

NO: R029

COUNCIL DATE: February 24, 2020

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## REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **February 14, 2020**

FROM: **General Manager, Engineering**

FILE: **8630-40**

SUBJECT: **Transportation Strategic Plan Update**

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## RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information; and
2. Approve the five key pillars of the new Surrey Transportation Plan, as described in this report.

## INTENT

The intent of this report is to provide an update on the development of a new Transportation Strategic Plan, authorized by Council in June 2019, and provide an overview of the upcoming engagement process.

## BACKGROUND

At the June 24, 2019 Regular Council meeting, Council, as part of Corporate Report No. R119; 2019 attached as Appendix "I", authorized staff to proceed with the development of an update to the 2008 Transportation Strategic Plan. The need for a new and updated plan was in part a response to the many changes to the transportation network, population growth, and increases to densities over the past 12 years. The new plan will support Smart Development principles and will also address new City priorities, such as Vision Zero Surrey, the Surrey-Langley SkyTrain along Fraser Highway, and the City's Climate Action Strategy.

## DISCUSSION

Staff have been developing a comprehensive work plan to deliver the new Plan, which will be renamed to the Surrey Transportation Plan (the "Plan"). By early 2021, Council will receive for consideration the Plan that will set a long-term vision and decision-making framework to prioritize investments for the next 10 years. It will also include medium and long-term transportation priorities that support the vision and help move the entire city forward. Finally, it will integrate regional planning initiatives, including TransLink's Transport 2050 long-range plan and the refresh of a rapid transit vision for South of the Fraser.

Some of the key actions that staff have completed since project inception are outlined below.

## **Surrey Transportation Plan: Connecting People + Places**

Staff identified that a renaming of the 2008 Transportation Strategic Plan was important to reflect the City's planning for a future of efficient, inclusive and safe systems of transportation across all modes. Surrey's transportation future is about connecting people to and from destinations, responding to the opportunities and challenges of change, evolving movement within a growing city, and aligning with the principles of Smart Development.

The Plan will be not only a policy-level document but also an action plan to deliver on its objectives. The tag line "Connecting People + Places" reflects a key principle of transportation associated with the Plan.

### **The Five Key Pillars of the Surrey Transportation Plan**

The new Plan seeks to address the challenges of responding to City and global drivers of change. It will chart a path forward to provide an efficient and equitable transportation system and support a thriving, green and inclusive city. To achieve this, five foundational pillars will guide the Plan and respond to Surrey's unique context. Together they represent best practices based on a review of peer cities.

1. Grow the Transportation Network: Surrey will become a vibrant urban centre of 1 million people.

Surrey continues to be one of the fastest growing municipalities in the region. Metro Vancouver's Regional Growth Strategy projects that by 2050 Surrey will be the largest population centre in Metro Vancouver. Looking to the future is critical to the livability and economic prosperity of Surrey today and the years leading up to a City of 1 million. This pillar will focus on what a transportation network may look like to accommodate this growth and how the City will manage congestion and achieve modal choice as Surrey continues to evolve into an urban centre for Metro Vancouver.

2. Prioritize Vision Zero Surrey: Human life is valued above all else in the City's transportation network.

At the January 30, 2019 Regular Council meeting, as part of Corporate Report No. R010; 2019 attached as Appendix "II", Council endorsed the Vision Zero Surrey: Safe Mobility Plan. This set a direction for the City to work towards eliminating killed and serious injuries collisions on Surrey's streets through strategic actions and investments. Including this pillar in the Plan underlies the City's commitment to road safety as integral to every aspect of Surrey's transportation system.

3. Tackle the Climate Crisis: Tackling the climate crisis requires decisive action on how we get around.

At the November 4, 2019 Regular Council Public Hearing, Council approved resolution RES.R19-1923 declaring a climate emergency, and the Community Climate Action Strategy has set direction towards reducing greenhouse gas (“GHG”) emissions in Surrey. Currently, approximately 55% of Surrey’s community GHG emissions come from transportation. This pillar identifies that the climate crisis is an external driver of change, and that to act the City must focus on transportation’s role in combating the climate crisis and how people move in and around Surrey.

