



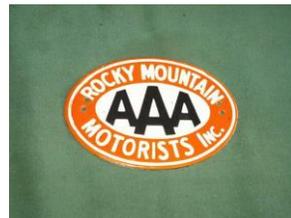
The Road to Zero Deaths: The Modern “Mobility” Conversation

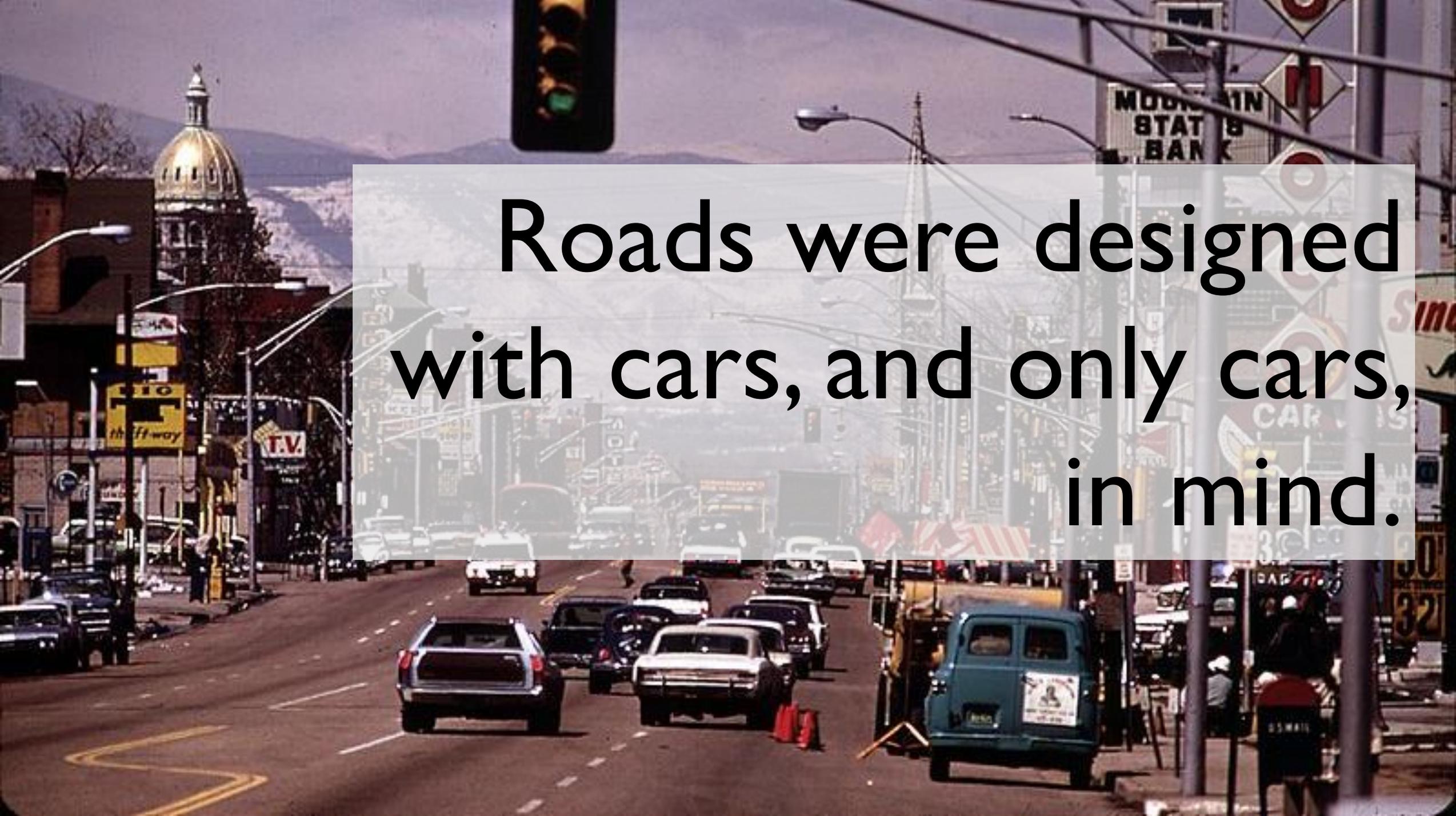
TESTIMONY
BEFORE THE
TRANSPORTATION
LEGISLATION
REVIEW
COMMITTEE

JANUARY 3, 2019



OUR HISTORY



A photograph of a busy city street. In the foreground, a traffic light shows a green light. The street is filled with cars, including a silver SUV and a white sedan. On the right side, there's a blue van and a person walking. In the background, a large building with a golden dome is visible, along with mountains in the distance. The text "Roads were designed with cars, and only cars, in mind." is overlaid on the image in a large, bold, black font.

