| Approved: _ | March 2, 2006 | | |
|-------------|---------------|--|--|
| | Date | | |

MINUTES OF THE HOUSE TRANSPORTATION COMMITTEE

The meeting was called to order by Chairman Gary Hayzlett at 1:30 P.M. on February 14, 2006 in Room 519-S of the Capitol.

All members were present except:

Representative Gary Hayzlett- excused Representative John Faber- excused Representative Jerry Henry- excused Representative Joe Humerickhouse- excused

Committee staff present:

Hank Avila, Kansas Legislative Research Bruce Kinzie, Revisor of Statutes Office Betty Boaz, Committee Secretary

Conferees appearing before the committee:

Representative Mark Treaster
Nancy Stauffer, Citizen,
Jan Stegman, Safe Kids Kansas (Written Testimony)
Robert Vancrum representing Blue Valley USD
Jim Edwards, KS Association of School Boards
Barbara Pringle, Executive Secretary, KS State Pupil Transportation Association
Jack Woolf, Director of Pupil Transportation, National Association for Pupil Transportation
KS Department of Transportation (Written Testimony)

Others attending:

See attached list.

Representative Margaret Long, Ranking Minority, chaired the meeting in the absence of Chairman Hayzlett.

Chairman Long opened the hearing on HB 2546.

HB 2546 - School buses, requiring seatbelts, retrofitting

Chairperson Long recognized Representative Mark Treaster as the first proponent to <u>HB 2546</u>. According to Representative Treaster (<u>Attachment #1</u>) 25 million children ride school buses every day and accidents involving injury or death are rare. He said there are several reasons for the rarity of accidents, one of which is the compartmentalization of buses which was required by the Federal Motor Vehicle Standard 222 on all buses manufactured after April 1, 1977. After one very serious accident involving the death of one child and leaving another permanently paralyzed and two other less serious accidents in Reno County in the next couple months he said he became much more aware of the problem. Representative Treaster said he did some research and then contacted the mother of the child who had been killed while riding a school buse. He concluded by saying when the National Highway Traffic Safety Administration (NHTSA) set the Standard 222 seat, they indicated these were the minimum requirements applicable to school buses. He said since 50% of fatalities occur in rollovers and 15% occur in side impacts, a three-point safety harness would reduce serious injury and deaths in side-impact and rollover accidents.

The next proponent was Nancy Stauffer, the mother of the child who had been killed in the school bus accident. She talked about her daughter and told the Committee the significant impact the accident has had on her family. Mrs. Stauffer said the cost would be a significant investment but it would be an investment in the safety of the children. (Attachment #2)

Chairperson Long drew the Committee's attention to the written testimony of Jan Stegman, Safe Kids Kansas, (Attachment #3)

There were no other proponents so Chairperson Long opened the hearing to opponents of <u>HB 2546</u>. The first opponent was Robert J. Vancrum, representing Blue Valley USD #229. (Attachment #4) He said the first reason for opposing this bill was that the National Highway Transportation Safety Administration have shed

CONTINUATION SHEET

MINUTES OF THE House Transportation Committee at 1:30 P.M. on February 14, 2006 in Room 519-S of the Capitol.

doubt on whether the installation of seat belts actually increases the potential for injury or has offered better protection. According to Mr. Vancrum, this bill would mandate the use of a three point harness system and that it would be difficult to imagine that such a three-point system will be properly utilized by most students most of the time. He also asked who would be responsible for making sure all children are buckled in and how much longer does that make every child wait and how much earlier must the bus pick them up and in case of an emergency, how much longer would it take to get all of the children off the bus. He concluded by urging the Committee to not pass this bill.

The next opponent was Jim Edwards, Governmental Relations Specialist, Kansas Association of School Boards. (Attachment #5) According to Mr. Edwards, the National Highway Traffic Safety Administration has shown that there are other, much more effective ways to reduce the number of fatalities and injuries from school bus accidents.

Chairperson Long recognized Barbara Pringle, Executive Secretary, Kansas State Pupil Transportaiton Association as the next opponent. (Attachment #6) Ms. Pringle said that the yellow school buses are the safest vehicles on the highway due to special safety features including Compartmentalization which is mandated by Federal Motor Vehicle Safety Standards. According to Ms. Pringle, their concerns are that the lap shoulder belt must be worn correctly; if the bus is involved in an accident, who will make sure all the children get their belts off even if the driver is injured; unruly children using the seat belt and its buckle as an additional weapon; maintenance to belt assemblies and buckles, are lap/shoulder restraints appropriate for all ages on the school bus; what criteria will be used in deciding the proper installation of the seat restraint seats; liability; and funding.

Jack Woolf, Director of Pupil Transportation by the National Association for Pupil Transportation was the next opponent (Attachment #7). According to Mr. Woolf, the use of the combination lap/shoulder belts could provide some benefit, unless misused. Lap/shoulder belts can be misused and NHTSA's testing showed that serious neck injury and perhaps abdominal injury could result when that happens. Other considerations, such as increased capital costs, reduced seating capacities, and other unintended consequences associated with lap/shoulder belts could result in more children seeking alternative means of traveling to and from school.

There being no additional opponents Chairperson Long drew the Committee's attention to written testimony from the Kansas Department of Transportation who were neutral on this bill. (Attachment #8)

After all questions were answered, Chairperson Long closed the hearing on HB 2546.

The next meeting will be on February 15, 2006, at 1:30 p.m. in Room 519-S.

HOUSE TRANSPORTATION COMMITTEE GUEST LIST

DATE: 2-14-06

| NAME | REPRESENTING |
|-----------------|-------------------------|
| Ted Pawer | HR State of 10 Ilit 8 |
| JackWoolf | K,S, P. T.A. |
| Barbara Pringle | KSPTA |
| LARRY BluthART | X5,0/= |
| Deann Williams | KS MOTOR Cappier ASSOC, |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | * |

HOUSE TRANSPORTATION COMMITTEE

DATE 2-14-06

| NAME | REPRESENTING |
|--|---------------------|
| But Wichen | |
| Have Organ | |
| Seet Wirten Forward Organ Leonard Stauffer (Nancy) | |
| Jin Edwards | KASB |
| Pat Rehman | Safe Kids KS |
| They | DOT |
| Pete Bodyk | KDOT |
| Bob Vancrum | Blue Villy USD, 229 |
| | |
| | |
| | |
| | · |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| u a | |
| | |
| | |

STATE OF KANSAS

MARK TREASTER

REPRESENTATIVE, 101ST DISTRICT

COMMITTEE ASSIGNMENTS
TAXATION
TRANSPORTATION
ECONOMIC DEVELOPMENT
WILDLIFE & PARKS
RULES AND REGULATIONS



DOCKING STATE OFFICE BUILDING 7TH FLOOR TOPEKA, KANSAS 66612 (785) 296-6838 treaster@house.state.ks.us

HB 2546 SCHOOL BUS SEAT BELTS

Chairman Hayzlett and esteemed members of the Transportation Committee. It is a privilege to testify before you today in favor of HB2546. I appreciate the opportunity in this hearing to examine the issue of requiring Kansas school buses to be equipped with a 3-point safety belt.

Thankfully, travel on school buses in Kansas and the United States is well documented to be among the safest modes of transportation on our streets and highways. Twenty-five million children ride school buses every day, and accidents that involve injury or death are rare. This is the result of the combination of a number of factors. The big yellow bus is easily seen by other motorists who tend to have more caution when in the buses' vicinity. The size of the buses also helps reduce injury when they are involved in minor accidents with smaller vehicles. Federal law regulates the training of drivers, and those drivers, nearly without exception, are professionals who understand the precious cargo they carry. I am certain that they are extremely cautious drivers. In addition, compartmentalization of buses was required by the Federal Motor Vehicle Standard 222 on all buses manufactured after April 1, 1977. This increased safety with higher seats, additional padding, and better anchored seats. While all of the above is true, I believe we can do even more to keep our children safe when riding in school buses by requiring those buses in Kansas to be equipped with a 3-point safety harness seat belt.

I, as well as my two children, rode buses to school the majority of our public education years, so I believe I can speak with experience. While I have wondered for many years why buses are not required to have seat belts, my interest in this subject was minimal until a fatal accident occurred in my legislative district in September 2004. A 13-year-old girl, Auriel Turner, was tragically killed, and another young boy was left permanently paralyzed when their bus was broadsided by a semi-trailer. In the next few months, two other accidents occurred that involved Reno County school buses. Fortunately, no one was seriously injured in those accidents. I became aware

House Transportation
Date: 2-14-06
Attachment #_____

last February that Nancy Stauffer, the mother of Auriel, had begun a crusade of getting petitions signed to require buses to be equipped with seat belts. Knowing that losing one's child has to be the hardest thing one could face in life, I called her and asked if she would like to have a bill drafted. Of course her answer was affirmative, and she is here today to testify.

After quickly reviewing research about safety belts on school buses, I do not hesitate to appear before you today to ask that these be required by state statute. Opponents of requiring seat belts site the compartmentalization of buses as the reason passengers are safe without them. Higher seats keep children in the seat area, and additional padding keeps them safely contained. Also, tests on lap seat belts showed that additional trauma to the head and neck could result if the upper torso were thrust forward into the seat ahead, and that improper fitting could cause injury to the internal organs. I believe this to be true. However, there are additional factors that are not taken into consideration in these arguments.

Compartmentalization was a result of a study done in the 1960's by UCLA which proposed that school buses be equipped with high-backed, well-padded and well-anchored seats capable of absorbing crash forces, and that large side panels should be installed to contain riders. Also, lap belts were recommended to provide additional protection. Some, but not all, of these features were added by the National Highway Traffic Safety Administration (NHTSA) in the aforementioned Standard 222 seats. Following tests by the NHTSA and by another Federal Agency, the National Transportation Safety Board (NTSA) in 1983 agreed that current standards appear to be effective in eliminating or substantially reducing the majority of school bus passenger injuries. In 1999, the NTSA revisited the school bus safety belt issue by conducting a special investigation of six school bus accidents in which serious injury or death occurred. They found that compartmentalization was ineffective in keeping children contained. In each of these accidents, children were injured or killed as a result of being tossed about within the bus or ejection from the bus. It was found that during a side or rear-end accidents as well as a rollover, children became human missiles as they were thrown from their seats into one another or into the aisles, blocking quick evacuation. While compartmentalization works well for frontend crashes, the children involved in the 2004 Haven School District bus accident were not so fortunate as to be in a front end crash.

Advocates of school bus seat belts point to the failure of Standard 222 to completely

implement the UCLA standards. The NHTSA failed to include padding on the sides of the bus as well as the aisle, the seats are eight inches shorter than the report called for, and no lap belt was required. The NTSA in 1999 stated three additional factors that result in compartmental-ization failure in side impacts and rollovers. These are

the slippery nature of seat coverings, the small size of many school children, and the effect of sitting on or near the aisle.

The 3-point safety harness is now the Federal Standard for seat belts when school districts or the state requires seat belts in buses. The 3-point safety harness eliminates the danger of children suffering head, neck, or abdominal injury from a lap belt. An additional argument used by opponents of seat belts on school buses is the behavior of school children. Studies have shown that children's behavior while buckled up improves dramatically. Children stay in their seats and don't have as much physical contacts with others. This not only reduces injuries, but also minimizes driver distractibility. Having ridden and been abused by older students on school buses for several years, I think it is logical that having children restrained will improve behavior.

Safety belts on school buses have been endorsed by the American Medical Society, American Academy of Pediatrics, American Academy of Orthopedic Surgeons, American College of Preventive Medicines, Physicians for Automotive Safety, and the Center for Auto Safety.

I believe children are sent a message that seat belts are not important if schools don't require them on school buses. Seat belts save lives and by requiring their usage on school buses, we would be both protecting our children and reinforcing the lessons they learn when they are traveling in a car. My education which prepared me to teach special education students can be applied to all learning. The consistency between what kids learn at home and what they are taught at school is key in teaching behaviors. Wearing a seat belt is an extremely important behavior for children to learn.

