

2022-2024

Vision Zero Deaths and Serious Injuries Action Plan

**vision
zéro**

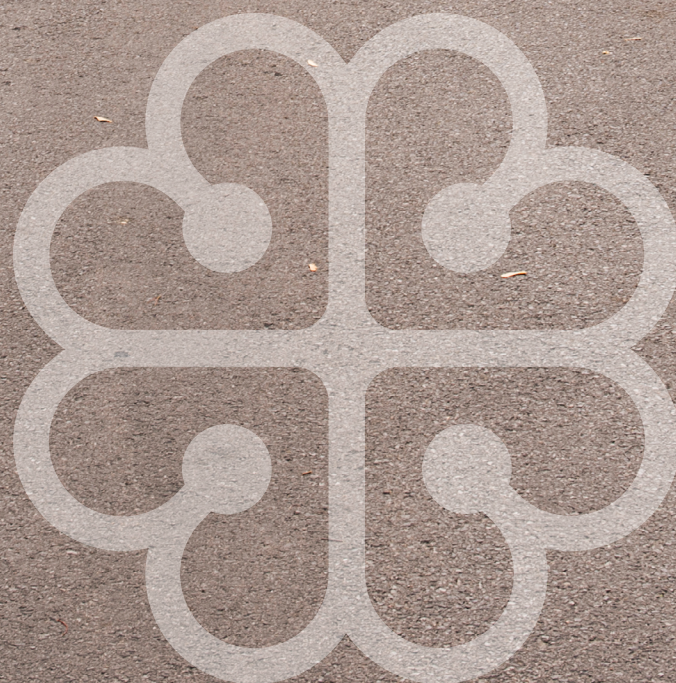


Table of Contents

Pedestrians at the Heart of Priorities 4

An ongoing process 5

Road safety at the Core of Montréal’s Concerns 6

Vision Zero Principles 7

The Safe System 8

A Coherent Vision..... 9

2019–2021 Action Plan Outcomes 10

Portrait and Diagnosis 11

 Road Safety Outcomes 11

 Collision Scenarios 12

 Locations of KSI Collisions between 2016 and 2021 14

Principal Road Safety Issues 16

2022–2024 Vision Zero Action Plan 18

 Component 1. Priority Issues 19

 Component 2. Overall Level of Risk 26

 Component 3. Understanding the Issues and the Effectiveness of Actions 29

 Component 4. The Scope of Vision Zero 32

Appendix A. Action Plan Summary Table 36

Appendix B Governance 40

Appendix C. Montréal Community Declaration of Commitment 44

List of Acronyms 46

* Version modified on November 3, 2022



Pedestrians at the Heart of Priorities

Adopted in 2016, and reaffirmed in 2019 with adoption of the first Action Plan, Vision Zero is a priority for the municipal administration. It is also an essential way to ensure the safety of all users, beginning with the most vulnerable. Road safety in an urban setting is complex, and a major challenge that requires continuous collaborative effort by Montréal and its partners. With this collaborative work, we will measure the strength of the commitment to eliminate, by 2040, death and serious injuries in Montréal.

For this reason, the second Vision Zero Action Plan includes concerted actions that will be implemented with our main partners.

The actions established in this plan have been identified on the basis of collision data and are categorized according to the different responsibilities of Montréal and its partners, i.e. street design, road users and vehicles. The actions identified also relate to land use and mobility planning. The aim is to reduce the overall level of risk related to the number of kilometres travelled in automobiles within the Montréal city limits.

During the last five years, pedestrians represented 46.9% of death and 27.9% of serious injuries. This update to the Vision Zero Action Plan emphasizes pedestrian safety during travel. It is important to ensure that the most vulnerable are protected in public spaces.

This effort will offer all Montrealers enjoyable public spaces so they can travel safely from one end of the city to the other.

The continuous commitment of partners and the municipal administration will allow us to reach the Vision Zero objectives and improve our public health outcomes.

Valérie Plante
Mayor of Montréal



An Ongoing Process

In 2016, Montréal adopted the Vision Zero approach. The first Action Plan (2019–2021) led to the creation of a governance structure and engagement with several stakeholders toward a common goal.

With the 2022–2024 Action Plan, Montréal will continue this effort to make the streets of Montréal even safer. Data analysis and multisector collaboration were essential to the development of these initiatives focused on Montréal’s specific road safety issues, for which vulnerable road users are a priority.

Implementation of the Vision Zero Action Plan must use a systemic, transverse approach. This involves collaboration among governmental and non-governmental organizations. This road map was created in continuity with previous work. Once again it is oriented toward the use of heavy vehicles in the city, street crossings, speed management and data management.

Many, many thanks to all partners involved in the implementation of the measures included in this new three-year Action Plan!

Mme Sophie Mauzerolle
City councillor,
Sainte-Marie district,
Ville-Marie Responsible for transportation
and mobility on the executive committee



Road Safety at the Core of Montréal’s Concerns

When it comes to looking at road safety for users, no matter their travel mode, each gesture counts. The 2022–2024 Vision Zero Action Plan continues the effort initiated by the municipal administration in 2016. It is based on data and collaboration from several partners and all Montrealers and responds to priority issues related to road safety for all users, in particular pedestrians.

This Action Plan is organized into four components, and addresses all elements of the road system, collaboration and data in order to improve road safety. Performance indicators will allow us to monitor and improve our actions. One death on Montréal roads is one death too many.

Marianne Giguère

Mme Marianne Giguère
City councillor, De Lorimier district
in Le Plateau-Mont-Royal
Associate Councillor for active transportation
on the executive committee

Vision Zero Principles

Objective : Zero deaths and serious injuries by 2040

Vision Zero

Vision Zero is a road safety effort based on a comprehensive, systems-based approach. It requires the implementation of actions on several fronts and the participation of a great variety of partners. This entails a paradigm shift in order to look at collision data from a different perspective and to draw more relevant and accurate conclusions. The purpose is to act proactively and systematically on the risk factors that cause collisions instead of simply reacting to each collision with a specific countermeasure.

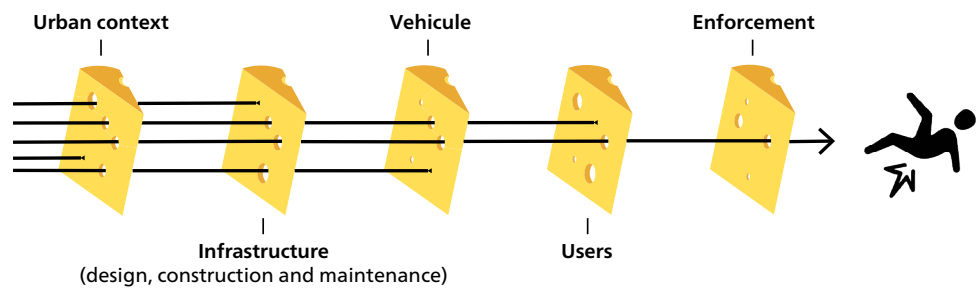
Traditional approach	Vision Zero
Deaths and serious injuries are an inevitable consequence of travel.	Deaths and serious injuries are avoidable and unacceptable ; people must be able to travel without putting their life in danger.
The design of the road system assumes perfect human behaviour .	The road system is designed to take into account human fallibility and vulnerability .
The road user is primarily held responsible for collisions.	The road system’s designers and managers as well as its users share the responsibility for collisions
Limited analytical and research resources are scattered across all collisions , even those without serious injuries.	Analytical and research resources are focused on collisions causing death or serious injury .
Safety measures are implemented in a reactive, location-specific manner, with priority given to locations deemed collision-prone.	Safety measures are based on a systemic approach and implemented proactively on all components of the road system.



The Safe System

The 2022–2024 Vision Zero Action Plan is based on the safe system approach and takes into account interactions between users, vehicles and street design. Addressing specific risk factors in each of these components will contribute to reducing the risk of collisions with victims killed or seriously injured (KSI)

In the analogy of slices of Swiss cheese illustrated below, each wedge of cheese represents a component of the system and each hole represents a flaw in that component. Each line is a sequence of events leading towards a collision, unless stopped by one of the system components. The fewer flaws there are in the different components, the less likely it is that the system will allow an unfortunate sequence of events to result in a collision.

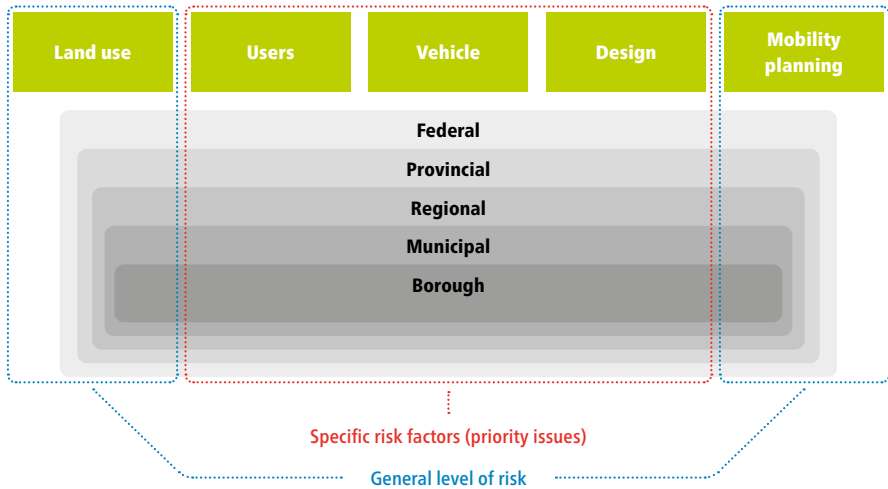


Beyond fixing flaws in individual system components, it is also possible to act more broadly in order to reduce users’ **overall risk exposure**¹.

In principle, a kilometre travelled in a private vehicle exposes other road users to a greater risk of injury or death than an equivalent distance travelled using active transportation or public transit. That is why

it is important to address **land use** and **mobility planning** in order to reduce car dependence and decrease the overall number of kilometres travelled by car in Montréal.

Actions to be implemented range from the local level (e.g. the boroughs) to the federal government level.



1 Overall risk exposure includes all hazards to which users are exposed during travel.

A Coherent Vision

Rethink the city to better ensure safety of vulnerable populations

The Vision Zero Action Plan is aligned with the **Montréal 2030** strategic plan and the **2050 Land Use and Mobility Plan**. Together, these plans are designed to make Montréal a more inclusive and friendly city. Environmental issues, including the need for an ecological transition, are priorities for Montréal. Where mobility is concerned, the **2020–2030 Climate Plan**, with its emphasis on alternatives to cars for urban travel, is complementary to Vision Zero.

This Vision Zero Action Plan needs to be situated in a broader policy context. It distinguishes itself from the other policies by its focus on the most vulnerable users of the road network. Nonetheless, it shares a number of common objectives with other policy documents, including the following :

Montréal 2030

- Develop local mobility by meeting the mobility needs of the most vulnerable people.
- Continue integrating gender-based and intersectional analysis (GBA+) in all City policies, programs and initiatives.

