# School Bus Safety Is... One Bus Stop At A Time



The University of the State of New York - The New York State Education Department Office of Education Management Services — EBA, Room 876 Albany, NY 12234-0001

Phone: (518) 474-6541 • Fax: (518) 474-1983

# NYS MASTER INSTRUCTORS

The instructional backbone of the program is Master Instructors who have been trained by the Education Department to provide instruction to not only school bus drivers but also to the more than 1000 School Bus Driver Instructors (SBDIs) who are responsible for training drivers and attendants across the state. They are listed here in recognition for their work in developing the program since 1985 which continues to drive the school bus safety effort in New York State.

Tom Acerra Richard Ahola Robert Alexander Maureen Arnitz Patricia Bailey Dona Beauchea David Becker Ronald Bell Dorothy Bell Patricia Bennett Cliff Berchtold Leonard Bernstein Joyce Boice Peter Brockman James Brown Robert Caldwell Joseph Caruana Ira Chudd Frank Ciccarella Judy Clarke Lee Comeau Vincent Conway Seth Corwin Francis (Sam) Dam Franklin Davis Sherry DuPont

Darothy DeAnglo Michael Dello Ioio Michael DeMais Dale Demler Andy Dixon Edward Doherty Marty Dratz Sherry DuPont Jim Ellis Fred Fibiger Ted Finlayson-Schueler Charlie Finley Pete Finn Ralph Firsch Adrian Flath Ray Free Kathleen Furneaux Thomas Gillison Salvatore Guadagna Keith Harvey William Hoostey Geraldine Howald/Dominski Elizabeth Hughes

Lee Irwin Pete James Barbara Kerst Joseph LaMarca Lisa Leber Jim Mahler Lee A. Martucci Brad Masters Joseph Matla John McCormick Sal Melitta Robert Milgate Mary Miller James Minihan Lorraine Misciagno Peter Montalvo Paul Mori Eileen Murphy Carolyn Neder William Northrop Nora O'Halloran William Oliver Paul Overbaugh Richard Pantano Douglas Pellegrino

Maria PH Cindy Raulli Raymond Roller Tony Rossi Robert Schneider Elsa Scottie Kevin Smith Kevin Snyder Faye Stevens Deborah Stevens Barbara Tebbitt James Tedesco Virginia Torres Joseph Van Aken Charles Vierling Helen Viltrakis Chuck Weber Nancy Wescott Norm Wheeler Gale Winsper George Withell Ed Zajaz

### NYS EDUCATION DEPARTMENT (SED) SBDI ADVISORY COMMITTEE

During the past year, the SBDI Advisory Committee has helped develop the guidelines for the school bus driver training program in New York State. The Committee has developed: the physical performance test for monitors and attendants; a response system to serious and fatal accidents; criteria for a Basic Course of Instruction for monitors and attendants; and approved the 2007 PDS.

Lenny Bernstein Peter Brockmann Jim Brown Robert Brown Jason Burrick Mathew Conti Anne Corwin Jorge DeJesus Michael Dello Ioio Linda Gaffney Betty Hughes Pete James (Chairperson) Patricia Martell Lorraine Misciagno Paul Mori Eileen Murphy Carolyn Neder Chuck Paquette Kathleen Shero Susan Soudant Faye Stevens Joseph Van Aken

### SCHOOL BUS SAFETY IS... ONE BUS STOP AT A TIME

### **Table of Contents**

Master Instructors / SED SBDI Advisory Committee	2
Table of Contents	3
Preface	4
Memo to All School Bus Drivers	5
Diagnostic Analysis of Student Fatalities	6 – 13
Not My Kid, Not My Stop	13 - 14
School Bus Safety is a Team Activity	15 - 19
Routing and Driving Tips	19 - 20
Safe Crossing Poster	21
Loading and Unloading Safety Procedures & Tips	22 - 29
Railroad Crossing Safety Procedures & Tips	30 - 36
NYS Safety Drill Checklist.	37
National Loading/Unloading Student Fatality Survey Summary	38
New York State Accident Summary 2006 - 2007	39 – 44
New York State School Vehicle Accident Report Requirements	45 – 46
Driver Handrail Flyer	47
Important Traffic/Pedestrian Safety Organizations	48 - 49
New York State School Bus Fatality Summary 1960-2008	50 - 54

# PREFACE

This document was created to enhance school transportation safety for the more than 2,300,000 children who ride school buses **each day** in New York State. Its distribution to school bus drivers is required in all Pre-Service and Basic or Advanced Courses.

This document should also be distributed to the following groups: Children, Parents and Parent Organization, Supervisors, Administrators, School Board members, Teachers, School Transportation Organizations, Legislators, the Media, and any other interested groups/individuals.

The highest level of student safety cannot be achieved until all who are involved with school transportation are fully aware of the potential dangers.

This document analyzes 48 years of school transportation fatalities. It describes the lessons from these tragedies and the recommended procedures for avoiding such tragedies in the future.

This document was originally conceived and developed by Mr. Lee Comeau of the State Education Department.

If you have suggestions and/or comments about this document, please forward them to:

The University of the State of New York The New York State Education Department School Bus Safety & Driver Training Unit - Room 876 EBA Albany, New York 12234-0001 (518) 474-6541 FAX (518) 474-1983

#### **COPYRIGHT January 31, 2009 by NYSED**

Electronic copy may be accessed via www.emsc.nysed.gov/schoolbus/

This document may be copied in whole or in part for all the training and educational purposes listed above. **It may not be copied for resale** or used by any individual or entity as the basis for any other document which is sold or for which ownership is claimed.

This document is available for purchase from PTSI for \$3.00 each with a minimum order of 10.

Pupil Transportation Safety Institute (PTSI) 224 Harrison St., Suite 300 Syracuse, NY 13202

Call: (315) 475-1386

Fax: (315) 475-5033

Visit:www.ptsi.org

#### THE STATE EDUCATION DEPARTMENT, THE UNIVERSITY OF THE STATE OF NEW YORK, ALBANY, NY 12234



Office of Educational Management Services/BOCES Room 876 Education Building Annex Albany, New York 12234 (518) 474-6541 - (518) 474-3936 Fax: (518) 474-1983

January 1, 2009

Dear New York State School Bus Driver, Attendant or Monitor:

Welcome to the wonderful world of pupil transportation. You are embarking on a rewarding career. The job of a school bus driver is like none other in the world. The roles you will play are varied, and the responsibility is profound. The purpose of school bus driver training is to provide you with the knowledge and tools you will need to become a safe school bus driver to ensure the safety of the children you transport each day from home to school and back again. All the training you receive, all the laws and regulations you will be exposed to, have one single purpose – to ensure the safety of children.

You are the most important ingredient in the recipe for safety. You hold the lives of many children in your hands every time you get behind the wheel of a school bus or supervise children on the ride to or from school. Anyone can transport cargo, but only a pupil transportation professional, a well-trained and caring school bus driver, attendant, or monitor can safely transport and supervise children.

This document incorporates what our state has learned over the past 48 years concerning safe pupil transportation. Our goal is to give you a head start, the benefit of that knowledge and experience, to help you become a safe school bus driver, attendant or monitor. Please take full advantage of this training program: listen carefully; ask the instructor questions about anything you don't understand; and participate actively in class discussions and activities. Remember: children's lives are in your hands.

You have my sincerest best wishes for a safe and rewarding career as a New York State school bus driver, attendant, or monitor.

