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Item No. 8.1(ii)
Transportation Standing Committee
June 19, 2024

TO: Chair and Members of the Transportation Standing Committee

SUBMITTED BY: -Original Signed-

Cathie O'Toole, Chief Administrative Officer

DATE: June 5, 2024

SUBJECT: Road Safety Strategy: The Way Forward

SUPPLEMENTARY REPORT

ORIGIN

April 25, 2024, Transportation Standing Committee motion (Item 13.1.2):

MOVED by Councillor Cuttell, seconded by Councillor Purdy THAT the motion be deferred to a future meeting of Transportation Standing Committee for review by key stakeholder groups and the Active Transportation Advisory Committee.

MOTION TO DEFER PUT AND PASSED.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter (HRM Charter), Part XII, subsection 318(2), "In so far as is consistent with their use by the public, the Council has full control over the streets in the Municipality."

Section 4(g) of the Terms of Reference for the Transportation Standing Committee provides that the duties and responsibilities of the Committee include "providing input and review of road and pedestrian safety".

RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend that Regional Council:

- 1. Adopt the Road Safety Strategy 2024, included in Attachment 1, and endorse the vision and goal identified.
- 2. Direct staff to provide annual reports to the Transportation Standing Committee regarding the actions of the Road Safety Program and the Road Safety Key Performance Indicators (KPIs) identified in the attached Road Safety Strategy.

BACKGROUND

The Road Safety Strategy was initially presented to Transportation Standing Committee on April 25, 2024. Staff responded to questions of clarification from the Committee regarding stakeholder engagement, data concerning serious injury, per capita metrics, time sensitivity considerations, transportation infrastructure considerations in the development process and the Road Safety Strategy's stated vision and goal for the Road Safety Program. As a result, the Committee voted to defer the motion to facilitate additional review by key stakeholders and the Active Transportation Advisory Committee.

DISCUSSION

Traffic Management staff presented the Road Safety Strategy to the Active Transportation Advisory Committee on May 16, 2024. Questions of clarification relative to the Strategy and specific operational elements were discussed.

The Active Transportation Advisory Committee noted the following:

- Inclusion of standards and measured data on intersections for walking, biking, and driving.
- Provincial amendment to the Nova Scotia Motor Vehicle Act on approving jurisdiction autonomy to the Municipality.
- Provincial approval on red light signals, photo radar pilots, summary offense tickets, and reducing speed limits to 40 km/hr within residential communities.
- Mandate on assessing intersections, restricting right turns on red lights, better road signage, intersection design, and road sign education.
- Road maintenance, near miss data collection, and encroachment/detour on sidewalks.
- Concerned with the length of time between road safety reviews.

Staff reiterated the Key Performance Indicators being proposed within the Strategy that will provide continuous tracking of performance in various categories. Information was also provided regarding ongoing municipal initiatives and proposed legislative changes at the Provincial level to enable additional countermeasures. Much of what was discussed was related to general practices that have either been discussed / clarified in the past or have been part of standard practices used by staff as part of various projects and initiatives. There were no recommendations for changes to the Strategy.

A submission from the Road Safety External Stakeholder Committee (RSESC) was received on May 24, 2024 and staff met with members on May 31, 2024 to discuss the concerns.

Key issues brought forward by the Road Safety External Stakeholder Committee included:

- Measuring the Goal of the Strategy with per capita metrics and a declining rate rather than an absolute target.
- The use of injury severity scales and the low number of serious injuries versus all injuries for vulnerable road users.
- The absence of speed, and arterial and major collector roads as priority areas.
- The absence of strategies for education and enforcement.
- The absence of guidance/commitment that subsequent budgets will reflect the priority areas.

During the meeting with the RSESC, staff reiterated the intent of the Key Performance Indicators and how they capture both per capita and absolute numbers, as well as serious injury vs. all injury. Education and enforcement have previously been discussed at the Transportation Standing Committee (TSC) and would require further direction for increased resources. Similarly, annual road safety budgets are approved by Regional Council. Staff will be bringing forward a report to TSC in June 2024 that highlights budget requirements associated with intersection safety upgrades.

At the June 5, 2024, meeting of the Road Safety Steering Committee, a point was raised regarding the wording included under the "Safe Road Users" element of the Safe System components. The perspective was that there was a need to emphasize a shared culture among all road users (from those that build and maintain roads to those that use the roads).

As a result of the feedback received from all Committees, the Road Safety Strategy was updated to include:

- An additional priority area of "Safe Speeds". This new section highlights continued efforts with speed management and speed reduction methods.
- Expansion of the "Data Management" priority area to emphasize the need for improved analytical capabilities to enable the creation of collision rates and high injury networks for improved project prioritization.
- Additional language describing the "Safe Road Users" element of the Safe System components.

Amendments to the Road Safety Strategy are included in Attachment 1 of this report.

FINANCIAL IMPLICATIONS

No financial implications at this time.

RISK CONSIDERATION

No risk considerations were identified.

COMMUNITY ENGAGEMENT

Feedback was received from the Active Transportation Advisory Committee, the Road Safety External Stakeholder Committee, and the Road Safety Steering Committee as noted in the above discussion.

ENVIRONMENTAL IMPLICATIONS

No environmental implications were identified.

ALTERNATIVES

- 1. The Transportation Standing Committee could choose to not recommend adoption of the proposed Road Safety Strategy.
- 2. The Transportation Standing Committee could choose to propose amendments to the proposed Road Safety Strategy.

ATTACHMENTS

Attachment 1 - Road Safety Strategy

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Sam Trask, P.Eng., Supervisor, Road Safety & Transportation

2024

Halifax Regional Municipality Road Safety Strategy



HALIFAX

Dedication

This Strategy is dedicated to every person who has lost their life or has encountered a life-altering event while traveling on roads within our municipality, and to all of those who have lost friends, neighbours and loved ones.

