



NATIONAL ASSOCIATION OF
STATE DIRECTORS OF
PUPIL TRANSPORTATION SERVICES

Information Paper

Emergency Evacuation Training – School Activity Trips

Background

Emergency evacuation training is an important issue in any environment where large numbers of people congregate and have access to limited numbers of exits. This safety issue is true for buildings, stadiums, concert venues, etc., and all types of mass transportation, e.g., trains, airplanes, transit buses, motorcoaches, and school buses.

In emergency situations, it is important that people be familiar with the location of all evacuation exits and knowledgeable about their operation. If not, additional injuries or fatalities could occur in an emergency. In various investigations of crashes involving motorcoaches, the National Transportation Safety Board has noted that “motorcoach passengers have reported a general sense of panic because they did not know what to do or how to get out of the bus.”

In its recent accident investigation of a school bus that plunged off a bridge and fell 49 feet into a creek in Omaha, Nebraska, the Safety Board learned that very few of the 27 high school students on the school bus had ever received emergency evacuation training. Most of the students did not ride a school bus to and from school each day, and, therefore, did not receive the mandated emergency evacuation training.

Some states require emergency evacuation training for all students that ride in school buses or school-chartered buses on school activity trips. However, the majority of states do not require any emergency evacuation training for these students. Accordingly, the Safety Board issued the following safety recommendation to remedy this problem:

Safety Recommendation H-04-06 to the National Association of State Directors of Pupil Transportation Services:

Prepare a report that can be used by the State Directors to influence their States to require pre-trip briefings before school-related activity trips on school buses or school-chartered buses and subsequently assist the States in developing criteria for such briefings, to include training all students regarding the location and use of emergency exits.

Several appendices in this document cover specific items related to this safety recommendation or other safety issues identified in the Omaha crash:

Appendix A: History of Highway Safety Program Standard No. 17

Appendix B: Excerpts from “National School Transportation Specifications and Procedures,” May 2000, 13th National Conference on School Transportation

Appendix C: Excerpt from February 7, 2001, Memorandum to State Directors Concerning a Safety Recommendation from the National Transportation Safety Board

Discussion

Emergencies in school buses occur in various forms, and the actions taken to evacuate school buses vary depending on the particulars of the emergency. Throughout the history of school bus transportation, the industry and both federal and state governments have been concerned about the emergency evacuation needs of school bus passengers.

As a result, school buses are equipped with emergency exits that anticipate a wide range of potential situations. For example, if an engine compartment caught fire on a front-engine bus, the use of the side or rear emergency exit doors would be the most logical escape route. Roof hatches or push-out windows would not be the most practical escape routes in this situation. On the other hand, if the bus in a crash ended up on its left side submerged in water, the emergency roof hatches would be one of the logical escape routes

The school bus crash in Omaha, Nebraska, faced this exact situation:

On Saturday, October 13, 2001, the driver of a 78-passenger transit-style school bus, carrying 27 high school students and 3 other adults, steered the bus sharply to the right in order to avoid a perceived frontal collision with a motorcoach coming from the opposite direction through a highway construction work zone. This steering action resulted in the school bus crashing through the guardrail and riding up onto the bridge’s concrete sidewall, and ultimately rolling 270 degrees clockwise as it fell about 49 feet, landing on its left side in a one-foot deep creek below. Three students and one adult sustained fatal injuries; the remaining 26 passengers and the driver sustained injuries ranging from serious to minor.

Students' knowledge of escape routes

During its investigation of this crash, the Safety Board found that the latches used to open the two roof hatches on the school bus were still in the “closed” position. Interviews with student passengers on the school bus indicated that, in the rush to evacuate the bus, students had kicked open or kicked out the emergency roof hatches rather than attempting to open them as designed. The student passengers took these actions because they had no knowledge of how to properly open the emergency roof exits. The Safety Board concluded that had these students received training and demonstrations in the use of all emergency exits on school buses, their “ability to open the emergency exits and evacuate the vehicle in an emergency would have been greatly improved.”

