



December 9, 2013

The Honorable Deborah A.P. Hersman  
Chairman  
National Transportation Safety Board  
490 L'Enfant Plaza East SW  
Washington, DC 20594

Dear Chairman Hersman:

The National Association for Pupil Transportation (NAPT) and the National School Transportation Association (NSTA) are pleased to jointly respond to the recent National Transportation Safety Board (NTSB) recommendations to our organizations for further improving the safety of school bus occupants.

The recommendations, which were developed as a result of NTSB's investigations of school bus crashes in Chesterfield, NJ and Port St. Lucie, FL, call on NAPT, NSTA and others to "Develop guidelines and include them in the next update of the National School Transportation Specifications and Procedures to assist schools in training bus drivers, students and parents on the importance and proper use of school bus seat belts, including manual lap belts, adjustable lap and shoulder belts, and flexible seating systems" (H-13-35), and "Provide your members with educational materials on lap and shoulder belts providing the highest level of protection for school bus passengers, and advise states or school districts to consider this added safety benefit when purchasing seat belt equipped-school buses." (H-13-36)

We have tremendous respect for NTSB and consider your recommendations the starting point for a further collaboration to bring an important topic with a long and difficult history to a conclusion that our industry and the communities we serve can understand and embrace.

Currently, there is no federal safety requirement for safety belts in large school buses. The National Highway Traffic Safety Administration (NHTSA), the federal agency with regulatory authority on the matter of occupant protection in motor vehicles, has for many decades worked to increase safety belt use in passenger cars and more recently in other vehicles. However, it has repeatedly come to the conclusion that safety belt mandates for large school buses are inadvisable and could actually be counterproductive to improving safety.

Since the early 1980s we have transitioned from a nation where belt use was relatively small to majority usage, and there are now laws requiring it in all but one state. This leads to the commonly-held opinion that "if my car has seat belts so should my child's school bus", which is one of the reasons calls for seat belts in school buses make headlines after every serious crash.

While this is understandable, as we know, there are many reasons why most large school buses - with a safety record that's the best in the transportation industry and a federally-conceived engineering design that is markedly different structurally and in usage than passenger cars - do not have safety belts. Now that NHTSA recently announced motor coaches will be required to have

lap/shoulder belts beginning in 2016, already the general public and news media are asking, “Why motor coaches but not school buses?”

NAPT and NSTA are prepared to explain to parents and the news media that school buses, motor coaches and the family car are very different vehicles from a crashworthiness perspective and, therefore, do not necessarily utilize the same safety strategies. We continue to believe that our safety record demonstrates that the “automatic” approach to protecting children in school buses, that was mandated for school buses by federal safety officials before seat belt use became popular, remains extremely effective.

Six states - California, Florida, Louisiana, New Jersey, New York and Texas - currently require belts to be installed in large school buses. These states were given a separate recommendation from the Board regarding developing informational materials on belt use, as well as training procedures for proper usage.

As the largest industry trade association representing all states operating school buses (NAPT), and the association representing private school bus contractors (NSTA), our response to your recommendations seeks to address outstanding concerns in the states where belts are required on school buses, as well as those where they are not. Our intent is to provide the best possible information and clarity so everyone can make informed decisions about the efficacy of belts in the school bus operational environment, and how to best allocate resources among safety priorities.

**In response to Recommendation H-13-35**, NAPT and NSTA will use their communications channels to share the NTSB’s recommendation with our members. Safety education is an ongoing priority of both organizations.

NAPT and NSTA, also agree to work collaboratively with the National Association of State Directors of Pupil Transportation Services (NASDPTS) to review the next update of the National School Transportation Specifications and Procedures so states with belt use requirements have the latest information regarding the installation and use of these devices.

If asked, we will also consult with NAPT and NSTA members in the six states that have belt requirements as they attempt to address your recommendation.

**In response to Recommendation H-13-36**, we cannot at this time support this recommendation.

We acknowledge and appreciate the work the Board did in the Chesterfield, NJ and Port St. Lucie crash investigations. These investigations add additional information to the body of knowledge about school bus crash kinematics and safety belts.

Frankly, however, NTSB’s conclusions and recommendations added to our conundrum as trade associations that must understand and represent many differing state and local views on this topic.

A bit of history may be instructive:

As a result of its 1999 special investigations report, *Bus Crashworthiness Issues*, NTSB recommended in November of that year that NHTSA “In two years, develop performance standards for school bus occupant protection systems that account for frontal impact collisions, side impact

collisions, rear impact collisions, and rollovers.” (H-99-45). That recommendation was subsequently closed because of “Acceptable Alternate Action.”

Apparently the alternate action was that NHTSA replied it was working on a 2-year research program that would scientifically determine the real-world effectiveness of current Federal requirements for school bus occupant crash protection and would evaluate alternative occupant crash protection systems in controlled laboratory tests.

