



City of Kawartha Lakes

Vision Zero/ Safe Systems Plan





Table of Contents

- 1.0 Executive Summary 3**
- 2.0 Introduction..... 4**
 - 2.1 About this Plan 4
 - 2.2 Vision Zero and Safe System Approach: Frameworks for improving Road Safety 5
 - 2.3 What is Vision Zero 5
 - 2.4 Vision Zero in City of Kawartha Lakes..... 7
- 3.0 The Vision Zero Plan 7**
 - 3.1 Elements of Vision Zero..... 8
 - 3.1.1 Evaluation 9
 - 3.1.2 Engineering 10
 - 3.1.3 Enforcement..... 12
 - 3.1.4 Engagement..... 13
 - 3.1.5 Education..... 14
- 4.0 Implementation 15**
- 5.0 Best Practices in North America 15**
- 6.0 Conclusion 16**



1.0 Executive Summary

The City of Kawartha Lakes remains an attractive place to live, offering a high quality of life. The city experiences significant population increases, ranging from 20-25% during peak tourist and recreational seasons, typically observed in the summer. The city's road network spans approximately 2,700 kilometers, with approximately 70% designated as collector roads, 28% as rural roads, and 2% as arterial roads. Additionally, the Ministry of Transportation of Ontario (MTO) manages key provincial routes within the city, including Highway 7, Highway 7A, Highway 35, and Highway 115.

Kawartha Lakes is surrounded by the Regional Municipality of Durham to the west, the County of Peterborough to the east, the City of Peterborough to the southeast, and the Counties of Simcoe, Muskoka, and Haliburton to the north, with the City of Orillia to the northwest. Internally, Kawartha Lakes comprises the urban areas Bobcaygeon, Fenelon Falls, Lindsay, and Omemee as well as numerous hamlets and rural and waterfront areas, each with distinct identities and varying needs. The city is also situated within the Greater Golden Horseshoe (GGH) area and is experiencing growth. According to Statistics Canada, City of Kawartha Lakes population was reported to be 79,247 in 2021. The City's Growth Management Strategy to be completed in Fall of 2024 shows the population is forecasted to be 105,600 by 2036 and 130,000 by 2051.

With increasing roadway utilization and concerns over traffic collisions, the safety of all road users has become a pressing issue. On average, there are 316 collisions annually in Kawartha Lakes (averaged over a 9-year period from 2014 to 2022), with most being vehicle-only incidents. The city has already taken steps to address road safety through educational programs and updates to existing plans and policies. However, recognizing the need for further improvement, Kawartha Lakes is exploring the Vision Zero approach to road safety. Vision Zero utilizes a data-driven strategy aimed at reducing serious injuries and fatalities related to traffic incidents, striving for the ultimate goal of zero casualties.





2.0 Introduction

Each year, more than 1.2 million people worldwide lose their lives in road traffic crashes. In the City of Kawartha Lakes, fatal crashes account for 0.2% of incidents, with 75% classified as Property Damage Only (PDO) collisions and 22% as non-fatal. Vision Zero has emerged as a leading road safety approach in Ontario and the broader transportation industry, aiming to increase safe, healthy, equitable mobility for all. .

Vision Zero is grounded in the belief that while drivers may make errors, the road system itself should not. It prioritizes life and health over other societal benefits, advocating for comprehensive strategies encompassing education, enforcement, engineering, evaluation, and engagement.

Municipalities adopting Vision Zero policies set ambitious targets of zero fatal and serious collisions within specific timeframes, guided by detailed Vision Zero Action Plans outlining precise steps, timelines, and priorities. Key elements of Vision Zero include ensuring safe speeds, vehicles, roads, and drivers. This Transportation Master Plan (TMP) update acknowledges these principles, integrating them into the planning and design of the City of Kawartha Lakes' future transportation network.

As the City of Kawartha Lakes continues to grow and evolve, consideration should be given to adopting a formal Vision Zero policy. This would expand current recommendations into a comprehensive Road Safety Action Plan, ensuring continued progress towards safer roads for all residents and visitors.

2.1.1 About this Plan

This guide provides essential insights to assist municipalities (as well as other public and private organizations) in initiating effective Vision Zero programs, improving existing ones, or developing new road safety initiatives and action plans. Its purpose is to support the City of Kawartha Lakes in its quest to achieve zero fatal and serious injury collisions on its road network. City staff can utilize this guide as a toolkit of actionable strategies to safeguard vulnerable road users and enhance overall road safety efforts.





