

NHTSA Status Report

TRB Truck and Bus Safety Committee

ANB70 Annual Meeting

January 13, 2015



NHTSA Status Report



Crash Avoidance Projects:

- **Electronic Stability Control Systems for Heavy Vehicles**
 - Purpose: Develop performance criteria and objective test(s) for a standard on electronic stability control (ESC) aimed at addressing rollover and loss-of-control crashes for truck tractors and motorcoaches
 - Status: NPRM published on May 23, 2012 (77 FR 30766)
 - Next Step: Publish Final Rule in 2015
 - Docket: **NHTSA-2012-0065** at www.regulations.gov

NHTSA Status Report



Crash Avoidance Projects:

- **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
- Next Steps: Publish Final Rule
- Docket: **NHTSA-2010-0132** at www.regulations.gov

NHTSA Status Report



Crash Avoidance Projects:

- **Advanced Crash Avoidance Technology Research**
 - Field Operational Test: Observing Forward Collision Warning (FCW), Crash Imminent Braking (CIB), and Lane Departure Warning (LDW) systems on 150 trucks for 1 year. Project managed by VTTI. Final results expected late 2015.
 - Cost Tear-Down Study: Available in docket **NHTSA-2011-0066-0085** at www.regulations.gov
 - Test Track Research: Completing development of objective test procedures and performance metrics for FCW and CIB
 - Human Factors Research: Completing research on driver-vehicle crash warning interface
 - Next Step: Complete test track research; estimate safety benefits

NHTSA Status Report



Crash Avoidance Projects:

- **Heavy Vehicle Vehicle-to-Vehicle (V2V) Research**

- Purpose: Address heavy vehicle-specific challenges for V2V
- Example: Develop changes to Basic Safety Message (BSM) to accommodate combination vehicles
- Status: Current research is focused on integrating articulated vehicles into the light vehicle environment
- Next Step: Agency decision in 2015
- More information: Light Vehicle V2V research available in docket **NHTSA-2014-0022** at www.regulations.gov

NHTSA Status Report



Crashworthiness Projects:

- **Heavy Vehicle Event Data Recorders**

- Purpose: Evaluate SAE Recommended Practice J2728, “Heavy Vehicle Event Data Recorders (HVEDRs)” (June 2010)
- Status: Identifying implementation issues related to appropriate performance requirements, economic impacts, and data collection needs
- Next Step: Agency decision in mid-2015

NHTSA Status Report



Crashworthiness Projects:

- **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. Three petitions for reconsideration received.
- Next Step: Developing notice responding to petitions for reconsideration
- Docket: **NHTSA-2013-0121** at www.regulations.gov

NHTSA Status Report



Crashworthiness Projects:

- **Motorcoach Rollover Structural Integrity**

- Purpose: Improve the structural integrity of motorcoaches in rollover events to maintain the occupant survival space and the structural integrity around the side windows
- Status: NPRM issued on August 6, 2014 (79 FR 46089). Comment period closed on October 6, 2014. 19 comments were received. Commenters included motorcoach manufacturers, entertainment bus manufacturers, motorcoach operators, industry groups, consumer advocacy groups, research groups, and private citizens.
- Next Step: The agency is developing a final rule responding to the comments received
- Docket: **NHTSA-2014-0085** at www.regulations.gov

NHTSA Status Report



Crashworthiness Projects:

- **Improve Glazing and Window Retention in Motorcoaches**

- Purpose: MAP-21 requires NHTSA to develop anti-ejection rulemaking for motorcoaches. Preliminary research results indicate 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, [Motorcoach Side Glazing Retention Research](#), DOT HS 811 862
- Next Step: Developing a proposal for advanced glazing and portal improvements to prevent partial and complete ejection of motorcoach passengers

NHTSA Status Report



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
- Next Steps: 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

NHTSA Status Report



Crashworthiness Projects:

- **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 [Docket **NHTSA-2007-28793-0026** at www.regulations.gov]
 - Follow-up research at Southwest Research Institute in 2013-2014 focused on exterior motorcoach material, fire detection systems, and fire suppression systems
- Next Step: Evaluate research results from Southwest Research Institute and plan for future actions in 2015

NHTSA Status Report



Crashworthiness Projects:

- **Motorcoach Interior Impact Protection**
 - Purpose: MAP-21 requires NHTSA to identify worst case target positions for head impact injury in motorcoaches, and evaluate the capability of various motorcoach interior surfaces to absorb impact energy
 - Status: Conducting Free Motion Headform (FMH) impact tests on production seats and motorcoach interior components to evaluate the potential for head injury
 - Next Step: Complete countermeasures study in 2015

NHTSA Status Report



Crashworthiness Projects:

- **Compartmentalization Safety Countermeasures for Motorcoaches**
 - Purpose: MAP-21 requires NHTSA to research feasibility of enhanced compartmentalization safety countermeasures for motorcoaches
 - Status: Conducting research to assess countermeasures, including advanced seat designs, to reduce injuries caused by interior impacts
 - Next Step: Complete research program in 2015