REQUIREMENTS

This refresher must be taught under the direct supervision of an SBDI between July 1, 2012 and May 1, 2013 and partially meets the requirements of Commissioner’s Regulation 156.3(b)(5)(iii) and (c)(5)(iii) which require a minimum of two hours of instruction two times a year for all drivers, monitors and attendants – the first two hours between July 1st and October 30th and the second between December 1st and May 1st every year. Other dates do not satisfy the requirements of this regulation.

This presentation must include a minimum of 60 minutes of instruction. There is no maximum. On the slides and notes pages, the term “attendant” is used to refer to both monitors and attendants as defined in SED regulations.

INTRODUCTION

This refresher is designed to give drivers and attendants an understanding of the accomplishments – THEIR ACCOMPLISHMENTS – of school transportation, and specifically school transportation in New York State. Continue to stress, throughout the presentation, that these are their accomplishments and that it is only their continued commitment to the task that will allow NYS to continue to protect the children – OUR CHILDREN – that we transport. This is a feel-good refresher, but the underlying message is “NEVER AGAIN.”

The refresher is not solely about Congers, but uses the 40th anniversary of the 1972 Congers crash and the lessons that were learned there, in other NYS crashes and major national crashes as well as data that has been collected in recent decades to give an historical perspective on our industry. Next improvements in vehicle design and improvements in driver and attendant qualifications and student training continue to flesh out how school transportation quality has grown. Finally, school transportation safety is compared with the safety of other ways to get to school. This refresher is designed to instill pride in our front-line staff by giving them the cold hard facts about the job that they (collectively) have done and are doing. Ultimately, we would like each one of them to become a “School Bus Champion” http://www.americanschoolbuscouncil.org/.

PRESENTATION REQUIREMENTS

You will need a computer (with PowerPoint, PowerPoint Viewer or another program that will present PowerPoint files such as Open Office) with attached projector to teach this refresher. There are a few sound effects on slides, so audio would be nice, but the refresher can be taught without it. Make sure to make copies of the handout and evaluation forms ahead of time.

The first page of the handout is designed to give drivers and attendants a place to record the key points you make about NYS and national crashes and the second page has a “pre-quiz” on the changes in school transportation.
DISCUSSION

Make sure that everyone knows the details of site logistics, how you will take questions and when and how long breaks will be.
DISCUSSION

The next two slides are photos from the Congers (pronounced “con-grrrs”) crash in 1972, an incident that spurred substantial changes in construction standards, driver training, and driver monitoring.

First, a big note of thanks to the Rochester Area Transportation Supervisors’ Association that scanned the Congers NTSB (National Transportation Safety Board, www.ntsb.gov) Report and put it on their website. It is on your SBDI Disk as an Adobe Acrobat file in the folder for this refresher. Many SBDIs have studied this crash during their 19-A CE training. Read the report to get a sense of all the issues involved.

Give a brief overview of the crash, but don’t spend too much time on it. Many SBDIs have spent countless hours digging into the circumstances of this accident and could talk about it for hours, but that is not the purpose of this presentation and could shortchange some of the other content.

ACCIDENT SUMMARY (from NTSB Report)

At about 7:55 a.m., on Friday March 24, 1972, an eastbound schoolbus was driven across a grade crossing on Gilchrist Road, Near Congers, NY, and was struck by the lead locomotive of a northbound Penn Central freight train. Except for a stop sign, the crossing was not specially protected.

After the impact the schoolbus was driven 1,116 feet down the track by the train, and the body structure of the bus disintegrated. The rear section of the bus was torn loose, fell beside the track, and overturned with a number of students underneath. Two of the several students who were ejected from the remaining portion of the bus passed through separated floor sections and fell between the rails into the path of the train.

As a result of the accident five students died, and the busdriver and all remaining 44 students were injured. None of the train crew was injured.

The National Transportation Safety Board determines that the cause of this accident was the failure of the schoolbus driver to stop at the stop sign until the crossing was clear of railroad traffic. Contributing to the accident was the unnecessary routing of the schoolbus over a not specially protected railroad/highway grade crossing.
DISCUSSION:
Continue brief discussion.
DISCUSSION
Use this slide to emphasize the impact a school bus crash can have on a community.

