Automation and the U.S. Department of Transportation

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ITS Joint Program Office
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Coordinating the ITS Environment
ITS J PO Automation Research

Technical Research
- Assessing Applications for Improving System Safety
- Developing Impacts Assessment
- Evaluating New Data Collection & Sharing Models

Program and Policy Support
- Strategic Planning and Roadmap Development
- Modal Policy Support and Coordination

Stakeholder Engagement
- Supporting Professional Capacity Building Efforts
- Facilitating International Coordination
- Low-speed Automated Shuttle Information Sharing Working Group
Targeted Technical Research

Human Factors Research

Cooperative Adaptive Cruise Control

Low-Speed Driverless Shuttles

Truck Platooning
Support industry innovation and encouraging open communication with the public and with stakeholders;
Make Department processes more nimble to help match the pace of private sector innovation; and
Encourage new entrants and ideas that deliver safer vehicles.
NHTSA Automation Research

- Electronic Control Systems Safety
- System Performance Requirements
- Human Factors
- Cybersecurity
FHWA Developing Agency Wide Vision On AVs

- Automated vehicles may impact the planning, design, construction, maintenance and operations of the Nation’s roadway infrastructure.

- FHWA is developing an Agency wide Vision Statement to establish its role in supporting the integration of Automated Vehicles onto the Nation’s roadways.

- Vision discusses agency wide goals and guiding principles for FHWA with respect to Automated Vehicles.
FHWA Automated Vehicle Research

Development of Cooperative Automation Applications:
- Cooperative Adaptive Cruise Control
- Eco Approach and Departure
- Speed Harmonization

Truck Platooning Demonstrations and Field Tests

Evaluating impacts of connected and automated vehicles on the transportation planning process
FTA Research Underway

**Plan**
- Develop a 5-year research and deployment plan for Transit Automation in progress.

**Knowledge Transfer**
- Inform internal and external stakeholders about state of the practice and research in progress.

**Technology Transferability**
- Assess transferability of light-duty and commercial vehicle sensors and technologies to transit applications.

**Policy Review**
- Identify and analyze federal, state, and local policies relevant to transit automation and provide recommendations for needed revisions and/or development of new policies.
Gathering information on issues relating to design, development, testing, and deployment of highly automated commercial vehicles.

FMCSA seeks information on how to ensure that Federal safety regulations provide appropriate standards for the safe operation of HACVs from design and development through testing and deployment.


Additional Considerations:
- Commercial driver licensing
- Hours of service
- Inspection, repair, and maintenance
Low Speed Automated Truck Queue at Ports and Warehouses (joint project with FMSCA and JPO)

- Exploring application of automation to low-speed commercial vehicle operations at port terminals and warehouses
- Review of related studies and papers
- Surveys of industry and technology stakeholders
- Technology scan of existing or near-term enabling technologies
- Cost estimation and safety benefits
Stay Connected... to the Future

For more information, contact...

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