When NHTSA set the Standard 222 seat, they stated that these were the minimum requirements applicable to school buses. Nothing prohibits a state or local jurisdiction from purchasing buses equipped with safety belts. Five states currently require safety belts. School Districts which require seat belts to be worn report 80% usage. Parents who entrust their children to ride school buses expect them to return home uninjured and alive. Unfortunately, school children in school buses will continue to be killed and injured in accidents. Nothing we can legislate will completely change that, but knowing that 50% of fatalities occur in rollovers and 15% occur in side impacts, the requirement of having a 3-point safety harness to keep children from becoming airborne in buses makes sense to me. Do we want to require only the minimum standard, or do we want to reduce serious injury and deaths in side-impact and rollover accidents in Kansas school buses? I will stand for questions at the appropriate time.

NCSBS



The National Coalition For School Bus Safety

Home Page Mission

Membership

Crash Reports

2006 2005

2004 2003 2002

2001 2000 1999

National News
Parents' Stories
& Letters

Endorsements

Fact Summaries

New Technology

Legislative Initiatives

Testimony

Liability Aspect

Scientific Reports

Rebuttals

Resources

Wish List

Accident Form

Accident Data

2005 2004

2003 2002 2001

2000 Pre-2000

Links

Contact NCSBS

If you like this site



click here to Tell a Friend

REVIEW OF MAJOR SCHOOL BUS CRASHWORTHINESS STUDIES BY THE NATIONAL TRANSPORTATION SAFETY BOARD

Crashworthiness of Small Poststandard School Buses (NTSB/SS-89/02)

avitte ver

This study focused on the crash performance of small school buses constructed in compliance with seating Standard 222. There were seat belts at all seating positions. 24 accidents were reviewed. There were a total of 167 occupants, 110 or about 2/3s were seat belted and subjected to crash forces.

During side impact and rollover accidents, protection for seat belted passengers seated between padded seats was excellent. Among these belted passengers; there were no significant abdominal or head injuries. None were thrown from the between the padded seats. This was not the case for the unbelted passengers.

It must be kept in mind that when in a similar collision to a large school bus, these small vehicles will be subject to greater crash forces. As a result, the absence of lap belt induced injury in this real world experience is of major significance.

Crashworthiness of Large Poststandard School Buses (NTSB/SS-87/01)

Because the NTSB conclusions and recommendations concerned large school buses detailed re-review of the details reported in this study was undertaken.

Of the 43 accidents reported 13 were side impact or non-collision rollover accidents where the injury producing forces were lateral and passenger kinematics were uncomplicated by foreward or rearward components. Accident severity ranged from very minor to extremely

severe. A total of 420 unbelted passengers were exposed and compartmentalization failed 65% of the children. 272 suffered injuries. On the other hand 38 were wearing belts. None of these were injured. 0% were hurt. The seat belts had protected all.

Case 13. Moderate. Multiple left side. *Compartmentalization failed.* 4 of 5 passengers injured. NTSB determined that lap belts would have prevented 3 injuries.

Case 16. Very Minor Sideswipe. Bus went off road. *Compartmentalization failed*. All 29 passengers were wearing belts. None injured. NTSB reports that crash was so minor that driver reported that books did not falloff seats. Driver denies making such a statement to investigators. She states that books are carried in knapsacks. All on the bus felt the strong pull of the crash pulse on their seat belts and dispute the very minor classification.

Case 17. Minor Sideswipe. *Compartmentalization failed.* 5 of 43 passengers injured. 1 suffered brain concussion. NTSB determined that a lap belt would have helped,

Case.18. Moderate. Slow moving train hit rear of bus. *Compartmentalization failed.* Only 8 of 53 passengers injured because driver insisted that all sit in front of bus, fortunately away from area of impact. .

Case 20. Moderate. Right side then left with partial rollover. *Compartmentalization failed*. 15 of 17 passengers injured, 5 moderate, 1 serious. NTSB determined that a lap belt could have reduced the severity or the serious injury. The moderate injuries to head, shoulder and extremities caused by children being thrown into sidewalls and windows could have been mitigated by padding of sidewalls.

Case 21. Moderate-Severe. Right side followed by minor left side. Compartmentalization failed. Of the 42 passengers 39 were injured, 4 moderate. NTSB has determined that lap belts would have eliminated 2 pelvic fractures. I head injury was caused by the steel sidewall. Other minor injuries were attributed to contact with parts of the bus interior and/or other occupants. Lap belts and wall padding would have mitigated.

Case 22. Minor. Non collision rollover. *Compartmentalization failed.* Of 8 passengers 3 suffered minor and 2 moderate injuries. NTSB estimates that lap belts would have prevented 2 of the moderate injuries. The 3 minor injuries caused by being thrown as the bus rolled could have been reduced or eliminated with padding and belts. One child was wearing a seat belt and rode through the rollover uninjured.

Case 23. Minor. Non-collision rollover. *Compartmentalization failed.* 12 passengers, 2 injured. Girl seated on left side fell across the bus to the right striking a boy seated on the right injuring both. NTSB determined that these injuries would have been prevented by lap belt use.

Case 24. Minor-Moderate. Rollover. *Compartmentalization failed.* 2 passengers. 1 serious

injury. Young girl who was seated on left side and was flung to the right as bus rolled over. Her right arm went through the window and remained outside as bus slid several feet along gravel roadway. Her arm had to be amputated above the elbow. NTSB admits lap belt would have prevented this serious injury.

Case 25. Moderate. Non-collision rollover *Compartmentalization failed.* 53 passengers, 36 injured, 4 moderate, Minor and moderate injuries resulted from contact with sidewall and windows. Padding would have mitigated.

Case 26. Moderate. Noncollision rollover. *Compartmentalization failed*. All passengers were injured, 5 minor 6 moderate. Injuries caused by hitting overhead luggage racks during rollover. Producing vertebral and cervical fractures. NTSB has determined that lap belts would have prevented most of the injuries. Padding would have reduced contact with sidewalls.

Case 27. Moderate. Non-collision rollover. *Compartmentalization failed.* 47 of 51 passengers were injured. "...all passengers tumbled around in the bus interior. Students mentioned hitting their heads, necks, shoulders and backs during rollover." Incredibly the Board did not feel that lap belts would be of value. They contend without documentation or example that injuries would be the same if lap belted. Applying extremely convoluted reasoning they point out that since some seat cushions dislodged in the accident, "...lap belted students conceivably could sustain more serious injuries should cushions come off during rollover. Since they then will impact the exposed seat rails with their "tail bones" or fall between the railings." This conjecture is patently absurd. Belted students held on their seats by their restraints would hold the cushions in place and ride through the accident uninjured with their "tail bones" intact.

Case 28. Moderate. Non-collision rollover. *Compartmentalization failed*. Of 22 passengers all were injured, 1 moderate, 1 serious injury. Most serious was a liver

injury. NTSB has determined that lap belts might have reduced this serious as well as the moderate injury. Students reported that they struck the roof, windows, seat backs and fell on one another. The Board speculates that injuries "...probably occurred as the bus rolled over and the flailing arms and legs struck seats, windows and each other. Head contusions were common. The failure to remain compartmentalized should be obvious.

Case 29. Moderate-Severe. Non-collision rollover. Compartmentalization failed. Of 33 passengers, 24 minor, 3 moderate injuries with 4 ejections. Injuries included vertebral and clavicular fractures and a severe laceration. The bus did a 360 degree rollover. NTSB has determined that lap belts would have prevented ejections

Case 30. N.A. Frontal Case 31. N.A. Rear

Case 32. N.A. Frontal Case 35. N.A. Frontal Case 36. N.A. Frontal

Case 37. N.A. Multiple collision Case 38. N.A. Head on Case 40. N.A. Rear

Case 41. N.A. Frontal

Case 33. Moderate. Left rollover. *Compartmentalization failed*. Of 9 passengers, the only injury was sustained by the only passenger who was not wearing a seat belt. NTSB agrees that the remaining belted passengers were spared injury because of belt use.

Case 34. Moderate. Left side, then rollover. Compartmentalization failed. Of 17 passengers 16 were injured. They were thrown from their seats onto ceiling and/or seats and other passengers. NTSB agrees that lap belt~ might have reduced the number of injuries.

Case 39. Severe. Side. Compartmentalization failed. Of 7 passengers 3 received minor, 2 moderate and 1 fatal injuries. Fatality was seated right rear just behind impact area and suffered a closed head wound, abdominal trauma and a fractured pelvis. Accident was probably not survivable.

Case 42. Extremely Severe. Right side rollover. Compartmentalization failed. Of 26 passengers 23 sustained minor, 1 moderate and 2 serious injury. One serious injury occurred to a child seated in the last row as her head hit the rear door behind. A seat belt would not have helped, however 10 year old 'iirl seated behind the driver was thrown head-first toward the right side of the bus. She sustained head trauma including a depressed skull fracture. NTSB determined that a seat belt would have prevented or mitigated this injury .The remaining children suffered multiple lacerations, cuts, abrasions, bruises and contusions to the head, arms and legs as they were thrown about during tie impact and subsequent rollover. Lap belts and sidewall padding would have reduced injury

top of page

back to Testimony Page

Home Page

Mission

Membership

A Parent's Story

Endorsements

Summaries

Technology

Legislative Initiatives

Testimony

Liability

Scientific

Rebuttals

(11)

Chairman Hayzlett, and members of the committee. I appreciate the opportunity to testify before you today.

Please understand that I am not a public speaker. This is all new and a bit overwhelming for me.

I will try to be as brief as possible. I do understand that you have other matters at hand.

First, I would like to share some information that I found on the Internet. I won't use much, because I know you have probably heard it all.

This is from Don Keenan, an attorney from Atlanta and a child advocate, published on 01/30/06.

Several children were injured when one school bus rear-ended another, in Paulding County last week. The collision put a 7-year-old boy in a coma. Just days later, three children on a Lake Butler, Florida school bus were seriously injured in a deadly accident involving a tractor trailer.

There has been an average of one school bus collision each day for the past 60 days. This rash of dangerous collisions demands revisiting our government's failure to require seatbelts on school buses.

Two grieving families in Arlington, Virginia late last year discovered the basic rule of physics. A school bus is no match for a big truck. Lilibeth Gomez and Harrison Orosco, both 3rd graders, died when a tractor trailer collided with their school bus. Another child was killed last year when a cement truck broadsided the child's school bus. Without question, the severity of the injuries to the Paulding County boy and the three children in Lake Butler, were because their buses were struck by, respectively, another school bus and a tractor trailer.

While there is some debate about the specifics of each of these deaths, common sense tells us that seatbelts would have made a difference if the children who were killed had been belted, they might have been seriously injured but they would probably have been alive today.

For several years, the National Coalition for School Bus Safety, a grass roots organization based in Virginia, has advocated the legislative mandate of seatbelts in school buses. The founder of that organization has one painful thing in common with the two families in Virginia; his son died when a tractor trailer struck his bus.

Most estimates put the figure for seatbelts at \$1,500 to \$2,000 per school bus. Perhaps the cost to retrofit school buses is more at the heart of the resistance to put seatbelts in those vehicles. It is hoped that is not the case, but proper installation of the necessary lap, shoulder belts will require significant investment.

Using seatbelts may also limit the number of students per seat from three to two. This will also add cost, because more buses may be necessary.

House Transportation
Date: 2-14-06
Attachment # 2

But the increased cost must be seen as an investment in the safety of our children While school bus companies are a for profit business that serves the public, they need to make their own investment to build a new, safer generation of school buses.

School districts and taxpayers must push for this investment and help pay the costs, if necessary. There is no price we can put on the well being or life of a child. And there is certainly no cost that is a greater burden than wondering if a youngster's death could have been avoided.

There is currently no federal requirements for children, other than preschoolers, to wear seatbelts on buses and a vast majority of school districts nationally do not require seatbelts. The fact that older children are not required to take this safety precaution doesn't make good sense.

