent of pedestrian-involved collisions resulting in injury or death. At the same time, active transportation trips are growing twice as fast as vehicle trips, highlighting the need to better protect these users. Although current safety programs and vehicle technologies have helped stabilize trends, a more focused and co-ordinated approach was needed. The Vision Zero Traveller Safety Plan was developed to close program gaps, align with best practices, leverage data and public input, and ultimately eliminate severe collisions on roads in York Region. York Region's 2022 Transportation Master Plan also identified safety for all travellers as a focus area. Focus areas require further study and additional engagement, with recommended actions and initiatives brought forward for review in the current term of council. This focus area is being advanced through the York Region Vision Zero Traveller Safety Plan.

PARACHUTE: How long has your Vision Zero strategy been in place and what are its goals?

NELSON COSTA: Council adopted York Region's Vision Zero Traveller Safety Plan in March 2024, with a timeline through 2028. The short-term goal is to reduce severe collisions by 10 per cent within five years. The aspirational vision is to eliminate all severe collisions and ultimately achieve Vision Zero in the region.

PARACHUTE: What major activities are you undertaking to meet these goals?

NELSON COSTA: York Region has undertaken a wide range of initiatives to meet its Vision Zero goals, focusing on protecting vulnerable road users and curbing dangerous driving behaviours. In 2024, more than 20 safety improvements were completed at more than 225 locations. These actions included physical infrastructure upgrades, technology deployment and strategic studies. Looking ahead, the region is expanding its use of automated enforcement, improving intersection safety and introducing more speed management tools across the network. Key activities include the following:

- Installed "SLOW DOWN" text pavement markings in all school zones
- Expanded the ASE program in 2024 with 20 ASE fixed cameras and opened a regional processing centre
- Established senior zones with extended pedestrian crossing times
- Implemented gateway safety enhancements in rural communities
- Installed fully protected left-turn signals
- Completed eight roundabout feasibility studies (2024), with eight more planned in 2025
- Adding 20 more ASE fixed cameras in school zones (2025)
- Installing 15 new red-light cameras (2025)
- Installing 100 radar speed monitoring boards; 20 in 2025, 40 in 2026, and 40 in 2027

PARACHUTE: How are equity and the needs of vulnerable users reflected in your plan?

NELSON COSTA: The plan integrates equity and the needs of vulnerable road users by focusing on five key emphasis areas: vulnerable users, intersections and high-risk driving behaviours such as aggressive, distracted and impaired driving. It places a strong emphasis on protecting those most at risk, e.g. pedestrians, cyclists, seniors, children and motorcyclists, and particularly at intersections, where a high number of collisions occur. Equity is addressed through targeted investments in locations that experience greater safety challenges, including school and community safety zones, senior safety zones, high-risk intersections and underserved rural hamlet communities. These targeted efforts aim to ensure safety improvements are inclusive and prioritize the well-being of those who are most vulnerable on the road.

PARACHUTE: Who are your key stakeholders and how did you engage them in developing and implementing your Vision Zero strategy?

NELSON COSTA: York Region developed its Vision Zero strategy through broad collaboration with stakeholders, including York Regional Police, local municipalities, public health, schools, school boards, emergency services, the MTO, advocacy groups and the public.

Since the plan's kickoff in October 2022, the region has held quarterly workshops, public consultations, online surveys and used interactive mapping tools to gather input and guide actions.

As Ontario's first multi-tier road safety initiative, the plan enables co-ordinated action across jurisdictions to protect vulnerable road users and address high-risk driving behaviours.

PARACHUTE: Do you have a Vision Zero or Safe System Approach committee and what players is that composed of?

NELSON COSTA: Through the Vision Zero Traveller Safety Plan, we are forming multi-disciplinary Emphasis Area Task Teams focused on managing the plan based on emphasis areas. The teams will guide the plan's execution, and includes transportation engineers, police, public health and municipal partners.

Ongoing collaboration with all nine local municipalities supports co-ordinated action and helps build a strong, region-wide road safety culture.

PARACHUTE: Do you have a committed Vision Zero or Safe System Approach budget for your road safety and mobility plan?

