

# NASDPTS POSITION PAPER THE EQUIPPING AND USE OF PASSENGER LAP/SHOULDER BELTS IN SCHOOL BUSES February, 2014

## Introduction

The National Association of State Directors of Pupil Transportation Services (NASDPTS) was established in 1968. The membership represents state government school transportation leadership from all 50 states. The purpose of the association is to provide leadership, assistance and motivation to the nation's school transportation community with the goal of providing safe, secure, efficient, economical, and high-quality transportation to school children on their trips to and from school and school-related activities.

This paper is to state the position of NASDPTS regarding the equipping and use of passenger lap/shoulder belts in school buses. States, school districts, school bus contractors and private schools across the nation are individually investigating and making decisions whether or not lap/shoulder belts are the appropriate choice for their school buses. The purpose of this Position Paper is to provide guidance and assistance to the professionals and policy makers charged with making that significant decision.

## **Background**

NASDPTS has previously addressed the subject of the equipping and use of passenger restraints in school buses. The last NASDPTS position paper on this topic was written in August, 2002, "Enhancing School Bus Safety and Pupil Transportation Safety." (1) Since then, significant changes have occurred in the technology, development, regulatory adoption, overall experience and body of knowledge regarding lap/shoulder belts in school buses.

On July 11, 2007, the National Highway Traffic Safety Administration, (NHTSA) conducted a public forum to seek information related to lap/shoulder belts in school buses (2). The NASDPTS executive director and two state directors were among industry representatives chosen to testify. Information gained from this forum and from previous years of research conducted by NHTSA led to the publication in the Federal Register on November 21, 2007 of a Notice of Proposed Rule Making (NPRM) for lap/shoulder belts in school buses (Docket No. NHTSA–2007–0014) (3).

In this NPRM, NHTSA proposed design and performance standards for lap/shoulder belts in school buses. NHTSA proposed school buses of 10,000 pounds and under Gross Vehicle Weight Rating (GVWR) would be required to install lap/shoulder belts instead of the existing requirement for lap belts. NHTSA proposed that the decision to equip lap/shoulder belts in school buses over 10,000 pounds GVWR be left to the discretion of state and local districts. NHTSA stated, "The agency's school bus research results indicated that lap/shoulder belts could enhance the safety of large school buses" and "we would recommend that pupil transportation providers consider installing lap/shoulder belts on large school buses because of the enhancements that lap/shoulder belts could make to school buses."

NASDPTS submitted comments to the NPRM on January 18, 2008 (4). The comments included the following statement: "NASDPTS recommends that NHTSA require lap/shoulder belts on all newly manufactured large school buses as a Federal Motor Vehicle Safety Standard, starting with the date of implementation of the Final Rule, and that dedicated funding commensurate with the requirement be provided." NASDPTS has since maintained this position of support for lap-shoulder belts only if dedicated funding was also provided.

NASDPTS articulated its position regarding two-point lap belts in school buses when it stated in the 2008 comments, "NASDPTS recommends that NHTSA reconsider the position taken in the NPRM that there is no need to prohibit lap belts on school buses," and, "NASDPTS recommends that NHTSA support lap/shoulder belts as the only seat belt system acceptable in school buses."

Around the time the NPRM was introduced, school bus seat manufacturers were introducing "flexible seating technology" that enabled school bus seats with lap/shoulder belts to maintain the full capacity of three small children or two large children on a school bus seat. Combined with thinner seatbacks and footprints identical to current FMVSS 222 seating, school buses equipped with the new seats could then maintain capacity if equipped with lap-shoulder belts.

On October 21, 2008 NHTSA published in the Federal Register the final rule that included lap/shoulder belts on school buses (Docket No. NHTSA–2008–0163) (5). Among its other requirements, this rule regulated design and performance standards for lap/shoulder belts when voluntarily installed in large school buses and included provisions for flexible seating technology. Effective October 21, 2011, school buses with a GVWR of 10,000 pounds and less were required to have lap/shoulder belts. School buses over 10,000 pounds GVWR were required to meet the new standards if equipped with lap/ shoulder belts. In addition, effective October 21, 2009 this rule required that all seatback heights be increased and that all hinging seat cushions must be self-latching.