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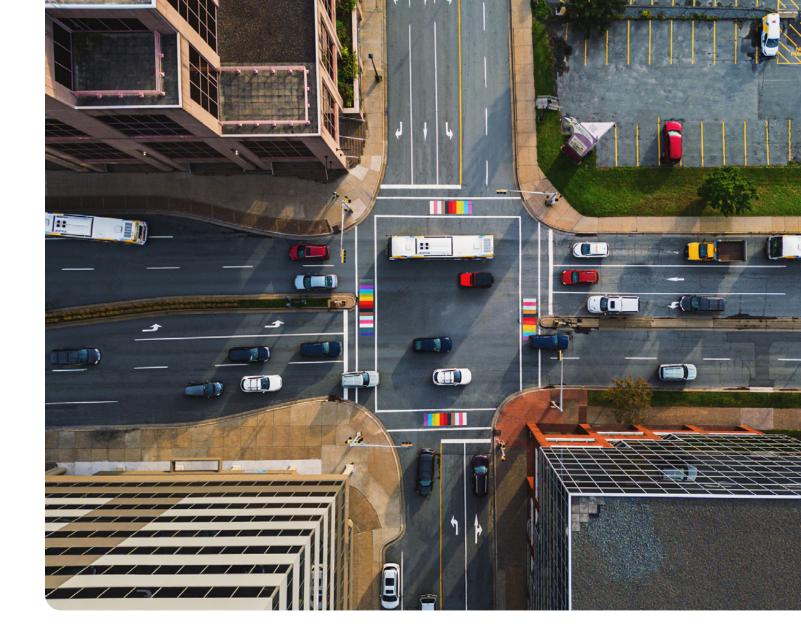
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Executive Summary

The Road Safety Strategy 2024 is the second guiding document produced for the Halifax Regional Municipality's Road Safety Program, succeeding the <u>Strategic Road Safety Framework (2018)</u>.

This Strategy adopts the principle of Vision Zero and the Safe System Approach to road safety. At the heart of these concepts is the idea that no loss of life or serious injury on our roads will be considered acceptable. Vision Zero, and the supporting Safe System Approach, have emerged as the standard for practice in Road Safety around the world, including in many Canadian cities and provinces.

In addition to adopting the Safe System Approach as a process for assessing and improving road safety, this Strategy identifies supporting approaches and key principles of the Road Safety Program in the Halifax Regional Municipality. These include engineering, education, engagement, enforcement, technology advancements, evidence-based decision making, equity and inclusion.

A commitment to annual planning, reporting, and identification of key performance indicators are outlined in this Strategy as the way forward for public accountability of the Road Safety Program.

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1. Introduction

1.1 ABOUT THIS STRATEGY

The Road Safety Strategy 2024 builds on the programs created under the <u>Strategic Road Safety Framework</u> (2018) and provides an updated outlook on road safety in the Halifax Regional Municipality (HRM).

This Strategy is designed to provide ongoing guidance for the Road Safety Program in the municipality and does not include a predetermined end date. Updates can and will be considered in response to adjustments to organizational priorities, policy, and business plans. Guidance and principles have been written to allow for the Road Safety Program to evolve along with new technology, and to be able to respond to emerging road safety concerns. Year-to-year plans, and analysis of road safety issues and progress will be presented on an annual basis within Road Safety Annual Reports.

Between 2018 and 2023, 75 fatal collisions have occurred on all public roadways in the municipality, including both municipal and provincial roadways. Over 4400 injury-related collisions also occurred within this time frame, many with life-changing results. Every serious collision involves some form of identifiable road safety risk factor. With this Strategy, the Road Safety Program will focus on identifying and addressing those road safety risks, using an evidence-based, integrated approach to work towards zero fatal and serious injury collisions.

1.2 ROAD SAFETY IN THE HALIFAX REGIONAL MUNICIPALITY

The municipal Road Safety Program was established in 2018 with the adoption of the Strategic Road Safety Framework (SRSF). The Road Safety Program is staffed by a small group of road safety program engineers within the Public Works business unit, with a dedicated road safety improvements budget. Road safety program engineers implement road safety related projects including traffic calming, in-service safety reviews, analysis of collision data and preparation of reports for the municipality's Transportation Standing Committee. This team also works with the municipality's Corporate Communications team, Halifax Regional Police, RCMP Halifax Regional Detachment and other road safety stakeholders to advocate for road safety at a system wide level.

The adoption of the SRSF in 2018 provided the municipality with an initial approach to road safety, based on a vision of Towards Zero with a goal of a 20 per cent reduction in fatal and injury collisions within five years (2018-2023). The SRSF identified seven emphasis areas: Intersection Related Collisions; Young Drivers; Pedestrian Collisions; Aggressive Driving; Distracted Driving; Impaired Driving; and Bicyclist Collisions. Key steps from the SRSF that contributed to the creation of the current Road Safety Program included the formation of a Road Safety Steering Committee, and the creation of a data analysis system for collision data, which included improved sharing of collision data from Halifax Regional Police and the RCMP Regional Halifax Detachment. Annual budgets for road safety improvements have steadily increased as the program has grown. This Road Safety Strategy will serve as the next strategic document to guide the continued evolution of the Road Safety Program.

The 2018 SRSF is summarized in the <u>Review of the Strategic Road Safety Framework (2018-2023)</u>, submitted to the Transportation Standing Committee in December of 2023.

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HIGHLIGHTS OF THE PROGRAM'S EVOLUTION SINCE THE 2018 ADOPTION OF THE STRATEGIC ROAD SAFETY FRAMEWORK INCLUDE:

2018

 Regional Council adopts the Strategic Road Safety Framework.