4. Innovate through Technology and New Mobility: Connected, autonomous, shared, and electric mobility options are available.

Technology is playing an important role in how people move. New mobility options will continue to shift travel choices in Surrey. These global and national trends of using technology to share vehicles, develop autonomous systems, and electrify vehicles will continue to influence how municipalities plan and operate their transportation system. This pillar will identify how technology has the potential to positively impact all aspects of Surrey’s transportation system, such as data collection, new micro-mobility options and an Intelligent Transportation System strategy.

5. Balance Equity: All members of the community should benefit from and have equitable access to the transportation network.

The City’s vision of becoming a thriving, green and inclusive city requires that equity is considered as a key pillar in the Plan. Both Surrey’s Poverty Reduction Strategy and Age Friendly Strategy for Seniors identify affordable transportation and increased transportation options as a key factor in reducing poverty and financial burden. Key to achieving equity is a transportation system that is accessible to all. The engagement process will shape how equity is defined and addressed.

### **State of Transportation in Surrey Today - Metrics**

An important starting point in the launch of the Plan is identifying the current state of transportation in Surrey. In order to include each of the five pillars in the current state of transportation, the Plan will draw on various data metrics already being tracked through available sources, such as TransLink’s Trip Diary and Canadian Census. Sample metrics and associated pillars are identified below in Table 1.

**Table 1: Current Transportation Metrics and Associated Pillars**

<b>Metric</b>	<b>Pillar</b>
GHGs from transportation	Climate Crisis, Technology & New Mobility
Transit trips per capita	Grow Network, Climate Crisis, Vision Zero, Equity
Daily trips by mode	Grow Network, Climate Crisis, Vision Zero
Intersection cameras	Technology & New Mobility, Vision Zero
Killed and serious injured	Vision Zero, Equity
Annual cost of owning a vehicle	Equity, Grow Network
Percent of population with access to Frequent Transit Network	Equity, Climate Crisis, Vision Zero
Pedestrian volumes	Equity, Grow Network, Climate Crisis, Vision Zero
Population density	Grow Network, Climate Crisis, Equity

As development of the Plan continues, further refinements may be made to what is tracked and how it is measured and included in the final Plan. This will ensure that metrics associated with the pillars are established and will gauge progress being made on meeting the goals and objectives of the Plan.

### **Public Engagement Process**

A public engagement process has been developed to support the development of the new Plan. It consists of four phases over the next 12 months, as outlined below. Evaluation measures have been developed to judge the success of the Surrey Transportation Plan public engagement process which will be shared with the team supporting the City's Public Engagement Task Force.

#### Phase 1: Information Sharing

Phase 1 will focus on sharing information about the Plan's foundational pillars, building awareness of the public engagement process and its importance, and priming the conversation by defining context and providing background. This phase will run from late February to mid-April 2020 and will help build excitement for the upcoming engagement.

#### Phase 2: Understanding Community Values

Phase 2 will engage the community stakeholders to understand what is important to them, mapping their values and key interests, understanding the opportunities and challenges they face related to transportation, and how they define success going forward. This phase will launch on April 16, 2020 with a speaker forum at City Hall, followed closely by the launch of a public survey, which will help shape early directions for the Plan. This phase will run until the end of June 2020 and will include open houses, community events, and a multi-stakeholder workshop.

### Phase 3: Feedback on Key Approaches

Phase 3 runs from mid-September through the end of October 2020. It will involve the community and stakeholders on evaluating potential priorities, seeking feedback on concepts and key approaches to address the five pillars, and inform the Plan’s vision and decision-making framework. This phase will help us to better understand resident, business and stakeholder perceptions of the potential approaches and how they address trade-offs.

