

Subject: CQ10-2018 Vision Zero - CITY-WIDE

Reference:

Date to Council: 3/20/2019
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Report Date: 2/22/2019
Clerk's File #: ST2019

To: Mayor and Members of City Council

Recommendation:

That Administration **BE DIRECTED** to report back with a Vision Zero Policy for adoption.

Executive Summary:

N/A

Background:

At the June 18, 2018 meeting of Council, Councillor Holt asked the following Council Question:

CQ 10-2018

Requests that Administration report back to the Environment, Transportation and Public Safety Standing Committee on the potential of implementing a "Vision Zero" framework for the City of Windsor. (Vision Zero is a multi-national road traffic safety framework that aims to achieve a transportation system with zero fatalities or serious injuries).

This report provides the requested response.

Vision Zero

Vision Zero was first implemented in Sweden in the 1990s and has since been adopted by many jurisdictions around the world. It represents a fundamentally different approach to road safety than the traditional road safety approach, as summarized in Table 1.

Table 1: Traditional Approach vs. Vision Zero (source: Vision Zero Network)

Traditional Approach	Vision Zero
Traffic deaths are inevitable	Traffic deaths are preventable
Perfect human behaviour	Integrate human failing in approach
Prevent collisions	Prevent fatal and severe crashes
Individual responsibility	Systems approach
Saving lives is expensive	Saving lives is not expensive

The principles of Vision Zero are:

- No loss of life is acceptable.
- Traffic fatalities and serious injuries are preventable.
- We all make mistakes, but these mistakes shouldn't cost our lives.
- We are physically vulnerable when involved in motor vehicle collisions.
- Eliminating fatalities and serious injuries is a shared responsibility between those who design and maintain our roadways and all road users.

(source: City of Edmonton)

Each jurisdiction that adopts Vision Zero creates a Vision Zero Action Plan. The contents of the action plan are customized, reflecting the unique characteristics of the community, its existing road safety situation and culture, and input received from stakeholders during consultation and collaboration.

Typically, a Vision Zero Action Plan:

- **Has specific targets** for reductions in severe collisions (or categories of severe collisions, such as severe pedestrian or cyclist collisions) by a specific date.
- **Includes components categorized by the "5 Es" (engineering, enforcement, education, engagement, and evaluation)** emphasizing lower-cost, high-return measures, as well as recommendations that go beyond roadway design and operation (e.g. educational campaigns and changes to policies).
- **Recognizes the inherent risks of vehicle speed** by incorporating measures to reduce vehicle speed through enforcement and roadway design.
- **Involves a wide range of departments, agencies, community members, and stakeholders**, such as:

- City departments
- Health units and local hospitals
- Emergency services
- School boards
- Transit agencies
- Representatives of under-served communities
- Vulnerable road users (e.g. cyclists and pedestrians)

Vision Zero Adoption and Results in Other Jurisdictions

Vision Zero has been adopted by a number of municipalities and provincial or state governments. A map of American Vision Zero communities is provided as Appendix 1. In Canada, the following jurisdictions have adopted Vision Zero and have created or are in the process of developing Vision Zero Action Plans:

- City of Hamilton
- City of Kingston
- City of London
- City of Ottawa
- City of Toronto
- Regional Municipality of Durham
- Regional Municipality of Peel
- Regional Municipality of Waterloo
- City of Edmonton, AB
- City of Saskatoon, SK
- City of Surrey, BC
- City of Vancouver, BC
- Strathcona County, AB
- Province of British Columbia

The most established Vision Zero program in North America is in New York City. Since their Vision Zero program was adopted in 2014, the following has occurred:

- As shown in Figure 1, overall traffic fatalities City-wide have decreased 15%, from 275 per year (4-year average before Vision Zero) to 235 per year (4-year average after Vision Zero).
- For the most recent year available (2017), year-over-year pedestrian fatalities fell 32%, from 148 in 2016 to 101 in 2017.
- At “priority locations” – i.e. locations that received special focus due to high rates of KSI (killed and seriously injured) pedestrian crashes – the number of pedestrian fatalities has decreased from 99 per year (2009-2013 baseline) to 54 in 2017, for a reduction of 45%.