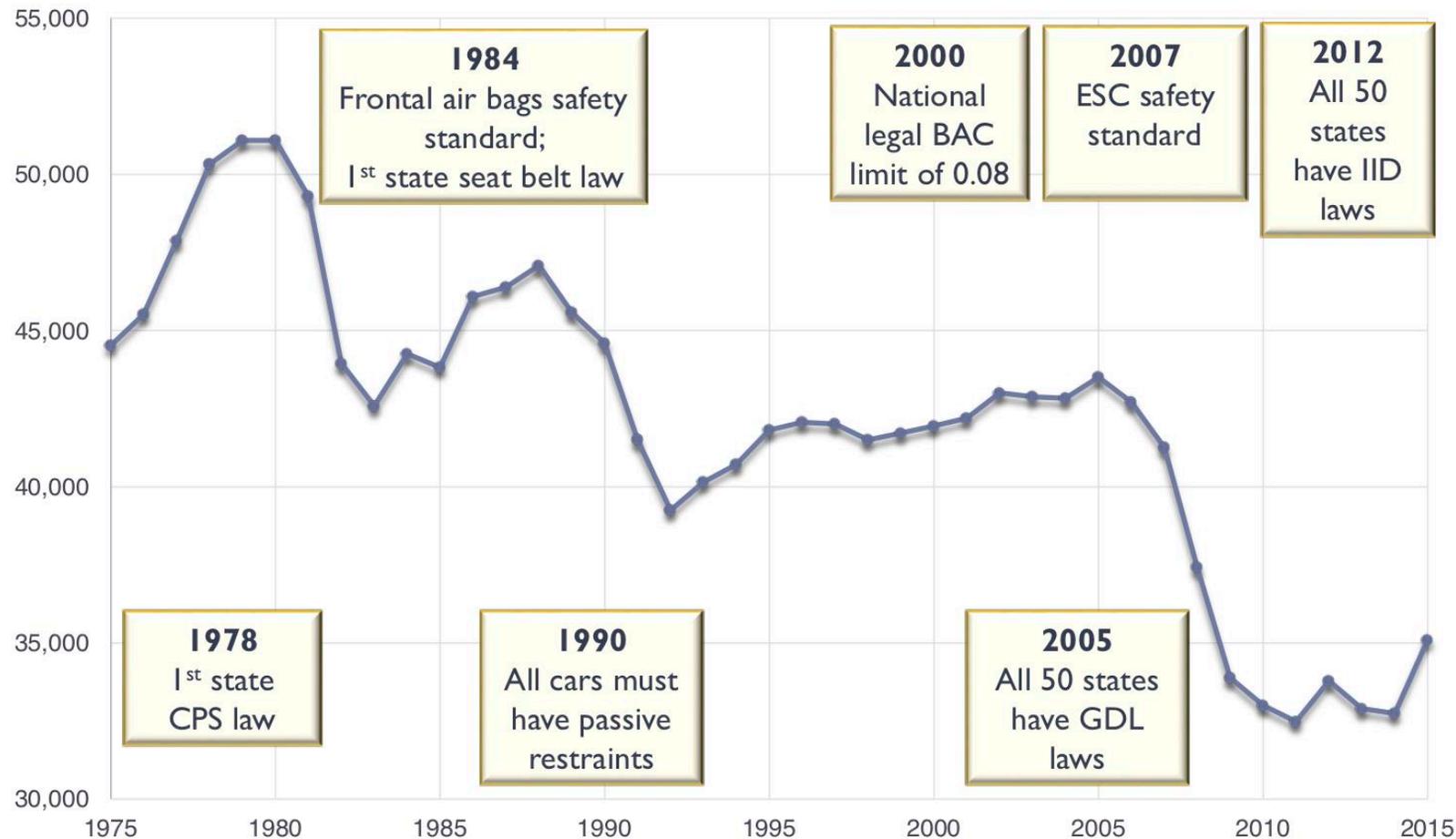
Roads were designed
with cars, and only cars,
in mind.

A photograph of a city street scene. In the foreground, a cyclist wearing a blue jacket and a black backpack is riding a bicycle from left to right. The background features several buildings, including a large white building with 'Anikors Hotel' on top and a brick building with 'Chevyenne Hotel' on top. A snow-capped mountain is visible in the distance. The sky is clear and blue. The text 'The way we get around has changed and is changing.' is overlaid on the top half of the image.

The way we get around
has changed and is
changing.

Our thinking hasn't, yet.

Motor Vehicle Fatalities, 1975-2015



Source: 1975-2015 FARS data

The good news is that the number of fatal crashes since 1975 has declined due to a variety of factors:

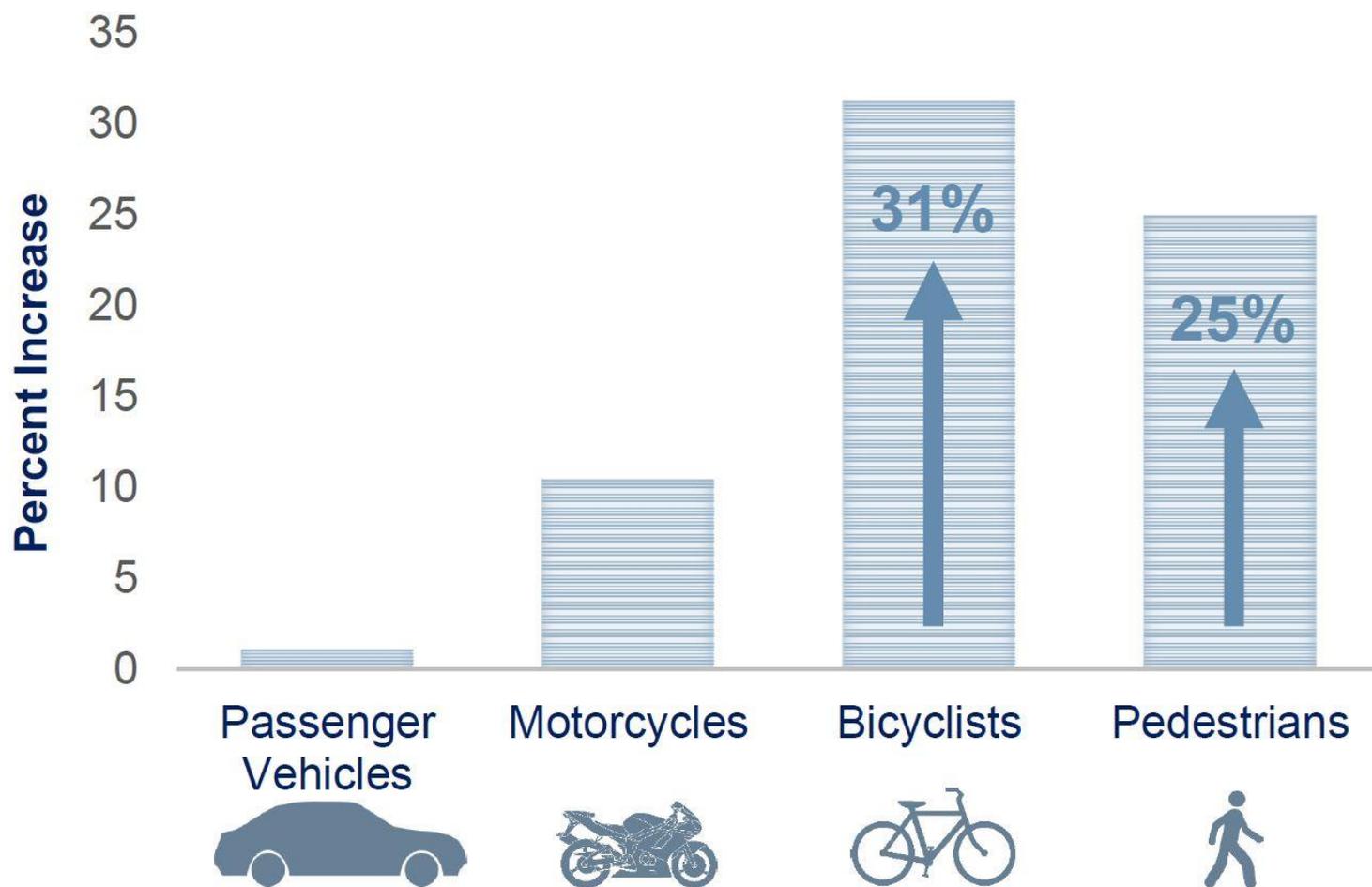
- Stronger laws
- Changing Behavior
- Safer Vehicles

