DATE: December 5, 2017

REPORT TITLE: REGION OF PEEL TRANSPORTATION SAFETY STRATEGIC AND OPERATIONAL PLAN UPDATE

FROM: Janette Smith, Commissioner of Public Works
Nancy Polsinelli, Commissioner of Health
Jessica Hopkins, MD MHSc CCFP FRCPC, Medical Officer of Health

RECOMMENDATION

That the Region of Peel adopt the “Vision Zero” framework where no loss of life is acceptable and to better coordinate efforts and resources among agencies and stakeholders to prevent fatal and injury motor vehicle collisions in Peel;

And further, that a copy of the joint report from the Commissioners of Public Works and Health Services, and the Medical Officer of Health, titled “Region of Peel Transportation Safety Strategic and Operational Plan Update”, be forwarded to the City of Brampton, City of Mississauga, Town of Caledon, Peel Regional Police and Ontario Provincial Police Caledon Detachment for information.

REPORT HIGHLIGHTS

- The Region of Peel is developing the Transportation Safety Strategic and Operational Plan (the “Plan”) in cooperation with major stakeholders including local municipalities, Peel Regional Police and Ontario Provincial Police Caledon Detachment.
- Regional staff are requesting adoption of the Vision Zero framework to allow for finalization of the Plan and for the Plan be brought forward to Council in 2018.
- The ultimate long-term concept of the Road Safety Strategic Plan is zero fatal and injury collisions with a near-term goal of a ten percent reduction in fatal and injury collisions by 2022 for Regional roads.

DISCUSSION

1. Background

The Region of Peel has initiated work to develop the Transportation Safety Strategic and Operational Plan (the “Plan”), and an updated memo concerning this work was provided to Regional Council on April 7, 2016. This report provides a subsequent update, and presents interim recommendations to advance specific elements of the Plan. It is anticipated that the final Plan and associated budget considerations will be presented to Regional Council in 2018.
The purpose of the Transportation Safety Strategic and Operational Plan is to develop and implement actions that will continually improve road safety to reduce and strive to eliminate motor vehicle collisions causing injury and death. The Plan aligns with the Strategic Plan direction of enhancing mobility, walkability and various modes of transportation, and a community where the built environment promotes healthy living.

The World Health Organization has declared road safety a public health issue because motor vehicle collisions remain one of the leading preventable causes of injury and premature death worldwide. Young people and seniors are among the most vulnerable road users globally, as are bicycle riders and pedestrians, who are at greater risk of severe and fatal injuries than other road users when proper active transportation infrastructure is not available.

There are several key factors that impact road safety and transportation choices within Peel. Chief among these is the Region’s growing population and economy, and the corresponding increased demand on the transportation network. Coupled with growth is the changing nature of land uses in key nodes and corridors in Peel that encourage residents to walk, ride a bicycle and use public transit more often for their journeys. Changes targeted at a safer transportation system for all users, combined with the anticipated decrease in motor vehicle collisions causing death and injury, will improve perceptions of safety and comfort and encourage more residents to choose walking, cycling and public transit as a transportation option.

The Peel Road Safety Strategic Plan is a structured approach to improve safety for all road users, developed through analysis of evidence, collision data, public input and Regional Council priorities; and is combined with a spirit of collaboration among all road safety stakeholders to take action on its implementation. The Plan is an important milestone towards addressing the needs of vulnerable road users in our community such as pedestrians, bicycle riders, young people and seniors.

The Transportation Safety Strategic and Operational Plan is one of the components of the Peel Long Range Transportation Plan (Figure 1).
2. Collision Data Analysis

The Ontario Road Safety Annual Report for 2014 states that in that year 20,364 motor vehicle collisions occurred on Peel roadways (i.e., municipal, regional and provincial), resulting in 35 people being killed and 4,234 people being injured. Peel Regional Police data show the annual number of traffic fatalities to be relatively stable from 2012 to 2015 with a sharp increase in 2016 to 40 deaths (Mississauga and Brampton). Whereas, the traffic fatalities data for 2012 to 2015 received from Ontario Provincial Police Caledon Detachment shows an average of seven fatal collisions per year with no appreciable trend. However, as the population and traffic congestion increase, we believe there is a significant risk of increasing deaths and injuries without a comprehensive action plan.

