



U.S. Department of Transportation

Federal Motor Carrier Safety Administration

Current & Upcoming Research Activities

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2020 Transportation Research Board 99th Annual Meeting
Federal Motor Carrier Safety Administration
Analysis, Research, and Technology Forum
January 14, 2020

Content

- Highlighted 2020 activities.
- Fixing America's Surface Transportation Act, 2015 (FAST Act) research updates.
- Ongoing and planned research, by focus area.
- Information resources.

Highlighted 2020 Activities

- Planning on the new Large Truck Crash Causal Factors Study.
- Focusing on remaining projects required by the FAST Act.
- Partnering with industry to leverage technology and reduce crashes.
- Conducting research and testing on automated driving systems (ADS) in commercial motor vehicles (CMVs).
- Conducting driver, carrier, and vehicle safety research.

Large Truck Crash Causal Factors Study

Goal

- To collect more and new data on the causal factors associated with large truck crashes.

Upcoming in 2020

- Review and analysis of request for information (RFI) comments.
- Develop study design with the National Highway Traffic Safety Administration (NHTSA).
- Conduct pilot data collection (beta test):
 - Develop data collection plan.
 - Construct database.
 - Train data collection team.

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 | Completed |
| 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 | Completed |

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 |

FY20 High-Priority Projects, Collaborative Research Activities

FY20 AMRP High Priority Projects:*

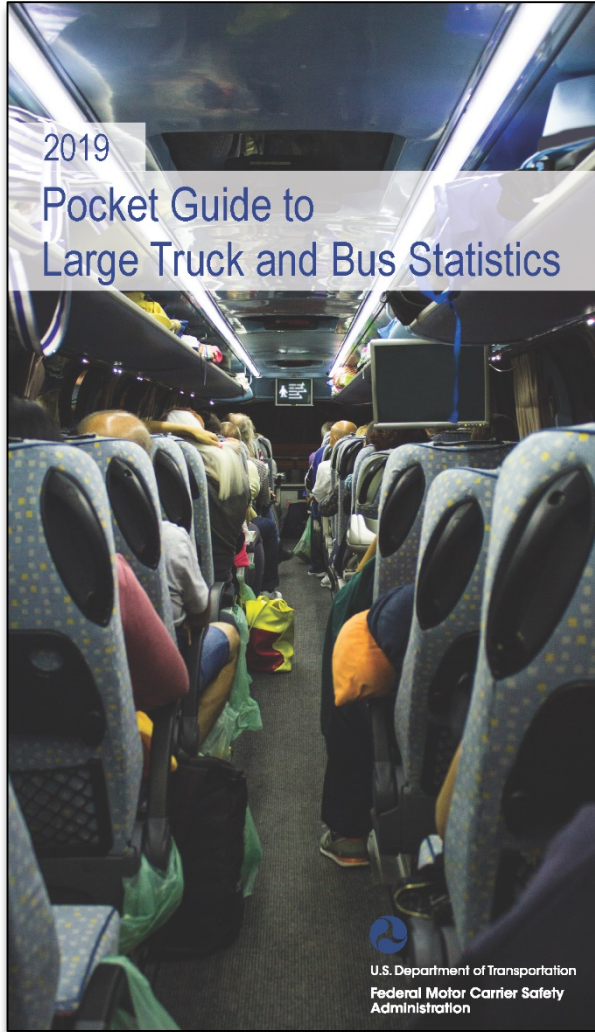
- Large Truck Crash Causal Factors Study
- Automated CMV Inspection Demonstrations and Evaluations
- Safety Performance of ADS-equipped CMVs and Electronically Controlled Braking Systems

Multi-modal and Government Collaborative Research Partners:

- OST-R's ITS Joint Program Office (ADAS)
- FHWA (CARMA, work zones)
- NHTSA (Truck Platooning Hazard Safety Analysis)
- MARAD (L4 Truck Port Applications)
- DOE – Oak Ridge National Laboratory (Brake Testing)
- DoD – Aberdeen Test Center (Testing Venue)

* FMCSA FY20 AMRP, pg. 17

Now Available: 2019 Pocket Guide



2019
Pocket Guide to
Large Truck and Bus Statistics

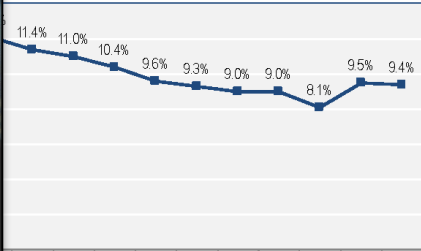
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Administration

Truck Weight Rating for Large Trucks in Fatal Crashes, 2007-2017

| Weight Rating | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 0,001 - 14,000 lb | 155 | 144 | 238 | 468 | | | | | | | |
| 14,001 - 16,000 lb | 70 | 70 | 101 | 97 | | | | | | | |
| 16,001 - 19,500 lb | 79 | 85 | 105 | 142 | | | | | | | |
| 19,501 - 26,000 lb | 221 | 221 | 258 | 243 | | | | | | | |
| 26,001 - 33,000 lb | 235 | 257 | 234 | 271 | | | | | | | |
| 33,000 lb | 2,902 | 3,191 | 3,210 | 3,309 | | | | | | | |
| Other | 87 | 106 | 105 | 127 | | | | | | | |
| | 3,749 | 4,074 | 4,251 | 4,657 | | | | | | | |

Large truck is defined here as a truck with a gross vehicle weight rating greater than 10,000 pounds.
Source: National Highway Traffic Safety Administration (NHTSA), FARS.

Percentage of Large Truck Drivers in Fatal Crashes Not Wearing Any Type of Safety Belt, 2007-2017



| Year | Percentage |
|------|------------|
| 2007 | 11.4% |
| 2008 | 11.0% |
| 2009 | 10.4% |
| 2010 | 9.6% |
| 2011 | 9.3% |
| 2012 | 9.0% |
| 2013 | 9.0% |
| 2014 | 9.0% |
| 2015 | 8.1% |
| 2016 | 9.5% |
| 2017 | 9.4% |

Large truck is defined here as a truck with a gross vehicle weight rating greater than 10,000 pounds.
Source: National Highway Traffic Safety Administration (NHTSA), Fatality Reporting System (FARS).

2019 Pocket Guide to Large Truck and Bus Statistics 41

2019 Pocket Guide to Large Truck and Bus Statistics now available for download:

<https://www.fmcsa.dot.gov/safety/data-and-statistics/commercial-motor-vehicle-facts>

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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www.fmcsa.dot.gov/safety/analysis-research-technology