### Phase 4: Refinement and Confirmation

Phase 4 will be the final engagement phase, focused on receiving feedback on the draft Plan and validating the key elements to identify any gaps and address potential concerns or points for clarification.

Following refinements made in Phase 4, staff will present the Plan to Council and seek adoption of the new Plan in early 2021. The timing of the four phases is outlined in the table below.

Phase 1: Information Sharing	February – April 2020
Phase 2: Understanding Community Values	April – September 2020
Phase 3: Feedback on Key Approaches	September – December 2020
Phase 4: Refinement and Confirmation	January – March 2021

## **SUSTAINABILITY CONSIDERATIONS**

Development of a new Plan supports the objectives of the City’s Sustainability Charter 2.0. This new Plan will relate to the Sustainability Charter 2.0 themes of Built Environment and Neighbourhoods, Public Safety, Economic Prosperity and Livelihoods, Infrastructure, and Health and Wellness. Specifically, the update supports the following Desired Outcomes (“DO”):

- Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the rest of the region by fast and efficient public transit and active transportation infrastructure for all ages and abilities;
- Economy DO6: Efficient land use and well-managed transportation infrastructure are in place to attract businesses and support a thriving economy;
- Transportation DO11: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations; and
- Transportation DO12: Surrey residents of all ages and abilities have access to active transportation options, enabling them to participate fully in society without the use of a private automobile.

## CONCLUSION

The update on the Transportation Strategic Plan is well underway and the next phase of the project will commence the public engagement. The Plan will have five foundational pillars: Grow Network, Technology & New Mobility, Climate Crisis, Vision Zero, and Equity. Staff will bring forward a Corporate Report for Council's consideration once Phase 2 of the public engagement has been completed.

Scott Neuman, P.Eng.  
General Manager, Engineering

JB/RS/DB/cc

Appendix "I" – Corporate Report No. R119; 2019  
Appendix "II" – Corporate Report No. R010; 2019

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## CORPORATE REPORT

NO: R119

COUNCIL DATE: June 24, 2019

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### REGULAR COUNCIL

TO: Mayor & Council

DATE: June 17, 2019

FROM: Acting General Manager, Engineering

FILE: 8630-01

SUBJECT: Launch of a New Transportation Strategic Plan

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### RECOMMENDATION

The Engineering Department recommends that Council

1. Receive this report for information; and
2. Authorize staff to initiate the development of a new Transportation Strategic Plan, as documented in this report.

### INTENT

The intent of this report is to request Council to authorize staff to proceed with an update of the City's 2008 Transportation Strategic Plan.

### BACKGROUND

#### The 2008 Transportation Strategic Plan

The City's existing 2008 Transportation Strategic Plan (the "Plan") is the long-range policy document that is intended to guide decision making on the development and operation of transportation services, programs and facilities for Surrey residents. The Plan contains six fundamental principles:

1. Effective and Efficient Network Management;
2. More Travel Choice;
3. Safer, Healthier Communities;
4. Successful Local Economies;
5. Protection of Our Built and Natural Environment; and
6. Transportation Integration.

A robust public engagement strategy shaped the development of the 2008 Plan and led to the adoption of the following four priorities:

1. The Plan should facilitate choice, mobility and balance in transportation;
2. In doing this, the Plan should promote attractive, safe, affordable and convenient alternatives;
3. Surrey should plan and invest for the long-term and for substantial growth; and
4. Sustainable and secure funding for transportation should be achieved.

Successful outcomes of the current Plan include the creation of accompanying stand-alone walking and cycling plans, establishing a secure funding source through the Roads and Traffic Safety Levy, establishing the Safe and Active Schools Program, and developing the recently adopted Vision Zero – Safe Mobility Plan.