PHOTO
Nyack High School students, from left, Matthew Cramer, Dana Livingston, Liz Gronwoldt, Joe Barone, and Stephanie Fox listen during the memorial service March 26, 2008 for the 36th anniversary of the train/school bus accident in Congers that killed five high school students and maimed others. The accident happened on March 24, 1972.
DISCUSSION
Go over the refresher objectives. Let them know what they will be learning and stress the role that drivers and attendants play in making the school transportation story a positive one.
Take this opportunity to mention the handout and how it will be used during the day.
DISCUSSION

In the 10 years that followed the Congers crash, there were many changes in New York State’s school bus program.

The two biggest NYS changes were in driver training and driver supervision.

While NYS had driver training courses and programs as far back as the 1940s, there were no regulatory requirements for training. In 1973, requirements for pre-service and in-service training were created. Many folks in school transportation remember the “20-hour” Basic Course that was introduced in 1977 to update earlier SED courses. The Advanced Course was introduced in 1979 and a training course for “Assistant Drivers” (Attendants) was introduced in 1981, although requirements for attendant training did not exist until 2003.

The other big change created Article 19-A of Vehicle and Traffic Law. 19-A created requirements for ongoing driver testing and observation. While the basic requirements of 19-A have not changed much over the years, the qualifications to become a 19-A Certified Examiner have increased significantly.

Congers was one of many crashes in the country during the late sixties and early seventies that identified deficiencies in school bus construction. Motor vehicle construction came under public scrutiny in the 1960s as a result of Ralph Nader and others who believed that vehicles should be designed to protect their passengers and these crashes brought the lens to school buses as well. Federal Motor Vehicle Safety Standards (FMVSS) for school buses were created and implemented in 1977.

As a part of how school transportation was being restructured in NYS during the 70s, the inspection of school buses and collection of accident reports shifted from SED to DOT and DMV respectively. This was an acknowledgement that SED is about education, not vehicle design or accident investigation. School bus driver training stayed with SED because it is “education.”
DISCUSSION
Use this slide to summarize the discussion of the Congers crash that started earlier and have drivers and attendants share what they feel is the most important lesson for them from Congers and have them write it on their handout.
DISCUSSION

When this slide first presents, only the left side is shown. Ask the class “What is the Big 3?” and lead a brief discussion before uncovering the correct responses. Have them write the correct answers on their handout under the question, “What is the Big 3.”

Statistics are from the accident database included each year in School Bus Safety is One Bus Stop at a Time (SBSIOBSAAT).
DISCUSSION

A subset of loading zone fatalities is children who are killed when they are snagged by the handrail or in the doors and are then dragged because the driver and/or attendant do not realize that they are attached to the bus. There have been three dragging fatalities in NYS (1979, 1987 and 1996) and there continues to be dragging incidents today. Automated doors on today’s buses make it increasingly important that the driver look at the door when it is being closed because there is no “feel” to the closing process. Attendants should also make sure that disembarking children have cleared the bus.

The National Highway Safety Administration (NHTSA) created a retrofit fix in 1995, but it was not required as a part of bus inspection by NYS DOT and in 1996 a girl, Andrea Chen, was killed by dragging when her drawstring was caught in the handrail on a bus that had not been retrofitted and the retrofit subsequently became a requirement.

In the 1987 fatality, the student’s clothing was caught in the door.

The 1979 fatality, the student’s jacket was caught in the bus door.

The 15’ requirement in V&T 1174 should make this scenario nonexistent because if a child is 15’ from the bus, they will not still be attached to the door or handrail.

The “nut and string” graphic on the slide is the testing device that NHTSA created to test handrails for snagging. If the nut stuck when pulled across the bottom of the handrail where it meets the bus, it needed to be retrofitted.

Have the drivers and attendants write what they have learned under “Dragging” on their handout.
DISCUSSION

Provide an opportunity for attendants and drivers to share briefly what they can do to prevent the “BIG 3” and snagging.