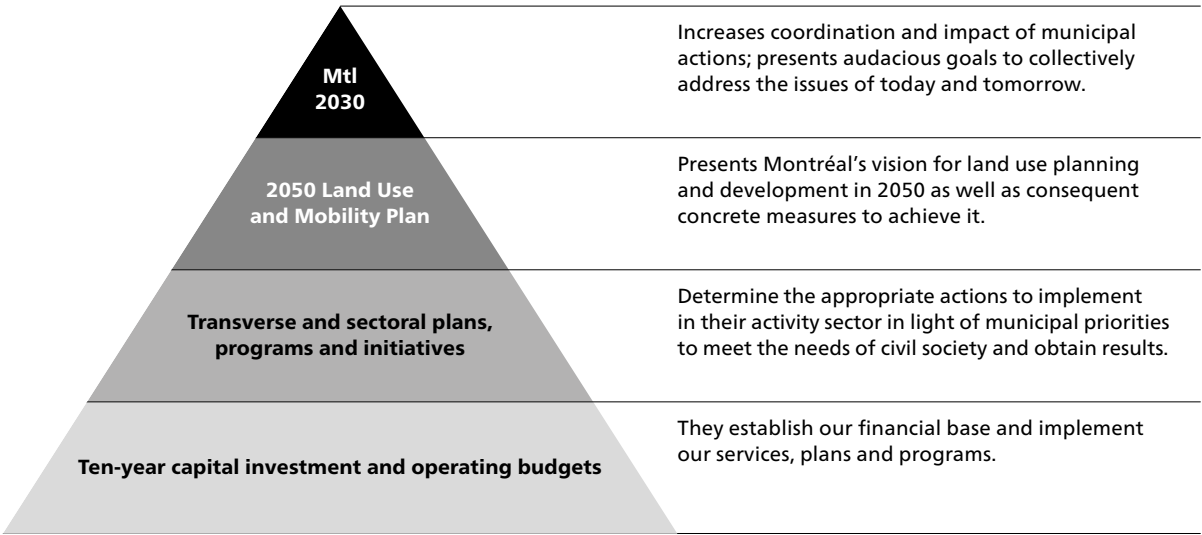
Projet de Ville²

- Work on rebalancing street functions, in particular to promote soft mobility.
- Act on the quality of the mobility experience: safety, sense of safety, well-being, opportunities.

2020–2030 Climate Plan

- Increase the modal share of cycling.
- Develop public transit and active transportation and promote car-sharing, taxi use and carpooling.

Planning framework



2 The Projet de Ville is a preliminary document drafted as part of the development of the 2050 Land Use and Mobility Plan.

2019–2021 Action Plan Outcomes

The first Vision Zero Action Plan was adopted in 2019 following a vast cooperative effort with **partners working in road safety**. Two partner summits were held, during which priorities were set and commitments for implementation over the following years were made.

A dedicated Vision Zero team was created within the Service de l’urbanisme et de la mobilité (Urban Planning and Mobility Department). This set the stage for several structuring actions, including :

- Establishment of a multi-partner governance structure for Vision Zero;
- Creation of the Équipe postcollision mortelle (Fatal Collision Assessment Team) to provide detailed analyses of fatal collision sites and to issue recommendations for corrective measures;
- Production of an annual Road Safety Report allowing partners and citizens to follow collision statistics and be informed of actions undertaken by the municipal administration and its partners;
- Creation of an on-line, interactive Vision Zero map showing collision locations by year, by severity, by type of victim, and by collision scenario as well as the safety improvements implemented by the boroughs;
- Creation and coordination of multi-partner workgroups and committees.

Main achievements of the 2019–2021 Action Plan

- Installation of the first axes of the **Réseau express vélo** (bicycle express network)
- Establishment of the **Sécurisation aux abords des écoles** (Safe Streets around Schools Program) program
- Creation of a **Charte des chantiers** (Construction Site Charter)
- Creation and on-line publication of the **Guide d’aménagement durable des rues de Montréal** (Montreal Sustainable Street Design Guide)
- Integration of the needs of vulnerable users into the design and programming of **traffic lights**
- Implementation of a **road safety education park for children** pilot project
- Inclusion of requirements for **side guards on heavy vehicles** in technical requirements in calls for tenders for municipal contracts
- Addition of **300 new hybrid buses**

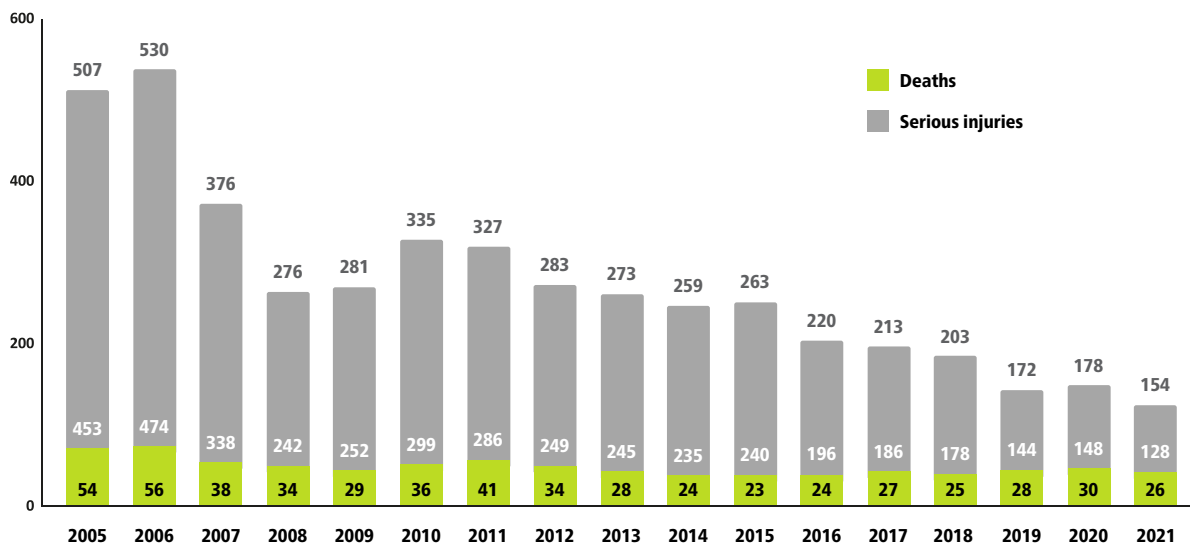
Portrait and Diagnosis³

Road Safety Outcomes

In 2008, Montréal adopted the Transportation Plan, which led to the implementation of measures to improve road safety over the long term. Since then, the number of collisions with seriously injured victims has been steadily decreasing while the number of deaths have remained fairly constant since 2013.

With the adoption of Vision Zero by the municipal administration, the objective is to deploy all necessary efforts to reach zero deaths and serious injuries on the Montréal road network by 2040.

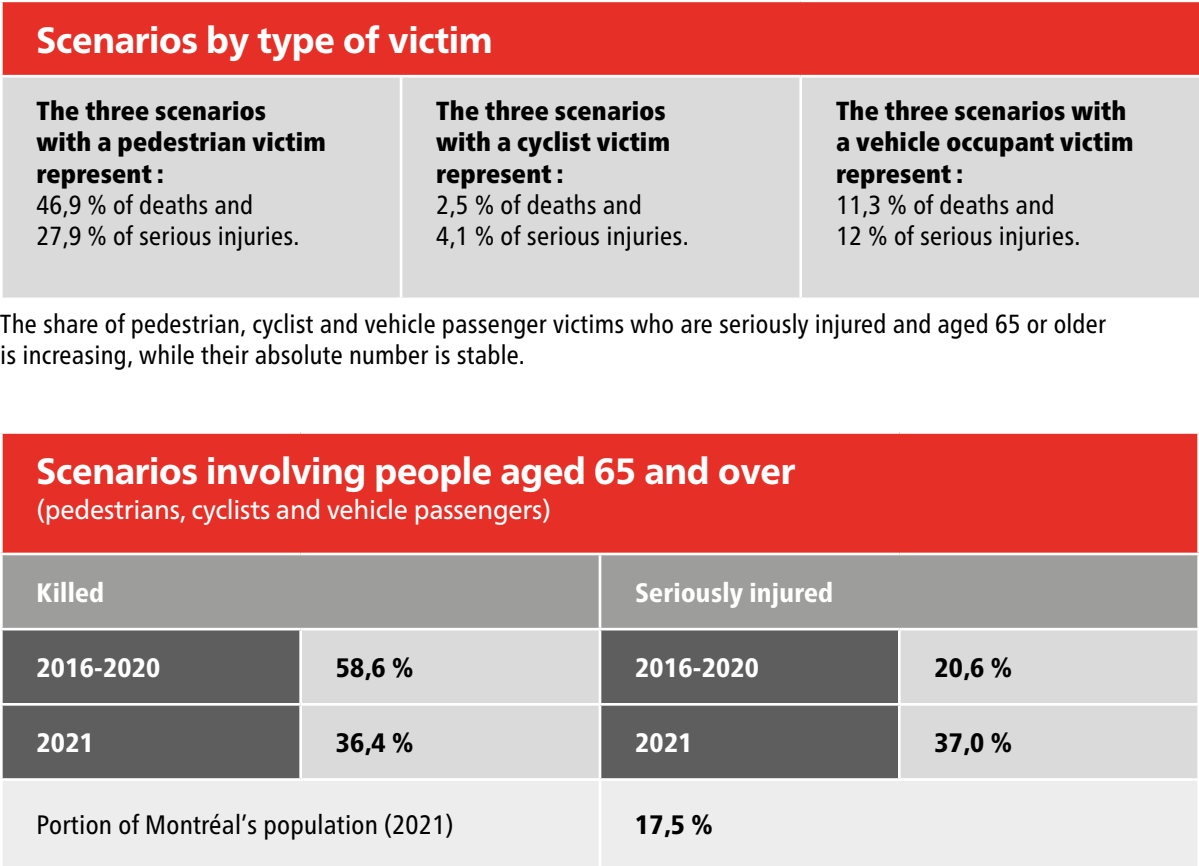
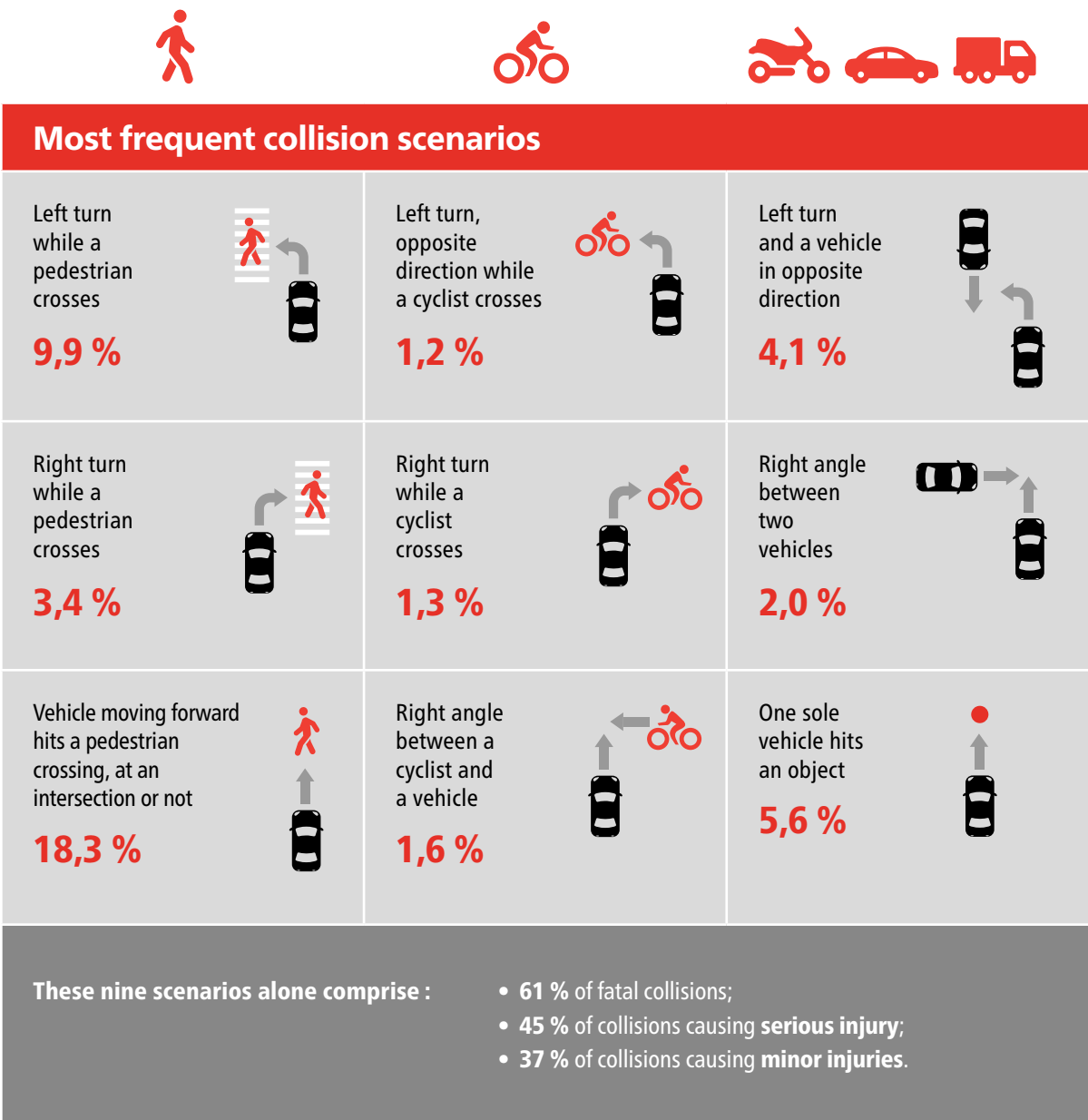
Evolution in the number of deaths and serious injury collisions, 2005–2021