When an emergency evacuation situation arises, there is no time to read instructions on the proper operation of emergency exits. Plus, conditions surrounding the emergency situation can impact the emotions and slow the reactions of even knowledgeable passengers. The following description from the Safety Board’s report vividly portrays the situation on board the school bus involved in the Omaha crash:

Many students recalled the bus’s rolling and being upside down during the accident sequence. Some reported grabbing the luggage rack rails when they felt the bus begin its roll off of the bridge. In the accident’s aftermath, students reported seeing bus seats and seat cushions strewn about the bus. The student in row 2 who drowned was trapped inside the bus by the left side of the bus and a seatback. Two other students (rows 1 and 12), who were trapped inside the bus but survived, were pinned between the seat bottoms and loose seat cushions. Another student, who was ejected from row 9, was trapped between the left side of the bus and the creek bed. One student interviewed recounted unsuccessfully attempting to free a friend trapped beneath a seat cushion, and another recalled seeing a friend pinned beneath a broken bus seat.

While no one on the accident bus was killed or injured because of their lack of knowledge and training about the emergency exits on school buses, slight changes in the accident conditions could have easily resulted in additional deaths and injuries because of a lack of emergency exit training for all passengers. In order to avoid such situations in the future, it is important to provide emergency evacuation training to all students before leaving on an activity trip in either a school bus or a school-chartered bus.

Over the years, training information on emergency evacuation from school buses has been developed and disseminated by both the federal government and the pupil transportation industry.

Federal Government Actions:

The National Highway Traffic Safety Administration first became involved in school bus emergency evacuation training in 1972 with the issuance of Highway Safety Program Standard No. 17, "Pupil Transportation Safety." It required states to ensure that "at least twice during each school year, each pupil who is transported in a school vehicle shall [emphasis added] ... participate in emergency evacuation drills." These drills were only required for students who rode school buses to and from school.

In 1987, the United States Congress changed Standard No. 17 to Guideline No. 17. Because nearly every state had already adopted such programs into their state requirements, this change from "standard" to "guideline" did not negatively affect emergency training requirements in the states.

Guideline No. 17 was revised in 1991 and greatly expanded the federal government's recommendations with respect to emergency evacuation training to include more specific standards. The current version of Guideline No. 17 reads:

At least once during each school semester, each pupil transported from home to school in a school bus should be instructed in safe riding practices, proper loading and unloading techniques, proper street crossing to and from school bus stops, and should participate in supervised emergency evacuation drills, which are timed. Prior to each departure, each pupil transported on an activity or field trip in a school bus or school-chartered bus should be instructed in safe riding practices and on the location and operation of emergency exits

Emergency Exit Access

Equally important to training in the location and operation of all emergency exits is the continued awareness of the need to maintain access to all emergency exits. If the occupants of a school bus or school-chartered bus must be evacuated, critical time can be lost if the aisle or exits are partially or completely blocked. Such was the case in the tragic May 1988 crash in Carrolton, Kentucky, where 27 people died from fire and smoke inhalation.

When Guideline No. 17 was revised in 1991, the following recommendation was added:

Baggage and other items transported in the passenger compartment should be stored and secured so that the aisles are kept clear and the door(s) and emergency exit(s) remain unobstructed at all times. When school buses are equipped with interior luggage racks, the racks should be capable of retaining their contents in a crash or sudden driving maneuver.

[Note: A detailed discussion of the history of Standard No. 17 and Guideline No. 17 appears in appendix A.]

Pupil Transportation Industry Actions:

The pupil transportation industry began developing industry “standards” and guidelines in 1939. Since that time, a total of 14 National Conferences on School Transportation, where delegations from each state gather, have revised existing “standards” and established new safety guidelines for school buses and operating procedures for the safe transportation of school children. While emergency evacuation drills were discussed and encouraged in the early conference documents starting in 1995, Guideline No. 17 was incorporated in its entirety into the conference report. The most recent document, “National School Transportation Specifications and Procedures,” May 2000, includes Guideline No. 17 as Appendix E.