NELSON COSTA: Funding for the plan is considered through the region's annual budget process, with estimated annual costs of approximately $12 million. About 90 per cent of these costs are integrated into existing capital programs, while the remaining 10 per cent is covered through revenues from ASE and red-light cameras. The York Regional Police budget also supports enforcement and parts of education and engagement. Larger infrastructure-related countermeasures are funded through the Capital Roads Program.

PARACHUTE: How do you plan to measure the success of your strategy? What concrete data do you plan to collect?

NELSON COSTA: Success will be measured through severe collision statistics (by mode, location, volume); enforcement trends in aggressive, distracted, impaired driving; traffic volumes and speeds; and infrastructure delivery metrics (e.g. number

of intersection upgrades, ASE and red-light camera installations.) These results will be reported annually to council and used to adjust targets.

PARACHUTE: Are there unique contextual factors that you needed to consider for planning purposes and, if so, can you please describe what these were?

NELSON COSTA: York Region had to consider several contextual factors during planning, including population growth and the differing needs of urban and rural jurisdictions and road networks. Community resistance to infrastructure changes, such as roundabouts and road diets to accommodate bike lanes, also posed challenges. These challenges required thoughtful engagement and collaboration during the plan development.

PARACHUTE: Since you initiated your program, what has changed (e.g. new projects, project scope, approach, and buy-in from stakeholders)?

NELSON COSTA: Since the plan's initiation, our traffic safety approach has shifted from more reactive to an individual's request to proactive, using data-driven methods such as network screening and systemic reviews to identify high-priority locations. This has enabled more preventative projects and a stronger focus on long-term safety improvements.

PARACHUTE: Are there any successes your program has achieved that you would like to share?

NELSON COSTA: While we are experiencing mixed results in the first year, it is common across many early Vision Zero efforts. The region has successfully laid the groundwork. Key achievements include launching new programs, building internal teams and strengthening communication. Although many safety measures are still being rolled out, the region is well-positioned to make meaningful, long-term improvements. Continued focus, stronger efforts in 2025 and long-term commitment will be essential to achieving safer roads for all.

PARACHUTE: Have you experienced any challenges or roadblocks in implementing your strategy? You may focus on one or two significant challenges in your response.

NELSON COSTA: One significant challenge has been public perception and acceptance of ASE. While ASE is a proven, evidence-based tool for reducing speeding and improving safety, some residents view it primarily as a revenue-generating system rather than a safety intervention. This skepticism has led to public pushback in some areas, particularly where cameras were installed without sufficient community outreach. To address this, the region has focused on transparency, including clear signs in ASE zones, public education campaigns and sharing data on speed reductions and safety outcomes to reinforce the program's intent and benefits.

PARACHUTE: Do you have any advice for jurisdictions that have recently adopted or are considering adopting a Vision Zero approach?

NELSON COSTA: Start by using reliable data to understand where and why severe collisions happen, especially at high-risk locations and to vulnerable road users. Build a strong team from areas such as traffic, public health and police, and work closely with the community and all levels of government. Expect early challenges and be patient. Change takes time. Share your progress openly and celebrate small wins to keep things moving. Make Vision Zero part of your regular planning and budgeting. That said, police reports still often contain errors, which affects data quality. Continue working with the province and police agencies to address this and plan to recommend improvements based on trends so we can all make smarter, evidence-based safety decisions.

PARACHUTE: As your Vision Zero program progresses, where would you like to see it go next? What are you hoping to accomplish moving forward over the next five years?

NELSON COSTA: Over the next five years, York Region aims to fully implement the Vision Zero Traveller Safety Plan and meet its target of reducing severe collisions by 10 per cent by 2028. The region will continue expanding automated enforcement, implementing more safety-focused infrastructure and improving policies that protect vulnerable road users. A key focus will be embedding Vision Zero principles into everyday transportation planning and capital delivery processes, ensuring safety is treated as a core function rather than an add-on. Long term, the region hopes to shift toward a proactive, prevention-first culture where "zero fatalities" is seen not as aspirational, but achievable.

Conclusion and next steps

Vision Zero efforts may not look the same or take the same path in each jurisdiction. As this report highlights, however, there are many similarities between the framework's fundamentals and how it gets rolled out. We hope that by presenting Vision Zero programs across Canada, we have facilitated a better understanding of how to approach Vision Zero in your unique jurisdiction. The learnings from various road safety stakeholders shared in this case study help you to prepare for a variety of challenges that may arise throughout the consideration and implementation of a Vision Zero and/or Safe System Approach to improving road safety.

