

REPORT
Meeting Date: 2020-11-26
Regional Council

For Information

REPORT TITLE: 2019 Vision Zero Road Safety Strategic Plan Update – Year Two

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Health

OBJECTIVE

To provide the 2019 update on the Vision Zero Road Safety Strategic Plan, representing the second year of program implementation. This report summarizes road safety trends for the Regional road network and highlights countermeasures implemented in 2019 to improve road safety.

REPORT HIGHLIGHTS

- In September 2018, Regional Council approved the implementation of the Vision Zero Road Safety Strategic Plan to reduce and ultimately eliminate fatal and injury motor vehicle collisions in Peel.
- Six emphasis areas were identified as priorities for safety improvement including intersections, aggressive driving, distracted driving, impaired driving, pedestrians and cyclists.
- Numerous action items were implemented throughout 2019 to advance safety within the six emphasis areas, including the construction of fully protected left turn signals, distracted and impaired driving initiatives and campaigns, expansion of the Red Light Camera program, development of Automated Speed Enforcement program, and the addition of cycling infrastructure.
- In 2019, fatal collisions on Regional roads decreased by 29 per cent and injury collisions decreased by 15 per cent (per 100,000 population) as compared to the baseline year of 2017.

DISCUSSION

1. Background

Vision Zero is a strategy to eliminate all traffic fatalities and injuries while increasing safe, healthy and equitable mobility for all. It prioritizes safety over speed, convenience and cost, and accepts that the road system must be forgiving of human error. In December 2017, Region of Peel Council adopted the Vision Zero Framework (Resolution 2017-990) to better coordinate efforts and resources among agencies and stakeholders to reduce fatal and injury motor vehicle collisions in Peel. This program supports the Term of Council Priority to 'Advance Community Safety and Well-being'.

In September 2018, Council subsequently adopted the Region's Vision Zero Road Safety Strategic Plan that envisions 'zero fatal and injury collisions for all road users' with a goal of '10 per cent reduction in fatal and injury collisions by 2022'. The Plan acknowledges that fatal and injury collisions are preventable and can eliminate them with measurable strategies. The Plan contains action items that address the "4-Es" of road safety:

- engineering changes to the physical roadway,
- education are the measures that change road user behaviour,
- enforcement of the rules of the road, and
- empathy helps drivers understand the consequences of their actions.

It is based on shared responsibilities, where all stakeholders have a part to play to make the program successful.

In October 2018, staff began implementing the actions identified in the Plan.

The Region has now completed the second year report, showing collision trends and the progress of action items implemented in 2019.

2. Current Status - Safety Outcome Trends

In 2019 there were a total of 417 reported collisions on Regional roads per 100,000 population, including fatal, non-fatal and property damage type collisions. This represents a five per cent increase as compared to the baseline year of 2017, as shown in Table 1.

While the total number of collisions on Regional roads have increased in 2019, the fatal collisions have decreased by 29 per cent and injury collisions have decreased by 15 per cent per 100,000 population, when compared to the baseline year of 2017. It is important to note that many factors contribute to these results, well beyond the Vision Zero program. While these trends are very encouraging, it is understood that lasting culture change in support of Vision Zero principles is a multi-year journey.

Table 1: Total Collisions Statistics, the Region of Peel Road Network (2017 - 2019)

Collisions per 100,000 population	2017 Baseline	2018	2019	Per cent (%) Change 2019 compared to 2017
Total Collisions on Regional Roads, fatal, injury and property damage	396	439	417	5 % increase
Number of Fatal Collisions	0.7	0.8	0.5	29 % decrease
Number of Injury Collisions	60	57	51	15 % decrease

Table 2 below provides trending statistics for each of the six emphasis areas. These metrics are based on per 100,000 population for 2019, and compared to the baseline year of 2017.

In general, collision trends related to aggressive driving and pedestrians remains relatively flat, whereas collisions related to intersections, distracted driving and cyclists showed improvement.

In contrast, fatal and injury collisions related to impaired driving show an upward trend since 2017. Peel Regional Police and the Ontario Provincial Police-Caledon Detachment recognize that impaired driving is a serious road safety issue and has been a causal factor in an increasing number of preventable fatal and injury collisions. They continue to take proactive measures like increased visibility, enforcement and public education to try and reverse this trend.

Table 2: Trending Statistics - Fatal and Injury Collisions, the Region of Peel Road Network (2017-2019)¹

Emphasis Areas		Injury Colli 0,000 popula	Per cent (%) Change		
Emphasis Areas	2017 ² Baseline	2018²	2019²	2019 compared to 2017	
Total Fatal and Injury Collisions	61	58	52	15 %	
Intersection Collisions	45	45	40	11 %	
Aggressive Driving	26	26	25	4 %	
Distracted Driving	23	19	20	13 %	
Pedestrian Collisions	7	6	6	14 %	
Cyclist Collisions	0.8	0.5	0.4	50 %	
Impaired Driving	2.2	2.6	3.2	45 %	

¹ the data only reflects reported collisions on roads under the jurisdiction of Region of Peel. Collisions on municipal roads, private property, unreported collisions are not included.

^{*}Collisions reported might have emphasis area overlap. For e.g. one collision might have involved an impaired, aggressive driver at an intersection striking a pedestrian.

² the population data was obtained from Peel Data Centre and is as follows 2017 – 1,452,597, 2018 – 1,479,139 and 2019 – 1,494,747.

3. Vision Zero Action Items Completed in 2019

The Vision Zero Road Safety Strategic Plan began with a comprehensive assessment of the Region's existing road safety conditions and programs. The top six areas that require improvement were identified based upon the collision analysis of all the data, including data from the local municipalities. These are referred to as the six emphasis areas in the Plan.

The following summary provides an overview of the key action items implemented in 2019 under each of the six emphasis areas.

Intersection Collisions

This emphasis area aims to prevent intersection collisions, of which rear-end collisions are the most common.

- Seven fully protected left turn signal locations were implemented in 2019, where vehicles can only turn left on a green arrow. This type of operation is effective at reducing driver decisions and reducing the probability of left turning vehicular collisions
- Traffic signal network progression was reviewed and improved on 18 road corridors, resulting in a 14 per cent improvement to flow. This involves coordinating traffic light timing to improve flow through a series of green lights, provided the driver is travelling the speed limit. This serves to improve air quality by reducing vehicle idling, improves travel time by reducing stops and encourages compliance to the speed limit. Additionally, better traffic flow reduces the probability of rear end collisions from stopping and starting cycles at intersections.

Aggressive Driving

Aggressive driving includes any driving behavior performed deliberately with ill intention or disregard for the safety of others on the road.

- The red light camera program was expanded in 2019 and cameras were installed at the following five locations:
 - Derry Road West and Syntex Drive / Syntex Court
 - Queensway East and Camilla Road
 - o Britannia Road West and Grossbeak Drive / Delle Donne Drive
 - o Britannia Road West and Tillsdown Drive / River Grove Avenue
 - o Cawthra Road and Atwater Avenue

On average, fatal and injury collisions decreased by 73 per cent and property damage collisions decreased by 78 per cent in 2019 when compared to the baseline year of the camera installation.