The May 2000 document includes a discussion of the need for emergency evacuation drills. This discussion includes “Instructions for Conducting Emergency Exit Drills” and “Evacuation Procedures for Activity and Field Trips.” The first document provides detailed guidance on conducting emergency evacuation drills “for all children who ride the school bus, even occasionally.” The second document provides detailed guidance on the emergency evacuation training procedures that should be followed before leaving on an activity trip. Copies of those documents appear as Appendix B.

Both of these documents address issues that could arise during an actual emergency evacuation situation. Examples of issues included are listed below:

- Knowledge and training in the location and use of the emergency exits.
- Location of fire extinguisher and first aid kit.
- Knowledge in operation of service entry door.
- Knowledge of how to shut off engine and set parking brake.
- Location and use of warning reflectors.

Additional Related Issues

While not included in the Safety Board’s recommendation to the State Directors Association, there are several additional aspects of the Omaha crash that merit discussion.

Road Hazards

Highway Work Zones – The Safety Board determined that the “probable cause” of the Omaha crash was “the hazardous condition in the work zone created by the irregular geometry of the roadway, the narrow lane widths and the speed limit.” This determination is not the first time that hazardous conditions have been cited by the Safety Board as the cause of a school bus crash.

Following its investigation of the school bus/train crash in Fox River Grove, Illinois, in October 1995, the Safety Board concluded that “the methods employed by the school district to identify and evaluate route hazards were ineffective.” The Safety Board noted that having information about route hazards “might have avoided the collision.”

The Safety Board issued Safety Recommendation H 96-52 to the State Directors Association as follows:

Encourage your members to develop and implement a program for the identification of school bus route hazards.

In response, the State Directors Association prepared a report titled, “Identification and Evaluation of School Bus Route and Hazard Marking Systems,” under a grant from the National Highway Traffic Safety Administration. That 1998 report was distributed to various state agencies and more than 10,000 school districts. It also is available on the State Directors Association’s website – www.nasdpts.org/documents/hazard.pdf

The report provides guidelines that school transportation officials can use in developing a system for identifying school bus route hazards that meet the needs of their locality. The report notes that:

A critical component of school bus driver training is the recognition of potential driving hazards and appropriate adjustment of driving behavior to ensure the safety of the school bus occupants. The goal of this project and report is to provide school bus drivers and substitute drivers with a list of locations/situations that should be recognized as being potentially hazardous. School bus drivers should be properly trained to deal with these potentially hazardous conditions. In addition, school bus drivers should be trained to deal with hazardous conditions that occur suddenly or are of a temporary nature. Constant dialogue between school bus drivers and route planners is critical to ensure the continued safe transportation of students in school buses.

The report discusses several conditions that existed at the Omaha crash site, including:

- Construction zones
- Lane width on bridges and overpasses
- Areas with no shoulders

The report concludes that school transportation officials should establish a program to routinely and systematically evaluate all school bus routes for potential driving

hazards. Appropriate changes in the school bus route, along with proper training, can help drivers both avoid and handle road hazards. Similarly, the training is important to school bus drivers on activity trips where the route may have a road hazard.

Familiarity with School Bus Characteristics

In addition to identifying the hazardous conditions of the work zone as the probable cause of the crash, the Safety Board also determined that the Omaha school bus driver's "unfamiliarity with the accident vehicle" contributed to the crash. The bus involved in the crash was a Type D school bus. Although the driver was licensed to drive both Type C and Type D buses, he drove Type C buses daily, and occasionally drove Type D buses on activity trips.

