

COMMITTEE REPORT

NO: **P010**

DATE: **November 27, 2017**

PUBLIC SAFETY COMMITTEE

TO: **Mayor & Council**

DATE: **November 24, 2017**

FROM: **General Manager, Engineering**

FILE: **5460-19**

SUBJECT: **Surrey Safe Mobility Plan – Vision Zero**

RECOMMENDATION

The Engineering Department recommends that the Public Safety Committee:

1. Receive this report for information;
2. Endorse adoption of the Vision Zero philosophy as a basis for Surrey's Safe Mobility Plan; and
3. Endorse staff completing the Safe Mobility Plan on the basis of this report for Council's consideration in 2018.

INTENT

The purpose of this report is to update the Public Safety Committee on the development of the Surrey Safe Mobility Plan - Vision Zero (The "Plan").

BACKGROUND

In recognition of the enormous impacts on society of road injuries and deaths, road safety is increasingly becoming a priority for governments and cities across the world and within Canada. This is reflected in Canada's *Road Safety Strategy 2025: Towards Zero: Having the Safest Roads in the World* and the BC Provincial "Moving to Vision Zero" Road Safety Strategy.

According to ICBC data for 2010-2015, 11,000 people, on average, are injured every year (17 people per day) in traffic collisions on Surrey roads and 20 people lose their lives. With the rapid growth of the City and the associated increase in users of our transportation system over recent years, the City has seen increases in collision rates.

The impacts of injuries and deaths are far reaching, and for every injury or death, dozens of others whether family, friend or co-worker are affected, and the impacts on individuals and their social networks can be life altering. There are also very broad societal impacts resulting from road collisions associated with: policing and fire service costs; immediate and longer term healthcare and disability costs; legal and court costs; increased insurance premiums; loss of earnings; reduced or lost productivity at work; travel delays; etc. These "costs to society" are estimated by ICBC to be \$380 M/year for Surrey's collisions alone.

The most recent data from ICBC (2010-2015) highlights a concerning trend with total collisions per 100,000 population going up 13% in Surrey. Furthermore, severe collisions per 100,000 population have seen a 17% rise in Surrey. The Provincial Health Officer's Annual Report *Where the Rubber Meets the Road: Reducing the Impact of Motor Vehicle Crashes on Health and Wellbeing in BC* shows Surrey to have the highest number of traffic fatalities in Metro Vancouver (BC Trauma Data 2006-2015): Surrey 209; Vancouver 167; Langley 84; Richmond 65; and Burnaby 64. In terms of serious injuries, Surrey fared slightly better: Vancouver 564; Surrey 349; Burnaby 129; and Richmond 104.

While the Provincial government leads road safety in BC, the Motor Vehicle Act gives local governments the power to improve road safety in their communities in numerous ways. Through collaboration with our partners and adopting a holistic approach to road safety which utilises a multi-pronged, evidence-based approach that incorporates the Five 'E's underpinning efforts to improve road safety: Engineering; Enforcement; Education; Engagement; and Evaluation.

DISCUSSION

Vision Zero

Vision Zero is an international campaign that emphasizes that no loss of life in road transport is acceptable. The Vision Zero approach was founded in the Netherlands in 1992, and has since been adopted by many of the world's leading road safety jurisdictions. This approach was first initiated in countries like Sweden, Norway and the United Kingdom, and has since gained momentum in many other countries. These countries have the lowest rates of motor vehicle crash fatalities in the world. Vision Zero is now being embraced in the United States at a national level, in addition to New York City, Portland, San Francisco, Chicago, Los Angeles and Seattle. In January 2016, Canada adopted Vision Zero as a federal strategy. The Province of BC also updated their strategy in 2016, "Moving to Vision Zero: Road Safety Strategy Update and Showcase of Innovation in British Columbia" (Road Safety BC).

Historically, road safety analyses focused on a reduction in all collisions, including less serious collision types such as property-damage-only collisions. In contrast, Vision Zero Plans focus on reducing the collisions that result in death and serious injuries.

