

Welcome

Office for State, Tribal, Local and Territorial Support
presents . . .

CDC Vital Signs

**Motor Vehicle Injury Prevention –
United States and 19 Comparison Countries**

July 12, 2016

2:00–3:00 pm (EDT)



Centers for Disease Control and Prevention
Office for State, Tribal, Local and Territorial Support

Agenda

2:00 pm	Welcome & Introductions	Susan Hardman Team Lead, Training and Education, Public Health Associate Program, Office for State, Tribal, Local and Territorial Support, CDC
2:04 pm	Overview	Erin Sauber-Schatz, PhD, MPH Team Lead, Transportation Safety, Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC
2:10 pm	Presentations	Lindsey Myers, MPH Director, Injury and Substance Abuse Prevention, Colorado Department of Public Health and Environment Leah Shahum Founder and Director, Vision Zero Network
2:30 pm	Q&A and Discussion	Susan Hardman
2:55 pm	Wrap-up	
3:00 pm	End of Call	



CDC *Vital*signs™ Teleconference

to support STLT efforts and build momentum around the monthly release of CDC *Vital Signs*



JULY 2016

Vital^{CDC}signs™

Vital Signs: Motor Vehicle Injury Prevention – United States and 19 Comparison Countries

How Is the United States Doing?

Erin K. Sauber-Schatz, PhD, MPH

Transportation Safety Team Lead

Vital Signs Town Hall

July 12, 2016

National Center for Injury Prevention and Control

Division of Unintentional Injury Prevention



Background

- ❑ Reducing motor vehicle crash deaths was 1 of 10 great public health achievements of the 20th Century
- ❑ However, motor vehicle crashes remain a leading cause of death for Americans aged 1–54 years
- ❑ Each year in the US
 - >32,000 deaths
 - >2 million nonfatal injuries
 - Hundreds of millions of dollars in direct medical costs
- ❑ How does the US compare to other high-income countries?

CDC. Motor-vehicle safety: a 20th century public health achievement. *MMWR Morb Mortal Wkly Rep*, 1999;48:369–74.

CDC. WISQARS (Web-Based Injury Statistics Query and Reporting System). Atlanta, GA: US Department of Health and Human Services, CDC; 2014.

<http://www.cdc.gov/injury/wisqars>

Study Purpose

- ❑ **Describe motor vehicle death data for the**
 - United States
 - Other high-income countries
- ❑ **Report the percentage of deaths that involved**
 - Alcohol-impaired driving
 - Speeding
- ❑ **Report national seat belt use by seating location**

Data Sources

- ❑ **World Health Organization's (WHO's) Global Status Report on Road Safety 2015**
 - Alcohol-impaired driving deaths, reported seat belt use, number of registered vehicles
- ❑ **International Road Traffic and Accident Database**
 - Vehicle miles traveled and deaths related to speeding
- ❑ **United States 2013 data**
 - National Highway Traffic Safety Administration (NHTSA)
- ❑ **Canadian 2013 data**
 - Transport Canada's National collision Database

World Health Organization. Global status report on road safety 2015. Geneva, Switzerland: World Health Organization Press; 2015.

http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/

Transport Canada. National collision database. Ottawa, ON: Transport Canada; 2015. <http://wwwapps2.tc.gc.ca/Saf-Sec-Sur/7/NCDB-BNDC/p.aspx?l=en>

Organisation for Economic Co-operation and Development/International Transport Forum. Road safety annual report 2015. Paris, France: Organisation for Economic Co-operation and Development; 2015. http://www.itf-oecd.org/sites/default/files/docs/15irtadannualreport_0.pdf

Country Inclusion

- ❑ **Membership in the Organisation of Economic Co-operation and Development (OECD)**
- ❑ **High income (defined by World Bank)**
 - Gross national income per capita \geq \$12,736
- ❑ **>1 million population**
- ❑ **Report annual number of**
 - Motor vehicle crash deaths
 - Vehicle miles traveled
- ❑ **Difference between the country-reported motor vehicle crash death rate and the WHO-estimated rate could not exceed 1 death per 100,000 population**

Countries Included: United States and 19 Comparison Countries

□ The Americas

- United States and Canada

□ Europe

- Austria, Belgium, Denmark, Finland, France, Germany, Ireland, the Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom

□ Asia

- Israel and Japan

□ Oceania

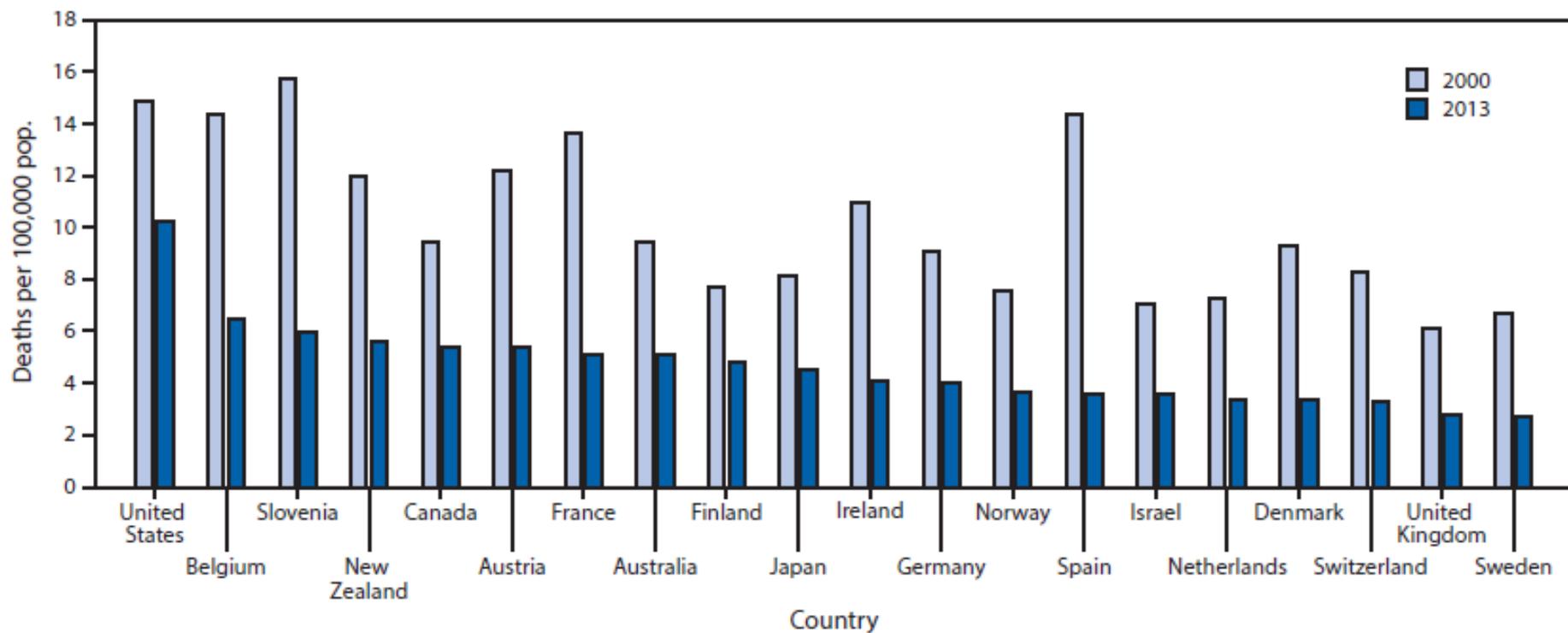
- Australia and New Zealand





RESULTS

Motor Vehicle Crash Deaths per 100,000 Population 20 High-Income Countries, 2000 and 2013



Motor Vehicle Crash Death Rates per...

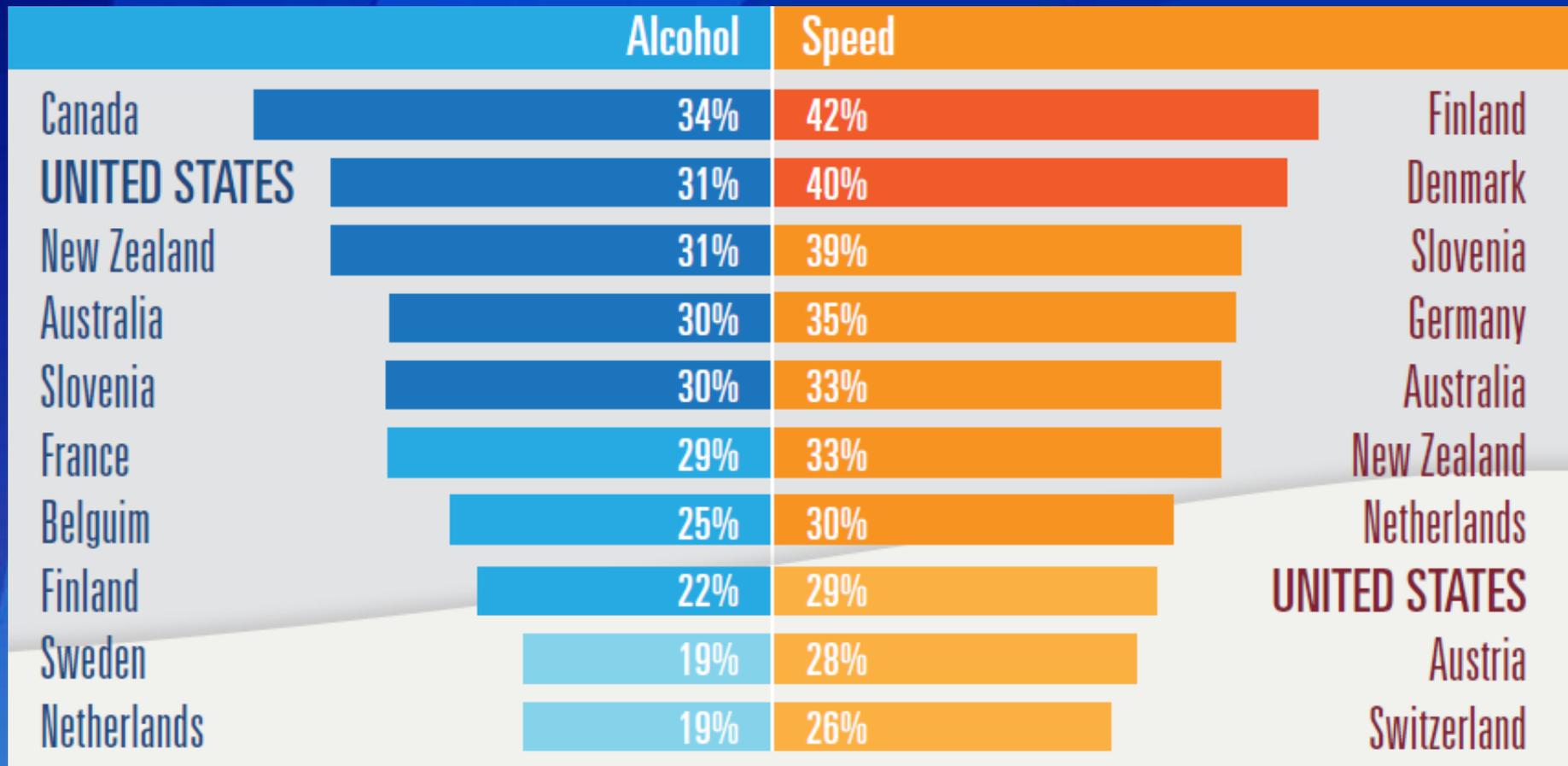
□ 100 million miles traveled

- United States: 1.10
 - Fifth-highest rate
- Average: 0.85
- Range: Sweden 0.54-1.22 Japan and Spain

□ 10,000 registered vehicles

- United States: 1.24
 - Highest rate
- Average: 0.68
- Range: Finland 0.44--1.04 Belgium