The role of the school bus driver in ensuring the safe transportation of children to and from school and school-related activities is as important as any other link in the school transportation safety chain. As discussed in the State Directors Association's Position Paper, "School Bus Drivers – Their Importance and Training," a modern, safe, well-maintained school bus operating on the best possible terrain with ideal loading zones can not compensate for an ill-trained school bus driver. Likewise, today's highly-trained school bus drivers can not provide the safest possible transportation to students with out-of-date, poorly-maintained school buses traveling over illogical routes, and stopping at undesirable loading zones.

In addition to training in the operation of the school bus itself, drivers need training in the use of specialized, auxiliary and optional equipment that is related to the safe operation/use of the school bus. For example, school bus drivers must be familiar with the various types of service entry door controls and operation, since manual, electric and air-operated doors are available on school buses. Likewise, drivers need training in optional braking systems and wheelchair lift operation.

Seat Cushion Retention

In the Omaha crash, a number of seat bottom cushions became unlatched from their mounting. In previous crash investigations, the Safety Board has concluded that "school bus passengers ... may have sustained more severe injuries because the seat cushion bottoms were unlatched." After its investigation of a school bus crash in Central Bridge, New York, in 2000, the Safety Board issued the following safety recommendation to NHTSA:

Modify the Federal Motor Vehicle Safety Standards to include the requirement for school bus seat cushion bottoms to be installed with fail-safe latching devices to ensure they remain in their installed position during impacts and rollovers.

Based on its concern that bottom seat cushions are not being securely reattached to the seat frame after routine cleaning of the school bus, the Safety Board issued the following Safety Recommendation to the State Directors Association:

Inform your members again of the safety hazards of not ensuring that the seat cushion bottom latching clips are properly latched at all times.

The State Directors Association sent a memorandum to each State Director on February 7, 2001, encouraging them to take actions within their states to ensure that all relevant personnel are fully informed on the importance of properly re-latching bottom seat cushions any time they are unlatched. The memorandum also discussed the importance of training individuals on how to inspect and repair seat bottom cushion.

A copy of the relevant section of the February 7, 2001, memorandum appears in Appendix C.

Conclusions

The National Association of State Directors of Pupil Transportation Services believes the emergency exit and evacuation training recommendations in Highway Safety Program Guideline No.17, "Pupil Transportation Safety," are reasonable and necessary. Specifically, the State Directors Association believes it is in the best interest of the transportation safety of children on school buses and school-charter buses to do the following:

1. At least once each school semester, provide all students transported to and from school in a school bus with instruction in the location and operation of all emergency exits. Also, provide supervised emergency exit drills to each student transported to and from school in a school bus.
2. Before departure on each school activity trip, provide all students transported on a school bus or school-chartered bus with instruction on the location and demonstration of the operation of all emergency exits.
3. Encourage the development of state or local school district policies limiting the amount of carry-on items, especially large items such as luggage, coolers, sports/band equipment, etc. on school buses and school-charter buses. Aisles and emergency exits in school buses and school-chartered buses must be kept clear at all times. Any item that is brought on board must be safely stowed and secured away from any aisle or emergency exit.
4. Adopt, implement, and enforce state or local school district laws/regulations that include all of the above mentioned recommendations from Guideline No.17.

The State Directors Association also believes all school routes, including those used for school-related activity trips, should be evaluated for any hazardous conditions.

Finally, the State Directors Association believes it is important for school bus drivers to receive training on each type of school bus they may be required to drive, including on activity trips. This training should include training about any auxiliary/optional equipment that is related to safety, such as optional braking systems, wheelchair lifts, etc, and may be on the school bus or school-charter bus. Their proficiency in driving each type of school bus and auxiliary/optional equipment should be maintained.

Appendix A

History of Highway Safety Program Standard No. 17

In 1972, the National Highway Traffic Safety Administration issued Highway Safety Program Standard No. 17, “Pupil Transportation Safety.” Under that standard, states were required to include that safety standard in their school bus operational practices and state regulations or risk the loss of Federal funding for a variety of transportation programs. Federal Standard No. 17, as published in the *Federal Register* on May 6, 1972, included the following requirement:

At least twice during each school year, each pupil who is transported in a school vehicle shall [emphasis added] ... participate in emergency evacuation drills.