Add to this fact that seatbelts on school buses are endorsed by the American Medical Association, American Academy of Pediatrics, American Academy of Orthopedic Surgeons, American College of Preventive Medicine, Physicians for Automotive Safety, and the Center for Auto Safety. And there is little doubt of their value. These esteemed organizations are not wrong. The problem is they are faceless groups with virtually no political or local clout.

Each school day more than 25 million children ride the yellow school bus, back and forth to school and to school related activities. Additionally, millions take these vehicles to camp, religious, athletic and youth events. There are an approximate 450,000 school buses in service to date. School buses travel 2 million miles every school day.

A recent bus accident in Boston, injured 15 Massachusetts students and a bus driver, when their school bus collided with another, on Route 93, pushing it into a passenger vehicle, has brought the issue of seatbelts into the spot light.

Children today are raised to treat seatbelts as common place in transportation, as the keys that start the vehicle. Strides made in this area, which came through community outreach, education and legislation, are invaluable.

The argument against seatbelts on school buses centers around the fear children may not be able to efficiently and quickly exit the bus in the event of an accident. The children today can utilize this basic safety technology without slowing evacuation. It is easier to assist a conscious passenger than one who has been tossed about in a collision.

An example is a 1998 accident in which a Wisconsin bus carrying preschoolers was hit in the side by a van. The bus rolled onto its side, and the children removed their own seatbelts and evacuated before fire and rescue personnel arrived. None of the students sustained injuries.

Just a couple of headlines:

A school bus in Liberty, Missouri crashed into two other vehicles Monday morning, killing two people in the cars struck by the bus and injuring more than 20 children.

2-2

A truck pulling a stock trailer came to rest more than 200 yards from a Ripley school bus after the vehicles collided on Tuesday afternoon on Highway 18 in Payne County. A student riding in the bus and the truck driver were killed.

One child was killed and 14 were injured Monday when their school bus collided with a garbage truck at a busy intersection.

In the past 10 years, 113 children have died in school bus accidents. There were 62,000 pupil injuries reported in school bus accidents from 1991-1996. This does not include the additional thousands of injuries that occur in non-crash events, such as when the bus simply stops quickly and a child is thrown from their seat.

Our school bus drivers, while maneuvering a large vehicle, must contend with traffic, bad weather, adverse road conditions, all this while having their backs to our children.

School officials from New York comment, "The most important aspect of seatbelt use is that the belts are a great management tool for student behavior. When wearing seatbelts, the students are seated and therefore, there is less fighting and physical contact, a quieter trip, less confusion and fewer distractions for the driver. The result is a safer trip."

Accidents are going to continue to happen. But we do know that in all other vehicles, seatbelts save lives. It is most assuredly the same in school buses.

MY STORY

On September 23, 2004, I receive the phone call that every parent fears. It was my new husband of two months. He said my only child, Airiel, had been in a school bus accident and had been Life Watched to a hospital 45 miles away. I was at work. I didn't ask any questions, I just ran. I ran to my van and tried to drive the 7 mile to my house where my husband was. I was in hysterics. My nephew had heard about the accident, and called me to see if Airiel was in it. I was screaming; he asked where I was and I told him I was trying to get home but the road was closed. He tried to calm me and told me to come get him and let him drive me. So I did. We got to my house where my husband was waiting. We drove to the school. They gave us very little information and then we were on the highway to where Airiel was at. When we reached the hospital, we were taken to a room where we talked to a Highway patrolman. He had only a small amount of information, but we did learn the school bus was crossing a major highway and was hit broadside at a speed of at least 70 mph.

Then we were introduced to the hospital's chaplain. He took us to a waiting room and said someone would come to talk to us. After about an hour, a doctor came in and told us that Airiel had a broken collarbone, but her critical injury was her skull; it had been broken, in a circle shape, on the left side of her crown. The break was about the size of softball and her skull was pushed into her brain. They were going to operate and try to lift the break off of her brain.

So we were left alone again. About this time, some of my family arrived, and a pastor from our area. It was 11:30 pm before the surgery was over and I was allowed to see Airiel. She was

unconscious and on a ventilator. I cried, I prayed, I sang to her, I talked to her for two days. After 2 days, they did some tests and determined she was brain dead.

Airiel was such an outgoing, fun-loving teenager. She liked music, art, Marilyn Monroe. She was funny. She collected Beanie and Boyd's Bears. She was always happy, with a big smile on her face. She was slow to anger and quick to forgive. She was going to be a gourmet cook and a dancer. She had found her passion in dancing. She danced at my wedding and we got it on video. That's one of my prized possessions. Airiel was my dear daughter, but above all, Airiel was my friend. I miss her every day. I think about what she would be doing today. I live with all the "what ifs". Airiel had shared with me that she would want to be an organ donor, so that was done; 7 lives were saved. I know that Airiel would want me to speak out on this seatbelt issue. Airiel was not the only child injured that day. One boy is paralyzed. His sister sustained brain damage. One boy suffered severe lacerations to his face.

We learned that Airiel had been ejected through one of the side windows and hit the highway head first. I believe if she had not been thrown from the bus, the outcome would have been better. All the other passengers lived, but they remained inside the bus.

I have a petition going for seatbelts on school buses. I have learned that a lot of parents don't even know that buses don't have seatbelts.

A recent survey showed that 94.7% of parents favor mandated seatbelt usage on school buses. Please listen to parents and grandparents, even doctors whose primary concern is protecting children. Gains on this issue must come from parents who demand improvements. I am one.

To sum things up, I would ask that you think about how many large vehicles are on our roadways. There are many, many more tractor trailer trucks out there. They are traveling on not just large interstates but on our small highways. Our school buses are going many more places on these highways. They go to more sporting events and more school-related activities. Compartmentalization is a wonderful thing. The buses themselves hold up better in collisions than even tractor trailers do. But our children are still being thrown around like rag dolls. Children, like my daughter, literally become human missiles. They are slammed into each other, or being ejected through windows that are hardly big enough to crawl through.

Imagine, if you can, that it was not my child ejected through that bus window at "God only knows what speed," but that it were your child, or your grandchild. Would you then vote to put seatbelts on school buses? To at least keep the children inside the bus and give them some chance to live.

On the next few pages are some pictures and some of Airiel's poems. I just wanted you to see things the way I have seen them.

Chairman Hayzeltt and members of the committee, again, I thank you. And may God bless us all.



Testimony Presented to the House Judiciary Committee House Bill 2546

Safe Kids Kansas, a nonprofit coalition of 67 statewide organizations and businesses dedicated to preventing accidental injuries to Kansas children ages 0-14, appreciates the opportunity to provide testimony on HB 2546.

School bus transportation is one of the safest forms of transportation. In fact, students are nearly eight times safer riding in school buses than motor vehicles.

In an ideal situation, every Kansas child would be transported to school and back each day in a brand new bus equipped with a lap/shoulder seat belt. Each bus would also carry an adult seat belt monitor to assure correct usage of the seat belts at all times. However, in these days of tight school budgets, requiring retrofitting on all buses with lap/shoulder belts might not be realistic.

Large School Buses:

- While the use of safety belts has been proven vital for children's protection in passenger vehicles, school buses instead rely on a passive restring system called "compartmentalization". Compartmentalization protects children through closely spaced, well-anchored vehicle seats that have high backs designed to absorb the energy of a crash for properly seated occupants. In addition, the sheet size of school buses offers further protection.
- Based upon NHTSA's research, while the use of combination lap/shoulder belts, if used properly, could provide some benefit, testing indicates that misuse of lap/shoulder belts (when children put the shoulder portion behind them) could result in serious neck and abdominal injuries. If used correctly 100% of the time on all school buses nationwide, lap/shoulder belts could save one life a year.
- The expense to retrofit older school buses would be exceeded by the bus' value. In those cases, the entire bus would have to be replaced. Additional new buses would be required to compensate for the loss of seating capacity for buses equipped with lap/shoulder belts.
- ➤ Increased capital costs and the reduced seating capacities associated with lap/shoulder belts could result in more children seeking alternative means of traveling to and from school.
- Even the smallest reduction in the number of bus riders could result in more children being killed or injured when using less safe alternative forms of transportation, such as motor vehicles.

| House | Transportation |
|---------|----------------|
| Date: | 2-14-06 |
| Attachn | nent # 3 |

If Kansas enacts polices to require lap/shoulder belts on large school buses, Safe Kids Kansas recommends that steps should be taken to ensure that they are used properly and that no child is forced to find alternative means of transportation since school buses are the safest way for children to get to and from school.

Small School Buses (less than 10,000 pounds):

- In small school buses, the benefits of preventing ejection outweigh the increased risk associated with lap belts
- > These types of buses weigh less, have different crash dynamics, and are more prone to rollover than large school buses.

As they are more similar to passenger vehicles, Safe Kids Kansas recommends that safety belts should be used at all times while riding in small school buses.

Attachment: Safe Kids Kansas Member Organizations

Safe Kids Kansas, Inc. is a nonprofit Coalition of 67 statewide organizations and businesses dedicated to preventing accidental injuries to Kansas children ages 0-14. Local coalitions and chapters are located in Allen, Anderson, Atchison, Clay, Dickinson, Doniphan, Douglas, Ellis, Ford, Franklin, Geary, Jackson, Jefferson, Johnson, Leavenworth, Marion, Meade, Mitchell, Montgomery, Nemaha, Osage, Pottawatomie, Republic, Rice, Riley, Saline, Smith, Shawnee, Wabaunsee, Wilson and Woodson Counties, as well as the cities of Chanute, Emporia, Leavenworth, Norton, Pittsburg, the Wichita Area and the Metro Kansas City Area. Safe Kids Kansas a member of Safe Kids



Safe Kids Kansas **Member Organizations**

AAA Kansas

American Academy of Pediatrics - KS

Attorney General of Kansas

Board of Emergency Medical Services

Brain Injury Association of Kansas

Children's Mercy Hospital

Cusick Jost Consulting, LLC

Dillon Stores

Fire Education Association of Kansas

Fire Marshal's Association of Kansas

HCC Fire Service Training Program

Kansas Academy of Family Practice Physicians

Kansas Action for Children

Kansas Association of Counties

Kansas Assoc. of Local Health Dept.

Kansas Assoc. of Osteopathic Medicine

Kansas Association of School Boards

Kansas Chapter International Assoc.

of Arson Investigators

Kansas Children's Cabinet & Trust Fund

Kansas Chiropractic Association

Kansas Cooperative Extension 4-H

Kansas Dental Association

Kansas Dept. of Health & Environment

Kansas Dept. of Human Resources

Kansas Dept. of Transportation

Kansas District of Kiwanis International

Kansas EMS Association

Kansas Emergency Nurses Association

Kansas Farm Bureau

Kansas Foundation For Medical Care

Kansas Head Start Association

Kansas Healthy Start Home Visitors

Kansas Highway Patrol

Kansas Hospital Association

Kansas Insurance Department

Kansas MADD

Kansas Medical Society

Kansas Motor Carriers Association

Kansas Operation Lifesaver

Kansas Parent Teacher Association

Kansas Recreation & Park Association

Kansas Rehabilitation Hospital

Kansas SADD

Kansas Safety Belt Education Office

Kansas School Nurse Organization

Kansas State Association of Fire Chiefs

Kansas State Board of Education

Kansas State Fire Marshal's Office

Kansas State Firefighters Association

Kansas State Nurses Association

Kansas Trial Lawyers Association

KIDS AND CARS

KNEA

KUMC Burn Center

KUMC Trauma Program

NHTSA Regional Office

Mid-America Poison Control Center

Office of the Governor

Safety & Health Council Western MO & KS

State Farm Insurance Companies

State Capitol Area Fire Fighters Association

Stormont-Vail Regional Medical Center

United School Administrators of Kansas

Via Christi - St. Francis Burn Center

Via Christi - Trauma Center

Wesley Medical Center

*Membership also includes Local Coalitions and Chapters located in Allen, Anderson, Atchison, Clay, Dickinson, Doniphan, Douglas, Ellis, Ford, Franklin, Geary, Jackson, Jefferson, Johnson, Leavenworth. Marion, Meade, Mitchell, Montgomery, Nemaha, Osage, Pottawatomie, Republic, Rice, Riley, Saline, Shawnee, Smith, Wabaunsee, Wilson and Woodson Counties; as well as the cities of Chanute, Emporia, Leavenworth, Norton, Pittsburg, Wichita Area, and Metro Kansas City.

