APPENDIX A





2019–2025 ACTION PLAN

TABLE OF CONTENTS

| | Executive Summary |
|----|--|
| 1 | Introduction |
| 3 | What is Vision Zero? |
| 4 | New Approach |
| 5 | Elements of Vision Zero |
| 6 | Vision Zero Network |
| 7 | Vision Zero Core Elements |
| 8 | Success Worldwide |
| 11 | Vision Zero in Hamilton |
| 18 | Safety Initiatives in Hamilton 2000 – 2012 |
| 20 | Safety Initiatives in Hamilton 2013 – 2016 |
| 22 | Vision Zero Action Plan |
| | Evaluation |
| | Engineering |
| | Enforcement |
| | Education |
| | Engagement |
| 30 | Implementation |
| 31 | Conclusion |



Executive Summary

The City of Hamilton continues to be an attractive place to live for people moving into the Greater Toronto Hamilton Area, providing a high quality of life, surrounded by the escarpment, and well connected to surrounding areas. It is one of the fastest growing communities in Ontario, playing a role as a key urban node within the GTHA. As a result, roadway utilization, traffic collisions and the safety of all road users have become a growing concern.

On average, there are over 8200 collisions a year in Hamilton (average over a 5-year period from 2013–2017). The majority of these collisions are vehicle-only collisions. However, on average 415 vulnerable road user collisions occur every year and the majority of these collisions result in injury or fatality. Not only are fatalities and severe injuries on the road unacceptable from an ethical perspective, they are also unacceptable from a societal cost perspective.

A safety survey completed as part of this study found that over 90% of Hamiltonians agree or strongly agree that Hamilton's roads could be safer.

The City of Hamilton is already addressing many aspects of road safety through its educational programs and campaigns, as well as its policies. Its commitment to road safety is shown with the reestablishment of

the Strategic Road Safety Program (HSRSP) in 2014. However, despite these successes, the City recognizes

that more must be done. In January 2016, City of Hamilton Council directed City staff to provide a comprehensive plan to further improve road safety in Hamilton. Part of this direction was to examine the Vision Zero approach to road safety.

Vision Zero uses a data-based approach to road safety with the goal of reducing trafficrelated serious injuries and fatalities towards the only acceptable goal: zero. The Vision Zero concept originated in Sweden in 1997. Sweden has since experienced the lowest annual rates of road fatalities in the world through 20 years of implementation, resulting in one of the most successful Vision Zero campaigns. Cities across North America have started to adopt this new approach to road safety with measureable success.

The basic principles of Vision Zero are as follows:

- No loss of life is acceptable traffic fatalities and serious injuries are preventable;
- We all make mistakes the transportation system should be designed to anticipate error so the consequences are not serious injury or fatality
- We are all responsible for road safety those of us who design and maintain the roads, those of us who make and enforce the rules of the roads, and those of us who use the roads;
- Working together will contribute to a safer road network.

Vision Zero can be achieved by addressing road safety holistically through five main elements (the five E's).

All of the elements need to be implemented in a coordinated and strategic manner to achieve improvements to road safety and to strive towards the goal of zero fatalities and severe injuries on the City of Hamilton's roads.

Evaluation – Identification of key challenges on Hamilton's road network using a data driven approach.

Engineering– Strategic use of resources to improve existing engineering practices and policies, as they pertain to road safety.

Enforcement – Strategic use of enforcement resources in key areas for maximized effectiveness. **Education** – Targeted and collaborative campaigns to address safety for all road users.

Engagement – Enhanced community engagement to create a safe roads culture.

In addition to successes worldwide, the Vision Zero approach to road safety is consistent with Canada's

Road Safety Strategy 2025 (Towards Zero: The Safest Roads in the World) and the Ministry of Transportation's (MTO) Vision to be a leader in moving people and goods safely, efficiently and sustainably, and to support a globally competitive economy. It is also consistent with the City of Hamilton's existing plans and policies which call for a safe, balanced and integrated transportation network that offers a choice of integrated travel modes. In particular, Vision Zero will support the City of Hamilton's 2016-2025 Strategic Plan by being an engaging and open program, which embraces the community and supports local prosperity by striving towards a safe, reliable road network. Vision Zero further supports the Strategic Plan by encouraging active modes of transportation - it addresses road safety for vulnerable road users of all ages and abilities, thus reducing Hamilton's carbon footprint while encouraging a healthy lifestyle.

Transportation-related fatalities and serious injuries are multifaceted problems that require a coordinated effort to address. This Action Plan was developed using the five E's to direct this effort. Action items were identified as a result of the review of best practices, input from the Vision Zero engagement program, consultation with City staff from the City of Hamilton Strategic Road Safety Program (HSRSP), and from a collision analysis completed as part of this study. This Action Plan is a fluid plan that will likely evolve as the Vision Zero program develops and as the safety data becomes more targeted to the program's needs.

Implementing a Vision Zero program is a significant undertaking. It will take time, resources, commitment and funding. Changes as outlined in this Action Plan and those forthcoming from an established Task Force, will take time and funding to transform. Collecting and analyzing data is the cornerstone of the Vision Zero approach: more robust data, analyzing and sharing that data can help direct resources where they are most needed and help the City of Hamilton move towards its goal of eliminating serious injuries and fatalities.

The success of this program should be viewed as the benefit it would provide the City as a whole. The vision of zero fatalities or serious injuries on Hamilton roads is ambitious. It will take time. It will take all of us to achieve.