While this requirement did not explicitly differentiate between “to and from school” trips and “school activity” trips, the stated purpose of Federal Standard No.17 addresses only the safety of “school children while they are being transported to and from school.”

In 1976, the United States Congress provided states with a more flexible implementation to the Highway Safety Program. The new requirements allowed states some discretion in how they adopted the various Highway Safety Program Standards. Specifically, states did not have to adopt every element of every standard. As a result, the standards became more like guidelines. In 1987, the Congress formally changed all of the Highway Safety Program Standards to Highway Safety Program Guidelines.

This change from “standard” to “guideline” did not negatively affect emergency training requirements in the states since nearly every state had already adopted significant portions of Guideline No. 17 into their state requirements. With the exception of a few states that allow each school district to make its own decisions concerning emergency exit training, every state has a requirement for emergency evacuation drills for students that ride school buses to and from school, several as many as three or four times per school year. In those states that have relegated the decision to the school district level, emergency evacuation training is provided in nearly all cases.

Guideline No. 17 was revised in 1991 to address new pupil transportation safety issues that had arisen since 1972 and to ensure consistency with the provisions and terminology in the existing and proposed Federal Motor Vehicle Safety Standards applying to school buses. The revisions greatly expanded the Federal government’s recommendations with respect to the types of transportation training pupils should receive. The recommendations were extended to loading zone safety (including escorting students across the street), bicycle routes and pedestrian safety information. With respect to emergency evacuation training, Guideline No. 17 reads:

At least once during each school semester, each pupil transported from home to school in a school bus should be instructed in safe riding practices, proper loading and unloading techniques, proper street crossing to and from school bus stops, and should participate in supervised emergency evacuation drills, which are timed. Prior to each departure, each pupil transported on an activity or field trip in a school bus or school-chartered bus should be instructed in safe riding practices and on the location and operation of emergency exits.

Appendix B

Excerpts from “National School Transportation Specifications and Procedures,” May 2000
13th National Conference on School Transportation

INSTRUCTIONS FOR CONDUCTING EMERGENCY EXIT DRILLS

There is an urgent need, due to the increased number of pupils being transported and the increased number of accidents on the highways, to instruct pupils on how to properly vacate a school bus in case of an emergency. It is possible for pupils to block the emergency door if all are trying to get out at the same time. Also, there is a possibility of danger when pupils jump from the rear emergency door exit. To avoid these situations, schools should organize and conduct emergency exit drills for all pupils who ride the school bus, even occasionally.

Reasons for actual emergency evacuations:

1. Fire or danger of fire. Being near an existing fire and unable to move the bus, or being near the presence of gasoline or other combustible material is considered dangerous and pupils should be evacuated. The bus should be stopped and evacuated immediately if the engine or any portion of the bus is on fire. Pupils should be moved to a safe place 100 feet or more from the bus and instructed to remain there until the driver has determined that the danger has passed.
2. Unsafe position. When the bus is stopped because of an accident, mechanical failure, road conditions, or human failure, the driver must determine immediately whether it is safer for pupils to remain on or evacuate the bus.
3. Mandatory evacuations. The driver must evacuate the bus when the following situations arise:
 - a. Fire or threat of fire is apparent.
 - b. The final stopping point is in the path of a train or adjacent to railroad tracks.
 - c. The stopped position of the bus may change and increase the danger (e.g., a bus comes to rest near a body of water or at a precipice where it could still move and go into the water or over a cliff). The driver should be certain that the evacuation is carried out in a manner which affords maximum safety for the pupils.
 - d. The stopped position of the bus is such that there is danger of collision.
4. Sight distance. In normal traffic conditions, the bus should be visible for a distance of 300 feet or more. A position over a hill or around a curve where such visibility does not exist should be considered reason for evacuation.
5. Important factors pertaining to school bus evacuation drills:
 - a. Safety of pupils is of the utmost importance and must be first considered.

