



Federal Motor Carrier Safety Administration

FMCSA

Current & Upcoming Research Activities

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CONTENT

- Highlighted 2019 activities.
- Fixing America's Surface Transportation Act, 2015 (FAST Act) research updates.
- Ongoing and planned research, by focus area.
- Information resources.

HIGHLIGHTED 2019 ACTIVITIES

- Focusing on remaining projects required by the FAST Act.
- Supporting the development and safe deployment of automated driving systems (ADSs) for commercial motor vehicles (CMVs).
- Conducting driver, carrier, and vehicle safety research.

FAST ACT RESEARCH UPDATE

FAST ACT RESEARCH PROJECTS

Status and Overview

Section Number	Activity	Status
5221	Correlation Study	Completed.
5306	Working Group to Consider New Post-Accident Crash Data Elements for Tow-Away Crashes	Committee work completed. Delivery of new training in 2019.
5404	Commercial Driver Pilot Program for Military Trained Drivers	Ongoing.
5506	Commercial Driver's License Skills Test Delays	First annual report complete.
5515	Study on Commercial Motor Vehicle Driver Commuting	Ongoing. Draft analysis of American Community Survey completed and reviewed; carrier interviews completed and reviewed; literature drafted and reviewed. Final draft report under review.

FAST ACT RESEARCH PROJECTS

Status and Overview (cont.)

Section Number	Activity	Status
5517	Report on Motor Carrier Financial Responsibility	Completed.
5510	Safety Study Regarding Double-Decker Motorcoaches	Completed.
5222	Beyond Compliance	Ongoing. Study design in progress.

FAST ACT SECTION 5306

Elements for Tow-Away Crashes

Goal

- Convene a working group to review the data elements of post-accident reports for reportable tow-away accidents involving CMVs and to report to the Secretary of Transportation its findings and any recommendations, including best practices for State post-accident reports to achieve the recommended data elements.

Upcoming in 2019

- Delivery of training based on new data elements and best practices to States.

Learn more here: <https://www.fmcsa.dot.gov/fastact/working-group-consider-new-post-accident-crash-data-elements-tow-away-crashes-fast-act>

FAST ACT SECTION 5515

Study on CMV Driver Commuting

Goal

- To conduct a study on the effects of excessive commuting on safety and CMV driver fatigue.

Upcoming in 2019

- Complete analysis of American Community Survey data and carrier interviews.
- Finalize and submit report to Congress.

Learn more here: <https://www.fmcsa.dot.gov/research-and-analysis/research/study-commercial-motor-vehicle-driver-commuting-fast-act-section-5515>

FAST ACT SECTION 5525

Safety and Enforcement Impacts of Exemptions

Goal

- To provide Congress with data about the safety and enforcement impact of exemptions created by six different sections of the FAST Act.

Upcoming in 2019

- Canvass FMCSA field staff.
- Analyze feedback.
- Conduct webinar(s) with State representatives.
- Finalize and submit report to Congress.

FAST ACT SECTION 5522

Research to Support FMCSA Beyond Compliance Program

Goal

- To provide a foundation of studies, experience, data on technology and safety program effectiveness, and potential methodologies and evaluation approaches to support implementation of the “Beyond Compliance” requirements outlined in Section 5222 of the FAST Act.

Upcoming in 2019

- Collect and analyze data from motor carriers.
- Finalize, publish report with findings.

RESEARCH FOCUS AREAS

RESEARCH FOCUS AREAS



- **Produce Safer Drivers**
- **Produce Safer Carriers**
- **Improve Safety of Commercial Motor Vehicles**
 - Automated and Connected Commercial Motor Vehicles
- **Advance Safety through Information-Based Initiatives**
- **Enable and Motivate Internal Excellence**

SELECTED DRIVER-FOCUSED RESEARCH

Ongoing Research

▪ **Driver Enforcement**

- Tracking commercial driver violations (for major traffic offenses) from issuance to closing to determine whether they result in the proper disqualification.

Planned Research

▪ **Crash Factors Research**

- Collaborate with NHTSA to conduct a systematic review of crash factors, using available data sources, and develop potential crash countermeasures.

▪ **Human Factors (in Automated CMV Applications) Research**

- Determine measures of situational awareness and alertness when using automated systems.
- Develop recommendations for mitigating the impacts of visual and cognitive distractions on situation awareness and vigilance when using automated driving systems.

SELECTED CARRIER-FOCUSED RESEARCH

Ongoing Research

▪ **Beyond Compliance**

- Conducting research to identify motor carrier safety best practices and develop a “Beyond Compliance” program for motor carrier safety measurement.

Planned Research

▪ **New Entrant Training Research and Implementation**

- Develop and demonstrate a cost-effective curriculum that incorporates multimedia electronic learning and in-person group sessions to encourage new entrant motor carriers to adopt a safety culture.

SELECTED VEHICLE-FOCUSED RESEARCH

Ongoing Research

▪ **Automated CMVs**

- Evaluating the safety performance of truck platoons and automated CMV applications; assessing requests from technology providers for regulatory flexibility.
- Identifying tools and inspection best practices for automated and connected CMVs.

Planned Research

▪ **Evaluating Advanced Driver Assistance System (ADAS) and Automated Driving System (ADS) Data**

- Evaluate safety data collected during special crash investigations of ADAS- and ADS-equipped CMVs.
- Analyze onboard monitoring system (OBMS) data from ADAS-equipped CMVs to determine their impact on safety.

▪ **Best Practices for Truck Platoon Deployments**

- Provide technical support and guidance to States conducting truck platoon field operational tests, supporting the development of consistent State regulations that enable free-flowing commerce across State lines.

MORE INFORMATION ON ACTIVE RESEARCH

Information on active research projects is available on the FMCSA website or on the USDOT Research Hub:

- **FMCSA Website:**
<https://www.fmcsa.dot.gov/safety/research-and-analysis/active-research-projects>
- **USDOT Research Hub:**
<https://ntlsearch.bts.gov/researchhub/index.do>

Annual Modal Research Plans for all USDOT modes are available here:

<https://www.transportation.gov/administrations/assistant-secretary-research-and-technology/rdt-annual-modal-research-plans>

PUBLISHED REPORTS

Published analysis, research, and technology reports are available via the National Transportation Library (NTL), in the FMCSA collection:

- NTL Repository and Open Access Portal (ROSA-P):
<https://rosap.ntl.bts.gov/cbrowse?pid=dot%3A1&parentId=dot%3A1>

SUBMITTING RESEARCH IDEAS & FEEDBACK

FMCSA is interested in your research ideas.

- Ideas can be submitted via FMCSA's "Research Idea Submission" webpage:
<https://www.fmcsa.dot.gov/safety/research-and-analysis/research-idea-submission>
- Ideas can be emailed to FMCSA_HOST@dot.gov, where they will be directed as appropriate.

FMCSA wants your feedback for this event.

- E-mail with link to published presentations, short 5-minute survey will be sent out after the event.

CONTACT INFORMATION

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