

CORPORATE REPORT

NO: R249 COUNCIL DATE: December 17, 2018

REGULAR COUNCIL

TO: Mayor & Council DATE: December 13, 2018

FROM: General Manager, Engineering FILE: 5460-19

SUBJECT: Surrey Vision Zero Safe Mobility Plan & Summit

RECOMMENDATION

The Engineering Department recommends that Council:

- 1. Receive this report for information;
- 2. Support in principle the approach and focus areas for the Surrey Vision Zero Safe Mobility Plan; and
- 3. Endorse Surrey hosting BC's first Vision Zero Summit in collaboration with the Provincial Health Services Authority of BC on Feb 8th-9th 2019.

INTENT

The purpose of this report is to introduce Council to the Surrey data on traffic collisions and the subsequent development of the Surrey Vision Zero Safe Mobility Plan 2019-2023 (the "Plan"). This report serves as a precursor to the presentation of the Surrey Vision Zero Safe Mobility Plan in January 2019 and its proposed subsequent launch on February 8th 2019 at the Vision Zero Summit hosted by City of Surrey in collaboration with Provincial Health Services Authority.

BACKGROUND

Vision Zero

Vision Zero emphasizes that no loss of life in the road transportation network is acceptable. The approach recognizes that humans are fallible and make mistakes, but these should not result in serious injury or death. The design of the system should be forgiving of human error. Anticipating human failings and errors in judgement, the approach prioritizes safety by creating safe roads, slowing speeds, improving vehicle design, educating people, and enforcing the rules of the road to encourage safer road user behaviours. The four pillars of the Safe Systems Approach are: Safe Roads; Safe Speeds; Safe Vehicles and Safe Road Users.

This approach was first initiated in countries like Sweden, Norway, and the United Kingdom, and has since gained momentum in many countries, including the United States of America and

Canada. These countries, each of which has adopted a Safe System Approach to road safety, have the lowest rates of motor vehicle crash fatalities in the world.

Vision Zero is now being embraced in the US at a National and Regional level with cities such as New York, Portland, San Francisco, Chicago, Los Angeles and Seattle all working towards zero fatalities and injuries on their roads. Canada also adopted Vision Zero as a Federal strategy in 2015. At the Provincial level, BC led the way in Canada when they published "Moving to Vision Zero: Road Safety Strategy Update and Showcase of Innovation in British Columbia" (Road Safety BC 2016). Edmonton, Calgary, Toronto, Montreal and Vancouver are also pursuing the goals of this mandate.

INTRODUCTION

The City expended considerable effort and funding to improve road safety in Surrey. A few key examples include:

- Safe & Active Schools Program the City has invested almost \$20 million since 2010 to improve safety for pedestrians and cyclists around schools;
- Traffic Management Centre over 450 cameras for monitoring traffic and incidents enables staff to implement real-time traffic signal timing changes, use video for collision analysis and provide accurate and timely information to help the public;
- ICBC Road Safety Program the City has worked with the Insurance Corporation of British Columbia ("ICBC") to improve the safety of road designs and operations by implementing safety initiatives such as roundabouts, higher reflectivity for signals and signs and skid resistant pavement treatments. ICBC has typically contributed \$1 million per year to Surrey for road safety improvements; and
- Walking Program the City invests over \$7 million per year for additional sidewalks and new and upgraded pedestrian crossings.

This work has been very important in increasing the safety and comfort of our citizens; however, despite these efforts, injury collisions in Surrey have risen by 26% over the last 10 years. In addition to the personal tragedy suffered by families, 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; and other related impacts. These "costs to society" are estimated by ICBC to be over \$400M/year for the City of Surrey's collisions alone. While this increase in injury collisions is due to numerous complex factors, such as rapid development, urban sprawl, population and traffic growth, and the high prevalence of high risk driving behaviours, it remains of considerable concern. The City is determined to reverse this trend through the development of a new, comprehensive approach to road safety which will be detailed in the Surrey Vision Zero Safe Mobility Plan.

DISCUSSION

Surrey Statistics

Although more injury collisions occur in the City of Vancouver, the City of Surrey's traffic injury rates are the second highest in British Columbia. Furthermore, Surrey suffered from more traffic fatalities than any other municipality in BC. Between 2012 and 2016, Surrey had 12 more fatalities than Vancouver. The City of Surrey also leads the Province in motorcyclist fatalities, and has the second highest level of pedestrian fatalities and cyclist fatalities in BC (Traffic Accident System, 2012 – 2016).