 A vehicle activated traffic calming sign was installed on King Street between Station Road and Coleraine Drive in the Town of Caledon, resulting in a five per cent reduction in vehicle speeds. These are traffic calming signs with an LED light and radar speed detector that show the speed of vehicles as they approach, flashing the words 'Slow Down' when vehicles are moving too fast.

Distracted Driving

Distracted driving occurs when a driver's attention is not on the road, including the use of hand-held devices.

- 2124 tickets were issued by Peel Regional Police and Ontario Provincial Police-Caledon detachment through enforcement of the *Highway Traffic Act* for violations related to distracted driving such as using cell phones while driving.
- Seven distracted driving initiatives and campaigns were conducted throughout 2019, delivered by Peel Regional Police and Ontario Provincial Police-Caledon detachment.

Impaired Driving

Impaired driving includes collisions where a driver is identified as 'impaired' or having a blood alcohol concentration of more than 80 milligrams or more of alcohol per 100 milliliters of blood, or 0.08.

 26,995 Reduce Impaired Driving Everywhere (RIDE) spot checks were conducted, resulting in 542 license suspensions in 2019. Peel Regional Police and Ontario Provincial Police-Caledon detachment laid a total of 1831 charges pursuant to the Criminal Code of Canada in relation to impaired driving.

Pedestrians

This category aims to reduce collisions between vehicles and pedestrians.

- A midblock pedestrian crossing signal was installed on Airport Road, 300m south of Clark Boulevard in 2019. A midblock pedestrian crossing signal is a controlled crossing that provides pedestrians with a safe way to cross the road between intersections.
- Six pedestrian countdown signals were installed at Regional intersections in 2019.
 Pedestrian Countdown Signals provide a countdown display of the seconds remaining in the flashing Don't Walk interval at an intersection.
- Provisions are included where possible for temporary sidewalks and multi-use trails through construction projects to provide safer access to pedestrians.

Cyclists

These countermeasures are designed to reduce collisions involving cyclists within the road right of way.

- In total, approximately 11km of cycling infrastructure was built in 2019, which
 includes a combination of multi-use paths, sidewalks, and paved shoulders.
 Similarly, provisions are included for the safer passage of cyclist through
 construction projects.
- Two bicycle signals and two crossrides were implemented in 2019. Bicycle signals
 and crossrides are dedicated spaces identified by unique pavement markings for
 cyclists to legally ride their bicycles across a roadway without dismounting.

A full list of countermeasures implemented in 2019 can be found in Appendix I – 'Region of Peel Vision Zero Annual Road Safety Report – 2019 Year Two'.

4. New Programs and Technologies Initiated in 2019

The Region continues to work with its partners and stakeholders to improve safety by updating practices and procedures, testing new programs and initiatives, and exploring new technologies. The following programs were rolled out or initiated in 2019 to improve safety.

Automated Speed Enforcement (ASE) – ASE is an electronic enforcement system that uses a camera and a speed measurement device to identify drivers exceeding speed limits in school zones and community safety zones. In 2019, school zones and community safety zones along Regional roads in the Town of Caledon were reviewed for speed data and roadway geometrics to determine where ASE could be implemented. The Region identified six locations and has installed a camera at Robert F. Hall Catholic Secondary School on Old Church Road east of Innis Lake Road, with the intention of rotating the existing camera to the other five selected locations in the Town of Caledon by 2021.

Automated School Bus Stop Arm Camera – Automated school bus stop arm cameras refer to an enforcement system that would use images of vehicles passing school buses illegally to ticket violations. Regional staff are currently working with various partners, stakeholders, technical staff and specialists to implement an automated school bus stop arm camera enforcement program in Peel Region in partnership with Student Transportation of Peel Region (STOPR), targeting rollout for September 2021.

Vision Zero Road Safety Culture - As part of the Road Safety Strategic Plan, the Region aims to promote a 'road safety culture' by encouraging people to place themselves in the situation of other road users to appreciate the potential consequences of their actions. The Region will adopt a two-step approach to first understand and then address issues of internal and external road safety culture. A community road safety survey will be used to gain a baseline understanding of residents' perceptions, behaviors and thoughts towards road safety. At the same time, the Region will conduct an internal gap analysis to identify how road safety is considered in policy, planning, design, operations and maintenance of the transportation system within the Region of Peel. These surveys will be conducted and completed by the end of 2020. Together, the survey data and gap analysis will provide greater insight into road safety culture. This information will then be used to guide subsequent actions within the Road Safety Strategic Plan. These actions will help to embed empathetic road safety culture as a core value in decision-making both externally within the community and internally as an organization.

5. Ongoing Program Updates

The Region has a wide range of programs and initiatives that are delivered on a regular basis to promote road safety.

In-Service Road Safety Audits and Reviews - Audits examine road locations in detail to assess operating conditions and identify short-term and long-term actions that could be taken to improve overall safety. Audits are conducted annually and on an as-needed basis. Locations with similar physical and traffic characteristics are categorized and ranked, thereby prioritizing staff efforts and annual spending on safety improvements. In 2019, the

Region conducted safety audits at 21 locations. Reviews are high-level analysis intended to identify larger trends and contributory causes of collisions at a location. In 2019, the Region conducted road safety reviews at 46 locations

Education and Outreach Programs - Education and outreach efforts aim to increase awareness of road safety, while empowering all road users to make safer choices and adopt empathetic behaviour. The Region, local municipalities, community partners and the police services undertook social media campaigns from June to October 2019 on topics including pedestrian and cycling safety to raise public awareness. Staff also provided interactive education to the public at events including Bramalea Cyclefest, Caledon Day event, Mississauga Cycles family day.

Red Light Camera Program - This program continues to demonstrate that Red Light Cameras are an effective tool in helping to reduce right angle collisions at intersections. There are 33 active Red Light Cameras in the Region, with a new camera to be installed at the intersection of Mayfield Road at Kennedy Road in the Town of Caledon. Staff will continue to review the success of the program in 2021 in anticipation of further expansion in 2022.

Collaboration and Cooperation - One of the key benefits of the Plan is the collaboration between partners and stakeholders to implement the actions of the Plan, leverage shared resources, and ensure consistent messaging across various organizations. The Vision Zero Task Force met twice in 2019 to facilitate collaboration between partners and collectively implement the Vision Zero Road Safety Strategic Plan. In addition to the Task Force, other areas of collaboration and cooperation include the Fatal Collision Review Committee, the Vision Zero Education and Awareness Working Group, Mississauga Road Safety Committee, the Caledon Active Transportation Task Force and the Road Safety Committee of Ontario (ROSCO).

CONCLUSION

In 2019, the collision trend for each of the six emphasis areas continues to decline with the exception of impaired driving. As outlined in the report, a number of measures were put in place including fully protected left turn signals, distracted and impaired driving initiatives, along with the expansion of the Red Light Camera program, the introduction of the Automated Speed Enforcement program and added cycling infrastructure.

Promoting safety and well-being and mitigating road safety risks require the continued and sustained efforts from all partners and stakeholders. The Region will continue to coordinate, monitor and implement road safety initiatives and targeted, pro-active campaigns that help drive changes to road user behaviour to support the goal of the Road Safety Strategic Plan and the priorities identified within it.

