
For Information

REPORT TITLE: 2020 Vision Zero Road Safety Strategic Plan Update – Year Three

FROM: Kealy Dedman, Commissioner of Public Works

OBJECTIVE

To provide the 2020 Vision Zero Road Safety Strategic Plan update, representing the third year of program implementation. This report summarizes road safety trends for the Regional road network and highlights countermeasures implemented in 2020 to enhance road safety.

REPORT HIGHLIGHTS

- In September 2018, Regional Council approved the implementation of the Vision Zero Road Safety Strategic Plan aimed at reducing and ultimately eliminating fatal and injury motor vehicle collisions in Peel.
 - Over the past three years numerous action items have been implemented to advance safety within the six emphasis areas.
 - 2020 presented sudden and unforeseen challenges associated with the COVID-19 pandemic; while overall traffic volumes dropped significantly, goods movement increased, many residents shifted to walking and cycling, and open roads gave rise to an increase in speeding.
 - In 2020 there were a total of 267 reported collisions on Regional roads per 100,000 population, including fatal, non-fatal and property damage type collisions. This represents a 33 per cent reduction as compared to the baseline year of 2017.
 - While the total number of collisions decreased significantly in 2020, the number of fatal collisions increased for the first time in three years when compared to 2017 data. This trend was reported across Ontario.
 - Public Works staff, in collaboration with Public Health, have continued to implement safety measures to address speed and aggressive driving concerns by expanding the Red-Light Camera program, implementing traffic calming measures, installing radar feedback signs, building additional cycling infrastructure, and piloting an Automated Speed Enforcement system.
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DISCUSSION

1. Background

Region of Peel Council is a strong advocate for road safety; a Vision Zero Framework was adopted in 2017 and subsequently a Vision Zero Road Safety Strategic Plan in 2018. The Plan 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. This program supports the Term of Council Priority to ‘Advance Community Safety and Well-being’.

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The Plan contains action items that address the “4-Es” of road safety:

- Engineering changes to the physical roadway,
- Education and outreach to inform and modify safer road user behaviours,
- Enforcement of the rules of the road, and
- Empathy to help users of the roadway understand the consequences of their actions and the impact to others around them.

This report provides an overview of the third year of Vision Zero program implementation (2020) which brought unexpected challenges due to the onset of the COVID-19 pandemic. Daily life transformed when stay-at-home orders were issued, and many workplaces shifted to remote work. Traffic patterns changed quickly, resulting in a significant reduction in traffic volumes but an increase in goods movement and speeding in the absence of traffic on the roads. Travel modes also shifted, with an unprecedented increase in people walking and cycling. The continuing impact of the pandemic on traffic patterns and road safety is not fully clear yet, but we continue to engage with the Region’s stakeholders to monitor and plan for the ‘new normal’.

2. Safety Trends

A review of the collision data indicates that in 2020 there were a total of 267 reported collisions on Regional roads per 100,000 population, including fatal, non-fatal and property damage type collisions. This represents a 33 per cent decrease as compared to the baseline year of 2017, as shown in Table 1.

Table 1: Total Collisions, the Region of Peel Road Network (2017 - 2020)					
Collisions per 100,000 population	2017 Baseline	2018	2019	2020	Per cent (%) Change 2020 compared to 2017
Total Collisions on Regional Roads, fatal, injury and property damage	396	439	417	267	33 % 
Number of Fatal Collisions	0.7	0.8	0.5	0.9	29 % 
Number of Injury Collisions	60	57	51	32	47 % 
Number of Property Damage Collisions	335	381	366	234	30% 

While the total number of collisions on Regional roads decreased significantly in 2020, the number of fatal collisions increased for the first time in three years when compared to the baseline year of 2017. During the peak of the COVID-19 first wave lockdown, collision data analysis shows that the spring of 2020 had the lowest number of collisions, and yet the highest number of fatal collisions. This could be attributed to the sudden drop in traffic volume and a corresponding rise in excessive speeding. The majority of fatal collisions in 2020 occurred where the drivers failed to yield the right of way (15 per cent) or disobeyed






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traffic control (31 per cent). This same trend was observed across Ontario as reported by Ontario Provincial Police.

At the same time, the number of injury and property damage collisions are trending downwards, showing year over year improvements since the inception of the Vision Zero program in Peel.