## DISCUSSION

### The Need for a New Plan

The Plan is now 11 years old and requires updating to reflect the significant emerging trends in transportation, as well as to respond to changes in the City's policies and transportation network since 2008. New transportation infrastructure built since the 2008 Plan includes a new Port Mann Bridge and HOV lanes on Highway 1, South Fraser Perimeter Road, and a number of significant projects to come, including an expanded Massey Tunnel, new Pattullo Bridge, and a Surrey-Langley Skytrain line. Developing a new Plan to reflect these changes is a top priority for the Engineering Department's Transportation Division.

Emerging trends to be addressed include the shift to electric vehicles, micro-mobility such as electric scooters, car sharing, and connected and autonomous vehicles, as envisioned in the City's Smart Cities Challenge bid.

A substantial number of City priorities will also be incorporated into the updated Plan, including:

- The Community Energy and Emissions Plan (2013), which identifies approaches and specific actions and targets to reduce greenhouse gas emissions and criteria air contaminants that cause global climate change and local air pollution, respectively;
- The Vision Zero Surrey Safe Mobility Plan (2019), which has a mission to work in collaboration with partners to take equitable, data-driven and evidence-based actions to ensure that City resources are spent where they will have the greatest impact on creating safer streets; and
- Smart Growth, which requires a balanced transportation system to help shape how the City grows. Transportation is also key to supporting the City's regional competitiveness, as decisions about business location within a region consider overall network accessibility.

Increasingly, cities will be in a position to own and manage the data that will be used by others to deliver multi-modal mobility options and create mobility-as-a-service platforms (apps that allow users to book and pay for a variety of mobility options, such as car share, e-bikes and ride hailing services).



## **Anticipated Outcomes**

The new Plan will be inclusive, visionary and sustainable, clearly identifying community values and prioritizing safety. The Plan will articulate a long-range vision, and be a reference that guides decision-making for everyone involved in transportation.

It is intended to expand beyond the existing high-level policy document to introduce:

- Baseline metrics that support performance evaluation;
- Evaluation of multiple long-range scenarios;
- A long-range rapid transit vision that supports TransLink's Transport 2050;
- Medium-range targets;
- Actions for delivering the plan including focus areas; and
- A robust evidence-based decision-making framework to inform day to day decision making.

It also supports the City's participation in external endeavours, such as the ISO Sustainable Cities and Communities Certification and the National Transportation Benchmarking Initiative.

The Plan is intended to be a public document that balances the values and interests of Surrey stakeholders along with a robust technical analysis that takes into account local, Provincial and national interests. It will outline a clear roadmap supporting Surrey's evolution into an urbanized city with a rich array of safe mobility choices that helps move the City toward the carbon limits agreed to in international treaties.

The revised Plan will incorporate Vision Zero principles and have sufficient walking and cycling policies and objectives to replace the need for stand-alone modal plans. It will also introduce medium-range targets and an action plan set for 10 years. This matches some of the City's other strategic plans, such as the Parks, Recreation & Culture Strategic Plan 2018 – 2027, and signals the role of this Plan as a bridge between today's transportation system and a safer, multi-modal, low carbon and automated transportation future.

The Plan will also contain a financial component, giving high-level direction on funding priorities to align with stated objectives.

## **Plan Delivery and Timeline**

The future work plan will be divided into three phases, with a report to Council at the end of each phase. Phase One will take place over the Summer and Fall of 2019 and includes summarizing the City's existing transportation programs and policy, capital spending categories, and identifying new emerging trends, such as electrification of the vehicle fleet.

Phase Two will begin in late 2019 and carry into the Spring of 2020 and involves developing hypothetical long-range scenarios for the future that complement the Regional Transportation Strategy long-range scenarios, but with a more detailed focus on outcomes for Surrey. A draft decision-making framework will also be developed. A robust technical analysis using the draft decision-making framework will assess the outcomes of the long-range scenarios.

Phase Three will take place over the Summer and Fall of 2020 and includes refining the long-range scenarios and decision-making framework and using these to develop medium-range targets for the next 10 years. The full process will be summarized in a new Draft Transportation Plan for approval by Council.