For the purposes of the Plan, the most recent available municipal and regional fatal collision and injury data for the period 2010 to 2014 were combined to identify emphasis areas (Figure 2). In most areas of emphasis, trends are similar between regional and municipal roads, with the exception of aggressive driving, pedestrians and cyclist involvement being of greater emphasis for local municipal roads. It should be noted that the collisions reported in Figure 2 account for the collision reporting practice of identifying all contributing factors of the collision. For example, if a pedestrian is involved in a collision within an intersection, with a large truck driven by an impaired driver – four emphasis areas would be identified: pedestrian collision, at-fault truck collision, within an intersection and impaired driving.

Also important to note is that Figure 2 represents only the absolute number of fatal and injury collisions. For pedestrian and cyclists, absolute numbers do not account for the relative frequency of trips that are conducted by walking or riding a bicycle, which is generally lower than those of motor vehicles. Hence, the total of collisions could underrepresent the relative vulnerability of users walking or riding a bicycle. Additionally, some injuries may be under-reported if the police are not involved, medical attention is not sought or cause is not captured in administrative health databases.

Figure 2.
3. Stakeholder Engagement

A collaborative approach was undertaken to engage stakeholders in identifying common objectives to achieve the collective goal of improving road safety. Effective and strategic partnerships are vital to a unified concept and goal, minimizing duplication of efforts, ensuring a consistent, efficient and effective delivery of key actions (also known as countermeasures) and to reduce the occurrence and severity of motor vehicle collisions.

A series of stakeholder engagement workshops were held and included the following stakeholders:

- City of Brampton
- City of Mississauga
- Town of Caledon
- Regional Municipality of York
- Peel Regional Police
- Caledon Ontario Provincial Police (OPP)
- Bike Brampton
- Ministry of Transportation of Ontario
- Brampton Transit
- Brampton Cycling Advisory Committee
- Canadian Automobile Association (CAA)
- MiWay (Mississauga Transit)
- Mothers Against Drunk Driving Canada (MADD)
- Mississauga Cycling Advisory Committee
- Road Today (Trucking Based Organization)
- Parachute
- Federation Internationale De L'Automobile (FIA) Foundation

4. Overview of Transportation Safety Strategic and Operational Plan Components

a) Road Safety Strategic Plan

The Road Safety Strategic Plan (‘Safety Plan’) is used to improve the understanding of the state of practice in road safety and consequently, improve the safety performance of the road component of a transportation network. The Safety Plan is aligned with the Canadian Road Safety Strategy 2015 and the United Nations’ Decade of Action for Road Safety. These National and International initiatives also highlight the need for more road user education, and engineering and design changes to make our roadways safer for all road users.

The Region of Peel recognized that despite having an active safety program to address motor vehicle collisions, a new and broader-based approach is required, and as a result has developed the Road Safety Strategic Plan. The Safety Plan sets out the goals, objectives, and action plans to guide the road safety partners and the Region towards creating safer roads and reducing the number of fatal and injury motor vehicle collisions.
b) Vision Zero Framework and the Goal for the Peel Road Safety Strategic Plan

The Peel Road Safety Strategic Plan is guided by Vision Zero, which is a framework that originated in Sweden in 1997 to better coordinate efforts and resources among agencies and stakeholders to prevent fatal and serious injury from motor vehicle collisions. Since that time, the framework has been adopted by numerous jurisdictions worldwide and in North America, including the City of Toronto.

“Vision Zero” can be summarized in one sentence: No loss of life is acceptable. It is based on the simple fact that we are human and make mistakes, and the key message is that life and health can never be exchanged for other benefits in society. Vision Zero is based on a system of shared responsibilities among all of those involved in the road system, including politicians, planners, police, public health, community organizations, vehicle manufacturing companies and all road users.