Safe Kids Kansas is a member of Safe Kids Worldwide.

1/06

1000 SW Jackson Suite 230

Topeka, KS 66612

tel 785-296-1223

fax 785-296-8645

www.safekids.org

www.kansassafekids.org

Testimony to House Transportation Committee on behalf of Blue Valley Unified School District #229 Robert J. Vancrum, Blue Valley Government Affairs Specialist Tuesday, February 14, 2006

Re: House Bill 2546

Dear Chairman Hazlett and Honorable Members of the Committee:

It is always very difficult to testify in opposition to well-meaning legislation which is intended to save lives, especially those of the youngest and often most vulnerable. However, the Blue Valley School District has concluded that it must oppose the bill for several reasons. In the first place, carefully documented safety studies since 1969, most recently including a 2002 study by the National Highway Transportation Safety Administration have shed doubt on whether the installation of seat belts actually increases the potential for injury or has offered better protection. Clearly the data seems to indicate that if passengers are using lap belts alone, (or a two point seat restraint system in the terminology of the NHTSA), the potential for injury is increased.

For the same reason parents are regularly told today not to put children weighing 49 pounds or less in a lap belt in the back seat, but instead place them in properly designed child restraint seats. The reason is simple: children's internal organs are likely to be harmed and serious neck and spinal injuries can be caused by the whiplash effect.

We of course realize that this bill would mandate the use of lap shoulder seat belts or a three point harness system. The problem is that it is very difficult to imagine that such a three point system will be properly utilized by most students most of the time. The same studies have indicated that if they are not properly utilized, they can actually cause more harm than simple compartmentalization which has been mandated on school buses nearly 20 years ago.

What is compartmentalization? The use of high-back seats, 20 to 24 inches high, the seat backs to be padded both front and back, closely spaced and well anchored. With such modifications, most studies have indicated a child is eight times more likely to be injured traveling to school in its parents car than in a school bus.

Another factor that must be considered would be who is responsible for making sure all children are buckled in and how much longer does that make every child wait and how much earlier must the bus pick them up. Also, in case of an emergency, how much longer would it take to get all of the children off the bus.

We also must talk about the fact that this is a non-funded mandate that will be fairly sizable on all school districts in the state of Kansas. One estimate by the budget department is that the cost could be tens of millions of dollars across the state. We believe that the first year the cost in Blue Valley alone could be \$325,000. This money could only come from the general fund of the district and thus reduce monies available for instructional purposes. The additional costs come from the fact that there is a reduction in the capacity of school buses as a result of retrofitting buses and a subsequent need to add routes and drivers to account for this reduction.

House Transportation

Date: 2-/4-06

Attachment #_4

766100 0002/7038945.1

Obviously, the school board of Blue Valley USD 229 is just as concerned as legislators are about the safety of our children, who clearly are the future of the state of Kansas.

I will be happy to answer questions of any member at the appropriate time.



1420 SW Arrowhead Road • Topeka, Kansas 66604-4024 785-273-3600

Testimony on HB 2546 before the House Transportation Committee

by

Jim Edwards, Governmental Relations Specialist Kansas Association of School Boards

February 14, 2006

Chairman Hayzlett and Members of the Committee:

I thank you for allowing me the opportunity to appear before you today on a very important issue and that is the safety of children being transported to and from school on school busses. KASB appears today as an opponent to **HB 2546**, the measure which would require seat belts in all school busses.

We appear as an opponent not because we don't believe in the safety of these transported children but because the National Highway Traffic Safety Administration (NHTSA) has shown that there are other, much more effective ways to reduce the number of fatalities and injuries from school bus accidents. Let me expand on this.

First, the NHTSA has determined that school bus transportation is one of the safest forms of transportation in the United States. Busses are required to have emergency exits, reinforced roof structures, seating compartment safety features and fuel systems that once again, surpass what is found in most other forms of passenger vehicles.

Second, school bus crash data show that a Federal requirement for belts on buses would provide little, if any, added protection in a crash. The National Transportation Safety Board (NTSB) and the National Academy of Sciences (NAS) have come to the same conclusion. NTSB concluded in a study of school bus crashes that most fatalities and injuries were due to occupant seating positions being in direct line with the crash forces and seat belts would not have prevented most of the serious injuries and fatalities occurring in school bus crashes.

Third, the NHTSA, the NTSB and NAS have all concluded that the best way to provide crash protection to passengers is through a concept called "compartmentalization." Occupant crash protection is provided by a protective envelope consisting of strong, closely-spaced seats that have energy-absorbing seat backs. NAS also stated that the funds used to purchase and maintain seat belts might better be spent on other school bus safety programs and devices that could save more lives and reduce more injuries.

Thank you for allowing me to appear on this important matter and I would respond to questions.

House Transportation
Date: 2-14-06
Attachment # 5

Representative Gary Hayzlett Chairman House Transportation Committee

House Bill # 2546

Barbara Pringle
Executive Secretary
Kansas State Pupil
Transportation Association

House Transportation

Date: 2-/4-06

Attachment #_6

The Honorable Representative Gary Hayzlett, Chairperson House Committee on Transportation Statehouse, Room 115-S Topeka, Kansas 66612

February 14, 2006

Representative Hayzlett,

I am here today to speak to you on behalf of the Kansas State Pupil Transportation Association (KSPTA). KSPTA was established in 1969. The number one priority of our organization is to promote pupil transportation safety in Kansas.

We do this by participating in the National Congress on School Transportation held every five years to develop industry guidelines for specifications and procedures for school transportation safety; we provide statewide training seminars for all transportation staff, supervisors, drivers, aides, and mechanics. We also provide training for students thru save rider programs. KSPTA sponsors safety competitions for school bus drivers to practice and hone their driving skills and increase their knowledge of safety practices and pupil transportation.

Kansas School buses are inspected annually by the Kansas Highway Patrol. KSPTA was involved in the development of a more detailed inspection process for Kansas school buses.

Today's yellow school buses are the safest vehicles on the highway due to special safety features including Compartmentalization which is mandated by Federal Motor Vehicle Safety Standards. Compartmentalization is a passive restraint system, it does not require the passenger to do anything to activate the system.

Compartmentalization requires school bus seating to be strong, well-anchored, closely spaced, energy-absorbing high-backed seats - padded both front and back. This is far different from the metal hand bars, waffled metal seat backs and exposed rivets most of us faced when we rode the school bus.

Can we improve on Compartmentalization? Our industry has requested that NHTSA revise the existing standard for school bus passenger seat back height. Research has found that a higher seat back improves on Compartmentalization. Current height is

"School bus safety" and "pupil transportation safety" involve two similar, but different, concepts. "School bus safety" concerns only those children on school buses. "Pupil transportation safety" relates to all children going to and from school and school-related activities, no matter what mode of transportation is used.

Every year, across the nation, approximately 450,000 public school buses travel an estimated 4.3 billion miles to transport 25 million children to and from school and school-related activities.

Each year approximately 800 school-aged children are killed in motor vehicle crashes during normal school travel hours. Of these 800 deaths, about 20 (2 percent) – 5 school bus passengers and 15 pedestrians – are school bus-related. The other 98 percent of the school-aged deaths occur in other motor vehicles ... or to pedestrians, bicyclists, or motorcyclists."

School buses represent the safest way for children to travel to and from school and school-related activities.

I think everybody involved here today wants to do the right thing and has the children's safety in mind. We just have different opinions about what constitutes the greatest safety for all the children.

Our concerns are:

The Lap Shoulder Belt must be worn correctly

The 3 pt lap shoulder restraint system must be worn correctly. Even when given correct instructions on the proper use of the restraint system young children will need constant supervision to assure proper use. My seven-year-old grandson sometimes gets the belts twisted or leaves slack in them. I always check to make sure it is on correctly. Even when they start out with the restraint in the proper position, their physical movement to see what is going on may cause the restraint to be improperly adjusted.

Who will make sure all children on the bus - sometimes as many as 50 or more students - have their seat belts fastened properly?

The bus driver cannot walk the bus at every bus stop and observe every student as they load in the mornings, they could make a visual observation before departing a school in the afternoon. Will we have to put a monitor on every bus to be sure the children buckle-up and stay in their seat restraints?

The last time I was on a plane the pilot didn't make that observation, the flight attendant was in charge of making sure everyone was properly seated and using the seat restraint.

On the last page of my hand out, I have included a few pictures of students using the 3 pt system incorrectly. This misuse could result in serious injury.

If we are to have the 3 pt lap Shoulder belts in our school buses, for the safety of the children, they MUST be worn correctly.

The National Academy of Sciences has stated that if the belts are to be beneficial states and local school districts must ensure not only that all school bus passengers wear the belts, but also that they wear them correctly.

What if the bus is involved in an accident?

Should the bus be involved in an accident, who will make sure all of the children get their seat belts off? What if the driver is unable to help because of injury?

In a recent school bus accident, young students were not able to get their seat belts off, students were splashed with diesel fuel. There was not a fire in this instance the bus was on its side and students could not release the belt due to pressure on the buckle. Witnesses to the accident did stop and help to release students in the bus. This has happened to school bus drivers also and they had to wait for assistance to be released from the belt.

Belts used as Weapons to Hit other Students

With behavior on the bus a major challenge for many drivers, will unruly children use the seat belt and its buckle as an additional weapon?

Maintenance to Belt Assemblies and Buckles

Students routinely put objects in the buckle causing it to be unusable. Coins, gum, glue and cut webbing are just a few things that will cause that seating position to be unusable until repairs can be made.

Are Lap/ Shoulder Restraints appropriate for all ages on the school bus?

This Legislative branch recently approved the mandatory use of booster seats for use with lap shoulder restraint system for children ages up to 8 years old.

How does that relate to mandating the same children ride in a school bus with the lap shoulder belt only?

This type of restraint system has been determined not to be the safest action and is why the booster seat is required for the young child in a passenger vehicle. Will you make an exception and say it is not important if they are riding in a school bus?

What criteria will be used in deciding the proper installation of the seat restraint seats?

NHTSA plans on proposed rulemaking late in 2006. They will be looking at the correct installation of the restraint seats for school buses. At this time, they are addressing those states that are choosing to install the restraints.

Liability

We all have concerns with liability. Wording in this Legislation says we will not be liable for a student's failure to properly adjust or fasten the seat belt. Is this realistic, that we expect children of all ages to be responsible for this? How much responsibility does a 5 year old have?

Funding

I don't like to discuss cost of a possible safety requirement, however it is an issue here if it results in children not getting to ride a school bus to school anymore because of bussing cuts due to lack of funding or unfunded mandates.

The Fiscal Note you already have explains the reduced capacity of school buses when there are 3 pt restraint systems installed.

Districts may need to cut transportation services if increasing their fleet of buses is not an option.

A decision as to a time line for retrofits or replacement is a major factor if you decide to pass this legislation.

The current 20 year replacement requirement for school buses should be an issue for all of us no matter if this legislation passes or does not pass. A more reasonable replacement schedule for school buses would be 10 to 12 years.

I have provided in your packet some information from several Transportation programs across the state as to what they anticipate the cost associated with this legislation.

Emporia \$ 970,000

Garden City \$ 1,930,000

Augusta \$ 630,000

Washburn Rural \$ 2,235,800

Shawnee Heights \$ 3,177,000

Newton \$ 681,000

Cimarron \$348,000

Altamont \$ 464,000

Buhler \$1,043,000

Concordia \$ 760,000

Manhattan

\$ 1,951,866

School buses represent the safest way for children to travel to and from school and school-related activities.