APPENDICES

Appendix I - Region of Peel Vision Zero Annual Road Safety Report - 2019 Year Two

For further information regarding this report, please contact William Toy, Supervisor, Traffic Safety, Ext. 7869, William.toy@peelregion.ca.

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Reviewed and/or approved in workflow by:

Department Commissioners, Division Directors, Medical Officer of Health and Financial Support Unit.

Final approval is by the Chief Administrative Officer.

J. Baker, Chief Administrative Officer

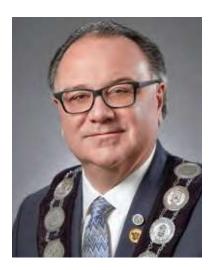
Region of Peel · VISIONZERO

Annual Road Safety Report

2019 | Year Two



Message from the Regional Chair



The Region's Vision Zero Road Safety Strategic Plan reflects Council's commitment to ensuring road safety is a top priority for Peel. The plan is built on the Vision Zero philosophy that "No loss of life is acceptable as a result of a motor vehicle collision," and aligns with our ongoing commitment to creating a healthy, safe and connected community.

Since the plan was adopted by Council in 2018, Regional staff and our stakeholders have worked to implement many of the measures and enhancements as outlined in the plan - and the great work continues!

Through the collaborative efforts of our stakeholders, including Peel Regional Police, the Ontario Provincial Police, local municipalities, partner agencies and community groups, we're taking action to make our roads safe for everyone, while also creating awareness and educating the public about how they too can support safety. It's a truly holistic approach.

On behalf of Regional Council, I thank staff, our partners and residents for their ongoing commitment to working together to enhance our road network, encourage positive behaviours and ultimately eliminate serious collisions for all road users, no matter how they choose to travel.

Nando Iannicca

Regional Chair, Region of Peel





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Message from the CAO



Since Council endorsed the Vision Zero framework in December 2017, the Region of Peel, along with our many partners, has been focused on preventing fatal and injury motor vehicle collisions in Peel. I am pleased to see we've made significant progress towards this goal in the last two years.

In cooperation with local municipalities, Peel Regional Police and Ontario Provincial Police Caledon Detachment, we are making our community safer for all road users. In this report, you'll read how we've reduced fatal and injury collisions on Regional roads involving pedestrians, intersection collisions and distracted drivers. The number of fatal and injury collisions for cyclists have also decreased by a notable 50 per cent.

But we have more work to do. Wherever road users are going, we want them to arrive there safely. The ultimate goal is that no one should be injured or killed in the Region of Peel resulting from a collision. Working with all our stakeholders, we continue to make progress towards this goal.

I would like to thank all our partners for helping to create a healthier, safer and more connected community. This includes a safe environment for all road users and is just one piece of our larger vision to build a Community for Life in Peel.

Janice Baker, FCPA FCA

Chief Administrative Officer Region of Peel

Message from the Mayor of Caledon



Safety on our streets and the well-being of all road users is a priority at the Town of Caledon. As our community grows, it is important that we continue to work with the Region and other key stakeholders to put measures in place today that will keep everyone safe when travelling on our roadways – whether driving, walking or cycling.

Many of the ongoing initiatives and steps taken toward enhancing our road system in Caledon, align with the Region of Peel's Vision Zero Road Safety Strategic Plan and support the key message that no loss of life is acceptable as a result of a motor vehicle collision.

Together with the Region, we've installed pedestrian crossovers to improve conditions for pedestrians and crossrides for cyclist safety. Curb extensions at various locations along the road have been added to help calm traffic, provide additional buffer space for pedestrians, and give clearer on-street parking spaces. Recently, automated speed enforcement was launched in school zones and community safety zones to protect our most vulnerable residents when out on our roads. This is just another reminder that we all need to drive according to the speed limit and the importance of slowing down in order to keep our communities safe.

We're also working closely with Peel Regional Police and the OPP-Caledon to support enforcement efforts through campaigns like Distracted Driving.

We all have a role to play. By working to create awareness and educating all road users, we can ultimately support the community in changing behaviours towards road safety.

Allan Thompson

Mayor of Caledon

Message from the Mayor of Brampton



I am very proud to support the Region of Peel's Vision Zero Road Safety Strategic Plan and the City of Brampton fully shares in the desire to enhance road safety.

Speed plays such a significant role in traffic collisions and tragically, speed causes more collisions, more serious injuries, and increases the number of fatalities.

Brampton takes the safety of residents seriously and was one of the first municipalities in Ontario to implement Automated Speed Enforcement (ASE) introducing its first notification sign on December 19, 2019. ASE cameras are now operational in five Community Safety Zones with 10 more to be installed by the end of the year.

In 2019, Brampton Council approved the Active Transportation Master Plan, to build a comprehensive and connected network allowing residents to travel safely around the City. A key element of this network is on-road bike lanes, which will not only make getting around by bicycle safer and easier, but also to help calm vehicular traffic. Over the next 20 years, Brampton residents will see 500 kilometers of additional trails, paths, and bike lanes.

Council recently participated in Peel Regional Police's #TakeThePledge campaign to build awareness and encourage drivers to SLOW DOWN on our streets!

No loss of life on our roads is acceptable and we all play an important part in keeping our residents, our families, and our loved ones safe.

Patrick Brown

Mayor of Brampton



Message from the Mayor of Mississauga



Since the approval of the Region of Peel's Vision Zero Road Safety Strategic Plan, Mississauga has made substantial progress in our shared efforts to ensure zero fatalities and serious injuries on Peel roadways.

No loss of life on our roads is acceptable. That's why we will continue to work collaboratively to ensure that the safety of all Peel residents is taken into account when we undertake road safety projects.

Our goal is to achieve safety for all, regardless of their travel choices. Whether it's a transit rider transferring from MiWay to Zum, to a pedestrian navigating the streets of Mississauga's City Centre, to a resident driving to their place of employment in Airport Corporate Centre – the health and safety of all road users remains our top priority.

The City of Mississauga is committed to building a transportation network that moves people safely and seamlessly across our City. Together, we can work to mitigate risk on our roadways through education, enforcement, engineering, empathy and evaluation. Initiatives including lowering speed limits, installing traffic calming, constructing new pedestrian and cycling infrastructure and developing education campaigns that target all users are just a few of the projects we are prioritizing to ensure the safety of vulnerable road users.

While we have come a long way in the past two years, there is still more to do. Our work never stops to build a safer Mississauga and Region of Peel. We look forward to a continued collaboration in the years to come to keep our residents safe and achieve Vision Zero.

Bonnie Crombie

Mayor of Mississauga



Message from the Director of Transportation



While the road system needs to keep us moving, it must also be designed to protect all road users. In partnership with our stakeholders, we've been able to implement significant enhancements to our road network and there's more to come!

Through collision analysis and public consultation, we've identified the key problem areas which include intersections; aggressive, distracted and impaired driving; pedestrians and cyclists and we've set actions to make improvements in each area.

We're making changes to how our roads are designed, installing road safety infrastructure like bike lanes, reducing speed limits, creating awareness and partnering to create walk-friendly neighbourhoods across Peel, to name a few.