The bad news is that fatal crashes have increased over the last few years.

There were 37,461 fatalities in 2016. It's the highest number since 2008.

That's a fatal crash every 14 minutes.

Motor Vehicle Fatalities, 2010-2015

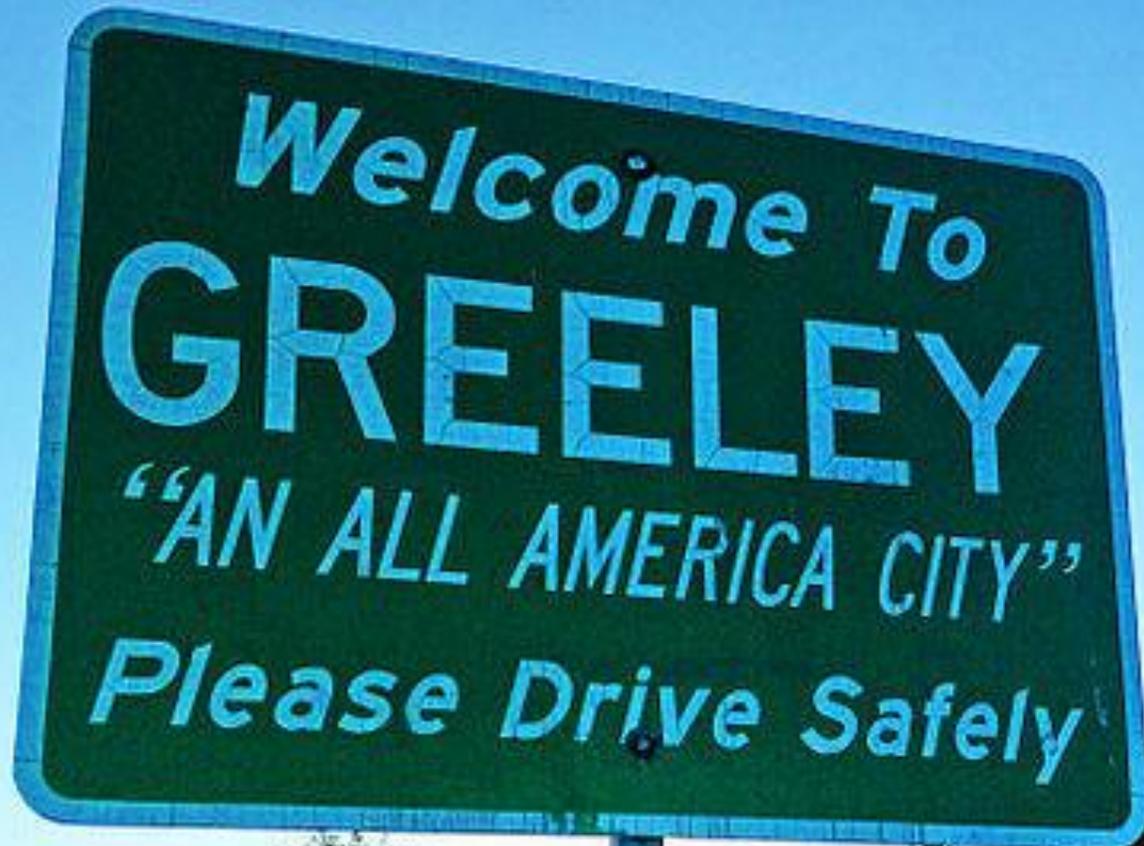


Source: 2001-2015 FARS data

In 2016, bicyclist and pedestrian fatalities hit their highest levels in 20 years.

Of all deaths, bicycle and pedestrians have also increased the most since 2010.

Changing demographics and year-to-year changes in weather may have *something* to do with these numbers, **but...**



Roads are designed for cars.

Inevitably, that leads to conflict between cars and everybody else.