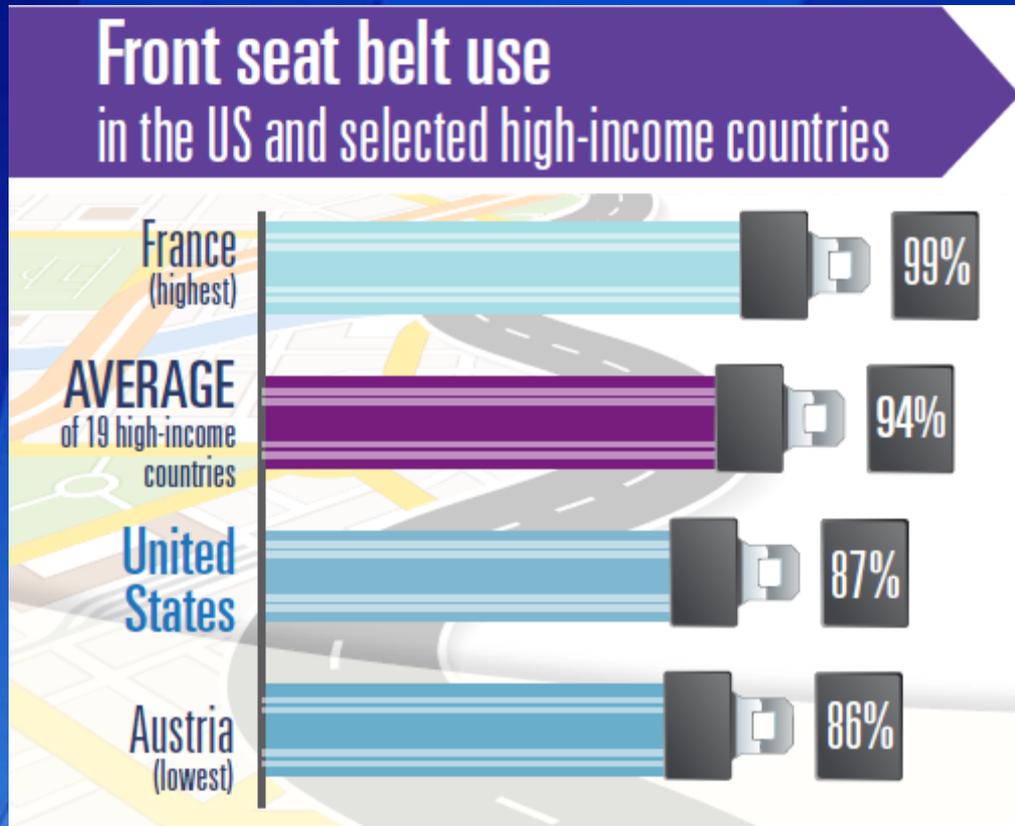
Countries with the Highest Percentage of Crash Deaths Involving Alcohol or Speed



19 countries reported the percentage of deaths involving alcohol and 15 countries reported the percentage of deaths related to speeding.

SOURCES: WHO Global Status Report on Road Safety 2015; Organisation for Economic Co-operation and Development/International Transport Forum; IRTAD Road Safety Annual Report 2015.

National Seat Belt Use



Rear seat belt use

- ❑ **United States: 78%**
 - 13/18 reporting
- ❑ **Germany: 97%**
- ❑ **Austria: 65%**
- ❑ **Average: 82.1%**

Among US occupant deaths

- ❑ **49% unrestrained**



CONCLUSIONS

Progress Made, More to Do

- ❑ **31% reduction in US crash death rate 2000 to 2013**
 - 90 people killed each day and thousands injured
 - Resulting in hundreds of millions of dollars in direct medical costs
- ❑ **Compared with 19 other high-income countries, the US:**
 - Most motor vehicle crash deaths per 100,000 population and per 10,000 registered vehicles
 - Second-highest percentage of alcohol impaired driving deaths
 - Third-lowest national front seat belt use
 - Lowest percentage decline in the rate of crash deaths 2000 to 2013

What Can Be Achieved

If the United States had the same motor vehicle crash death rate as:

- ❑ **Belgium (second-highest death rate)**
 - 12,000 fewer lives would have been lost in 2013 and an estimated \$140 million in direct medical costs would have been averted
- ❑ **The average in the 19 comparison countries**
 - 18,000 fewer lives would have been lost and an estimated \$210 million in direct medical costs would have been averted.
- ❑ **Sweden (the best performing country)**
 - At least 24,000 fewer lives would have been lost and an estimated \$281 million in direct medical costs would have been averted

We Know What Works: Immediate Impact

☐ Restraint use

- Primary enforcement seat belt laws that cover occupants in all seating positions
- Car seats and booster seats for motor vehicle passengers through at least age 8 years

☐ Alcohol-impaired driving

- Publicized sobriety checkpoints
- Ignition interlocks for all convicted offenders
- Having lower blood alcohol concentration limits
- Maintaining and enforcing the minimum legal drinking age of 21

Learn More

- ❑ Vital Signs:
www.cdc.gov/vitalsigns
- ❑ Prevention Status Reports:
www.cdc.gov/psr
- ❑ CDC's MV PICCS:
www.cdc.gov/motorvehiclesafety/calculator
- ❑ State Fact Sheets
www.cdc.gov/motorvehiclesafety/statecosts
www.cdc.gov/motorvehiclesafety/seatbelts/states.html
www.cdc.gov/motorvehiclesafety/impaired_driving/states.html
- ❑ Tribal Road Safety:
www.cdc.gov/motorvehiclesafety/native

CDC Vital Signs™
JULY 2016

Motor Vehicle Crash Deaths

How is the US doing?

Reducing motor vehicle crash deaths was one of the great public health achievements of the 20th century for the US. However, more than 32,000 people are killed and 2 million are injured each year from motor vehicle crashes. In 2013, the US crash death rate was more than twice the average of other high-income countries. In the US, front seat belt use was lower than in most other comparison countries. One in 3 crash deaths in the US involved drunk driving, and almost 1 in 3 involved speeding. Lower death rates in other high-income countries and a high percentage of risk factors in the US suggest that we can make more progress in reducing crash deaths.

Drivers and passengers can:

- Use a seat belt in every seat, on every trip, no matter how short.
- Make sure children are always properly buckled in the back seat in a car seat, booster seat, or seat belt, whichever is appropriate for their age, height, and weight.
- Choose not to drive while impaired by alcohol or drugs, and help others do the same.
- Obey speed limits.
- Drive without distractions (such as using a cell phone or texting).

*Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Japan, Netherlands, New Zealand, Norway, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Want to learn more?
www.cdc.gov/vitalsigns/motor-vehicle-safety

90
About 90 people die each day in the US from crashes—resulting in the highest death rate among comparison countries.*

31%
US crash deaths fell 31% compared to an average of 56% in 19 other high-income countries* from 2000-2013.