Our plan aligns with the Region of Peel's vision of a community for life, by contributing to the mission of 'creating a healthy, safe and connected community' for Peel residents. The goal is based on a shared responsibility for road safety between municipalities, the police, community organizations and road users. We all have a role to play.

The message is clear – "No loss of life is acceptable" as a result of a motor vehicle collision. Our plan will help us move toward a community where everyone can travel safely on our roads.

Terry Ricketts, P.Eng

Director of Transportation Public Works, Region of Peel



Message from Peel Public Health



During these unprecedented times, the Region of Peel has completed year two of its five-year Vision Zero Road Safety Strategic Plan. Working alongside colleagues in Transportation Planning and our community partners, we continue to aim for our overall future vision of zero fatal and injury-causing collisions for all road users in Peel and our near-term goal of a 10% reduction in fatal and injury-causing collisions by 2022. The plan's Vision Zero philosophy highlights the important contribution that transportation design can make towards public health's traditional goals of protecting and promoting health, preventing disease and reducing health disparities in our community.

Of note, Peel Public Health's 2020-2030 Strategic Plan has also identified advancing health equity as a strategic priority. Data shows that our most vulnerable residents and communities are disproportionately impacted by death and disability caused by motor vehicle collisions, as well as chronic conditions that can be improved through active transport. Building a Community for Life thus means that the transportation network should provide everyone with equal and safe access to walking, cycling and transit opportunities to improve health and safety.

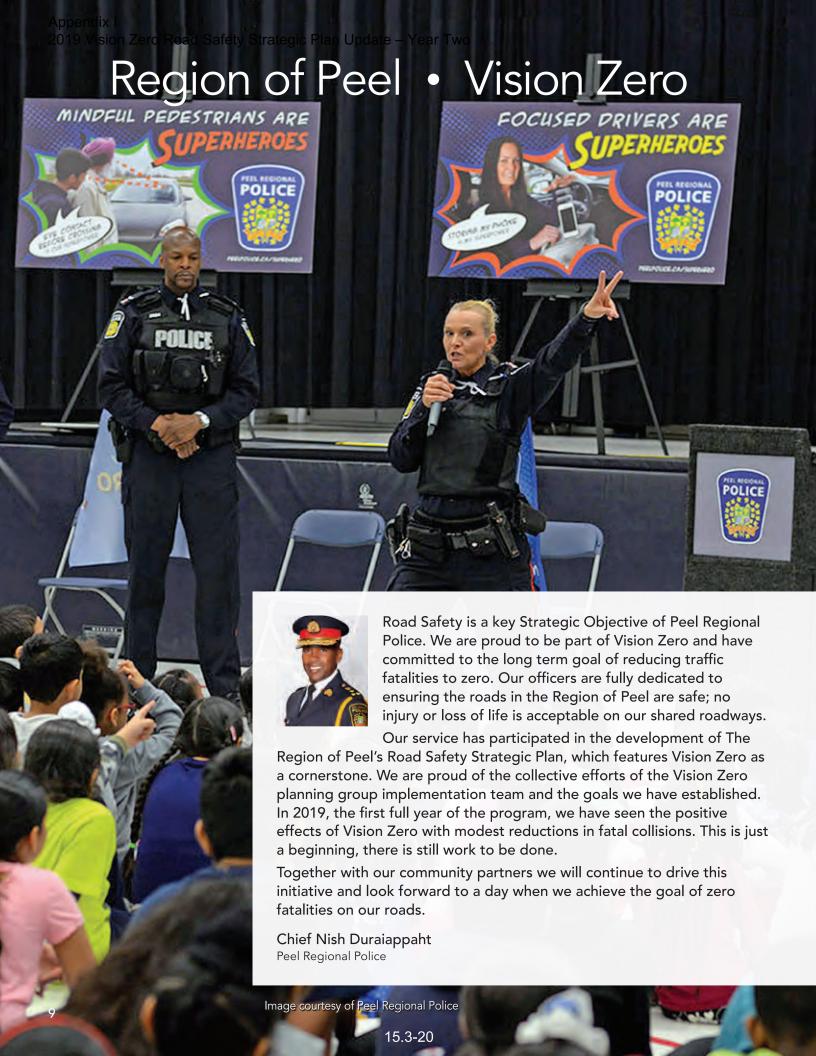
Modern transportation design is fundamental to fostering health and mitigating the impacts of air pollution and climate change. As we continue to implement Vision Zero, I am confident our collaborating group will identify areas for attention, monitor and track progress, and direct the implementation of safety improvements to our transportation network that will reduce death and disability, and provide opportunities for our most vulnerable residents to enjoy the benefits of safe and active transportation.



Lawrence Loh, MD, MPH, CCFP, FRCPC, FACPM Medical Officer of Health Public Health, Health Services, Region of Peel







What is Vision Zero?

The Region of Peel's Vision Zero Road Safety Strategic Plan 2018–2022 (RSSP) was launched in September 2018 to approach road safety holistically. The fundamental principle of Vision Zero is that fatal and injury collisions on the roadway are not acceptable.

The Vision Zero framework recognizes that:



Human beings make mistakes so the road system is designed to be forgiving



Life and health cannot be exchanged for other societal benefits



Safety is prioritized over other factors such as cost, speed, delay, level of service, and convenience



Benefit - cost analysis not necessarily applicable

Vision Zero is a strategy to eliminate all traffic fatalities and injuries while increasing safe, healthy and equitable mobility for all. This report summarizes road safety trends for the Regional road network and highlights countermeasures implemented in 2019 to improve road safety.



Vision and Goal



The vision of the Road Safety Strateic Plan is "zero fatal and injury collisions for all road users". It is recognized by the partners that this is an ambitious vision and it will take some time to achieve it.



The goal is a "10% reduction in fatal and injury collisions by 2022". The ultimate goal is that no one should be injured or killed in the Region of Peel resulting from a collision.

The Six Emphasis Areas of the **Road Safety Strategic Plan**

The Road Safety Strategic Plan has Six Emphasis Areas representing the main safety concerns identified through a collision analysis and public consultation. These include:



Intersection



Distracted driving



Pedestrian



Aggressive driving



Impaired driving



The Four E's of Road Safety

The Four E's of road safety contains action items that the Region uses to enhance safety. These include:



Engineering



Education



Enforcement



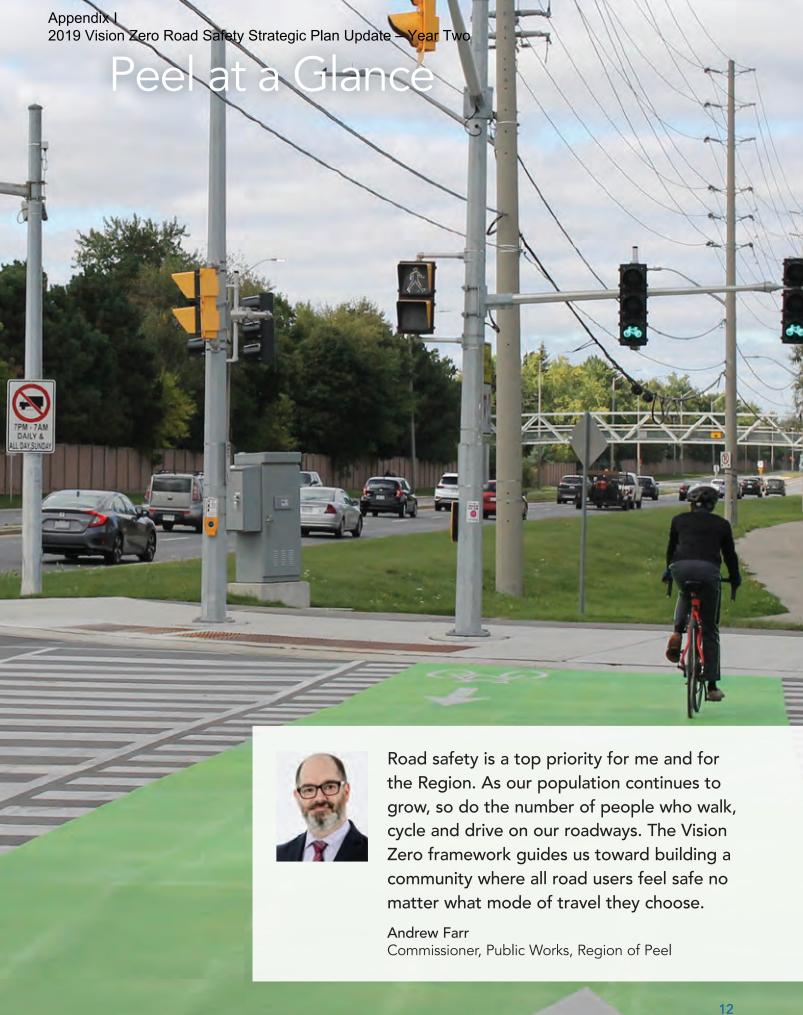
Empathy

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Peel Collision Statistics at a Glance (2017–2019)

Two years after the launch of Vision Zero, the Region has made considerable progress towards the goal of reducing the number of fatal and injury collisions on Regional roads. The Region will continue to refine strategies and develop countermeasures to reduce fatal and injury collisions with an emphasis on pedestrian, cyclists, aggressive driving, distracted driving, impaired driving and intersection collisions to provide further protection for vulnerable road users.

The following statistics compare fatal and injury collisions in 2019 to the baseline year of 2017 per 100,000 population.

- 15% reduction overall on Regional Roads,
- 11% reduction in Intersections collisions,
- 4% reduction in Aggressive Driving collisions,
- 13% reduction in Distracted Driving collisions,
- 14% reduction in Pedestrian collisions,
- 50% reduction in Cyclist collisions,
- 45% increase in Impaired Driving.

The table below shows the summary of total collisions including property damage type, fatal and injury collisions, that occurred on Regional roads between 2017 and 2019.

Total Collisions Statistics, the Region of Peel Road Network (2017–2019)¹

Statistic	2017	2018	2019
Number of Collisions	5756	6488	6228
Number of Collisions (per 100,000 population)	396	439	417
Percentage of Collisions involving Trucks	6%	6%	6%
Number of Fatal Collisions (per 100,000 population)	0.7	0.8	0.5
Number of Injury Collisions (per 100,000 population)	60	60	50
Number of Collisions Involving Pedestrians (per 100,000 population)	8	7	6
Number of Collisions Involving Cyclists (per 100,000 population)	2	1	2
Percentage of Collisions Occurring at Intersections	71%	71%	75%
Day with Highest Number of Collisions	Friday	Friday	Friday
Month with Highest Number of Collisions	October & December	November	January
Time of Day with Highest Number of Collisions	15:00	15:00	18:00
Most Common Collision Type	Rear End	Rear End	Rear End
Most Frequently Recorded Improper Driving Action	Following too Close	Following too Close	Following too Close
Percentage of Alcohol-Related Collisions	2%	2%	2%

the data only reflects reported collisions on roads under the jurisdiction of Region of Peel. Collisions on municipal roads, private property, unreported collisions are not included.





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^{*} Collisions reported might have emphasis area overlap. For e.g. one collision might have involved an impaired, aggressive driver at an intersection striking a pedestrian

² the population was obtained using PDC data and are as follows 2017 – 1,452,597, 2018 – 1,479,139 and 2019 – 1,494,747

The table below provides the trending statistics of the total number of fatal and injury collisions, as well as the reported fatal and injury collisions for each of the six emphasis areas along with the metrics based on per 100,000 population that occurred on Regional Roads.

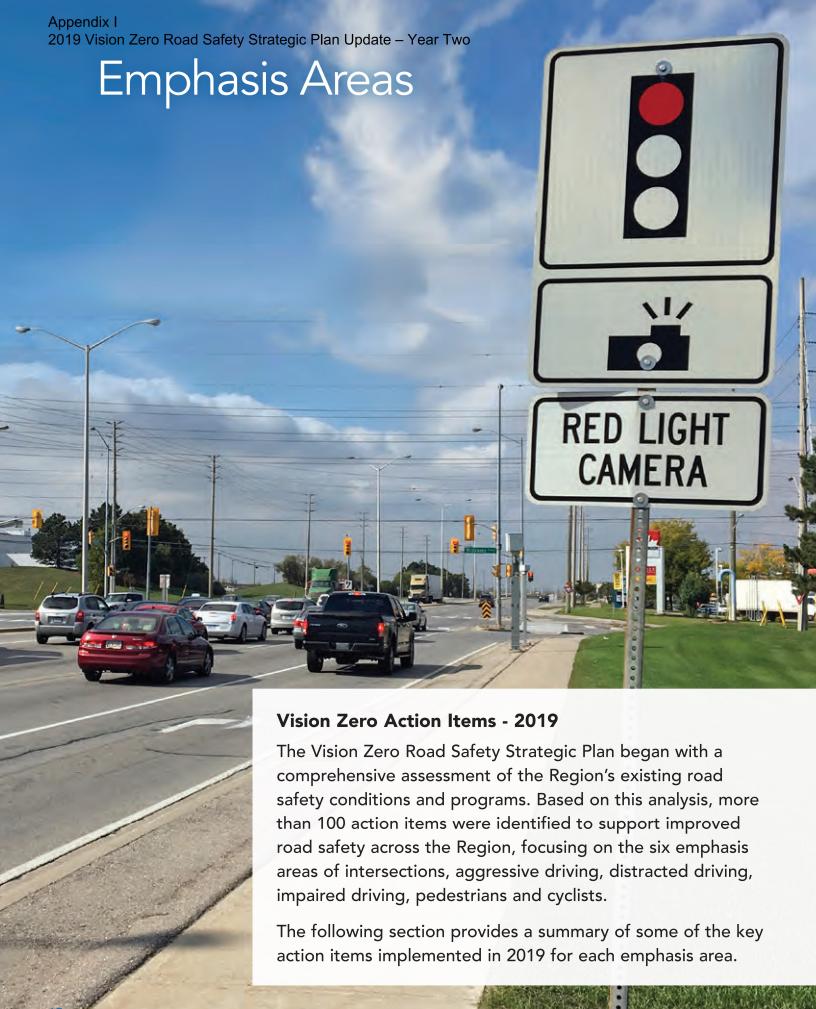
Trending Statistics - Fatal and Injury Collisions, the Region of Peel Road Network (2017–2019)¹