To achieve the objectives, the strategic planning process will be informed by a parallel, comprehensive stakeholder consultation program.

## **Public Engagement**

Staff will be working in Summer 2019 to develop a robust and innovative stakeholder consultation program. It will also comprise of three phases, as illustrated in Appendix "I" and described below:

1. Phase One will take place in October and November of 2019 and will be scheduled to avoid the Surrey-Langley SkyTrain project consultation, which is scheduled for September 18 to October 4, 2019. This timing also compliments TransLink's Transportation 2050 Regional Transportation Strategy ("RTS") consultation, which ends in September 2019. The first phase of consultation will identify attitudes and values related to the existing transportation system and emerging trends;
2. Phase Two in the Spring of 2020 will seek feedback on various possible future scenarios and a draft evaluation framework, again scheduled to avoid the short window of the final phase of the Surrey-Langley SkyTrain project consultation; and
3. Phase Three in the Fall of 2020 will confirm support for a draft plan and identify improvements and missing components.

Staff have identified an opportunity to align with the work of the Public Engagement Task Force in order to maximize efficiencies and pilot processes/techniques in-stream. Also, coordinating the consultation with TransLink's RTS process allows the City to be proactive and use significant local community feedback to inform the City's input into the RTS update. This is preferable to TransLink's process occurring prior and the City having to react to their proposals, relying on their engagement with Surrey residents.

## **SUSTAINABILITY CONSIDERATIONS**

Development of a new Transportation Strategic Plan will support the objectives of the City's Sustainability Charter 2.0. In particular, this new Plan will relate to the Sustainability Charter 2.0 themes of Built Environment and Neighbourhoods, Public Safety, Economic Prosperity and Livelihoods, Infrastructure and Health and Wellness. Specifically, the update supports the following Desired Outcomes ("DO") and Strategic Directions ("SD"):

- Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the rest of the region by fast and efficient public transit and active transportation infrastructure for all ages and abilities;
- Transportation Safety DO9: Transportation network supports and provides safe mobility for all ages and abilities;
- Economy DO6: Efficient land use and well-managed transportation infrastructure are in place to attract businesses and support a thriving economy;

- Transportation DO<sub>11</sub>: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations;
- Transportation DO<sub>12</sub>: Surrey residents of all ages and abilities have access to active transportation options, enabling them to participate fully in society without the use of a private automobile; and
- Wellness and Recreation DO<sub>9</sub>: Pedestrian and cycling infrastructure promotes walking and cycling for travel to work, school, services and recreation.

## FUNDING

Funding to complete all work associated with this project is available in the Transportation Budget.

## CONCLUSION

Based on the discussion above, it is recommended that Mayor and Council:

- Receive this report for information; and
- Authorize staff to initiate the development of a new Transportation Strategic Plan, as documented in this report.

Staff will report back as each phase of the project moves forward.



Jaime Boan, P.Eng.  
Acting General Manager, Engineering

JB/DB/cc

Appendix "I" – 2019 – 2020 Transportation Engagement Timeline



## CORPORATE REPORT

NO: **R010**

COUNCIL DATE: **January 30, 2019**

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### REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **January 25, 2019**

FROM: **General Manager, Engineering**

FILE: **8630-40 (Vision Zero)**

SUBJECT: **Vision Zero Surrey Safe Mobility Plan 2019-2023**

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### RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information; and
2. Approve the Vision Zero Surrey Safe Mobility Plan 2019-2023, which is attached to this report as Appendix "I".

### INTENT

The purpose of this report is to highlight the significant impact of serious collisions and seek Council approval of the Vision Zero Surrey Safe Mobility Plan 2019-2023 (the "Plan") to move Surrey towards zero deaths and serious injuries.