2019

- The Road Safety Steering Committee is formed.
- · Internal collision database is released to staff.
- Ten in-service road safety reviews completed at the top locations of fatal and injury collisions.
- The neighbourhood speed limit reduction program begins.
- All basic marked crosswalk posts (approximately 300 locations) are outfitted with fluorescent yellow-green strips as a new standard.
- Implementation guidelines developed to standardize the use of Leading Pedestrian Intervals.
- Heads Up Halifax community grant program becomes available for pedestrian safety initiatives.
- Phase 1 of the South Park Street protected bike lanes opened, first of its kind in the Halifax region.

2020

- Speed display sign program initiated, with 10 signs installed in the first year.
- In-ground crosswalk signs piloted at five school crosswalk locations.
- Tactical Urbanism program developed, creating a quicker and easier process for municipal staff to make small, temporary changes to the roadway.
- · Road Safety Dashboard published to the website.
- COVID-19 restrictions in effect, limiting travel on the roadways and significantly reducing collisions.
- Mobility Response Plan created to address the changing needs of road space during the COVID-19 pandemic. This included the implementation of 16km of slow streets in the Regional Centre, temporary expanded sidewalks and loading spaces and accelerated implementation of tactical protected bike lanes.
- · First road safety video analytics project.

2021

- An additional \$1 million in funding added to the Traffic Calming program budget, totaling \$2.2 million.
- · Photo Enforcement Feasibility Study completed.
- Update to the Municipal Design Guidelines released, incorporating a complete streets design philosophy.
- Participation in consultant research project to mitigate cyclist right turn hook conflicts.
- Updates to Accessible Pedestrian Signals across the region implemented at 76 signalized intersections.

2022

- · Left-turn traffic calming pilot implemented.
- High-visibility crosswalk markings (zebra crosswalks) installed at select signalized intersections as a pilot program.
- · First installation of speed cushions in the municipality.
- Bicycle traffic signals installed as part of the Wyse Road Bike Lane project, the first in Nova Scotia.
- New Traffic Calming Administrative Order adopted by Regional Council with increased emphasis on road safety.
- Funding for the Heads Up Halifax road safety education campaign removed from the municipal budget. Increased emphasis on internal resources for road safety communication.
- A 40 per cent reduction in fatal collisions is achieved in 2022 when compared to the baseline statistics.

2023

- Creation of the Road Safety External Stakeholder Committee.
- Completed a school zone traffic calming pilot to address locations ineligible for vertical deflections.
- Initiated a research project on the effectiveness of high visibility crosswalk markings at signalized intersections, with \$50,000 received in federal grant funding.
- Secured standing offer for road safety video analytics services to increase analytical capabilities.

2024

· Completion of Road Safety Strategy 2024.

2. Strategic Objectives

2.1 VISION AND GOAL

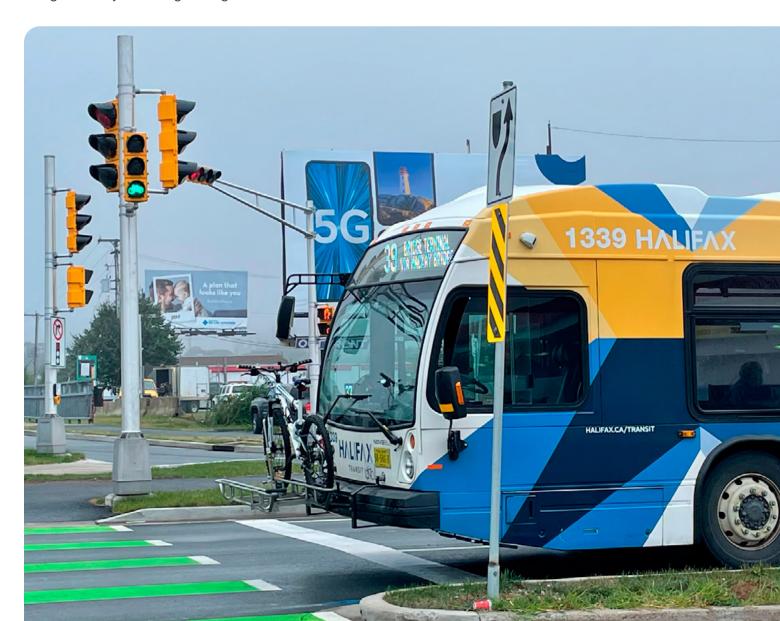


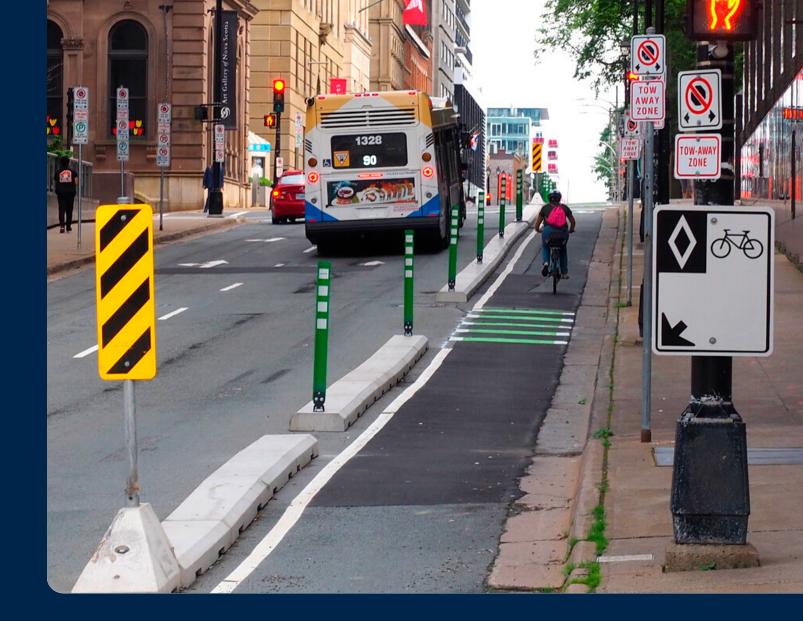
Vision: To achieve zero fatalities and serious injuries for all road users in the Halifax Regional Municipality by 2038.