Whether you are just learning what Vision Zero is, are advocating for Vision Zero in your area, or are actively in the phase of considering or implementing Vision Zero, learning from the experiences of other jurisdictions can help you plan effectively and progress your road safety efforts forward.

If your community is considering implementing Vision Zero, please let us know by emailing **info@parachute.ca**. Visit the **Vision Zero collection on the Parachute website** to find Parachute-produced case studies, blogs, infographics, videos as well as links to road safety plans in Canada. You will also find the best tools and resources to create, implement and evaluate Vision Zero.

Appendix 1: References

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Appendix 2: Acronyms

ALPR: Automatic Licence Plate Reader

AHS: Alberta Health Services

AMA: Alberta Motor Association

AMTA: Alberta Motor Transport Association

ASE: Automated Speed Enforcement (see also ATE)

ATE: Automated Traffic Enforcement (see also ASE)

BCAA: British Columbia Automobile Association

BCIRPU: BC Injury Research and Prevention Unit

BCRSS: BC Road Safety Strategy

BCTA: British Columbia Trucking Association

BIA: Business Improvement Areas

BNQ: Bureau de normalisation du Québec

CAA: Canadian Automobile Association

CCMTA: Canadian Council of Motor Transport Administrators

CNESST: Commission des normes, de l'équité, de la santé et de la sécurité du travail

CNIB: Canadian National Institute of Blind

CPS: Calgary Police Service

CVOR: Commercial Vehicle Operator Registration

EMCS: City of Calgary's Emergency Management and Community Services Traffic Safety Team

EPS: Edmonton Police Service

ICBC: Insurance Corporation of British Columbia

KCAT: Kingston Coalition for Active Transportation

KSI: killed or seriously injured

LBI: Leading Bike Interval

LiDAR: Light Detection and Ranging

LPI: Leading Pedestrian Interval

MADD: Mothers Against Drunk Driving

MAMH: Ministère des Affaires municipales et de l'Habitation

MELCCFP: Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs

MPI: Manitoba Public Insurance

MTMD: Ministère des Transports et de la Mobilité durable

MTO: Ontario Ministry of Transportation

MTQ: Québec Ministry of Transportation

NACTO: National Association of City Transportation Officials

OPP: Ontario Provincial Police

OTC: Ontario Traffic Council

PARTY: Prevent Alcohol and Risk-related Trauma in Youth

PMD: Drummondville's Plan de mobilité durable

POEO: Ministry of Transportation Public Outreach and Education Office (POEO)