Introduction

The City of Hamilton continues to be an attractive place to live for people moving into the Greater Toronto Hamilton Area, providing a high quality of life, surrounded by the escarpment and well connected surrounding areas. It is one of the fastest growing communities in Ontario, playing a role as a key urban node within the GTHA. As a result, roadway utilization, traffic collisions and the safety of all road users have become a growing concern.

On average, there are over 8200 collisions a year in Hamilton (average over a 5-year period from 2013- 2017). The majority of these collisions are vehicle-only collisions. However, on average 415 vulnerable road user collisions occur every year and the majority of these collision result in injury or fatality. A safety survey completed as part of this study found that over 90% of Hamiltonians agree or strongly agree that Hamilton's road could be safer.

In January 2016, City of Hamilton Council directed City staff to provide a comprehensive plan to improve road safety in Hamilton. Part of this direction was to examine the Vision Zero approach to road safety.

Through progressive growth and development, Hamilton is playing a role as a key urban node within the Greater **Toronto Hamilton Area**





What is Vision Zero?

Data-Based Approach

Vision Zero uses a data-based approach to road safety with the goal of reducing traffic-related serious injuries and fatalities towards the goal of zero. The Vision Zero concept originated in Sweden in 1997 and has since been adopted in countries world-wide, including Canada and the United States.

Vision Zero is based on the following Principles:

No loss of life is acceptable - traffic fatalities and serious injuries are preventable;

We all make mistakes – the transportation system should be designed to anticipate error so the consequences are not serious injury or fatality;

We are all responsible for road safety – those of us who design and maintain the roads, those of us who make and enforce the rules of the roads, and those of us who use the roads: and

Working together will contribute to a safer road network.

Vision Zero uses a data-based approach to road safety with the goal of reducing trafficrelated serious injuries and fatalities towards the only acceptable goal: zero.



A New Approach

Vision Zero is a new way of looking at how we deal with collisions on our roads. The Vision Zero way of thinking recognizes that we all make mistakes. Instead of blaming and trying to only correct human behaviour, it focuses on how we can minimize the impacts of our mistakes.

TRADITIONAL APPROACH

Traffic deaths are INEVITABLE

PERFECT human behavior

Prevent COLLISIONS

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VISION ZERO

Traffic deaths are PREVENTABLE

Integrate **HUMAN FAILING** in approach

Prevent FATAL AND SEVERE CRASHES

SYSTEMS approach

Saving lives is **NOT EXPENSIVE**

Vision Zero recognizes we all make mistakes.

VS



Elements of **Vision Zero**



Vision Zero can be achieved by addressing road safety holistically through five main elements.

All of the elements need to be implemented in a coordinated and strategic manner to achieve improvements to road safety and to strive towards the goal of zero fatalities and severe injuries on City of Hamilton roads.

Evaluation – Identification of key challenges on Hamilton's road network using a data driven approach.

Engineering – Strategic use of resources to improve existing engineering practices and policies, as they pertain to road safety.

Enforcement – Strategic use of enforcement resources in key areas for maximized effectiveness.

Education – Targeted and collaborative campaigns to address safety for all road users.

Engagement – Enhanced community engagement to create a safe roads culture.

Vision Zero Network is an organization that has been established to be a resource for Cities that are committed to Vision Zero.

This Action Plan is being developed under the Core Principles and Elements as defined by the Vision Zero Network and will continue to be further developed as stakeholders are engaged and areas of improvement identified.

POLITICAL COMMITMENT

The highest-ranking local officials (Mayor, City Council, City Manager) make an official and public commitment to a Vision Zero goal to achieve zero traffic fatalities and severe injuries among all road users (including people walking, biking, using transit, and driving) within a set timeframe. This should include passage of a local policy laying out goals, timeline, stakeholders, and a commitment to community engagement, transparency, & equitable outcomes.

MULTI-DISCIPLINARY LEADERSHIP

An official city Vision Zero Taskforce (or Leadership Committee) is created and charged with leading the planning effort for Vision Zero. The Taskforce should include, at a minimum, high-ranking representatives from the Office of the Mayor, Police, Transportation (or equivalent), and Public Health. Other departments to involve include Planning, Fire, Emergency Services,



Public Works, District Attorney, Office of Senior Services, Disability, and the School District.

ACTION PLAN

Vision Zero Action Plan (or Strategy) is created within 1 year of initial commitment and is implemented with clear strategies, owners of each strategy, interim targets, timelines, & performance measures.

EQUITY

City stakeholders commit to both an equitable approach to Vision Zero by establishing inclusive and representative processes, as well as equitable outcomes by ensuring measurable benchmarks to provide safe transportation options for all road users in all parts of

the city.

COOPERATION & COLLABORATION

A commitment is made to encourage meaningful cooperation and collaboration among relevant governmental agencies & community stakeholders to establish a framework for multiple stakeholders to set shared goals and focus on coordination and accountability.

SYSTEMS-BASED APPROACH

City leaders commit to and prioritize a systems-based approach to Vision Zero — focusing on the built environment, systems, and policies that influence behavior — as well as adopting messaging that emphasizes that these traffic losses are preventable.



DATA-DRIVEN

City stakeholders commit to gather, analyze, utilize, and share reliable data to understand traffic safety issues and prioritize resources based on evidence of the greatest needs and impact.

COMMUNITY ENGAGEMENT

Opportunities are created to invite meaningful community engagement, such as select community representation on the Taskforce, broader community input through public meetings or



workshops, online surveys, and other feedback opportunities.