2.1.2 Vision Zero and Safe System Approach: Frameworks for improving Road Safety

Worldwide, Vision Zero and the Safe System Approach have become widely embraced frameworks for road safety initiatives. Growing emphasis on health and environmental considerations has expanded road safety strategies to include innovative and sustainable mobility solutions, while also fostering collaborations with non-traditional partners.

2.1.3 What is Vision Zero

Vision Zero is a global traffic safety initiative and framework designed to eradicate all traffic fatalities and severe injuries, while promoting safe, healthy, and equitable mobility for everyone. Employing a data-driven approach to road safety, Vision Zero strives to minimize serious injuries and fatalities caused by traffic incidents to zero. Originating in Sweden in 1997, the Vision Zero concept has been embraced globally, including in countries like Canada and the United States.

The basic principles of Vision Zero are as follows.

1. **No loss of life is acceptable** – traffic fatalities and serious injuries are preventable;
2. **We all make mistakes** – the transportation system should be designed to anticipate error, so the consequences are not serious injury or fatality;
3. **We are all responsible for road safety** – those of us who design and maintain the roads, those of us who make and enforce the rules of the roads, and those of us who use the roads; and
4. **Working together** will contribute to a safer road network.

Overall, Vision Zero is a framework adopted by cities to eliminate traffic fatalities and severe injuries, aiming for safer streets for all road users. The framework includes several key elements and strategies as identified below:

1. **Safe Road Design:** Cities redesign streets to prioritize safety, often by implementing measures such as traffic calming (speed bumps, roundabouts), separated bike lanes, wider sidewalks, and improved crosswalks.



2. **Safe Speeds:** Lowering speed limits in urban areas to reduce the likelihood and severity of crashes. This can involve setting default speed limits and using traffic calming measures to enforce them.
3. **Education and Public Awareness:** Campaigns to educate drivers, pedestrians, and cyclists about safe behavior and the importance of following traffic rules. This may include driver training, school programs, and public engagement events.
4. **Enforcement:** Police enforcement of traffic laws to ensure compliance with speed limits, yielding to pedestrians, and other regulations. This can involve increased patrols, automated enforcement systems (like speed cameras), and penalties for traffic violations.
5. **Data-Driven Approaches:** Using data to identify high-risk areas and prioritize interventions. This includes analyzing collision data, conducting safety audits, and using predictive modeling to anticipate and prevent crashes.
6. **Collaboration and Partnerships:** Engaging with community groups, transportation agencies, public health officials, and other stakeholders to implement and support Vision Zero goals. Collaboration helps in getting support, funding, and diverse perspectives.
7. **Policy and Legislation:** Implementing policies and laws that support safer streets, such as zoning changes that prioritize pedestrian and cyclist safety, funding for infrastructure improvements, and regulations on vehicle design and safety features.
8. **Evaluation and Continuous Improvement:** Regularly assessing progress towards Vision Zero goals, adjusting strategies based on data and feedback, and sharing lessons learned with other cities. Evaluation helps cities refine their approach and improve effectiveness over time.

Cities that adopt Vision Zero typically customize these elements to their specific needs and challenges, but the overarching goal remains the same: to create streets where traffic fatalities and severe injuries are eliminated through a holistic approach to safety.





2.1.4 Vision Zero in City of Kawartha Lakes

The Vision Zero approach to road safety is consistent with Canada's Road Safety Strategy 2025 (Towards Zero: The Safest Roads in the World) and the Ministry of Transportation (MTO)'s vision to be a leader in moving people and goods safely, efficiently and sustainably, and to support a globally competitive economy. It is also consistent with the City of Kawartha Lakes existing strategic plans and policies which call for a safe and integrated transportation network that offers a choice of integrated travel modes. In particular, Vision Zero would support the City of Kawartha Lakes 2024-2027 Strategic Plan.

Vision Zero supports the priorities outlined in the City of Kawartha Lakes Strategic Plan by fostering an inclusive and community-oriented program that promotes local prosperity through the development of a safe and integrated transportation network. Moreover, Vision Zero enhances these objectives by promoting active transportation modes and addressing road safety for vulnerable road users of all ages and abilities, thereby reducing Kawartha Lakes' carbon footprint and promoting a healthy lifestyle.