18,000
Over 18,000 lives could be saved each year if US crash deaths equaled the average rate of 19 other high-income countries.*

Acknowledgments

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Grant Baldwin, PhD, MPH

David Sleet, PhD, FAAHB

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



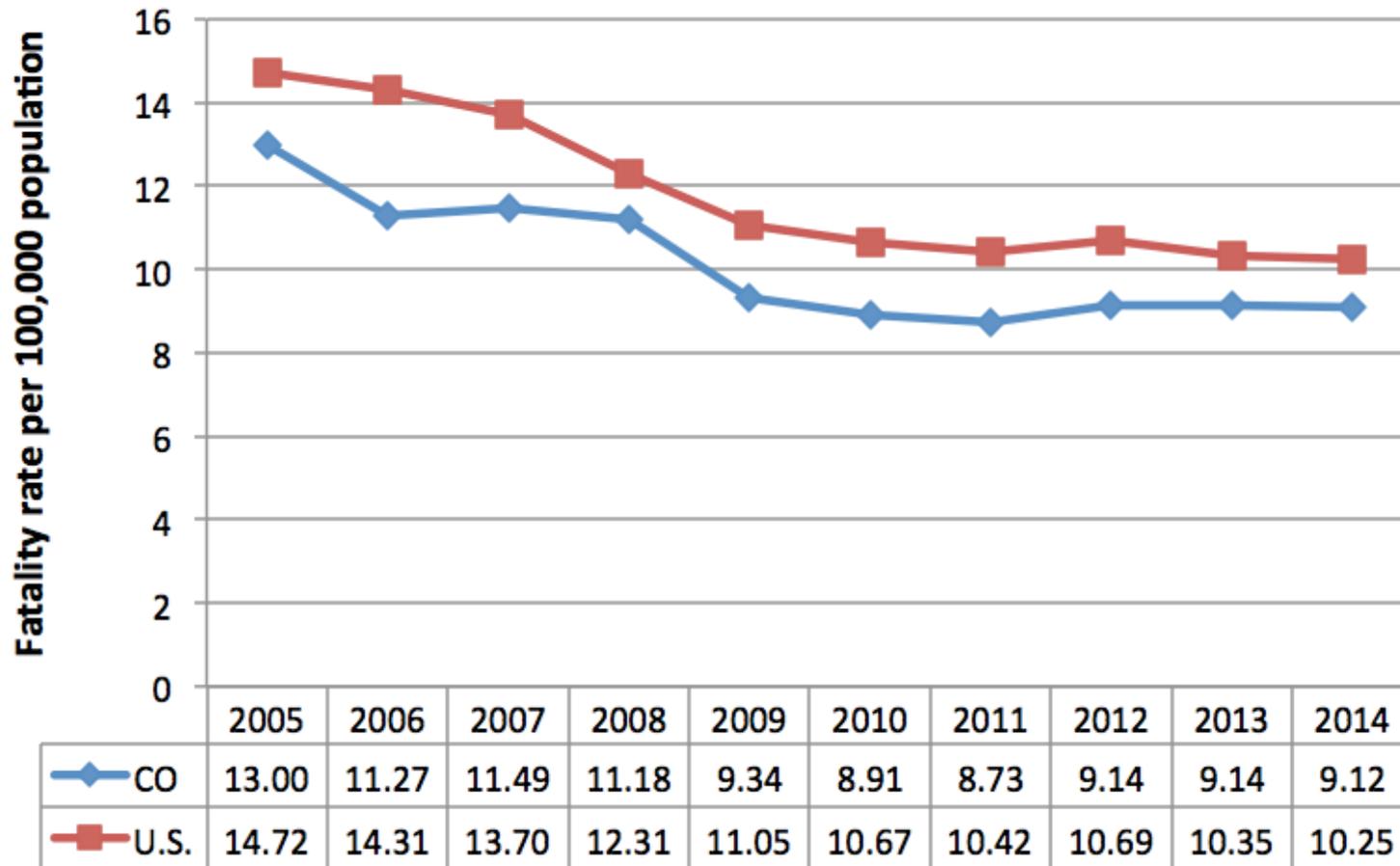
Improving Colorado's Road Health

Lindsey Myers, MPH
Injury and Substance Abuse Prevention Section Manager
July 12, 2016



COLORADO
Department of Public
Health & Environment

Motor Vehicle Fatality Rate in Colorado and the US, 2005-2014



Source: FARS, DOLA, and US Census Bureau



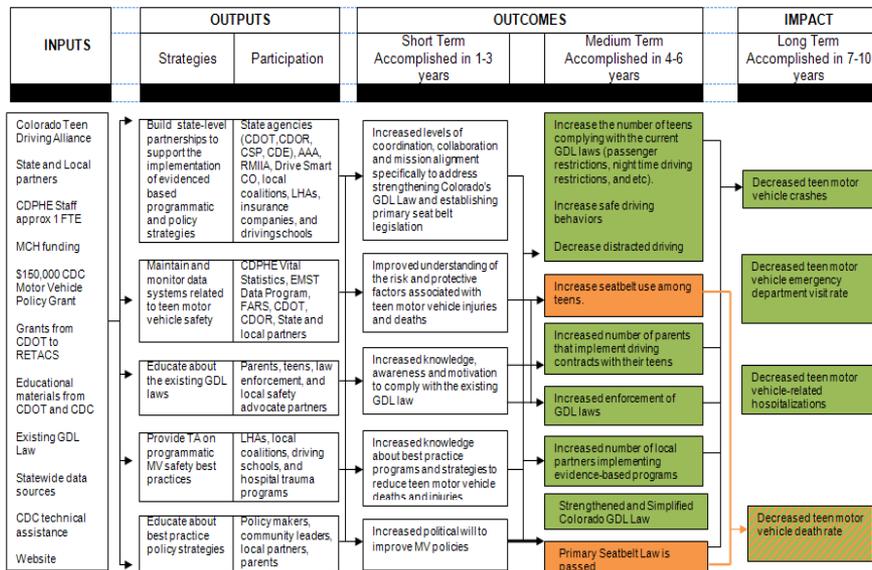
Overview: Colorado's Motor Vehicle Safety Strategies

- Build and maintain state-level partnerships to support the implementation of evidence-based programmatic and policy strategies
- Maintain and monitor data systems
- Educate about existing policies, especially graduated driver licensing (GDL)
- Provide technical assistance to local communities
- Educate about best practice policy strategies

Aligning Work Plans Across Funding Sources and Different Agencies

Teen Motor Vehicle MCH Implementation Team Logic Model March 2012

Overarching Goal: Reduce motor vehicle related injuries and deaths among teens ages 15-19.



