



# NHTSA

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

## Automated Driving Systems: A Vision for Safety

*Overview of New Voluntary Guidance*

*June 2018*

# Purpose of New NHTSA Voluntary Guidance

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Support industry and States, as they consider innovative approaches to safety and develop best practices.

Reaffirm that the Federal government will continue to govern vehicles and vehicle equipment.

Add transparency to complicated and new technologies for consumers.

Reemphasize that NHTSA's priority is the safe testing and deployment of Automated Driving Systems.

# What Changed and Why?

- Responds to public comments, keeps the best safety elements, and deletes premature and burdensome items.
- Represents an evolutionary approach by streamlining, clarifying, and emphasizing voluntary nature.
- New assistance for State Legislatures.
- Improved guidance as States consider testing and in-use regulations.

# What is in the New Voluntary Guidance?

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Encourages companies to consider and document their consideration of 12 safety elements (e.g. crash protection, cybersecurity, and public education).

Encourages companies to make available to the public a summary of how they addressed safety.

Encourages State Legislatures to consider 4 best practices as they consider legislative action.

Encourages State Highway Officials to consider 7 best practices for administering testing and operation.

# Voluntary Guidance to Companies

Companies to consider and document their consideration of 12 safety elements:

- 1. Vehicle Cybersecurity**
- 2. System Safety**
- 3. Operational Design Domain**
- 4. Object and Event Detection and Response**
- 5. Fallback (Minimal Risk Condition)**
- 6. Validation Methods**
- 7. Human Machine Interface**
- 8. Crashworthiness**
- 9. Post-Crash ADS Behavior**
- 10. Data Recording**
- 11. Consumer Education and Training**
- 12. Federal, State, and Local Laws**

# Best Practices for State Legislatures

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Provide a “technology-neutral” environment

Provide licensing and registration procedures

Provide reporting and communications methods for Public Safety Officials

Review traffic laws and regulations that may serve as barriers to operation of ADSs

# Best Practices for State Highway Safety Officials

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Administrative (establishment of lead agency for ADS oversight)

Application for Entities to Test ADSs on Public Roadways

Permission for Entities to Test ADS on Public Roadways

Specific Considerations for ADS Test Drivers and Operations

Considerations for Registration and Titling

Working with Public Safety Officials

Liability and Insurance

**The End**