- b. All drills should be supervised by the principal or by persons assigned to act in a supervisory capacity.
 - c. The bus driver is responsible for the safety of the pupils. When the driver is incapacitated and unable to direct the evacuation, school patrol members, appointed pupils or adult monitors should be authorized to direct these drills. It is important to have regular substitutes available.
6. Pupils appointed to direct evacuation drills should possess the following qualifications:
- a. Maturity.
 - b. Good citizenship.
 - c. Live near end of bus route.
7. Appointed pupils should know how to:
- a. Turn off ignition switch/shut down engine.
 - b. Set emergency brake.
 - c. Summon help when and where needed.
 - d. Use kick out windows or emergency escape exits.
 - e. Set warning devices.
 - f. Open and close doors and account for all pupils passing the station.
 - g. Help small pupils off bus.
 - h. Perform other assignments.
 - i. Use electronic voice equipment to summon help.
- (1) School bus driver and attendants should be active participants.
 - (2) Drills should be scheduled in a manner similar to fire drills held regularly in schools. They should be held more often during fall and spring months and conducted when the bus arrives at the school building with the pupils.
 - (3) Drills should be restricted to school property and conducted under the supervision of school officials.
 - (4) Types of drills should be varied.
8. Driver should stay in bus during evacuation drill. He/she must set the parking brake, turn the engine off and place the manual transmission in gear.
9. Pupils should not be permitted to take lunch boxes, books, etc., with them when they leave the bus. The objectives are to get pupils off safely in the shortest time possible and in an orderly fashion.

10. Pupils should travel a distance of at least 100 feet from the bus in an emergency drill and remain there until given further directions.
11. All pupils should participate in the drill, including those who ride only on special trips.
12. Each pupil should be instructed in proper safety precautions.
13. Pupils should be instructed in how and where to obtain assistance in emergencies. Written instructions and telephone numbers should be posted in the bus.
14. There are several different drills:
 - a. Everyone exits through the front entrance doors and emergency door configurations.
 - b. Everyone exits through the rear-most emergency door(s).
 - c. Front half exits through the front door and rear half exits through the rear-most door.
 - d. All rear engine buses are equipped with a left side emergency door in lieu of a rear emergency door (see Diagram). This exit should also be utilized for evacuation drills.
 - e. Some states also require side emergency doors in addition to rear emergency doors.
 - f. Students should be familiar with the operation of emergency windows, both side and rear, and roof hatches. All exits should be opened by students during evacuation drills to ensure their ability to operate such devices.
 - g. Every school bus driver shall ensure the students assigned to their bus are familiar with the emergency exit configuration of their assigned bus.
 - h. Identification of seat rows and positions similar to airline seating is recommended (i.e., left front seat 1, a, b, c, right front seat 1, d, e, f, etc.).

**EVACUATION PROCEDURES
for
ACTIVITY TRIPS AND FIELD TRIPS**

In order to ensure the safety of school bus passengers in an actual emergency, every school bus driver assigned to transport students on activity trips or field trips, shall assign an evacuation team prior to each trip. The team may consist of teachers, coaches, students or any other passenger. A roster should be provided to the driver accounting for all passengers.

Passengers assigned to evacuation teams must be seated where they can effectively carry out their responsibilities in an emergency.

Each Evacuation Team will consist of at least the following:

1. A passenger assigned to set the parking brake, turn off the engine, turn on warning flashers and to call in on the radio or other means, and report the incident to the Transportation Department, in case the driver is unable to do so.
2. A passenger assigned to lead passengers to a safe location at least 100 feet from the bus and to take the first aid kit off the bus.
3. Two passengers assigned to stand outside the bus, next to the front door, to help students exit the bus and for taking the fire extinguisher.
4. Two passengers assigned to stand outside the bus next to the rear door, to help students exit the bus.

