



#### A Decade of Safety Improvement

# 25% reduction in lives lost





# 35,092



- Overall: 7.2% increase compared to 2014
  - largest % increase since 1966
- Pedestrian fatalities up 9.5%
  - highest since 1996
- Pedalcyclist fatalities up 12.2%
  - highest since 1995

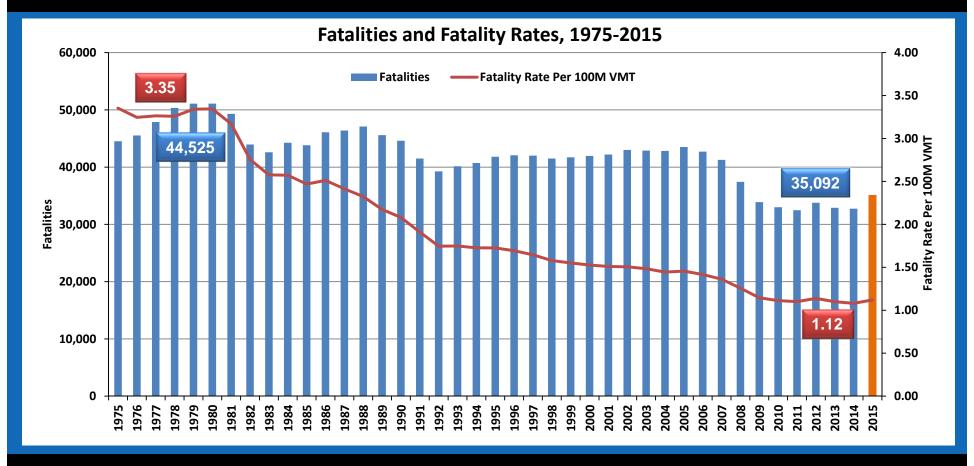




- VMT increased by 3.5%
  - largest % increase since 1992
- Fatality rate increased to 1.12
  - 1.08 in 2014



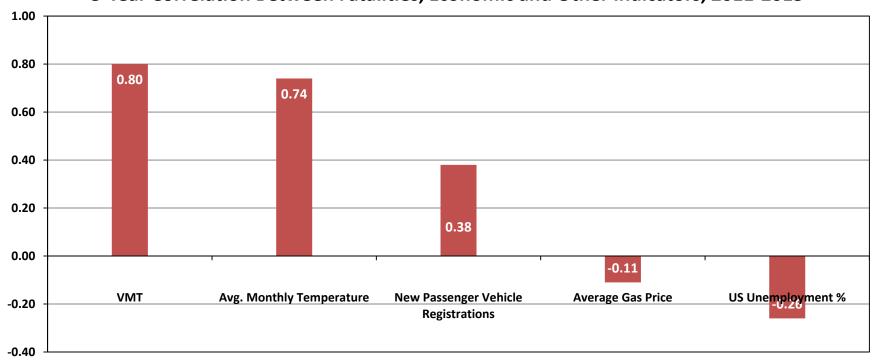




Source: FARS, FHWA



#### 5-Year Correlation Between Fatalities, Economic and Other Indicators, 2011-2015





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#### Roadway Lives Lost = 747 Crash Every Week/l YR



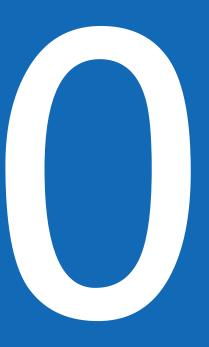


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Crashes Related to a Human Choice or Error



# The Only Acceptable Goal

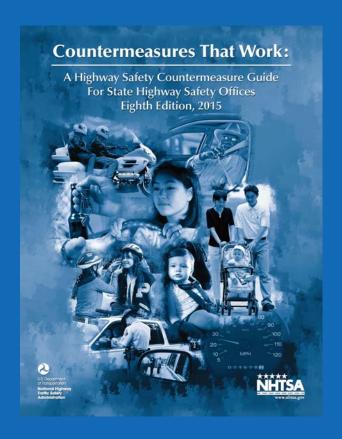


But when? And how?





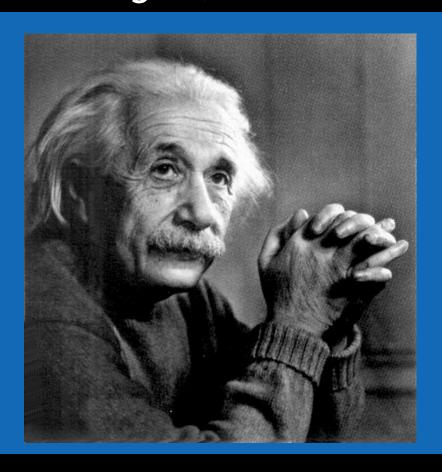
# How do we get there?