³ The road safety data and diagnosis are based on data on collisions occurring on roads under the responsibility of the SPVM, which involved at least one motorized vehicle in movement and was the subject of an accident report.

Collision Scenarios

The table below illustrates the nine most frequent death or serious injury collision scenarios between 2016 and 2021. It highlights that the most frequently arising scenarios are those in which a pedestrian was a victim while crossing a street. They represent a much larger proportion of KSI collisions than those in which the victim was a cyclist or a vehicle occupant.



Location of KSI Collisions between 2016 and 2021

The need to act on the entire road network

Between 2016 and 2021, 88% of KSI collisions occurred at intersections where no other collision of the same severity occurred during this period. In other words, KSI collisions rarely recur in the same place.

An approach that provides an understanding of the circumstances in which KSI collisions occur must be adopted in order to act preventively on risk factors. This will require establishing types, or “families” of intersections that are prone to KSI collisions, identifying locations of intersections belonging to these families in Montréal, and then proactively implementing safety measures at these locations, without waiting for collisions to occur.

Locations of deaths and serious injury collisions (2016 to 2021)





Principal Road Safety Issues

The 2022–2024 Action Plan focuses on five priority issues related to collision scenarios involving pedestrians, who are overrepresented among seriously injured victims and death. Each is comprised of a number of specific issues that represent either elements directly related to the collisions, or problematic elements present at the site at the time of the collision.

Issue 1 Unexpected Behaviours

Unexpected behaviours occurring at the time of the collision :

- Pedestrian crossing on a red light;
- Pedestrian crossing several metres away from an intersection;
- Driver failing to yield to pedestrians;
- Driving a truck in a restricted zones;
- Driver not complying with traffic signals (red light);
- Dangerous driving (speed, prohibited manoeuvres).

Issue 2 Vehicle Characteristics

Characteristics of vehicles involved in collisions :

- Blind spots in heavy vehicles;
- A-pillars⁴ in all vehicles;
- Weight and height of sport utility vehicles, pick-up trucks and heavy vehicles.

Issue 3 Deficient Traffic Signals

Deficiencies in the design of streets in terms of traffic signals :

- Lack of pedestrian signals;
- Non-compliant signalling (roadway marks, road signs).

Issue 4 Visual Obstructions at Intersections

Visual obstructions noted at intersections :

- Cars stopped within five metres of the intersection;
- Fixed objects such as a structure, vegetation and median fencing.

Issue 5 Impaired Cognitive State of the User

Impaired cognitive state of the user is involved in some collisions. Specifically, these include :

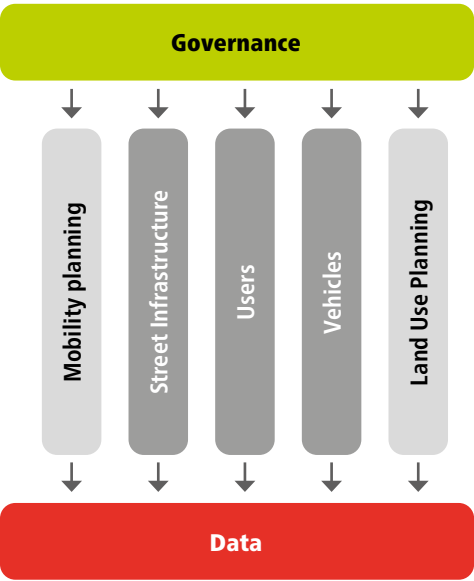
- Drowsy drivers;
- Intoxicated pedestrians.

4 A-pillars, or windshield pillars, are the vertical posts between the windshield and the side windows of a vehicle.

2022–2024 Vision Zero Action Plan

The Action Plan Framework

Five pillars support acting on all road safety components in order to make it safer. Additionally, **two transverse elements** guide the pillars and their actions in a unified and coherent direction.



Street Infrastructure

The design and maintenance of streets and other travel corridors have an important influence on the user behaviour and interactions. In order to reduce collision risks, design must respond to the users' needs while inducing them to adopt safe and predictable behaviours, and to ensure safe interactions.

Vehicles

Vehicle characteristics, such as their mass and dimensions, blind spots and the presence of certain safety equipment, have an impact on the exposure to collision risks both for vehicle occupants and for other street users.

Users

Street users' knowledge, skills, as well as their physical and mental capacities have an impact on their behaviour and their interactions while they travel. Actions related to education, awareness building and control can encourage users to adopt predictable and prudent behaviours.

Mobility Planning

The choice of mode of travel determines the collision risks a person faces and to which they expose other road users. In general, the car generates more risks than the other travel modes. Mobility planning offers the opportunity to reduce overall risk levels by developing alternatives to the automobile, both for personal mobility and for the transportation of goods.

Land Use Planning

By promoting denser and more mixed land use, the number and length of trips that people must take to meet their needs can be reduced. If distances travelled decline, so should the exposure to collision risks.

Data

Data collected in the field is at the heart of the Vision Zero effort, acting as the basis for the five pillars. Analysis of field data allows the identification of recurring risk factors and helps to set priorities for the City's actions and those of its partners. Data allows the effectiveness of actions and progress toward the ultimate goal of Vision Zero, the elimination of KSI collisions, to be measured.

Governance

The governance framework defines the fundamental links connecting partners involved in decision making, monitoring and accountability. It drives the process to ensure things are moving in the right direction.

Focus Area 1 Priority Issues

Collision analyses over the last years in Montréal have led to the identification of several recurring issues. These issues are being prioritized in the second Vision Zero Action Plan. The five objectives of this focus area specifically target pedestrians since they represent the overwhelming majority of victims killed or seriously injured in collisions.

Objective 1

Encourage more foreseeable behaviours and reduce the consequences of unexpected behaviours

According to the Vision Zero approach, a safe road network must take into account human error. For this purpose, design and safety measures can help reduce unexpected behaviours that can lead to serious consequences. Preventive and awareness-raising measures can be implemented to remind them of the importance of adopting safe behaviours.

1.1 Expand Montréal’s Sustainable Street Design Guide

The *Guide d’aménagement durable des rues de Montréal* is the main information source for the City’s street design practices. Between now and 2024, content integrating Vision Zero principles will be developed in collaboration with the SIM and the STM. These additions will respond to needs expressed by several municipal units in order to ensure streets are designed to be safe, while allowing emergency vehicles and buses to travel.

Lead : Central administration
Partners : Boroughs, SIM and STM

1.2 Implement a safety program for older pedestrians

Seniors are greatly overrepresented among killed and seriously injured pedestrians. A safety program for senior-aged pedestrians will be implemented in order to adapt the road environment and ensure their safety during travel. Project locations and the types of measures to be implemented will be selected in collaboration with the Regional Public Health Department (DRSP). If needed, the program will provide scope for the deployment of temporary retrofits, allowing for rapid intervention. These quick-fix retrofits will then be evaluated before becoming permanent.

Lead : Central administration
Partners : Boroughs, CEUM, DRSP and Piétons Québec

1.3 Analyze the location of midblock bus stops

The location of certain bus stops may encourage users to cross the street at unexpected locations, particularly when using the nearest pedestrian crossing would require a long detour. The STM will produce a diagnosis to identify stops of this type that are problematic. The objective is to either implement safe crossings or to reposition, or even remove, a bus stop in order to promote user safety while maximizing customer service.

Lead : STM
Partners : Boroughs, suburban cities and Central administration

1.4 Evaluate the effectiveness of measures, designed to make arterial street pedestrian crossings safer, in terms of actual and perceived safety outcomes

The research project focuses on actions that aim to make crossing of arterial streets safer for pedestrians. It will be comprised of three parts : providing a better understanding of challenges, allowing for experiments of certain possible solutions, and documenting their realization potential and their effects on pedestrian safety. This project, funded by the MTQ’s Fonds de sécurité routière, will be completed in partnership with the INRS Laboratoire piétons et espace urbain.

Lead : Piétons Québec
Partners : Boroughs, INRS, MTQ, and Central administration

1.5 Conduct awareness campaigns in neighbourhoods

Excessive speed, even if minor, can have serious consequences during collisions with vulnerable users. Piétons Québec’s first awareness campaign, planned for summer 2022 in partnership with the SAAQ, is designed to create awareness about the impact of minor speed limit violations in residential areas and the usefulness of traffic-calming measures to promote safe speeds.