Sincerely,

Marin 7. Edick

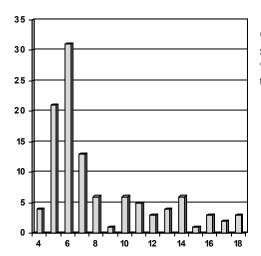
Marion F. Edick, State Director Pupil Transportation Services

## NEW YORK STATE SCHOOL BUS TRANSPORTATION STUDENT FATALITIES A DIAGNOSTIC ANALYSIS 2/1/60 - 6/30/2008

School bus accidents resulting in student fatalities are a reality for the school transportation community. Careful examination of the circumstances and causes surrounding such tragedies helps us learn how to prevent them in the future. This document is a detailed examination of the trends and lessons which have been identified by an analysis of school bus accidents in New York State since 1960.

School buses can be involved in many types of accidents, with or without student passengers. For the purpose of this document, a "school bus student fatality" is defined as a student killed while riding in, entering, or exiting a school bus. Fatalities occurring to school bus drivers or attendants, pedestrians who were not entering or leaving the bus, or passengers in other vehicles are not included in "school bus student fatalities." Based on this definition, 108 student school bus fatalities have occurred in New York State since 1960. Five additional student fatalities occurred during charter bus transportation on school trips.

### Trend #1: Youngest Students at Risk



Overall, children ages 4 - 8 (grades k-3) were most susceptible to a school bus fatality. Children ages 4-8 were involved in 75 of the fatalities (70%) even though they represent less than 35% of the school population.



- Younger children are shorter so they are harder for bus drivers and motorists to see. They can't see over or around objects like parked cars or bushes.
- Their hearing has not completely developed; they cannot tell where sounds are coming from easily.
- Their vision has not completely developed; they cannot estimate the speed of an approaching object.
- They are inexperienced regarding road hazards and . how to act safely around school buses.
- Young children have very short attention spans and need lots of repetition to learn a safety procedure.

### **Trend #2: Most Fatalities Occurred Outside the Bus**

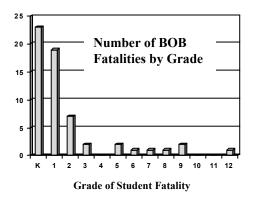
89 of the 111 fatalities (80%) involved students as <u>PEDESTRIANS during the</u> <u>LOADING/UNLOADING PROCESS</u> at a bus stop or school. Students are most vulnerable to serious accidents at this time because they are not inside the bus. Loading or unloading accidents are of two types: 1. a child is struck by the school bus (BOB or by-own-bus). 2. A child is struck by a passing motorist (PM or passing motorist).

Loading and unloading fatalities typically involve one or more of the following factors:

- Child crossed too close to the bus and the bus driver didn't see the child
- Child dropped something under the bus and tried to get it
- Child slipped under the side of the bus
- Child was struck by a motorist illegally passing the bus
- Child's drawstring or backpack straps were caught in handrail or door and the child was dragged by the bus

NO	TYPE	<u>% of 90</u>	<u>% of 11</u>
63	By School Bus	69%	57%
	61 By Own Bus (BOB)		
	2 By Another School Bus		
<u>28</u>	By Passing Motorist	<u>31%</u>	<u>25%</u>
91		100%	82%

## **BY OWN BUS PEDESTRIAN FATALITIES**



GRADE LEVEL – Kindergarten and 1st Grade 71% of all By Own Bus (BOB) Fatalities!

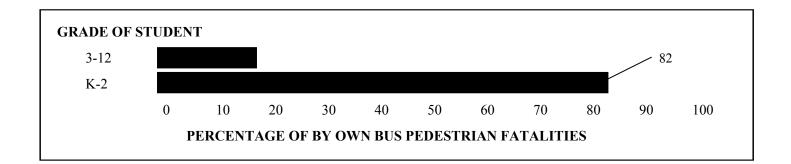
73% (43 of 59 students whose age is known) of all BOB fatalities were in grades K-1 (23 fatalities, grade K; 19 fatalities, grade 1). Even compared to students in second grade, only one year older, <u>GRADES K & 1 WERE</u> <u>ALMOST THREE TIMES MORE SUSCEPTIBLE</u> to by own bus fatalities (7 fatalities, grade 2).

**OF GREATER SIGNIFICANCE:** When compared to all other grades, children in grades K-2 are 15 TIMES more likely to be run over by their own bus.

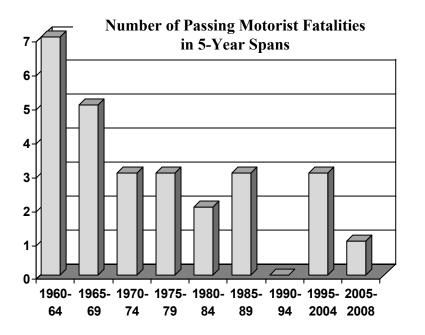
FROM 1989 to 2008 THERE HAVE BEEN ONLY 8 BOB FATALITIES: 5 in New York City where alternative crossing signals are used.



More Likely



### **PASSING MOTORIST PEDESTRIAN FATALITIES**



Even when the red lights are flashing, motorists sometimes pass on the left <u>OR</u> right side of buses which are stopped to load and unload students. Bus drivers and student pedestrians alike must be constantly aware of this danger.

Passing motorist fatalities typically involve one or more of the following factors:

- Motorists claim they didn't have time to wait
- Motorists claim they couldn't see the flashing lights because the lights were dirty or because sun, rain, snow, or fog blinded them
- The bus driver waved the car through the red flashing lights not knowing a child was crossing the road
- The motorist had no regard for the law or children's safety

Of the 27 student pedestrians who were struck and killed by a passing motorist, 4 - 8 year olds represent 71%, as opposed to BOB where 87% are 4-8 years old.

Of the 26 student pedestrian passing motorist fatalities, 61% occurred during the 14 years from 1960-1973; 31% happened the next 14 years. And then...

#### THE 110 MONTHS FROM 4/23/87 TO 6/21/96 WAS THE LONGEST PERIOD ON RECORD WITHOUT PASSING MOTORIST FATALITIES. HOWEVER, PASSING MOTORIST FATALITIES IN 1999, 2004 and 2006 EMPHASIZE THE NEED TO STAY VIGILANT DURING LOADING AND UNLOADING. THIS PAST YEAR WE HAD ZERO FATALITIES! LET'S COMMIT TO ZERO FATALITIES FOR ANOTHER YEAR!

After several passing motorist fatalities over a short period of time, an intensive campaign was launched in 1985-86 to alert the public of its legal, if not moral, obligation to stop for school buses stopped with red lights flashing.

The Education Department, school districts and contract providers of transportation services (in partnership with private business, local governments and the Governor's Traffic Safety Committee) designed several campaigns to alert the motoring public and parents of their obligation to stop for stopped school buses. Twice, the legislature amended the law to provide for stiffer penalties for passing stopped school buses. Several years later, significant improvement has been made in reducing what once was a serious problem.

COMMIT TO ZERO FATALITIES

However, school bus accident reports of "near misses" and students being injured, and of school bus drivers saving children's lives during the loading/unloading process, reminds us that public awareness campaigns and school bus driver alertness during the loading/unloading process continue to be essential in managing this problem.

### **PASSENGER FATALITIES**

Passenger fatalities typically include factors such as the following:

- Bus involved in traffic accident with a train or other vehicles on the road, or drives off the road and strikes a fixed object.
- Student puts their head out the window as the bus passes a utility pole, sign, or another vehicle.
- Student jumps from a moving bus.
- Passenger fatalities are usually the result of: temporary inattention on the part of the school bus driver, lack of student control, or improper techniques for observing the environment. The youngest students have not been involved as passenger fatalities; the average age is 12 years old.