Possible discussion points could include:

• Mirror check before pulling away
• Extra attention to young riders
• Keep focus outside the bus during loading/unloading
• Maintain focus in the afternoon when Circadian Rhythms are at their lowest point of the day
• Count as they get off and before you leave
• Watch out for other children (siblings, neighbors) at the stop
• Watch for students carrying loose items
• Use SED universal crossing procedure
• Remind crossing children every day of proper procedure
• DO NOT change stop placements
• Follow 15’ regulation every day, every stop.
• Train students to wait for the bus at least 15’ from the edge of the road

At this point the presentation moves from NYS data and crashes to a discussion of key historical national crashes. These crashes are introduced in chronological order starting with the Kansas Loading Zone Survey that dates back to 1970. Make a point of the fact that as instructors and safety experts we track not only what happens in our own back yard, but also across the country so that we can learn from the lessons offered by these tragic incidents and keep our operations as safe as possible.
DISCUSSION

We ended the NYS discussion talking about the loading zone where the vast majority of school bus fatalities occur. The graph shows how the national focus on the loading zone through driver and student training and equipment improvements has dramatically reduced the number of children killed in the loading zone each year.

The folks at the Kansas Department of Education have been collecting national loading zone fatality data since 1970 (2010-11 report is on your SBDI disk). This survey highlighted the danger of the loading and unloading process and highlighted the need for better driver, attendant and student training as well as better mirrors and bus design to improve visibility. The consistent improvement over the past 40+ years is a testament to school transportation professionals including the drivers and attendants that supervise the loading zone every day.

Ask the drivers and attendants to write what the message is from the Kansas Survey on their worksheet under “What have we learned and accomplished from the Kansas State Loading Zone Survey?” The key learning is that we together, operators, managers, manufacturers and front-line staff can change the outcomes of how we provide our transportation service.
DISCUSSION

Twenty-seven passengers burned to death in this school bus that was being used by a church because they could not get out a rear emergency door that was blocked by coolers and other trip equipment.

Make the point that there were four other adults on the bus besides the driver. If these adults had been prepared to assist in an evacuation, the students may have been able to evacuate in an orderly fashion instead of being bottlenecked at the only available exit. On our buses, a prepared attendant can also be the difference between life and death in helping in an evacuation.

A copy of the NTSB Overview of this crash is on the SBDI disk in the folder for this refresher.

NTSB SUMMARY

About 10:55 p.m. eastern daylight time on May 14, 1988, a pickup truck traveling northbound in the southbound lanes of Interstate 71 struck head-on a church activity bus traveling southbound in the left lane of the highway near Carrollton, Kentucky. As the pickup truck rotated during impact, it struck a passenger car traveling southbound in the right lane near the church bus. The church bus fuel tank was punctured during the collision sequence, and a fire ensued, engulfing the entire bus. The busdriver and 26 bus passengers were fatally injured. Thirty-four bus passengers sustained minor to critical injuries, and six bus passengers were not injured. The pickup truck driver sustained serious injuries, but neither occupant of the passenger car was injured.

The National Transportation Safety Board determines that the probable cause of the collision between the pickup truck and the church activity bus was the alcohol-impaired condition of the pickup truck driver who, operated his vehicle opposite to the direction of traffic flow on an interstate highway. Contributing to the severity of the accident was the puncture of the bus fuel tank and ensuing fire in the bus, the partial blockage by the rear bench seats of the area leading to the rear emergency door which impeded rapid passenger egress, and the flammability of the materials in the bus seat cushions.
DISCUSSION

Lead a brief discussion about baggage on field trips and sport trips. Discuss policy on sports equipment, band instruments, skis, coolers, etc. on your buses as well as any requirements for securement of baggage. Make sure drivers and attendants know what to do when a trip leader wants to bring items on the bus that could block emergency exit from the bus after a crash. Make sure the lesson of Carrollton and emergency exits is clear.

Possible discussion points:

• Remember that in a crash any unsecured object (or person) can be thrown around the bus, so putting something on an unoccupied seat doesn’t mean it won’t end up blocking an exit.
• Anything big enough that it can’t be easily kicked out of the way can block an exit.
• Don’t just think about the rear exit. You never know what exit you are going to have to use.
• Remind drivers and attendants that this applies to things they have on the bus such as brooms or personal items too.
• Before leaving on a sports or activity trip do a mini-evacuation drill explaining proper evacuation procedures and the role of everyone on the bus. Remember, some walkers may not get bus drill instruction (even though they are supposed to).