LOGIC ASSUMPTIONS	EXTERNAL FACTORS
Strong GDL laws have been proven to be the best way to keep teens safe on the road. Colorado can improve its MV laws by strengthening GDL and passing primary seatbelt legislation. Passing primary seatbelt legislation would make enforcing the teen seatbelt laws easier.	Changes to the GDL law are proposed by different groups nearly every legislative session, which means there is always a possibility that it will be weakened. There is little political will to pass primary seatbelt legislation.
EVALUATION FOCUS - OUTPUTS	EVALUATION FOCUS - OUTCOMES
New partnerships developed, reach of policy training efforts, local communities working on TMV.	Political will for policy changes; the extent to which policies align with best practice.

MOVING TOWARDS ZERO DEATHS

COLORADO STRATEGIC HIGHWAY SAFETY PLAN

prepared for
Colorado Department of Transportation

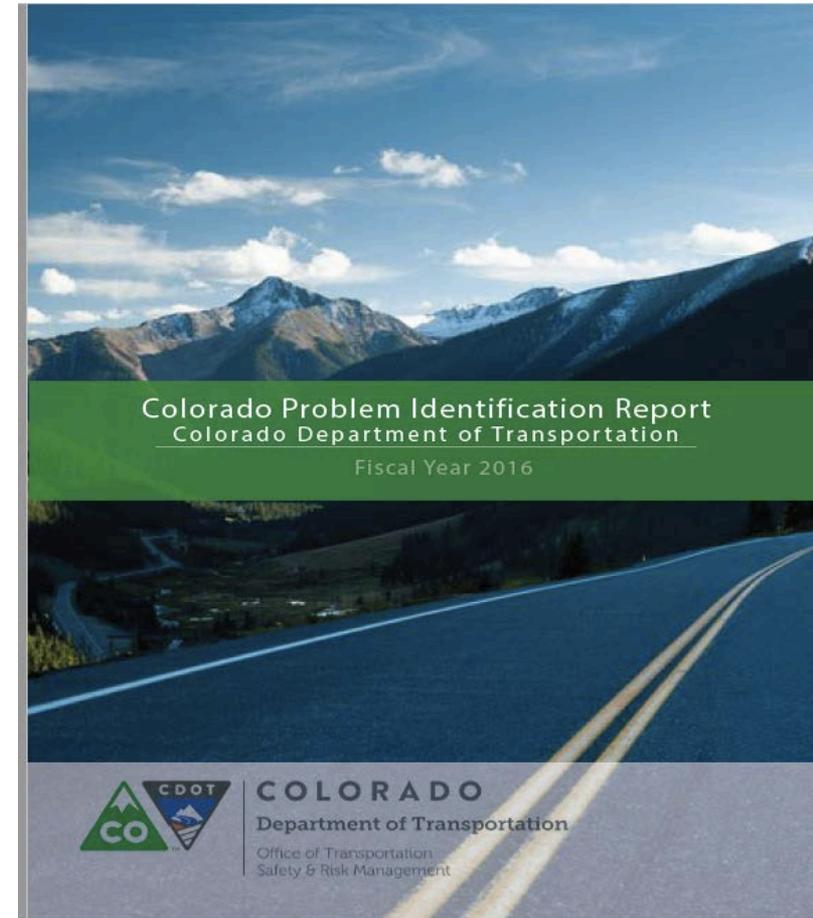
October 2014

CAMBRIDGE SYSTEMATICS

CDOT COLORADO
Department of Transportation

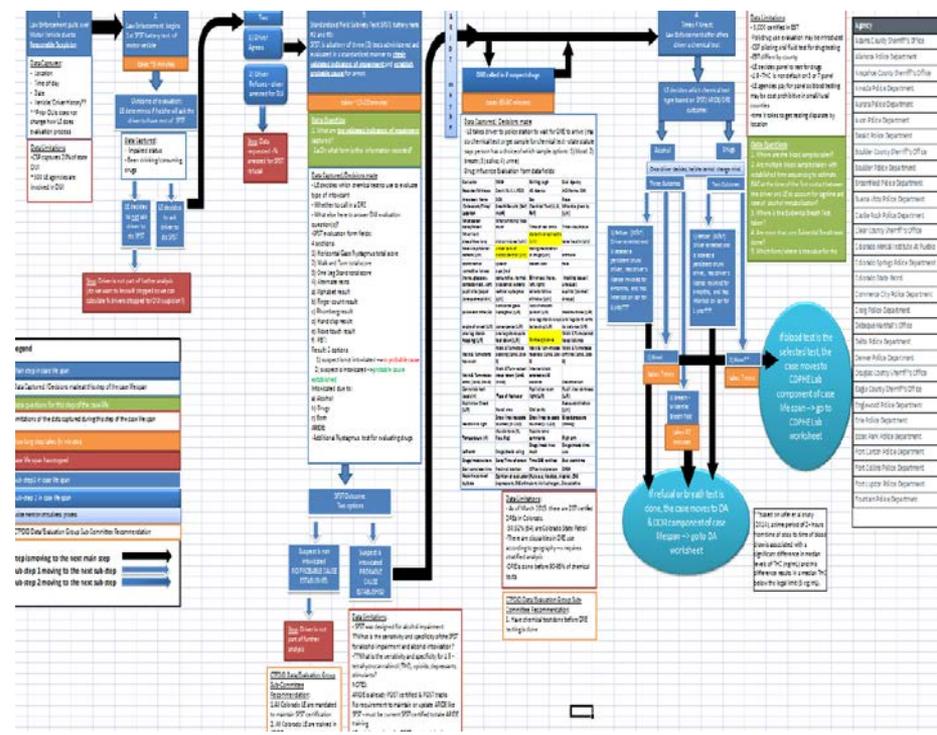
Collaboration with the Colorado Department of Transportation