PRSC: Manitoba's Provincial Road Safety Committee

RCMP: Royal Canadian Mounted Police

RRFB: Rectangular rapid flashing beacons

RSSAP: Winnipeg Road Safety Strategic Action Plan

RSSP: Region of Peel's Vision Zero Road Safety Strategic Plan 2018-2022

SAAQ: Québec Automobile Insurance Corporation

SGI: Saskatchewan Government Insurance

SMP: Calgary's Safer Mobility Plan

SPD: Saanich Police Department

SPVG: Service de police de la Ville de Gatineau

SRSAP: Durham Region's Strategic Road Safety Action Plan

SRSP: Hamilton's Strategic Road Safety Program

SSA: Safe System Approach

SSP: Safe Systems Pyramid

STEP: Selective Traffic Enforcement Program

STO: Société de transport de l'Outaouais

TAC: Transportation Association of Canada

TCAT: Toronto Centre for Active Transportation

TCDSB: Toronto Catholic District School Board

TDSB: Toronto District School Board

TPS: Toronto Police Service

TSSP: Strathcona County Traffic Safety Strategic Plan 2020

TTC: Toronto Transit Commission

VIHA: Vancouver Island Health Authority

VCH: Vancouver Coastal Health

VPD: Vancouver Police Department

VRU: Vulnerable Road Users

VSL: Variable Speed Limits

Appendix 3: Vision Zero strategy comparison table

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Brantford, Ont.	3 of the Es of mobility safety: • Engineering • Education • Enforcement		• Reduce collisions by 10% (from 2019 numbers) by the end of 2026 • 25% fewer cyclist/pedestrian collisions • 25% reduction in the number of personal injuries resulting from collisions
British Columbia	Safe System Approach	High-risk driving behaviours High crash locations Vulnerable road users (e.g. pedestrians, cyclists, users of mobility devices)	• Continuous downward trends in the rate-based number of fatalities and serious injuries (per 100,000 population). • Support the global goal set by the Stockholm Declaration on road deaths and injuries by 50% by 2030
Burnaby, B.C.	Land use integration Public realm and place-making Streets are for everyone Transportation Demand Management Behaviour change: educate, encourage, enable and empower	Road design Regulation, policies and enforcement Road user behaviour Vehicular compliance with industry safety standards	• 20% reduction in serious injuries and deaths by 2030 • 75% reduction by 2040 • Eliminate all traffic-related fatalities and serious injuries by 2050 (using 2019 as the baseline year).

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Calgary, Alta.	Safe System Approach 6 Es of mobility safety	School and community safety Serious-injury/fatality corridors and contributing factors (speed, impairment, distraction) Safety of people walking, rolling and wheeling Speed and noise – quality of life and community livability Legislative change and technology including e-bikes and e-scooters	• 25% reduction in major injuries and fatalities over 5 years • 25% reduction in collisions involving vulnerable road users, using 2023 collision data as a baseline
Chatham-Kent, Ont.	Safe System Approach Safe Systems Pyramid	Collision types Roadway departure collisions Nighttime/dusk collisions on unlit roadways Infrastructure Roadway operating speeds People Impaired driving Seat belt use Pedestrians Vehicles Cyclists Off-road vehicles Motorcycles	
Coquitlam, B.C.	Safe System Approach	Safety and accessibility for all Complete and connected communities Sustainable and innovative mobility Reliable transportation network Fast and frequent transit	• Zero serious traffic injuries and fatalities by 2050 • 50% mode share by active transportation and public transit by 2050 • 0 transportation greenhouse gas emissions by 2050

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Delta, B.C.	Safe System Approach	Protecting older adults and youth Vehicle speeds Vulnerable road users (e.g. pedestrians, cyclists, and motorcyclists) Intersections	• Reduce deaths and serious injuries by at least 5% annually, reaching a 25% reduction by 2030
Devon, Alta.	Safe System Approach 5 of the Es of mobility safety: • Engineering • Education • Enforcement • Evaluation • Engagement	Follows the monthly topics covered in the Alberta Traffic Safety Plan Calendar	• Eliminate all serious injury and fatal road collisions on community roads to create a safe and healthy community
Drummondville, Que .	Complete Streets	Accessibility Safety Comfort Efficiency	• Eliminate all traffic-related fatalities and serious injuries by 2040 • Increase use of active and public transportation by 20% by 2040
Durham Region, Ont.	Safe System Approach 5 of the Es of mobility safety: • Engineering • Education • Enforcement • Evaluation • Engagement	Intersections Aggressive driving Distracted driving Impaired driving Young drivers Pedestrians Cyclists Commercial vehicles	• Reduce fatalities and injury collisions by 10% within 5 years
Edmonton, Alta.	Safe System Approach		• Zero serious injury and fatality crashes by 2032

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Fort Saskatchewan, Alta.	Safe System Approach 5 of the Es of Mobility Safety: • Engineering • Education • Enforcement • Engagement • Evaluation	High-risk locations Motorist behaviours Speed reduction	• Longterm goal is to be free of fatal and serious injury collisions on our roadways
Gatineau, Que.	4 of the Es of mobility safety: • Engineering • Education • Enforcement • Engagement	Target groups: • Young drivers • Vulnerable road users • Operators of heavy vehicles • Traffic offenders • Construction workers • Seniors Collision factors: • Inattention and careless driving • Driving while impaired by alcohol or drugs • Driving with distractions (cell phone – texting) • Speeding and aggressive driving • Environmental factors • Fatigue • Road sharing / Sharing the road	• Reduce the total number of collisions within its territory