Goal: Maintain a downward trend in the rate of fatal and serious injury collisions per 100,000 residents.

This Road Safety Strategy sets the long-term vision and current goal for the Road Safety Program in the Halifax Regional Municipality. The vision of this plan is based in the Vision Zero concept – an internationally recognized road safety strategy first introduced in Sweden in the 1990s and now adopted around the world. Vision Zero asserts that fatalities and serious injuries on our roads are preventable, and that it is our shared responsibility to work towards eliminating those collisions, using an integrated, multi-disciplinary approach.

The goal of this strategy – over the short and long term – is to achieve and maintain a consistent downward trend in fatal and serious injury collisions. The trend for serious injury and fatal collisions will be measured using a three-year rolling average to smooth out short-term fluctuations.





3. Approach

3.1 SAFE SYSTEM APPROACH

The Safe System is an approach that underlies the Vision Zero philosophy. This approach is built on the recognition that people make mistakes, and that the human body has a limited ability to tolerate large crash forces. Accepting these facts, a safe system must be designed to minimize the chances of road users making mistakes and to limit the severity of consequences when mistakes occur. The Safe System approach names the components of a road safety system – working individually and together– to reduce the occurrence of serious injuries and fatalities.

With this Strategy, the municipality's Road Safety Program adopts the Safe System Approach to understand and address road safety issues. The municipality uses the six components of a safe system named in the <u>Transportation Association of Canada's "Vision Zero and the Safe System Approach: A Primer for Canada":</u> Safe Road Users, Safe Roads, Safe Speeds, Safe Land Use Planning, Safe Vehicles, and Post-Crash Care.

The following table outlines the six components of a safe system, along with general examples of how each safe system component can be addressed to improve road safety within the municipality. Detailed actions for the Road Safety Program and the primary stakeholders will be identified in annual reports.

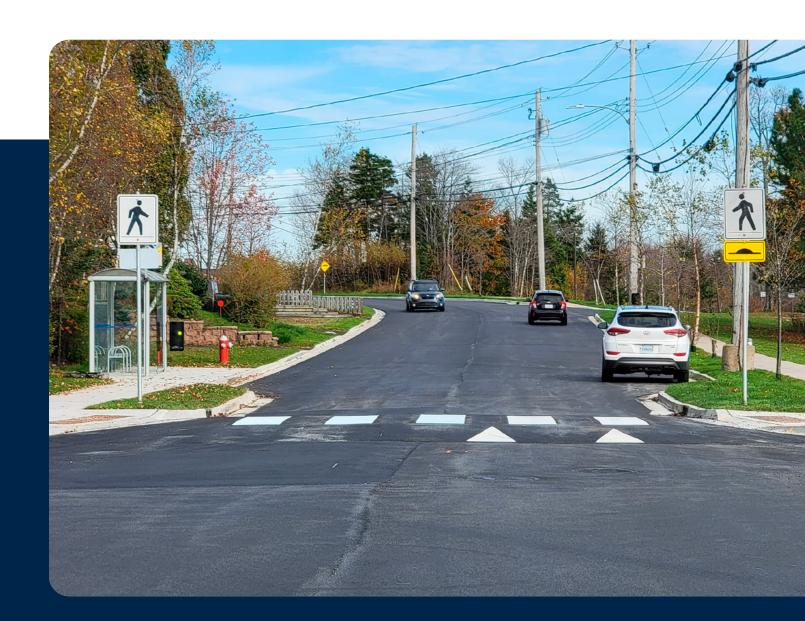
SAFE ROAD USERS	Road safety is a shared responsibility between the agencies that design, build and maintain roads, and those that use the roads – from public agencies to commercial users, and each person as they travel throughout their day. A shared culture of prioritizing safety among every stakeholder is critical to achieving Vision Zero. Road user behaviours, including impaired, distracted, and aggressive driving, are contributors in roughly 40 per cent of fatal and serious injury collisions in the Halifax region. People use roads in the municipality in a variety of ways, including driving, walking, cycling, rolling, and using transit; and each of these activities comes with both rights and responsibilities for safe and equitable road use. Promote and model a shared culture of road safety. Educate and encourage all road users on their role in safety with knowledge of the laws and practices to safely travel within the right-of-way. Consider the needs and vulnerabilities of all road user groups.
SAFE ROADS	Road infrastructure that is designed, operated and maintained to reduce the risk of collisions is a foundation for safer roads. Roads should be designed to enable easy navigation, minimizing the potential for user error. Improve existing roads through regular maintenance, pavement renewal, clear signage and targeted improvements. Complete streets principles should be prevalent through new and redesign opportunities, including incorporating protected bike lanes and separated pedestrian infrastructure. Perform safety reviews at intersections where collision data suggests improvements are needed, and test or adopt new and improved infrastructure when evidence suggests safety benefits.
SAFE SPEEDS	Speed is a major contributor to both the likelihood and the severity of a collision, making safe speed a crucial component of the safe system. Proactively manage this risk by incorporating active and passive traffic calming measures through design to promote safer speeds. Post safe, appropriate speed limits for the road context. Enforce speed limits through regular and automated speed enforcement efforts.
SAFE LAND USE PLANNING	Road users are safer and healthier in complete communities that offer a variety of affordable, convenient, and accessible travel choices for all residents. Siting of destinations for housing, education, work, recreation, shopping, services, and health care is critical. The municipal Integrated Mobility Plan addresses this element of the system, with a vision to create complete communities with connected, healthy, affordable, and sustainable travel options.
SAFE VEHICLES	Well designed and maintained personal, commercial, and public service vehicles are safer for both their occupants and other users sharing the road. Newer vehicles can provide better crashworthiness for occupants and may feature assistive safety technologies for vulnerable road users. Technologies can adapt vehicles to prevent collisions and severity of outcomes. Enforce Provincial vehicle safety regulations to ensure that vehicles on our roads meet the minimum standards for safety and roadworthiness. As vehicle technology advances, consider how proven safety technologies should be adopted in municipally owned vehicles.
POST-CRASH CARE	Deliver fast and effective emergency response when collisions do occur, to save lives and improve long-term recovery outcomes. This work is delivered by first responders including Emergency Health Services, fire, police, emergency departments and trauma teams within the municipality. Explore building relationships and sharing data with these groups to support their critical work.