NTSB also recommended, “Once pertinent standards have been developed for school bus occupant protection systems, require newly manufactured school buses to have an occupant crash protection system that meets the newly developed performance standards and retains passengers, including those in child safety restraint systems, within the seat compartment throughout the accident sequence for all accident scenarios.” (H-99-46). This recommendation was closed with the notation, “Unacceptable Action.” We presume this meant NHTSA chose not to follow your recommendations on this very serious safety matter.

In 2002, NHTSA issued a report to Congress that, for all intents and purposes, underscored the efficacy of compartmentalization as a good “passive” solution to protecting children riding in the unique operational circumstances of a school bus, and reinforced its preference for this system as the core of school bus passenger safety.

In February 2007, NAPT petitioned NHTSA for rulemaking to establish “...a safety system that will definitively enhance the current passenger crash protection for all children that ride a school bus.” NAPT also asked NHTSA to help us educate the public about the importance of safe school bus transportation.

In NAPT’s response to the subsequent rulemaking, NAPT called on NHTSA to conduct dynamic crash tests of school buses - as they do routinely and repeatedly with other passenger vehicles - to evaluate kinematics in all of the various crash modes, including and especially side, oblique and rollover crashes.

To our knowledge, no such testing has been conducted.

Problematic for us in responding to the Board’s recommendation H-13-36 is that in its March 2010 Final Rule on school bus occupant protection and again in 2011, NHTSA reached conclusions that in our view contradict the Board’s current recommendations. In 2011, for example, NHTSA determined that requiring safety belts in school buses would not result in improved safety, and said that a federal seat belt mandate might actually increase fatalities by forcing more children into less safe modes of getting to and from school.

In addition, the following statements also illustrate a dichotomy of perspective between NHTSA and NTSB:

**NTSB:** “Provide your members with educational materials on lap and shoulder belts providing the highest level of protection for school bus passengers, and advise states or

school districts to consider this added safety benefit when purchasing seat belt-equipped school buses.”<sup>1</sup>

**NHTSA:** “Given that very few school bus-related serious injuries and fatalities would be prevented by a requirement mandating seat belts on large school buses, we could not assure that overall safety would not be adversely affected, particularly given the many competing demands on school resources and widely varying and unique circumstances associated with transporting children...”

“After considering all available information, including the comments to the [Notice of Proposed Rulemaking], we cannot conclude that a requirement for seat belts on large school buses will protect against an unreasonable risk of accidents or an unreasonable risk of death or injury in an accident.”

“NHTSA has been repeatedly asked to require belts on buses, has repeatedly analyzed the issue, and has repeatedly concluded that compartmentalization provides a high level of safety protection that obviates the safety need for a Federal requirement necessitating the installation of seat belts.”<sup>2</sup>

NHTSA has also pointed out that “...the NTSB expressed concern that lap/shoulder belts have not been sufficiently researched in non-frontal crash modes, e.g., side, oblique and rollover crashes.”<sup>3</sup>

We recall well when NTSB first articulated this perspective, and wonder why you did not reiterate this recommendation to NHTSA in the current group of recommendations following the Chesterfield and Port St. Lucie investigations, especially if NHTSA did not previously provide acceptable follow-up on this matter?

We also would like to point out that in its 2010 Final Rule NHTSA responded to a question about side impact testing from an NAPT member, the New York Association for Pupil Transportation, that “...our side impact protection countermeasure research is still ongoing. We have been actively pursuing this research and expect to complete it soon.”

We do not know if this research has been completed and are not aware that the results of this research have ever been published.

Our members across the country are passionate about safety and need clear and definitive guidance from federal policy-makers. Our members must be able to justify school bus safety-related decisions to local officials and taxpayers that always ask challenging questions and demand compelling facts before deciding where to authorize action or spend educational dollars.

Many NAPT and NSTA members remain very concerned about the “unintended consequences” of belt use that NHTSA articulated in its 2011, 2010 and 2002 rulemakings and do not understand why the NTSB is not making a strong recommendation that NHTSA conduct the “sufficient research” the agency said it would undertake nearly a decade ago or at least show the results of the work it said nearly 4 years ago would be completed “soon.”

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<sup>1</sup> NTSB. 2013. School Bus and Truck Collision at Intersection Near Chesterfield, New Jersey, February 16, 2012. Highway Accident Report NTSB/HAR-13/01. NTIS Number: PB2013-106638

<sup>2</sup> NHTSA 2010 Final Rule, 49 CFR Part 571, “School Bus Passenger Seating and Crash Protection”

<sup>3</sup> Ibid. (page 22)

We offer this perspective to address outstanding questions that NAPT and NSTA members share. Moreover, we feel so strongly about this shortcoming in necessary science that as part of our response to Recommendation H-13-36 we want the Board to know that NAPT may again petition NHTSA to conduct dynamic crash tests of school buses and evaluate kinematics in all of the various crash modes, including and especially side, oblique and rollover crashes. We hope you would support this effort.