Have drivers and attendants write what they have learned on their handout under “Carrollton.”
DISCUSSION

Twenty-one children drowned in this bus that was submerged by just a few inches because they couldn’t get out the emergency exits. The front door was jammed and there were no roof hatches or window exits. Current NYS buses have roof hatches. Use the next slide to initiate a discussion about student emergency exit training.

NTSB Summary

About 7:34 a.m., central daylight time, on Thursday, September 21, 1989, a westbound school bus with 81 students operated by the Mission Consolidated Independent School District, Mission, Texas, and a northbound delivery truck operated by the Valley Coca-Cola Bottling Company, McAllen, Texas, collided at Bryan Road and Farm to Market Road Number 676 (FM 676) in Alton, Texas.

After the collision, the truck came to rest facing west on the right shoulder of FM 676. The school bus continued in a northwest direction and dropped approximately 24 feet into a caliche pit (excavation pit) partially filled with water, located in the northwest corner of the intersection. The bus came to rest on its left side facing southeast, totally submerged in approximately 10 feet of water, approximately 35 feet from the nearest shoreline. The bus front boarding door was jammed shut, but the rear emergency exit door was operable. No other emergency exits were on the bus.

Nineteen students died at the accident scene, and two died later in the hospital. The 21 fatalities were the result of drowning or complications related to the submersion. Furthermore, 3 students sustained serious injuries, 46 others sustained minor injuries, and 11 students were not injured.

The National Transportation Safety Board determines that the probable cause of the accident was the truckdriver’s inattention and subsequent failure to maintain sufficient control of his vehicle to stop at the stop sign. Contributing to the severity of the accident was the lack of a sufficient number of emergency exits on the school bus to accommodate the rapid egress of all 81 students.

The safety issues discussed in this report include:

- Adequacy of school bus egress guidelines.
- State and local emergency response planning for mass casualty accidents.
- Adequacy of school busdriver medical examination report reviews.
- Training of public safety personnel regarding calls for emergency assistance.
- Crashworthiness of large school buses.
DISCUSSION

Lead attendants and drivers in a discussion about how many of the emergency exits they really teach. Do they point to them, do they demonstrate them, do they go out, do the children go out? Carrolton and Alton show the importance of children knowing how to exit safely.

Photos show bus on its side at Rolling V bus company; the Safe Bus at Moravia CSD (inside) showing the use of roof hatches; and side exit training at Grand Island CSD.

Make the point that we DO NOT want children practicing side window and roof exits without proper supervision and spotting. Bus drills must always be done in a safe and approved location.

Proper use of exits discussion includes:

- Rear and side emergency doors – “sit and slide”
- Side window exits – “face down and feet first”
- Roof hatches – used most often for buses on side. For exiting an upright bus, stand on seat backs and pull up through exit. On conventional buses slide down windshield to hood. On side – feet first.

Have drivers and attendants write what they have learned on their handout under “Alton.”
DISCUSSION
The Snyder, OK crash introduced a new term to school transportation, vision obscuration. The NTSB study of this crash demonstrated that the blind spot created by the bus design completely obscured a tractor trailer gravel truck. As the bus started to roll forwards from the stop sign, the blind spot continued to move and obscure the gravel truck – almost until the point of impact. The graphic is from the NTSB report.

In New York State, we introduced the concept of “Rock Before You Roll” (thanks to MI Fred Fibiger) in the PDS to remind drivers of the need to look around blind spots before they move the bus into an intersection. This strategy is important not just for seeing approaching vehicles, but also pedestrians who can easily be obscured in blind spots.

NTSB SUMMARY
On November 10, 1993, a tractor-semitrailer traveling southbound on U.S. Route 183 near Snyder, Oklahoma, struck a 20 passenger school bus that was crossing the highway while traveling on County Line Road. The side collision killed four of the nine children on the bus. The other five children and the two drivers sustained injuries ranging from minor to severe.

The safety issues identified in this accident are the protection provided school bus occupants, the performance of the school bus driver and the view obstruction in the bus, the performance of the truck driver, and the adequacy of carrier oversight.

NEW YORK STATE
There has also been a severe intersection accident in New York State, often referred to as the Pumpkin Patch accident because it happened on a field trip to a pumpkin picking farm. The full report is on the PDS disk.

