

**NSTA Board Meeting
January 18, 2010
La Jolla, California**

REGULATORY REPORT

Developments and activities since the November Board Meeting

Grant Applications

NSTA submitted applications for the 2009-10 round of DERA funding in four EPA regions last month. Our requests totaled \$3.9 million to purchase new buses meeting 2010 emission standards and to equip buses with heaters to reduce idling. In all, eleven members participated in the applications. We expect to hear from EPA in February whether or not we were successful.

In a related development, we are pleased to announce the delivery of 99 new buses to Dousman Transportation and Riteway Bus Service as a result of the ARRA-DEIRA grant NSTA received in July. That grant also paid for installation of heaters on the M&M Bus Service fleet, which was completed during the fall, and will pay for the installation of diesel particulate filters on Durham School Service's Racine, WI fleet.

New Seat Belt Information

Two new reports from the National Transportation Safety Board, a new report from NHTSA, and a fatal crash on January 9 have added to the noise on installation of seat belts in school buses.

NTSB Accident Brief: Huntsville, Alabama

As you recall, this is the 2006 crash of the school bus that dived off the overpass, killing four students and reigniting the seat belt controversy. In no surprise, the Board determined that the crash was caused by a high school student driving a Toyota to the same destination as the bus. The student attempted to pass the bus just before the exit ramp, lost control, and hit the right front tire of the bus, forcing it onto and over the bridge rail. The school bus driver, who weighed over 300 pounds, was not wearing his seat belt. He was ejected before the bus fell off the bridge, when the force of his weight falling against the service door caused it to open.

On the seat belt question, the Board concludes that if the bus had been equipped with lap/shoulder belts, the fatal injury to the student in the second row as well as the serious injuries to students in the back of the bus might have been mitigated, since these students would have stayed in their seats during the crash sequence. The Board could not determine, however, whether restraints would have helped the students in the front row because they were unable to determine the maximum extent of roof intrusion into the survivable space at those seating positions. The report repeats the Board's 1999 and 2001 recommendations to NHTSA to develop standards for school buses that address passenger protection in all types of accidents and

for sidewalls, sidewall components, and seat frames. The report can be found at <http://www.nts.gov/publicctn/2009/HAB0902.htm>.

NTSB Accident Brief: Milton, Florida

This accident occurred in May 2008 when a school bus transporting third graders on a field trip drifted into the left lane on an interstate highway. An SUV traveling in the left lane at a speed about 20 miles faster than the bus struck the bus at the left rear bumper. The bumpers of the two vehicles snagged briefly, and when they separated, the bus went onto the grass median where it rotated and rolled over at least twice. The body separated from the chassis. The bus driver and one student sustained serious injuries; the other passengers received minor or no injuries.

NTSB investigated this crash in order to assess the impact of lap belts on school bus occupants in a rollover accident. All passengers were wearing lap belts; the driver was wearing a lap/shoulder belt. The driver's serious injury was to her hand, which was trapped when the bus separated; she also sustained a broken rib, likely due to seat belt loading. The student who was seriously injured was reportedly wearing her lap belt loosely and slipped out of it during the crash sequence. She suffered head injuries and fractures. One other student also slipped out of a loose belt, but received only minor injuries.

The report compares this crash with a comparable 1996 Flagstaff crash in which five passengers were ejected, two sustaining critical injuries requiring life-long care. With all other factors essentially the same (though the Milton bus rolled twice, whereas the Flagstaff bus rolled 1.5 times), the lap belts appear to have made the difference in the injury levels. The Board concludes that injury severity was mitigated by the use of lap belts. The report can be found at <http://www.nts.gov/publicctn/2009/HAB0903.htm>.

January 9 Fatal Crash

On Saturday morning a bus carrying 17 students to a robotics competition in Farmington, CT, was hit on an interstate highway by a station wagon driven by a 16-year-old who apparently made an unsafe lane change. The bus ran off the highway, jumped a restraining barrier, and went down a 20-foot embankment. While witnesses said the bus was airborne, it did not roll over and there were no ejections. One student was pronounced dead at the scene from blunt head trauma; two others were seriously injured. The remaining passengers, including the driver and two adults, were treated for broken bones and other less serious injuries.

This crash is reminiscent of the Huntsville crash, though less severe. It is still under investigation by State Police and the DMV, but there were immediate calls for legislation in the state to require seat belts on school buses.