Additionally, many of our members wonder if upgrading the federally mandated engineering design called compartmentalization, an approach that NHTSA says "...provides a high level of safety protection that obviates the safety need for a Federal requirement necessitating the installation of seat belts",<sup>4</sup> might be a viable - or even better - solution than belts in side impact and rollover crashes. But such an update has not to our knowledge been considered, much less any analysis done to evaluate the premise.

We continue to believe that consideration of an upgrade to the existing design of school bus passenger crash protection should be a worthy area of federal investigation before urging the installation and usage education of seat belts, when comprehensive testing of this passive technology in side, oblique and rollover crashes has not been done to validate performance.

Again, based on NHTSA's repeated conclusions, and the operational concerns of our members, we believe it is logical to at least do the requisite research to see if enhancing compartmentalization to provide better protection in side and rollover crashes might not be the best practice to augment the good performance in frontal crashes and further improve the safety of school bus occupants. We would hope the Board would support this in a recommendation.

If anything, the wisdom of compartmentalization as an engineering design may have become more relevant as the school bus operational reality has become more difficult. Today, children of many cultures and languages ride school buses, making belt use education even more challenging. Bus drivers must deal more frequently with tighter schedules because of budget cuts, behavior issues, security concerns, and even potential personal legal liability for interventions aboard the bus, in addition to their fundamental responsibility of driving safely and getting children to and from school on schedule. In fact, NHTSA noted in its 2010 rulemaking, "School bus drivers were universally opposed to having belts on the buses, believing that belts were unnecessary, that they would impede emergency egress, and that drivers have limited means to get students to buckle up."

Finally, NAPT and NSTA have great concern about the Board's implied recommendation that it supports lap belts as acceptable technology.

Again, we point to the conflict with what NHTSA said in its 2010 Final Rule: "A number of commenters to the NPRM wanted NHTSA to ban lap belts. The NTSB believed that NHTSA's 2002 school bus test program showed that lap belts afford occupants little if any safety benefit above that achieved by compartmentalization alone and may cause additional neck and abdominal injury." NHTSA concluded: "...we stand by our statement in the NPRM that we cannot conclude that lap belts either helped or hurt occupant injury outcomes. It was not possible to estimate lap belt performance or effectiveness."

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<sup>4</sup> Ibid. (page 9)

In January 2007, NSTA offered in comments to NHTSA, “NSTA urges NHTSA to reconsider its position on lap belts.” In addition, NSTA noted, “Given the absence of a benefit from lap belts along with the evidence that lap belts can be harmful in severe crashes, NSTA disagrees with NHTSA’s decision to allow states to require lap belts on their school buses going forward. Our concern is that states will choose to mandate the less costly but ineffective two-point restraints in the mistaken belief that they are improving passenger safety. While we agree that the decision to require passenger restraints should be left to the states and local education agencies, we strongly believe that the only viable option other than compartmentalization alone is lap/shoulder belts; lap belts should not be a consideration. Therefore, we urge NHTSA to amend the proposed standards for voluntary installation of passenger restraints to preclude the installation of two-point belts.”

According to NHTSA, this argument was supported by the NTSB in the agency’s rulemaking on “School Bus Passenger Seating and Crash Protection:” “The NTSB believed that NHTSA’s 2002 school bus test program showed that lap belts afford occupants little if any safety benefit above that achieved by compartmentalization alone and may cause additional neck and abdominal injury.”<sup>5</sup>

Both NAPT and NSTA have a long public record of strong advocacy for elevating this discussion to a national level and for seeking a science-based rather than emotion-driven or “directionally correct” conclusion to the question of whether safety belts would definitively improve school bus passenger crash protection.

Transporting children safely is our sole business. We are safety professionals ourselves. We share the Board’s passion for action; that’s one of the reasons NAPT petitioned NHTSA nearly 7 years ago to settle this matter once and for all. Unfortunately, they did not so there remains both public confusion and uncertainty regarding an important matter that deserves definitive resolution.

We cannot in good faith advise our members, or the public, on this issue until the significant and conflicting policy differences between the two federal safety agencies are resolved, hopefully with the added science of dynamic crash testing that is customary and routine for all other motor vehicle recommendations and requirements.

We would be pleased to meet with you to have a more thorough discussion about our concerns, and seek constructive next steps toward our mutual goal of making school bus transportation even safer.

Sincerely,



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National Association of Pupil  
Transportation



Ronna Sable Weber  
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National School Transportation  
Association

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<sup>5</sup> Ibid (page 35)