NTSB SUMMARY:
About 10:30 a.m. on October 21, 1999, in Schoharie County, New York, a Kinnicutt Bus Company school bus was transporting 44 students, 5 to 9 years old, and 8 adults on an Albany City School No. 18 field trip. The bus was traveling north on State Route 30A as it approached the intersection with State Route 7, which is about 1.5 miles east of Central Bridge, New York. Concurrently, an MVF Construction Company dump truck, towing a utility trailer, was traveling west on State Route 7. The dump truck was occupied by the driver and a passenger. As the bus approached the intersection, it failed to stop as required and was struck by the dump truck. Seven bus passengers sustained serious injuries; 28 bus passengers and the truckdriver received minor injuries. Thirteen bus passengers, the busdriver, and the truck passenger were uninjured.
DISCUSSION

Lead a brief discussion with drivers and attendants about where the blind spots are in their vehicles and how they compensate for the blind spots in order to drive safely. Attendants can be a big help to the driver by being a second set of eyes on the bus. The photos show a variety of view obstructions (children behind the bus, too close to the front of the bus, hidden by large mirrors and hidden by bus construction particularly buses built on van chassis) around the bus and the graphic shows how a blind spot can move forward, continuing to obscure an oncoming vehicle.

The reflection on the lower right corner of the transit-style bus almost looks like dirt left on the windshield by the wipers. While that is not the case in this picture, it is an important point to make that some wiper configurations leave the window uncleared in locations that are vital for seeing children outside the bus. Drivers and attendants must be aware of this if their bus leaves these dangerous uncleared places and be diligent about being sure that they find a way to see clearly.

Have the drivers and attendants write what lessons we learned from the Snyder Crash.
DISCUSSION

The Fox River Grove crash highlighted the issue of queuing, or vehicle storage, space – Making sure that you have enough room on the other side of the tracks to proceed across the tracks. This driver left the tail of the bus across the tracks to tragic consequences. The photo is from the scene after the crash and the graphic from the NTSB Report shows how the bus was caught in the short queuing space. The phrase that is used to teach this concept is “If it doesn’t fit, don’t commit.” As you can see from the graphic, the bus simply did not have enough room to clear the tracks without extending out into the crossroad.

NTSB OVERVIEW

On October 25, 1995, at 7:10 am CDT, Metra train number 624, traveling approximately 50 mph (80 km/h) at the time of impact, collided with the back of a school bus carrying students to Cary-Grove High School at the intersection of Algonquin Road, Northwest Highway (U.S. Highway 14) and a double-tracked mainline belonging to the Union Pacific Railroad. The impact separated the body from the chassis of the bus and catapulted the wreckage into the intersection. Five students were instantly killed and two later died from their injuries. Another 21 were injured, some critically. Most victims suffered blunt trauma and head injuries. The most seriously injured suffered skull fractures, lacerations and internal injuries. Police Officers arrived on scene in less than one minute due to the location of the accident being almost directly across from the former Fox River Grove Police Department, as reported by the former police chief and several reporting officers.
DISCUSSION

Of course, this is another rail/school bus crash 33 years after Congers, the starting point for this whole presentation. Lead drivers and attendants in a brief discussion about difficult crossings that they face and what strategies they use to cross safely. Attendants can help look for trains too! Ask the question of sub drivers and field trip drivers, “How do you know, how do you plan?” for difficult crossings in unfamiliar territory?

Ask the drivers and attendants to write down on their worksheet what lessons there are to learn from the Fox River crash.
DISCUSSION

Use this slide to ask the class for comments and/or learnings from each of these crashes and databases. Ask them to reflect for a minute on what the most single important learning for them was in all this discussion and then to write it on their worksheet under the “key learning” question. After they have written it, ask them to turn to their neighbor and share their insight and how that insight will make them a safer bus attendant or bus driver.

The presentation now moves from an examination of specific crashes and datasets to a look at how bus construction has changed to improve safety and how the partnership between operators, manufacturers and frontline staff has protected children better since Congers.
OPTION:
The next three slides are included to provide a break in the heavy information. Research shows that concentration is lost after about 20 minutes and a change in style allows the listener to refocus for another 20 minutes. Allowing your listeners to enjoy these slides will help them stay focused for the rest of the presentation. If you feel pressed for time when you get to these slides, just move through them quickly.