### BACKGROUND

On December 17, 2018, Council approved the Vision Zero approach and continued development of the Vision Zero Surrey Safe Mobility Plan 2019-2023, as described in the Corporate Report No. R249; 2018 attached as Appendix "II".

Road safety is a shared responsibility and something that affects us all. 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.

Injury collisions in Surrey have risen by 26% over the last 10 years. While this is due to numerous complex factors, such as population and traffic growth, and a rise in distracted driving, it is of considerable concern. Staff have reviewed best practices from around the world and have determined the Vision Zero principles would be the most suitable approach to reduce deaths and serious injuries on our roads.

Vision Zero is an international campaign that emphasizes that no loss of life in road transport is acceptable. 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. Canada has also adopted Vision Zero as a federal strategy. The Province of BC led the way in “Moving to Vision Zero: Road Safety Strategy Update and Showcase of Innovation in British Columbia” (Road Safety BC). Edmonton, Calgary, Toronto, Montreal and Vancouver are pursuing the goals of this mandate.

Vision Zero has been recognized by the World Health Organization 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.

## **DISCUSSION**

In 2017, 21 people were killed on Surrey’s roads. 14,500 were injured. The social costs and impacts of these losses are difficult to measure. Life-changing injuries create a burden on families, friends, communities, the health sector, insurers and social services.

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%.

Looking more closely at Surrey data, it is found that:

- 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 scale of the personal loss is unacceptable, and the status-quo must be challenged through data-driven and evidence-led targeted actions. There is an economic and ethical imperative to address this unnecessary loss of life. This data shows that it is critical for Surrey to take a new approach to reducing serious collisions on our roads.

## **Vision Zero Surrey Safe Mobility Plan 2019-2023**

The Vision Zero Surrey Safe Mobility Plan outlines the overarching approach of the City to move towards the concept of zero people killed and seriously injured (“KSIs”) within the transportation network. The Plan sets out the vision, mission and identifies key focus areas to prioritize for action in order to move Surrey towards having the safest roads in British Columbia.

### Our Vision

That Surrey has zero people killed and seriously injured on its roads, and that human life is valued above all else in our transportation network.

## Our Mission

Working in collaboration with our partners, we will take equitable, data-driven and evidence-based actions to ensure that City resources are spent where they will have the greatest impact on creating safer streets.

Zero is not a target to be achieved by a certain date; rather, it is an aspiration highlighting the need for the very best road safety outcomes and where no loss of life is considered acceptable. It has been called a Vision Zero Surrey Safe Mobility Plan because the freedom to move is fundamental to every aspect of life.

Through enhanced strategic partnerships and collaborations leveraging the broader road safety community, the City is embracing a Safe Systems Approach as a guiding principle to examine all factors contributing to safer roads. By adopting a holistic, evidence-led and data-driven approach to road safety, we will work towards the goal of zero serious injuries and fatalities on the City's roads. Safety will become integrated into the planning of the transportation system and the City as a whole.

The Plan expands on the principles identified in the 2008 Transportation Strategic Plan that recognized 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. It recognizes that KSIs are both a public health issue and social issue which impact our families, our neighbourhoods and our community as a whole.

## **Road Safety Stakeholder Engagement**

Staff reached out to partners and stakeholders in order to explore further 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 including Lookout Society, MADD, Options Community Services, HUB, Surrey Seniors Planning Table, Disability Alliance BC, BC Coalition of Motorcyclists, Surrey Board of Trade, DiverseCity, and Surrey Crime Prevention Society;
- Business Improvement Associations representing different neighbourhoods; and
- Organizational level stakeholders such as RCMP, ICBC, Surrey Schools, Coroners Service of BC, Road Safety BC, Fraser Health Authority, Provincial Health Services Authority and BC Injury Prevention.

Some key concerns emerged:

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

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 all our stakeholders.