DEATHS	ACCIDENT	% Of 111	% of 20
5	Bus/Train (Congers, NY 1972)	5%	25%
5	Bus collisions with other vehicles	5%	25%
4	Student's head out windows	4%	20%
4	Bus drove off road	4%	20%
2	Fatal injuries jumping from moving bus	2%	10%
20		20%	100%

## **CHARTER BUS FATALITIES**

Five fatalities have occurred while children were being transported by charter "coach" buses. While these are not "traditional" student school bus fatalities, they highlight the need to maintain the same high standard for charter bus drivers and equipment as for school bus transportation. The State Education Department and Department of Motor Vehicles have both established recommended guidelines for selecting charter coach operators.

All five students were ejected from the charter buses during roll-overs. Both accidents occurred in winter months during inclement weather. Both drivers lost control of buses that were driven too fast for conditions. In the 1973 accident, the bus hit an ice patch on the highway, proceeded to turn sideways and left the ice patch. When the bus returned to dry pavement it rolled, ejecting and then crushing the three victims. In the 1992 accident, the driver lost control in wet, slushy snow and the bus left the highway, rolling down an embankment. Again, the victims were ejected and crushed by the bus.

DEATHS	ACCIDENT	% of 5 Fatalities
3	01/03/73 Vestal Swim Team, Rt. 17	60%
2	04/11/92 East Meadow UFSD, Rt. 87	40%
5	Total	100%

### Trend #3: Most Injuries Occur Inside the Bus

While most fatalities occur outside the bus in the loading/unloading process, <u>THE</u> <u>OVERWHELMING MAJORITY OF SCHOOL BUS INJURIES OCCUR TO PASSENGERS</u> <u>INSIDE THE BUS</u>.

- Two-thirds of the passenger injuries are minor injuries, but even these can result in major lawsuits and settlements for districts and/or contractors.
- Students who are out of their seats are most vulnerable to injury because they are not positioned to benefit from the protection the bus design provides them. Whether students are legitimate standees or goofing around, they can be injured even in a non-collision maneuver or quick stop.
- TREND # 3: MOST INJURIES INSIDE THE BUS
- Students sitting in the rear or front seats have been shown to be most at risk for injury or death in frontal or rear collisions, the most common types.
- Drivers must be aware of all injuries to bus passengers, no matter how minor. Every injury should be reported to a supervisor for appropriate action.

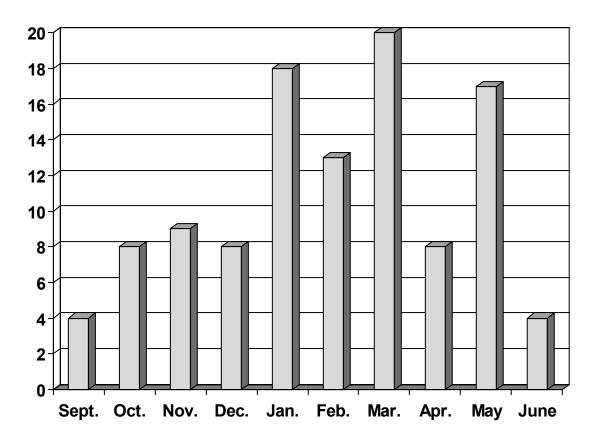
### Trend #4: Most Dangerous Times—Afternoon & Mid-year

Most fatalities take place on the afternoon trip home from school.

- Students and drivers alike often are thinking about what they will do when they get home instead of concentrating on safely unloading.
- Most fatalities take place between December and May.
- School bus drivers, students and motorists are lulled into complacency once school has been in session for a few months. Interestingly, June and September have the least fatalities. Drivers expect the unexpected in these months and really concentrate.
- 56 of the 111 fatalities occurred on the trip home; 15 on the trip to school. The remaining 40 are unknown with respect to the activity engaged in at the time of the fatality. This means that a total of 78% of the fatalities with information available happened on the trip home.

TREND #4: MOST DANGEROUS: AFTERNOON, MID-YEAR

# **Fatalities by Month**



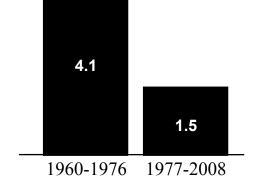
### Trend #5: DRIVER AND STUDENT TRAINING PROGRAMS HAVE REDUCED FATALITIES DRAMATICALLY!

The 1977 BASIC Course of Instruction set a new standard for driver training:

- 67 fatalities occurred from 1960-76 or 4.1 per year. From 9/1/76 -6/30/2008, 44 fatalities occurred or 1.3 per year. This represents a 34.3%\* reduction from 1960-76, when driver training was less regulated and/or advanced. These figures demonstrate the importance of today's driver, instructor and student training efforts and use of team management concepts in operating today's program as a school transportation safety team.
- K-6 Classroom Curriculum for School Bus Safety, the Safe Crossing Video and the State Education Department **Crossing Poster** were introduced in the late 1980s. Eight children have been killed as pedestrians since 1990.



\*Note: the statistic given last year of 61% was an error – should have been 34.3%.



#### STUDENT FATALITIES PER YEAR

### Non-Trend #1: Bad Weather

Bad weather conditions do not cause fatal accidents. In fact, accident reports indicate that <u>MOST ACCIDENTS HAPPEN ON</u> <u>CLEAR SUNNY DAYS.</u>

Early New York data, for the most part, does not indicate the weather conditions at the time of the fatality (this was corrected beginning 1984-85). National statistics, however, show that the greatest number of national fatalities occur on clear, bright, sunny days. Since New York's other statistics follow those at the national level and since 85% of the fatalities since 1984-85 occurred on bright, sunny days, it is projected that most of our fatalities probably occurred on bright, sunny days.

### NON-TREND # 1

### **BAD WEATHER**

### **Non-Trend #2: Gender**

Child's gender is a non-trend for school bus fatalities.



Boys and girls have been equally susceptible as school bus fatalities. **By own Bus** and **Passing Motorist** fatalities are equally split between boys and girls. Only passenger fatalities show any difference, and that is a result of random seating position at the time of the accident. Of the 111 fatalities during "traditional" school bus transportation to and from school on school buses from 2/1/60 - 6/30/2008, 45% were girls and 55% were boys.

This "non-trend" is unusual compared to some childhood accident data. Four times as many boys die in bicycle accidents than girls and almost twice as many boys die as pedestrians and by drowning.

## SUMMARY - WHAT DOES ALL THIS MEAN?

An effective school transportation safety program requires that students, drivers, parents, school administrators and affiliated groups **BE AWARE** of the basic characteristics that are most likely to lead to a school bus fatality. This awareness, **COUPLED WITH A STRONG ELEMENTARY GRADE LEVEL SAFETY CURRICULUM THAT UTILIZES THIS INFORMATION**, is the most important action that can be taken to enhance the safety of a child's ride to and from school and school activities.

# "Not My Kid, Not My Stop"

School bus drivers need to be highly aware of the possibility of children chasing after their bus. This can occur when a child mistakenly believes it's his or her bus and tries to catch it, or approaches the bus to meet a sibling getting off, or just because children enjoy chasing buses. Drivers need to be aware that children might appear from any direction at any time– especially near a bus stop.

In recent years, a number of incidents have taken place in which a child has been killed or seriously injured in these kinds of incidents:

- In two cases, the children who were struck were routed to ride the bus that struck them but had missed the bus and were running to catch it. One child had chased the bus a full city block.
- In two other cases, the victims were siblings of the child riding the bus. One was a two-year-old who got under the bus while the mother was talking to the bus driver, and one was a nine-year-old who rode across the street on a Big Wheel bike just as the bus was leaving the stop in the afternoon.
- The final case was a student who mistakenly thought a passing bus was his bus, and was running to catch it just as it turned a corner. He was killed.

The school bus stop is a dangerous place. During the 2006-2008 school year, 70 school bus crashes occurred at bus stops. Bus drivers must be highly alert for all potential hazards – pedestrians or vehicles – when stopped, approaching, or leaving the vicinity of a school bus stop. Drivers need to be aware of traffic behind their bus, and remember that children can be anywhere. Just because it's "not my kid, not my stop" is no excuse for not being alert to children near the bus.