I ask that you evaluate all the pros and cons of this legislation and to make sure that you are not reducing the level of safety being provided for our children in school buses. This is a very important issue I ask that you take the time to read the information in my packet and to do additional research before you make your decision.

I know and understand that this is a very emotional issue and the safety of pupil transportation is important to us all.

"Pupil transportation safety" relates to all children going to and from school and school-related activities, no matter what mode of transportation is used.

We need to be careful not do something that we think might increase safety for some and cause a lower level of safety for others.

Barbara Pringle

Executive Secretary

Kansas State Pupil Transportation Association

PO Box 1504

Emporia KS 66801

620-341-2220

kspta@kans.com



CHAL ACADEMY OF SCIENCES + NADONIAL ACADEMY OF ENGINEERING + INSTITUTE OF MEDICINE + NATIONIAL RESEARCH COUNCIL

Date: June 18, 2002 Contacts: Jennifer Burris, Media Relations Associate Cory Arberg, Media Relations Assistant (202) 334-2138; e-mail <news@nas.edu>

FOR IMMEDIATE RELEASE

Greatest Risk in School Travel Is Not on School Buses

WASHINGTON -- Children are at far more risk traveling to and from school in private passenger vehicles -- especially if a teen-age driver is involved -- than in school buses, says a new report from the National Academies' Transportation Research Board. Bicycling and walking also place students at greater risk than traveling by school bus. National data assessing the risk of different modes of school transportation need to be made available to help parents, students, and officials at the state and local levels make more informed decisions regarding safety, said the committee that wrote the report.

"Each state, school district, and private school must assess its own situation and circumstances," said committee chair H. Douglas Robertson, director, Highway Safety Research Center, University of North Carolina, Chapel Hill. "The goal is to improve the safety of all children traveling to and from school, and to provide information to communities so that they can make informed choices that balance their needs and resources."

Every year, about 800 school-age children are killed in motor vehicle crashes during normal school travel hours -- weekday mornings and afternoons during school months -- accounting for about 14 percent of the 5,600 child deaths that occur on the nation's roadways. Of these 800 deaths, only about 2 percent are school-bus related, while 74 percent occur in private passenger vehicles and 22 percent are the result of pedestrian or bicycle accidents. More than half of all deaths of children between age 5 and 18 occur during normal school travel hours when a teenager is driving.

When students are injured or killed in crashes involving school buses, the link to school travel seems obvious, but when such casualties occur while traveling to and from school by other modes of transportation, the association is often not made. Congress asked the National Research Council to study the safety issues posed by all travel modes so that an accurate comparison could be made.

The report considered six transportation modes. In assessing buses, the committee looked at school buses as well as public transit buses and motorcoach services. Passenger vehicles were divided into two categories, those driven by individuals 19 or older and those driven by operators under 19 years of age, mostly students. Data on pedestrians and bicyclists traveling to and from school also were examined.

The dramatic difference in risk across transportation modes at the national level suggests that more can be done to manage and reduce those dangers, the committee said. School districts should facilitate travel by safer modes while working to improve others that are less safe. For example, walking and bicycling could be made safer by improving sidewalks and protection at street crossings as well as building more bike paths. A dialogue among parents, schools, and other relevant organizations also needs to be established, encouraging collaboration to promote safe practices for students using all modes.

To help identify the risks of school travel, the committee developed a risk-management framework. This framework should be included among the tools used to make decisions on locations of schools, changes in the amount of student parking provided, or changes in the area

serviced by school buses. For example, increasing the distance that students must live from school to qualify for school-bus service may save money but it also shifts children to travel modes that are less safe. Alternatively, providing school-bus service for middle school children attending after-school activities could reduce the risk of injury and fatality significantly. These examples, however, are based on national averages and do not reflect the variations that exist on a local or school-district level.

More research and evaluation are needed to provide local decision-makers with better guidance on how to reduce school travel risks, the committee said. Data limitations also pose problems. At present, a lack of uniformity in local- and state-level data hinders risk analyses in individual school districts. National data provide helpful insights, but could be improved by using consistent definitions. Before gathering new data, however, the cost-effectiveness of doing so needs to be examined.

The study was sponsored by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. The National Research Council is the principal operating arm of the National Academy of Sciences and the National Academy of Engineering. It is a private, nonprofit institution that provides independent advice on science and technology issues under congressional charter. A committee roster follows.

Copies of <u>The Relative Risks of School Travel: A National Perspective and Guidance for Local Community Assessment</u> are available for free on the Internet at http://www.nap.edu. Printed copies will soon be available for purchase from the Transportation Research Board; tel. (202) 334-3213, fax (202) 334-2519, or e-mail TRBSales@nas.edu». Reporters may obtain a copy from the Office of News and Public Information (contacts listed above).

NATIONAL RESEARCH COUNCIL Transportation Research Board

Committee on School Transportation Safety

School Bus Crashworthiness Research - October 2002 NEW

Presentation given at New York's 17th Annual Motor Carrier Safety Conference

Press here for full text (PDF)

School Bus Crashworthiness Research Report - April 2002

ABSTRACT

Press here for full text (PDF)

The record is impressive: American students are nearly eight times safer riding in a school bus than with their own parents and guardians in cars. The fatality rate for school buses is only 0.2 fatalities per 100 million vehicle miles traveled (VMT) compared to 1.5 fatalities per 100 million VMT for cars. This impressive safety record is a result of the Department of Transportation's requirements for compartmentalization on large school buses, and lap belts plus compartmentalization on small school buses. Moreover, the protective abilities of today's school buses have been reaffirmed by two years of research. Yet, no matter how safe our children are on school buses, it is vitally important to constantly reassess existing safety measures. Therefore, Congress requested that DOT investigate the safety value of installing safety belts on our nation's school buses. An analysis of test data by the National Highway Traffic Safety Administration (NHTSA) has concluded that lap belts appear to have little, if any, benefit in reducing serious-to-fatal injuries in severe frontal crashes. On the contrary, lap belts could increase the incidence of serious neck injuries and possibly abdominal injury among young passengers in severe frontal crashes. Any increased risks associated with the use of lap belts in small school buses are more than offset by preventing ejections. The use of the combination lap/shoulder belts could provide some benefit, unless misused. Lap/shoulder belts can be misused and NHTSA's testing showed that serious neck injury and perhaps abdominal injury could result when lap/shoulder belts are misused. Other considerations, such as increased capital costs, reduced seating capacities, and other unintended consequences associated with lap/shoulder belts could result in more children seeking alternative means of traveling to and from school. Given that school buses are the safest way to and from school. even the smallest reduction in the number of bus riders could result in more children being killed or injured when using alternative forms of transportation. Over the past 11 years, school buses have annually averaged about 26,000 crashes resulting in 10 deaths - 25 percent were drivers; 75 percent were passengers. Frontal crashes account for about two passenger deaths each year. Meanwhile, NHTSA is continuing its research program, focusing on side impact protection, working with university-based researchers.

SEATBELTS ON SCHOOL BUSES

The National Highway Traffic Safety Administration (NHTSA) is responsible for establishing Federal motor vehicle safety standards to reduce the number of fatalities and injuries from motor vehicle crashes, including those involving school buses. We also work with the states on school bus safety and occupant protection programs. School bus safety is one of our highest priorities.

School bus transportation is one of the safest forms of transportation in the United States. We require all new school buses to meet safety requirements over and above those applying to all other passenger vehicles. These include requirements for improved emergency exits, roof structure, seating and fuel systems, and bus body joint integrity. These requirements help ensure that school buses are extremely safe.

Every year, approximately 394,000 public school buses travel approximately 4.3 billion miles to transport 23.5 million children to and from school and school-related activities. Since 1984, on the average, 11 passengers per year have died in school bus crashes. While each of these fatalities is tragic, it should be noted that the numbers of fatalities among school bus occupants are small when compared to those in other types of motor vehicles. For example, in 1995, twelve occupants in a school-bus-body type vehicle died in a crash. During the same year, 8,168 children between the ages of 5 and 20 died as passengers or drivers in all other types of motor vehicles.

School bus crash data show that a Federal requirement for belts on buses would provide little, if any, added protection in a crash. The National Transportation Safety Board (NTSB) and the National Academy of Sciences (NAS) have come to the same conclusion. NTSB concluded in a 1987 study of school bus crashes that most fatalities and injuries were due to occupant seating positions being in direct line with the crash forces. NTSB stated that seat belts would not have prevented most of the serious injuries and fatalities occurring in school bus crashes.

In 1989, NAS completed a study of ways to improve school bus safety and concluded that the overall potential benefits of requiring seat belts on large school buses are insufficient to justify a Federal requirement for mandatory installation. NAS also stated that the funds used to purchase and maintain seat belts might better be spent on other school bus safety programs and devices that could save more lives and reduce more injuries.

Rather than requiring seat belts, NHTSA decided that the best way to provide crash protection to passengers is through a concept called "compartmentalization." This requires that the interior of large buses provide occupant protection so that children are protected without the need to buckle-up. Occupant crash protection is provided by a protective envelope consisting of strong, closely-spaced seats that have energy-absorbing seat backs. The effectiveness of compartmentalization has been confirmed in the NTSB and NAS studies.

Small school buses, those with a gross vehicle weight rating under 10,000 pounds, must be equipped with lap or lap/shoulder belts at all designated seating positions. Since their sizes and weights are closer to those of passenger cars and trucks, the agency believes seat belts in those vehicles are necessary to provide occupant protection.

School bus <u>pedestrian</u> fatalities account for the highest number of school bus related fatalities each year. There are about 31 such fatalities per year, about two-thirds of which involve the school bus itself and about one-third of which involve motorists illegally passing the stopped school bus. In its 1989 report, NAS stated that since children are at "greater risk of being killed in school bus loading zones (i.e., boarding and leaving the bus) than in the bus, a larger share of the school bus safety effort should be directed to improving the safety of school bus loading zones." NHTSA agrees with NAS that states and localities should focus their efforts toward improving school bus loading zones.

While no Federal requirement exists for seat belts on large school buses, states and localities are free to install them if they feel it is in the best interest of safety in their area. However, the NAS report states that if seat belts are to be beneficial, "states and local school districts that require seat belts on school buses must ensure not only that all school bus passengers wear the belts, but that they wear them correctly."

Seat belts have been required on passenger cars since 1968. Forty-nine states have enacted laws requiring the wearing of seat belts in passenger cars and light trucks. Laws governing the usage of occupant restraints are the prerogative of each state. We strongly believe that wearing seat belts is important. On December 28, 1996, in his weekly radio address, President Clinton asked all Americans to always wear seat belts as the first line of defense against injuries and fatalities. On April 16, 1997, Transportation Secretary Rodney E. Slater submitted a Presidential Initiative to Increase Seat Belt Use Nationwide. It emphasizes the strong enforcement of occupant protection laws as a key component and calls for Members of Congress, Federal agencies, governors, mayors, law enforcement, business and others to play active roles in this national endeavor.