Emphasis Areas (Per Capita 100,000)	Fatal a	and Injury Col	Per cent (%) Change	
	2017 ²	2018 ²	2019 ²	(2019 compared to 2017)
Total Fatal and Injury Collisions	60	60	52	15%
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Manager, Traffic and Sustainable Transportation, Region of Peel

Sean Carrick

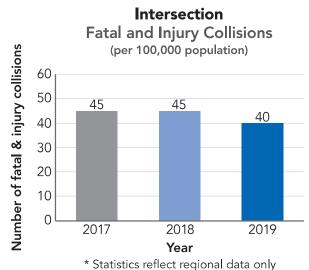


Intersection Collisions

Collisions at intersections in the Region made up 75% of total reported collisions in 2019. Rear ends are the most common type of collisions at intersections, followed by those caused by turning movement.

By the Numbers

The number of fatal and injury collisions at intersections decreased by 11% in 2019 when compared to 2017.



The following section provides a summary of some of the key action items implemented for intersection in 2019.

Intersections Countermeasures Implemented in 2019

Signage Enhancement

The Region is implementing enhanced signing such as: deer signs, traffic signals ahead signs, checkerboard signs, etc. The Region of Peel retrofitted 765 signs in 2019 over 16 projects.

Pavement Marking Improvements

Enhancements were made to pavement markings to improve safety by painting guidelines at the intersection, crosswalks, crossrides and yield pavement markings. These improvements were completed in 2019 on six different Regional projects.

Sightline Clearing/ **Sight Distance Improvements**

The Region proactively and reactively improved visibility at various intersections by removing visual obstructions to improve sightlines for drivers to have a clear view of the roadway ahead.







Stay Connected



Hazard Marker at Bullnose

These hazard markers signs were installed on centre median bullnoses to provide positive guidance to drivers.

Ladder Crosswalks

In 2019, a series of ladder crosswalks were installed at various intersections, by replacing the traditional two-line crosswalk with painted bars to better identify pedestrian crossings.



In 2019, the Region installed street lighting in two corridors. These enhancements help to improve the night time illumination.

At-Grade Railway Crossing Audits

Road safety review of the at-grade railway crossings were conducted to ensure they meet the Railway Safety Act and Grade Crossing Regulations. The Region in 2019, enhanced road safety at 14 at-grade railway crossing locations.

Traffic Signal Network Progression

Traffic Signal Network Progression involves coordinating traffic light timing to improve flow through a series of green lights, provided the driver is traveling the speed limit which reduces read end collisions. The Region improved Network Progression on 18 road corridors, in 2019.

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Implement Traffic Control

The Region continues to review how we safely control traffic at intersections. This includes stop signs, yield signs, traffic signals and roundabouts. In 2019, the Region installed four new traffic signals.

Protected Left Turn Signals

Protected left turn signals are implemented to prevent conflicts between left turning vehicles, and opposing through vehicles. The Region implemented seven protected left turn signals at intersections in 2019.

Dedicated Signal Phase for Bus Movements

In 2019, the Region implemented a dedicated signal phase for buses at an intersection to give them priority to enter the intersection before other vehicles in order to reduce conflict with other road users, improve bus scheduling and reduce vehicle emissions.

Advanced Signals Signage

We continue to implement and standardize "traffic signal ahead" signs at various intersections to advise motorists of an upcoming signal to reduce last minute lane changes.









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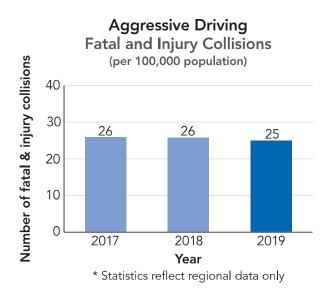


Aggressive Driving Collisions

Aggressive driving behavior is when a driver disregards the safety of other road users which significantly increases the risk of being involved in a collision. Some examples would include tailgating, speeding, failing to yield right-of-way, cutting in front of another driver, etc.

By the Numbers

The number of fatal and injury collisions for aggressive driving have decreased by 4% in 2019 when compared to 2017.



The following section provides a summary of some of the key action items implemented for aggressive driving in 2019.

Aggressive Driving Countermeasures Implemented in 2019

Speed Limit Reviews

The Region has developed a speed limit policy and has conducted various speed limit reviews on Regional roads to enhance road safety for all road users proactively. In 2019, the Region completed speed limit reviews on nine corridors that resulted in speed limit reductions on three corridors.

Right Turn Channel Retrofit

The Region is reviewing the use of smart channels and retrofitting the existing right turn channels to support walkability and cycling. The Region completed nine right turn channel retrofits in 2019 which has shown to reduce aggressive driving.







Electronic Radar Speed Signs

Radar Speed Feedback Signs, speed trailer and Vehicle Activated Traffic Calming Signs (VATCS) are installed to remind motorists of their speed and slow traffic down. The Region has deployed the speed trailer at eight locations across the Region and the Radar Speed Feedback Signs at two locations, in 2019.



Speed cushions are installed as a traffic calming measure to slow the speed of vehicles. Speed cushions have been installed in rural areas with lower posted speed limits where speed has been a concern.

On-Street Parking

On-street parking narrows the travel lane which helps in the reduction of vehicle speed. It improves safety by separating pedestrians from through traffic. In 2019, this countermeasure was implemented on a corridor to improve safety.

Red Light Cameras

The Region has installed five Red Light Cameras in 2019 to discourage red light running. On average, fatal and injury collisions decreased by 73 per cent and property damage collisions decreased by 78 per cent in 2019 when compared to the baseline year of the camera installation.











Distracted driving occurs when a driver's attention is not on the road, including the use of hand-held devices.

Region of Peel

§791-7800

3PTS \$615 3 DAY SUSPENSION! PUT THE PHONE DOWN!



In the Region of Peel 13% of fatal collisions in 2019 are due to distracted driving. Inattentive driving is a dangerous factor that can be simply prevented by paying attention. Mitigating this poor driving behaviour will lead to less preventable deaths on our roadways.

Pete Danos #1978 - Inspector Road Safety Services Peel Regional Police

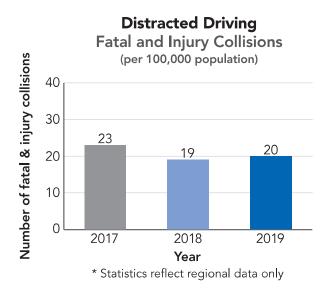


Distracted Driving Collisions

Distracted driving happens when a driver's attention is taken away from the driving task because they are focused on texting, talking on the phone or to passengers, eating or drinking or using the entertainment or navigation system. Distraction reduces a driver's ability to notice and safely respond to critical events on the road.

By the Numbers

The number of fatal and injury collisions for distracted driving have decreased by 13% in 2019 when compared to 2017.



