TRB Truck and Bus Safety Committee ANB70 Annual Meeting January 13, 2014





Crash Avoidance Projects:

Truck Tractor and Motorcoach Stability Control

- Purpose: Develop performance criteria and objective test(s) for a standard on electronic stability control for truck tractors and motorcoaches. The stability control system is aimed at addressing rollover and loss-of-control crashes.
- Status: NPRM published on May 23, 2012 (77 FR 30766).
- · Next Step: Publish Final Rule in 2014.

Forward Crash Avoidance and Mitigation (FCAM) System Research

- Purpose: Develop objective test procedures and performance metrics for Forward Collision Warning (FCW) and Crash Imminent Braking (CIB) systems; develop benefits estimates; conduct human factors research related to the crash warning; initiate a cost tear-down study.
- Status: Cost tear-down study available in docket NHTSA-2011-0066-0085 at <u>www.regulations.gov</u>. Recently kicked-off a one-year field operational test with 150 vehicles.
- Next Step: Agency Decision on Rulemaking in January 2014.



Crash Avoidance Projects:

Lane Departure Warning (LDW) Research

- Purpose: Develop objective test procedures and performance metrics using latest generation LDW systems.
- Status: Cost tear-down study available in docket NHTSA-2011-0066-0085 at <u>www.regulations.gov</u>. Currently conducting a comprehensive cost-benefits and synthesis study to be completed in 2014.
- Next Step: LDW system operation and performance will be closely monitored on 150 vehicles over one year through the FCAM field operational test.

Heavy Truck Tires

- Purpose: Upgrade the heavy vehicle tire standard, FMVSS 119.
- Status: NPRM published on September 29, 2010 (75 FR 60036). In response to comments, two rounds of additional endurance testing were completed in 2011 and 2012. [Docket NHTSA-2010-0132 at www.regulations.gov]
- Next Steps: Publish Final Rule.



Crashworthiness Projects:

Heavy Vehicle Event Data Recorders

- Purpose: Evaluate SAE Recommended Practice J2728, "Heavy Vehicle Event Data Recorders (HVEDRs)," which was published in June 2010.
- Status: Currently identifying implementation issues related to appropriate performance requirements, economic impacts, and data collection needs.
- Next Step: Agency decision on whether to initiate rulemaking in early 2014.

Lap/Shoulder Belts on Motorcoaches

- Purpose: Reduce occupant ejections and mitigate injury during crash events requiring lap/shoulder belts at all seating positions in motorcoaches.
- Application: All motorcoaches, regardless of weight, and all other buses with a Gross Vehicle Weight Rating > 26,000 lb, with certain exceptions, including school and transit buses.
- Status: Final Rule issued on November 25, 2013.
- Effective Date: November 25, 2016



Crashworthiness Projects:

Motorcoach Rollover Structural Integrity

- Purpose: The agency is considering improvements to the structural integrity of motorcoaches in rollover events to maintain the occupant survival space and the structural integrity around the side windows.
- Status: NHTSA has evaluated appropriate performance requirements for a roof crush/rollover test. Research report was published in December 2013.
- Next Step: NPRM is expected to be issued in 2014.

Improve Glazing and Window Retention in Motorcoaches

- Purpose: MAP-21 requires NHTSA to develop anti-ejection rulemaking for motorcoaches. Preliminary research results indicated that preventing ejection would involve not only glazing but also the structural integrity of the motorcoach to ensure that the glazing doesn't pop out when the bus structure twists.
- Status: Research report was published in November 2013.
 http://www.nhtsa.gov/Research/Defects+Analysis+and+Crashworthiness+Division,
 Motorcoach Side Glazing Retention Research, DOT HS 811 862



Crashworthiness Projects:

Motorcoach Emergency Evacuation

- Purpose: NHTSA is considering upgrading the motorcoach evacuation standards.
- Status: NHTSA's emergency evacuation research program at the Volpe Center was completed in 2010.
- The agency will focus on improving glazing and window retention to meet the MAP-21 mandate before proceeding with an emergency evacuation rulemaking for motorcoaches.

Motorcoach Fire Safety

- Purpose: Agency is considering upgrading the fire standards that apply to motorcoaches.
- Status: Two-year research program with National Institute of Standards and Technology (NIST) was completed in 2011 and is available in DOT Docket NHTSA-2007-28793-0026 at www.regulations.gov.
- Next Step: Follow-up research in 2013-2014 will focus on exterior motorcoach material, fire detection systems, and fire suppression systems.