Of all collisions in 2020, the top three causes are as follows: 27 per cent of collisions on Regional roads were speed related with the majority of the speeding during weekdays; 14 per cent of collisions involved drivers making an improper turn; and 10 per cent involved drivers failing to yield the right-of-way.

Table 2 below provides trending statistics for each of the six emphasis areas. These metrics are based on per 100,000 population for 2020 compared to the baseline year of 2017.

Table 2: Trending - Fatal & Injury Collisions, Region of Peel Road Network (2017-2020)					
Emphasis Areas	Fatal and Injury Collisions (per 100,000 population)				Per cent (%) Change 2020 compared to 2017
	2017 Baseline	2018	2019	2020	
Intersection Collisions	45	45	40	26	42 % 
Aggressive Driving	26	26	25	17	35 % 
Distracted Driving	23	19	20	12	48 % 
Pedestrian Collisions	7	6	6	4	43 % 
Cyclist Collisions	0.8	0.5	0.4	0.7	13 % 
Impaired Driving	2.2	2.6	3.2	2.2	0% (No Change)

- Data reflects reported collisions on roads under the jurisdiction of Region of Peel.
- Population data was obtained from Peel Data Centre and is as follows 2017 – 1,452,597, 2018 – 1,479,139, 2019 – 1,494,747 and 2020 – 1,501,578

In general, fatal and injury collision trends for impaired driving improved as compared to 2018 and 2019 but remained the same as compared to the baseline year of 2017. Peel Regional Police and Ontario Provincial Police-Caledon Detachment continue to take proactive measures like ride checks, increased visibility, enforcement, and public education to improve this trend.

Overall, fatal and injury collisions in 2020 showed improvement 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, lasting behavioural change is required to achieve the goal of eliminating all fatal and injury collisions.

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3. Overview of Vision Zero Action Items Completed in 2020

Despite the challenges of responding to the COVID-19 pandemic as an organization, the Region continued to make progress by implementing a number of action items within the Road Safety Strategic Plan. The following provides an overview of key improvements throughout 2020. A full list of countermeasures implemented in 2020 can be found in Appendix I – ‘Region of Peel Vision Zero Annual Road Safety Report – 2020 Year Three’.

- **Intersection collisions**

Transportation infrastructure design supports road safety. The Plan focuses on building infrastructure that is safe for all modes of travel and prioritizes protection for vulnerable road users. This emphasis area aims to minimize intersection collisions, of which rear-end collisions are the most common.

Eight fully protected left turn signals were implemented in 2020, where vehicles can only turn left on a green arrow. This helps to prevent conflict between left turning vehicles and through vehicles, and separates turning movements from the pedestrian walk period. The Region also improved street lighting at five intersections to improve visibility on roadways and walkways, and installed seven new traffic signals and two all-way stops to provide clear traffic control. The Region continues to review and prioritize safety improvements in Regional intersections.

- **Aggressive Driving**

Aggressive driving is any unsafe driving behaviour that disregards the safety of other road users. Travel speeds have a direct impact on collision severity, even a small increase in speed can result in a higher probability of severe injury if a collision occurs.

The Region implemented eight right turn channel retrofits in 2020. The review of existing right turn channels and implementing smart channels supports the safety of vulnerable road users and reduces vehicular speeds. The Region also deployed radar speed feedback signs at three locations and the speed trailer at thirteen locations. Electronic speed signs remind motorists to slow down.

Proactive speed limit reviews are conducted on Regional roads to continuously improve road safety. In 2020, the Region completed speed limit reviews on two corridors and four reviews within community safety zones. In 2020, Peel Regional Police and Ontario Provincial Police – Caledon detachment issued 23,627 speeding tickets and 1,153 stunt driving charges were laid.

- **Distracted driving**

Distracted driving often involves cell phone use but can also involve things like eating, drinking, or being tired. A total of 1,412 tickets were issued by Peel Regional Police and Ontario Provincial Police-Caledon detachment for violations related to distracted driving in 2020, and eight distracted driving initiatives and campaigns were conducted by Ontario Provincial Police-Caledon detachment.