### Our Focus Areas

A focus on priority locations is at the center of our planning for Vision Zero safety investments. Through an analysis of crash data, staff have identified priority intersections and high-injury corridors which require specific road safety counter measures. The health impact and collision data reveals the existence of an unequal burden of injury amongst different road users, with pedestrians, cyclists and motorcyclists having the highest rate of death and serious injury.

When we focus on priority locations and victims of harm, resources go to where they are most urgently needed. Targeted enforcement of high-risk driving behaviours will demonstrate that those who break the rules of the road will be made to account for their irresponsible actions that put at risk innocent lives.

Using a holistic, data-driven and evidence-led approach, informed by international best practice research, the City will:

- Target **high-risk hotspot intersections** (Locations of Harm) where almost 80 % of KSI collisions occur;
- Prioritize our **most vulnerable road users**, including pedestrians, cyclists and motorcyclists, (Victims of Harm) who account for 50 % of Surrey’s KSI collisions, and
- Create a community mindset where ‘accidents’ no longer happen and **high-risk driving behaviours** (Perpetrators of Harm), which contribute to about 66% of Surrey’s KSI crashes, are no longer tolerated.

The following will form our areas of focus:



### Equity

Surrey’s data demonstrates that certain subgroups of the population suffer disproportionately on our roads. We will ensure equity is embedded within our decision-making for each of the focus areas above.

## Our Approach

Our strategy is based on the Safe System Approach. Different elements of a Safe System combine to produce a summary effect greater than the sum of individual treatments, so that if one part of the system fails, other parts provide protection. This means we must work together towards: road designs that prioritize safety; vehicle speeds appropriate for the road environment; road user behaviours that create a culture of safety; and safe and well-maintained vehicles.



The Safe Systems Approach



### Safe Roads

In a Safe System, roads are designed to reduce the risk of crashes occurring and the severity of injury should a collision occur. Infrastructure incorporates safety features from the outset by segregating different kinds of road users, as well as traffic moving in different directions or at different speeds. Safe roads interventions will: reduce the likelihood of high-speed collisions; protect road users from side impact and head-on collision impacts; and focus on the safety of our most vulnerable road users. Safe roads prevent unintended use through design and encourage safe behaviors by users.

### Safe Speeds

Travel speeds are the fundamental factor in crash severity, with the risk of death and injury increasing as travel speeds increase. Research has shown that a pedestrian hit at 30 kilometres per hour has a 90% chance of surviving, while at 55 kilometres per hour, they have only a 10% chance of surviving. Speeds must be managed through road design, enforcement and education measures, especially in areas where vulnerable road users are present or at locations where side impact and head on collisions remain possible.

### Safe Road Users

The Safe Road Users pillar addresses human behaviours that contribute to collisions. While we will design and build safe roads to minimize human error, the Safe System requires that all road users follow the rules of the road. When road users fail to comply, enforcement of unsafe actions will be ensured by law enforcement.

Safe Road Users work will also focus on ensuring an understanding of laws and signage, and on employing a varied approach to education and engagement of all community members. Notwithstanding that, even the best drivers, riders and walkers will make mistakes or wrong decisions at times, having safe road users who accept their share of responsibility in safe roads for all is an important part of a safe road system. Being a safe road user involves more than understanding and following the rules of the road; it involves having greater awareness of road safety issues, understanding one's abilities and limitations, and taking necessary precautions to stay safe.

### Safe Vehicles

Safe vehicles that are designed well with the appropriate safety technologies can either prevent a crash or absorb some of the crash forces to help decrease the risk of death and serious injuries. Increasingly, roads and vehicles will be managed within intelligent transport systems, relying ever more on driver-less (autonomous) vehicles and smart infrastructure. As safety becomes hardwired into vehicle technology and road design, there is potential to further reduce road casualties and deaths.