3.0 The Vision Zero Plan

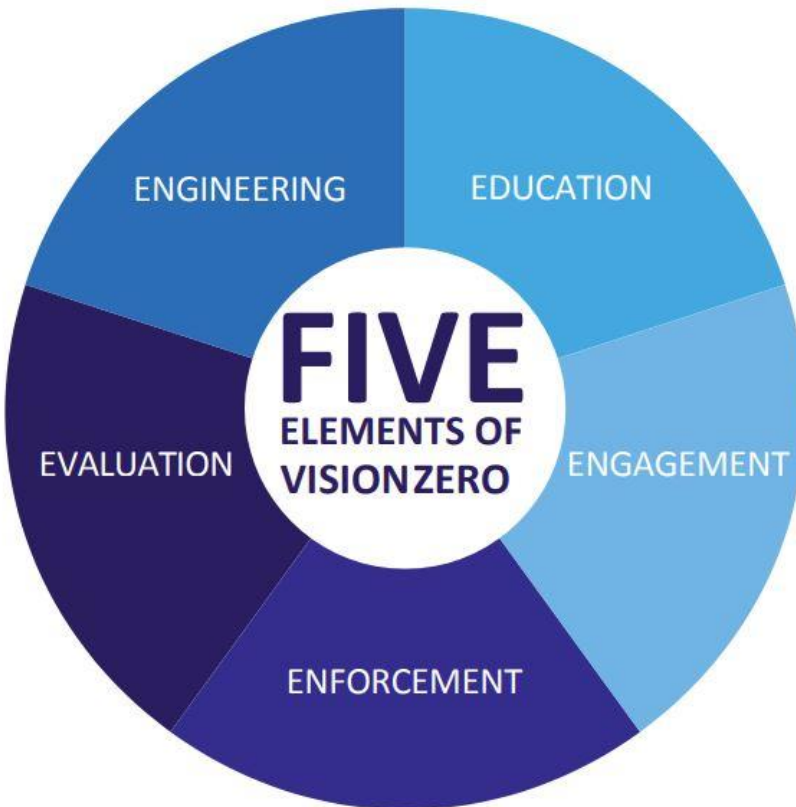
Addressing fatalities and serious injuries related to transportation presents complex challenges that demand a unique approach to finding solutions. This Action Plan is adaptable and anticipated to develop, as the Vision Zero program advances and safety data becomes more targeted to its specific needs.





3.1.1 Elements of Vision Zero

Vision Zero can be achieved by addressing road safety through five main elements (the five E's).



All of the elements need to be implemented in a coordinated and strategic manner to achieve improvements to road safety and to strive towards the goal of zero fatalities and severe injuries on the City of Kawartha Lakes roads.

1. **Evaluation** – Identification of key challenges on Kawartha Lake's Road network using a data driven approach.
2. **Engineering** – Strategic use of resources to improve existing engineering practices and policies, as they pertain to road safety.



3. **Enforcement** – Strategic use of enforcement resources in key areas for maximized effectiveness.
4. **Education** – Targeted and collaborative campaigns to address safety for all road users.
5. **Engagement** – Enhanced community engagement to create a safe roads culture

3.1.2 Evaluation

The evaluation component involves identifying the underlying causes of traffic-related fatalities and severe injuries, with a focus on methods to enhance the collection, sharing, maintenance, and refinement of data. This evidence-based approach to safety enables the strategic implementation of effective measures to address fatalities and serious injuries across the transportation network. Improving the availability of traffic and collision data is crucial for identifying engineering, enforcement, engagement, and education programs.

Key Actions for Evaluation:

1. Review the current collision and traffic to propose enhancements that will enable the identification and reporting of collision patterns, trends, and high-risk areas.
2. Integrate all collision reports, into the database and evaluation process.
3. Explore innovative methods for monitoring and gathering data. Record, monitor, evaluate, and share data among stakeholders to identify trends and assess the effectiveness of collision mitigation efforts in Kawartha Lakes. Incorporate emerging trends into ongoing and future Vision Zero initiatives.
4. Coordinate a data-driven program to prioritize locations and corridors with high volumes and severity of collisions, as well as emerging collision trends, to strategically allocate resources. Use cost-benefit analysis to prioritize projects and programs.
5. Conduct regular reviews to identify root causes of traffic-related fatalities and severe injuries. Conduct field assessments within a week of each fatality to examine the conditions and circumstances leading to the incident. Coordinate with Kawartha Lakes Police Services as necessary.



6. Evaluate Vision Zero initiatives and programs regularly. Recommend adjustments or new programs through a multi-disciplinary committee within the City to gain diverse perspectives on successes and challenges. Assess the effectiveness of engineering, education, enforcement, and engagement programs as integrated efforts.
7. Identify additional focus areas for secondary emphasis.

3.1.3 Engineering

The Vision Zero approach to safety aims to design and manage roads to mitigate the consequences of human errors by road users. With the rising popularity of active transportation, proactive design strategies, including a review of speed limits, are essential to safely accommodate all road users. Continuous monitoring of the road network using safety and traffic data will facilitate the integration of strategic engineering solutions in street design, traffic engineering, transportation planning, and land use to prevent fatal and severe collisions.