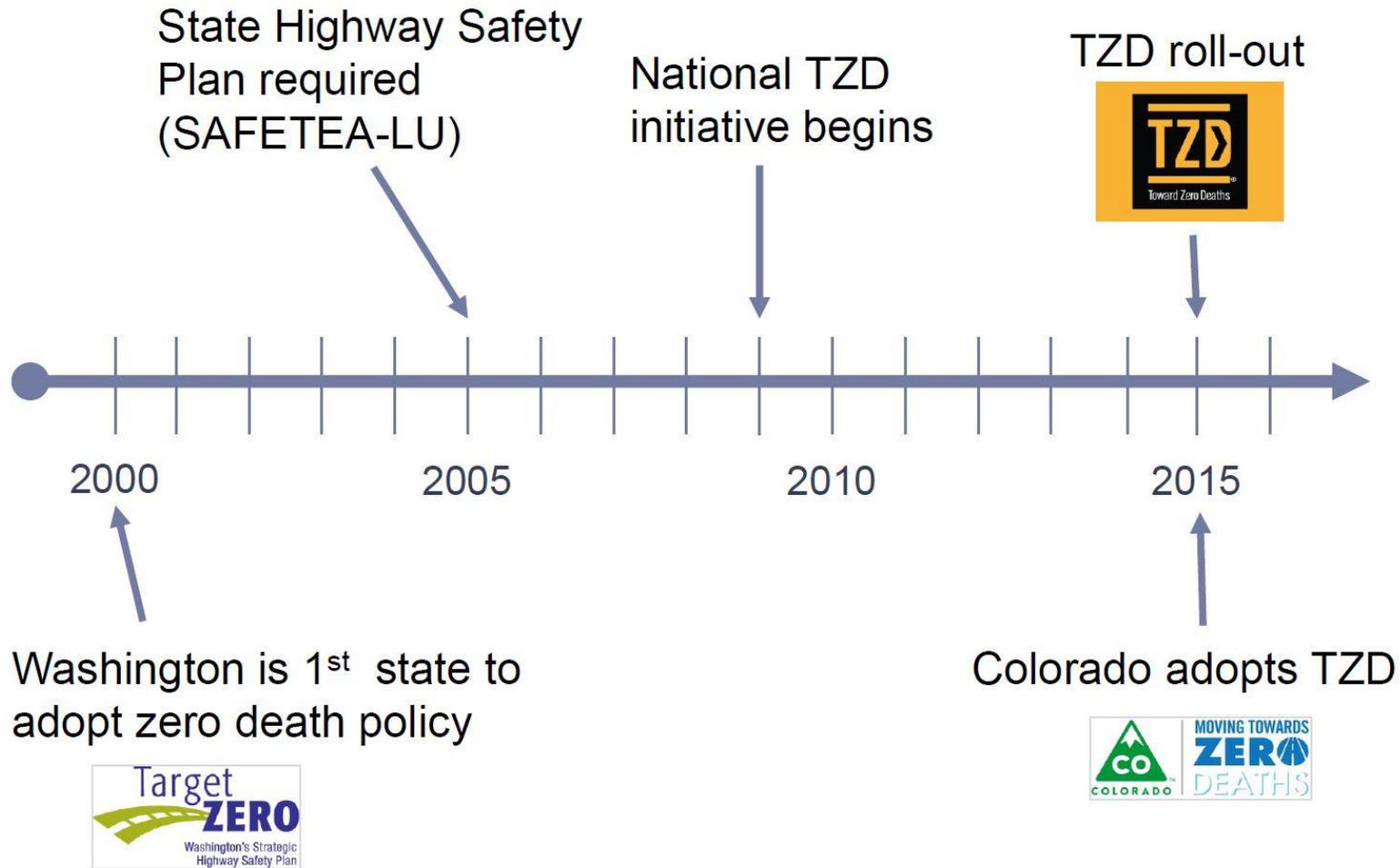
Mobility = An understanding that there are a lot of ways to get around, and that everybody has the right to get around safely.



Setting a goal of
zero people killed:

- Toward Zero Deaths
- Vision Zero Initiative
- Road to Zero
- Target Zero
- Pedestrian Plans

Zero Death Movement



According to a 2015 survey from the AAA Foundation for Traffic Safety, 4 in 5 drivers support their state adopting a vision to reduce the number of people killed in crashes to zero.

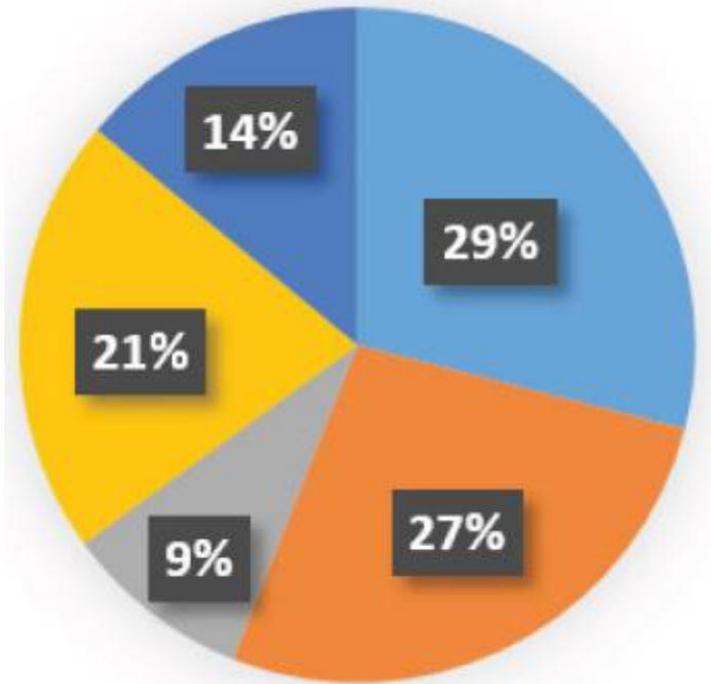
Translation? It's not motorist vs other road users. We all realize that we ARE those other road users, at times.