TRANSPARENCY

The city's process is transparent to city stakeholders and the community, including regular updates on the progress on the Action Plan and performance measures, and a yearly report (at minimum) to the local governing board (e.g., City Council).

Photo and Information: Courtesy of Vision Zero Network



Leadership and Commitment is identified as a key component to any Vision Zero Program. Through the approval of the Transportation Master Plan Update 2018, the City of Hamilton, Mayor and elected officials approved operating under the principles of Vision Zero.

The Safe Roadways and Safe Speeds component, have begun to be implemented with neighbourhood speed reductions and the approval of the Complete Street Policy developed by Transportation Planning.

Through this Action Plan, the **Data-driven Approach**, **Transparency & Accountability** component will be established to direct staff to focus on counter measures for identified trends and patterns involving injury and fatal collisions.





Vision Zero is not a "quick fix" solution program, there will be challenges and require a fundamental shift in thinking to insure traffic safety for all road users is the primary focus. With strong municipal leadership, the City of Hamilton can continue on its path to Vision Zero.

Success Worldwide

Vision Zero has had successes worldwide.

North America is driven by the car and as a result is at great risk of experiencing greater instances of car collisions. The Vision Zero approach, first perfected in Sweden, has proven that reducing fatalities and serious injuries on our roads is not only realistic but achievable.

Sweden

Has experienced the lowest annual rates of road fatalities in the world through 20 years of implementation, resulting one of the most successful Vision Zero campaigns.

North America

Cities across North America have started to adopt this new approach to road safety with measureable success.

City of Edmonton

The City of Edmonton adopted Vision Zero in 2015 with a 5-year road safety improvement plan with the target of 2020 as the safest year in Edmonton. The strategy relies heavily upon an evidence based approach through partnerships with road safety stakeholders, educators, the Office of Traffic Safety, the Edmonton Police Service and the City of Edmonton.

City of Toronto

The City of Toronto has developed a five-year Vision Zero Action Plan that identifies and focuses on six main areas of emphasis: pedestrians, school children, older adults, cyclists, motorcyclists, aggressive driving and distraction.



City of San Francisco

The City of San Francisco is committed to working together through Vision Zero to prioritize street safety and eliminate traffic fatalities by 2024. A comprehensive Transportation-related Injury Surveillance System is being developed under the leadership of a Vision Zero Epidemiologist, using Public Health tools and approaches to get to the root of the problem.

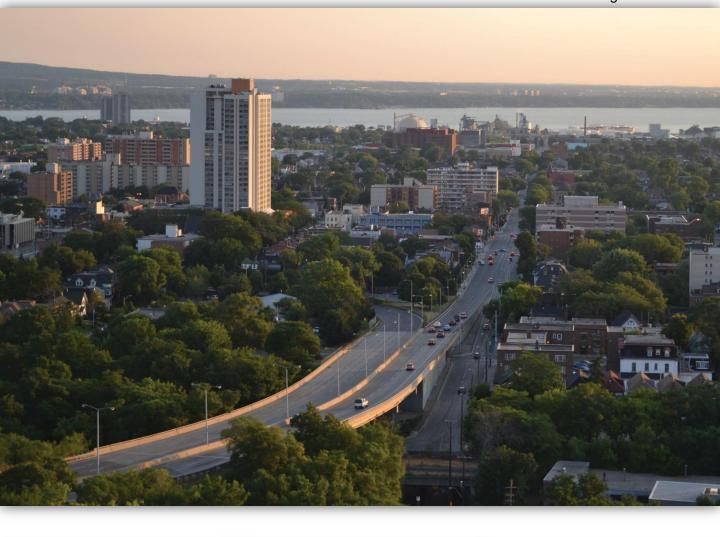
6 City of New York

The City of New York has established a Vision Zero taskforce with community driven initiatives which has have major successes in identifying and engaging the public into solving many of the safety issues on New York streets. These new initiatives have continued to have city wide success resulting in the City of New York having the safest year on record in 2016.

City of Austin

The City of Austin's goal is to begin reducing traffic fatalities using a two-year plan (2016-2018) and to eliminate transportation-related fatalities and serious injuries by 2025. Vision Zero partners are extensive – this is truly a Citywide initiative. The City of Austin is working to revise transportation policies and criteria with a focus on road safety and complete streets.







Vision Zero in Hamilton

The Vision Zero approach to road safety is consistent with Canada's Road Safety Strategy 2025 (Towards Zero: The Safest Roads in the World) and the Ministry of Transportation (MTO)'s Vision to be a leader in moving people and goods safely, efficiently and sustainably, and to support a globally competitive economy.

It is also consistent with the City of Hamilton's existing plans and policies which call for a safe, balanced and integrated transportation network that offers a choice of integrated travel modes. In particular, Vision Zero would support the City of Hamilton's 2016-2025 Strategic Plan which, through extensive public consultation, identified seven priorities.



Community Engagement & Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.



Our People & Performance

Hamiltonians have a high level of trust and confidence in their City government.



Economic Prosperity & Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.



Culture and Diversity

Hamilton is a thriving, vibrant place for arts, culture, and heritage where diversity and inclusivity are embraced and celebrated.



Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.



Healthy & Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.



Built Environment & Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Vision Zero supports the City of Hamilton's 2016-2025 Strategic Plan priorities by being an engaging and open program, which embraces the community and supports local prosperity by striving towards a safe, reliable road network. Vision Zero further supports these priorities by encouraging active modes of transportation by addressing road safety for vulnerable road users of all ages and abilities, thus reducing Hamilton's carbon footprint while encouraging a healthy lifestyle.