3.2 ENGINEERING

Engineering changes to the roadway, from quick, tactical projects to major street redesign, are a key part of a strategic approach to road safety.

The Road Safety team will continue to implement and support engineering projects and countermeasure programs that improve the safety of our infrastructure. Ongoing programs which include upgrades to existing crosswalks (such as rectangular rapid flashing beacons (RRFBs), RA-5 crosswalks with pedestrian-activated flashing beacons or half-signals) traffic signal adjustments, traffic calming infrastructure and school assessments, will continue to be an element of the work of the Road Safety Program. Major projects such as transportation plans, capital work and the design of new roads and communities, will be reviewed with a road safety lens to ensure that safety is prioritized. Many groups within the municipality design, review and oversee construction of engineering projects that can contribute to safety goals, and application of a road safety lens into the work of all engineering groups is important to the implementation of this Strategy.

While infrastructure improvements can be highly effective and are a critical component of road safety, engineering projects can be costly, and the safety improvements are typically localized to the project area. Other road safety components of education, engagement and enforcement are necessary to complement infrastructure improvements and achieve system-wide results.



3.3 EDUCATION

A supporting approach of the Road Safety Program is public education. Education can include messages that communicate and highlight upgrades and improvements within the road system; provide instructions on how to use new infrastructure; bring awareness to evidence-based road safety issues; remind road users about safe road use practices; and share stories to promote a culture of valuing road safety and vision zero.

Under this Strategy, members of the municipal Corporate Communications team, in collaboration with the Road Safety team, will continue to use a diverse selection of communication methods and channels, online and offline, to connect with road users in the municipality. Various platforms can be used to target a specific audience of road users, or key areas in the region where evidence points to higher volumes of incidents or suggests certain groups may be disproportionately involved in a certain type of behaviour or exposed to particular risk. Messages can be tailored to meet the diverse needs of the population, including those with varying literacy skills and cultural backgrounds. Themes and messages will be reviewed throughout the year to identify timely and pertinent messaging based on data informing collision trends and feedback gathered through any forms of public engagement.



The Road Safety team will consider opportunities to work with external partners to conduct road safety awareness campaigns. Community and advocacy groups, public and private agencies, and other levels of government can reach different audiences and bring focus to specific road safety issues. The Road Safety team is committed to exploring ways to collaborate with our partners to enhance messaging aligned with the approach and principles of this Strategy. The team recognizes the value in leveraging the efforts of external agencies and the importance of demonstrating a united focus on keeping our roads safe for all users.

While widely recognized as a key component for any road safety program, evidence shows that education alone plays a limited role in decreasing dangerous behaviours and reducing fatal and serious injuries. Educational messages are most effective when integrated with infrastructure improvements, community engagement and enforcement of dangerous driving behaviours. Coordination of these multi-disciplinary efforts will be factored into the creation of educational messages, to yield the greatest overall benefit.

3.4 ENGAGEMENT

Complementary to education efforts, the Road Safety Program will also seek feedback from the road-using community through culturally appropriate and inclusive engagement.

The Road Safety team will monitor public perception of road safety, using outreach tools including surveys and social media to ask pertinent questions and create space for discussion and feedback.

To effectively measure awareness and perception of safety, a survey will be developed and conducted in 2024 to gather a baseline for the public's overall perception of road safety in our municipality. Subsequent annual surveys will monitor any changes in perception of safety and awareness of road safety initiatives.

The Road Safety External Stakeholder Committee, formed in 2023, will serve as an avenue for discussion and feedback from key road safety advocates and stakeholders in the community. Membership will continue to be considered for any interested organizations.

3.5 ENFORCEMENT

Traffic enforcement is an instrumental component of road safety. Consistent, strategic enforcement addresses immediate danger by hindering individuals engaged in risky behaviours, while visible enforcement over time acts as a deterrent against those behaviours.

Halifax Regional Police and RCMP Regional Halifax Detachment – Partners in Policing – are jointly responsible for traffic enforcement in the Halifax Regional Municipality. The Road Safety Program relies on relationships with both agencies, which will continue to be prioritized under this Strategy. The Road Safety team will work with police partners to improve the sharing of critical data, and will provide support for targeted, strategic enforcement of high-risk driving behaviours including speeding, aggressive driving, distracted driving, and impaired driving.



Police partners will align their enforcement approach with the vision and goal of this Strategy, while the Road Safety team will support police partners with collision analysis data, infrastructure improvements and findings from public and stakeholder engagement. The municipality and police partners will explore collaborating on high-visibility enforcement campaigns, widely publicizing targeted enforcement activities through traditional and social media. This style of enforcement campaign emphasizes the deterrent effect by making road users aware of the high-risk behaviours which will be targeted by police.