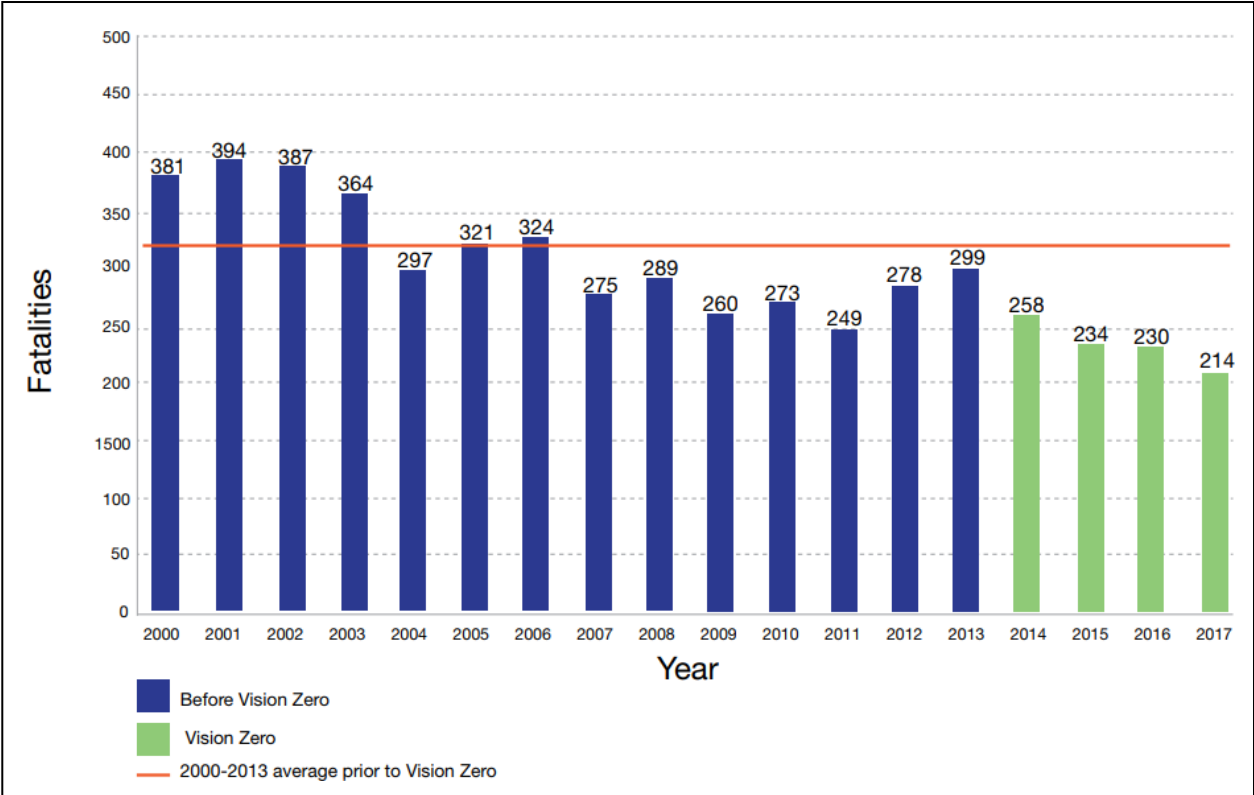


Figure 1: New York City Traffic Fatalities Before and After Vision Zero (Source: New York City Vision Zero Year Four Report)

The most established Vision Zero program in Canada is in the City of Edmonton. As shown in Figure 2, as of their 2017 annual report, they had experienced a 19% reduction in vulnerable road user collisions since adopting Vision Zero in 2015.