Key Actions for Engineering:

1. Clearly designate Roads and Traffic as the City's road authority.
2. Annually implement five Priority Safety Projects identified through the evaluation of collision and safety data.
3. Conduct a Safe Speeds Review based on findings from the evaluation of collision and safety data, and provide recommendations.
4. Evaluate Road Maintenance practices, identify areas for enhancement (e.g., keeping cycling and pedestrian facilities clear of snow and ice), and implement appropriate changes.
5. Prioritize Traffic Engineering efforts in identified areas of concern following industry standards.
6. Establish a review mechanism within the City to ensure that road safety best practices, complete street principles, and cycling and pedestrian networks are integrated into all new or rehabilitation projects and development initiatives.



7. Explore opportunities to incorporate collision costs into capital works budgets and asset management, ensuring a return on investment for all new and rehabilitation projects.
8. Review construction budget practices to ensure safety considerations are integrated and reviewed for each project, with allocated funds addressing identified concerns.
9. Conduct a cross-section and design standard review from a complete streets perspective, recommending adjustments to the City's current standards to support safe speeds, address collision trends, and better accommodate vulnerable road users, including the visually impaired. Evaluate traffic calming and speed reduction methods and other design details prior to implementation.
10. Research safety initiatives related to roadway design, maintenance, and operation, proposing recommendations for inclusion in the Action Plan.
11. Identify opportunities for policy changes within the City, such as assessing the need for new roadway classifications and evaluating current road uses like trucking and bike routes.
12. Identify and address gaps in the cycling and pedestrian networks.
13. Evaluate the issue of secondary incidents resulting from driver frustration during road closures (scheduled or unscheduled), reviewing contingency plans for improvements and making recommendations.
14. Identify opportunities for policy and legislative changes related to traffic operations and engineering, such as considering winter tires as a requirement.
15. Assess the performance of improvements implemented in previous year's Priority Safety Projects and Safe Speeds Review, applying lessons learned to future projects.

These actions are integral to advancing the Vision Zero initiative, ensuring safer roads through comprehensive engineering strategies that prioritize safety, accessibility, and efficient transportation for all users.





3.1.4 Enforcement

Given that human error is the primary cause of fatal and serious collisions involving vehicles, effective law enforcement is crucial for enhancing roadway safety. The collaborative and data-driven approach of Vision Zero ensures that limited law enforcement resources are allocated efficiently for maximum effectiveness.

Enforcement – Key Actions:

1. Establish a specialized Traffic Enforcement Unit.
2. Implement focused enforcement efforts at locations with high speeds and frequent collisions.
3. Develop a protocol to identify and monitor locations with safety concerns.
4. Collaborate with engagement and education teams to create and implement community-driven programs that educate and enforce road rules equitably for all users.
5. Recommend targeted enforcement and educational initiatives addressing issues like distracted driving, speeding, school zone safety, and parking violations that obstruct road users.
6. Assess road maintenance practices, identifying areas for enhancement (e.g., keeping cycling and pedestrian facilities clear of illegally parked vehicles) and implementing necessary improvements.
7. Explore additional safety measures (e.g., radar message boards, speed cameras) and provide recommendations for implementation.
8. Identify opportunities to revise policies and legislation concerning traffic operations and enforcement practices.

These actions are integral to the comprehensive strategy of Vision Zero, aiming to reduce traffic-related injuries and fatalities through proactive and targeted enforcement efforts supported by community engagement and continuous evaluation of safety initiatives.



3.1.5 Engagement

The Vision Zero engagement initiative aims to inspire Kawartha Lakes residents to actively contribute to achieving zero fatalities and serious injuries. It seeks to involve citizens of all ages and encourage engineering and enforcement efforts.

Engagement – Key Actions:

1. Expand the Kawartha Lakes Road Safety Committee by including representatives from City departments, external agencies, neighborhood representatives, private companies, and supportive external organizations.
2. Adopt an open data approach to share information, empowering the public to make informed decisions that improve their lives.
3. Develop an interactive Vision Zero website to disseminate community information, enable road users to voice safety concerns, announce new initiatives, and more.
4. Utilize technology to enhance road safety and promote safe driving behaviors.
5. Explore diverse media outlets, including traditional and social media, to effectively communicate with the community.
6. Establish a Road Safety Pledge initiative.
7. Create a community engagement program to raise awareness of Vision Zero, address concerns, highlight successes, and engage reluctant participants through local working groups.
8. Design a dedicated road safety program for school-aged children, in consultation with school boards.
9. Develop age-specific road safety programs based on collision analysis results, consulting with community partners.
10. Launch pedestrian and cyclist road safety programs.
11. Develop a Vision Zero Neighborhood Toolkit in collaboration with local community groups.