NHTSA Report on Seat Belt Carryover

The National Highway Traffic Safety Administration released a new report in November on the carryover effect of school bus seat belts on elementary school children. The paper was commissioned by NHTSA to explore the claim by seat belt advocates such as the American Medical Association that the lack of restraints in school buses makes it more likely that children will not use seat belts in personal vehicles.

This report includes no new data, but uses accepted psychological and human development theories to reinforce the conclusions of NHTSA's earlier study on the same subject in 1986. The authors explain that in children, learning is constrained to the situation in which it is learned, resulting in very little transfer across situations. Thus, information that is learned in one context, the school bus, has very little chance of transferring to another context, the personal vehicle. Because their brains are still immature, children compartmentalize learning, making it unlikely that they would question the lack of seat belts on a school bus even if they always use a seat belt in their car. This is even truer if children receive an explanation of why buses are different from cars and are safe without seat belts.

As in the earlier study, this report points to parents as the most significant factor in whether or not children use seat belts in personal vehicles. It is up to parents to teach children the importance of wearing a seat belt in personal vehicles by modeling the correct behavior, teaching children why seat belts are important in personal vehicles and reinforcing children's correct use of seat belts in personal vehicles.

You can find NHTSA's complete report at www.nhtsa.dot.gov.

NTSB Recommendations on Tire Pressure

In August 2008 a chartered motorcoach with 55 passengers aboard crashed through a bridge railing and fell off the bridge, killing 17 passengers. The crash was caused by failure of the right steer axle tire, due to an extended period of underinflation, which resulted in sidewall, belting, and body ply separation within the tire, and subsequent loss of vehicle control. The driver was found to have alcohol and cocaine in his system, though that did not appear to have been a factor in the crash. As a result of its investigation, the National Transportation Safety Board issued the following recommendations of interest to school bus operators.

To FMCSA:

- 1) Require that tire pressure be checked with a tire pressure gauge during pretrip inspections, vehicle inspections, and roadside inspections of motor vehicles.
- 2) Require those states that allow private garages to conduct Federal Motor Carrier Safety Administration inspections of commercial motor vehicles to have a quality assurance and oversight program that evaluates the effectiveness and thoroughness of those inspections.
- 3) Develop a system that records all positive drug and alcohol test results and refusal determinations that are conducted under the U.S. DOT testing requirements, require prospective employers to query the system before making a hiring decision, and require certifying authorities to query the system before making a certification decision.

To NHTSA:

- 1) Require all new motor vehicles weighing over 10,000 pounds to be equipped with direct tire pressure monitoring systems to inform drivers of the actual tire pressures on their vehicles.

The full report can be found at <http://www.nts.gov/publictn/2009/HAR0902.pdf>.

Motorcoach Safety Action Plan

In November, the Department of Transportation released its Motorcoach Safety Action Plan to improve interstate bus transportation. The following are the high priority items from that plan:

- 1) Initiate rulemaking to require electronic on-board recording devices on all motorcoaches to better monitor drivers' duty hours and manage fatigue.
- 2) Initiate rulemaking to propose prohibiting texting and limiting the use of cellular telephones and other devices by motorcoach drivers.
- 3) Initiate rulemaking to require the installation of seat belts on motorcoaches to improve occupant protection.
- 4) Evaluate and develop roof crush performance requirements to enhance structural integrity.
- 5) Develop performance requirements and assess the safety benefits for stability control systems on motorcoaches to reduce rollover events.
- 6) Enhance oversight of carriers attempting to evade sanctions and of other unsafe motorcoach companies.
- 7) Establish minimum knowledge requirements for people applying for authority to transport passengers.

Some of these items may affect school bus operations as well (e.g. rulemaking to prohibit texting and to require EOBRs). All indications are that the proposed requirement for seat belts, which does not specify either lap belts or lap/shoulder belts, will not include school buses. DOT expects to initiate that rulemaking during this quarter.

The entire document, which includes many other action items, can be found at <http://www.nhtsa.gov/staticfiles/DOT/NHTSA/reports/HS811177.pdf>.

NPRM on Bus Emergency Exits

In December NHTSA published a Notice of Proposed Rulemaking to effect technical changes in the standard for school bus emergency exits, in response to a petition from the School Bus Manufacturers' Technical Council. The proposal specifies that the exterior release (the exterior handle) for school bus rear emergency exit doors may be located opposite the door hinges rather than in the middle of the door where it is currently located. It also makes a clarifies the number of force applications required to open an emergency exit. Comments must be received on or before February 26, 2010.