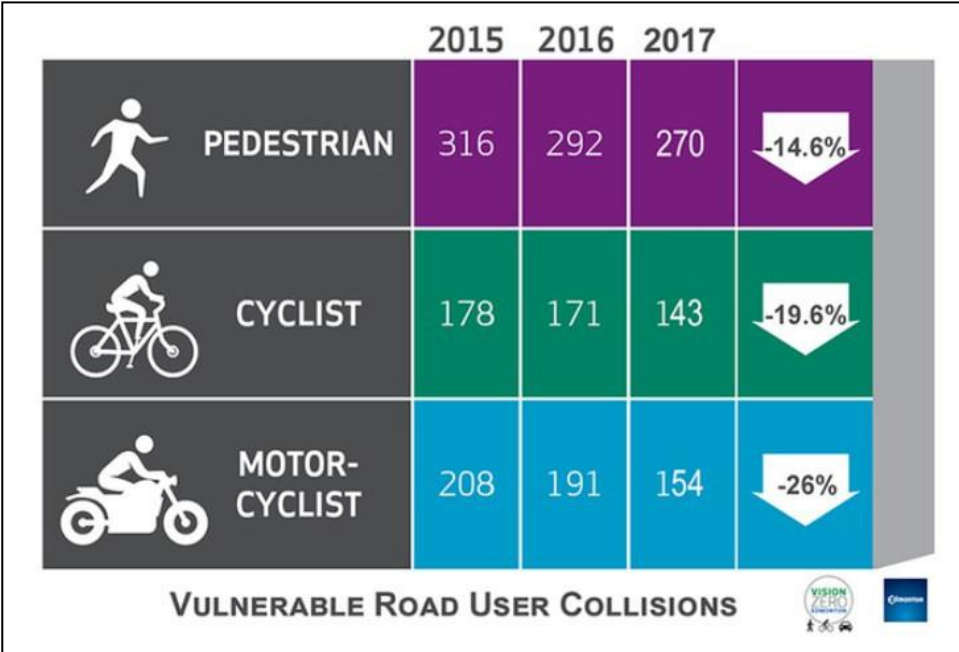


Figure 2: Edmonton Vision Zero Results to Date (source: City of Edmonton)

Fatal and Serious Injury Collisions in the City of Windsor

The 2017 Road Safety Report (S 70/2018) included a discussion of fatal and serious injury collisions. For this review, all injuries classified as “fatal” or “major” on standard police MVA reports were included.

Between 2013 and 2017, there were an average of 37.4 fatalities and serious injuries resulting from motor vehicle collisions on roads under the jurisdiction of the City of Windsor. Figure 3 shows the variation in fatalities and serious injuries per year over this period. Figure 4 shows the breakdown of fatal and serious injury collisions by victim category.