Use the Safety Alert below to help educate parents of preschoolers, daycare centers, and babysitters who receive young children from the bus.

# **Safety Alert**

Dear parent or preschool care provider:

Your bus driver has been entrusted with the serious responsibility of protecting the safety of your child. The driver cannot control the hazards outside the bus. We ask your cooperation in making sure that a responsible person meets the bus every day to receive your child. This will ensure your child's safety as well as the safety of other children in the area.

We also wish to alert you to the dangers of long drawstrings or straps on children's clothing, or long mitten strings. Across the country, a number of incidents have occurred in which children's clothing or mitten strings became entangled in the bus door or handrail as the child stepped off the bus. In some cases, children have been seriously injured and even killed. Please make sure that your children's clothing does not have any long, dangling strings or straps that could jeopardize their safety while getting off the bus, as well as in other daily activities such as the playground.

Another danger to be aware of is dark clothing during the non-Daylight Savings time when it is darker in the morning and afternoon. Small children should be dressed in brightcolored clothing or have reflective tape on their outerwear for better visibility by motorists and school bus drivers.

Our only goal is to protect the safety of your child!

Thank you.

## SCHOOL BUS SAFETY IS A <u>TEAM</u> ACTIVITY – TRAIN CHILDREN OVER & OVER & OVER AGAIN

The accident analysis identifies certain key trends which can guide us in working with students. The key lessons learned are that boys and girls in grades K-3 who are getting off a bus are more susceptible than other children to a fatal accident. Such accidents usually take place from October to May. Students are most often struck by their own school bus, and secondarily by a passing motorist. Unlike fatalities, most student injuries occur when students are riding on the bus.

### WHAT CAN BE DONE?

**EDUCATION, EDUCATION AND MORE EDUCATION:** The student age group that is most susceptible to a school bus accident must be thoroughly educated about the dangers of riding a school bus. Student safety awareness (and, more important, their retention level) must be raised by frequent bus safety instruction. The following programs are recommended to increase awareness and improve the retention of critical safety procedures by these children:

#### IN THE SCHOOL

Many products have been created by the State Education Department to help train the youngest, most vulnerable children. Other products have been created which are based on the State materials. Many other safety products are available from other sources. Be sure that what you use accurately displays the behaviors you want your children to follow. Inaccurate training information is dangerous.



(1) **K-6 Classroom Curriculum for School Bus Safety** provides lessons for various parts of the year covering all school bus safety topics (320 pages).

(2) Safety video, "Safe Crossing: An EGG-cellent Idea" is a 10 minute video especially for younger elementary students, which focuses on safe crossing and riding behaviors.

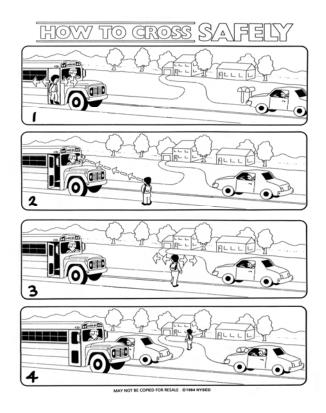
(3) "How to Cross Safely" poster is available in 17"x22" size for posting in classrooms and  $8"x10 \frac{1}{2}"$  size for posting in the bus. The bus posters are a vinyl crack-and-peel material to stand up to the harsh environment inside a school bus. The safety message of this poster is described fully on the next pages.

(4) **School Bus Safety Activity Book** is a 16-page coloring and activity book which uses illustrations from the K-6 Curriculum to stress the important topics of crossing, evacuation, danger zones and riding safety.

(5) **School Bus Safety Stickers** are nine stickers with illustrations from the Activity Book which students can put on their lunch box or backpack to help them remember the safety guidelines.

#### ON THE BUS

In addition to a bus driver's day-to-day opportunity to train students in safety procedures, the three times a year **BUS SAFETY DRILLS** provide an additional opportunity for in-depth instruction. "Guidelines for a Quality Bus Safety Drill" are included in the appendix to this document.



The most important safety tool for use on the bus is the **SAFE CROSSING POSTER** created by NYSED in 1984. Schools should display the poster (which illustrates the proper procedures for crossing in front of a school bus) at eye-level position to 4-8 year olds in the classroom and on the bus as they exit. A safety illustration, posted in this position, gives these children the opportunity to observe this critical life-saving message each time they depart the classroom and bus, thereby enhancing the awareness and retention of the safety message.

Posters can be placed in a variety of areas in the classroom or on the bus, but posters near exits ensure children see this important message just as they **embark on the most dangerous part of their trip to and from school**.

Teachers, parents and bus drivers should emphasize the safety message depicted in the poster. The most vulnerable children are too young to retain information they read. Once explained, the message in the illustration is easily understood by young children.

A **HIGHLY VISIBLE** illustration will subliminally enhance the child's ability to retain the important safety messages. Professional, quality renditions of the crossing poster and other listed safety materials are available from the Pupil Transportation Safety Institute, 224 Harrison St., Suite 300, Syracuse, NY 13202, 800-836-2210.

### **CROSSING POSTER ILLUSTRATES FIVE "LIFE SAVING TIPS":**

### LIFESAVING TIP #1... "CHECK BEFORE YOU STEP"

Students should be looking out the door for passing motorists and a safe space to step before they

exit the bus. REASON: Buses are sometimes passed on the right side by inattentive or impatient motorists. If the student steps off the bus without checking first, he/she could be hit by a passing vehicle as they disembark.

The second reason for "check before you step" is that the student should be sure the driver has stopped the bus in **a place that is safe to disembark**. The student should tell the driver if the bus is stopped in a deep puddle, close to a snowbank, or where there is no access to a safe space for the student to wait while the bus pulls away. This is especially important when a substitute driver is on the route who might not know the route well.



The third reason for "check before you step" is for drivers and students alike

to be conscious of the possibility of drawstrings, scarves, or backpack straps which can get caught on bus handrails, in the door as it closes, or on a fire extinguisher or anything else in the stepwell. Over a dozen children have been dragged and killed in such accidents around the country. All school bus drivers must remain extremely vigilant about this danger!

# LIFESAVING TIP #2 ... "I SEE THE DRIVER, THE DRIVER SEES ME"

Students should be looking at the driver's face while waiting to cross in front of the bus. REASON: If a student can see the driver's face, the driver should, therefore, be able to see the student, which means the child has moved out of the driver's blind spot in front of the bus. No accident report ever indicated the driver could see the child he or she ran over.

"I SEE THE DRIVER, THE DRIVER SEES ME" is a phrase that's easy for children (and adults) to learn and remember. Eye contact between driver and student is extremely important in the "crossing" situation. The important point is...

### **VISUAL CONTACT BETWEEN DRIVER AND STUDENT IS CRITICAL**

NOTE: If you drive a flat front, "transit style" bus, be sure to make the children walk at least "10 giant steps" in front of the bus to wait for your signal and cross. If not, they could get into a habit of standing just a few feet in front of the bus and be in great danger if they happen to ride a conventional style bus sometime in the future.

# LIFESAVING TIP #3 . . . "WAIT FOR THE DRIVER'S SIGNAL TO CROSS"

Students cannot see through the school bus when looking back to see if cars are coming. The school bus driver, properly utilizing all mirrors, is in a position to analyze what the traffic is doing. It is only when the bus driver is convinced that traffic is controlled that the driver gives the child the signal to cross the highway, utilizing proper crossing procedures while doing so.