DISCUSSION:
The following few slides just demonstrate the evolution of school buses from wooden, horse drawn carriages to steel body motor vehicles. Photos are from around the country. Let the drivers and attendants enjoy these images.
Horse drawn school buses were the norm from the 1800’s into the early 1900’s.
The yellow bus is a 1900 Wayne Body Works “school hack” or “kid hack”
Upper left – 1912 Studebaker
Bottom left – 1921
Upper right - 1920
Upper left – 1933 Chevy
Lower Left – 1950 Ford
Upper right – 1940 International Ad
Upper left 1933 wheelchair bus
Bottom left – 1972 Dura-Coach
Right – 1957 Ortho coach
The 1939 conference that was attended by every state created a process for the industry to establish standards or best practice for school transportation. One of the first decisions was to standardize on “national school bus chrome” or as we know it, school bus yellow.

This conference has continued since that time and is now called the “National Congress on School Transportation” and is held every 5 years – in Warrensburg Missouri for the past three decades.

Copies of conference reports dating back to the 1939 conference can be downloaded at http://www.ncstonline.org/.
DISCUSSION

The changes prompted by Congers, other severe national school bus accidents and a general public outcry for safer motor vehicles led to FMSS (Federal Motor Vehicle Safety Standards) for school buses that took effect in 1977. The key issues are listed above. The main initial standards were for joint strength (50% of the joined material), fuel tank protection (steel cage around the tank), rollover protection (roof can support 1.5 times the bus weight), and seat design (high-back padded seats designed to absorb the energy of a frontal crash).

Additional standards have been created over time in response to crash and incident analysis.

Stop arms – 1991 – most recent change 1998
Mirrors – since 1970’s – most recent change 1998
Seat belts – since 1970’s – most recent change 2005
Emergency exits – since 1970’s – most recent change 1995

The double bus picture shows the top bus resting on its wheels, while the testing procedure spreads the weight out evenly across the roof.

DISCUSSION:

Lead a brief discussion about how each of these FMVSS work. Ask the class to identify which of the standards on the previous slide are active and which are passive. Make sure that they understand how important pre-trip and proper use is to having these components perform properly. Passive standards should be inspected when possible, active standards must be engaged by the user. When they can inspect a component visually during their pre-trip, they can know it is in working order.

Joint strength – passive
Fuel tank protection – passive
Rollover protection – passive, but don’t forget the Carpenter roof bows that failed

The following require daily pre– and post-trip

Seat design/Barriers – passive, but require proper seating position to work as designed
Stop arms – active, must be turned on by operator
Mirror requirements – active, must be adjusted by operator
Seat belts – active, must be put on properly by user
Emergency exits – active, user must know how to operate and exit
DISCUSSION:

Ask drivers to stand or raise their hands if they remember when each of the items on the right was introduced. The ones on the left have been around since at least 1973.

Fingerprinting – 1985 (Changes in disqualifications for post-July 1, 1985 drivers only)

CDL – 1986

PPT - 1997

Drug Testing – 1991 (Driver with N Restrictions – no vehicle designed for more than 15 adults) on their licenses – are exempt under federal law from this requirement

PJ’s Law 2009
DISCUSSION:
Attendant requirements are much more recent than those for drivers. Make the point that these standards are evidence of the importance of this job and the recognition that these individuals must be trained and screened just like drivers. All attendant regulations were created in 2003. Implementation stretched into 2004.
DISCUSSION:

While many drivers and attendants remember when they first had to pass the PPT, the physical form from the 1950's sets a pretty high standard for physical performance too. The text is hard to read, but it says:

"Attention Medical Examiner:

The job of school bus driver is one which requires physical strength, lack of nervousness, ability to meet emergencies and a disposition able to cope with a large crowd of adolescent children.

School bus drivers are required to operate conveyances ranging in size from five-passenger cars to 61-capacity buses. These large buses weigh about 18,000 pounds or nine tons. They must be driven on all kinds of highways and in various kinds of weather.