12. Establish a centralized point of contact/resource for Vision Zero inquiries from internal City staff, councillors, and the community.
13. Introduce a Community Vision Zero Events program, exploring fundraising opportunities.
14. Coordinate engagement activities with Engineering, Enforcement, and community groups.
15. Advocate for financial support from other levels of government.
16. Require established neighborhood Vision Zero committees to develop comprehensive neighborhood Traffic Calming plans instead of individual street requests.
17. Collaborate with other levels of government to advocate for policy or legislative changes.
18. Publish annual Vision Zero Reports to update the community on progress and challenges.

These actions are essential for fostering community involvement, advancing safety initiatives, and achieving the Vision Zero goal of eliminating traffic-related fatalities and severe injuries in the City of Kawartha Lakes.

3.1.6 Education

A yearly education plan should be formulated. Education campaigns should reinforce previously communicated messages to maintain ongoing awareness among Kawartha Lakes residents.

The plan must also be adaptable to allocate resources for unforeseen educational opportunities and to address unexpected road safety challenges effectively.



4.0 Implementation

Future resources may be necessary to implement the Vision Zero Action Plan; however, several of the action items identified would have minimal cost implications. For example, implementing a review mechanism for all new or rehabilitated projects would incur no capital costs. Similarly, exploring opportunities to integrate collision costs into capital works budgets and asset management would require modest resources and could potentially lead to cost savings for the City. Moreover, by integrating safety into all construction projects and including it in the planning and design phases of new developments, significant savings could be achieved by avoiding retrofitting existing conditions later on. Addressing these safety measures could also reduce the severity of collisions. A reduction in fatalities and serious injuries would serve as a clear measure of the program's success. Furthermore, success could be gauged by the impact of revised engineering practices on reducing costs for the City overall. Ultimately, success should also be assessed by public perception of the program and confidence in the City's commitment to prioritizing the safety of all road users.

5.0 Vision Zero Best Practices

Vision Zero is a groundbreaking approach to road safety that aims to eliminate all traffic fatalities and severe injuries, making streets safe for all users, including pedestrians, cyclists, and motorists. Originating in Sweden in the late 1990s, Vision Zero challenges the traditional belief that traffic accidents are inevitable and instead asserts that human life and health are paramount. Sweden has achieved the world's lowest annual rates of road fatalities over 20 years of implementation, marking one of the most successful Vision Zero campaigns globally. Overall, by prioritizing safe system design, data-driven strategies, and community engagement, Vision Zero seeks to create transportation networks that are not only efficient but also equitable and safe for everyone. This holistic approach has since gained traction worldwide, with cities and regions implementing tailored initiatives to reduce road-related deaths and injuries through comprehensive, evidence-based interventions. Below are examples of vision zero plans being implemented in North America.

1. **The City of Toronto** - Has devised a five-year Vision Zero Action Plan that identifies and prioritizes six key areas: pedestrians, school children, older adults, cyclists, motorcyclists, aggressive driving, and distraction.



2. **The City of Edmonton** – In 2015 adopted Vision Zero, launching a five-year road safety improvement plan with the goal of making 2020 the safest year in Edmonton. The strategy is grounded in an evidence-based approach and involves partnerships with road safety stakeholders, educators, the Office of Traffic Safety, the Edmonton Police Service, and the City of Edmonton.
3. **The City of New York** - Has formed a Vision Zero task force that engages the community through initiatives aimed at addressing safety issues on city streets. These efforts have led to significant successes, culminating in New York City achieving its safest year on record in 2016.

6.0 Conclusion

This Vision Zero plan for Kawartha Lakes represents a pivotal step towards creating safer roads and promoting sustainable mobility within the community. By adopting a holistic approach that integrates education, enforcement, engineering, and engagement, it will aim to eliminate fatalities and serious injuries on the city's roadways. This initiative not only aligns with national and provincial road safety strategies but also supports the local goals of enhancing quality of life and fostering a healthier, more connected city.

As the City implements this plan, it is essential to refine it with input from all stakeholders, ensuring it serves as a model for safe, equitable, and vibrant transportation for future generations. The Vision Zero Plan should be informed by best practices, extensive consultation, and thorough analysis of collision data. The plan should be designed to evolve over time and be adaptable and overall achieving the ambitious goal of zero fatalities or serious injuries on Kawartha Lakes' roads will require sustained commitment and collaboration from all stakeholders involved.

