NHTSA Heavy Vehicle Research/Rulemaking Report
TRB Truck and Bus Safety Committee Mid-Year Meeting
September 14, 2017

- **Truck Tractor and Large Bus Stability Control**
  - Petition to FMVSS 136 after final rule to create exception for long wheel truck tractors – currently addressing this petition
  - Docket for this rule is NHTSA-2015-0056 at www.regulations.gov

- **Heavy Vehicle Speed Limiters**
  - Proposed rule issued in September 2016 - This rulemaking would consider a new Federal Motor Vehicle Safety Standard that would require the installation of speed limiting devices on heavy trucks.
  - Press release: http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-large-vehicles-speed-limiters-08262016
  - Docket for this rule is NHTSA-2016-0087 at www.regulations.gov
  - This item has been moved to 'Long-Term' in the Unified Agenda of Regulatory and Deregulatory Actions.

- **Automatic Emergency Braking (AEB) Systems and Advanced Crash Avoidance Technology**
  - NHTSA received petition asking to regulate; start of rulemaking phase
  - AEB Systems - Research posted on docket: NHTSA-2015-0024 at www.regulations.gov
    - Field Operational Test (FOT) - 150 trucks instrumented, 7 fleets participated, over 3 million miles of data - Study Completed
    - Final Report is available on NHTSA website at: http://www.nhtsa.gov/DOT/NHTSA/NVS/Crash Avoidance/Technical Publications/2016/812280_FieldStudyHeavy-VehicleCAS.PDF
  - Virginia Tech Transportation Institute (VTTI) Study on newer generation AEB systems is underway
    - Latest systems from Bendix, WABCO, and Detroit Assurance
    - 150 vehicles instrumented, approximately 1 year of FOT data collection to start in mid-2018
  - Safety Benefits of Heavy Vehicle Crash Avoidance Systems

- Study being conducted by Volpe National Transportation Systems Center starting September 2017
- Establish target crash population and estimate safety benefits for AEB and other crash avoidance systems

- **Heavy Vehicle V2V Research**
  - Heavy Truck Trailer Basic Safety Message Development Study
    - Demonstrated concepts in August 2017 for automatically determining trailer specifications for a tractor based V2V system
    - Next step - testing and documentation of a full tractor based V2V system for various trailer types
  - Heavy Vehicle V2V Retrofit Feasibility
    - Project awarded to University of Michigan Transportation Institute (UMTRI) in December 2016
    - Determining applicability of retrofit V2V systems on heavy vehicles and costs
    - Final Report available in early 2018
  - Heavy Vehicle Cybersecurity
    - UMTRI Project on determining cybersecurity risks specific to heavy vehicles has completed
    - Final Report available in early 2018
  - Recently Released Final Reports available on NHTSA website: ***New Web link***: https://www.nhtsa.gov/crash-avoidance/office-crash-avoidance-research-technical-publications
    - DOT HS 812 300 - Summary of NHTSA Heavy-Vehicle V2V Safety Communications Research
    - DOT HS 812 336 - Driver Acceptance of Collision Warning Applications Based on Heavy-Truck V2V
    - DOT HS 812 327 - Commercial Connected Vehicle Test Procedure Development and Test Results - Emergency Electronic Brake Light
  - NHTSA V2V Research Docket for related reports: NHTSA-2015-0060 at www.regulations.gov

- **Automated Vehicles**
  - NHTSA Automated Driving Systems 2.0
    - Released on September 12, 2017

- https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13069a-ads2.0_090617_v9a_tag.pdf
  - o Automated Vehicles for Safety - NHTSA Website
    - https://www.nhtsa.gov/technology-innovation/automated-vehicles

Contact Information:

NHTSA Heavy Vehicle Research:
Alrik L. Svenson
Research Engineer/Program Manager
Office of Vehicle Crash Avoidance & Electronics Controls Research
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE., Washington, DC 20590
Office: (202) 366-0436 Email: Alrik.Svenson@dot.gov

NHTSA Heavy Vehicle Rulemaking:
Lisandra Garay-Vega, PhD
Chief, Vehicle Dynamics Division
Office of Crash Avoidance Standards W43-312
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE., Washington, DC 20590
Office: (202) 366-5274   Email: Lisandra.Garay-Vega@dot.gov