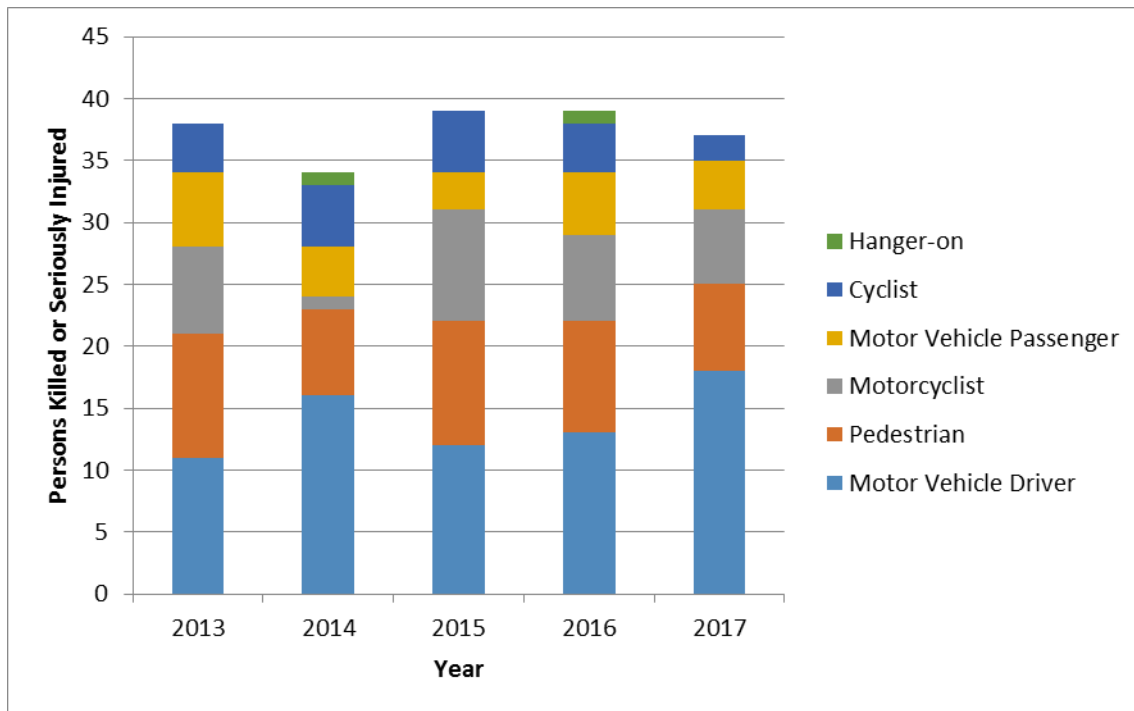


Figure 3: Fatalities and Major Injuries by Year and Victim Category

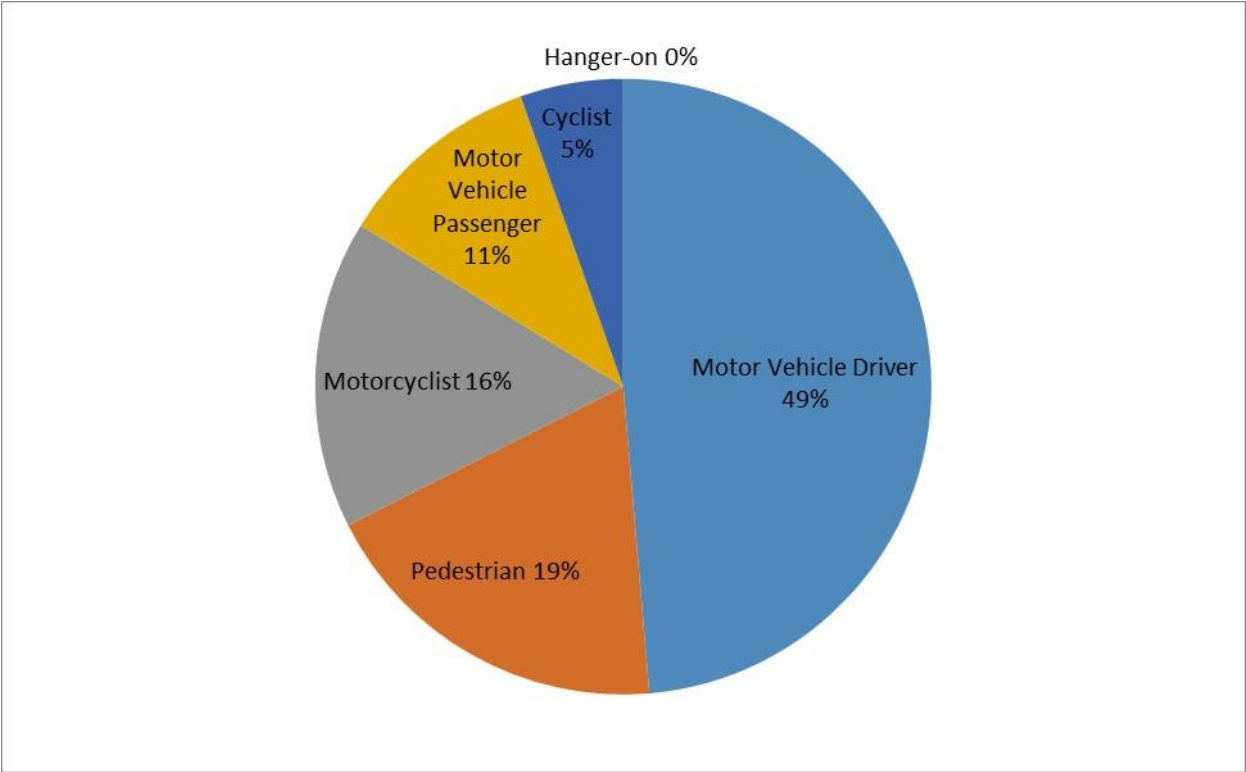


Figure 4: 2017 Fatalities and Serious Injuries – City of Windsor

Safe Community Designation & Windsor Essex Road Safety Working Group

In 2016, the City of Windsor received Safe Community designation from Parachute Canada. To achieve this designation, a community analyzes its data on injuries, sets injury prevention priorities and works toward addressing these priorities. For Windsor, these priorities were identified as the following (details in Appendix 2):

1. Falls
2. Collisions
3. Self-harm

As a result of these priorities, the Windsor-Essex Road Safety Working Group was established.

Discussion:

A potential approach for implementing Vision Zero in Windsor is outlined in Table 2.