- The Colorado Department of Transportation funds a full-time motor vehicle epidemiologist at the Colorado Department of Public Health and Environment
- Enhances ability to take data to action
- Facilitates more robust analysis of motor vehicle crashes from different sources



Data Linkage Work

- Gaining an understand of how each piece of traffic data is collected and used
- Colorado State Traffic Records Advisory Council (STRAC) is prioritizing developing a process to integrate all of the traffic information databases, including crash, EMS/injury surveillance, citation, and judicial data bases
- Exploring possibility of a unique identifier across data systems





Data Improvement Process

- Colorado DRIVES Project: Colorado Department of Revenue is updating driver license system and electronic crash reporting system
- Updating Colorado Traffic Accident Reporting Form
 - Especially important to track impaired driving
 - Colorado law does not differentiate alcohol DUIs and drug DUIs, making it hard to assess the impact Colorado's retail marijuana law has had on impaired driving
- Better collaboration between state agencies—MOUs across all state agencies may lead to the development of a de-identified analytic data set

Technical Assistance to Local Communities

- The Colorado Department of Transportation funds 40 to 60 grantees a year to implement motor vehicle safety projects.
- The Colorado Department of Public Health provides technical assistance to these communities on grant writing, using data, evidence-based strategies, and evaluation

Year 2 Action Plan October 1, 2016-September 30, 2017 [Enter Agency Name] [Enter Emphasis Area]			
3-Year Project Goal(s):			Evaluation of Goal(s)
Goal 1			
Goal 2			
Goal 3			
Objective 1:			
Evaluation of Objective 1:			
Objective 1 Activities	Target Completion Date	Person Responsible	Evaluation of Activities
1.1:			
1.2:			
1.3:			
1.4:			
1.5:			
1.6:			
1.7:			
1.8:			
1.9:			



Evidence-Based Motor Vehicle Policies

- The Colorado Department of Public Health and Environment leads the Colorado Teen Driving Alliance, which has been responsible for educational efforts related to the graduated driver's license system (GDL).
- Most recent version of GDL passed in 2004 and since then Colorado has seen over a 69% reduction in teen motor vehicle fatalities.
- The Colorado Motor Vehicle Prevention Status Report indicate, some Colorado laws are not aligned with best practice (e.g., booster seat, portions of GDL, seat belt)



Recent Policies Enacted in Colorado: Felony DUI Bill

- Passed in 2015 legislative session, the bill went into effect August 5, 2015.
- Similar legislation failed in the five previous legislative sessions.
- Original version imposed a felony charge on the third arrest for the most egregious cases, but final version makes a DUI a felony if the violation occurred after three or more prior convictions for DUI, SUI *per se*, or DWAI.
- Includes alcohol and/or drugs.



Future Efforts

- Colorado recently formed a new Seat Belt Task Force.
- Currently working on reframing messages and data related to the effectiveness of seat belts to prevent injury and death.
- Colorado Department of Transportation and Colorado State Patrol will likely put primary seat belt legislation on their legislative agendas for the 2017 session.



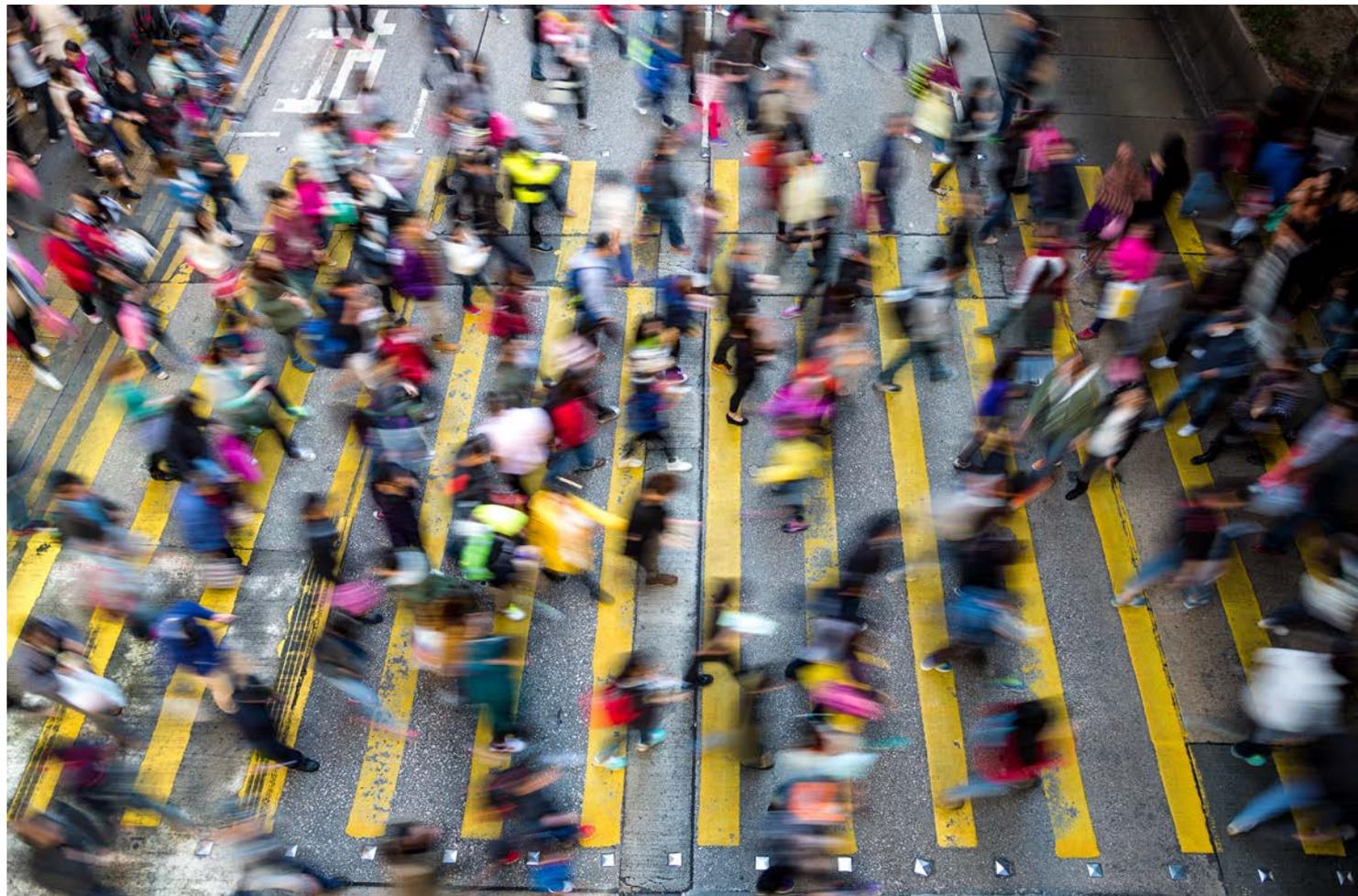
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COLORADO
Department of Public
Health & Environment