Lead : Piétons Québec
Partner : SAAQ

1.6 Continue collaboration on the development and operation of automated enforcement devices

Since 2009, the municipal administration has been collaborating with the MTQ to evaluate the operation of automated enforcement devices. The first sites selected were part of a pilot project to evaluate their effectiveness and social acceptability. A second phase consisted of evaluating municipal collaboration and the types of photo radar appropriate in a municipal context. The goal of the current phase is to establish a strategy for the progressive deployment of these devices. It will be based, in part, on a report evaluating the effectiveness of current locations via a dashboard with a variety of relevant indicators.

Lead : Central administration
Partners : Boroughs, MTQ and SPVM

Objective 2

Reduce risks related to vehicle characteristics

The mass and configuration of vehicles can have a direct impact on collision risks and the severity of the consequences. A significant share of collisions causing death or serious injury involves heavy vehicles, SUVs, and pick-up trucks. A variety of actions can be implemented to minimize the risks: in the short term, awareness campaigns; in the medium and long term, measures to mitigate blind spots and efforts to modify the vehicle characteristics.

2.1 Develop a safety index for heavy vehicles

For heavy vehicles, blind spots are a contributing factor in collisions causing death or serious injury. Different types of vehicles have different shapes and characteristic blind spots. The development of a safety index will provide vehicle owners and operators with better information on the dangers inherent to certain vehicle types and makes. This index, based on the Direct Vision Standard (London), is being developed by the BNQ in collaboration with numerous heavy-vehicle-industry partners. The MTQ and the City fund the project equally.

Leads : Central administration and MTQ
Partners : ACQ, APMLQ, BNQ, CFRM, CIRRELT, INRS, Girardin Blue Bird, Groupe Robert, Lion Électrique, Nova Bus, Piétons Québec, Prévost, SPVM, STM, Tremcar, UMQ and Vélo Québec

2.2 Promote user awareness about sharing the road with heavy vehicles through virtual reality

It is essential to raise awareness of users about the dangers of heavy vehicle blind spots. A virtual-reality-based project has been created to provide users with an immersive experience of driving a heavy vehicle. This tool will be used during awareness activities to educate users about sharing the road with heavy vehicles.

Lead : SAAQ

Partner : SPVM

2.3 Continue testing rear-view cameras on buses

New technologies can provide opportunities for improving road safety. Starting in 2022, rear-view cameras will be tested on two STM buses as part of a pilot project. This system offers several advantages for the safety of all users, such a :

- Reduction in vehicle blind spots;
- Improvement of the driver's field of vision;
- Better vision, even during difficult conditions.

Lead : STM

Partner : n/a

2.4 Influence the firefighting vehicle market to supply smaller vehicles appropriate for urban settings and with improved safety characteristics

Street design is constrained by the size of the largest vehicles using them. The needs of fire trucks represent a challenge for designing narrower streets that intrinsically calm traffic and allocate more space to pedestrians, cyclists and green infrastructure. The size of firefighting trucks has been increasing, making them less well-adapted to existing, dense urban contexts. The SIM will engage industry

stakeholders to raise awareness of the challenges of driving fire engines through a constrained urban environment. The desired vehicle size and performance characteristics will be defined in collaboration with the SUM.

Leads : SIM and Central administration

Partners : Central administration, boroughs and on-island municipalities

2.5 Consolidate all municipal trucking by-laws

Each Montréal borough and suburban municipality is empowered to regulate heavy vehicle traffic within its boundaries. This situation creates disparities and complicates the enforcement of heavy vehicle regulations across boundaries. In order to address this significant shortcoming, a single, unified heavy by-law for the entire Montréal agglomeration will be developed. In case of a violation, the municipal court will be able to consistently apply the unified by-law.

Lead : Central administration

Partners : Boroughs, MTQ and SPVM

2.6 Obtain authorization to dispatch vehicles appropriate to patients' paramedical needs

One of the factors affecting collision injury severity is vehicle mass. Even though few collisions involve an emergency vehicle, all actions related to this Vision Zero priority issue can contribute to reaching the goal. To this end, Urgences-Santé will make representations to the *Comité national de la transformation du service préhospitalier d'urgence* in order to be able to deploy different types of emergency vehicles across the area it serves. The objective is to remove the requirement of using an ambulance for all types of emergency calls.

Lead : Urgences-santé

Partner : n/a



Objective 3

Correct traffic control device deficiencies

Road markings, traffic signs and traffic signals are essential for allowing all to safely use our streets. It is important that all relevant traffic control devices are present where needed, being implemented in a consistent, context-specific manner and covering all of the different uses of the street. Specific actions, based on recent collision data, are needed to correct deficiencies that may affect the safety of pedestrians and other street users.

3.1 Improve signalized pedestrian crossings in compliance with the pedestrian countdown signals guidelines

The safety of vulnerable users depends above all on safe intersections. This entails implementing pedestrian signals at all signalized intersections, and providing sufficient crossing time. Improvement of pedestrian crossings at signal-controlled intersections will continue over the next few years.

Lead : Central administration

Partners : Boroughs

3.2 Analyze traffic control device deficiencies

The respect of traffic control devices requires that users perceive them as being credible. The Fatal Collision Assessment Team will produce a report analyzing the deficiencies of traffic control devices observed at fatal collision sites. The report should shed light on recurring deficiencies and their potential consequences on user behaviour. Solutions will be proposed to make the necessary corrections, with respect to both markings and signage, in order to reach the stated objective.

Lead : Central administration

Partners : Boroughs and EESM

Objective 4

Reduce visual obstructions

Intersections are where different users’ trajectories cross. To avoid collisions, everyone must see and be seen sufficiently ahead of the intersection. It is therefore important to limit the presence of stopped vehicles and other objects that can restrict a motorist’s ability to see vulnerable street users on the approach to an intersection.

4.1 Develop guidelines on sight triangles and clearance at intersections

There are many interacting components at intersections, some of which may cause visibility and safety issues for vulnerable users. The sight triangle concept is used to ensure motorists, cyclists, and pedestrians have a clear field of view at intersections. The development of guidelines, based on the MTQ’s road design standards manual, will clarify the application of this concept within Montréal’s dense urban environment. This will help street design teams better determine where to locate various landscape elements, including plantings, street furniture, terraces, and so on, ensuring the safe sharing of public space, including pedestrian streets.

Lead : Central administration
Partners : Boroughs

4.2 Carry out an awareness campaign on the prohibition of parking within five metres of an intersection

Parking within five metres of an intersection or pedestrian crossing is prohibited by Article 386.1 of the Québec Highway Safety Code. However, this rule is little known by motorists. The AMD can effectively reach motorists to remind them about road safety. The purpose of the awareness campaign will be to educate motorists to the risks of collision caused by visual obstruction at intersections.

Lead : AMD
Partner : Central administration

4.3 Have the Escouade mobilité carry out targeted operations related to priority Vision Zero issues

The City’s *Escouade mobilité* (mobility squad) has patrollers across the street network. Part of its mission is to ensure that all travel is safe. To this end, it will include targeted operations for the priority Vision Zero issues, in coordination with the AMD and the SPVM, including operations related to visual obstructions at intersections.

Lead : Central administration
Partners : AMD and SPVM

Objective 5

Prevent travel while impaired

People walking, cycling or driving a vehicle with faculties impaired by fatigue or intoxicants expose themselves to increased risk of collisions. It is appropriate to implement actions designed to raise awareness of all street users, and discourage travel when someone’s faculties are impaired.


5.1 Support companies in their preventive efforts related to driver fatigue using improved informative content via the SAAQ’s community relations advisers.

The SAAQ’s community relations advisers (*conseillères/conseillers en relation avec le milieu*) use communication tools during their awareness building efforts in companies. Improvements will be made to the contents, in particular through the production of video clips and prevention tools for driver fatigue. These prevention tools should be better targeted to

the problems and challenges connected to the various realities within companies with regard to driver fatigue, and should also propose innovative solutions to help companies prevent collisions related to fatigue.

Lead : SAAQ
Partner : n/a





Focus Area 2

Overall Level of Risk

In addition to actions related to the current priority issues, reaching the main goal of Vision Zero also involves measures for the overall reduction of exposure to the risk of deaths and serious injury collisions. Automobile use is the main cause of this risk, consequently, the number of kilometres travelled using this transportation mode on the island of Montréal is to be reduced.

This will require a reduction in the distances Montrealers must travel to meet their daily needs, as well as offering them other viable alternatives to the automobile, including active transportation and public transit.

Objective 6

Reduce travel distances

Someone travelling by car exposes other street users and, to a lesser degree themselves, to the risk of a collision. The longer the distance, the greater the risk generated. Land use planning that promotes density and proximity of services should mean that Montrealers will reduce the number of kilometres travelled by automobile and promote the use of other transportation modes, including walking and cycling, which generate little risk for other users.

6.1 Define land use designations and density parameters

In order to reduce travel distances, and consequently reduce exposure to the risk of collision, it will be necessary to address land use planning. Appropriate locations and densities that bring activities closer

together will lead to shorter travel distances, more of which will use active transportation modes. The 2050 LUMP will define land use designations and density parameters to support this optimization.

Lead : Central administration
Partner : n/a

Objective 7

Promote alternatives to replace automobile use

A shift from automobile use (which generates a great deal of collision risk) to active transportation and public transit (which generate less risk) requires a context favourable to this transition. It is appropriate to deploy a variety of actions promoting this transition in the medium and long term. These actions will include the development of safe and comfortable pedestrian and bicycle networks as well as the support of programs that equip Montrealers for travel on foot and by bicycle, in order to encourage good habits from an early age.

7.1 Update the Bicycle Plan

Development of the bicycle network needs planning both for its extension and upgrading, as well as for its maintenance. This planning will be based on setting priorities related to safety and stress criteria. The next municipal Bicycle Plan will be based on different indices, including what is called *Level of Traffic Stress*. Particular consideration will be paid to the safe sharing of space by different users.

Lead : Central administration
Partners : Boroughs

7.2 Continue deployment of the *Cyclist averti* program

Travel by bicycle includes applying safety rules and safe sharing of spaces with other users, starting in childhood. Vélo Québec offers Cycle 3 elementary school students (grades 5 and 6) practical training for the safe, autonomous use of bicycles as a travel mode. This training, lasting about 15 hours, includes theoretical knowledge, practice in a closed setting and road activities. An individual report card of skills is provided. The purpose is to encourage young people to use active transportation.

Lead : Vélo Québec
Partners : Boroughs and MEQ



7.3 Analyze mobility around metropolitan transit infrastructure elements

Active travel modes, such as bicycling and walking, are complementary to public transit and must be integrated into the network in a way that is safe and easy for users. To this end, the quality and safety of pedestrian and cyclist access to transit facilities and vehicles will be the focus of measures recommended by ARTM. The ARTM intends to collaborate with municipalities and the STM to complete mobility analyses; these will favorsafe designs for active modes on streets giving access to public transit equipment and infrastructure.