Vision Zero in Hamilton

Input from stakeholders, including City staff as well as citizens of Hamilton was considered an integral part of developing the Vision Zero Action Plan. As such, a robust and comprehensive engagement program was developed to engage City staff and the community.

This engagement program followed the spirit of the Hamilton Engagement Charter. Elements of the program included a Vision Zero page on the City's website and a safety survey, which was created to gauge the appetite and demand for a program such as Vision Zero. The survey was opened to Hamiltonians October 7th, 2016 to December 31st, 2016 and resulted in 2,274 responses. The program also included two workshops and an open house, designed to educate and engage City staff and residents on road safety and Vision Zero.

Safety Survey

The results of the safety survey are clear: over 90% of respondents agree or strongly agree that Hamilton roads could be safer, with almost 60% having been involved in a collision.

Workshops

Vision Zero workshops and an open house were held on November 22, 2016 to engage key stakeholders, including City Staff and the community.

The purpose of this initiative was to introduce Vision Zero, engage invitees in how to implement Vision Zero, and define challenges and opportunities related to road safety in the City of Hamilton. It was intended to, and succeeded in gathering meaningful comments and insights which have been used in the Vision Zero Action Plan.



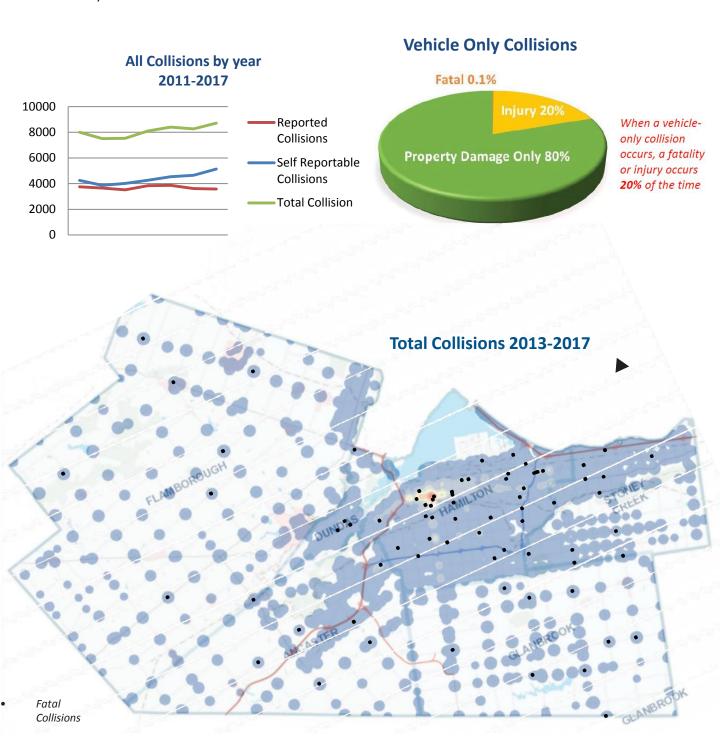
Driving a personal vehicle was found to be the primary mode of daily transportation for respondents, followed by walking, public transit, and lastly cycling.

The survey found that the top challenges faced by road users included distracted driving and road users ignoring the laws, or rules of the road.



Collision History

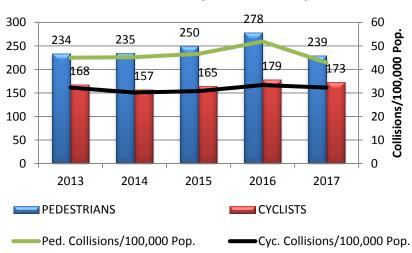
An overview of total collisions from 2011 to 2017 shows that collisions are steadily increasing from year to year. As such, to further understand safety issues and challenges faced by Hamilton Road users, and to pinpoint emerging collision trends, analysis of the collision data between 2013 and 2017 was carried out. The assessment found that on average, from 2013 - 2017, there are approximately 8,200 total collisions a year in Hamilton, 95% of which were vehicle-only.

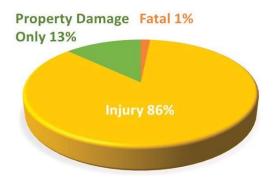


Vulnerable Road Users

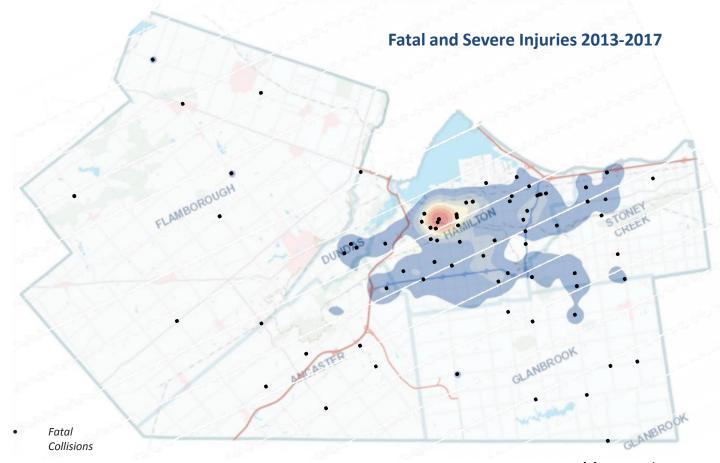
Out of the nearly 8,200 annual collisions, approximately 5% involve vulnerable road users (pedestrians and cyclists).

