Seat Belts and School Bus Safety

While federal law required automakers to install seat belts starting in 1968, states held off on requiring their use by vehicle occupants for nearly 20 years. After New Jersey passed the first law requiring drivers and passengers to wear seat belts in autos in 1985, five other states (plus Washington, D.C.) followed suit that year alone. Now, New Hampshire is the only state in the nation that does not require seat belt usage in any vehicle.

Although school transportation doesn’t come before state boards as often as academic issues, modes and regulation of transportation do fall under the purview of many state boards. That may include policies regarding the use and maintenance of traditional school buses, driver training, and policies in concordance with laws about these issues and the installation and use of seat belts.

Even as debate over children’s safety in other aspects of their school lives continues, most states still do not require school buses to have seat belts, much less require students to use them. While much of the debate over the utility of automobile seat belts has been erased because of evidence that many lives are, in fact, saved by them, the debate over seat belts in school buses remains vigorous for several reasons, including what some believe to be incomplete data and testing of their efficacy by the federal government.

Other reasons for debate include:

- ★ While some claim existing data is lacking, what data there is has conflicting information about the need for seat belts on buses.
- ★ What type of restraint—two-point lap belts or three-point lap-and-shoulder harnesses—should be required?
- ★ Is seat compartmentalization—four-inch-thick foam-padded seats with seat-backs—good enough by itself?
- ★ And, of course, money. New equipment, rehabilitation of old vehicles, and more and newer buses all need to be paid for somehow.

Then again, all of these questions may be settled for some because data collected by the National Highway Transportation Safety Administration (NHTSA) found that school buses are among the safest vehicles on the road, based on reported fatalities from accidents. In 2002, the NHTSA reported that the fatality rate for school buses is .2 per 100 million vehicle miles traveled (VMT), making this mode of transit safer for students than being driven to school in a car, which had a fatality rate of 1.5 deaths per 100 million VMT.

According to the NHTSA’s Fatality Analysis Reporting System, in 2007 only five people were killed on school buses—four of them drivers. Of the 141 fatalities reported in the system, the vast majority were drivers or passengers of other vehicles (112), with pedestrians listed as the second-largest number of school bus-involved fatalities at 18 victims. Further, the November 2006 issue of Pediatrics reported that approximately 17,000 children are injured annually in bus-related accidents, although slightly more than 40 percent of these injuries involved the bus being in a crash (the rest were accidents related to boarding or leaving the bus, roughhousing on the bus, sudden stops, etc.).

The Questions Explained

School transportation industry observers have said that the 2002 NHTSA report provides an incomplete picture of school bus safety because it was conducted using mainly head-on collisions. A side-impact test was conducted using a large truck, and test dummies other than the ones directly impacted also showed significant threat of serious injury. Missing from the data, however, were tests on the use of two-point and three-point harnesses in other types of accidents, including roll-overs. Seat belt proponents argue that without this information, it is better to err on the side of caution, particularly since compartmentalization alone will not keep children in their seats if a bus tips or rolls over. In addition, proponents say that acclimation to seat belt use in school buses will carry over into regular use of seat belts as students become adults.
The results for what was tested, however, show that the safest solution is the three-point harness. While a lap belt will stop a passenger from sliding forward, a passenger’s torso will continue to bend until the head makes contact with the compartmented seat-back in front of them, causing neck injuries. Compartmentalization alone tested better than using it with a lap belt, as test dummies’ whole bodies were thrust forward, thus reducing head-and-neck specific injuries. Three-point harnesses with compartmentalization tested significantly better than the aforementioned options, trailing only the combination of three-point harnesses with compartmentalization and air bags.

The first-ever U.S. Department of Transportation guidelines on the subject were handed down in 2007. The guidelines call for three-point harnesses with compartmentalized seat backs in buses weighing 10,000 pounds or more, but these are voluntary due to the increased costs to school districts. In addition to the cost of purchasing and installing seat belts, there are expenses associated with raising the height of seat backs for optimal compartmentalization. Smaller buses, however, are required by federal regulation to have seat belts.

The greatest single expense would be for additional buses, as safety guidelines state that while bus seats without belts can accommodate three students, belted seats only have room for two students.

**In the States**

Although few states require buses to have seat belts, more states are either adopting laws requiring seat belt installation and usage or are broaching the subject.

The states that mandate two-point belts be installed are New Jersey, New York, Louisiana, and Florida, while California requires three-point harnesses for buses purchased after June 2005. As happens in many cases, it takes tragedy to motivate some policy and/or legislative action. Such was the case in Texas, where action was not taken until after a bus rolled over while avoiding road debris during a rain storm, killing two students. The state’s law—which contains no funding mechanism—calls for all buses purchased after Sept. 1, 2010 to be equipped with three-point harnesses.

In addition to state governments that passed these laws, organizations that support seat belts in school buses include the National Parent Teacher Association, the American Medical Association, the American Academy of Pediatrics, and the American College of Emergency Physicians. Groups against seat belt installations mainly oppose two-point lap belts. This list of opponents includes National Association for Pupil Transportation and the National School Transportation Association.

Before a state board comes out on either side of the school bus seat belt debate, it must first examine the requirements of its state’s circumstances and its own reach and responsibilities. For instance, the opportunity cost for states where local bus fleets are replaced more often due to weather and wear damage (as with states that deal with snow, ice, and road salt) is different for states where buses are able to safely operate for longer periods.

In addition, any discussion on the mandating of seat belts must include participation or input from respective state transportation or motor vehicles department.

**Resources**


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