School buses are heavier, experience less crash forces, and distribute crash forces differently than do passenger cars and light trucks. Because of this, the crash force experienced by the passengers of large buses is much less than that experienced by occupants of passenger cars, light trucks, or vans. Federal regulations require the installation of occupant restraints in motor vehicles based on the vehicle type and size. Because the safety record of school buses is outstanding, and because there is no compelling evidence to suggest that seat belts would provide even higher levels of occupant protection in crashes, NHTSA agrees with the NAS report that there is insufficient reason for a Federal mandate for seat belts on large school buses.

| SCHOOL BUS 3 | POINT LAP - SHOULDER RESTRAIN | T SYSTEMS |
|--------------|-------------------------------|---------------------|
| ESTIMATED CO | OST CALCULATIONS FOR RETROFIT | / REPLACEMENT BUSES |

U.S.D <u>102</u> CITY <u>Canadron</u>

Total number of Buses in your fleet

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal the old seats and replacing them with new seats, with three point belts, and new floor covering):

A 48 passenger bus (will become a 28), approx. \$8,000.00. X 6 Buses = \$ 48,000

A 71 passenger bus (will become a 40), approx. $$12,000.00 \times 2$ Buses = \$24000

An 84 passenger bus (will become a 44), approx. \$13,500.00 X _____ Buses = \$____

ESTIMATED COST FOR RETROFITS

\$ 72,000

REPLACEMENT VEHICLES DUE LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity 3

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses 3 X \$ \$9,500 = \$269,500 Estimated Cost of daily operation Buses 3 X \$ 500 = \$ 500 Estimated Cost of Training additional drivers 3 X \$ \$1,500 = \$ 4500 Estimated Cost of Wages new drivers 3 X \$ 1000 = \$ 3000

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

\$ 276,500 72 3 4 8

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

(Don't forget about added cost for engine Mfg, to meet EPA 2007 Requirements est. \$9,000 per bus)

SCHOOL BUS 3 POINT LAP – SHOULDER RESTRAINT SYSTEMS ESTIMATED COST CALCULATIONS FOR RETROFIT / REPLACEMENT BUSES

CITY CM PORIA U.S.D 253

Total number of Buses in your fleet

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering):

Special Needs Bus 5,000.00

A 48 passenger bus (will become a 28), approx. \$8,000.00. X 6 Buses = \$ 30,000

A 65 passenger bus (will become a 38), approx. \$10,000.00 X Buses =

A 71 passenger bus (will become a 40), approx. \$12,000.00 \times 23 Buses = \$276,000

An 84 passenger bus (will become a 44), approx. \$13,500.00 X _____ Buses =

ESTIMATED COST FOR RETROFITS

\$ 360,000.00

REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses $5 \times 5 \times 5 \times 600 = 5$ Estimated Cost of daily operation Buses $5 \times 5 \times 5 \times 600 = 5$ Estimated Cost of Training additional drivers $5 \times 5 \times 5 \times 500 = 5$ Estimated Cost of Wages new drivers $5 \times 5 \times 5 \times 500 = 5$

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

Repair & maint for belt assemblies (Don't forget about added cost for engine Mfg. to meet EPA 2007 Requirements est. \$9,000 per bus)

SCHOOL BUS 3 POINT LAP – SHOULDER RESTRAINT SYSTEMS ESTIMATED COST CALCULATIONS FOR RETROFIT / REPLACEMENT BUSES

| U.S.D313 CITY_BUHLER |
|--|
| Total number of Buses in your fleet61 |
| |
| Estimated cost to RETROFIT current buses |
| An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering): |
| . <u>A 48 passenger bus (will become a 28), approx. \$8,000.00.</u> X18 Buses = \$144,000 |
| A 65 passenger bus (will become a 38), approx. \$10,000.00 X40 Buses = \$400,000 |
| A 71 passenger bus (will become a 40), approx. \$12,000.00 X _ 3 Buses = \$36,000 |
| An 84 passenger bus (will become a 44), approx. \$13,500.00 X Buses = \$0 |
| ESTIMATED COST FOR RETROFITS \$580,000 |
| REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY |
| Number of Buses needed to replace reduced seating capacity |
| If you are not running with capacity loads your replacement needs may be less. |
| However, don't forget if the buses were used on activity/field trips at capacity. |
| Estimated Cost of replacement Buses 6 X \$ 77000 = \$ 462,000 Estimated Cost of daily operation Buses 6 X \$ 6480 = \$ 38800 Estimated Cost of Training additional drivers 6 X \$ \$1,500 = \$ 9,000 Estimated Cost of Wages new drivers 6 X \$ 5670 = \$ 34,020 |
| ESTIMATED COST FOR ADDITIONAL BUSES NEEDED \$_543,900 |

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

| SCHOOL BU | S 3 POI | NT LAP - S | SHOULDER | RESTRAINT | SYSTEMS | |
|-----------|---------|------------|-----------|------------|-------------|-------|
| ESTIMATED | COST | CALCULA | TIONS FOR | RETROFIT / | REPLACEMENT | BUSES |

U.S.D 333 CITY

Total number of Buses in your fleet

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal the old seats and replacing them with new seats, with three point belts, and new floor covering):

A 48 passenger bus (will become a 28), approx. \$8,000.00. X // Buses =

A 71 passenger bus (will become a 40), approx. $$12,000.00 \times 7$ Buses = \$84,000

An 13 Passenger bus An 84 passenger bus (will become a 44), approx. \$13,500.00 X / Buses =

ESTIMATED COST FOR RETROFITS

REPLACEMENT VEHICLES DUE LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses Estimated Cost of daily operation Buses 19

Estimated Cost of Training additional drivers X \$ \$1,500

Estimated Cost of Wages new drivers

Note: If District had to replace Buses, we would buy 71 Pass insted of Hiring More drivers.

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500,00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

(Don't forget about added cost for engine Mfg. to meet EPA 2007 Requirements est. \$9,000 per bus)

| SCHOOL BUS 3 P | OINT LAP - SHOULDER | RESTRAINT S | SYSTEMS |
|----------------|---------------------|--------------|-------------------|
| ESTIMATED COS | ST CALCULATIONS FOR | RETROFIT / I | REPLACEMENT BUSES |

U.S.D 373 CITY Newton

Total number of Buses in your fleet

18

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering):

A 48 passenger bus (will become a 28), approx. \$8,000.00. X 3 Buses = \$ 24 0000

A 71 passenger bus (will become a 40), approx. \$12,000.00 X / 5 Buses = \$ /80,000

An 84 passenger bus (will become a 44), approx, \$13,500,00 X _____ Buses = \$____

ESTIMATED COST FOR RETROFITS

\$ 204,000

REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity



If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses _____ X \$___

X \$_____

\$ 7500

Estimated Cost of daily operation Buses
Estimated Cost of Training additional drivers
Estimated Cost of Wages new drivers

5 X \$ \$1,500 = 5 X \$ 10,000 =

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

<u> 477500</u>

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx, \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

7681,500

First year

(Don't forget about added cost for engine Mfg. to meet EPA 2007 Requirements est. \$9,000 per bus)

| SCHOOL BUS | S 3 POINT LAP – | SHOULDER RI | ESTRAINT SYST | ΓEMS |
|------------------|-----------------|--------------|---------------|----------------|
| ESTIMATED | COST CALCULA | ATIONS FOR R | ETROFIT / REP | LACEMENT BUSES |

U.S.D 383 CITY Manhattan/Ogden

Total number of Buses in your fleet

59

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering):

A 48 passenger bus (will become a 28), approx. \$8,000.00, X $\frac{4}{9}$ Buses = \$\frac{32,000}{00}.00 \\
A 65 passenger bus approx. \$\frac{1}{9}(0,000.00) \\
A 71 passenger bus (will become a 40), approx. \$\frac{12,000.00}{00} \times \\
A \text{Buses} = \$\frac{32,000}{00}.00 \\
\text{90,000.00} \\
\text{800.00}.00 \\
\text{An 348,000}.00 \\
\text{An 348 passenger bus (will become a 44), approx. \$\frac{12,750.00}{35,500.00} \times \text{2} \\
\text{Buses} = \$\frac{32,000}{9}.00 \\
\text{500.00}.00 \\
\text{800.00}.00 \\
\text{An 348 passenger bus (will become a 44), approx. \$\frac{13,500.00}{35,500.00} \times \text{2} \\
\text{Buses} = \$\frac{32,000}{9}.00 \\
\text{500.00}.00 \\
\text{800.00}.00 \\
\text{100.00}.00 \\

ESTIMATED COST FOR RETROFITS

<u>\$ 495,500.00</u>

REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity 19

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses $\frac{19}{19}$ X \$ 60,000,00 = \$ 140,000.00 Estimated Cost of daily operation Buses $\frac{19}{19}$ X \$ $\frac{19}{1$

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

<u>\$ 1,456,3</u>66.00

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

SCHOOL BUS 3 POINT LAP – SHOULDER RESTRAINT SYSTEMS ESTIMATED COST CALCULATIONS FOR RETROFIT / REPLACEMENT BUSES

| U.S.D _393 CITY_Solomon | |
|--|------------------------------|
| Total number of Buses in your fleet10 | |
| Estimated cost to RETROFIT current buses | |
| An estimate of the cost to retrofit existing units is as follows (these numbers included the replacing them with new seats, with three point belts, and new floor covering): | removal of the old seats and |
| A 48 passenger bus (will become a 28), approx. \$8,000.00. X _4 Buses = | \$32,000.00 |
| A 71 passenger bus (will become a 40), approx. \$12,000.00 X _6_ Buses = | \$72,000.00 |
| An 84 passenger bus (will become a 44), approx. \$13,500.00 X Buses = | \$ |
| ESTIMATED COST FOR RETROFITS | \$94,000 |
| REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY | |
| Number of Buses needed to replace reduced seating capacity2 | |
| If you are not running with capacity loads your replacement needs may be less. | |
| However, don't forget if the buses were used on activity/field trips at capacity. | |
| Estimated Cost of replacement Buses2_ X \$_70,000.00 = Estimated Cost of daily operation Buses X \$ = | \$140,000.00 \$++ |
| Estimated Cost of Training additional drivers2 X \$\$1,500 = Estimated Cost of Wages new drivers2_ X \$\$ | \$3,00.00 \$++ |
| ESTIMATED COST FOR ADDITIONAL BUSES NEEDED | \$_244,000.00 |
| ESTIMATED ADDITIONAL COST FOR NEW BUSES | |
| A 48 passenger bus (will become a 28), approx. \$6,500.00 | |
| A 65 passenger bus (will become a 38), approx. \$8,000.00 | |
| A 71 passenger bus (will become a 40), approx. \$9,000.00 | |

| SCHOOL BUS 3 POINT LAP - SHOULDER RESTRAINT SYSTEMS | |
|---|-----|
| ESTIMATED COST CALCULATIONS FOR RETROFIT / REPLACEMENT BUSE | 2.5 |

Total number of Buses in your fleet

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering):

A 48 passenger bus (will become a 28), approx. \$8,000.00. X ____ Buses = A 71 passenger bus (will become a 40), approx. \$12,000.00 X 5/ Buses = An 84 passenger bus (will become a 44), approx. \$13,500.00 X _____ Buses =

ESTIMATED COST FOR RETROFITS

612,000.00

REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity /5

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses Estimated Cost of daily operation Buses Estimated Cost of Training additional drivers 15 X \$ \$1,500 Estimated Cost of Wages new drivers X \$/358S 15×100 Miles x 1.10 x17.