Vision Zero Tenets

1. Loss of life is not an acceptable price to pay for mobility.
2. 94 percent of crashes involve human choice or error. Humans are fallible. You can't get around that.
3. Instead of faulting road users such as drivers or pedestrians, we should address infrastructure design, vehicle technology, and enforcement.



Vision Zero: Common Elements



- ✓ Infrastructure
- ✓ Culture
- ✓ Technology

Source: 2015 FARS data

What do Vision Zero strategies address?

Changes to the built environment through design and infrastructure

Changes to the traffic safety culture

New technologies employed by cities, as well as emerging technologies in vehicles.

Vision Zero: Infrastructure



What changes?

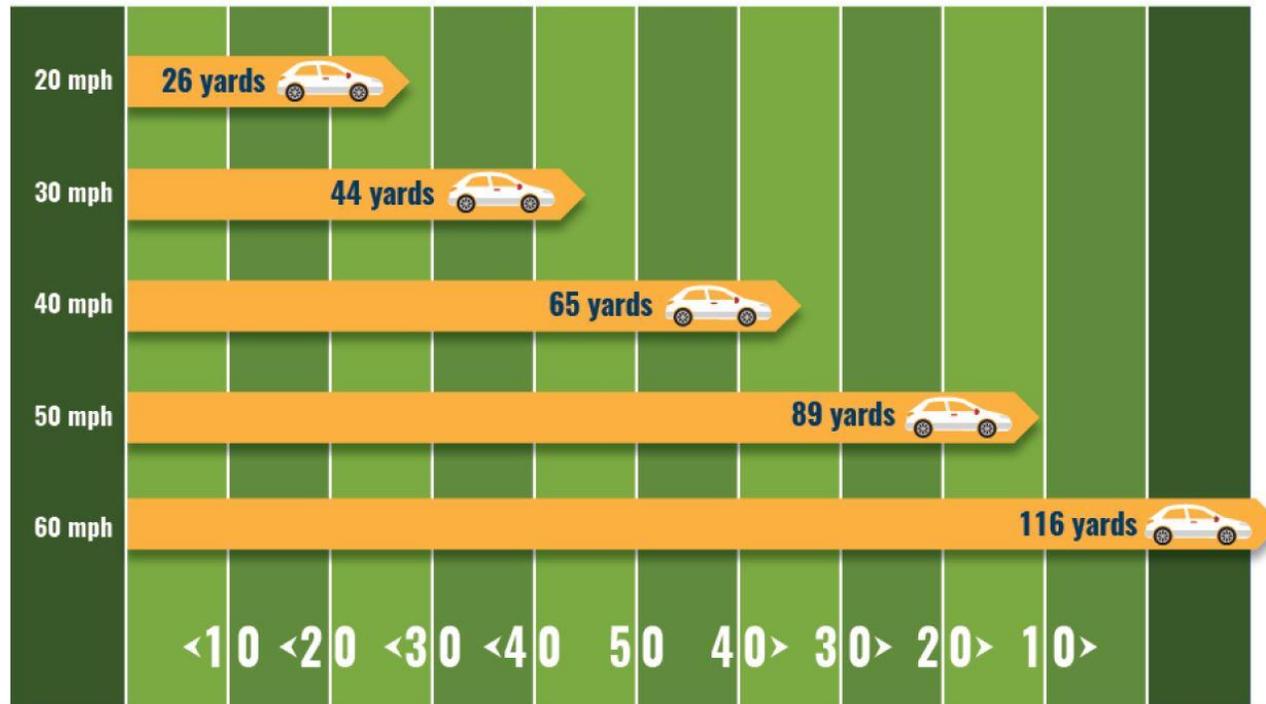
Re-design roadways to reduce speed, reduce conflicts, or for safer movement.

In urban areas, this may involve road diets, road markings, or signal timing.

In less dense areas, it may involve sidewalks/share-use paths or better lighting.

Infrastructure: Speed & Crash Risk

How Long Does It Take to Stop?