In Surrey:

- Every hour one person is injured;
- Every day crashes cost over \$1 million;
- Every month more than one person dies on our roads; and
- Every year injury collisions are increasing by 3%.

Burden of injury:

- 100% of pedestrians involved in a traffic collision are injured or killed;
- 88% of cyclists involved in a traffic collision are injured or killed;
- 73% of motorcyclists involved in a traffic collision are injured or killed; and
- 78% of all fatal and injury collisions in Surrey occur at intersections.

THE CITY'S APPROACH

Earlier this year, the City has created a new Road Safety Section within the Engineering Department and significant work has been undertaken by staff to create a Plan that is collaborative; informed by resident concerns; driven by our data; and in line with best practices in research.

Activities include:

- Hosting three stakeholder consultation sessions which provided the opportunity for input from City of Surrey Departments; Business Improvement Associations; Community Groups; and key stakeholder organizations;
- CitySpeaks survey on road safety;
- Detailed data analysis of Surrey's collision trends; and
- One-to-one meetings with key multi-sector stakeholders to foster collaboration in road safety efforts.

(See Appendix "I" for more details)

The Plan expands on the principles identified in the 2008 Transportation Strategic Plan that recognised the importance of providing safer and healthier communities. It also supports the principles and policies of the City's Official Community Plan, Public Safety Strategy, and Sustainability Charter 2.0. The Plan recognizes that "Killed or Seriously Injured" ("KSIs") are a both a public health issue and social issue which impacts our families, our neighbourhoods, and our community as a whole.

The Plan also builds on the successes of existing road safety work completed by the City. While citywide injury collisions are increasing, road safety improvements at specific locations have been achieved through protected left turn phases; data driven and targeted intersection safety improvements; LED streetlight upgrades; traffic calming; new cross walks; pedestrian countdown timers; separated bike lanes; and many other measures.

While the foundation of this Plan is a holistic, data driven and evidence based approach to improving road safety, it must be complemented with robust community engagement because road safety is a shared responsibility and something that affects everyone. The City needs to ensure the approaches we take resonate with the community in order to achieve the support and collaboration needed to be successful.

Road Safety Stakeholder Engagement/ Public Consultation

Public consultation of Surrey residents in 2016 showed that concerns around Road Safety and Mobility are prevalent and considered a high priority for action. The majority of the 1,600 residents and stakeholders attending consultation sessions identified the following public key issues as they relate to safe mobility:

- We need to instill a sense of freedom to move;
- We need to ensure safe streets and transit;
- We need to reduce the fear of harm while moving through the city on foot, bike, wheelchair or car; and
- Design infrastructure and buildings need to foster safety, such as lighting, surfaces, and visibility.

The findings of Surrey RCMP's 2017 public survey showed that road safety issues account for three of the top ten areas of concern, particularly: impaired driving (89%); distracted driving (87%); and speeding/dangerous driving (88%).

Building on previous work, and in keeping with the City's philosophy of inclusion and consultation, staff reached out to partners and stakeholders in order to explore issues and opportunities related specifically to road safety.

Four different groups were included in the process:

- Internal staff from across the City;
- Not-for-profit organizations, interest groups and community groups;
- Business Improvement Associations ("BIA"s) representing different neighbourhoods; and
- Organizational level stakeholders such asPolice, ICBC, Surrey Schools, Coroners Service of BC, Road Safety BC, Fraser Health Authority, Provincial Health Services Authority and BC Injury Prevention.

The City received clear support for the development and implementation of a Vision Zero Approach to road safety in Surrey. Serious injury and loss of life on Surrey's roads was not acceptable to participants. Feedback was categorized under the four pillars of Safe Systems Approach: Safe Roads, Safe Speeds, Safe Vehicles and Safe Road Users. Highlights of the feedback are included in Appendix "II", but some key concerns emerged:

- Speeding (biggest concern);
- Distracted driving;
- The need for more enforcement, including automated speed enforcement;
- Vulnerable road users (pedestrians and cyclists specifically);
- The need for more Engineering interventions and maintenance; and
- Education.