Enforcement of some dangerous driving behaviours, particularly speeding, can be effectively managed by automated enforcement technology. Automated speed enforcement delivers fair and consistent enforcement and provides a strong ongoing deterrent against speeding where it is installed with proper signage and notification. At the time of the development of this Strategy, automated enforcement is not enabled by legislation in Nova Scotia, however a 2022 feasibility study lays out recommendations to proceed with an automated speed enforcement program once the necessary supports are implemented at the Provincial level.

3.6 EMERGING TECHNOLOGY ADVANCEMENTS

Technology in the field of road safety is constantly evolving, and the tools and approaches used by the Road Safety Program must be flexible to adapt to new developments. The Road Safety team will remain open to exploring opportunities with academic and private sector partners in this field.

New systems and software for identifying high-risk conditions, near-miss conflicts, and analytical tools will help the Road Safety Program identify the highest priority locations for intervention and select the most effective engineering countermeasures.



Meanwhile, vehicles are continually improved with more technological safety features, such as automatic braking and blind spot monitoring, which can add a layer of protection to the system. Vehicles that can operate with less driver input are being developed and will have an increased presence on our roadways over time. While vehicle design and regulation are beyond the scope of the municipality's Road Safety Program, it is recognized that improvements in vehicle safety features, including some features of self-driving vehicles, can contribute to a safe system. The Road Safety team will monitor advancements in vehicle technology, as it pertains to Road Safety and the Safe System in the Halifax region and adapt as necessary to take advantage of vehicle safety improvements, as well as mitigate risks and challenges that come along with new technology.

4. Principles

4.1 EVIDENCE-BASED DECISION MAKING

Road Safety Program decisions should be supported by the best available evidence. Evidence-based decision making is a value identified in the Municipal Strategic Priorities Plan 2021-25.

To prioritize the best possible decisions, a Road Safety Program requires both high-quality data and capable data analytics tools. For the Road Safety Program to have success with the vision and goal identified by this Strategy, progressive improvements to the quality of available data and data analytic capabilities must be prioritized.

The Road Safety Program has an established relationship with Halifax Regional Police and RCMP Regional Halifax Detachment to receive and interpret the collision data which has informed the program to this date. With this Strategy, the Road Safety Program will seek to continue the sharing of further collision details, as well as improve the quality and completeness of collision data received.

With the 2018 Strategic Road Safety Framework, the first iteration of a collision database was developed for staff use. The implementation of this Strategy will require the use of more powerful data analysis tools for staff to detect collision patterns, identify road safety issues and evaluate the effectiveness of road safety countermeasures.

4.2 EQUITY AND INCLUSION

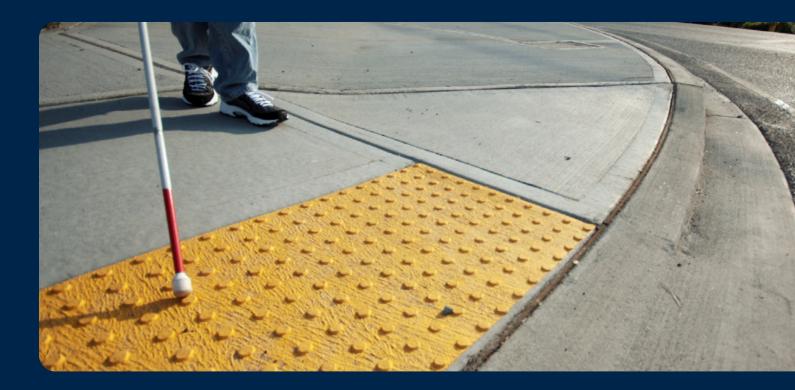
Road Safety is an issue that can disproportionately affect low-income and marginalized communities, children and youth, older adults and persons with disabilities. Historically, marginalized neighbourhoods are often burdened with poor land-use planning, such as major roads cutting through neighbourhoods and a lack of pedestrian infrastructure.

While implementing the Road Safety Strategy, it is important that equity and inclusion are considered when deciding how and where projects are delivered. The Road Safety team will work with the municipal Office of Diversity & Inclusion/ANSAIO to incorporate equity considerations into project prioritization and implementation. The Road Safety Program will consult the municipality's Gender Based Analysis Plus (GBA+) Toolkit to aid in considering different lenses and identifying equitable outcomes. The incorporation of equity into a road safety program is still an evolving practice, and the approach that the Road Safety Program takes will mature over the life of this Strategy.



Barriers to meaningful communication including language, reflected representation, complexity of material, and access to technology, must be taken into consideration when creating and sharing education campaigns or engagement opportunities. The Road Safety team and the municipal Corporate Communications team will consider these barriers when creating material, in consultation with the Office of Diversity & Inclusion/ANSAIO when necessary to determine the most appropriate ways to reach all communities within the municipality.

This Strategy is intended to prevent fatalities and serious injuries for all road users, ranging from those travelling by foot or wheelchair, bicycle, scooter, human- and electric-powered personal transporters, motorcycles, and vehicles for personal, commercial, or public service use. Each mode varies in its degree of risk, vulnerability, rights, and responsibilities; and is connected to a unique perspective and experience of the road network. The experiences related to varying modes can intersect with other aspects of a person's identity, including age, gender, cultural background, and socioeconomic status, further increasing vulnerability for some road users. Other populations of road-users are at greater risk of causing harm. While the well-being of all road-users is the vision, there is need to prioritize vulnerable modes and users who experience a higher probability of fatalities and serious injuries.



<u>The Integrated Mobility Plan (2017)</u> is an important companion to this Strategy for creating equitable mobility in the Halifax Regional Municipality. The vision of the Integrated Mobility Plan (IMP) is to create a transportation system that is connected, healthy, affordable, and sustainable. By creating communities that have less reliance on private vehicles, better access to transit, safe active travel for all ages and abilities and lower emissions, the IMP plays a vital role in creating safer and more equitable transportation systems.