Use the **"Universal Crossing Signal."** Hold hand with palm facing the student until it is safe to cross. Then, with your thumb pointing up, index finger extended out (pointing), remaining three fingers curled in toward the palm of the hand (like a clenched fist), driver points at the child and slowly motions from right to left (left to right, if loading), indicating that the child should proceed across the road while following proper crossing procedures.

(**NOTE**: There has been some confusion about the symbolism of this signal. It is not a "pistol" signal which could evoke the violence that haunts our society. It is a TWO-PART SIGNAL. First, the "thumbs up" signal indicates that the coast is clear; then the index finger points in the direction to travel.)

### LIFESAVING TIP #4 .... "LEFT, RIGHT AND LEFT AGAIN"

Students need to stop and look both ways as they cross in front of the bus. REASON: If students see a passing motorist early enough, they should be less likely to be hit and more likely to retreat to safety if properly educated to do so.

When crossing a highway as a pedestrian, or entering an intersection when driving, the traffic that will reach us first is always coming from the left. This being the case, children should be taught to look "LEFT, RIGHT, AND <u>THEN LEFT AGAIN.</u>" It is also logical as children move to the outside

edge of the bus as they cross the road that they look left first, because the view to the right has been clear as they initially entered the roadway.

Students should practice stopping midway to check for oncoming traffic as they cross in front of the bus. REASON: stopping encourages children to look carefully for motorists, and to not run across the highway immediately upon discharge, which is very dangerous.

### LIFESAVING TIP #5 . . . "USE BACKPACKS OR BOOK BAGS"

Students should carry books and other items in a backpack, tote bag, etc. REASON: Children are less likely to drop something that they may return to pick up and, while doing so, be run over by their own bus. This happens too often.



### THIS FINAL TIP IS NOT PART OF THE POSTER

### LIFESAVING TIP #6 . . . "HORN MEANS DANGER"

The bus horn is our state's "UNIVERSAL DANGER SIGNAL." If the bus driver perceives danger while the child is crossing, the horn means "get back to the side of the road you started from." The horn provides the quickest and most reliable signal in this situation. In an emergency, hand signals could be misinterpreted by the child, or hard to see because of glare or darkness. Outside PA systems are not on all buses, and may not work well in very cold weather. Also, using the PA to alert a child of an approaching vehicle might take too much time.

#### IN THE HOME

Parents should post the Crossing Poster in the bedroom of young children for continued reinforcement of important safety procedures.

Parents should review school bus safety procedures on a regular basis with their children.

#### **EVERYWHERE**

School bus drivers, teachers and parents should point out the location of the crossing poster and emphasize the safety message on it as often as possible. Until the lesson is learned and the children are able to successfully demonstrate the safety procedures, the message should be repeated as follows:

- Weekly for children in grades K-3
- Once per month during the first week of each month for grades 4-6
- Once as follows for grades 7-12:
  - First week of school
  - Second week of November
  - First five school days of January, March and May

**STRESS TO THE STUDENTS** the importance of looking both ways as they cross the road. Motorists do not always stop for the flashing red lights of stopped school buses. Train children to immediately return to the protection of the bus if they see an approaching vehicle.

#### ENCOURAGE ALL STUDENTS, ESPECIALLY THOSE IN GRADES K-3, TO CARRY THEIR BELONGINGS IN A BACKPACK or tote bag (or other type of carrier). A backpack reduces the possibility of a student dropping an object near or under the bus, returning for it, and being run over by the bus.

During the bus ride, a single carrying container on a child's lap is more easily controlled than three books, two drawings, four pencils and a lunch bag, etc. Keeping student items together in a backpack is also safer during an accident, as there is less clutter for everyone to work around during an evacuation.

# **ROUTING AND DRIVING TIPS**

Attempt to route all buses to be able to eliminate the need for children to cross in front of the bus during loading or unloading, especially on busy roads with poor sight-distance.

When children must cross in front of the bus, the following procedures are absolutely necessary:

(a) Identify all "crossers" on the driver's student list and route sheet. This is critical safety information for the regular driver at the beginning of the school year, and for all substitute drivers during the year.

(b) Avoid discharging children where they must walk back along the side of the bus. Children could slip and fall under the bus and be run over.

(c) Teach students the "UNIVERSAL CROSSING SIGNAL" for loading and crossing and the "UNIVERSAL DANGER SIGNAL" – the horn – to warn them of danger while crossing.

(d) If parents meet children who must cross the road at the bus stop, encourage them to meet their children **as they exit the bus**. This results in the child crossing the road under parent supervision, which is safer. Be sure parents also follow proper crossing procedures so their children will learn the correct way to cross. Someday the parent won't be there and the child will have to cross on his or her own.

(e) When discharging a mix of non-crossers and crossers at a bus stop, discharge the crossers first. Observe their crossing carefully. After all crossers have safely crossed the road, discharge the non-crossers.

Because motorists may drive by the exit door, children should look both ways before leaving the stairwell of the bus. After all students are safely away from the bus (remember DMV's 15-foot Law): proceed with caution, checking your **OUTSIDE** pedestrian mirrors as you begin to move. It is extremely important to make sure all children are away from the bus **BEFORE** moving forward. Never move the bus if there's any question that a child isn't at least 15 feet away. There have been several incidents around the country of drivers closing bus doors on children's garments or of drawstrings getting caught in the door or handrail, and dragging a child down the street. In February, 1996, a New York State student was killed in such an incident. There were also New York State dragging fatalities in the 70s and 80s. Many other close calls have been reported. January 2003, a New York preschool child was dragged to his death when his mitten strings were snagged by the bus. Another



very close call occurred when a driver shut an elementary-age child's backpack in the bus door and traveled 400 feet before realizing what he had done.

**NOTE:** By discharging crossers first, waiting motorists are more likely to remain stopped if they see children crossing the road. If non-crossers are discharged first and waiting motorists observe no crossers, they're more likely to become impatient and pass the bus when children are crossing.

Separating crossers and non-crossers puts the school bus driver in a better position to control the discharging students. Bus drivers must also be sure that all students are seated before leaving the bus stop, as well as during the route.

A driver's undivided attention during the complex task of crossing is absolutely critical. Drivers must also monitor motorists very closely during the entire crossing process. Student lives have been saved by drivers who saw "out of control" motorists approaching the bus while students were outside the bus. Drivers must be prepared to communicate with students AT EVERY MOMENT during the crossing procedure, and students must be taught to respond to the driver's warning immediately.

Use these procedures when loading all children, not just crossers:

(a) Children who are not seated are vulnerable to greater injury in an accident or sudden braking or steering actions. Be sure all children are properly seated before you move the bus.

(b) Use "MIDDLE LOADING" to keep children out of the front and rear seats whenever possible. Because most accidents involve a bus striking something in front or being struck in the rear, most student passenger fatalities occur in the front or rearmost seats. Use these seats only if the bus is completely full and be sure that they are emptied as soon as possible.

(c) Drop off all passengers <u>after</u> the following maneuvers, not before:

Backing the bus
 Making a right turn

Children should <u>always</u> be on board the bus when backing or making a right turn near a bus stop.

#### REMEMBER...CHILDREN OUTSIDE THE BUS ARE 4 to 5 TIMES MORE VULNERABLE TO BEING KILLED THAN CHILDREN INSIDE THE BUS

#### THANK YOU! New York's children are safer, because of you! "FOR THE CHILDREN"

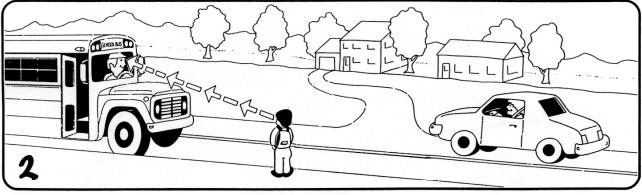
The most effective and economical safety insurance is that which is purchased with time...time spent to teach children safety procedures, and time required to pay extremely careful attention to children getting on or off your bus, at every single bus stop, every single day.