THE PLAN

The Surrey Vision Zero Safe Mobility Plan is a strategic document which outlines the overarching approach of the City to move towards the concept of Zero People Killed and Seriously Injured within the transportation network. It sets out the vision, mission and strategic objectives to move Surrey towards having the safest roads in British Columbia. Through enhanced strategic partnerships and collaborations leveraging the broader road safety community, the City will embrace a Safe Systems Approach as a guiding principle to examine all factors contributing to safer roads. Safety will become integrated into the longer term planning of the transportation system and the city as a whole.

The Plan will move us towards the Vision:

"Surrey has Zero people killed and seriously injured on its roads and human life is valued above all else in the transportation network."

The Plan responds to community concerns around safety and is aligned to recommendations made by local, regional and provincial stakeholder groups. The Plan has received positive support from a vast array of stakeholders including those involved in responding to the consequences of road trauma.

The Plan is being developed using a data-led, evidence- based approach, informed by international best practices research. The outcome of this development process will be an holistic Plan that utilizes a partnership approach to proactively prioritize high injury road networks and address the needs of all road users including the most vulnerable who suffer a greater burden of injury.

Surrey's Focus Areas for Road Safety

Data analysis and research clearly demonstrates that in order to reduce serious injuries and fatalities on our roads, Surrey's road safety focus must be centred around five areas:

- Pedestrians;
- Cyclists;
- Motorcyclists;
- Intersection locations where most people are killed or seriously injured; and
- Aggressive driving behaviours.

The actions taken within this Plan will be accountable and transparent to our citizens. Through regular monitoring and evaluation we will produce Annual Vision Zero Reports to demonstrate how effective our road safety interventions have been. They will also provide an outline of future actions, engage citizens in a shared commitment of moving towards the goal of Vision Zero.

THE VISION ZERO SUMMIT

The Vision Zero Summit is scheduled to take place on February 8-9, 2019. The Summit is a collaborative effort between the City of Surrey, Road Safety Section and the Provincial Health Services Authority. The Summit will present an opportunity for Surrey's civic leaders to welcome their counterparts from around BC and launch the City's road safety plan. The Summit participants will include civic leaders from across BC; road safety and transportation professionals; first responders and health representatives. The Summit speakers include high profile leaders in the road safety arena from the US and BC. The event will be live-streamed across BC communities enabling rural and remote communities to benefit from the learnings and participate in the proceedings. In collaboration with stakeholders, Surrey will showcase its' efforts past and planned through Subject Matter Expert Panels.

Objectives of the event include:

- A high profile launch of the Surrey Vision Zero Safe Mobility Plan (2019-2023);
- Establish Surrey as a Provincial Leader in Road Safety;
- Strengthen and provide participants for the SMART Cities Challenge engagement event coordinated to take place on the Plaza during the second day of the Summit.
- Strengthen multi-sectoral partnerships with key Provincial, Regional and Local Stakeholders with an emphasis on relationships between road safety and health professionals;

The highlights of the Summit include:

- Opportunity to explore the linkages between traffic collisions and broad societal impacts, including the economic burden on services across the sectors;
- Learning from leading international Vision Zero Cities about what works in implementing Vision Zero and the impact on reducing road trauma;
- Hear from recognised cities about their experience in successful community engagement and education in road safety related issues;
- Opportunity to learn about the BC toolkits developed for Vision Zero implementation in cities of all sizes;
- Learn about emerging road safety interventions and innovations; and
- Strengthen partnerships between road safety stakeholders to share pertinent data and research evidence.
- Opportunity for municipalities to access Vision Zero starter grants.

NEXT STEPS

The next steps, including timeframe, are:

- December 2018: Finalize event planning of BC's first Vision Zero Summit
- January 2019: Finalize the Vision Zero Safe Mobility Plan 2019-2023;
- January 2019: Present the final Plan to Council; and
- February 2019: Subject to Council approval, conduct the public launch of the Plan at the Vision Zero Summit hosted in Surrey.