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

(Don't forget about added cost for engine Mfg. to meet EPA 2007 Requirements est. \$9,000 per bus)

2,235,025.00

| | | F | = | F | 20 |
|---|---|---|---|---|----|
| ٦ | - | - | - | | |
| l | ĺ |) | I | \ | |

| SCHOOL BUS 3 POINT LAP - SHOULDER RESTRAINT | SYSTEMS |
|---|-------------------|
| ESTIMATED COST CALCULATIONS FOR RETROFIT / | REPLACEMENT BUSES |

U.S.D 450 CITY Tecumseh

Total number of Buses in your fleet

50

Estimated cost to RETROFIT current buses

An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering):

A 48 passenger bus (will become a 28), approx. \$8,000,00. X Buses = \$

A Repassenger bus (will become a 40), approx. \$12,000.00 × 41 Buses = \$451,000

An 84 passenger bus (will become a 44), approx. \$13,500,00 X _____ Buses = \$_____

ESTIMATED COST FOR RETROFITS

\$ 451,000

REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY

Number of Buses needed to replace reduced seating capacity 29

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

Estimated Cost of replacement Buses $\frac{29}{79} \times \frac{5000}{1000} = \frac{174000}{1000}$ Estimated Cost of daily operation Buses $\frac{79}{79} \times \frac{5100}{1000} = \frac{52200}{1000}$ Estimated Cost of Training additional drivers $\frac{79}{79} \times \frac{5100}{1000} = \frac{52200}{1000}$ Estimated Cost of Wages new drivers $\frac{79}{79} \times \frac{5100}{1000} = \frac{51000}{1000} = \frac{51000}{1000}$

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

s 2, 726,000.00

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

first WEAR

- total 3,175°

SCHOOL BUS 3 POINT LAP – SHOULDER RESTRAINT SYSTEMS ESTIMATED COST CALCULATIONS FOR RETROFIT / REPLACEMENT BUSES

| U.S.D 457 CITY Garden City | |
|--|---|
| Total number of Buses in your fleet 47 | (6-Mini Buses for Rt. w/seat belts) (5-Whlchr.lift Rt. Buses w/seat belts) (5-Act. Buses w/o seat belts) (31-Rt. Buses) |
| Estimated cost to RETROFIT current buses | , |
| An estimate of the cost to retrofit existing units is as follows (these n replacing them with new seats, with three point belts, and new floor | numbers included the removal of the old seats and covering): |
| A 48 passenger bus (will become a 28), approx. \$8,000.00. X | 3 Buses = \$ 24,000.00 |
| A 71 passenger bus (will become a 40), approx. \$12,000.00 X 1 6-7-*10-16-19-*20-21-22-23-*24-26-*35-36-*75-76-77 | |
| An 84 passenger bus (will become a 44), approx. \$13,500.00 X _ 1 30-*70-*71-*72-*73-*74-83-84-*85-*86 | 0 Buses = \$ 135,000.00 |
| ESTIMATED COST FOR RE | TROFITS \$ 375,000.00 |
| | |
| REPLACEMENT VEHICLES DUE TO LOSS OF SEATI | NG CAPACITY |
| Number of Buses needed to replace reduced seating capacit | ty14 |

If you are not running with capacity loads your replacement needs may be less.

However, don't forget if the buses were used on activity/field trips at capacity.

| Estimated Cost of replacement Buses 14 | X \$98,200.00 = \$1,374,800.00 |
|--|-------------------------------------|
| * Estimated Cost of daily operation Buses 14 | X \$ 73.60 daily = \$ 1,031.00 |
| Estimated Cost of Training additional drivers 14 | X = 1,500 = 21,000.00 |
| D | X \$973.703x 163 days \$ 158,713.00 |
| * Based on 2700 daily Bt miles 1/ base/1 | |

n 2700 daily Rt. miles. 14 buses/1120 miles

ESTIMATED COST FOR ADDITIONAL BUSES NEEDED

\$ 1,930,544.00

ESTIMATED ADDITIONAL COST FOR NEW BUSES

A 48 passenger bus (will become a 28), approx. \$6,500.00

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

| EB. 6.2006 4:53PM USD 402 DOT-COPY CTR NO.023 P.1/1 Inbox: 1 messages unread - jlile@usd402.com - 02/06/2006 12:08:50 pm -0600 - iso-885 Page 1 of 3 |
|--|
| Date: Mon, 6 Feb 2006 11:53:50 -0600 From: "Barbara Pringle" Subject: Re: YOUR INFORMATION NEEDED |
| SCHOOL BUS 3 POINT LAP – SHOULDER RESTRAINT SYSTEMS ESTIMATED COST CALCULATIONS FOR RETROFIT / REPLACEMENT BUSES |
| U.S.D 402 CITY Cugusta 4 6 30, 800 |
| Total number of Buses in your fleet |
| Estimated cost to RETROFIT current buses figured stapprofinately 500,00 per Dest |
| An estimate of the cost to retrofit existing units is as follows (these numbers included the removal of the old seats and replacing them with new seats, with three point belts, and new floor covering): 57-10- will become a 28), approx. \$8,000.00. X D Buses = |
| A 65 passenger bus (will become a 38), approx. \$10,000.00 X |
| A 71 passenger bus (will become a 40), approx. \$12,000,00 X 5 Buses = \$ 60,000 |
| An 84 passenger bus (will become a 44), approx. \$13,500.00 X O Buses = \$ |
| ESTIMATED COST FOR RETROFITS \$ 125,000 |
| REPLACEMENT VEHICLES DUE TO LOSS OF SEATING CAPACITY |
| Number of Buses needed to replace reduced seating capacity |
| If you are not running with capacity loads your replacement needs may be less. |
| However, don't forget if the buses were used on activity/field trips at capacity. |
| Estimated Cost of replacement Buses |
| Estimated Cost of replacement Buses S Estimated Cost of daily operation Buses S Estimated Cost of Training additional drivers S Estimated Cost of Training additional drivers S S S S S S S S S S S S S |
| Estimated Cost of Training additional drivers 6 X \$_\$1,500 = 49,000 |
| Estimated Cost of Wages new drivers 6 X \$ 36.00 x /80days 4 32880.00 |
| Estimated Cost of Wages new drivers 6 X \$ 36.00 x /80days \$ 33880.00 6 drivers (2 4 hrs per day et 9.00 per hour x /80 days year = 38,880.00 # 507,000 |
| # 50 7,000 |

ESTIMATED ADDITIONAL COST FOR NEW BUSES

Think our bus number is

A 48 passenger bus (will become a 28), approx. \$6,500.00

okay. The Routes would have to change. May add time to the routes due to miles added.

A 65 passenger bus (will become a 38), approx. \$8,000.00

A 71 passenger bus (will become a 40), approx. \$9,000.00

Did You Know

That Each Year More Than 800 Students are Killed Going to and From School?

The nationwide safety record* for the 25 million children who do not ride school buses to and from school each day.

- 448 fatalities in passenger vehicles with a teenage driver
- 169 fatalities in passenger vehicles with an adult driver
- 131 fatalities to pedestrians
- 46 fatalities to bicyclists

The nationwide safety record* for the 25 million children **who ride school buses** to and from school each day.

- 5 passenger fatalities
- 15 pedestrian fatalities at school bus stops

With this information in mind,

How do you want your kids to get to and from school?

To learn more about school bus safety, and how you can help get more children on school buses, go to www.schoolbusinfo.org



Provided as a public service by the School Bus Information Council 1-888-FOR- SBIC

* Source: National Research Council, National Academy of Sciences.

RESOLUTION NO. 2: SEAT BACK HEIGHT

2005

WHEREAS, it is in the public interest to adequately protect school bus passengers in the event of a school bus crash; and

WHEREAS, the national accident research data demonstrates that enhancements to compartmentalization are necessary; and

Whereas, the 14th National Congress for School Transportation recognizes the importance to include known safety enhancements on school buses; and

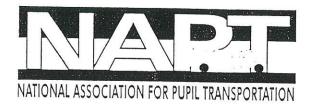
Whereas, industry officials are committed to safe transportation of America's children: now

THEREFORE, BE IT RESOLVED that the National Highway Traffic Safety Administration revise the existing standard for school bus passenger seat back height to reflect the research findings

May 2005 14th NATIONAL CONGRESS ON School Transportation VLATIONAL SCHOOL TRANSPORTATION Specifications & Procedures.







PRESS ADVISORY

Local Transportation Professional Acquires Prestigious Credentials

Jack Woolf Achieves Certified National Status

Jack Woolf, an employee of Midwest Bus sales in Bonner Springs, KS, has been certified as a Director of Pupil Transportation by the National Association for Pupil Transportation (NAPT). Woolf is only the 45th person in the United States to achieve this recognition.

The NAPT Professional Certification Program was established in 1989 to recognize the achievements and expertise of individuals in various administrative positions within the pupil transportation field. A candidate for certification in any category must undergo an objective peer review of the candidate's education, career experience, and achievements in the field of pupil transportation operations as well as a rigorous job-specific written examination that tests a candidate's knowledge of national standards for safe and efficient pupil transportation. The categories are structured according to job responsibilities and identify individuals who are fully qualified to carry out all administrative and technical functions associated with each job.

NAPT currently offers four types of professional certification: Director of Transportation; Supervisor of Pupil Transportation; Pupil Transportation Specialist; and Pupil Transportation Driver Instructor. Certification as a Director of Pupil Transportation (CDPT) is available to those individuals who are qualified to serve as the top administrator of a pupil transportation system. Candidates must demonstrate that they are capable of handling a position that involves establishing programs and policies, setting standards, developing materials, and providing leadership to achieve designated goals.

Specific certification requirements are:

- College degree and/or Acceptable Career Profile
- Minimum of five (5) years experience as Director and/or Supervisor of Transportation
- Attendance at two (2) NAPT Annual Conferences

-more-

- Certificate of Completion indicating twenty (20) hours contact time from an NAPT-approved workshop
- Workshop presentation at a national or state meeting, or accepted project/published article
- Completion of the NAPT CDPT 3-hour written exam

The National Association for Pupil Transportation (NAPT) is a nonprofit, voluntary membership organization that represents public and private sector school transportation professionals from around the world who advocate safe and efficient pupil transportation and encourage professional growth through life-long learning.

For additional information, please contact:

Michael J. Martin, Executive Director National Association for Pupil Transportation 4 Tower Place – Executive Park Albany, NY 12203-0647

-30-



THE NATIONAL ACADEMIES

YONAL ACADEMY OF SCIENCES . NATIONAL ACADEMY OF ENGINEERING . INSTITUTE OF MEDICINE. NATIONAL RESEARCH COUNCIL

Date: June 18, 2002 Contacts: Jennifer Burris, Media Relations Associate Cory Arberg, Media Relations Assistant (202) 334-2138; e-mail <news@nas.edu>

FOR IMMEDIATE RELEASE

Greatest Risk in School Travel Is Not on School Buses

WASHINGTON -- Children are at far more risk traveling to and from school in private passenger vehicles -- especially if a teen-age driver is involved -- than in school buses, says a new report from the National Academies' Transportation Research Board. Bicycling and walking also place students at greater risk than traveling by school bus. National data assessing the risk of different modes of school transportation need to be made available to help parents, students, and officials at the state and local levels make more informed decisions regarding safety, said the committee that wrote the report.

"Each state, school district, and private school must assess its own situation and circumstances," said committee chair H. Douglas Robertson, director, Highway Safety Research Center, University of North Carolina, Chapel Hill. "The goal is to improve the safety of all children traveling to and from school, and to provide information to communities so that they can make informed choices that balance their needs and resources."

Every year, about 800 school-age children are killed in motor vehicle crashes during normal school travel hours -- weekday mornings and afternoons during school months -- accounting for about 14 percent of the 5,600 child deaths that occur on the nation's roadways. Of these 800 deaths, only about 2 percent are school-bus related, while 74 percent occur in private passenger vehicles and 22 percent are the result of pedestrian or bicycle accidents. More than half of all deaths of children between age 5 and 18 occur during normal school travel hours when a teenager is driving.

When students are injured or killed in crashes involving school buses, the link to school travel seems obvious, but when such casualties occur while traveling to and from school by other modes of transportation, the association is often not made. Congress asked the National Research Council to study the safety issues posed by all travel modes so that an accurate comparison could be made.

The report considered six transportation modes. In assessing buses, the committee looked at school buses as well as public transit buses and motorcoach services. Passenger vehicles were divided into two categories, those driven by individuals 19 or older and those driven by operators under 19 years of age, mostly students. Data on pedestrians and bicyclists traveling to and from school also were examined.

The dramatic difference in risk across transportation modes at the national level suggests that more can be done to manage and reduce those dangers, the committee said. School districts should facilitate travel by safer modes while working to improve others that are less safe. For example, walking and bicycling could be made safer by improving sidewalks and protection at street crossings as well as building more bike paths. A dialogue among parents, schools, and other relevant organizations also needs to be established, encouraging collaboration to promote safe practices for students using all modes.

To help identify the risks of school travel, the committee developed a risk-management framework. This framework should be included among the tools used to make decisions on locations of schools, changes in the amount of student parking provided, or changes in the area

serviced by school buses. For example, increasing the distance that students must live from school to qualify for school-bus service may save money but it also shifts children to travel modes that are less safe. Alternatively, providing school-bus service for middle school children attending after-school activities could reduce the risk of injury and fatality significantly. These examples, however, are based on national averages and do not reflect the variations that exist on a local or school-district level.