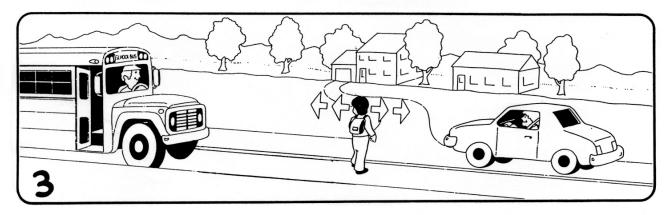
NOTE: 56% of all school bus fatalities since 1960 occurred when children were run over by their own bus. Driver, parent AND student training, awareness and alertness of this fact are critical to eliminating these tragic incidents. Cooperative programs to educate children, parents, teachers, administrators, board members and motorists are very important.

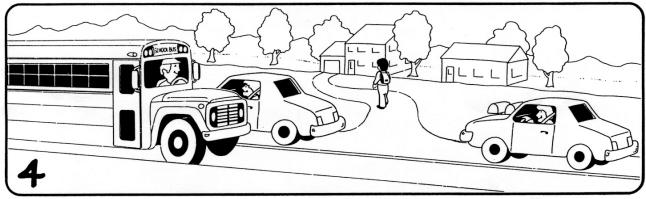
#### Important Reminder from SED:

School Bus Drivers leaving an unattended school bus or one parked on the street must properly secure the vehicle by turning off the engine, locking the ignition, removing the keys from the vehicle, and setting the parking brake (8 NYCRR 156.3 e4). In addition to setting the parking brake, drivers should turn the wheels into the curb, and pump down the pressure in the air brakes.









MAY NOT BE COPIED FOR RESALE ©1984 NYSED

2009 SBSIOBSAAT

## Loading and Unloading Safety

NYS Procedures, Tips, and Cautions For School Bus Drivers: 2006-2008 Courtesy of Pupil Transportation Safety Institute

Most of these lifesaving safety procedures, tips and cautions were first developed by school bus drivers. If you have a suggestion to add, use the form at the end of this document.

### A. STRICTLY ENFORCE SAFE CROSSING PROCEDURES

- 1. Establish eye contact between driver and student: "I See You, You See Me."
- 2. With **transit-style (flat front) buses**, students should still be trained to walk out at least 10 big steps someday they may ride a conventional style bus again.
- 3. Use the **New York State Universal Crossing Signal** when it's safe for the child to cross, pointing in the direction you want the child to walk.
- 4. Drivers and students must follow all safe crossing procedures in the **morning**, too.
- 5. Teach children the **New York State Universal Danger Signal** so they know what to do if a motorist fails to stop for your stopped bus. If the bus driver honks the horn while the child is crossing, it means "return to the side of the road you started from at once!"



- 6. When crossing, **students must stop and check for traffic** (looking carefully left, right, left, and listening carefully, too) before entering the unprotected lane.
- 7. Enforce Safe Crossing procedures with **older students** too don't give up on older students! Safe crossing is a law. And, older students set an example to younger children on the bus.
- 8. **Don't train discharging students to walk to a set location** before crossing, such as a tree or driveway. A substitute driver may not stop the bus in exactly the same spot, and the students could be confused.
- 9. On **routes with bus attendants**, children should still be taught to make eye contact with the driver and wait for the driver signal to proceed. The attendant's role is to accompany the crossing child and make sure the correct crossing procedures are followed. The attendant may not be there one day. Young children need to learn how to cross the street on their own.



# B. COUNT AND RE-COUNT CHILDREN AT EVERY STOP, EVERY DAY

- 1. If you've **lost count of a child** who's exited your bus, secure the bus, shut it off, take the key with you, get out, and check under and around the bus. Never take a chance!
- 2. Appoint **a student bus helper** to double-check your student count at each bus stop, from inside the bus. It's still the bus driver's responsibility, but an extra set of eyes can only help.

# C. ASSUME THE WORST WITH APPROACHING MOTORISTS

- 1. Continually check for approaching traffic during the entire loading/unloading process.
- 2. Keep children inside the bus until all visible traffic is stopped.

- 3. Be alert for vehicles (trucks, motorcycles, snowmobiles, bikes) **passing your bus on the right** (passenger) side, or on the shoulder. Train children to "check before they step" off the bus. Strictly enforce this safety procedure.
- 4. Whenever possible, let traffic behind the bus pass before you arrive at the next bus stop. Pull over only in a safe location, and come to a complete stop. Don't "troll" along the edge of the road; it's dangerous and illegal. Be very careful when pulling onto a shoulder. Watch out for drop-offs, soft shoulders, etc.
- 5. Activate yellow school bus flashers well in advance of the bus stop: two utility poles, or about 300 feet in residential areas, and further on higher speed roads, roads with limited visibility, during bad weather, or in heavy traffic conditions.
- 6. Even **emergency vehicles** (police, ambulance, fire) should stop for a school bus stopped with its red school bus flashers activated, but don't assume they will stop. If it's possible to do so safely, abort the loading or unloading process and let the emergency vehicle pass it's for everyone's good. Funeral processions have been known to drive through school bus flashing lights, too. Be careful!
- 7. **Be careful motioning students to their seats** after they've boarded the bus. Waiting motorists have mistakenly interpreted this as a signal to proceed past the bus.

# D. RESIST DISTRACTION DURING LOADING OR UNLOADING

- 1. **Do not use the internal overhead mirror** inside the bus while loading or unloading children. Your attention must be focused outside the bus until you're safely away from the bus stop. The internal mirror can be the most dangerous piece of equipment on a bus.
- 2. Check on student behavior and address any problems well ahead of the bus stop. Dealing with onboard behavior problems that occur as children are getting on or off must wait until the bus is safely away from the loading zone.
- 3. Silence your onboard students as you load or unload. Flash dome lights on and off as a signal for silence during critical driving tasks such as loading and unloading.

# **E. STAY ALERT FOR SPECIAL DANGERS**

- 1. **Kindergarten through third-grade children** are most vulnerable to a loading and unloading accident. Young children are short and harder to see near your bus.
- 2. They are impulsive **and inexperienced in traffic**. Be extremely cautious when loading or discharging young children!
- 3. **Take-home routes** are the most dangerous. Children may be pent-up with energy after school, and bus drivers are tired.
- 4. **By-own-bus accidents** children being run over by their own buses are the most common type of student school bus fatality. Understand the danger and use extreme caution.
- 5. **Beware of spring fever**. The most dangerous months for by-own-bus fatalities are December to May. Children, and bus drivers, may get sloppy about safety procedures after school has been in session for several months. "Pinch yourself!" Remember that an accident can occur in a split-second of inattention.
- 6. Children should be on board whenever the bus backs up. Minimize backing. All backing is dangerous, especially near bus stops. Use a bus attendant or a reliable student as a spotter, from the inside rear of your bus. Only back up at approved turnarounds.
- 7. At bus stops located near corners, children should be on the bus when the bus turns right. The rear duals of a bus can "track" over the curb and run over a child on the corner. Pick up children before turns and drop them off after turns.
- 8. **School loading areas** can be congested and hazardous. Be extremely alert in school bus loops!



9. **Group stops** (at trailer parks, apartment complexes, etc.) can be very challenging – watch out! Train students to wait for the bus in an orderly manner, and insist that discharging children move immediately away from the bus to prearranged spot.

