

Future Interstate Study: Safety

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About Advocates

A coalition of public health, safety, and consumer organizations, insurers and insurance agents.

We promote highway and auto safety through the adoption of safety laws, policies and regulations.

We are a unique coalition dedicated to advancing safer vehicles, safer drivers, and safer roads.

The Road Ahead

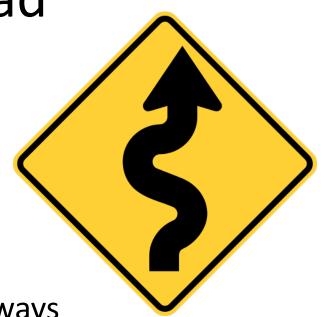
Interstate Highway Safety

Specific Topics



Equity Issues: Access to safe Interstate mobility

Truck Platooning



• 35,092 Fatalities in 2015

Interstates 4,432 (12%)

• Rural 1,918

• Urban 2,424

- Fatalities are increasing
 - 37,461 fatalities in 2016 (up 5.6 percent)
 - This is after and 8.4 percent increase from 2014 to 2015

The Role of the Road in Safety

Design: curvature, sight distance

Laws: speed limits, passing lanes

Safety Technology: barriers

Maintenance: Pavement condition

What is the common thread...

• The Role of the Future Interstate

Autonomous Vehicles: sight distances, marking, signage

Platooning: grades, bridges, truck size and weight

Connectivity: vehicle to infrastructure (V2X)

- Facilitate and encourage uniformity in design and implementation across the interstate system.
- Consider the short and long term predictions for safety technology relative to the design and maintenance cycles.

 Review and update design principles as necessary to comport with new analyses (85% speed).

Specific Topics

Automated Driving and Smart Highways

Platooning

Equity

Automated Driving and Smart Highways

- The AVs are coming
 - VMT, fleet size, ownership, congestion
 - Technology requirements
 - Machine vision, conflicting sensors



- Fleet mix of SAE Levels, humans and machines
- Big Data

Automated Driving and Smart Highways

Remember that changing role

- Interstates as a AV target
 - Uniform, limited access
- V2X: V2V rulemaking
 - DSRC vs. 5G / LTE



Platooning

- Predicted future freight demands are enormous
- Platooning offered as a solution
 - Fuel savings, reduce congestion
- But what about safety?
 - Reliant on other technologies such as automated braking
 - Interacting with other vehicles (merging, passing)

Platooning

What about impacts on the road?

Truck size and weight interaction

Road design



- Network design
 - Rest Stops, distribution centers, access

Equity

- Accessibility to mobility has been a big selling point for AVs / Smart Roadways
 - Independence
 - Opportunity







Recommendations

- Support regulation of AV technology
- Support fleet wide adoption of technology presently available
 - ADAS: crash imminent braking, LDW, Blindspot
- Support V2X
- Include interaction of coming safety technology in design of the future interstate
- Get ready for big data

Thank you

- Advocates for Highway and Auto Safety
 - www.saferoads.org

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