Growing the Vision for Safe Mobility: Vision Zero

July 12, 2016



Leah Shahum, Director

VISION 4 FUTURE NETWORK

Vision Zero Cities

A Vision Zero City meets the following minimum standards:

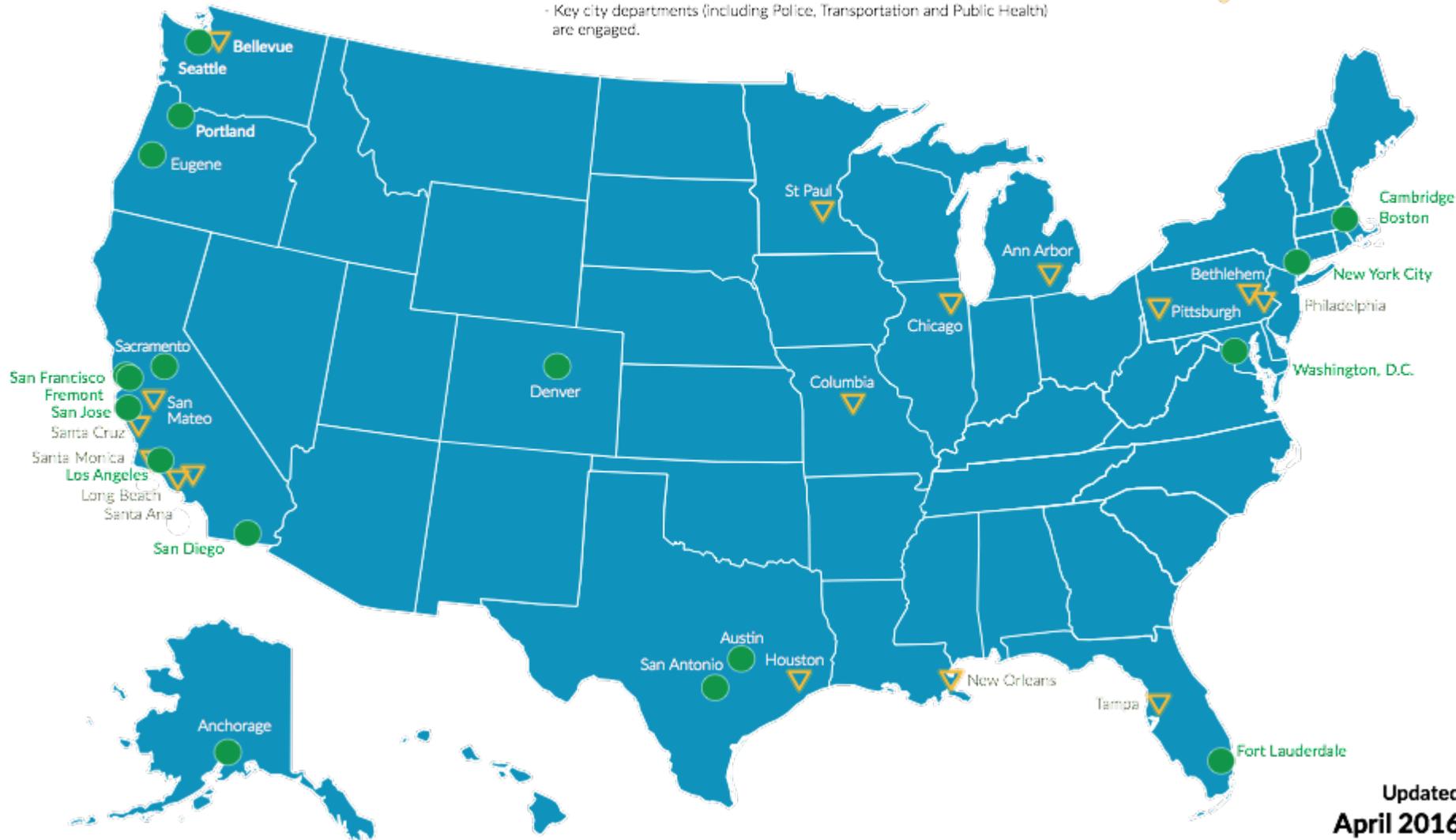
- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health)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



Vision Zero City



Considering Vision Zero



Updated
April 2016



- ◆ Acknowledges that traffic losses are *preventable*
- ◆ Takes *systems approach* to prevention
- ◆ Is data-driven
- ◆ Addresses all road users (i.e., moves out of silos)
- ◆ Engages diverse, critical stakeholders
- ◆ Brings new URGENCY!