- Stops with mixed crossers and non-crossers can be challenging. The potential for confusion is high. Discharge crossers first; then discharge non-crossers. Children who must cross should be clearly indicated on the route sheet.
- 11. If several students are crossing, they should **cross as a group**. Don't let children straggle across one at a time it's harder to keep tabs on them, and waiting motorists are more likely to lose patience.
- 12. Be aware of children carrying loose papers. Tell children to keep belongings in a backpack or book bag.
- 13. Watch out for children's clothing with dangling straps, drawstrings, or mitten strings. Bus handrails, doors, even fire-extinguishers mounted near the exit can snag loose clothing as children get off the bus. Watch out for children wearing bulky winter coats and hoods they can't see traffic or other hazards.
- 14. Be alert for students trying to retrieve an item from the external luggage compartment on your bus at school or at a bus stop.
- 15. **Don't run early or late on your route** children can become confused, creating a dangerous situation. If the bus is early in the morning, children might chase after it without watching for dangers. If the bus is late, children may become confused and try to board another bus, or get on at another stop. Dangerous situations can result.
- 16. When **facing another school bus** while loading or unloading children, make eye contact with the other bus driver. Be sure both of you are finished loading or unloading before proceeding.
- 17. In **heavy fog**, get off the road to a safe area and stop. Wait for fog to lift or for further instructions from your supervisor. Use 4-way hazard flashers (and roof-mounted strobe lights if equipped). If you encounter dense fog approaching a bus stop and are worried that traffic behind you may not stop for your stopped bus, you might need to go past the stop. Train children ahead of time to wait well back from the roadway, especially in foggy conditions. Explain that they should go back inside or wait in a safe area until conditions have improved if their bus goes past the stop. Always alert base by radio, at once, if you can't make a stop for any reason.
- 18. **Be alert for pranks at bus stops** the last week of school (water fights, jumping out of bus exits, etc.) Don't let yourself become rattled; children have been run over in the chaos. Report any rumor about planned pranks to your supervisor ahead of time.

## F. CORRECTLY ADJUST MIRRORS ON EACH BUS DRIVEN, EACH DAY

- 1. **Checking mirror adjustment** is one of the most important parts of a pre-check. Never drive a bus with mirrors out of adjustment. It is against the law, and dangerous to children.
- 2. Are you sure your mirrors show you what they should according to state and federal regulations? Ask for assistance from a mechanic, trainer, or supervisor. Front pedestrian (crossover) mirrors should show a seated bus driver the entire area in front of the bus hidden by the bus hood, from the front bumper forward to where direct vision of the ground is possible.
- 3. Check both pedestrian (crossover) and driving mirrors for children in or near the danger zones just before resuming forward motion, and keep checking driving mirrors as you pull slowly forward to watch for children running up to the bus from any direction.
- 4. Pull away from the bus stop at **low (idle) speed** so you can stop quickly if a child suddenly appears near your bus.
- 5. **Mirrors can be deceptive**. Force yourself to search mirrors slowly and carefully. Quick glances can easily miss a child. Search for children who have tripped and are lying on the ground, not just for children standing up; search for children wearing dark or low-contrast clothing.
- 6. Mirrors create **blind spots**. Move in the bus seat to "look around" mirrors before moving forward. Don't check mirrors only while leaning over to close the bus door. Your view into the mirrors is distorted. You could fail to see a child.

# G. RESIST THE TEMPTATION TO RUSH

- 1. Driver rushing has been a factor in many school bus accidents, including by-own-bus fatalities.
- 2. Remember: **"One bus stop at a time**." Focus on what's happening as you load and unload children at the stop you're at. Keep other thoughts and concerns out of your mind at this "moment of truth."
- 3. Focus and concentration are the signs of a professional. If you are worrying about personal problems or thinking about errands you need to do after work, you can't load and unload children safely.
- 4. **Report unrealistic route times** to your supervisor, or your School Bus Driver Instructor (SBDI). Don't give in to unrealistic time pressures on your route. "Safety first, schedule second."
- 5. Never move the bus if children are within 15 feet on any side. It's against the law and very dangerous. Don't allow students to walk back along the side of the bus.
- 6. **If you miss a stop by mistake, never back up**. Go around the block, even if it's a long one. Alert base by radio. Backing is dangerous, especially near a bus stop. You could easily back over a child.
- 7. **Substitute drivers** must avoid rushing too. If a sub starts a route late, he should finish it late. Trying to "make up time" while driving a school bus is a recipe for tragedy.
- 8. Rushing doesn't just mean breaking the speed limit: in a school bus you can rush at 20 mph. Rushing means you're not being alert to potential dangers around your vehicle.

# H. UNDERSTAND ROUTE AND BUS STOP SAFETY

- 1. **Never change the location of a bus stop (pick-up or drop-off)** without approval from your supervisor. Personal liability could result if a child was hurt and it was proven you had changed the location of the bus stop. Never alter your route without official approval!
- 2. If a child is waiting for your bus **on the wrong side of the road, or at an unapproved stop**, pick the child up that day as safely as you can, but alert base by radio and talk to your supervisor about the situation as soon as you return to base. Use good judgment and keep children's safety foremost when unexpected situations arise on your route.
- 3. You are the eyes and ears of the transportation department. **Report any unusual hazards**, such as dangerous crossovers, to your supervisor.
- 4. When loading or unloading children, stop your **bus toward the right of the driving lane, positioned straight ahead and not at an angle. Try not to leave more than 18 inches of driving lane on the right side** of your bus. This makes it harder for a vehicle to pass your bus on the right side.
- 5. Under normal circumstances, **don't pull onto a shoulder** when loading or unloading children. However, if a wide shoulder or a bike lane is present at a bus stop, you may need to stop your bus more to the right. According to NYS DMV, it's not against the law to stop a school bus on the shoulder of a highway (other than an interstate highway) when picking up or discharging passengers. Every bus stop is unique. Ask your supervisor or SBDI for guidance.
- 6. In the morning, stop your bus **before pulling right next to students waiting for your bus**. Make students walk to your bus it's safer. Pulling up next to children could result in a tragedy in slippery weather or if a child moves suddenly into the road. Train children to wait until your bus is fully stopped, and until you signal them it's safe, before moving toward your bus.
- 7. **Bus stops on corners can be confusing to motorists** entering a road from an intersecting road. Work with your supervisor to place bus stops safely back from intersections whenever possible.
- 8. **Train yourself to search for unusual hazards as you approach each bus stop**: criminal activity, strangers, dogs, cars backing from driveways, construction equipment, snow banks, etc. You can't be too careful today.

# I. USE SAFETY EQUIPMENT PROFESSIONALLY

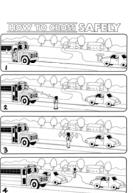
- 1. Secure your bus at every bus stop, whether 1 child or 10 children are assigned to that stop. Set the parking or emergency brake regardless of whether you're driving a bus with automatic or standard transmission, air or hydraulic brakes.
- 2. Let your foot rest lightly on the service (foot) brake while your bus is stopped to load or unload children. Brake lights help wake up approaching motorists.
- 3. When ready to resume forward motion after children have gotten on or off, **take special care that the transmission is in "Drive"** before releasing the emergency brake. You don't want your bus to roll back.
- 4. Never move your bus with its door open and the red school bus flashers activated. It's illegal and confusing to motorists.



- 5. When it's dark, use your dome lights if you must cross children (for instance, early in the morning during the winter). The Universal Crossing signal may be more visible to children outside the bus. However, be careful that dome lights don't create glare that makes it even harder to see.
- 6. If your bus is equipped with an **external PA system**, use it to supplement the Universal Crossing hand signal when crossing students, but not to replace it. Equipment can always break down. A spare bus might not be equipped with a PA system. Children need to be constantly reminded about the Universal Crossing signal.
- 7. If your bus is equipped with a **crossing gate**, think of it mainly as a training tool for children. Don't rely on crossing gates to keep children away from the bus. No piece of safety equipment is foolproof. Children are unpredictable. Don't use a bus equipped with a crossing gate (or any other piece of safety equipment, required or optional) if it's not in working order.
- 8. Check frequently to make sure your **Master Switch is activated and your school bus flashers are working** during the route. Check your "pilot" light next to the Master Switch, or your stop arm, to make sure they're working. Double-check the Master Switch after crossing railroad tracks, to make sure you've reactivated it.
- 9. The most important piece of safety equipment on a bus is a professional, alert, caring school bus driver.