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Guelph, Ont.	Safe System Approach Safe Systems Pyramid	Focus areas: • Plan better ways to grow • Identify risk • Protect vulnerable people • Design safe streets • Reduce speeds • Be data-driven • Work together • Learn together Priority areas: • Vulnerable road users • High-risk locations • High-risk driving	• Reduce the number of people killed and seriously injured on our roadways to zero
Halifax Regional Municipality, N.S.	Safe System Approach Engineering, education, enforcement, engagement, emerging technology advancements, equity and inclusion	Intersections Safe speeds Vulnerable road users Safe schools Data management	• Achieve zero fatalities and serious injuries for all road users by 2038 • Maintain a downward trend in the rate of fatal and serious injury collisions per 100,000 residents
Hamilton, Ont.	5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	Secondary emphasis areas: • Aggressive driving • Intersections • Vulnerable road users • Young drivers • Collision data improvements	• Eliminate incidents that result in injury or fatality
Kamloops, B.C.	Safe System Approach	Evidence-based safety decisions Safety and livability Equitable safety Safety by design Creating a safety culture	• Zero crashes causing fatalities or serious injuries by 2039

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Kingston, Ont.	5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	Intersections Distracted driving Aggressive driving Impaired driving Pedestrian collisions Cyclist collisions Young demographic	• Over 5 years, achieve at least a 10% reduction in fatal and injury collisions involving any type of road user • Over 5 years, see at least a 10% reduction in collisions with vulnerable road users such as pedestrians, cyclists and motorcyclists
Kitchener, Ont.	5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	Vulnerable road users High-risk locations High-risk driving Aggressive driving Distracted driving Speeding	• A declining trend in the number of collisions involving serious injuries or fatalities over the course of the 4-year strategy
Lacombe County, Alta.	Safe System Approach 5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	Follows the monthly topics covered in the Alberta Traffic Safety Plan Calendar	• Eliminate all traffic-related fatalities and serious injuries in their jurisdiction
Lethbridge, Alta.	Safe System Approach	Distraction Speed and aggressive driving Intersections Safe vehicles Vulnerable road users	• Zero transportation-related fatalities and serious injuries by 2040 • Interim target of a 50% reduction in transportation-related fatalities and serious injuries by 2030

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
London, Ont.	Guiding principles: • Environmentally sustainable • Financially sustainable • Equitable • Healthy and safe • Integrated, connected and efficient	Use the mobility system to support London's desired future land use Put people first in London's mobility system Manage road capacity strategically Male transit the option of choice for more trips Make walking and cycling preferred mobility options to meet daily travel needs Support London's role as a regional hub Provide a mobility system that enables more equitable participation in city life Prepare for change	• By 2050, achieve a minimum of 32.5% of trips made by waking, cycling and transit
Manitoba	Safe System Approach	Safe vehicles Safe roads Safe road users Evolving a traffic culture in Manitoba Enforcement Education Public policy and legislation Medically at-risk drivers Safe speeds	• An annual downward trend of fatalities and serious injuries on provincial and municipal roadways over the next 10 years per 100,000 population • Downward trend over the next 10 years in the societal cost of collisions in Manitoba on a per capita basis
Middlesex Centre, Ont.	3 of the Es of mobility safety: • Engineering • Education • Enforcement		

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Mississauga, Ont.	Evaluation Engineering Enforcement Empathy Education		• Zero fatalities and serious injuries from collisions on city streets
Montréal, Que.	Consistent with the Safe System Approach	Fairly reallocate the street space Reduce speeds Make arterial and collector roads safer Make the streets used by the most vulnerable safer Develop a Vision Zero culture	• Eliminate all traffic-related fatalities and serious injuries by 2040, with an interim goal of a 50% reduction by 2030
Niagara Region, Ont.	Engineering Enforcement Education and empathy	Intersections Distracted and aggressive driving Vulnerable road users Young and new drivers Rural roads Commercial vehicles Impaired driving	• Eliminate fatalities and serious injuries on roadways
North Bay, Ont.	Safe System Approach 4 of the Es of mobility safety: • Engineering • Enforcement • Education • Engagement	Intersections Distracted driving Aggressive driving Pedestrians Cyclists School zones	• Reduce fatal and serious injury collisions by a minimum of 15% within 5 years