Table 2: Potential Windsor Vision Zero Implementation

Step	Potential Windsor Approach
Commitment	<ul style="list-style-type: none"> • Council resolution endorsing Vision Zero • Council-approved policy adopting a framework for Vision Zero implementation

Step	Potential Windsor Approach
Task Force	<ul style="list-style-type: none"> • Identify a staff member as the Vision Zero lead. • Assign the Road Safety Committee as the Vision Zero Task Force <ul style="list-style-type: none"> • The Road Safety Committee is an existing, multi-disciplinary staff technical committee. Its current membership includes representatives from Transportation Planning, Traffic Operations, Public Works – Operations, Public Works – Maintenance, Engineering, and the Windsor Police Service. • Membership in the committee could be expanded to other departments to better align with Vision Zero goals.
Action Plan Development – Data	<ul style="list-style-type: none"> • Road safety data and analysis would be provided by Transportation Planning, similar to current practice. <ul style="list-style-type: none"> ○ Transportation Planning currently maintains the Corporation’s collision database, which is drawn from information in Windsor Police Service motor vehicle collision reports. • Sources for supplementary data (e.g. survey results) would be identified as the Action Plan is developed.
Action Plan Development – Inclusion and Collaboration	<ul style="list-style-type: none"> • Two options have been identified. The City’s Vision Zero approach could include either or both options: <ul style="list-style-type: none"> ○ Option 1: form a Vision Zero Stakeholder Group. This stakeholder group would continue with, as much as practical, the same membership throughout the development of the Action Plan. The stakeholder group would be invited to provide feedback on road safety concerns at the start of the project and be consulted for collaboration and feedback on Action Plan elements as they are developed. The following departments, agencies, and stakeholder categories would be invited to send representatives: <ul style="list-style-type: none"> ▪ Other City departments ▪ Emergency services ▪ Health promotion and injury prevention organizations (e.g. Windsor Essex County Health Unit, Windsor Regional Hospital) ▪ Educational organizations (e.g. school boards, the Safety Village) ▪ Vulnerable road users (e.g. cyclists, pedestrians, motorcyclists) ▪ Neighbourhood representatives for traditionally underserved communities

Step	Potential Windsor Approach
	<ul style="list-style-type: none"> ○ Option 2: conduct wider public consultation at key points throughout the development process of the Action Plan, such as open houses, pop-up events, and online surveys.
Action Plan Development – Plan Details	<ul style="list-style-type: none"> ● The Vision Zero Policy would identify requirements for the Action Plan, including that it <ul style="list-style-type: none"> ○ Reflect a systems-based approach ○ Identify clear strategies, along with the owner of each strategy ○ Identify interim targets, timelines, and performance measures
Action Plan Adoption and Implementation	<ul style="list-style-type: none"> ● The final Action Plan would be brought forward to Council for approval. ● Once the Action Plan is approved, measures for implementation would be brought forward for approval as appropriate. Items with significant associated cost or that would involve reprioritization of projects would likely come forward through the budget deliberation process.
Monitoring and Reporting	<ul style="list-style-type: none"> ● An annual report on progress toward Vision Zero targets would be prepared by Administration. This could be provided either as additional material in the annual Road Safety Report or as a separate document. ● As part of its ongoing responsibility, the Road Safety Committee would review progress against Vision Zero targets and recommend changes to the Action Plan as necessary to stay on track to achieve the identified targets. ● Annual reports and ongoing review by the Road Safety Committee would continue for the life of the Action Plan.

Geographic Focus

The aim of the proposed Vision Zero Policy is to create and implement a Vision Zero Action Plan for the City of Windsor specifically.

A number of potential Vision Zero stakeholders, including the Windsor-Essex Health Unit, Windsor Regional Hospital, Essex-Windsor EMS, the Safety Village, and the school boards, operate programs throughout Windsor-Essex beyond the City of Windsor. As the action plan is developed, opportunities may arise for region-wide partnerships on specific items (e.g. education campaigns); Administration will investigate opportunities to collaborate with other organizations and jurisdictions to reach the goals of the Corporation’s Vision Zero Action Plan.

Risk Analysis:

Collisions, especially the fatal and serious injury collisions that are the focus of Vision Zero, represent a safety risk to road users in the City of Windsor. Adopting a Vision Zero Policy is a strategy to reduce this risk.