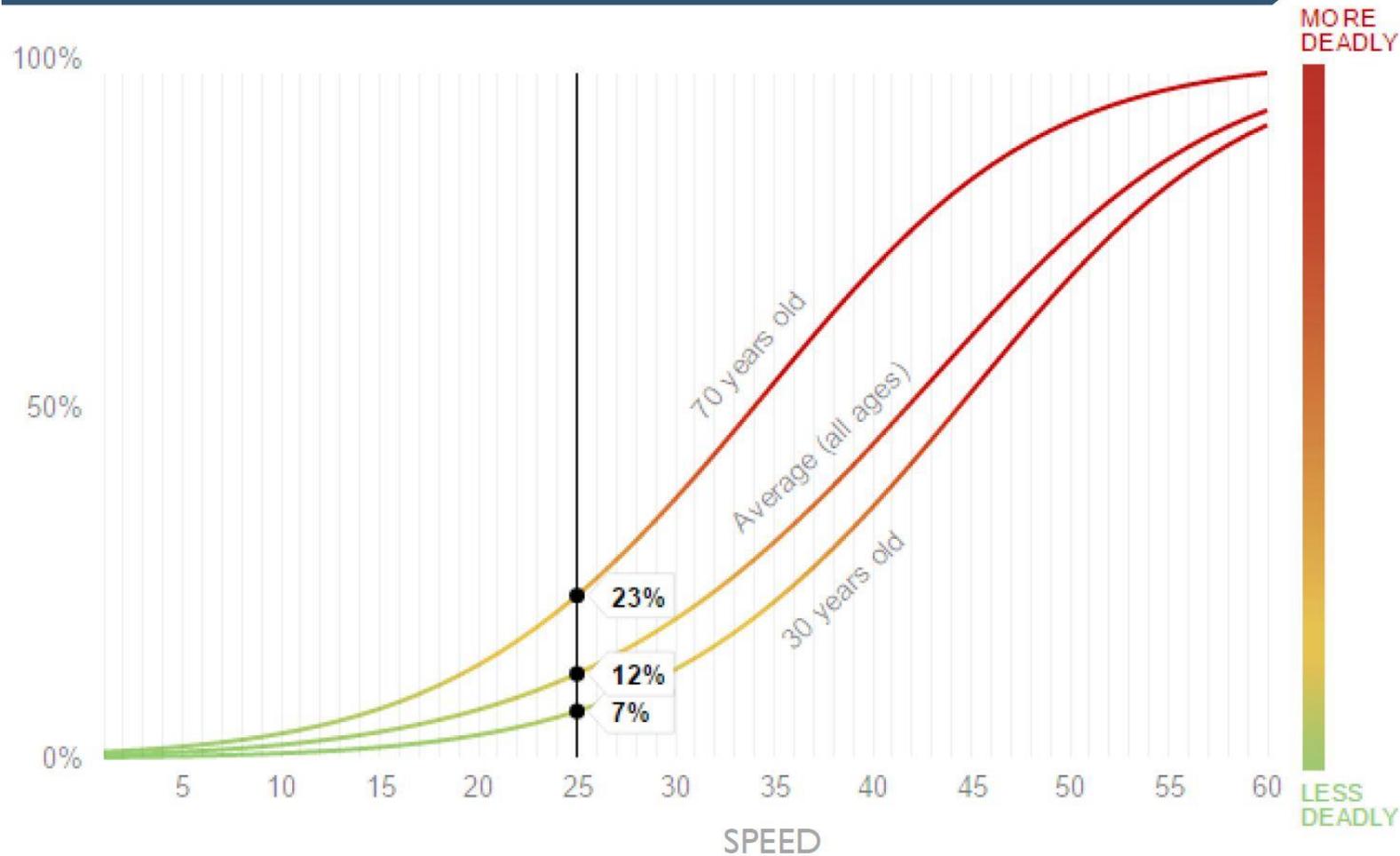
This graphic illustrates the average minimum stopping distances for each speed traveled on smooth, dry pavement with a clear path ahead.

Speed

One-third of traffic fatalities related to speed.

Speed increases **crash risk**, as response time decreases and stopping distances increase with the increasing speed of a vehicle.

Infrastructure: Speed & Pedestrian Risk



Source: AAA Foundation for Traffic Safety; ProPublica

Speed

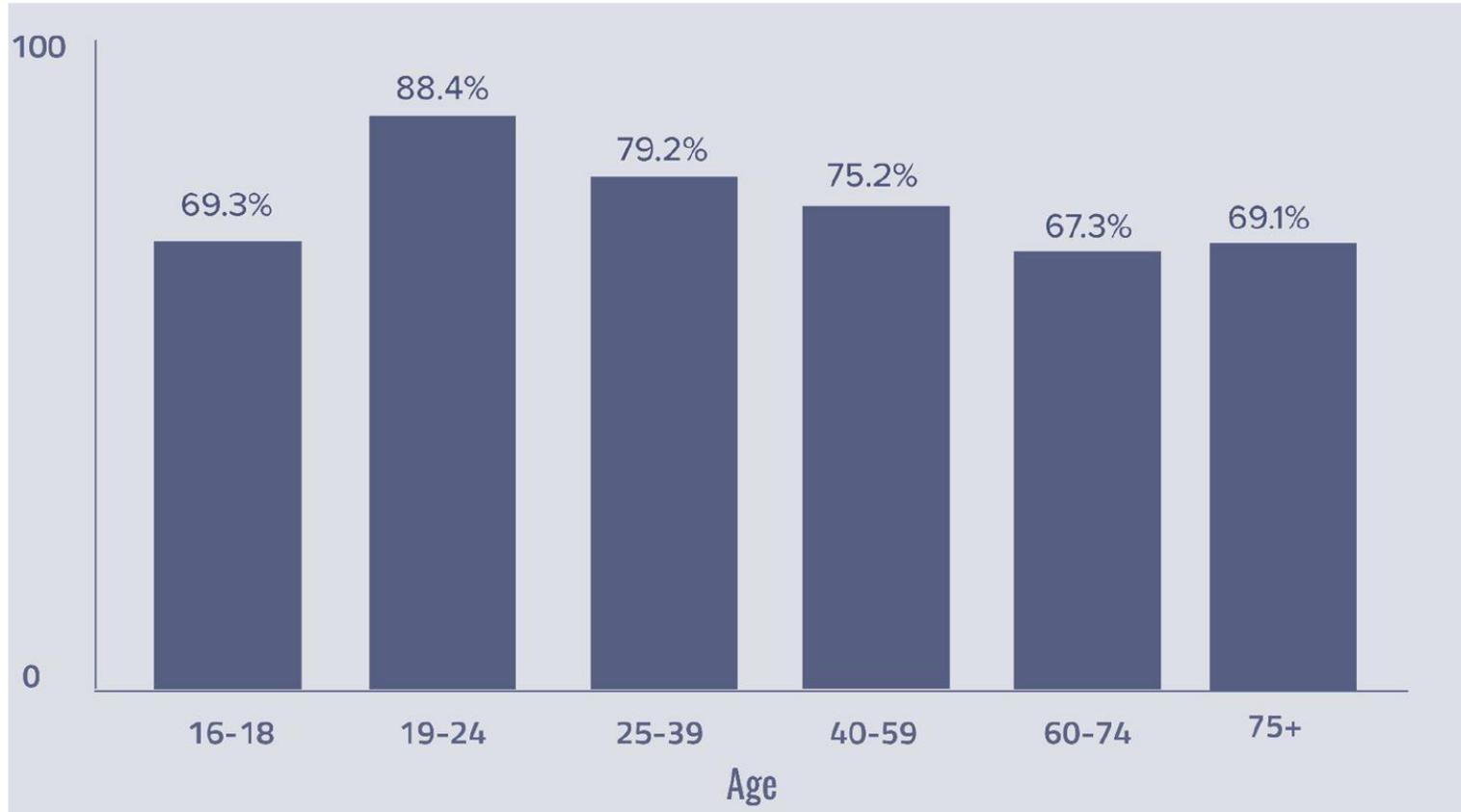
Speed increases crash severity.