In addition to assigning an evacuation team, the following information shall be discussed and/or demonstrated prior to each activity trip or field trip:

1. Location and use of the fire extinguisher.
2. Location of the first aid kit.
3. Location of the warning reflectors.
4. Location and use of all emergency exits.
5. How to shut off the engine and set the parking brake.
6. How to open the service door, to include, safety releases on manual, air or vacuum doors, if so equipped.
7. Instruct passengers to keep aisles clear at all times and not to block emergency exists.

THE DRIVER OF THIS TRIP DID ASSIGN AN EVACUATION TEAM AND EXPLAINED THE EMERGENCY PROCEDURES TO OUR GROUP.

Sponsor _____ Date _____

Appendix C

Except from February 7, 2001, Memorandum to State Directors Concerning a Safety Recommendation from the National Transportation Safety Board

Safety Issue #2 – Bottom seat cushion latching clips

During the Central Bridge crash, a number of bottom seat cushions were displaced because the latching clips at the base of the seat cushions were unlatched or loosely attached. As a result, two lap belt-restrained passengers on the right side of the bus (the side impacted by the dump truck) came to rest, still restrained, with their knees almost touching the bus floor and their backs against the dislodged bottom seat cushion. During the crash, the bottom seat cushion most likely flipped upward at its hinge point on the front of the seat frame. The Safety Board believes these passengers may have sustained more serious injuries because the bottom seat cushion became unlatched during the crash.

Since 1984, the Safety Board has found seat cushion latching to be an issue in a number of its investigations and even recommended solutions concerning the attachment of the bottom seat cushion to the seat frame. In 1987, the National Highway Traffic Safety Administration surveyed school bus manufacturers and found that most indicated they would permanently affix the bottom seat cushions to the seat frames in future production. According to the Safety Board, many school bus manufacturers are still using clips to affix the bottom seat cushion to the seat frame.

Based on its inspection of the school bus involved in the Central Bridge crash, the Safety Board is concerned that bottom seat cushions are not being securely reattached to the seat frame after routine cleaning of the school bus. As a result, the Safety Board issued the following Safety Recommendation to the State Directors Association:

Inform your members again of the safety hazards of not ensuring that the seat cushion bottom latching clips are properly latched at all times.

Response

The State Directors Association agrees with the Safety Board that bottom seat cushions can be a safety hazard if they are not securely latched or fastened to the seat frames. The entire seating structure of a school bus is an integral part of the crash protection built into the school bus. If any part of it is not installed correctly, the ability of the school bus to provide the highest level of safety to its passengers is affected. While easily removable bottom seat cushions are beneficial to facilitate the

cleaning of school bus interiors, it is imperative that the bottom seat cushions be properly re-latched after cleaning.

The State Directors Association encourages its members to take actions within their states to ensure all relevant personnel are fully informed on the importance of properly re-latching bottom seat cushions any time they are unlatched. These personnel should be trained in the areas listed below. Suggestions are provided on how to accomplish these items. However, the means by which bottom seat cushions and latches are inspected and/or repaired must follow state and/or local regulations or procedures.

1. How to inspect bottom seat cushions to ensure they are securely latched;
 - Seats can be either visually checked to see if the latch is complete engaged, or the seat bottom cushions can be manually checked to see if they are loose.
2. How to ensure that the latches are still capable of securely retaining the bottom seat cushion to the seat frame; and
 - Bottom seat cushion latches can be visually examined to determine if they are loose, damaged, or otherwise incapable of securely retaining the cushion.
3. How to remedy any bottom seat cushion that is not properly latched or has a damaged latch.
 - Latches that are not fully engaged should be adjusted so that they are fully engaged. Latches that are loose should be tightened. Latches that are damaged should be replaced.