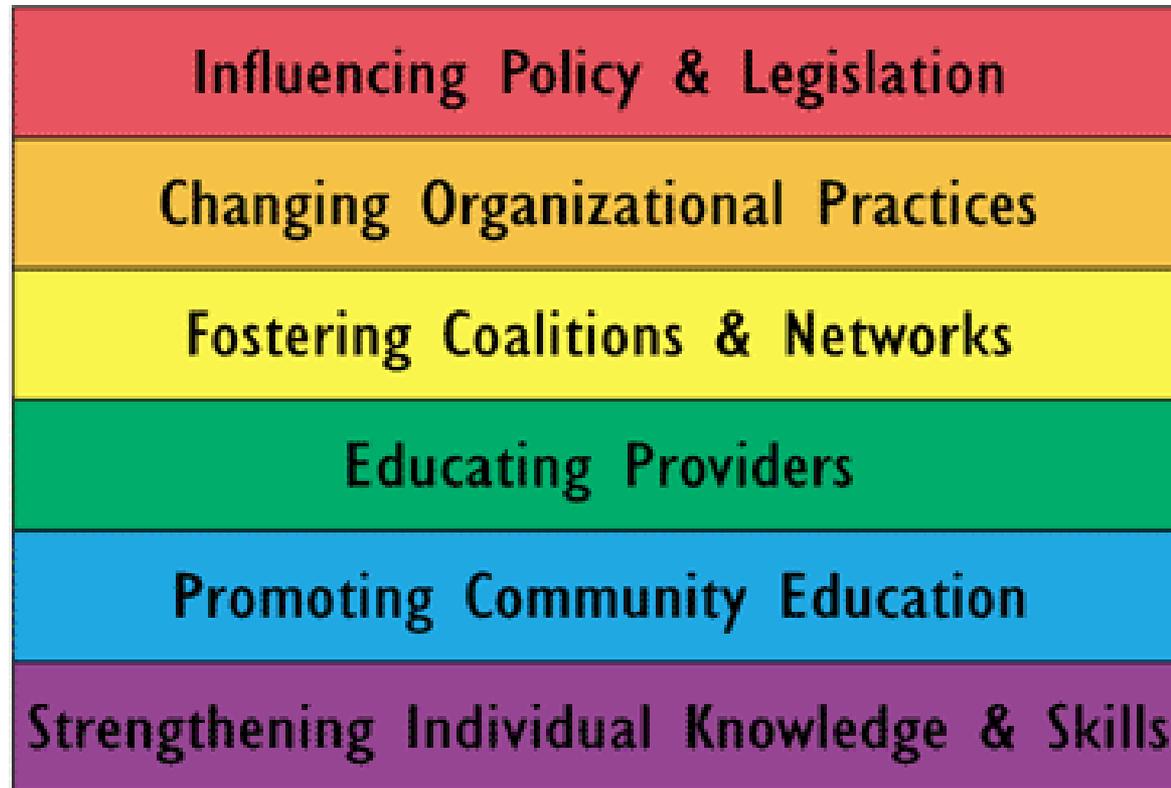
VISION 440 NETWORK

CRASH

ACCIDENT

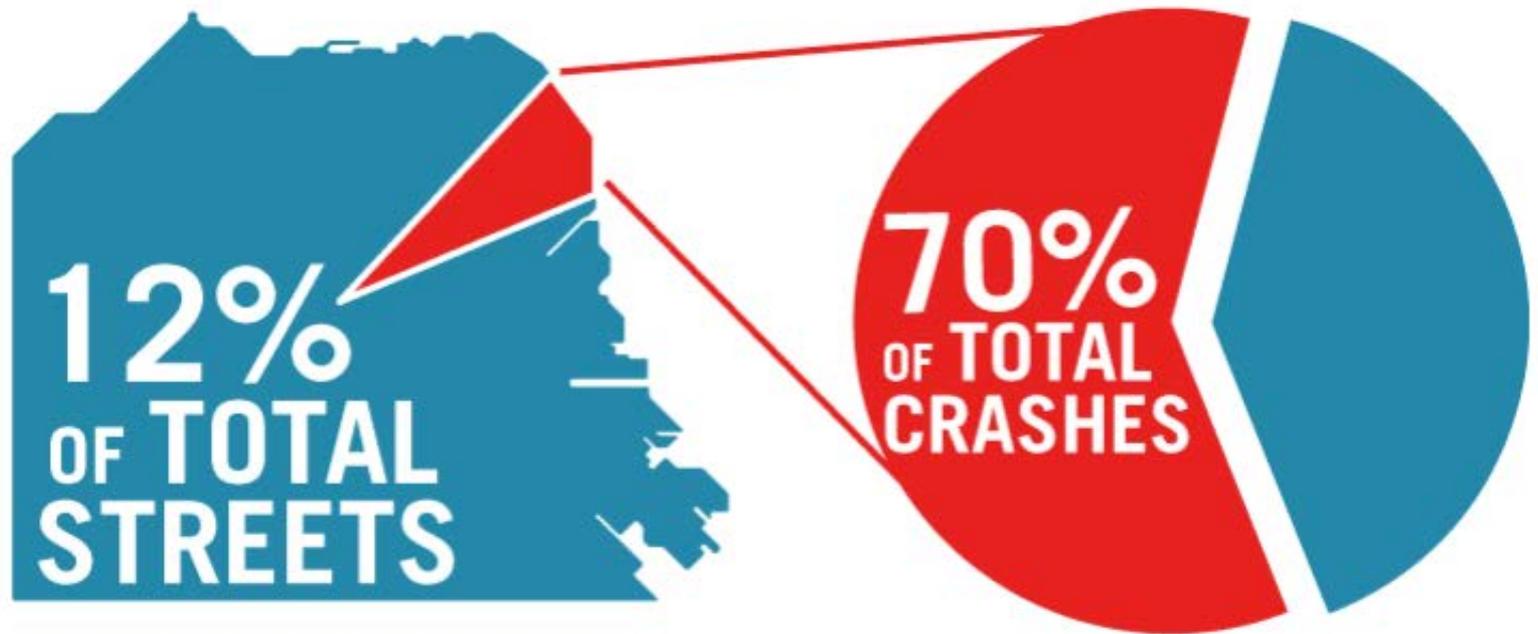
VISION 4 FRONTWORK

The Spectrum of Prevention





HIGH-INJURY STREETS



Disproportionate impact of injury crashes in low-income communities



Governing Magazine

VISION 44:0 NETWORK

9 Components of a Strong Vision Zero Commitment

Based on the experiences of early-adopter cities in the United States, these nine components have proven to be an effective high-level framework for communities considering a Vision Zero commitment. While these are not the only factors to consider, they are critical aspects to ensure a strong and lasting commitment to Vision Zero.

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).



For more visit the Vision Zero Network at visionzeronetwork.org.
Questions or ideas? Contact leah@visionzeronetwork.org.

VISION ZERO NETWORK

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Vision Zero

City of Boston

Vision Zero Task Force



CITY OF BOSTON
Martin J. Walsh



VISION ZERO NETWORK



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Vital Signs interactive buttons and banners

<http://www.cdc.gov/socialmedia/tools/buttons/vitalsigns/index.html>

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Vital Signs Town Hall Teleconference

August 30, 2016

2:00–3:00 pm (EDT)

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