Lead : ARTM

Partners : Boroughs, MTQ, STM and Central administration

7.4 Define guidelines for road sharing to promote soft mobility

The physical separation of different types of users within the public right-of-way is not the only way to achieve safety. Safe space-sharing principles like those promoted by the concept of soft mobility can also be used. This implies a revision of the space allocated to the different travel modes, and a reduction in the speed and mass of motorized vehicles when operating in a shared space. Guidelines will be established during development of the 2050 LUMP in order to apply this concept in the coming years.

Lead : Central administration

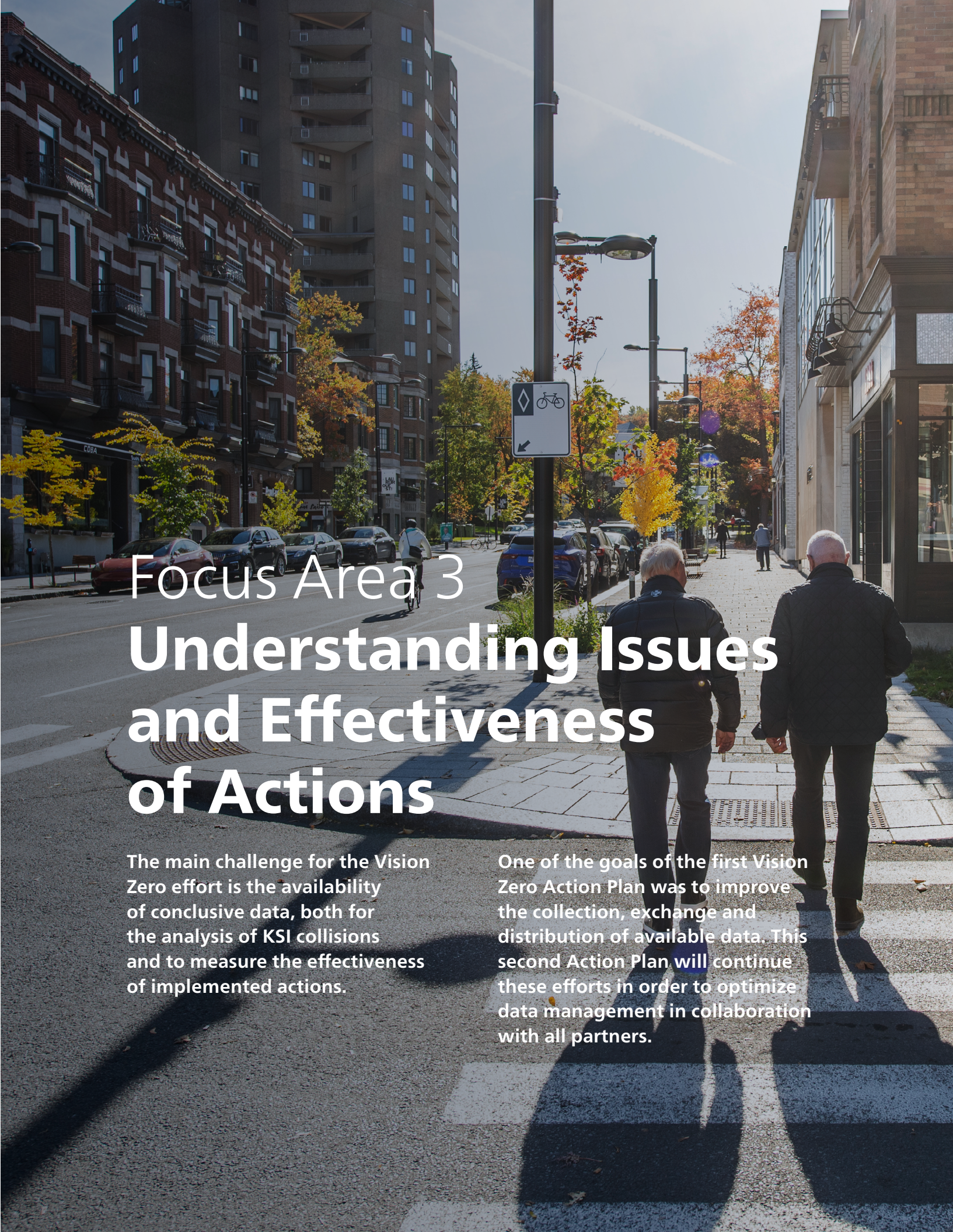
Partners : Boroughs

7.5 Continue the Safe Streets around Schools Program

Today’s children are tomorrow’s adults, who will travel for work, family and social activities. By getting into the habit of choosing active transportation modes early in their life, these children will have a greater tendency to maintain such habits as adults. The Programme de sécurisation aux abords des écoles (Safe Streets around Schools Program) is designed to make school zones safer and encourage active travel.

Lead : Central administration

Partners : Boroughs



Focus Area 3 Understanding Issues and Effectiveness of Actions

The main challenge for the Vision Zero effort is the availability of conclusive data, both for the analysis of KSI collisions and to measure the effectiveness of implemented actions.

One of the goals of the first Vision Zero Action Plan was to improve the collection, exchange and distribution of available data. This second Action Plan will continue these efforts in order to optimize data management in collaboration with all partners.

Objective 8

Improve data collection and analysis

Collision data analyses performed over the last few years have revealed knowledge gaps and highlighted the need to better understand the risk factors and the contexts in which KSI collisions occur. Actions will be taken to improve the understanding of safety issues and of the effectiveness of previously implemented measures. These actions will address the type of data collected as well as the collection process and data sharing among partners.

8.1 Classify intersections into families by characteristics in order to assign a level of risk and an improvement potential

The Vision Zero approach involves intervening proactively and systematically throughout the road network instead of only reacting to a limited number of sites. Intersections will be classified nto families as a function of certain characteristics. This classification system will allow preventive safety measures to be deployed proactively, targeting families of intersections deemed a higher level of risk and not waiting until collisions occur.

Lead : Central administration
Partners : Boroughs

8.2 Make representations in support of improving the data management for all types of collisions

Faced with a lack of data on collisions that did not involve registered vehicles, the SAAQ established a working group on vulnerable road users in early 2022. This group has been mandated to analyze options for extending collision insurance coverage to include people involved in this type of collision without registered vehicles. As members of this working group, Vélo Québec and Piétons Québec will bring to the fore the data needs of the metropolitan region of Montréal.

Leads : Vélo Québec and Piétons Québec
Partner : DRSP

8.3 Produce a study on the quality and availability of data required for predictive safety analyses for all types of collisions

The understanding of causes of KSI collisions depends on the quality and availability of data. Experience in recent years has highlighted deficiencies with regard to the quality of available data, reporting and collection processes as well as the lack of data collisions not involving a registered vehicle. The study will identify gaps that need to be filled and evaluate the required resources to attain what is determined to be essential. The data requirements for a Gender-based Analysis Plus (GBA+) approach will also be taken into consideration⁵.

Lead : Central administration
Partners : DRSP, MTQ, SAAQ, SIM, SPVM and Urgences-Santé

8.4 Create list of specifications to establish a data sharing platform

Reliable data analysis depends on the availability of data and the ability to share them among partners. A platform to facilitate data sharing must be created with consideration for issues such as confidentiality, digital security, data updating and compatibility of data sets. A specifications list will generate a solution adapted to this context.

Lead : Central administration
Partners : DRSP, MTQ, SAAQ, SIM, SPVM and Urgences-Santé

5 Gender-based Analysis Plus (GBA+) is an analytical tool to guide decision making to make public programs and policies more accessible, safe and inclusive.

Objective 9

Disseminate data

The first Vision Zero Action Plan led to the preparation of an annual road safety status report. In addition, an interactive map, posted in 2020, presents collision data, priority collision scenarios and the safety measures implemented by the boroughs available to the public. The second Action Plan proposes to continue distribution of this information on an annual basis.

9.1 Produce and distribute an annual Road Safety Report

The Road Safety Report is a key document for sharing information on road safety within the Montréal agglomeration. It highlights indicators for KSI collisions, and monitors trends. It also reports on the progress of actions presented in the Vision Zero Action Plan.

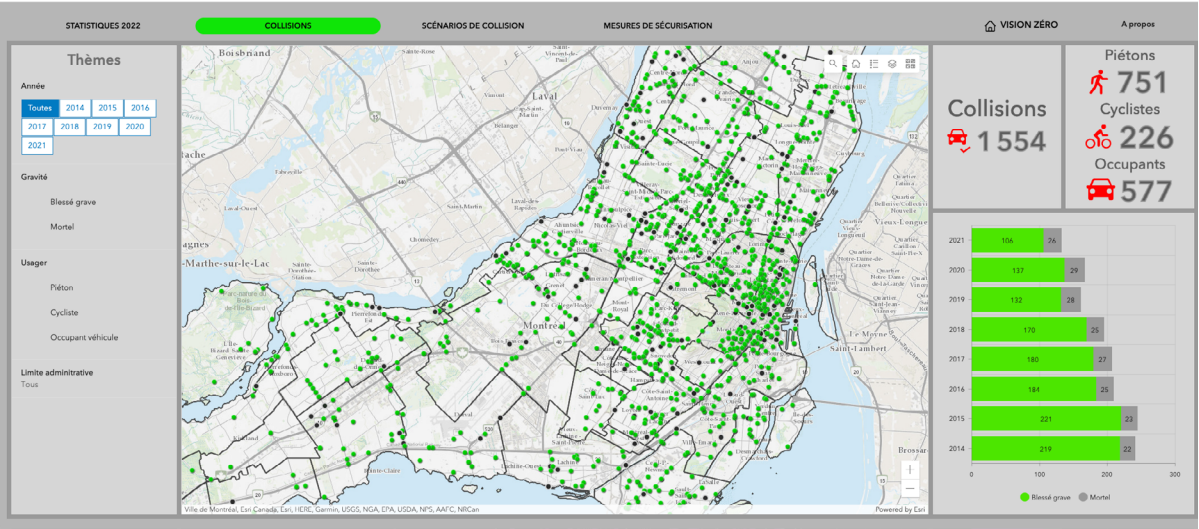
Lead : Central administration
Partner : CRE-Montréal

9.2 Regularly update the Vision Zero interactive map

Accountability regarding the Vision Zero Action Plan includes regularly updating an interactive map available to the general public. The map allows for the visualization of KSI collision locations and of the spatial distribution of collisions by priority collision scenario. It also allows users to see where boroughs have implemented safety measures. The map is updated annually to allow partners and the public to follow-up on the evolution of the situation on the ground.

Lead : Central administration
Partner : n/a

Vision Zero interactive map





Focus Area 4

The Scope of Vision Zero

Vision Zero is an undertaking that involves multiple partners at the local, regional, provincial and even federal level, who share the responsibility for decision making, for the implementation of the planned actions and for accountability. The purpose of this Focus Area is to ensure efficient governance, oriented toward the mobilization of partners and the coherence of their joint actions.