Implementing the “Vision Zero” framework requires a paradigm shift in the way the transportation system is designed, built and operated. The framework acknowledges that the system must be changed, since it is difficult if not impossible to change human capabilities or limitations. In altering transportation system design and operation, safety should be prioritized over speed, convenience or cost, and the system should be forgiving of human error. Appendix I summarizes the Vision Zero framework.

To support and advance towards the ultimate long term concept of zero fatal and injury collisions, the following near-term goal was adopted for the Road Safety Strategic Plan (2018-2022): Ten per cent reduction in fatal and injury collisions by 2022 for the Regional road network.

The Vision Zero framework and associated goal are consistent with the Region’s strategic directions and are supported by the stakeholders that participated in developing the Plan. The stakeholders are committed to working together to ensure that the goal of the Road Safety Strategic Plan is achieved.

c) Emphasis and Awareness Areas

Causes of collisions were grouped to identify emphasis areas. The causes of collisions were then characterized as priority safety concerns and an action plan, consisting of countermeasures (or interventions), was developed to improve road safety. Emphasis areas were selected based on the following factors:

- Collision analysis
- Public input
- Strategic and practical considerations

In addition to the data analysis, it was also important to receive feedback from people that live and/or work within the Region of Peel. Through various community outreach programs, public opinion surveys and market research, the public was asked to provide their feedback and concerns about traffic safety. Public comments on road safety were generally consistent with the results from the data analysis, and the top six emphasis areas based on the collision data analysis and public opinion survey include:
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- Intersection related collisions
- Aggressive driving (includes speeding)
- Distracted driving
- Pedestrian collisions
- Impaired driving
- Cyclist collisions

Aggressive driving includes speeding, running red lights, tailgating, weaving in and out of traffic, and failing to yield right of way, among other unsafe driving behaviours. Although not identified in the collision data statistical analysis, there were two additional areas of public concern, ‘school zones’ and ‘heavy trucks’ that were identified through public input as awareness areas. Like emphasis areas, countermeasures have been identified for these awareness areas as a way to proactively improve safety.

d) Countermeasures and Action Plan

A countermeasure or intervention is an engineering (design), education, and/or enforcement action taken to reduce the occurrence and severity of motor vehicle collisions. Examples of importance from a public health and transportation perspective include appropriate road design to prevent speeding and protect vulnerable road users.

Countermeasures are chosen based on:
- Likelihood of success
- Ability of one (or more) of the stakeholder agencies to implement

A full list of the countermeasures will be included in an upcoming Council report in 2018.

NEXT STEPS

Regional staff will:

- Develop implementation strategies and action plans for the safety priorities or emphasis areas.
- Develop an evaluation plan for the countermeasures by assigning responsibility, setting schedules, and identifying performance indicators.
- With Regional Council endorsement, report back to Regional Council with a final report in 2018 that will include the final Transportation Safety Strategic and Operational Plan, including proposed countermeasures, operational policy papers and associated future budget considerations.

CONCLUSION

Road safety is a high priority in the Region of Peel, and it is recommended that the Region of Peel adopt the “Vision Zero” framework where no loss of life is acceptable and to better coordinate efforts and resources among agencies and stakeholders to prevent fatal and injury motor vehicle collisions.
Regional staff will work collaboratively with partner agencies including the local municipalities, Peel Regional Police and the Ontario Provincial Police (Caledon detachment) to develop new programs and enhance existing programs to promote road safety.

Regional staff are requesting adoption of the Vision Zero framework to allow for finalization of the plan and for the plan to be brought forward to Regional Council in Q2 2018.

Janette Smith, Commissioner of Public Works

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Approved for Submission:

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APPENDICES

Appendix I – Vision Zero Framework

For further information regarding this report, please contact Joe Avsec, Manager, Traffic and Sustainable Transportation, extension 7910, joe.avsec@peelregion.ca.


Reviewed in Workflow by:

Financial Support Unit