The following section provides a summary of some of the key action items implemented for distracted driving in 2019.

Distracted Driving Countermeasures Implemented in 2019

Operation Impact

Peel Regional Police and Ontario Provincial Police focus their efforts on various traffic enforcement initiatives to improve road safety, public awareness and compliance with traffic laws.

Enforcement of HTA – Distracted Driving

2124 tickets were issued by Peel Regional Police (PRP) and Ontario Provincial Police - Caledon detachment (OPP) through enforcement of the Highway Traffic Act for violations related to distracted driving such as using cell phones while driving.









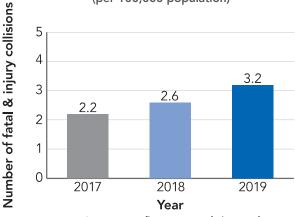
What are Impaired Driving Collisions?

Impaired driving means operating a vehicle while your ability to do so has been compromised to any degree by consuming alcohol and/or drugs. Their use can affect your vision, impair attention and slow reflexes to name a few. Throughout Canada, the maximum legal blood alcohol concentration (BAC) for fully licensed drivers is to be under 80 milligrams of alcohol in 100 millilitres of blood, or 0.08.

By the Numbers

The number of fatal and injury collisions for impaired driving has **increased 45%** in 2019 when compared to 2017.

Impaired Driving Fatal and Injury Collisions (per 100,000 population)



* Statistics reflect regional data only

The following section provides a summary of some of the key action items implemented for impaired driving in 2019.

Impaired Driving Countermeasures Implemented in 2019

Regular and Festive Enforcement/ R.I.D.E. Spot Checks

Reduced Impaired Driving Everywhere (R.I.D.E.) is a yearly program operated by the Police. Additionally, a Festive Season R.I.D.E. program operates from the end of November to early January.

DriveSafe Campaign

A yearly campaign initiated by the Ontario Association of Chiefs of Police on a specific road safety issue. The 2019 DriveSafe campaign warns the public that the legalization and regulation of cannabis requires motorists to take extra care on the road.







Enforcement of HTA – Impaired Driving

Education and enforcement campaigns were targeted by Peel Regional Police and Ontario Provincial Police - Caledon detachment for impaired driving. Impaired driving charges are laid by the police pursuant to the criminal code of Canada.



There is an increased visibility and enforcement of impaired and aggressive driving infractions over the labour day long weekend.

MADD 911 Campaign

Campaign 911 is a Canada-wide campaign to encourage and empower Canadian public to report suspected impaired driving by calling 911.









Pedestrians

This category aims to reduce collisions between vehicles and pedestrians.





Peel is undergoing a shift to move more people by bike, foot and transit. This will help us to address traffic congestion, reduce green house gas emissions and increase physical activity among Peel residents. Pedestrians and cyclists continue to be one of our most vulnerable road

users, and it's imperative that we continue providing safe, comfortable and convenient travel choices for everyone.

Sandra Fitzpatrick

Manager, Health Services, Chronic Disease and Injury Prevention, Region of Peel

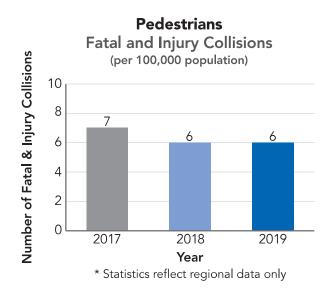


Pedestrian Collisions

Pedestrians are the most vulnerable road users and their safety is of primary concern for the Region of Peel. Pedestrian safety is a challenge that evolves with growing populations, increase of vehicular activity, increase in the popularity of healthy lifestyles and active transportation.

By the Numbers

The number of fatal and injury pedestrian collisions have decreased by 14% in 2019 when compared to 2017. The challenge ahead is to maintain this progress, as pedestrian safety cannot be taken for granted.



The following section provides a summary of some of the key action items implemented for pedestrians in 2019.

Pedestrian Countermeasures Implemented in 2019

Enhanced Pedestrian Signage

Enchanced pedestrian signage has been installed to warn motorists of the presence of pedestrians. These signs include "watch for children" and "watch for seniors" signs. The Region installed these types of signs on two corridors in 2019.

Pedestrian Infrastructure

Changes to the roadway features like pedestrian crosswalks and sidewalks are implemented to improve safety and walkability. In 2019, this countermeasure was implemented at a number of locations in the Region.











Implementing Components of the Regions Streetscaping tool box

The Regions "Streetscaping Tool Box" provides options for creating a comfortable and safe walking environment. In 2019, this countermeasure was implemented in Alton to improve pedestrian safety.

Accessibility for Ontarians with Disability Act (AODA)

The Region has installed various equipment such as tactile plates, audible pedestrian signals and pedestrian count down signals to remove barriers for people living with disabilities making it safer for them to maneuver on our roads. In 2019, these countermeasures were implemented at various locations to improve pedestrian safety.

Pedestrian Countdown Signals and Pedestrian Signal Infrastructure

Six pedestrian countdown signals were installed at Regional intersections in 2019. Pedestrian countdown signals provide a countdown display of the seconds remaining in the "Flashing Don't Walk" interval at an intersection.

Pedestrian Crossing

The Region continues to facilitate safer roadway crossings for the public with the installation of Pedestrian Crossovers (PXO), Intersection Pedestrian Crossings (IPS) and Mid-Block Crossings. The Region of Peel installed a mid-block crossing signal in 2019.









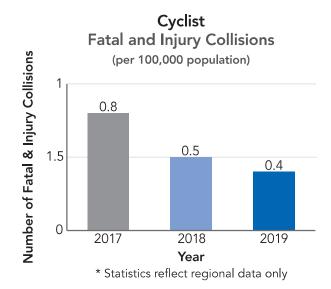


Cyclist Collisions

Cyclists are the most at risk for serious injury or death when involved in a motor vehicle collision. The Region will continue to address and improve safety on Regional roads as cyclists are one of the most vulnerable users of the roadway.

By the Numbers

The number of fatal and injury collisions involving cyclists have decreased by 50% in 2019 when compared to 2017.



The following section provides a summary of some of the key action items implemented for cyclists in 2019.

Cyclist Countermeasures Implemented in 2019

Cycling Infrastructure

Cycling infrastructure like multi-use trails, cycle tracks and bike lanes continues to be installed by the Region to delineate cycling areas from other roadway users. Approximately 11 kms of active transportation facilities were built in 2019 on Regional roads.

Enchanced Cyclist Pavement Markings

The Region of Peel continues to install pavement markings for cyclists such as the application of green paint, sharrows, etc. To prevent a potential conflict between cyclist and other vehicles, these application provide a visual enhancement, delineation and notification that bicycles may share this space.







Bicycle Signals and Cross-Rides

The Region continues to install a dedicated space identified by unique pavement markings, for cyclists to legally ride their bicycle across a roadway without dismounting. The Region built two crossrides with bicycle signals in 2019.

Cyclist Targeted Media Messaging

The Region's Education and Outreach program continues to provide safety messaging through various media sources targeted at promoting cyclist and pedestrian safety.