2013-2017 Pedestrian & Cyclist Collisions per Year





When a vulnerable road user is involved in a collision, a fatality or injury occurs 87% of the time



Pedestrian and Cyclist Injuries (2013-2017)





Who Is At Risk On Hamilton Roads?

In order to fully understand who is at risk on Hamilton roads, a more detailed assessment was undertaken of injury and fatal collisions involving vulnerable road users. In total, there were 2,078 collisions involving cyclists and pedestrians on Hamilton roads between 2013 to 2017.

These collisions resulted in 1,236 involving pedestrians and 842 involving cyclists on which over 1,750 incidents resulted in injuries. These collisions tragically also resulted in 27 fatalities, 2 cyclists, 25 pedestrians.

Total Collisions Involving Page 20 of 36 Pedestrians & Cyclists 2013-2017

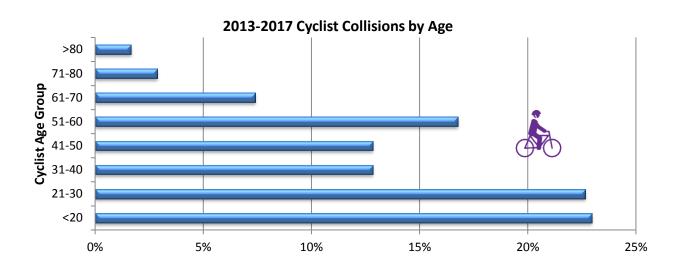


842 collisions

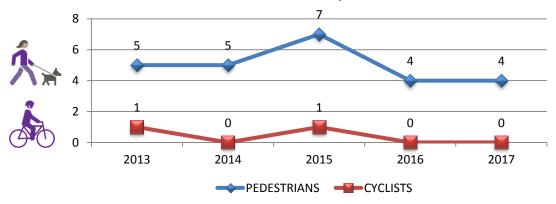


1,236 collisions

2013-2017 1,700 Injury Collisions



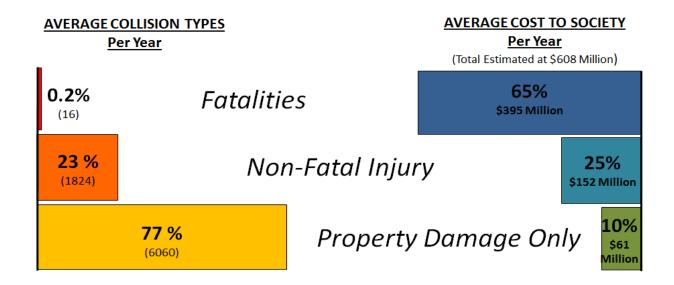
2013-2017 Pedestrian and Cyclist Fatal Collisions



Societal Cost of Collisions

Over the 5-year period from 2011-2015, there was on average 16 fatal collisions a year and over 1800 non-fatal injury collisions. These fatal and injury collisions together represented less than 25% of all collisions in Hamilton over that time period but resulted in approximately 90% of the total collision cost to society.

Not only are fatalities and severe injuries on the road unacceptable from an ethical perspective, they are also unacceptable from a societal cost perspective.



Building On Success

The City of Hamilton is already addressing many aspects of road safety through its many educational programs and campaigns, including Streets Complete, Livable, Better Neighbourhood 40km/h Speed Limit Reductions. Its commitment to road safety is shown with the re-establishment of the Strategic Road Safety Program (HSRSP) in 2014. This program laid out a plan to tackle road safety by the addition of highly skilled staff and the re-introduction of the Hamilton Strategic Road Safety Committee.

Despite these successes, the City recognizes that more must be done. In January 2016, City of Hamilton Council directed City staff to provide a comprehensive plan to further improve road safety in Hamilton. Part of this direction was to examine the Vision Zero approach to road safety.

This Vision Zero plan ties together the existing initiatives and recommends others by providing an overarching goal to unite the City's transportation safety initiatives.



Safety Initiatives in Hamilton 2000 – 2012

2000

Network Screening Program

A program and process to evaluate collisions on each roadway and highest to lowest risk locations based on a weighted scoring system.

2000

Active & Sustainable School **Transportation**

The Active and Sustainable School Transportation (ASST)'s vision is that Hamilton schools exist in a safe, healthy, and complete community that enable the use of active and sustainable transportation daily.

2000

Red Light Camera Program

This program was Intended to improve road safety by reducing incidents of angle collision at traffic signals. Its revenues are used to fund other safety initiatives.







Safety Initiatives in Hamilton 2000 – 2012

2004

Collision Counter Measure Program (CCM)

As a result of this program, a report titled Hamilton Strategic Road Safety Action Plan was released in 2009. It focused on two primary areas: Aggressive Driving and Vulnerable Users.

Several initiatives resulted from this program including the Red Light Camera program and the Active & Safe Routes to School program.







2007 **Hamilton Strategic Road Safety Program**

As a result of this program, a report titled Hamilton Strategic Road Safety Action Plan was released in 2009. It focused on two primary areas: Aggressive Driving and Vulnerable Users.

Several initiatives resulted from this program including the Red Light Camera program and the Active & Safe Routes to School program.

Safety Initiatives in Hamilton 2013 – 2016

2013

Ladder Crosswalk Program

To highlight pedestrian crossing conditions and vulnerable users at priority locations



2013

Pedestrian mobility Plan

The City Hamilton of Mobility Pedestrian Plan focuses on rebalancing vehicular pedestrian and mobility on Hamilton's streets by providing for pedestrians needs, while accommodating vehicular traffic within the streetscape.