Financial Matters:

No financial expenditures are recommended at this time.

Development of a Vision Zero Action Plan is likely to result in costs associated with public consultation, as well as use a significant portion of the available time for the Vision Zero Lead. Detailed cost estimates will be developed by Administration for approval as part of the approval of a Vision Zero Policy. Currently, Administration estimates that an upset limit of \$15,000 will be sufficient to complete the development of the policy. A source of funds for this work will be identified when the Vision Zero Policy is brought forward for approval.

There is currently no dedicated funding source for this initiative. If directed, Administration will address any new financial commitments or reprioritization of planned expenditures or resources, as a result of the Vision Zero Action Plan, when the Vision Zero Action Plan is brought forward for approval. To provide a comparison, the City of London has identified \$125,000 per year within their Capital Budget for the implementation of a similar policy. Unless directed otherwise, any funding would likely have to come forward from a request through the 2020 or 2021 Capital Budget process.

Consultations:

Engineering

Traffic Operations

Operations – Maintenance

Windsor Police Service

Windsor Regional Hospital (Regional Trauma Program)

Windsor Essex County Health Unit

Conclusion:

Information on the feasibility of implementing a Vision Zero framework has been provided as requested in the Council Question. Administration recommends that a Vision Zero Policy be developed.

Planning Act Matters:

N/A

Approvals:

Name	Title
Josette Eugeni	Manager of Transportation Planning
Don Nantais	Financial Planning Administrator
Shelby Askin-Hager	City Solicitor and Corporate Leader, Economic Development and Public Safety
Joe Mancina	City Treasurer
Onorio Colucci	Chief Administrative Officer

Notifications:

Name	Address	Email
Councillor Holt		
Windsor Bicycling Committee		
Diane Bradford Regional Trauma Program, Windsor Regional Hospital		Diane.Bradford@wrh.on.ca
Cindy Gignac Windsor Essex County Health Unit / Windsor Essex Road Safety Working Group		cgignac@wechu.org
Sgt. Craig Judson Sgt. Morgan Evans Windsor Police Service		cjudson@police.windsor.on.ca mevans@police.windsor.on.ca

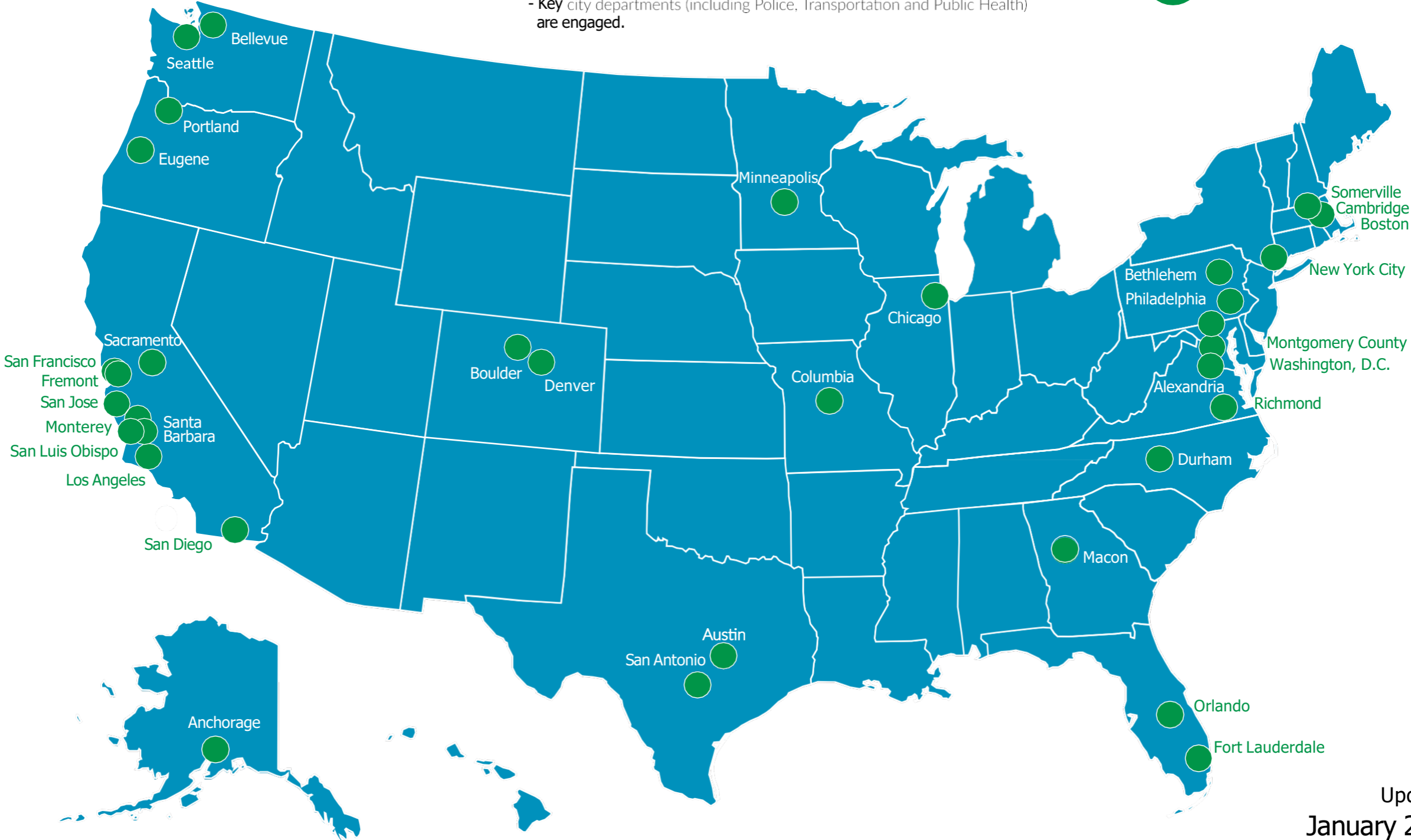
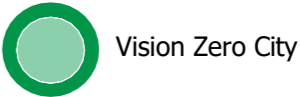
Appendices:

- 1 Vision Zero Communities in the United States (source: Vision Zero Network)
- 2 Leading Causes of Injury - Windsor-Essex (source: WECHU)

Vision Zero Cities

A Vision Zero City meets the following minimum standards:

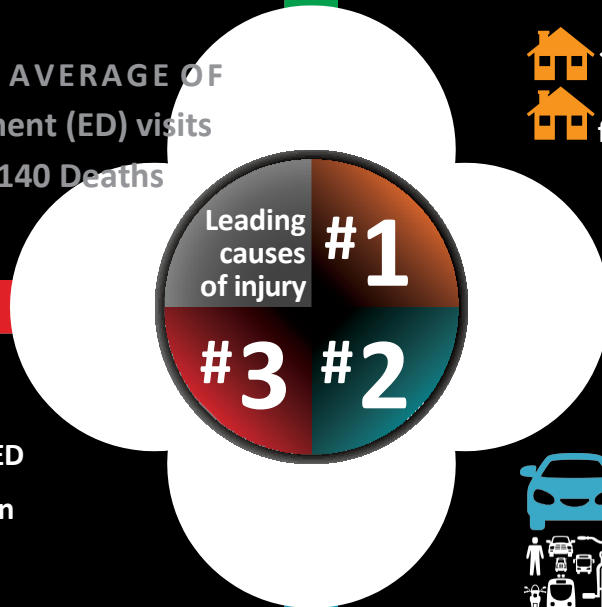
- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.



Injury is the leading cause of death in people under 45 years old.

WINDSOR & ESSEX COUNTY
INJURY
PROFILE

EACH YEAR THERE IS AN AVERAGE OF
30,000 Emergency Department (ED) visits
1,500 Hospitalizations | 140 Deaths



Falls



Falls account for

1 in 3

of all injury-related ED visits



Over 90%
of fatal falls are among seniors



2 in 3

fatal falls occur at home



Adolescent girls
= most visits to ED



Middle-aged men
= most deaths



80% of ED visits
related to self-harm are
caused by self-poisoning with medication



1 in 4
injury-related deaths is due to self-harm



Self-Harm



1/2 of injuries
are sustained
by the occupant of a car



3 in 4

fatalities are male



15 to 24^{year}
olds
have the most ED visits

Collisions



Developed to assist the designation of Safe City Windsor.

safe communities
windsor

WINDSOR-ESSEX COUNTY
HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex

For full report visit
www.wechu.org