Bike Rodeos

The Region continues to participate in bike rodeo which is a bicycle skills event that provides an opportunity for cyclists to practice and develop skills that will help them to cycle safely and with confidence.









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2019 Education and Outreach - Committees and Conferences

The goal of the Region is to empower all road users to make safer choices and adopt an empathic behavior change towards road safety. To do so, Regional staff and Police services have attended various events and participated on several committees to promote road safety in 2019, while using various social media campaigns to raise public awareness.

General Committees, Conferences:

- The Canadian Association of Road Safety Professionals Conference held in Calgary
- Road Safety Committee of Ontario
- Mississauga Road Safety Committee
- Region of Peel Vision Zero Task Force
- Caledon Active Transportation Task Force





2019 Education and Outreach - Pedestrians & Cyclists

The Region supports safe cycling and walking through collaborative programs and committees to provide pedestrian and cycling safety messages to all road users in Peel.

For example, Walk and Roll Peel coordinates with Regional staff at approximately 12 events per year to promote cycling and pedestrian road safety and travel routes. These events have an attendance of between 50 and 19,000 Peel residents.

Programs and Committees:

- Brampton Book Bike Ride
- Walk and Roll Peel
- Brampton Cycling Advisory Committee
- Active Transportation Task Force
- Mississauga Cycling Advisory Committee
- Bike Brampton
- Peel Children Water Festival
- Bike to School Event
- Bike Rack Program
- Caledon School Traffic Safety
- Peel Safe and Active Routes to School
- GTHA Active and Safe School Travel Hub
- Peel School Travel Planning

Region of Peel was involved in the following events in 2019:

- Bramalea Cyclefest 2019 (June 1st, 2019)
- McHardy Court Bike Rodeo (June 15th, 2019)
- Caledon Day (June 18th, 2019)
- Velocity 2019 (June 18th, 2019)
- Bike the Creek (June 22nd – June 30th, 2019)
- Brampton Farmer's Market Get Active 2019 (June 29th, 2019)
- Mississauga Cycles Family Day (August 27th, 2019)
- TRCA Winter Cycling (December 19th, 2019







Image courtesy of Ontario Provincial Police



2019 Police Services Education Awareness Programs

Peel Regional Police and Ontario Provincial Police - Caledon Detachment promote and deliver road safety education awareness programs to help reduce the number of fatal and injury collisions in the Region of Peel. They have partnered and participated with the Region and the municipalities in:

- Annual Walk to School Week programming as well as Bike to School Week programming
- School Travel Planning (STP)
- The Region and the Annual Pedestrian Safety Month
- Bicycle Rodeo Community program at Children's Safety Village

- National Teen Driver Safety Week
- Motorcycle Safety Awareness Month
- National Police Week
- Tow truck campaign
- Peel Safe and Active Routes to School (PSARTS) committee work and school route planning activities
- Town of Caledon Active Transportation Task Force





2019 Peel Regional Police and Ontario Provincial Police - Caledon Detachment Enforcement

The objective of traffic enforcement is to make road users follow the rules of the road by complying with the traffic laws and regulations, and to facilitate safe movement of traffic, pedestrians and cyclists. In 2019, Police were more active with virtual engagement through the social media and traditional media channels.



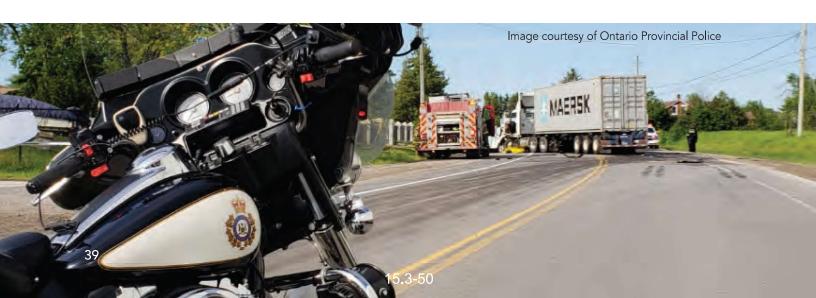
General Traffic Enforcement Activity 2019

- Reduce Impaired Driving Everywhere (R.I.D.E.) spot checks
- Traffic stops of motor vehicles
- Provincial offence notices (tickets) to vehicle drivers or passengers for failing to properly utilize a seatbelt
- Provincial offence notices (tickets) to vehicle drivers who were speeding
- Provincial offence notices (tickets) to vehicle drivers who were driving while distracted using hand held communication device
- Laid criminal code charges to drivers for impaired operation of a motor vehicle



Commercial Motor Vehicle Enforcement Activity 2019

- Traffic stops of commercial motor vehicles
- Unsafe commercial motor vehicles out of service and removed from roadway





2019 Peel Regional Police and Ontario Provincial Police **Caledon Detachment Road Safety Initiatives**

The road safety campaigns by the police aim to reduce collisions on the roads in Peel while providing empathetic awareness to the public through enforcement. In 2019, the Police services participated in the following road safety campaigns:



Distracted Driving Campaign



Operation Corridor





Seat Belt Campaigns



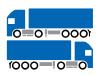
Canada Day Long Weekend **Road Safety** Campaigns



Festive Reduce **Impaired** Driving Everywhere (R.I.D.E) Campaigns



Road Safety Week



Operation Safe Trucking



Impaired Driving Campaigns



ERASE (Eliminate Racing Activities on Streets Everywhere)



Civic Day Long Weekend Road Safety Initiatives



Speed and Aggressive Driving **Campaigns**





Labour Day Long Weekend **Road Safety** Campaigns



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Road Safety Culture

As part of the Road Safety Strategic Plan, the Region aims to promote a 'road safety culture' by encouraging people to place themselves in the situation of other road users to appreciate the potential consequences of their actions.

The goal of this initiative is to change values and attitudes so that road safety is prioritized over other factors such as cost, speed, delay, level of service and convenience.

It will be targeted towards Regional employees, as well as Peel residents to first understand and then address issues of internal and external road safety culture. The expected outcome is a positive change in attitudes, beliefs, knowledge and behaviours regarding road safety for everyone designing, maintaining and using the roads in the Region.

At the core of all road safety programs is the need to cultivate a strong and consistent safety culture to promote safe behavior by all road users.



Vision Zero Partners

Vision Zero Task Force

Road safety must be integrated into decision making processes. As part of the Road Safety Strategic Plan, the Region created a Vision Zero Task Force. The Vision Zero Task Force consists of members from local municipalities, the Region, elected officials, police, and other stakeholders. The Task Force supports ongoing efforts to achieve the Plan's vision

and goal by ensuring that all opportunities to improve road safety are identified, prioritized, supported, and implemented as appropriate. We would like to thank the following partners that continue to work with us to achieve our road safety vision and goals.



Region of Peel



Peel Regional Police



Ontario Provincial Police



Town of Caledon



City of Brampton



City of Mississauga



Peel Regional Paramedic Services



Canadian Automobile Association



Mothers Against Drunk Driving



Bike Brampton

Mississauga Road

Safety Committee



Brampton Cycling Awareness Committee



Mississauga Cycling Advisory Committee



Road Safety Committee

Teens Learn to Drive



Ministry of Transportation of Ontario

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