## **Our Partners**

While numerous organizations work diligently to address road safety within their own mandates, none have the responsibility or budget for overall responsibility. It is clear that road safety is a shared responsibility requiring action from the municipality, police, health sector, community and other road safety stakeholders. In order to successfully implement road safety programs and initiatives, we must work together, be mindful of upcoming challenges and opportunities, and regularly measure progress to ensure we are heading towards our goal of Zero. In addition to working across City departments, our external partners include: the police; Surrey Fire Service; Fraser Health Authority; ICBC; and Surrey Schools.

## **Our Commitment**

As a community, it is our responsibility to eliminate traffic deaths and serious injuries for all who share Surrey's streets. Our goal is an achievable and measurable shorter-term target: to reverse the trend of rising injuries and deaths on Surrey's roads and achieve a minimum 15% reduction in injury collisions over the next five years (2019-2023).

The safety performance of Surrey's road network will be continuously monitored, and several performance measures will be used to assess the success of the Plan. The key performance measure is the rate of killed and seriously injured per 100,000 population.

The Plan will be delivered through aligning safety targets into the work of all City departments and prioritizing road safety within planning processes. The City will work with its partners to maximize and leverage all current resources available. Through our data-driven, proactive targeting of resources to areas of greatest need, we will be able maximize our safety returns on investment.

The actions taken within this Plan will be accountable and transparent to our citizens. Embedding regular community consultation and through the use of monitoring and evaluation of our actions, staff will produce an Annual Vision Zero Report to demonstrate how effective our road safety interventions have been. They will also provide an outline of future actions, while engaging citizens in a shared commitment of moving towards the goal of Vision Zero. In addition, quarterly reports on progress will be presented to Mayor & Council.

## **Next Steps**

The City of Surrey is hosting BC's first Vision Zero Summit (February 8 to February 9, 2019), in partnership with the Provincial Health Services Authority, Fraser Health Authority and Vancouver Coastal Health Authority. In addition to launching our Vision Zero Surrey Safe Mobility Plan, the event is intended to foster dialogue on taking a proactive approach to prevent serious injuries and save lives across our BC communities. The Summit will bring together international Vision Zero speakers to present shared solutions to our shared challenges. Civic leaders, health sector, road safety and transportation professionals from across BC will gather at Surrey City Hall to hear from experts who are working to eliminate traffic deaths and severe injuries on their streets, while increasing safe, healthy and equitable mobility for all.

A detailed Implementation Plan is being developed as a matter of priority. The first steps will involve a review of current and planned projects to ensure they proceed in a manner that prioritizes road safety benefits and prevents injuries, as well as saving lives. This Implementation Plan will detail specific interventions, counter measures, locations, milestones and budget.

Development of the Implementation Plan will include various City departments and agencies, as well as the partner organizations who together comprise the Vision Zero Surrey Action Team. The City will lead key overarching initiatives, while partner organizations will lead those initiatives that fall within their mandates. The result will be a holistic, coordinated, targeted plan of action and goals that are shared by all.

The Vision Zero Surrey Action Team will immediately work to target several 'quick wins' to address critical road safety issues. In parallel to these actions, all partners will align internal and external organizational processes to support the seamless delivery of Vision Zero objectives. Surrey will begin the journey to Zero by enhancing internal processes and using evidence-led decision making to systematically incorporate road safety into the planning, design, construction and maintenance activities.

## CONCLUSION

No one should have to grieve the loss of a loved one as a result of our mobility. Vision Zero is an approach to safe mobility that prioritizes eliminating death and serious injury from the transportation system. The City of Surrey acknowledges its obligation to protect the freedom to travel across our City free from harm. We will prioritize our most vulnerable road users and protect everyone's right to safe mobility.

The Engineering Department recommends that Council approve the five-year Vision Zero Surrey Safe Mobility Plan 2019- 2023 which will move us towards zero people killed and seriously injured on our streets because, Every Life Matters.



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JB/SA/cc

Appendix "I" - Vision Zero Surrey - Safe Mobility Plan 2019-2023

Appendix "II" - CR249;2018 Surrey Vision Zero Safe Mobility Plan & Summit