SUSTAINABILITY CONSIDERATIONS

The development of the Plan supports the objectives of the City's Sustainability Charter 2.0. In particular, the development of the Plan relates to the Sustainability Charter 2.0 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 approach, objectives and focus areas outlined in this report support the following Desired Outcomes ("DO"):

- 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 Engineering Department recommends that Council:

- 1. Receive this report for information;
- 2. Support in principle the approach and focus areas for the Surrey Vision Zero Safe Mobility Plan; and
- 3. Endorse Surrey hosting BC's first Vision Zero Summit in collaboration with the Provincial Health Services Authority of BC on Feb 8th-9th 2019.

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

Appendix 'I" - Activities Undertaken in Creation of the Surrey Vision Zero Safe Mobility Plan Appendix "II" - Stakeholder Feedback Categorized Under the Four Pillars of Safe Systems Approach

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Appendix "I"

Activities Undertaken in Creation of the Surrey Vision Zero Safe Mobility Plan

Date	Activity	Details
November 27, 2017	Corporate report to Public Safety Committee	Council endorses the create of a Vision Zero Safe Mobility Plan for Surrey
December 11, 2017	Transportation Infrastructure Committee	Update presentation on intersection safety in Surrey
March 19, 2018	Transportation Infrastructure Committee	Presentation on speed management and the Vision Zero Safe Mobility Plan
April 13 – May 1, 2018	CitySpeaks Survey promoted on Social Media	Survey on road safety available for over two weeks to Surrey residents. Over 160 responses were received.
April 16, 2018	Transportation Infrastructure Committee	Presentation introducing Vision Zero and the Safe Systems Approach
April 17, 2018	Consultation Session	Consultation session with Surrey staff members from across City departments
April 19, 2018	Consultation Session	Consultation session with Business Improvement Associations and Community Groups
April 19, 2018	Consultation Session	Consultation session with various road safety stakeholders, including ICBC, Health, Fire, RCMP, BC Injury Prevention, Road Safety B.C, and others
April 20, 2018	Presentation	Presentation to the Surrey Board of Trade on the development of the Vision Zero Safe Mobility Plan
June 8, 2018	Presentation	Presentation to the Surrey Urban Indigenous Leadership Committee on the development of the Vision Zero Safe Mobility Plan
June 8, 2018	Transportation Infrastructure Committee	Presentation on the consultation process and feedback received from the community
June 10 - 13, 2018	Conference	Present at the Canadian Association of Road Safety Professionals annual conference on the development of Surrey's Vision Zero Safe Mobility Plan
June 20, 2018	Senior Management Advisory Team	Update presentation on Surrey's Vision Zero Safe Mobility Plan
July 10, 2018	Senior Management Team	Presentation on Surrey's Vision Zero Safe Mobility Plan
September 17, 2018	Presentation to Council	Presentation on Surrey's Vision Zero Safe Mobility Plan focus
September 22, 2018	Presentation Surrey VZ	Focus on Seniors Forum – Transportation
October 24, 2018	Presentation Surrey VZ	Medical Health Officers Council BC
October 25, 2018	Surrey Transportation Talks	
November 2, 2018	Surrey Public Safety Strategy	
November 15, 2018	Presentation Surrey VZ	Provincial Health Services Association BC

APPENDIX "II"

Stakeholder Feedback Categorized under the Four Pillars of Safe Systems Approach

SAFE ROADS

- Safety and quality of roads;
- Vulnerable road users: cyclists and pedestrians;
- Concerns about lack of separation between pedestrians, cyclists and motor vehicles; and
- Engineering interventions and maintenance frequently suggested to improve safety

SAFE SPEEDS

- Safe speeds key issue in the consultation process;
- Concerns about excessive speeds through residential areas and near schools or seniors centres;
- Enforcement and education rank as contributing to the current lack of safe speeds in Surrey;
- Automated speed enforcement suggested as a proven method of creating safe speeds; and
- Engineering interventions and road design recognized by as contributing to travel speeds.

SAFE VEHICLES

- Safe vehicles received less attention in the consultation process than the other safe systems pillars; and
- Commercial vehicle safety and potential pilots of automated vehicles.

SAFE ROAD USERS

Road user behaviours contributing to unsafe roads:

- Distracted driving, pedestrian jaywalking and cyclists riding on the sidewalk;
- Education and enforcement identified as important strategies in addressing unsafe road user behaviours; and
- Emphasized benefits of a collaborative and co-ordinated approach.