2014

Establishment of the Hamilton Strategic Road Safety Program

The Mission and Vision of the Hamilton Traffic Road Safety Program is to make roadways throughout the City of Hamilton the safest throughout North America and to address safety for ALL road users, including vulnerable road users such as seniors and children.

2013

Hamilton Helmet Initiative

The HHI is a comprehensive health promotion and injury prevention initiative focused on reducing brain injury by promoting access to helmets, educational and skill-building programming and messaging about using the right helmets and the right fit.



2013

Complete, Livable, Better Streets

The City of Hamilton intends and expects to realize long-term cost savings in improved public health, better environmental stewardship, reduced fuel consumption, and reduced lifecycle costs of motor vehicle infrastructure through the implementation of its Complete, Livable, Better Streets policy. Complete, Livable, Better Streets also contribute to walkable neighborhoods, which can foster interaction, strengthen street-level retail business, create a sense of community pride, and increase safety for all residents. In addition, Complete, Livable, Better Streets will contribute to reducing health disparities between Hamilton's high, middle and low income neighbourhoods.

2014

School Zone Safety Program

The goal is to provide designated safe routes to school, focused on providing children a safer, calmer environment to commute and also to encourage walking and cycling modes of travel compatible with a safer healthy lifestyle.

2014

Dynamic Radar Feedback Sign Program

This program is intended to enhance driver awareness of travel speeds as well as collect valuable traffic data for later analysis. Signs are rotated on a request basis throughout the City for a 4-8 week period per location.

Safety Initiatives in Hamilton 2013 - 2016



2016

New Permanent Traffic Calming Program

A pilot program to remove temporary traffic calming measures and construct permanent features using hard surface materials.

2016

Slow Down, Safety **Zone Lawn Sign Program**

This is a Hamilton Strategic Road Safety Program collaborative initiative designated to raise awareness about road safety and to remind motorists drive cautiously residential streets.



2015

Establish the Hamilton Strategic Road Safety **Program**

The City of Hamilton along with other stakeholder Municipalities is working with the Provincial Government on an initiative to support a change in legislation to the Highway Traffic Act (H.T.A.) to enable Municipalities to reduce default neighbourhood speed limit on municipal roadways.

A reduction in speed limits on local residential roadways would contribute to improved safety for all road users.

2016

Distracted Driving Campaign

The Just Drive Campaign was launched by the Hamilton Strategic Road Safety committee address this serious safety concern.



2016

Pedestrian Crossover Program

On January 1, 2016, Bill 31 legislative amendment to the Highway Traffic Act came into effect requiring drivers to stop and yield the entire right of way to pedestrians and school crossing guards at designated pedestrian crossover locations and school crossings. An education program launched by the City is raising awareness about these regulations.





Vision Zero Action Plan

Transportation-related fatalities and serious injuries are multifaceted problems that require a coordinated effort to address. The Vision Zero Action Plan was developed to direct this coordinated effort.

Action items were identified as a result of the review of best practices, input from the workshops and open house, consultation with City staff from the City of Hamilton Strategic Road Safety Program (HSRSP), and from a collision analysis completed as part of this study.

This Action Plan is a fluid plan that will likely evolve as the Vision Zero program develops and as the safety data becomes more targeted to the program's needs.











Evaluation – Identification of key challenges on Hamilton's road network using a data driven approach.

Engineering – Strategic use of resources to improve existing engineering practices and policies, as they pertain to road safety.

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Engagement – Enhanced community engagement to create a safe roads culture.

1 Evaluation

APPENDIX A
Report PW19015
Page 27 of 36
HAMILTON

Record, monitor, assess and communicate shared data among various stakeholders to determine the trends and success of collisions within Hamilton.

Incorporate these emerging trends within ongoing and future Vision Zero initiatives

The evaluation component includes identifying the root causes behind traffic related fatalities and severe injuries while focusing on methods of collecting, sharing, maintaining and improving data collection.

This evidence-based approach to safety allows for the strategic deployment of effective countermeasures in addressing fatalities and serious injuries within the transportation network. Enhancing the availability of traffic and collision data is essential for identifying programs for use in engineering, enforcement, engagement and education.

Evaluation – Key Actions

- Evaluate the current Collision and Traffic Data Collection Program and make recommendations for improvements in order to identify and report on collision patterns, trends and hot spots.
- 2. Incorporate all collision reports into the database, and evaluation process, including self-reports.
- Research innovative ways to monitor and collect data.

- 4. Coordinate a data-driven program to prioritize high volume/severity collision locations and corridors, as well as collision trends, to strategically focus resources. Identify the need for targeted programs and priority projects. Consider using a cost-benefit analysis to prioritize programs and projects.
- 5. Through regular reviews, get to the root causes behind traffic related fatalities and severe injuries. This includes a field review of each fatality within a week to assess the conditions/circumstances that led to the occurrence. Follow-up with Hamilton Police Services should also occur, as required.
- 6. Evaluate the Vision Zero initiatives and programs and recommend any adjustments or new programs using a multi-disciplinary committee within the City to gain a broader perspective of the successes and challenges. Evaluate the effectiveness of the engineering, education, enforcement and engagement programs as a cohesive and collaborative effort.
- 7. Identify secondary emphasis areas of focus



2 Engineering



Work toward synergizing engineering best practices to encourage safer streets through design with all road users in mind

The Vision Zero approach to safety is to design and operate roads to minimize the impacts of the mistakes we make as road users. Considering the increasing trend in active transportation, proactive design approaches, including a review of speed limits, are required to ensure safely accommodate all road users.