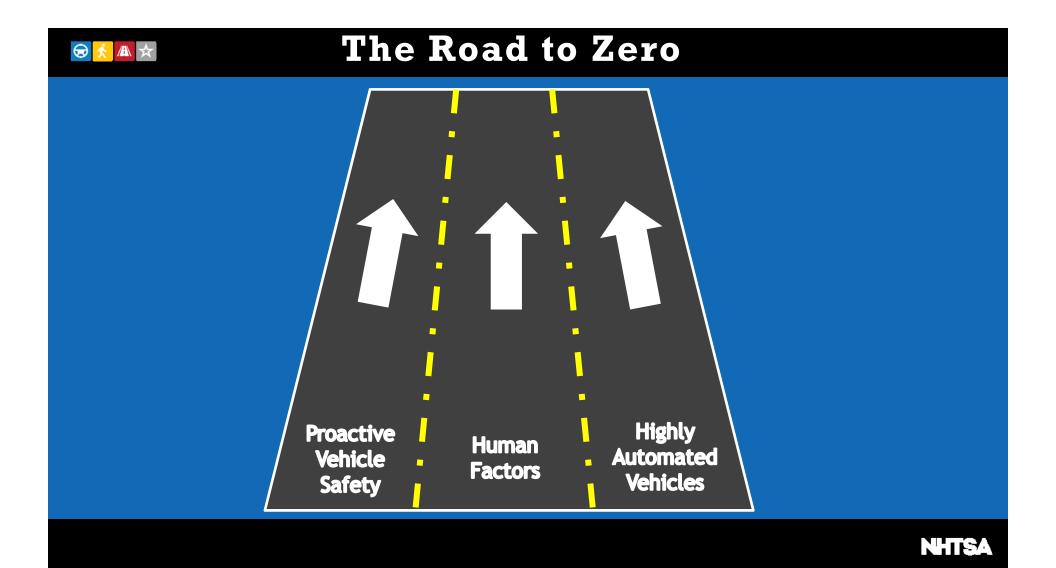




# Same Strategies, Different Outcomes?









#### **Proactive Vehicle Safety**

<u>Traditional Approach</u>

Mitigate the crash

Fix the defect

70 percent recall completion

Investigate. Recall. Penalize. Repeat.

**Proactive Approach** 

Prevent the crash

Prevent the defect

100 percent recall completion

Work together.
Repeat.





### **Proactive Vehicle Safety**

NCAP/5-Star Safety Ratings

AEB

Retooling Recalls

**Proactive Safety Principles** 





#### **Proactive Vehicle Safety**

#### More Efforts

- NHTSA/FAA Forum: Enhancing Safety Culture in Transportation
- FCA: Automotive Safety Recall Best Practices Summit
- Cybersecurity Best Practices/Industry Roundtable





#### **Human Factors: Choices and Errors**







4D's

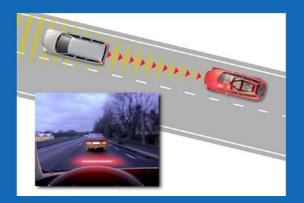


### **Highly Automated Vehicles**

• Historic approach:



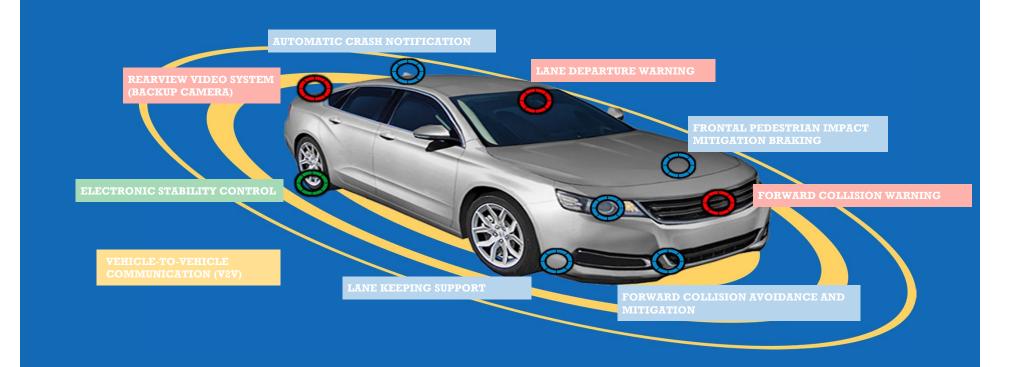
• Proactive approach:







### **Safety Technologies**







#### **Driver Alcohol Detection System for Safety**

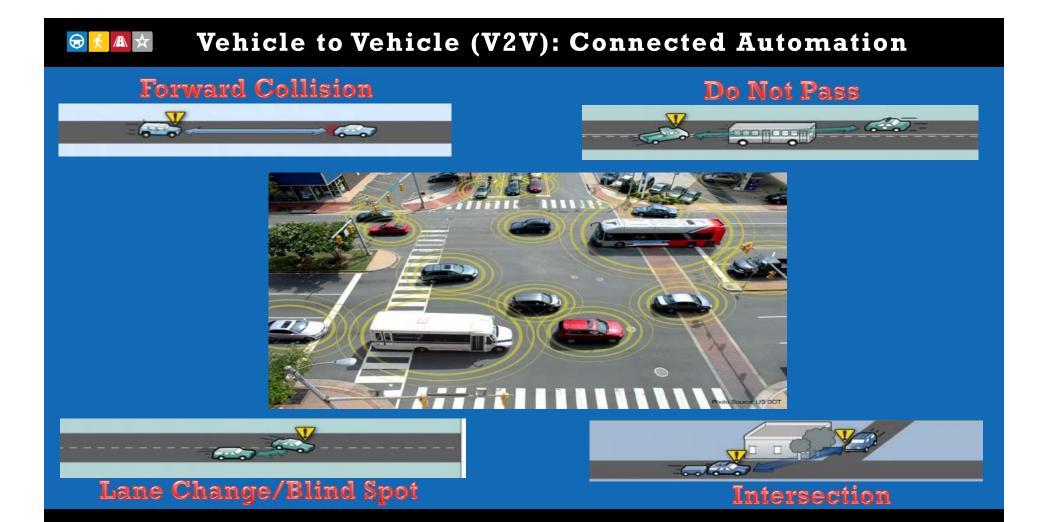
#### Objective

A non-invasive, seamless technology to measure driver BAC and reduce the incidence of drunk driving











#### **Highly Automated Vehicles**

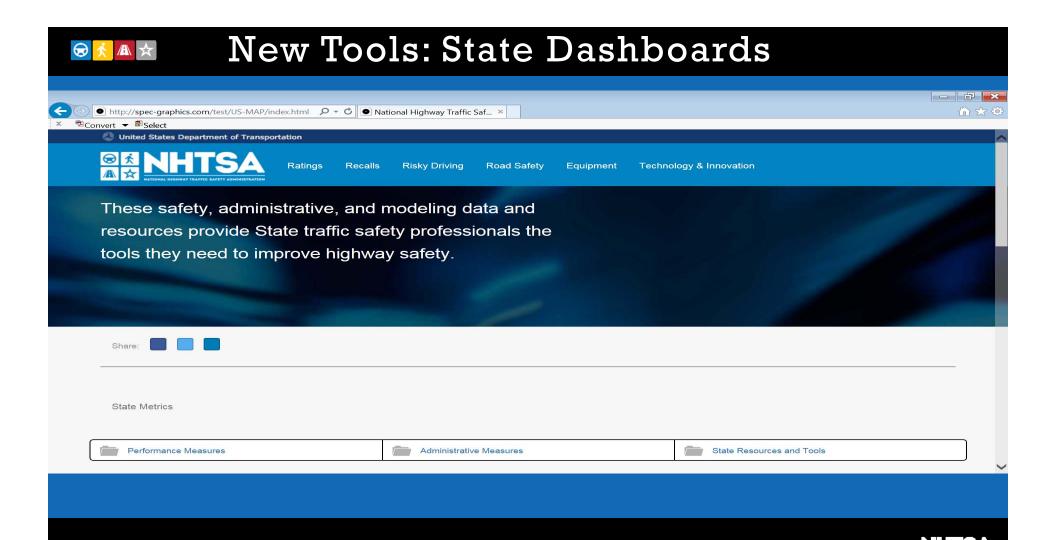
- President Obama's commitment: \$3.9 billion
- DOT/NHTSA:
  - Vehicle Performance Guidance
  - Model State Policy
  - Current Tools and Authorities
  - New Tools and Authorities





