Applied Research Division

Jon Mueller



Federal Motor Carrier Safety Administration

2024

SAFETY RESEARCH FORUM

VIRTUAL EVENT







Applied Research Division

 Purpose: Conduct basic and applied research focused on Driver Health and Wellness, Carrier issues impacting safety, and staying current on international research and standards.

Human Factors

- Driver Fatigue
- Driver Distraction
- Driver monitoring systems

Driver Qualifications

- Medical Certification
- CDL Knowledge, Skills, Training

Impairment

- Alcohol
- Other drugs

Equity and Diversity

- Inspection and enforcement actions
- Harassment
- Carrier best practices

Truck Parking

- Information Systems
- Analysis of demand

International Research & Standards

- Awareness/incorporation of international research activities
- Participation in international transport safety organizations

Selected Applied Research Division Projects

- Safe Driver Apprenticeship Pilot Program (SDAP) https://www.fmcsa.dot.gov/safedriver
 - Required by Section 23022 of the Bipartisan Infrastructure Law
 - Pilot program to determine the safety impacts of an apprenticeship program for drivers 18-20
- "Driver Compensation Study" and "Driver Detention Time Study"
 - Driver Compensation Study: Contract with TRB to understand the impact of various methods of driver compensation on safety and driver retention
 - Detention Time Study: Determine the frequency and severity of detention time and the impact on safety and operations
- FMCSA Data Repository
 - Develop, maintain, and operate the Repository with raw AND public use data sets
 - Launched in February 2022: https://fmcsadatarepository.vtti.vt.edu/
- Warning Devices for Stopped Commercial Motor Vehicles
 - Goal is to evaluate the effects of warning triangles deployed near a stopped CMV on safetyrelevant driving behavior
 - Eye-trackers, vehicle sensors, and GPS will measure drivers' detection time, response time, and response quality with millisecond-precision.

Contact Information

Jon Mueller

Jon.Mueller@dot.gov