Nationally, a number of school districts and private schools have inquired about or decided to proceed with the installation of lap/shoulder belts on both new and existing school buses. Each year some state legislatures propose and debate new legislation that would require lap/shoulder belts in large school buses. Public response to school bus crashes and the need for lap/shoulder belts in school buses continues to highlight this issue at all levels.

On July 23, 2013, the National Transportation Safety Board (NTSB) reported (NTSB Accident ID HWY12-MH007) (6) its findings on two school bus crashes, Chesterfield, New Jersey (February 16, 2012) and Port St. Lucie, Florida (March 26, 2012). The report findings emphasized the NTSB concern for usage of occupant restraints when available in school buses. NASDPTS and other organizations were specifically charged to (7):

"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)

On October 20, 2013 the NASDPTS Board of Directors agreed that it would fully support the installation and use of lap/shoulder belts in school buses and that a position paper formalizing the Boards position would be published.

On December 6, 2013, NASDPTS responded to the NTSB in full support of the requests made in Safety Recommendations H–13-35 and H–13-36.

## **Position Statement**

As an association with a primary leadership role in issues relating to student transportation safety, environmental responsibility, and access to education, NASDPTS fully supports state and local decisions for the installation and use of lap/shoulder belts in school buses. NASDPTS is not advocating that the installation and/or use of lap/shoulder belts be required by state or local jurisdictions without thorough consideration of available resources. NASDPTS believes this decision should be based on state or local need, but also believes lap/shoulder belt equipped seats should be encouraged as an option when considering new bus original equipment specifications. NASDPTS further believes that states and local jurisdictions should require proper usage by all students when belts are available and should provide related notices, training and enforcement.

NASDPTS supports the NHTSA position stated in the 2007 NPRM that this local decision should not be made at the expense of students being displaced from school bus transportation. A state or local district that does decide to proceed with lap/ shoulder belts should consider the following points on usage arising from the NTSB report on the Chesterfield, New Jersey crash:

- A usage policy must exist for buses equipped with passenger restraints.
- A training program must exist for proper usage and adjustment of passenger restraints.
- A training program must exist for evacuation that includes unbuckle drills.

# **Position Statement Supporting Points**

The following points support NASDPTS position on the equipping and usage of lap/shoulder belts in school buses:

## 1. NHTSA has approved technical standards for equipping and using of lap/shoulder belts.

NHTSA has crash tested seats with lap-shoulder belts and has found that they supplement the high level of safety already provided by compartmentalization and provide the best protection for students in school buses. NHTSA first reported this to Congress in an April, 2002 study. NHTSA reaffirmed these findings in the November, 2007 NPRM when they stated, "We would recommend that pupil transportation providers consider installing lap-shoulder belts on large school buses because of the enhancements that lap/shoulder belts could make to school buses." The decision of NHTSA to proceed with the proposal and finalize regulations providing standards for lap/shoulder belts in large buses and allowing for their installation demonstrates NHTSA's approval of this safety device in this type of vehicle.

## 2. Compartmentalization alone has limits for protection; lap-shoulder belts enhance protection.

Compartmentalization offers protection in frontal and in rear crashes assuming passengers are properly seated, but offers limited protection in rollovers or side impacts. Passengers restrained by lap-shoulder belts are retained in the seating compartment, thus minimizing injury caused by body impact to surroundings.

#### 3. Capacity remains the same with lap-shoulder belts.

Flexible seating technology and improved seatback thickness design have resolved the capacity issue. School buses with lap-shoulder belts can have the same capacity as school buses without belts.

## 4. Evacuation process can be aided with lap-shoulder belts.

A properly restrained child is less likely to be injured and therefore more capable of being evacuated quickly. An unbelted child is more likely to be injured or rendered unconscious, slowing down their ability to evacuate. Buckles are designed and tested to easily unlatch even under load as required in Federal Motor Vehicle Safety Standard (FMVSS) 209.

### 5. Lap-shoulder belt design minimizes the possibility of the belt being used as a weapon.

Current lap-shoulder belt designs use a lightweight latchplate on a retractable web system. The buckle is attached to the seat with little or no webbing so it cannot be swung and used as a weapon.