Consistent monitoring of the road network using safety and traffic data will allow for the incorporation of strategic engineering countermeasures in street design, traffic engineering, transportation planning and land use to prevent fatal and severe collisions.

Engineering – Key Actions

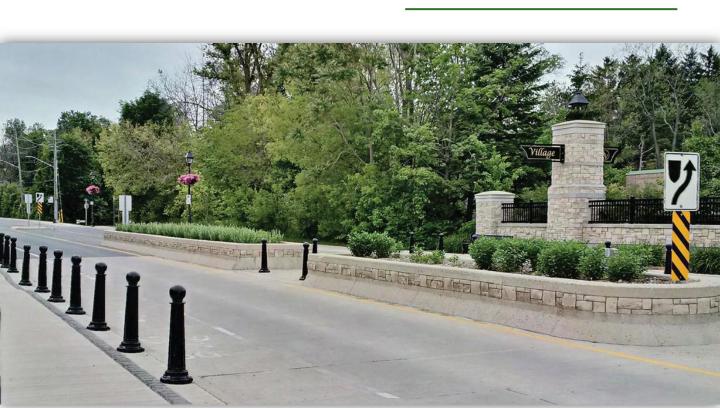
- 1. Clearly identify Roads and Traffic as the City's road authority.
- Implement five Priority Safety Projects yearly, as identified through the evaluation of collision and safety data.
- Implement a Safe Speeds Review based on input from the evaluation of collision and safety data and make recommendations.
- Review Road Maintenance practices, identify areas for improvement (ie. keep cycling and pedestrian facilities clear of snow and ice) and implement changes, as appropriate.
- Traffic Engineering priority focus to become identified areas of concern through industry standards.

- 6. Establish a review mechanism within the City to ensure that road safety best practices, complete street, and cycling and pedestrian networks and needs, are implemented on all new or rehabilitation projects, and are integrated as part of all development projects.
- Investigate opportunities to include cost of collisions in capital works budget / asset management – return on investment for all new and rehabilitation work.
- Review construction budget practices to ensure safety is incorporated and reviewed for each project. Review projects to ensure funds are available to address identified locations of concerns.
- 9. Complete a cross-section and design standard review, from a complete streets perspective, and make recommendations for changes to the City's current standards to better support safe speeds, address collision trends and to better accommodate vulnerable road users, including those who are visually impaired. Evaluate traffic calming/speed reduction methods, other design details before implementation.
- 10. Research safety initiatives related to design, maintenance and operation of roadways and make recommendations for inclusion in the Action Plan.
- 11. Identify opportunities for changes to City Policies (ie. assess need for New Roadway Classification, evaluate and address current road uses throughout City such as trucking and bike routes).
- 12. Identify and fill in gaps in the cycling and pedestrian networks.

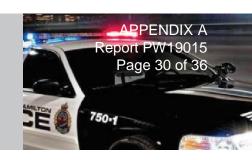


- 13. Confirm the issue of secondary incidents occurring due to driver frustration in the event of a road closure. If warranted, review contingency plans for scheduled (construction, special events) and unscheduled (collision, emergency) road closures to address the issue of secondary incidents occurring and make recommendations for improvements.
- 14. Identify opportunities for changes to policies and legislation related to traffic operations and engineering (ie. making winter tires a requirement).
- 15. Review the performance of improvements made as part of previous year's Priority Safety Projects and Safe Speeds Review, and apply any "lessons learned" to future projects.

Consistent monitoring of the road network using safety and traffic data will allow for the incorporation of strategic engineering countermeasures in street design, traffic engineering, transportation planning and land use to prevent fatal and severe collisions.



3 Enforcement



Provide clear and focused policing services directed to areas of concern.

Considering that human error is the main cause of fatal and serious injury vehicle collisions, efficient and effective law enforcement is necessary in improving roadway safety. The collaborative, data-driven Vision Zero process will result in the efficient allocation of limited law enforcement resources for maximized effectiveness.

Enforcement – Key Actions

- 1. Establish a Traffic Enforcement Unit.
- 2. Implement targeted enforcement at high speed, high collision locations.
- 3. Provide officer training on producing clear, detailed, Motor Vehicle Collision (MVC) Reports.
- 4. Establish a protocol for identifying and tracking locations with safety concerns and relaying these concerns to the Vision Zero office.

- In conjunction with Engagement and Education, develop and implement an education and enforcement program that includes teaching, is community driven, and enforces the rules of the road equally for all road users.
- Identify the need for, and recommend targeted enforcement and education programs for issues such as distracted driving, speeding, school zone enforcement and parking violations impeding road users.
- Review Road Maintenance practices, identify areas for improvement (ie. keep cycling and pedestrian facilities clear of illegally parked vehicles) and implement changes, as appropriate.
- 8. Review current Red Light Camera Program and identify changes to existing locations and additional locations to target, as appropriate.
- Research other safety initiatives (ghost cars, radar message boards, speed cameras, school bus cameras) and make recommendations.
- 10. Identify opportunities for changes to policies and legislation related to traffic operations and enforcement.



Engagement



APPENDIX A Report PW19015 Page 31 of 36

An effective Engagement Program will help create a safe roads culture.