Vision Zero has been recognized by the World Health Organization ("WHO") as an effective road safety policy and is recognized for its ability to significantly reduce traffic fatalities and serious injuries. The City of Surrey is committed to Vision Zero and accepts its fundamental message: fatalities and serious injuries on the City's roads are preventable and the City must strive to reduce traffic-related deaths and injuries to zero.

Alignment with City Priorities

Similar to the Public Safety Strategy, the Plan, which is being done in collaboration with the Surrey RCMP, is framed around evidence-based strategic initiatives and collaboration, and has clear linkages with other City strategic plans. The Plan aligns closely with the Public Safety Framework by emphasizing integration and innovation, as well as using data and evidence to identify priorities. Within Surrey, the Public Safety Strategy, Transportation Strategic Plan, Official Community Plan and Sustainability Charter clearly identify road safety as a high priority. In order to establish Surrey as a municipal leader in road safety and one of the first municipalities

in BC to strategically adopt Vision Zero, it is imperative that the Plan be given the appropriate priority and associated resources to ensure its success in reducing road deaths and injuries in Surrey.

Road Safety Public and Stakeholder Engagement

During the development phase of the Public Safety Strategy, public consultation revealed Road Safety and Mobility as a major concern for residents and a high priority for action. The majority of the 1,600 residents and stakeholders attending consultation sessions identified the following public concerns as they relate to safe mobility:

- Instill a sense of freedom to move;
- Ensure safe streets and transit;
- Reduce fear of harm while moving through the City on foot, bike, wheelchair or car; and
- Design infrastructure and buildings to foster safety, i.e., lighting, surfaces, visibility, etc.

The findings of Surrey RCMP's 2017 public survey show that road safety issues account for 3 of the top 10 areas of concern, particularly: impaired driving (89%); distracted driving (87%); and speeding/dangerous driving (88%). The CitySpeaks version of the RCMP survey demonstrated similar results.

Safe Mobility Plan Overview

The Plan is structured around a number of guiding principles including:

- Applying "Safer Systems Approach" ("SSA");
- Data-driven and evidence-based focus;
- Leadership, collaboration and advocacy;
- Continuous improvement and innovation;
- Involving and mobilizing the community; and
- Relevant and responsive to change.

The aim of a SSA is to reduce the overall level of risk for human trauma in a multi-sectoral, multi-faceted way. The premise of this approach is that Motor Vehicle Collisions ("MVCs") will undoubtedly occur, but that associated fatalities and serious injuries are preventable. It recognizes that road users will inevitably make mistakes that may lead to crashes and that human beings have a limited tolerance for physical force; thus, it emphasizes the need for a comprehensive system designed to anticipate and accommodate human error, and reduce the risk of death and serious injury to road users when an MVC occurs. The SSA has been recommended by the WHO and the Organisation for Economic Co-operation and Development, and has been adopted by several countries such as Australia, New Zealand and Canada. All stakeholders of the road system contribute to the SSA through legislation, education, enforcement, road design, collaboration, licensing programs, research, innovation and communication (see Appendix "I" for more detail).

To ensure the Plan has the greatest impact on reducing injuries, the Plan is aligned around the three focus areas which the evidence suggests are contributing factors to injuries and deaths in Surrey:

1. Locations of Harm - A Focus on Intersections: Data analysis using GIS hotspots indicates approximately 80% of collisions occur at intersections and have a higher chance of injury occurring.
2. Victims of Harm - A Focus on Vulnerable Road Users: 57% of fatalities in Surrey involve pedestrians, cyclists or motorcyclists.
3. Perpetrators of Harm - A Focus on Driver Behaviour including Impaired, Distracted and Speeding Drivers: In the Lower Mainland, impaired driving is responsible for 17% of fatal collisions, and distracted driving 27%.