Objective 10

Consolidate partner engagement

Experience acquired over the recent years has underlined the need to improve cooperation among the partners involved in the Vision Zero effort. A variety of actions could help improve decision making and implementation processes, including establishing new committees or adding partners to existing committees and working groups.

10.1 Establish a governance strategy

The systemic approach of Vision Zero involves cooperation among numerous organizations with different mandates, objectives and types of tools. Collective decision making and monitoring mechanisms must be established to ensure partner buy-in. A committee will be created to analyze questions of governance related to Vision Zero and to recommend ways to optimize the decision-making process and the implementation of the Action Plan. This mandate will be completed in collaboration with the *Chaire internationale sur les usages et pratiques de la ville intelligente* (International Research Chair in Smart City Uses and Practices).

Lead : Central administration

Partner : Chaire internationale sur les usages et pratiques de la ville intelligente (ESG-UQAM)

10.2 Establish performance indicators for Vision Zero

Trends in the numbers of KSI collisions can only be observed over a longer term. In the short term, it is harder to measure progress in the Vision Zero effort. Performance indicators must be developed to measure the impacts of the planned actions on road safety. Researchers and third parties, such as the DRSP, INRS and Piétons Québec will participate in the development and monitoring of indicators.

Lead : Central administration

Partners : DRSP, INRS and Piétons Québec

10.3 Coordinate awareness campaigns through the creation of a multi-partner communications committee

Several public organizations are involved in educating and raising user awareness related to road safety. Indeed, the public is faced with an overload of information. A multi-partner committee, with the main Vision Zero partners, will be set up to coordinate awareness campaigns on selected priority themes. Initially, this committee will be comprised of representatives of the SAAQ, SPVM and the municipal administration. The committee will later be expanded to include additional partners.

Lead : Central administration

Partners : SAAQ and SPVM

10.4 Include additional stakeholders during site visits by the Fatal Collision Assessment Team (FCAT)

Following a fatal collision, it is desired that stakeholders that have the capacity to act on the factors that may have contributed to the collision participate in a site visit. However, in practice, some stakeholders do not attend the site visits and miss the opportunity to gain a more comprehensive understanding of the circumstances that lead to a fatal collision. As a result, they may fail to implement potential “upstream” corrective measures that could prevent other fatalities in similar situations. The FCAT will ensure diligent follow-up with all these partners through the use of an up-to-date contact list and will sign collaboration agreements, particularly with the boroughs and with suburban cities within the Montréal agglomeration.

Lead : Central administration

Partners : Boroughs, suburban cities and other partners depending on the situation

10.5 Provide stakeholders with interim and permanent design recommendations resulting from fatal collision site analyses and follow-up on implementation

The FCAT produces an analyticals on most⁶ fatal collisions that involve a motorized vehicle in motion on a municipal public right-of-way within the Montréal agglomeration. The report is accompanied by a set of recommendations for internal use only. These are shared with the appropriate municipal entity, be it the borough or the suburban municipality that has jurisdiction over the collision site and is able to bring about the recommended corrective measures. When feasible and appropriate, quick implementation measures will be deployed at the collision site. Measures deployed on the basis of the FCAT’s recommendations will continue to be reported in the annual Road Safety Report, as they were under the previous Vision Zero Action Plan.

Lead : Central administration
Partners : Boroughs, suburban cities and other partners depending on the situation

10.6 Include new partners on the various Vision Zero committees

Involvement of partners in the Vision Zero process requires their active participation on the various committees. The addition of new members to the Vision Zero steering committee is an opportunity to expand the scope of the Vision Zero process to include all of the public organizations involved directly and indirectly with road safety in the Montréal agglomeration. This expanded participation relates as much to existing committees as to the new ones that will be established in the coming years.

Lead : Central administration
Partners : ASM, AMD, ARTM, CMM, CSSDM and MEQ

10.7 Produce an information video on road safety and the Vision Zero approach for the police force

A road safety awareness video will be produced and distributed to all new recruits and street patrol agents. Its purpose is to highlight the importance of road safety and to expose district police officers to the basic notions of the Vision Zero approach in order to better target enforcement and awareness activities for citizens. More specifically, the officers will learn what is termed in French the PILE approach to enforcement (road safety interventions involving a Person committing a targeted Infraction at a relevant Location, Executed at the right time). The Central administration will collaborate with the SPVM to include an overview of Vision Zero principles and priority issues related to fatal and serious injury collisions in the Montréal agglomeration.

Lead : SPVM
Partner : Central administration

10.8 Coordinate awareness campaigns to promote active lifestyles in a short-distance city

Successfully changing travel habits does not depend solely on urban planning and design, it also entails the daily actions and the determinative choices made by everyone. Through coordinated actions, several organizations can launch awareness campaigns to promote active transportation and public transit. The 2022 edition of the annual “ J’embarque! Les rendez-vous de la mobilité durable” campaign, coordinated by CRE-Montréal, will include a communications component to help guide people who are thinking of getting rid of their car. More broadly, the campaign will include a program of activities highlighting various partners and their many initiatives related to sustainable travel.

Leads : CRE-Montréal and CEUM
Partners : MPA and Central administration

Objective 11
Establish and reinforce links between Vision Zero and the other plans and policies of the City and its partners

The Vision Zero Action Plan is part of a broader effort to promote sustainable mobility and public health in the Montréal agglomeration. The following set of actions is intended to tie Vision Zero in with the 2050 LUMP, local transportation plans, and other municipal policies as well as with partners’ policies and plans.

11.1 Integrate Vision Zero principles in the 2050 Land Use and Mobility Plan

Achieving Vision Zero will require a paradigm shift in transportation and land use planning that must be reflected in Montréal’s strategic orientations. The key role that the 2050 LUMP will play in orienting the ecosystem of urban policies and plans in the Montréal agglomeration presents an opportunity to entrench Vision Zero principles.

Lead : Central administration
Partner : n/a

11.2 Include Vision Zero priority issues in local transportation plans

Boroughs adopt local transportation plans that can include actions related to road safety and the protection of vulnerable users. These plans provide an opportunity to focus actions on Vision Zero priority issues. In the future, all local transportation plans, whether new or revised, will tackle Vision Zero goals and will reflect its key principles.

Leads : Boroughs
Partner : Central administration

11.3 Map the plans, programs and policies that may impact the implementation of the Vision Zero Action Plan

The Vision Zero Action Plan is complementary to the three municipal strategic plans, namely Montréal 2030, the 2050 LUMP and the 2020–2030 Climate Plan. Links could potentially be established with internal and external partners’ strategic policies and plans. A mapping of these plans and policies will help situate and align Vision Zero within the policy environment and ensure consistency of action and between the City and its partners. This mapping is also expected to better highlight the specific role of Vision Zero with regard to other plans and policies.

Lead : Central administration
Partner : Chaire internationale sur les usages et pratiques de la ville intelligente (ESG-UQAM)

11.4 Coordinate the SPVM’s road safety master plan with the Vision Zero Action Plan

Each year, the SPVM adopts a road safety master plan, which identifies priorities according to four groups of actions: (1) development and communications, (2) prevention, (3) police operations (enforcement) and (4) urban planning and infrastructure improvements. In a collaborative approach, the Montréal police force will take into account information from the Vision Zero team to develop its annual master plan. The SUM will regularly update the SPVM on current priority issues so that the SPVM can include, when possible, relevant actions in its annual strategic plan.

Lead : SPVM
Partner : Central administration

6 Certain collisions are excluded for exceptional reasons, such as homicide.

Appendix A

Action Plan Summary Table

Focus Area 1 : Priority issues								
Objectives	Actions		Scope	Leads	Partners	Deliverables or activities	Deadline	Innovation in this Vision Zero
Objective 1 : Encourage more foreseeable behaviours and reduce the consequences of unexpected behaviours	1.1	Expand Montréal’s Sustainable Street Design Guide	Street infrastructure	Central administration	Boroughs, SIM, STM	Module on Vision Zero design principles	2022	0
						Technical brief on pedestrian safety islands	2022	0
						Technical brief on turning radius and lane width	2023	0
						Technical brief on the compatibility and lane sharing by transportation modes with different masses and speeds	2024	0
	1.2	Implement a safety program for older pedestrians	Street infrastructure	Central administration	Boroughs, CEUM, DRSP and Piétons Québec	Program Framework	2022	0
						Research project report	2024	0
	1.3	Analyze the location of midblock bus stop	Street infrastructure	STM	Boroughs, suburban cities and Central administration	Analytical report	2023	
	1.4	Evaluate the effectiveness of measures, designed to make street pedestrian crossing safer, in terms of actual perceived safety outcomes	Street infrastructure	Piétons Québec	Boroughs, INRS, MTQ and Central administration	Publication of results	2023	
	1.5	Conduct awareness campaigns in neighbourhoods	Users	Piétons Québec	SAAQ	2 awareness campaigns	2024	
	1.6	Continue collaborations in the development and operation of automated enforcement devices	Users	Central administration	Boroughs, MTQ and SPVM	Active participation in committees	Continually	
Information dashboard						2023		
Evaluation report of existing sites						2023		
Objective 2 : Reduce risks related to vehicle characteristics	2.1	Develop a safety index for heavy vehicles	Vehicles	Central administration and MTQ	Multiple*	Standardized safety index	2023	0
	2.2	Promote user awareness about sharing the road with heavy vehicles through virtual reality	Vehicles	SAAQ	SPVM	Awareness activities	Continually	
	2.3	Continue testing rear-view cameras on buses	Vehicles	STM		Analytical report	2023	
	2.4	Influence the firefighting vehicle market to supply smaller vehicles appropriate for urban settings and with improved safety characteristics	Vehicles	Central administration	SIM	Definition of vehicle dimension parameters	2022	0
				SIM	Central administration, boroughs	Representations to industry	Continually	0
	2.5	Consolidate all municipal trucking by-laws	Users	Central administration	Boroughs, MTQ and SPVM	Consolidated by-law	2024	0
	2.6	Obtain authorization to dispatch the vehicles appropriate to patients’ paramedical needs	Vehicles	Urgences-santé		Representations before the CNTSPU	2024	
Objective 3 : Correct traffic control device deficiencies	3.1	Improve signalized pedestrian crossings in compliance with the pedestrian countdown signal guidelines	Street infrastructure	Central administration	Boroughs	Pedestrian traffic signals	Continually	
	3.2	Analyze traffic control device deficiencies	Street infrastructure	Central administration	Boroughs and EESM	Analytical report	2024	0
Objective 4 : Reduce visual obstructions	4.1	Develop guidelines on sight triangles and clearance at intersections	Street infrastructure	Central administration	Boroughs	1 technical brief	2023	0
	4.2	Carry out an awareness campaign about the prohibition of parking within five metres of an intersection	Users	AMD	Central administration	1 awareness campaign	2022	0
	4.3	Have the Escouade mobilité carry out targeted operations related to priority Vision Zero issues	Users	Central administration	AMD and SPVM	6 operations/year	Continually	0
Objectif 5 : Prévenir les facultés altérées	5.1	Support companies in their preventive efforts related to driver fatigue using improved informative content via the SAAQ’s community relations advisers	Users	SAAQ		3 video clips	2023	
						Representations to 35 companies	2024	