## 6. Students will wear them.

Children are taught early to use safety belts and expect to have belts available in any moving vehicle, including school buses. School districts with lap-shoulder belt equipped school buses that have established usage requirements as part of their school bus riding policies, have confirmed high compliance rates.

7. Equipping school buses with lap-shoulder belts can reduce school district and driver liability for student protection.

The addition of lap-shoulder belts to a school bus is a proactive measure by a school district to further enhance the safety of the students it is responsible for transporting. This measure goes beyond the minimum level of expectation for safe student transportation.

8. Lap/shoulder belt equipped school buses with usage policies have resulted in improved student behavior and create an environment that has less potential for driver distraction.

School districts with defined and enforced lap/shoulder belt usage policies report notable improvements in student behavior and reduction in behavioral incident write-ups. Driver attention is less focused on student behavior allowing for greater attentiveness to driving matters.

9. Lap-shoulder belts may result in increased ridership due to parent preference that children be properly secured with lap-shoulder belts when riding school buses

A 2006 study by the American School Bus Council revealed that a notable percentage of parents had concerns about the safety of their children in yellow school buses. With lap/shoulder belts installed in school buses, and with policies and practices that encourage their use, parents may feel more confident about having their children ride the school bus.

10. Costs for equipping school buses with lap/shoulder belts are reasonable. Prioritization of means to provide the greatest overall safety for students is necessary.

Lap/shoulder belts have become an affordable option considering the overall cost of the bus, other available options, and the average life of the bus. When considering lap/shoulder belts or other safety measures, including the ability to buy sufficient buses to meet service demands, states and local school districts must prioritize available funding to provide greatest safety for all students.

## **Summary**

NASDPTS fully supports the installation and use of lap-shoulder belts in school buses. NASDPTS is not advocating that the installation and/or use of lap-shoulder belts be required. NASDPTS believes this should be a local decision based on local need, but also believes lap/shoulder belt equipped seats should be encouraged as an option when considering new bus original equipment. Should a state or local district decide to equip their buses with lap-shoulder belts, NASDPTS believes a mandatory usage policy should also be in place along with necessary training on the importance of wearing and proper usage of the belts along with proper evacuation training. NASDPTS supports the NHTSA position that this local decision should not be done at the expense of students being displaced from school bus transportation.

# **References**

(1) NASDPTS. (2002). Enhancing School Bus Safety and Pupil Transportaion Safety.

- (2) NHTSA. (2007, June 4). Federal Motor Vehicle Safety Standards for School Bus Passenger Protection. Federal Register /Vol. 72, No. 106 /Monday, June 4, 2007 / Proposed Rules, 72(106), pp. 30739-30742.
- (3) NHTSA. (2007, November 21). Federal Motor Vehicle Safety Standards; Seating Systems, Occupant Crash Protection, Seat Belt Assembly Anchorages, School Bus Passenger Seating and Crash Protection. Federal Register /Vol. 72, No. 224 / Wednesday, November 21, 2007 / Proposed Rules, 72(224), pp. 65509 65532.
- (4) NASDPTS. (2008). COMMENTS FROM THE NATIONAL ASSOCIATION OF STATE DIRECTORS OF PUPIL TRANSPORTATION SERVICES. Federal Docket Management System. Retrieved January 18, 2008, from http://www.regulations.gov/#!docketBrowser;rpp=25;so=ASC; sb=docld;po=0;D=NHTSA-2007-0014
- (5) NHTSA. (2008, October 21). Federal Motor Vehicle Safety Standards; Seating Systems, Occupant Crash Protection, Seat Belt Assembly Anchorages, School Bus Passenger Seating and Crash Protection; Final Rule. Federal Register / Vol. 73, No. 204 / Tuesday, October 21, 2008 / Rules and Regulations, pp. 62744 62786.
- (6) NTSB. (2013). School Bus and Truck Collision at Intersection Near Chesterfield, New Jersey February 16, (2012. Washington, DC: NTSB. Retrieved July 23, 2013, from http://www.ntsb.gov/doclib/reports/2013/HAR1301.pdf
- (7) NTSB. (2013). Safety Recommendation September 9, 2013. Washington, DC: NTSB Docket Management System. Retrieved September 26, 2013, from http://dms.ntsb.gov/pubdms/search/document.cfm?docID=401636&docketID=52501&mkey=82911