- **Impaired driving**

While alcohol-related impaired driving is the most common form of impaired driving, medication or drug related impairment can also have an impact on safe driving. In 2020, 24,617 Reduce Impaired Driving Everywhere (RIDE) spot checks were conducted,

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resulting in 334 license suspensions and 1,886 charges pursuant to the Criminal Code of Canada in relation to impaired driving.

- **Pedestrians and Cyclists**

Collisions disproportionately impact vulnerable road users. These two categories aim to reduce collisions between vehicles and pedestrians, as well as collisions involving cyclists.

Enhanced pedestrian signage was installed at eight right turn channel retrofits to better inform the drivers about the presence of pedestrians. Fifty four pedestrian countdown signals were installed at seven Regional intersections (these provide a countdown display of the seconds remaining to cross), and approximately 15.5 km of cycling infrastructure including multi-use trails and bike lanes were installed. Cycling pavement markings including green paint and sharrows to delineate cyclists were added, and provisions were made for safe passage of cyclists through construction projects.

4. Focus Areas in 2020

Although 2020 was an unprecedented year given the impact of COVID-19, the Region continued work with partners and stakeholders to improve safety by focusing on several special projects, including:

- **Automated Speed Enforcement**

Automated Speed Enforcement (ASE) is a pilot electronic radar enforcement program that began in the fall of 2020. This program enhances traditional police enforcement by using a camera along with a speed measuring device to capture speeding infractions automatically. Currently ASE is being piloted in school areas and community safety zones consistent with Provincial requirements. A report to provide the results of the ASE pilot program and recommendations for program expansion will be brought to Regional Council in 2022.

- **Automated School Bus Stop Arm Camera**

This program proposes to use camera technology installed on school buses to capture images of vehicles illegally passing when the bus is stopped. Regional staff are working closely with Student Transportation of Peel Region (STOPR) and local municipal staff to establish an Automated School Bus Stop Arm Camera program in Peel Region. Regional Council has directed staff to continue negotiations with STOPR's selected vendor to establish a program that meets Council expectations for legal compliance, cost neutrality and court capacity.

- **Micro-mobility**

Staff have been engaging with local municipal staff to discuss their positions on participation in the MTO e-scooter pilot, and are working together to discuss the scope of necessary amendments to the Region's Traffic By-law. Staff intend to bring forward a report to amend the Region's Traffic By-law to permit e-scooters in early 2022. As part of this report, direction through Resolution Number 2021-1048 to report to Regional Council on facilitating the use of electric bicycles and creating a campaign to educate the community on safe transportation etiquette.

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5. Government Relations Advocacy

Throughout 2020, the Region leveraged opportunities to advocate for the advancement of priorities and funding related to a sustainable and integrated transportation system. In February of 2020, Regional Councillors met with Minister Mulroney from the Ministry of Transportation (MTO) to discuss the need for provincial funding for public transit projects and goods movement infrastructure in Peel. In May of 2020, Regional staff contributed to a letter from the Ontario Traffic Council to the MTO advocating for an Administrative Monetary Penalty System (AMPS) for automated school bus stop arm camera offences. In November of 2020, Regional Councillors attending the Federation of Canadian Municipalities Conference and focused on the need for investment in transit and active transportation infrastructure.

FINANCIAL IMPLICATIONS

The current five-year Vision Zero Road Safety Strategic Plan (2018-2022) will end in 2022. The Region is establishing plans to update Vision Zero strategies and actions. As part of this update, there is an opportunity to advance the objectives of Vision Zero through future corridor planning and capital programming activities. More information about the financial implications of the Vision Zero program will be presented to Council through the updated strategies.

CONCLUSION

In 2020, the COVID-19 pandemic presented unforeseen challenges across all aspects of life, resulting in a significant decrease in overall traffic volumes, and an increase in reckless driving. For the first time in the past three years there was an increase in fatal collisions. This is consistent with the collision trending in the province of Ontario as reported by the Ontario Provincial Police.

However, the total collision trend for the Region continues to decrease. Over the past three years, numerous actions items have been implemented to advance safety within the six emphasis areas, and the Region will continue to work and coordinate with partners and stakeholders to leverage and allocate resources as necessary for the implementation of the action plan to reach our Vision and Goal.

APPENDICES

Appendix I - Region of Peel Vision Zero Annual Road Safety Report – 2020 Year Three

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