Collaboration

In line with the principles of the Public Safety Strategy, partnerships and collaboration are essential for the Plan to meet its objectives and for the greatest progress to be achieved. A number of very strong partnerships exist with others including ICBC, Fraser Health and the RCMP, and these will continue to be developed and strengthened and new ones established.

The Plan has identified two strategic partnerships that need to be emphasised in order to significantly impact the number of injuries and deaths on our roads.

City of Surrey and RCMP

Experience in other jurisdictions has shown that the role of the police enforcement is a major driver of reducing collisions. One of the strategic initiatives in the Public Safety Strategy is the implementation of a new pilot enforcement initiative called DDACTS (Data-Driven Approach to Crime and Traffic Safety). DDACTS is based on an operational model developed in other North American cities for deploying dedicated city and police resources using data related to criminal activities and traffic collisions to deploy those resources. The focus of those efforts is on overlapping “hot spots” of crime and traffic collisions.

Indeed, jurisdictions across North America, most notably in the United States, have adopted evidence-based tactics and demonstrated that this type of strategic deployment of resources has shown a high return on investment. Evaluations of DDACTS have shown reductions in calls for service, increased deterrence, reductions in crime rates, in addition to a reduction in fatalities and serious injuries. Specific details around a made-in-Surrey data driven model will be finalized as part of development of the plan. For example, further collaboration with the Surrey RCMP, and direction from the OIC Surrey Detachment, will allow for enforcement strategies to be determined.

Advocacy with the Provincial Government

Recently, strategic level engagement of the Provincial government has taken place in order to garner support for the more fundamental changes that need to take place in order for Surrey to become a Provincial leader in road safety. In the development of the Plan, City staff met with senior management at the Ministry of Public Safety and Solicitor General, ICBC and Road Safety BC to ensure the development and sustainment of the Plan is fully supported by Provincial leaders during its 5 year implementation from 2018 to 2022.

While stakeholder relations will continue to strengthen, in the short term they have led to the City of Surrey's road safety management being invited to join as a participating member of the Road Safety BC - Road Safety Strategy Communities Working Group.

The Plan provides the opportunity for an enhanced and innovative partnership to be established with the Province. Through its *British Columbia Road Safety Strategy "2015 and Beyond"*, the Provincial government has identified support for casualty reductions as a priority.

Staff have begun engagement with the Provincial government to identify shared priorities and a local "toolbox" of measures and powers needed to support Surrey's road safety vision. Issues requiring provincial commitment going forward include:

- Changes in how traffic fine revenues are distributed to local jurisdictions and police services so that sufficient resources are allocated to allow local government to focus on local needs and casualty reduction priorities;
- Exploring options to enhance resources and tools specific to traffic safety enforcement, so as to increase resources for road safety and ensure deployment is based on local needs, priorities and targets;
- A full re-evaluation of the use of photo radar, both mobile and static, for the enforcement of speeding drivers at high collision locations; and
- A timely and full review of ICBC's capacity for collision data sharing and accuracy.

The City already takes a proactive role in the Provincial Road Safety Working Committees to achieve Province-wide improvements to data collection, reporting methodologies and legislative changes. Staff have also established a commitment from several Provincial executives for participation on a Road Safety Advisory Committee for Surrey.

Plan Implementation and Governance

To effectively implement the Plan and deliver on its key objectives, it is critical to establish an effective governance structure to provide oversight, direction and reporting. Similarly, the adoption of the SSA must include a governance structure that reflects a shared responsibility within the wider road safety community. Staff will bring forward a governance model with the Safe Mobility Plan for council's consideration in 2018.

Regular collaboration amongst all who have a role to play in road safety will ensure efficiency is maximized and that interventions are effective. Synergies between initiatives will be maximized through adoption of a "global lens" on road safety and open dialogue between the various levels of government.

Organizational changes within the Engineering Department have also been made with the creation of a dedicated Road Safety Team within the Transportation Division with responsibility for implementing the Plan in cooperation with key partners like the RCMP. This will involve ongoing stakeholder development, advocacy, research and evaluation of best practices, as well as the development of the most appropriate and fiscally responsible responses to Surrey's road safety issues. The Road Safety Team will be responsible for delivery of the various strategic initiatives identified within the Public Safety Strategy priority of Ensuring Safe Places.