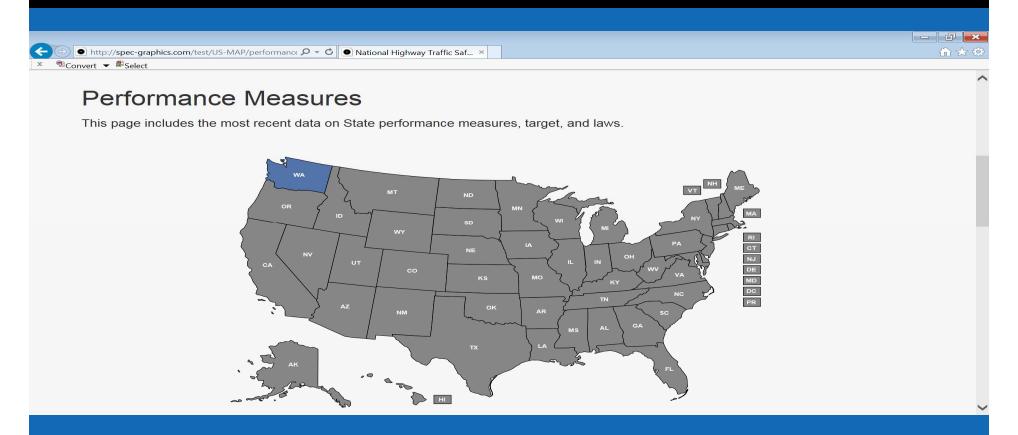
#### **Technology Saves Lives**

# 613,501





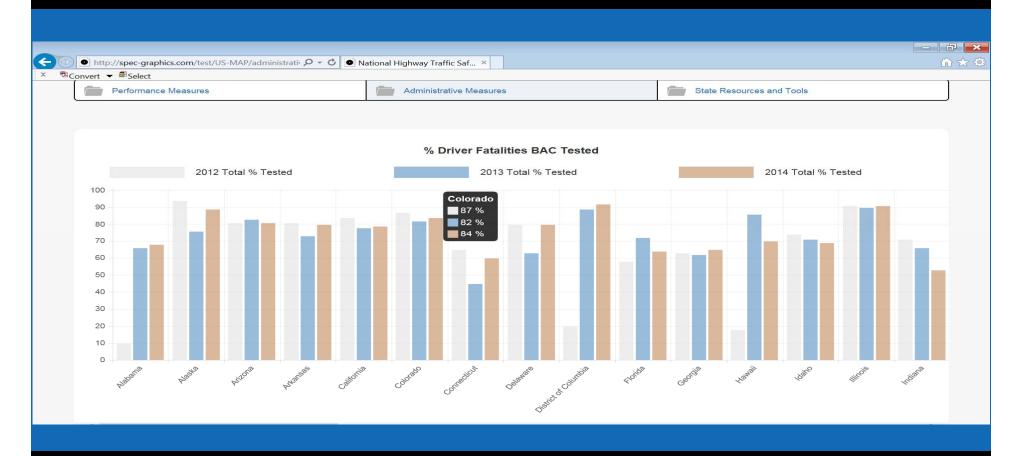
#### New Tools: State Dashboards







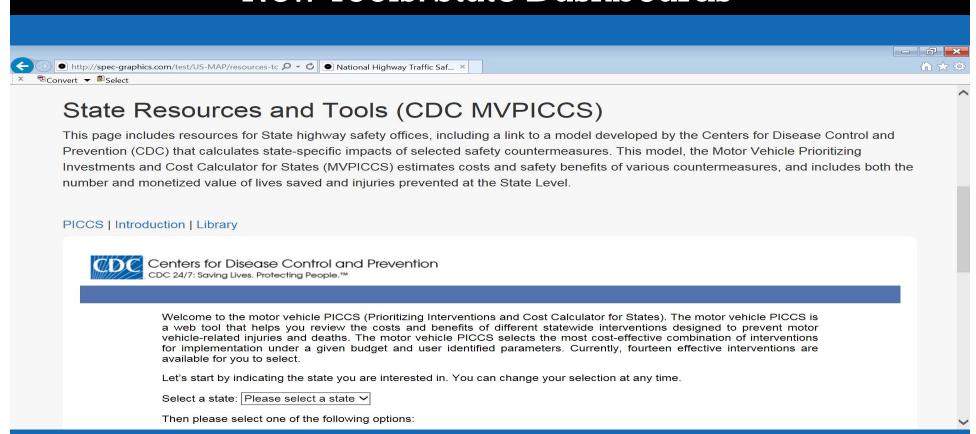
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