* 2.1 : 2.1: ACQ, APMLQ, BNQ, CFRM, CIRRELT, INRS, Girardin Blue Bird, Groupe Robert, Lion Électrique, Nova Bus, Piétons Québec, Prévost, SPVM, STM, Tremcar, UMQ and Vélo Québec

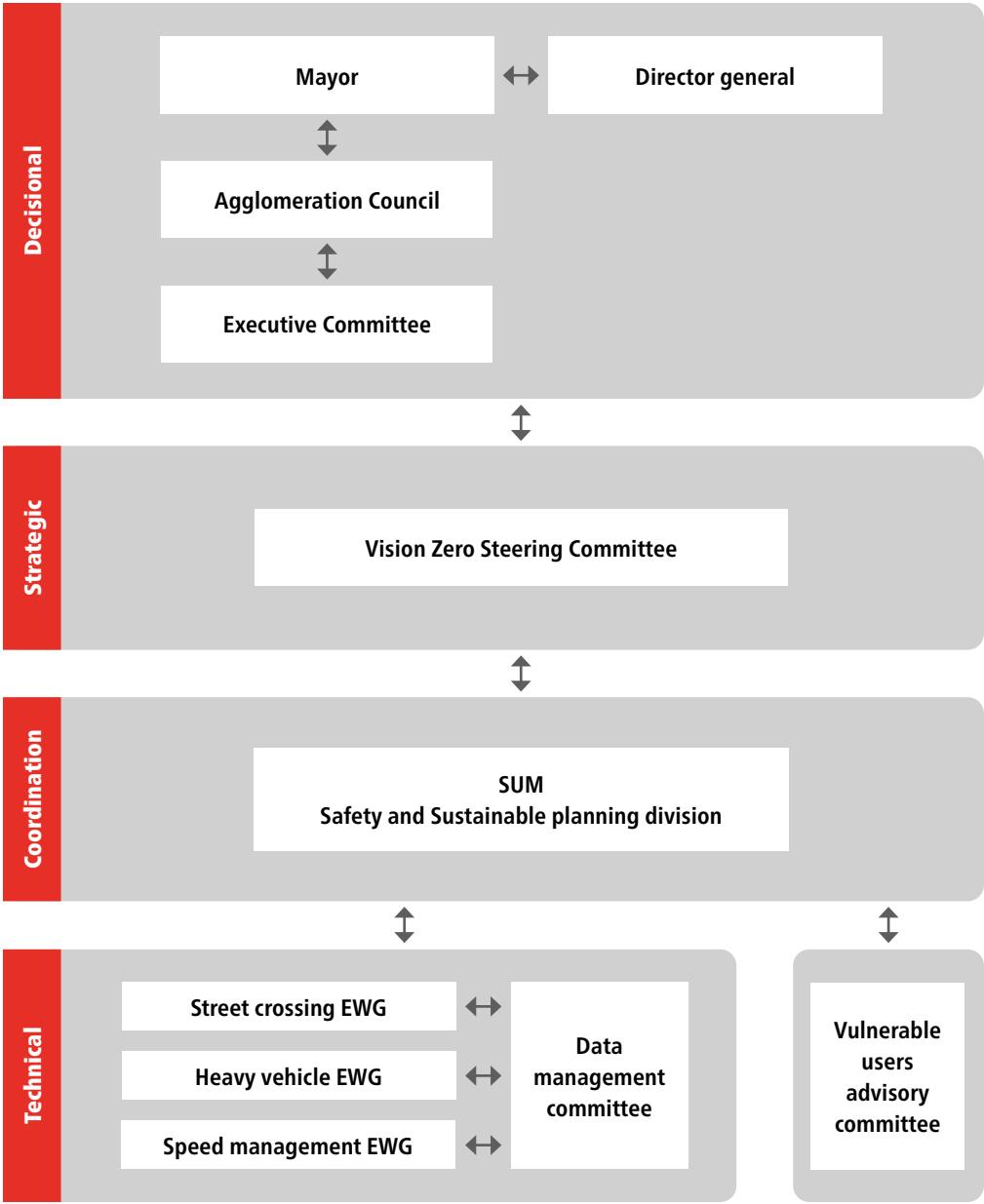
Focus Area 2 : Overall level of risk								
Objectives	Actions		Scope	Lead	Partners	Deliverables or activities	Deadline	Innovation in this Vision Zero
Objective 6 : Reduce travel distances	6.1	Define land use designations and density parameters	Land use	Central administration		Land use designation map	2023	
						Density parameters	2023	
Objective 7 : Promote alternatives to replace automobile use	7.1	Update the Bicycle Plan	Mobility	Central administration	Boroughs	Bicycle plan	2024	
	7.2	Continue deployment of the <i>Cyclist averti</i> program	Mobility	Vélo Québec	Boroughs and MEQ	Work in 120 classes per year	2022 and 2023**	
	7.3	Analyze mobility around metropolitan transit infrastructure elements	Mobility	ARTM	Boroughs, MTQ, STM and Central administration	Analytical report	2024	
	7.4	Define guidelines for road sharing to promote soft mobility	Mobility	Central administration	Boroughs	Guidelines	2023	
	7.5	Continue the Safe Street around Schools Program	Mobility	Central administration	Boroughs	Action measures around 25 schools per year, on average	Continually	
Focus Area 3 : Understanding issues and effectiveness of actions								
Objective 8 : Improve data collection and analysis	8.1	Classify intersections into families by characteristics in order to assign a level of risk and an improvement potential	Street infrastructure	Central administration		Intersection class definitions	2022	0
					Boroughs	Internal dissemination of intersection classes	2023	0
	8.2	Make representations in support of improving the data management for all types of collisions	Data	Vélo Québec and Piétons Québec	DRSP	Participation in a work group	2023	0
	8.3	Produce a study on the quality and availability of data required for predictive safety analyses for all types of collisions	Data	Central administration	DRSP, MTQ, SAAQ, SIM, SPVM and Urgences-Santé	Study document	2024	0
Objective 9 : Disseminate data	8.4	Create list of specifications to establish a data sharing platform	Data	Central administration	DRSP, MTQ, SAAQ, SIM, SPVM and Urgences-Santé	List of specifications	2024	0
	9.1	Produce and distribute an annual Road Safety Report	Data	Central administration		Annual report	Continually	0
					CRE-Montréal	Distribution		
	9.2	Regularly update the Vision Zero interactive map	Data	Central administration		Annual update	Continually	0
Focus Area 4 : The Scope of Vision Zero								
Objective 10 : Consolidate partner engagement	10.1	Establish a governance strategy	Governance	Central administration	Chaire internationale sur les usages et pratiques de la ville intelligente (ESG-UQAM)	Committee	2022	0
						Strategy	2023	0
	10.2	Establish performance indicators for Vision Zero	Governance	Central administration	DRSP, INRS and Piétons Québec	List of indicators	2023	0
	10.3	Coordinate awareness campaigns through the creation of a multi-partner communications committee	Users	Central administration	SAAQ and SPVM	Committee	2022	0
						Annual theme	Continually	0
	10.4	Include additional stakeholders during site visits by the Fatal Collision Assessment Team	Governance	Central administration	Boroughs, suburban cities and other partners, depending on the situation	Contact list	Continually	0
						Collaboration agreements	Continually	0
	10.5	Provide stakeholders with interim and permanent design recommendations resulting from fatal collision site analyses and follow-up on implementation	Street infrastructure	Central administration	Boroughs, suburban cities and other partners depending on the situation	Transmittal of recommendations	Continually	0
						Report on recommended and completed design changes	Continually	0
	10.6	Include new partners on the various Vision Zero committees	Governance	Central administration	ASM, AMD, ARTM, CMM, CSSDM and MEQ	6 partners added	2022	0
Objective 11 : Establish and reinforce links between Vision Zero and the other plans and policies of the city and its partners	10.7	Produce a information video on road safety and the Vision Zero approach for the police force	Users	SPVM	Central administration	Information video	2022	0
	10.8	Coordinate awareness campaigns to promote active lifestyles in a short-distance city	Mobility	CRE-Montréal	Central administration and MPA	Awareness campaign	Continually	0
	11.1	Integrate Vision Zero principles in the 2050 Land Use and Mobility Plan (LUMP)	Governance	Central administration		Vision Zero principles included in the 2050 LUMP	2024	0
	11.2	Include Vision Zero priority issues in local transportation plans	Governance	Boroughs	Central administration	Priority issues included in local transportation plans	Continually	0
	11.3	Map the plans, programs and policies that may impact the implementation of the Vision Zero Action Plan	Governance	Central administration	Chaire internationale sur les usages et pratiques de la ville intelligente (ESG-UQAM)	Mapping of plans, programs and policies	2022	0
	11.4	Coordinate the SPVM's road safety master plan with the Vision Zero Action Plan	Governance	SPVM	Central administration	Priority issues included in the road safety master plan	Continually	0

** 7.2 : The completion of this action by 2024 will depend on the availability of funding.

Appendix B

Governance

Applying the systemic approach of Vision Zero to the Montréal context requires a governance structure based on shared responsibility among numerous partners working in transportation. By combining knowledge and strengths, shared collaborative solutions can be implemented and efforts will be oriented toward the same goal, i.e. zero death and serious injuries on the Montréal road network by 2040.



Vision Zero Steering Committee

The mission of the Vision Zero Steering Committee is to coordinate resources created for the Vision Zero Action Plan and to advise elected officials. The role of the committee is to provide strategic leadership, guide planning efforts, review activity programming and approve plans and reports.

Montréal municipal administration

- Elected official of the Montréal Executive Committee
- Service de l’urbanisme et de la mobilité (Urban and Mobility Planning Department)
- Service de sécurité incendie de Montréal (Montréal Fire Department)
- Service des infrastructures du réseau routier (Road Network Infrastructure Department)
- Service matériel roulant et des ateliers (Rolling Stock and Mechanical Department)
- Service de police de la Ville de Montréal (Montréal Police Department)

Public and para-public organizations

- Agence de Mobilité Durable (Sustainable Transportation Agency)
- Association of Suburban Municipalities⁷
- Centre de services scolaire de Montréal (French-Langage School Service Centre)
- Communauté métropolitaine de Montréal (Metropolitan Community of Montréal)
- Direction régionale de la santé publique (Public Health Directorate)
- Ministère de l’Éducation du Québec (Québec Education Ministry)
- Ministère des Transports du Québec (Québec Transportation Ministry)
- Société de transport de Montréal (Montréal Transit Corporation)
- Société de l’assurance automobile du Québec (Québec Automobile Insurance Agency)
- Transport Canada
- Urgences-Santé (health emergency services)

Thematic Working Groups

The Vision Zero technical committees involve many specialists from different sectors related to transportation. In developing the second Vision Zero Action Plan, these committees evaluated the relevance and feasibility of the actions included in the plan. Afterward, they will be responsible for ensuring that measures implemented will be consistent with the final Vision Zero objective.