School bus drivers may be required to change tires which weigh as much as 150 pounds each. They also should be able to wash and polish a bus, change oil, put on chains and do other minor repair work. It is suggested that they meet the minimum physical requirements listed below."
DISCUSSION:

This is a good time to remind drivers and attendants that bus safety drills are more than jumping out the back door. 156.3(f)(1) requires that drills must include evacuation and emergencies and also bus stop behaviors (walking to the bus, waiting at the stop and loading/unloading) and riding the bus (stay seated facing front, feet out of isle, backpack on lap, using inside voices).

Drills must also include instruction in proper use of seat belts (156.3(g)(1)). Not doing seat belt instruction as required in regulation could expose the driver, attendant, operator/school district to liability in court.

SED Regulation 156.3(d)(4) and Vehicle and Traffic Law Section 1174 require instruction of crossing students.

In many operations drivers and attendants go over and above the regulatory requirements and have created innovative programs that bring bus safety into classrooms and large group presentations and have trained responsible student passengers as bus helpers.
DISCUSSION:
Remind drivers and attendants of the Universal Crossing Procedure and Danger Signal. Be sure that attendants who cross the street with children follow the proper procedure so that children do not learn bad habits. Click on the horn to “toot.”

Frame #1 – “Check before you step”
Frame #2 – “I see the driver, the driver sees me”
Frame #3 – “Right – Left – Right”
Frame #4 – “Walk directly home” (Leave reds on until students are 15’ away)
Horn – “Return to the safe curb” (the side of the road that you just came from)
DISCUSSION:

This last section of the presentation will examine what we know about the risk involved in school transportation. How has the roadway changed, how many vehicles are on the roads, how safe are different ways to get to school? How does NYS stack up? The graphic might get the attention of your older drivers who remember Bob Dylan singing, “The Times They Are A-Changing.” Adding a hyperlink to the song can make this transition slide a little fun.

Because the song is copyrighted, it cannot be provided on your SBDI disk, but it can be downloaded from [http://www.apple.com/itunes/](http://www.apple.com/itunes/) or any music web site for $.99 and linked to this slide.
DISCUSSION:
To continue the Bob Dylan analogy, “How many roads must a man walk down?”

Before clicking in the graphic on this slide have the class turn to page 2 of their handout and guess the changes in total miles of road and total vehicles since 1960. Once they have circled their answer, click in the graphic. Miles – 1X (no change), Vehicles 3X (tripled)

There aren’t really many more roads than there were when those words were written in the 1960’s, but the number of vehicles threatening to knock that “walking man” off the roads has more than tripled. This means we are doing our job in a much more hazardous place.
DISCUSSION:

Before clicking in this graphic, have the class turn to page 2 of their handout and put the five ways students get to school in order of risk (1 is safest and 5 is most dangerous). Check their responses and then click in the graphic which lists the modes by decreasing risk.

The data for this chart is from the Transportation Research Board’s book, *Special Report 269 – The Relative Risks of School Travel* (on your disk as an Adobe Acrobat file). Use the “Deaths/100 Million Trips” column to demonstrate the relative danger of different ways to get to school. Deaths per trip provides a consistent measure to compare different modes since the “total users” varies so much by mode.

This comparison makes the point of why it is so important for children to be coming to school on school buses.
DISCUSSION:

Why do teens consider our buses so “un-cool” and parents consider them inconvenient or unsafe?

- Driving your own car is a sign of freedom
- Bus is for little kids
- Bullying
- Students learn words the parents don’t appreciate
- Doesn’t fit parents work schedule
- Read stories about bus drivers and attendants doing dumb things (DWI, leaving kids on buses, texting, etc)

What is the impact of their choosing to not ride?
DISCUSSION:

Get attendants and drivers thinking both about this proud tradition and about how they can continue to make school bus transportation even better. The image of the mirror is to suggest that drivers and attendants self-reflect on what they can do to get children on school buses and safer.