The Vision Zero engagement program should inspire Hamiltonians to become part of the solution on this journey towards zero fatalities and serious injuries. It should engage citizens of all ages and support engineering and enforcement initiatives.

Engagement – Key Actions

- 1. Expand the Hamilton Strategic Road Safety Committee with membership consisting of City departments, external agencies, neighbourhood representatives committees. and private external company representatives and organizations that support road safety.
- 2. Follow an open data approach in sharing information by enabling the public to make more informed decision resulting in improvement to their lives.
- 3. Develop an interactive Vision Zero website to provide information to the community, to provide a means for road users to communicate safety concerns, comments, to advertise new Vision Zero programs and initiatives, etc.
- 4. Leverage Technology to enhance Road Safety and encourage safe driving behaviours.
- 5. Explore other opportunities to use both conventional and social media outlets in a format the community can relate to or understand.

- 6. Create a Road Safety Pledge.
- 7. Create an Engagement Program for the community to promote the program, identify concerns and challenges, as well as successes. Figure out how to engage those who don't want to be engaged. This could include local Vision Zero working groups.
- 8. Develop a specific road safety program for schoolage children (ie. consider bringing back the Safety Village). Consult with school boards, educators, Public Health, as well as the Vision Zero team.
- Based on the results of the collision analysis completed as part of this study, develop specific road safety programs for various age categories. Consult with community partners, Public Health, as well as the Vision Zero team.
- 10. Develop and initiate a pedestrian and cyclist road safety programs.
- 11. Create a Vision Zero Neighbourhood tool kit working in partnership with local community groups.
- 12. Establish a single point of contact/resource for Vision Zero for both internal Councillors/City staff and the community.

Engagement



APPENDIX A Report PW19015 Page 32 of 36

- 13. Develop a Community Vision Zero Events program. Consider fund-raising opportunities such as Fun Runs.
- 14. Coordinate activities engagement with Engineering, Enforcement, Public Health and community groups.
- 15. Engage other levels of government for financial resources.
- 16. Require established neighbourhood Vision Zero working Committees to develop neighbourhood Traffic Calming plans rather than individual street requests.

- 17. Engage other partners (CAA, business leaders, and insurance companies) for financial or other resources.
- 18. Engage other levels of government for changes to policy or legislation, as identified through Engineering or Enforcement assessments.
- 19. Publish Yearly Vision Zero Reports.





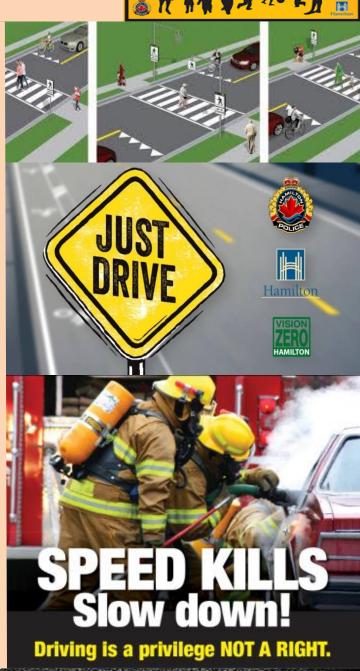
SLOW DOWN
SAFETY ZONE

The education component of this Vision Zero Plan plays a supporting role to the other E's, in particular Engineering, Enforcement and Engagement.

An education plan should be developed every year in consultation with the Vision Zero Task Force and the Hamilton Strategic Road Safety Committee. These identified Education programs will primarily focus on issues identified through Network Screening and Enforcement patterns.

Education campaigns should continue reinforcing previous messages that have been communicated to ensure continued education for the residents on Hamilton.

The education plan must also be flexible in resources to undertake campaigns that are unexpected education opportunities and address unexpected challenges in terms of road safety.



HOW SAFE ARE DESIGNATIONS



Implementation

Future resources may be required to implement the Vision Zero Action Plan, however, a number of Action Items are simply a different way of doing business at the City and would have negligible cost implications. For instance, the recommended review mechanism for all new or rehabilitation projects would not have any capital costs. Investigating opportunities to include cost of collisions in capital works budget / asset management would not require significant resources and could ultimately result in cost savings for the City.

In addition, by addressing safety as part of all construction projects and by including it in the planning and design process of all new development, significant cost savings would be realized by not having retrofit an existing condition at a later date.

Cost savings could also be realized to the City's Risk Management by reducing the severity of collisions and therefore magnitude of claims against the City. By

reducing fatalities and severe collisions, there would be a significant savings to society as a whole, benefitting all Hamiltonians. The success of the program can be considered in many different ways. A reduction in number of fatalities and serious injuries would be a clear indicator that the program is effective. However, the success of the program could also be seen with respect to how changing engineering practices and reducing fatalities and serious injuries would reduce overall costs to the City.

Finally, success can also be considered in terms of public response to the program and confidence that the City is making the safety of all road users a priority.





Conclusion

Implementing a Vision Zero Action Plan is a significant undertaking. However, based on the Safety Survey completed as part of this study, there is a clear perception by Hamiltonians that the City roads could be safer; this is confirmed by the collision data.

Based on a review of existing best practices, a rigorous consultation program, and an analysis of the available collision information, an Action Plan was developed for the City of Hamilton.

This plan should be considered fluid and will likely evolve over time. The success of this program should be viewed as the benefit it would provide the City as a whole.

The vision of zero fatalities or serious injuries on Hamilton roads is ambitious. It will take time. It will take all of us to achieve.