Street crossing

- Communauté métropolitaine de Montréal (Metropolitan Community of Montréal)
- Direction régionale de santé publique (Public Health Directorate)
- Institut national de la recherche scientifique (National Institute of Scientific Research)
- Ministère des Transports du Québec (Québec Ministry of Transportation)
- Piétons Québec (Québec Pedestrians Association)
- Service de police de la Ville de Montréal (Montréal Police Department)
- Service de sécurité incendie de Montréal (Montréal Fire Department)
- Société de l’assurance automobile du Québec (Québec Automobile Insurance Agency)
- Ville de Montréal

Heavy vehicles

- Association du camionnage du Québec (Québec Trucking Association)
- Association nationale des camionneurs artisans inc. (Québec National Association of Independent Truckers)
- Association des propriétaires de machinerie lourde du Québec (Québec Heavy Machinery Owners Association)
- Communauté métropolitaine de Montréal (Montréal Metropolitan Community)
- Piétons Québec (Québec Pedestrians Association)
- Canada Post
- Service de police de la Ville de Montréal (Montréal Police Department)
- Service de sécurité incendie de Montréal (Montréal Fire Department)
- Société de l’assurance automobile du Québec (Québec Automobile Insurance Agency)

⁷ The Association of Suburban Municipalities represents the 15 other municipalities of the island of Montréal.

- Société de transport de Montréal (Montréal Transit Corporation)
- Ministère des Transports du Québec (Québec Ministry of Transportation)
- Vélo Québec (Québec Bicycling Association)
- Ville de Montréal

Speed management

- Piétons Québec (Québec Pedestrians Association)
- Polytechnique Montréal
- Service de police de la Ville de Montréal (Montréal Police Department)
- Service de sécurité incendie de Montréal (Montréal Fire Department)
- Société de l’assurance automobile du Québec (Québec Automobile Insurance Agency)
- Société de transport de Montréal (Montréal Transit Corporation)
- Ministère des Transports du Québec (Québec Ministry of Transportation)
- Ville de Montréal

Data Management Committee

The data management committee is comprised of partners that produce data relevant to the Vision Zero process. Its purpose is to provide a portrait of data available, define related issues and offer solutions for the collection, analysis and dissemination of data. It also helps produce the State of Road safety report.

- Direction de la santé publique de Montréal (Montréal Public Health Directorate)
- Laboratoire d’innovation urbaine de Montréal (Montréal Urban Innovation Laboratory)
- Ministère des Transports du Québec (Québec Ministry of Transportation)
- Société de l’assurance automobile du Québec (Québec Automobile Insurance Agency)
- Service de sécurité incendie de Montréal (Montréal Fire Department)
- Service de police de la Ville de Montréal (Montréal Police Department)
- Société de transport de Montréal (Montréal Transit Corporation)
- Urgences-Santé (health emergency services)
- Ville de Montréal
- 911

**Vulnerable Users
Advisory Committee**

The vulnerable users advisory committee ensures that the objectives and actions recommended in the Vision Zero approach are consistent with the needs of all users, no matter their condition or limitations.

- Coalition mobilité active de Montréal (Montréal Active Mobility Coalition)
- Centre d’écologie urbaine de Montréal (Montréal Urban Ecology Centre)
- Conseil jeunesse de Montréal (Montréal Youth Council)
- Conseil régional de l’environnement - Montréal (Montréal Environmental Regional Council)
- Ex Aequo (*a mobility disability group*)
- Piétons Québec (Québec Pedestrians Association)
- Regroupement des aveugles et amblyopes du Montréal métropolitain (Metropolitan Montréal Association of the Blind and Visually Impaired)
- Société Logique (*a non-profit promoting universal design*)
- Table de concertation des aînés de l’île de Montréal (Montréal Island Seniors’ Coordination Roundtable)
- Vélo Québec (Québec Bicycling Association)
- Vivre en Ville (*a non-profit promoting the development of livable communities*)



Montréal Community Declaration of Commitment

VISION ZERO FOR ROAD SAFETY MONTRÉAL COMMUNITY DECLARATION OF COMMITMENT

Since the early 1990s, winds of change have led the Montréal community to renew the vision of Montréal as a cultural, economic and sustainable metropolis (first Urban Plan - 1992).

This movement then accelerated, particularly through the Montréal summit of 2002, and the vision became more specific.

Consequently, several strategic and goal-focused documents were adopted :

- 2004 : The second Urban Plan, defining Montréal as a human-scaled city, providing significant space to pedestrians.
- 2005 : The first Strategic Sustainable Development Plan of the Montréal community
- 2006 : Pedestrian Charter, recognizing the pre-eminence of pedestrians in urban space
- 2008 : The first Transportation Plan, with the commitment to invest in public transit and active transportation accompanied by the first target, to reduce road accidents by 40%.

These efforts sought to define Montréal as an economically viable metropolis that is also concerned about the well-being and quality of life of its citizens. They helped provide Montréal with the tools necessary to transform the city according to the vision.

The Montréal dynamic was not unrelated to the worldwide movement that led to the General Assembly of the United Nations proclaiming 2011–2020 the Decade of Action for Road Safety.

It is also part of the international community's efforts related to sustainable development. To this end, the special report of the Intergovernmental Panel on Climate Change (IPCC) published October 8, 2018, highlighted the need for rapid and wide-ranging changes in land use planning, energy, industry, construction, transportation and urbanism.

Adoption by Montréal City council in September 2016 of a resolution committing to Vision Zero for road safety was the launching point for development and implementation of a new road safety strategy based on this vision.

During the last few years, multiple actions put forward by various Montréal community stakeholders for mobility and road safety have created a significant improvement in safety for users of the municipal road system.

However, of late, our road transportation network seems to have reached a plateau when it comes to safety.

To ensure new momentum for the continuous improvement of road safety throughout Montréal, the community adopts Vision Zero in order to finally eliminate fatalities and serious injuries due to road collisions.

In making a commitment to this effort, the municipal administration, its partners and citizens recognize that :

- Everyone, no matter their physical capacities, age, gender, ethnic origin modes of travel or revenue, has the right to use the streets and roads, in all Montréal districts, without this being a threat to their life or health.
- Zero deaths and injuries on our roads is the only ethically reasonable target.
- Designers, managers and users of the road transportation system share the responsibility for road safety.
- Human beings are vulnerable and may commit mistakes. This means the transportation system must be designed, operated and maintained in a manner that forgives error, in particular by taking into account vulnerabilities.

- To successfully make this paradigm shift, all stakeholders (designers, managers and users) must work together to agree on the objectives to pursue and the coordination and monitoring mechanisms to establish.

The Montréal community strives to offer its residents, workers and visitors quality public spaces and a travel system that is safe, comfortable, reliable and equitable. The new road safety strategy must be coordinated with the other planning instruments that apply across Montréal (Urban Plan, Transportation Plan, Sustainable Development Plan, Economic Development Strategy, etc.).

As the central municipality of the agglomeration, Montréal must assume, in a spirit of partnership and collaboration, leadership in the development, implementation and monitoring of the Vision Zero strategy for the Montréal community. The Montréal administration and its partners agree formally to Vision Zero and together agree to :

- Collaborate on the implementation of the first Vision Zero Action Plan, 2019–2021, and on the development and implementation of subsequent action plans.

- Support a multidisciplinary structure, including various committees tasked with guiding planning efforts related to the Vision Zero of the community and to actively participate in its activities.

- Ensure social equity of the Vision Zero effort, through an inclusive process and performance indicators specifically for various user groups and various areas of Montréal.

- Support and improve collaborative and cooperative mechanisms among partners.
- Emphasize coordination, responsibility and accountability for all.

- Apply a systemic management approach to road safety, by paying attention to all potential flaws of each component of the road system (infrastructure, vehicles and users).

- Take advantage of expertise and technological innovation for the continuous improvement of road safety.

- Use reliable data to define and categorize road safety problems and issues, and to prioritize actions and resources based on evidence of needs and expected impacts.

- Offer real opportunities for citizen participation to create significant community involvement in meeting road safety objectives.

- Ensure transparency in the process and data as well as for the advancement of actions and performance indicators.

The Montréal administration and its partners hereby agree to :

- **Adhere to the principals of Vision Zero in road safety and to promote it in their day-to-day activities.**

- **Actively participate in the development and implementation of Action Plans resulting from the Vision Zero strategy.**

- **Mobilize and deploy all resources and all means to carry out their specific commitments.**

- **Develop and promote the Vision Zero approach throughout the Montréal community.**



List of Acronyms

ACQ	Association du camionnage du Québec (Québec Trucking Association)
ASM	Association of Suburban Municipalities
AMD	Agence de mobilité durable (Sustainable Transportation Agency)
APMLQ	Association des propriétaires de machinerie lourde du Québec (Québec Heavy Machinery Owners Association)
ARTM	Agence régionale de transport métropolitain (Regional Metropolitan Transportation Authority)
BNQ	Bureau de normalisation du Québec (Québec Standards Board)
CEUM	Centre d'écologie urbaine de Montréal (Montréal Urban Ecology Centre)
CFRM	Centre de formation du routier de Montréal (Montréal Road Training Centre)
CNTSPU	Comité national de transformation du système préhospitalier d'urgence (Pre-Hospital Emergency Transformation National Committee)
CIRRELT	Centre interuniversitaire de recherche sur les réseaux d'entreprise, la logistique et le transport (Interuniversity Centre for Research on Business Networks, Logistics, and Transportation)
CMM	Communauté métropolitaine de Montréal (Montréal Metropolitan Community)
CRE	Conseil régional de l'environnement — Montréal (Montréal Regional Environmental Council)
CSSDM	Centre de services scolaire de Montréal (French-Language Schools Service Centre)
DRSP	Direction régionale de santé publique (Public Health Regional Directorate)
EESM	Entretien de l'éclairage, de la signalisation et du marquage de la chaussée (Maintenance of Lighting, Signs and Road Marking)
ESG-UQAM	École des sciences de la gestion — Université du Québec à Montréal (UQAM School of Management)
EWG	Expert Work Group
FCAT	Fatal Collision Assessment Team
GBA+	Gender-Based and intersectional Analysis
INRS	Institut national de la recherche scientifique (National Institute of Scientific Research)
KSI	Killed and Seriously Injured
LUMP	Land Use and Mobility Plan 2050
SAAQ	Société de l'assurance automobile du Québec (Québec Automobile Insurance Agency)
PUM	Plan d'urbanisme et de mobilité 2050
PAVZ	Plan d'action Vision Zéro
SAAQ	Société de l'assurance automobile du Québec
SIM	Service de sécurité incendie de Montréal (Montréal Fire Department)
SPVM	Service de police de la Ville de Montréal (Montréal Police Department)
STM	Société de transport de Montréal (Montréal Transportation Corporation)
SUM	Service de l'urbanisme et de la mobilité (Urban and Mobility Planning Department)
SUV	Sport utility vehicle
UMQ	Union des municipalités du Québec (Québec Union of Municipalities)



ville.montreal.qc.ca/visionzero