Monitoring and Evaluation of Progress

Mechanisms for the monitoring and evaluation of the various initiatives within the Plan have been established in part through the Public Safety Strategy Scorecard Performance Measures Framework which will be forwarded to Council for review. The evaluation of progress towards additional initiatives will be ongoing as and when they are incorporated into the Plan. The Plan itself includes high level road safety targets, which will be monitored and reported out.

SUSTAINABILITY CONSIDERATIONS

The development of the Plan supports the objectives of the City's Sustainability Charter. In particular, the development of the Plan relates to the Sustainability Charter theme of Public Safety by creating a city in which all people live, work, learn and play in a safe and engaging environment. Specifically, the priorities and objectives outlined in this report support the following Desired Outcomes:

- Community Safety and Emergency Services DO5: Surrey is recognized and perceived as a leader in establishing and maintaining collaborative partnerships for community safety and well-being;
- Transportation Safety DO9: Transportation network supports and provides safe mobility for all ages and abilities; and
- Transportation Safety DO10: Surrey is part of a coordinated effort to reduce the risk of harm for all road users, with attention to those who are most vulnerable, including pedestrians and cyclists.

CONCLUSION

The development of the Surrey Safe Mobility Plan – Vision Zero will provide a comprehensive, broad-based framework for the City to strive towards zero fatalities and zero injuries on our roads. Adoption of the Vision Zero philosophy will establish Surrey as an innovative partner for the Provincial government and its Road Safety Vision. The City will be well positioned to benefit from future investments envisioned in the form of road safety initiatives and pilots. Furthermore, by establishing a culture of being evidence-led and collaborative, the City will ensure that maximum benefits are derived from investments in road safety.

The guiding principles enshrined within the Safe Mobility Plan reflect a Safe System Approach and will ensure a cohesive and holistic methodology which builds on the strengths of the City departments and the RCMP. Safe roads are at the heart of public safety. Through the enhancement of public spaces, a reduction of harm experienced on roads and provision of safe mobility, the City of Surrey will demonstrate how it has heard, listened and responded to one of the number one concerns of its citizens.

Therefore, based on the above, it is recommended that the Public Safety Committee:

- Receive this report for information;
- Endorse adoption of the Vision Zero philosophy as a basis for Surrey's Safe Mobility Plan; and
- Endorse staff completing the Safe Mobility Plan on the basis of this report for Council's consideration in 2018.

A handwritten signature in black ink, appearing to read 'Fraser Smith', with a large loop at the end.

Fraser Smith, P.Eng., MBA
General Manager, Engineering

JB/PB/SA/cc

Appendix "I" - Safe System Approach

Safe System Approach

Safe System Components:

1. Safe Road Users

This component of the Safe System Approach focuses on reducing unsafe behaviours including: drinking and driving; drug use and driving; distracted driving; speeding; and failing to use occupant restraints, targeting high-risk drivers and chronic offenders and protecting vulnerable road users such as pedestrians and cyclists.

2. Safe Vehicles

The Safe Vehicles component of the Safe System Approach requires working with partners such as corporate consumers, Transport Canada, the automotive industry and researchers to assess and raise awareness about the next generation of safety technologies. Vehicle safety is improved by monitoring issues across Surrey and ensuring that safety concerns are communicated to Federal authorities responsible for Canadian motor vehicle regulation.

3. Safe Roadways

The Safe Roadways component of the Safe System Approach focuses on the role of road project development and on land use and neighbourhood planning. This component encourages the explicit consideration of safety for innovations in road design. Areas for work include identification and improvement of high-risk locations, and better road designs that benefit vulnerable road users.

4. Safe Speeds

The Safe Speeds component of the Safe System Approach promotes setting safe speed limits, greater compliance with speed limits, vehicle-speed management technologies and educating road users.