- Create positive relationships with bus riders so they don’t seek other ways to get to school.
- Eliminate bullying and abuse on the bus.
- Commit to continuous student education.
- Go to school board meetings and share the importance, efficiency and environmental benefits of school buses in general, as well as late buses and field/activity trips.
- Create a positive image of school transportation on the road by careful, courteous driving.
- Be your best everyday.
- Be at the bus stop on time, at the same time, everyday (conditions permitting)
- Make school transportation indispensable.
- Be a school bus champion (see discussion on slide 1).
DISCUSSION:

Before clicking in the graphic, have the class turn to page 2 of their handouts and guess the change in how many students are riding school buses and how fatalities have changed since the 1960’s. Students riding – 3X (tripled), Fatalities – down 90%

We have already shown the more than tripling of motor vehicles sharing the road with our school buses, this slide shows the increase in school bus riders and decrease of fatalities since the 1960’s. The blue bars indicate the total student fatalities in the decade. The red bars show students transported annually in that decade. In order to show the comparison, the red rider bars are in units of 100,000 students. This means that the growth in riders is from 800,000 in 1960 to 2.4 million in 2009.

The student fatalities included in these figures are students who were transported under the direction of a school district. It includes students that the district buses to both public and non-public schools. It does not include students transported by private schools at the private school’s expense or students killed in crashes involving school buses if they are not passengers for that bus, so we want to be sure we never forget the other children or adults who may be injured or killed around our school buses that might not be included in this data.
DISCUSSION:

When you do the math figuring out the number of students transported per year and the number of fatalities per year, transportation in the 00’s was 37 times safer than in the 60’s. A “rider” is a student riding for one school year, so in the 60’s one out of every 216,000 school bus riders died each year.

The 00’s included the better part of two 5 year fatality-free periods. The first such accomplishment was ’99-’04. The second span without a student fatality hit five years on November 6, 2011. It is up to us to continue this important accomplishment.
DISCUSSION:

When you compare fatalities in the 00’s in NYS with fatalities in the entire country, NYS was 10x safer than the rest of the country. Celebrate again.

These accomplishments do not come without hard work. Work that has been done and work that remains to be done every day, every trip, every stop.
DISCUSSION:

Be sure to check for any questions or comments before you review the objectives and close.

Take this opportunity to remind drivers and attendants to complete the evaluation form so that you can get some helpful feedback on your presentation.
DISCUSSION:

Use these questions to review the objectives we identified on Slide 7. The questions follow the order that the content was presented and should flow directly from what the class has written on their handouts during the presentation. The following are some of the points that should be touched on in this discussion.

1. Congers – RR procedures, rushing, following route, driver training and supervision, bus design
   - Big 3 – Outside bus, youngest passengers, afternoon
   - Handrail snagging – 15’ rule

2. Kansas – loading zone dangers, we can change things for the better
   - Carrolton – blocked exits, evacuation training
   - Alton – emergency exit practice, training
   - Snyder – vision obscuration, blind spots
   - Fox River Grove – If it doesn’t fit, don’t commit, listen to student warnings

3. FMVSS – joint strength, rollover protection, fuel tank protection, compartmentalization, stop arms, mirrors, seat belts, exits

4. 19-A, physicals, drug testing, and CDL (all driver only); fingerprinting, PPT, Pre-service and Basic Courses, PJ’s Law, Refreshers (driver and attendant)

5. Bus drills and daily crossing instruction

6. Increased traffic – no more roads

7. Increased safety – 90% reduction in fatalities from 1960’s to 2000’s.
DISCUSSION:

Our goal is that this review of school transportation in NYS in the 40 years since the Congers crash will have made our drivers and attendants proud of their accomplishments and committed to making yellow bus transportation the safest it can be. Give them the credit they deserve….and
DISCUSSION:

Make sure that they (and we) never forget the tragedy that a school bus fatality creates in families, schools and communities. These monuments and images (large and small) have been raised in communities across the country at scenes of fatal bus accidents. No one will erect a monument for a driver or attendant who does their job safely tomorrow, but they can be proud of a job well done and secure in the knowledge that there will be no monument forever linking that day to a tragedy.

You don’t need to identify each picture. The following details have been provided in case you are asked about a photo.

Top left – Spring City, TN August 1955

Left middle – Gilchrest Road crossing today – scene of Congers crash

Bottom left – Cottonwood, MN February 2008, memorial service students for four students killed in school bus crash

Top middle – Greeley, CO December 1961

Bottom middle – Northampton, PA January 2009, students react to fellow student’s being killed by her school bus

Top right – Huntsville, AL November 2005

Middle right – Lake Chelan, WA 1945

Bottom right – Cincinnati, OH March 2010. makeshift memorial for student killed by school bus