Accessibility is an important consideration in all new road projects and road safety improvements. The 2021 Municipal Design Guidelines include Accessibility as a design philosophy, committing to implementing regulations associated with the Nova Scotia Accessibility Act (2017). The municipality's Accessibility Strategy, within the Diversity & Inclusion Framework, aims to make the municipality accessible by 2030 with 30 actions items, including actions for public transit and transportation infrastructure. When considering new road safety projects and countermeasures under this Strategy, the Road Safety team will consult with accessibility stakeholders to understand the design requirements necessary to accommodate all road users.

5. Implementation

5.1 SAFE SYSTEM PARTNERS

The implementation of the Road Safety Program under this Strategy will bring together a multi-disciplinary team with a Safe System Approach to improve the safety performance of roads in the municipality. The Road Safety team will seek to partner and strengthen relationships with primary stakeholders that can support each component of our Safe System.

SAFE SYSTEM COMPONENT	PRIMARY STAKEHOLDERS	
SAFE ROAD USERS	Municipal Corporate Communications Halifax Regional Police RCMP Regional Halifax Detachment	Province of Nova Scotia Halifax Transit Nova Scotia Health – Public Health
SAFE ROADS	Municipal Traffic Management Municipal Design & Construction Services Municipal Infrastructure Maintenance & Operations	Municipal Project Planning & Asset Management Province of Nova Scotia
SAFE SPEEDS	Municipal Traffic Management Municipal Design & Construction Services Municipal Project Planning & Asset Management	Halifax Regional Police RCMP Regional Halifax Detachment Province of Nova Scotia
SAFE LAND USE PLANNING	Municipal Transportation Planning Municipal Infrastructure Planning	Province of Nova Scotia
SAFE VEHICLES	Halifax Regional Police RCMP Regional Halifax Detachment Province of Nova Scotia	Municipal Corporate Fleet Halifax Transit Fleet
POST-CRASH CARE	Nova Scotia Health – Emergency Care Emergency Health Services Halifax Regional Police	RCMP Regional Halifax Detachment Halifax Regional Fire & Emergency

5.2 PROGRAM ACTIVITIES

Regular program activities for the Road Safety team will include implementing, supporting and monitoring new and existing municipal initiatives relating to road safety concerns.

Engineering countermeasures and ongoing road safety programs that align with the safe system approach will continue to be the focus of the Road Safety Program. Existing programs may change in scope based on evaluated effectiveness, the need to shift focus areas, or Council direction.

The Road Safety team will deliver various reports through the Transportation Standing Committee and Regional Council. The content and frequency of these reports will be driven by program deliverables, as identified in annual budget reports, and by request of Committees and Council. At a minimum, annual reports will be delivered each year.

Based on the best available data, the Road Safety team will identify priority locations for Road Safety improvements, perform in-service safety reviews of each location, and produce multi-year action plans for improving the safety performance of those targeted locations. This structured approach will permit the Road Safety team to perform a complete, focused analysis of each location and allocate budgets to effectively coordinate planning and implementation for the recommended improvements.

Priority locations for road safety improvements were previously identified in the 2023 Road Safety Annual Report. The Road Safety team identified 10 high-priority intersections, based on fatal and injury collision frequency. These 10 locations will be a focus of the Road Safety Program over the next five years (2024 – 2029). As these 10 locations are being addressed, staff will be collecting and analyzing data to identify any new locations requiring priority focus for future programs. Identification of future priority locations may consider additional data and variables, including collision rates, vulnerable road user collisions and equity for underserved communities.

5.3 PRIORITY AREAS

The Road Safety Program will focus resources based on evidence as well as Council and community priorities, and the areas of focus may shift over the life of this Strategy. The Road Safety Program intends to focus efforts on the following five focus areas.

5.3.1 Intersections

Collision data between 2018 and 2023 demonstrates that 28 per cent of fatal collisions, and 50 per cent of injury collisions, for all road users, occurred at intersections. Intersections are a complex area for all road users to navigate, with the potential for conflicts to occur. Engineering improvements to intersections are important for safe roads, as a Safe System component. The focus will be on an iterative approach to improving intersections by prioritizing the worst intersections for capital improvements. Once those are complete, the next priority locations will be identified based on current data, as well as an equity lens, and a new capital plan will be developed. Improvements could include large projects like protected turning movements, photo radar, and new signals and street lighting, as well as softer approaches as left turn traffic calming and no right turn on red signage.





5.3.2 Safe Speeds

Speed is a critical factor in both the likelihood and severity of collisions. It is therefore crucial that safe speeds are prioritized in the design of roads, the posting of speed limits, and the enforcement of road use. With the Strategy, the Road Safety Program will continue to support and advocate for safer speeds in each of these realms. New roads will incorporate reduced design speeds based on the intended road function, and speed calming countermeasures will be installed on existing roads where speed is identified as a safety concern. The Road Safety Program will continue to post 40 km/h speed limits in applicable residential areas, and advocate for provincial legislative change to either reduce the default speed limit in residential and business districts below 50 km/h, or provide municipalities with autonomy to set their own speed limits below 50 km/h, without requiring Provincial approval. Other posted speed limit reductions will continue to be considered on major corridors. Current speed enforcement efforts rely solely on the support of Halifax Regional Police and Halifax District RCMP. The municipality will continue to pursue provincial legislative change enabling automated speed enforcement, informed by the Photo Enforcement Feasibility Study prepared in 2022. Automated speed enforcement would be a valuable tool to address speeding on major collector and arterial roadways, where other engineering and enforcement countermeasures are limited.