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Ottawa, Ont.	Safe System Approach	Intersections High-risk driver behaviour Following too close Exceeding the speed limit Speed too fast for conditions Disobeying traffic control Failing to yield right of way Inattentive Impaired Vulnerable road users Rural areas	• 20% reduction in the average annual rate of fatal and major injury collisions by 2024 • Zero traffic-related fatalities by 2035
Peel Region, Ont.	Engineering Education Enforcement Empathy	Intersections Aggressive driving Distracted driving Impaired driving Pedestrian collisions Cyclist collisions	• 10% reduction in fatal and injury collisions by 2022 • Zero fatal and injury collisions for all road users
Peterborough, Ont.	Safe System Approach 5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	Safe school zones Safe neighbourhoods Safety for vulnerable users Safe corridors Safe intersections	• 50% reduction in fatalities and major injuries over the next 10 years, such that collisions involving fatalities and major injuries will represent no more than 0.5% of total annual collisions by 2031
Québec	Safe System Approach	-Safe active transportation to school Safe infrastructure for pedestrians Safety of road construction workers Safety of road construction workers Innovating to improve road safety Communication and training	• Achieve a 25 % reduction in the number of fatal and serious injury collisions by 2030 compared to 2017 levels

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Regina, Sask.	Safe System Approach 4 of the Es of mobility safety: • Education • Enforcement • Engineering • Engagement	Intersections Vulnerable road users Aggressive driving Distracted driving Impaired driving	• Reduce the number of serious injuries and fatalities by 10% within 5 years
Saanich, B.C.	Safe System Approach Guiding principles: • Data and evidence • Collaboration and partnerships • Protect the most vulnerable • Speed and conflict management • Shift to safer vehicles • Equity • Sustainable funding • Support a growing culture of safety		• Reduce fatal and serious injury collisions by 50% by 2030
St Albert, Alta.	Safe System Approach 5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement 5 pillars of sustainability: • Social • Economic • The built environment • The natural environment • Culture	Intersections Vulnerable road users Vehicle speeds Distraction Young drivers Safer vehicles	• Year-to-year reduction in fatalities and injuries

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Strathcona County, Alta.	5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement		• Decrease the annual rate of fatal and major injury collisions per 100,000 population by 15%
Surrey, B.C.	Safe System Approach	Pedestrians Cyclists Motorcyclists Intersections High-risk driving Equity	• Achieve a 15% reduction in the rate of killed and seriously injured road users per 100,000 population over 5 years
Temiskaming Shores, Ont.	Safe System Approach Safe Roads Safe Speeds Safe Users Systematic approach Pilot programs and quick wins Infrastructure improvements Community engagement and education Enforcement Long-term planning and sustainability		• Zero injuries or fatalities related to traffic
Toronto, Ont.	Safe System Approach 5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	Pedestrians, Cyclists Motorcyclists School-aged children Older adults Aggressive and distracted driving	• Reduce and ultimately eliminate killed or seriously injured collisions on Toronto's roads

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Vancouver, B.C.	5 of the Es of mobility safety: • Education • Enforcement • Engineering • Evaluation • Engagement	-	• Zero fatal and injury collisions
Victoria, B.C.	Local area planning Equity within the community Advancement of accessibility	Traffic calming Complete streets Improved intersections Reduced speed limits	• By 2023, Victoria planned to effectively manage and prioritize all curb space. • By 2025, the city aimed to have smart mobility infrastructure that provides real-time safety and performance data to support evidence-based decisions. • By 2026, the goal is for 95 per cent of household transportation needs to be met using less than 15 per cent of monthly income, emphasizing affordability and access • Reach and maintain zero annual traffic fatalities and injuries

Jurisdiction	Approach and guiding principles	Key focus areas and priorities	Target(s)
Windsor, Ont.	Safe System Approach	Driver behaviour Vehicle speeds Drug and alcohol impairment Inattentive driving Failing to yield at intersections Road user types Vulnerable road users Data gaps – people Locations and infrastructure High injury corridors Signalized intersections Pedestrians crossing mid-block Process improvements Improved data sources and information sharing Design standards and best practices	• Short term: 33% reduction of serious injury and fatal collisions in 5 years • Medium term: 67% reduction of serious injury and fatal collisions in 10 years • Long term: to achieve zero fatalities and serious injury collisions within 15 years
Winnipeg, Man.	Safe System Approach	Signalized intersections Pedestrians Cyclists Speed Road safety culture	• 20% reduction in fatal and serious injury collisions over 5 years
York Region, Ont.	Safe System Approach 4 of the Es of mobility safety: • Engineering • Enforcement • Education • Engagement	Vulnerable road users Intersections Aggressive driving Distracted driving Impaired driving	• Reduce traffic-related fatalities and injuries across the region by 10% over 5 years