More research and evaluation are needed to provide local decision-makers with better guidance on how to reduce school travel risks, the committee said. Data limitations also pose problems. At present, a lack of uniformity in local- and state-level data hinders risk analyses in individual school districts. National data provide helpful insights, but could be improved by using consistent definitions. Before gathering new data, however, the cost-effectiveness of doing so needs to be examined.

The study was sponsored by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. The National Research Council is the principal operating arm of the National Academy of Sciences and the National Academy of Engineering. It is a private, nonprofit institution that provides independent advice on science and technology issues under congressional charter. A committee roster follows.

Copies of <u>The Relative Risks of School Travel: A National Perspective and Guidance for Local Community Assessment</u> are available for free on the Internet at http://www.nap.edu. Printed copies will soon be available for purchase from the Transportation Research Board; tel. (202) 334-3213, fax (202) 334-2519, or e-mail TRBSales@nas.edu. Reporters may obtain a copy from the Office of News and Public Information (contacts listed above).

NATIONAL RESEARCH COUNCIL Transportation Research Board

Committee on School Transportation Safety

FEBRUARY 13, 2006 RESPONSE TO HOUSE BILL 2546

A. JACK WOOLF'S EXPERIENCE IN PUPIL TRANSPORTATION:

- 1. 35 Years In The Industry
- 2. Certified Director of Pupil Transportation from NAPT (National Association Pupil Transportation)
- 3. President for 3 Terms for KSPTA (Kansas State Pupil Transportation Association)
- 4. Five Times Attended National Congress on School Transportation (1980, 1985, 1995, 2000, 2005)
- 5. Managed over 400 Contracted Buses in Kansas

B. COST OF NEW BUSES & ASSOCIATED COST

1. Price of Bus (65 passenger)

a. Buses have gone up \$4,000.00

b. 2007 engines will go up another \$6,000.00

c. Lap/shoulder belts \$8,000.00

Total Increase 2007 \$18,000.00

2. Price for Additional 1/3 more Buses \$\$\$\$\$\$\$\$

- a. Larger bus lots
- b. More mechanics
- c. More drivers
- 3. Price for aides or attendants

a. \$10 x 4 hrs = \$40 x 180 hrs= \$7,200.00

C. COST OF RETROFITTING EXISTING BUSES

1. EXISTING BUSES

a. Cost: 5,697 x \$10,000 = \$56,970,000.00

b. By whom & where

2. CERTIFICATION AFTER VEHICLE IS RETROFITTED???

House Transportation
Date: 2-14-06
Attachment # 7

D. PLACING CHILDREN IN HARMS WAY

- 1. NATIONAL ACADEMIES OF SCIENCE
 (Advisors to the Nation on Science, Engineering, and Medicine)
- 2. School Bus Crashworthiness Research (New York's 17th Annual Motor Carrier Safety Conference)
- 3. NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (2 Year Study on Seatbelts on School Buses)
- D. RECOMMENDATIONS: (since 99.94% of student injuries and fatalities are outside the bus then focus on the major problem)
 - 1. Higher pay for all pupil transportation personnel
 - 2. Install Cameras on all buses
 - 3. Adopt 14th National Congress on School Transportation's Recommendation to require "high back" passenger seats in all Large school bus passenger crash protection
 - 4. Stiffer fine for vehicles that violate the stopped school bus
 - 5. Expand yearly Kansas public information campaigns for school safety

School Bus Crashworthiness Research - October 2002

Presentation given at New York's 17th Annual Motor Carrier Safety Conference

Press here for full text (PDF)

School Bus Crashworthiness Research Report - April 2002

ABSTRACT

Press here for full text (PDF)

The record is impressive: American students are nearly eight times safer riding in a school bus than with their own parents and guardians in cars. The fatality rate for school buses is only 0.2 fatalities per 100 million vehicle miles traveled (VMT) compared to 1.5 fatalities per 100 million VMT for cars. This impressive safety record is a result of the Department of Transportation's requirements for compartmentalization on large school buses, and lap belts plus compartmentalization on small school buses. Moreover, the protective abilities of today's school buses have been reaffirmed by two years of research. Yet, no matter how safe our children are on school buses, it is vitally important to constantly reassess existing safety measures. Therefore, Congress requested that DOT investigate the safety value of installing safety belts on our nation's school buses. An analysis of test data by the National Highway Traffic Safety Administration (NHTSA) has concluded that lap belts appear to have little, if any, benefit in reducing serious-to-fatal injuries in severe frontal crashes. On the contrary, lap belts could increase the incidence of serious neck injuries and possibly abdominal injury among young passengers in severe frontal crashes. Any increased risks associated with the use of lap belts in small school buses are more than offset by preventing ejections. The use of the combination lap/shoulder belts could provide some benefit, unless misused. Lap/shoulder belts can be misused and NHTSA's testing showed that serious neck injury and perhaps abdominal injury could result when lap/shoulder belts are misused. Other considerations, such as increased capital costs, reduced seating capacities, and other unintended consequences associated with lap/shoulder belts could result in more children seeking alternative means of traveling to and from school. Given that school buses are the safest way to and from school, even the smallest reduction in the number of bus riders could result in more children being killed or injured when using alternative forms of transportation. Over the past 11 years, school buses have annually averaged about 26,000 crashes resulting in 10 deaths - 25 percent were drivers; 75 percent were passengers. Frontal crashes account for about two passenger deaths each year. Meanwhile, NHTSA is continuing its research program, focusing on side impact protection, working with university-based researchers.

SEATBELTS ON SCHOOL BUSES

The National Highway Traffic Safety Administration (NHTSA) is responsible for establishing Federal motor vehicle safety standards to reduce the number of fatalities and injuries from motor vehicle crashes, including those involving school buses. We also work with the states on school bus safety and occupant protection programs. School bus safety is one of our highest priorities.

School bus transportation is one of the safest forms of transportation in the United States. We require all new school buses to meet safety requirements over and above those applying to all other passenger vehicles. These include requirements for improved emergency exits, roof structure, seating and fuel systems, and bus body joint integrity. These requirements help ensure that school buses are extremely safe.

Every year, approximately 394,000 public school buses travel approximately 4.3 billion miles to transport 23.5 million children to and from school and school-related activities. Since 1984, on the average, 11 passengers per year have died in school bus crashes. While each of these fatalities is tragic, it should be noted that the numbers of fatalities among school bus occupants are small when compared to those in other types of motor vehicles. For example, in 1995, twelve occupants in a school-bus-body type vehicle died in a crash. During the same year, 8,168 children between the ages of 5 and 20 died as passengers or drivers in all other types of motor vehicles.

School bus crash data show that a Federal requirement for belts on buses would provide little, if any, added protection in a crash. The National Transportation Safety Board (NTSB) and the National Academy of Sciences (NAS) have come to the same conclusion. NTSB concluded in a 1987 study of school bus crashes that most fatalities and injuries were due to occupant seating positions being in direct line with the crash forces. NTSB stated that seat belts would not have prevented most of the serious injuries and fatalities occurring in school bus crashes.

In 1989, NAS completed a study of ways to improve school bus safety and concluded that the overall potential benefits of requiring seat belts on large school buses are insufficient to justify a Federal requirement for mandatory installation. NAS also stated that the funds used to purchase and maintain seat belts might better be spent on other school bus safety programs and devices that could save more lives and reduce more injuries.

Rather than requiring seat belts, NHTSA decided that the best way to provide crash protection to passengers is through a concept called "compartmentalization." This requires that the interior of large buses provide occupant protection so that children are protected without the need to buckle-up. Occupant crash protection is provided by a protective envelope consisting of strong, closely-spaced seats that have energy-absorbing seat backs. The effectiveness of compartmentalization has been confirmed in the NTSB and NAS studies.

Small school buses, those with a gross vehicle weight rating under 10,000 pounds, must be equipped with lap or lap/shoulder belts at all designated seating positions. Since their sizes and weights are closer to those of passenger cars and trucks, the agency believes seat belts in those vehicles are necessary to provide occupant protection.

School bus <u>pedestrian</u> fatalities account for the highest number of school bus related fatalities each year. There are about 31 such fatalities per year, about two-thirds of which involve the school bus itself and about one-third of which involve motorists illegally passing the stopped school bus. In its 1989 report, NAS stated that since children are at "greater risk of being killed in school bus loading zones (i.e., boarding and leaving the bus) than in the bus, a larger share of the school bus safety effort should be directed to improving the safety of school bus loading zones." NHTSA agrees with NAS that states and localities should focus their efforts toward improving school bus loading zones.

While no Federal requirement exists for seat belts on large school buses, states and localities are free to install them if they feel it is in the best interest of safety in their area. However, the NAS report states that if seat belts are to be beneficial, "states and local school districts that require seat belts on school buses must ensure not only that all school bus passengers wear the belts, but that they wear them correctly."

Seat belts have been required on passenger cars since 1968. Forty-nine states have enacted laws requiring the wearing of seat belts in passenger cars and light trucks. Laws governing the usage of occupant restraints are the prerogative of each state. We strongly believe that wearing seat belts is important. On December 28, 1996, in his weekly radio address, President Clinton asked all Americans to always wear seat belts as the first line of defense against injuries and fatalities. On April 16, 1997, Transportation Secretary Rodney E. Slater submitted a Presidential Initiative to Increase Seat Belt Use Nationwide. It emphasizes the strong enforcement of occupant protection laws as a key component and calls for Members of Congress, Federal agencies, governors, mayors, law enforcement, business and others to play active roles in this national endeavor.

School buses are heavier, experience less crash forces, and distribute crash forces differently than do passenger cars and light trucks. Because of this, the crash force experienced by the passengers of large buses is much less than that experienced by occupants of passenger cars, light trucks, or vans. Federal regulations require the installation of occupant restraints in motor vehicles based on the vehicle type and size. Because the safety record of school buses is outstanding, and because there is no compelling evidence to suggest that seat belts would provide even higher levels of occupant protection in crashes, NHTSA agrees with the NAS report that there is insufficient reason for a Federal mandate for seat belts on large school buses.

KANSAS

DEPARTMENT OF TRANSPORTATION DEB MILLER, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

TESTIMONY BEFORE HOUSE TRANSPORTATION COMMITTEE

House Bill 2546 REQUIRING SEAT BELTS ON SCHOOL BUSES

February 14, 2006

Mr. Chairman and Committee Members:

The Kansas Department of Transportation (KDOT) is providing written testimony in reference to House Bill 2546; requiring seat belts on school buses.

It might appear logical that all persons in any type of vehicle should always wear seat belts since use of seat belts is a documented method of saving lives. However, school buses are heavier and distribute crash forces differently than passenger cars and light trucks. While this is an engineering phenomenon that can be explained in scientific detail, our state's crash numbers demonstrate the differences between school buses and other types of vehicles in a manner that is more intuitive.

From 2000-2004, there were 384,530 crashes in Kansas with 1,480 or 0.38 percent involving school buses. Of the 133,502 people injured in those crashes, 340 or 0.25 percent of those were on school buses. Of the 2,390 killed, only 4 or 0.17 percent of those were on school buses.

It is a tragedy whenever someone is killed in a motor vehicle crash, and as the numbers show, school buses as currently manufactured are generally safer than passenger vehicles. We believe that installation of seat belts on school buses could have a detrimental effect when you consider the various sizes of children who may ride a school bus. The same bus may have students from first grade, all the way up to high school. The belts won't fit the various sizes of students properly, which could cause serious injuries or death in the event of a crash. Indeed, one size does not fit all.

Ultimately, KDOT will continue to work with Kansas Highway Patrol and local law enforcement agencies to encourage personal vehicle occupant safety in Kansas through the use of seat belts.

Thank you for your attention and consideration.

House Transportation
Date: 2-14-06
Attachment # 8