5.3.3 Vulnerable Road Users

Collisions involving people walking, rolling and cycling, are more likely to result in injuries or fatalities compared to collisions involving motor vehicles alone. These vulnerable road users make up four per cent of overall collisions that occurred between 2018 and 2023, however they were involved in 22 per cent of fatal and injury collisions. Vulnerable road users represent a diverse group of people with intersecting identities. The Road Safety Strategy will focus on evidence-based opportunities to improve road safety for vulnerable road users. Criteria for new marked crosswalks were reviewed in 2022, with safety identified as a guiding principle along with delay, equity, expectancy, consistency, connectivity, and pragmatism. Typical improvements for vulnerable road users will include new sidewalks, trails, protected bike lanes, lighting, and new and enhanced crosswalks.

5.3.4 Safe Schools

School zone safety has been identified as a priority by Council and the community. There are current and future programs aimed to create safe streets around schools in the municipality. As children have less experience as road users, it is critical to create a safe environment while travelling to and from school. Safe school zones also create conditions for children to actively travel to school, gaining valuable physical activity and creating healthy active travel habits from an early age. Safe school streets as well as the Active School Transportation Program will work to enhance safety and education in school zones.

5.3.5 Data Management

High quality data management and analysis is necessary to identify problems, make good decisions and evaluate results. Effective sharing of data helps the Road Safety Team communicate with Council and the public and creates greater transparency into road safety issues. Improvement of data quality and procurement of more advanced data analysis tools are necessary to support the Road Safety Team in implementing this Strategy. As data quality and analytical capability are furthered, improved methods for assessing road safety, such as high injury networks and collision rates, can be used to guide project prioritization. Creating a high injury network involves mapping serious injury and fatal collisions, identifying spatially the corridors and neighbourhoods where the highest collision rates are evident. This collision mapping, overlaid with other data including equity data and community input from perception of safety surveys, will create a valuable new tool for visualizing, prioritizing, and sharing road safety information.

5.4 ANNUAL REPORTS

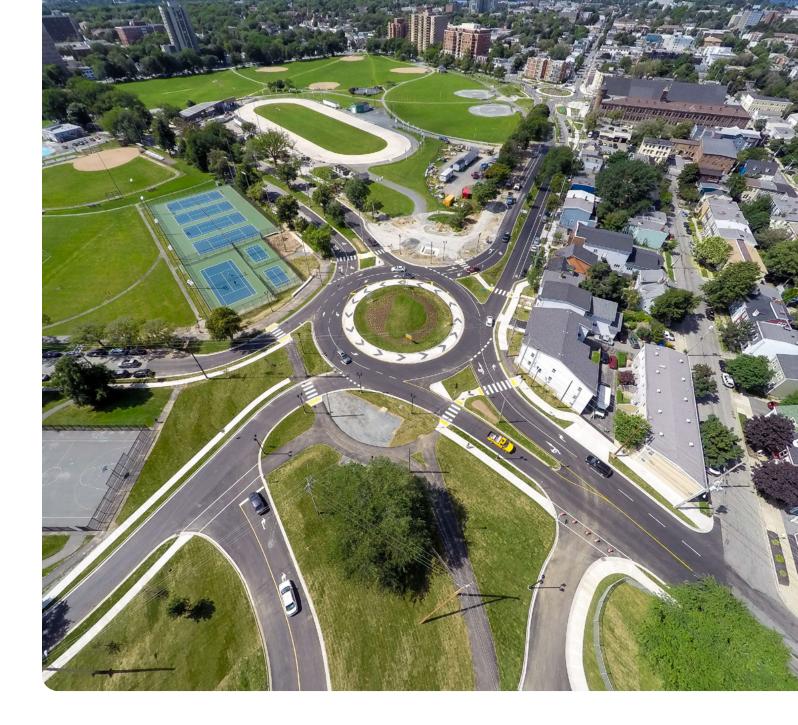
Action plans and accounting of work for the Road Safety Program under this Strategy will be documented in Road Safety annual reports. The annual reports will:

- · provide an overview of the collision data;
- outline the road safety projects implemented in the previous fiscal year;
- present the plan for road safety projects to be completed in the current fiscal year; and,
- report on road safety key performance indicators.

5.5 KEY PERFORMANCE INDICATORS

To evaluate the year-over-year effectiveness of the Road Safety Program, annual reports will present road safety key performance indicators. Performance indicators for the Road Safety Strategy are selected based upon the data that is most accurate and readily available, to ensure that annual reporting is consistent and successful. While the indicators presented in this Strategy represent an initial commitment to reporting, additional indicators may be added over the years, as the availability of data and analysis tools evolves.

- 1. Number of fatal collisions, serious injury collisions, and fatal and serious injury collisions per capita
- 2. Number of fatal and serious injury collisions by mode and jurisdiction
- 3. Number of fatalities and serious injuries
- 4. Number of fatalities and all injuries
- 5. Percentage of fatal and serious injury collisions that are within identified vulnerable communities
- 6. Percentage of vehicles complying with the speed limit on a sample of major collector and arterial roadways
- 7. Median change in 85th percentile speed on traffic calmed streets by sub-region
- 8. User perception of safety within the municipality and individual polling districts
- 9. Number of people exposed to educational, online materials
- 10. Number of summary offense tickets issued by Halifax Regional Police and RCMP Regional Halifax Detachment



6. Conclusion

This Road Safety Strategy provides an essential foundation for the Halifax Regional Municipality's Road Safety Program. The Strategy will serve as a constant point of reference for our shared goals and vision for safe roads in the municipality; committing to a Safe System Approach; integrating engineering, education, engagement, enforcement, and emerging technology into road safety work; and identifying core principles of evidence-based decision making, equity and inclusion.

From the people who design and build the roads; to those who educate and engage with others; to traffic enforcement and first responders; and to every person who uses our roads; this Strategy will help us all build and share in a culture of road safety in the Halifax Regional Municipality.

