

Truck & Bus Technology Subcommittee ACS60(5)

January 8, 2024 1:30 PM – 3:15 PM EST Marriott, Mt Vernon Sq (M3)

Type of Meeting:	Annual Subcommittee Meeting
1:30 – 1:45	Introductions
1:45 – 2:00	FMCSA Advanced Technology Division Updates Jeff Loftus, Federal Motor Carrier Safety Administration (FMCSA)
2:00 – 2:30	Real-World Experience with Electronic Stability Control (ESC) on Truck Tractors
	ESC is mandated on truck tractors. Real-world maintenance, inspection, and operations experience can share early lessons learned for other advanced safety technologies
	2:00 – 2:15 Fred Andersky, Bendix
	2:15 – 2:30 Tom Weakley and Andrew King, Owner-Operator Independent Drivers Association (OOIDA)
2:30 – 2:40	Other Updates Brief industry, regulatory, or research updates
2:40 – 3:10	Work Session: Brainstorming New Technology Research Needs
3:10 – 3:15	Wrap Up

For your reference: Technology Research Needs Identified in 2023 Subcommittee Meeting:

• Connecting electronic logging device (ELD) data with state DOT truck parking availability data. Identify ways to link state DOT real-time data on truck parking availability at rest stops with ELD data to alert drivers about parking availability related to their remaining hours of service. Mandatory hours of service (HOS) requirements specify how long commercial drivers can work before taking rest breaks. Truck parking availability is an issue for the safety of drivers and the motoring public. Many states are starting to collect

real-time truck parking occupancy data at public rest areas. This information is typically shared with drivers using dynamic message signs in advance of the rest areas. Connecting parking data with ELD data could help drivers learn of overcapacity issues at their estimated rest area. For example, if one hour of driving remains, and parking at a rest area 60 miles down road is full, drivers could make the informed decision to stop at a closer rest area to ensure they find a safe place to park for a mandatory rest break. What are the opportunities and challenges for also connecting private parking facility data where available?

- **Trip-Level Safety Data**. As we study truck safety, consider understanding the influence of hours into a trip (or into total hours of service for a shift), rather than studying averages over total miles traveled. Many factors influence safety that might not be constant over all miles or throughout a shift.
- Driver Education on Levels of Automation for Commercial Driver License (CDL) Training. Develop a training program to teach drivers the capabilities and limitations of each Level of Automation or of specific advanced driver assistance systems (ADAS).
- Smart Trucks and Dumb Trailers: Understanding the safety of automated tractors and low-tech trailer combination units. As advanced driver assistance systems and automated driving systems enter the market through new truck tractors, how do these systems perform in the real-world when pulling trailers that do not have new sensor and communication technologies?
- Safe Transitions Between ADS and Human Driving Responsibility for Level 3 Automation. How do you safely reengage a driver in a SAE Level 3 vehicle? Overcoming driver distraction or fatigue from inattentiveness.