This is particularly dangerous for pedestrians.

Struck at 25mph:
12% chance of death

Struck at 45 mph:
60% chance of death

Safety Culture: Dangerous Behavior



Drivers Engaging in at Least One Risky Behavior in Last 30 Days

Source: AAA Foundation for Traffic Safety, 2017

Do as I say, not as I do...

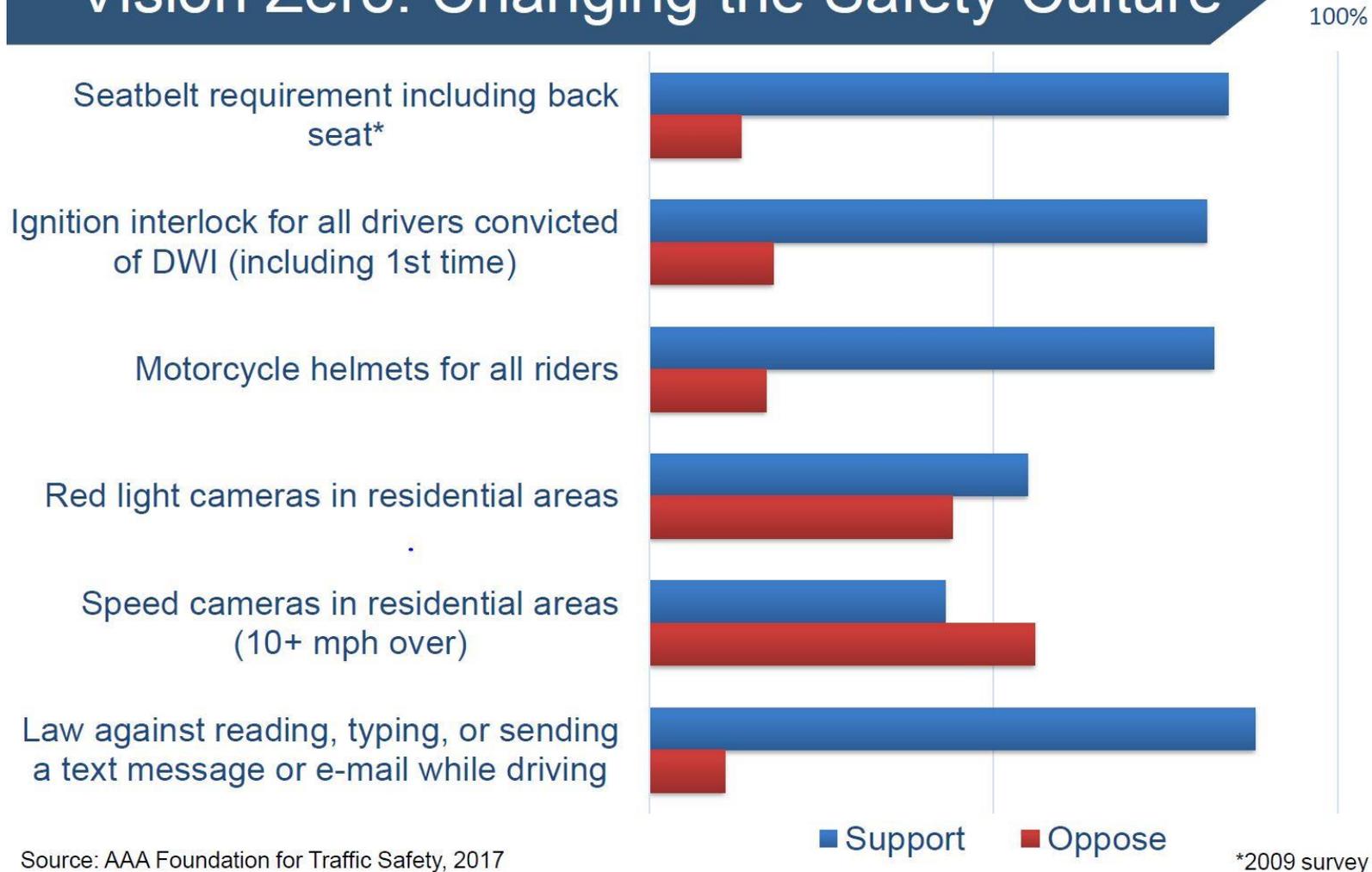
We need to change traffic safety culture – there are always deadly consequences.

Education and public engagement build awareness and develop social norms.

But also, new or stronger laws:

Primary seatbelt
Ignition Interlock
Automated Enforcement

Vision Zero: Changing the Safety Culture

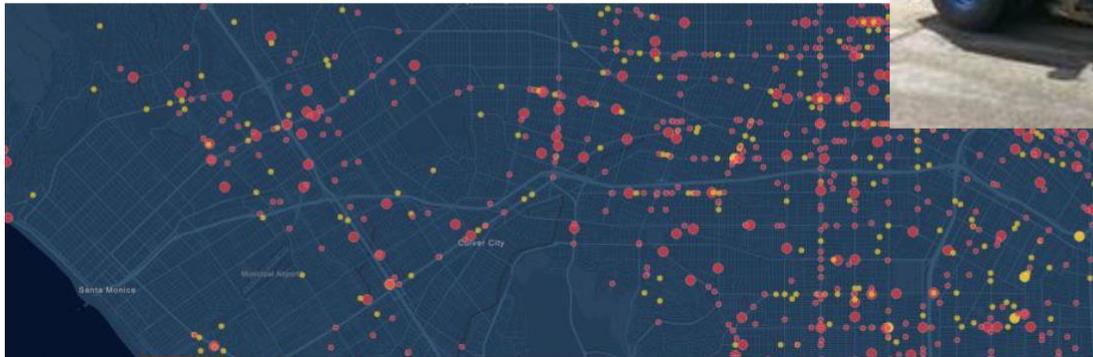


Source: AAA Foundation for Traffic Safety, 2017

**Overwhelming
Public Support
for Most Safety
Measures**

One exception:
Automated
enforcement

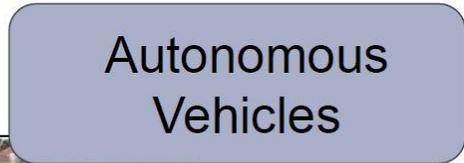
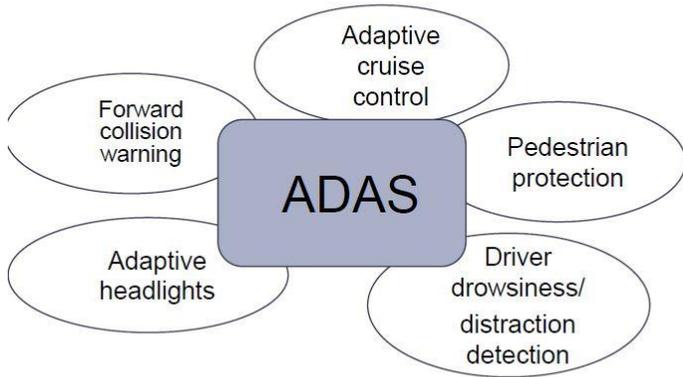
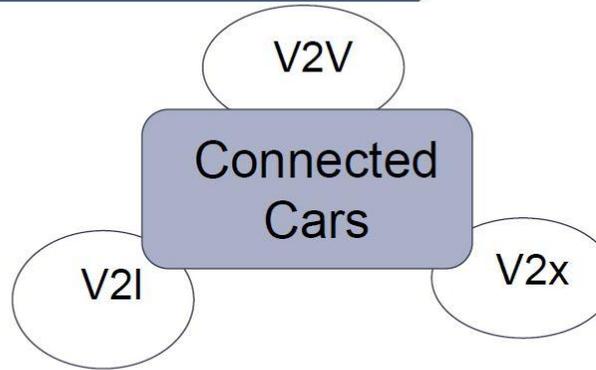
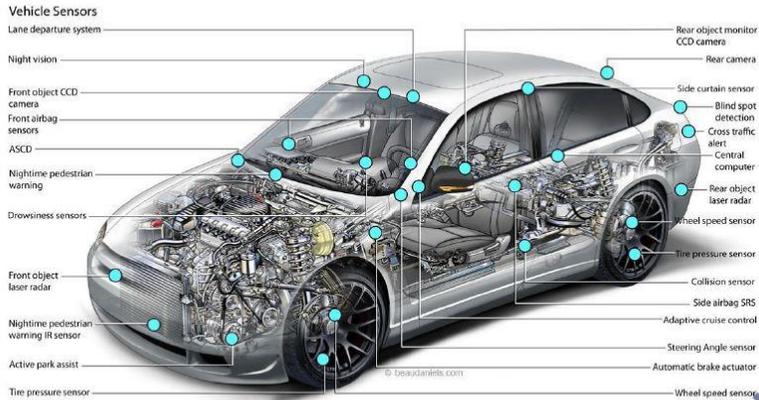
Vision Zero: Technology



Data & Technology

- Accident Web Reporting
- Crowd-sourcing
- Transponders on fleet vehicles
- Vision Zero Compliant Vehicles

Vision Zero: Technology



What about the self-driving car?

- We are a LONG way from autonomous vehicles.
- Current safety tools are an improvement, but still flawed.
- Many drivers don't want these features

Auto club says consumers need to be better educated on distinctions between system types



AAA Says Not All Automatic Braking Systems Are Designed to Prevent Car Crashes

by Kirsten Korosec | @kirstenkorosec | AUGUST 24, 2016, 5:53 PM EDT



Not all systems are designed to prevent accidents



Always look when you change lanes - AAA

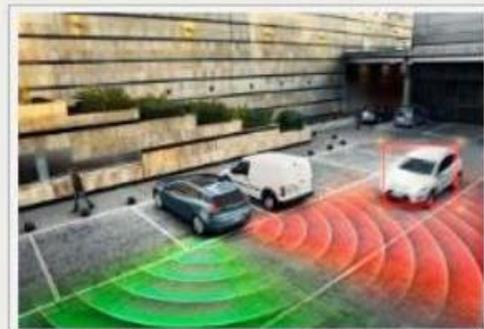
Despite massive improvements in car safety technology, you still need to keep your eyes open.

A new AAA report finds that car safety options work most of the time, but drivers need to be aware of the limitations they have.

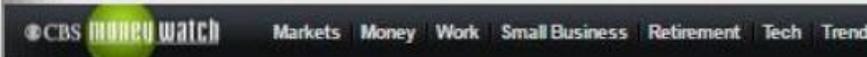


New Cross Traffic Alert Systems Often Fail, Warns AAA

by Paul A. Eisenstein on Dec.10, 2015
A major new safety technology frequently fails to work



An illustration shows how a cross-traffic alert system works, by spotting oncoming traffic.



Would you trust your car to park itself?



AAA

Getting to Zero

1. Unfinished business in shifting the curve
2. Both physical changes to the roadway and cultural changes are needed.
3. Technology shows promise in mitigating crashes and saving lives, but we can't "wait" for technology to solve our problems – that day may never come.