# J. EDUCATE CHILDREN

- 1. Children learn by repetition, repetition! **Remind kids about safe crossing procedures every time they get off your bus**. You don't need to give them a speech, but say something every day that will keep safety in the forefront of their minds as they exit the bus. Daily instruction of children who must cross the road is a law and a good one! Daily reminders save children's lives.
- 2. Stress to children that they should **never return if they drop something near or under the bus**. However, be prepared for the unexpected – children may do so anyway. Training is very important, but children will always be unpredictable.
- 3. Use **bus safety drills** to test students' mastery of loading and unloading procedures. Conduct drills in an isolated section of a parking lot so you can let students practice crossing procedures safely. Ask your supervisor or SBDI for help.
- 4. **Crossing children must be crystal-clear about what driver signals mean**. A single moment of confusion could cost a child's life if a car is speeding toward your bus. Teach children to check carefully for traffic before crossing, and to return to the safe curb if you sound the horn ("Universal Danger Signal").



5. Teach children they must **ignore grandparents**, **parents**, **or friends while crossing** in front of the bus. A distracted child could run across the road without waiting for the driver signal and be struck by a passing motorist – it has happened. If parents or grandparents don't understand the safety reason for this, ask your supervisor to give them a courtesy call.

- 6. Teach children **not to place too much faith in red school bus flashers**. Remind children that the road is a dangerous place, and that cars will drive by the bus!
- 7. Train students to **wait for the bus safely back from the road, in an orderly line**. Many school bus drivers have been very successful at teaching children to wait in an orderly fashion.
- 8. Teach children about **mail box dangers**. Don't let students stand at the mail box right next to the road as your bus pulls away from the stop. Don't let them run across the street behind your bus to pick up the mail. If their parents permit it, children can get the mail after the bus has left the area.
- 9. The **State Education Department's "How to Cross Safely" poster** should be mounted in every New York State school bus. Make sure there's one in your bus. However, safety posters are not effective unless bus drivers use them as teaching tools on a regular basis.
- 10. **Coloring books, stickers, certificates, buttons**, etc. are great ways to reinforce safe crossing procedures with younger kids.
- 11. All kindergarten children should view the State Education Department's "Safe Crossing: an 'Egg-Cellent' Idea" training video. The video teaches children critical safety procedures such as how to get on and off a bus, how to cross the road in front of the bus, what the "Universal Crossing" and "Universal Danger" Signals are, what to do if they drop an item near the bus, etc.
- 12. Driver-in-the-Classroom bus safety programs to reinforce loading and unloading safety make a big difference. Many wonderful New York State school bus drivers have volunteered to offer safety training to children in the classroom. If your school system doesn't have a "driver-in-the-classroom" program yet, talk to your supervisor or SBDI about what it would take to get one going.

### K. ALWAYS EXPECT THE UNEXPECTED FROM CHILDREN

- Err on the side of caution trust your intuition. Children's lives have been saved when bus drivers "just didn't feel right" and checked under their buses. Young children will do almost anything around a bus. Children have crawled under buses, crawled into wheel wells, climbed on bumpers, played with crossing gates, grabbed hold of mirrors, etc. In some of these incidents, an attentive bus driver discovered the child; in others, the child was run over by the bus and killed.
- 2. Watch out for **children running after a bus they missed** as it pulls away from the bus stop. If a child isn't at the bus stop in the morning, be especially careful as you pull away. The child may be late and could chase after the bus. Check the surrounding area carefully before you pull away.
- 3. Be alert for **parents following your bus in their own cars** to catch the bus at a later stop, or even at a traffic light! Children could run up to the bus door unexpectedly, just as you pull away.
- 4. Watch out for **students slipping off the bus while you are focused on crossers outside the bus**. Don't leave the door fully open. Just "crack" it enough to keep the red school bus flashers activated. With air doors, place your right arm across the aisle to keep children from going out the door.
- 5. Watch out for a student on the bus signaling to a motorist outside to proceed past the school bus flashers it has actually happened!
- 6. Be alert for **unsupervised younger brothers and sisters near a bus stop**. Tragedies have occurred when preschool children have rushed to meet an older brother or sister getting off the bus. Report to your supervisor or an SBDI any unsupervised children playing at or near a bus stop.
- 7. **Snow banks** near bus stops can be dangerous. Check carefully for kids playing or climbing on snow banks, or hiding behind them. Never discharge a child directly into a snow bank or any other unsafe situation.
- 8. **Be alert for last-second warnings from others** just before moving your bus away from a bus stop. Other motorists, other bus drivers, parents or teachers outside the bus, or even children on board your bus might have seen a child under or near your bus. Take warnings seriously.
- 9. Silence students and turn the AM/FM radio down at each bus stop, so you can hear warnings. It's also a good idea to open the driver window at the bus stop, to be able to hear well.
- 10. If no one is home to receive a young child or a child with special needs, radio base and ask for guidance before proceeding. Know your school or company policy about dropping off young children. Never force a child off the bus who seems frightened or confused. Ask base what you should do.

# L. USE MIDDLE LOADING WHENEVER POSSIBLE

- 1. In the morning, **keep children out of the rear and front seats** until all other seats are filled. In the afternoon, empty the rear and front seats first. Train children to fill the middle seats first. Children in rear and front seats may be more vulnerable to injury in certain types of severe collisions.
- 2. **Middle loading saves lives**. It has been recommended by the National Transportation Safety Board and the State Education Department for many years.
- 3. Middle loading is especially important on bus routes with high-speed truck traffic.
- 4. Teach children why you don't want them in the back or front seats if the bus isn't full.

# M. LISTEN TO CHILDREN

- 1. **Don't force children off the bus if they tell you they should get off someplace else**. They may be pulling your leg, or they may be telling the truth. Always use your radio to check with base when unexpected situations arise on a route.
- 2. **Train children to remind the bus driver every day if they have to cross the road** after getting off the bus. Getting children involved like this helps them remember safety procedures. Substitute drivers really benefit from this tip!
- 3. If children say there's a problem, take it seriously. Maybe they're joking; maybe not. Tragedies have occurred when drivers ignored children's warnings.

# **N. EDUCATE PARENTS AND TEACHERS**

- 1. Explain the **importance of book bags or backpacks** to parents and teachers. Book bags and backpacks reduce the chance that a child will drop an item near the bus. Some drivers carry plastic grocery bags on the bus for kids who have forgotten their book bags.
- 2. Explain the **danger of dangling drawstrings**, **straps**, **or mitten strings** to parents. Parents should buy coats and sweatshirts with short drawstrings.
- 3. Large, distracting, or fragile items should not be carried on the bus. Parents should bring such items to school. Children's safety is more important than parents' convenience.
- 4. Encourage parents to reinforce loading and unloading safety procedures at home. For instance, parents of very young children can practice the crossing procedure in the driveway using the family car. Parent training is a huge help! Give parents copies of the "How to Cross Safely" poster.
- 5. Seek parent and school assistance in reinforcing safe behavior on bus. Parents can be powerful safety allies. Help parents understand how student behavior problems could distract the bus driver and result in a tragedy.
- 6. Regularly remind your school and the whole community about the importance of never passing a stopped school bus. Take part in the annual **"Operation Safe Stop"** campaign in your area; the campaign's goal is to remind the public to stop for school buses. Work with parent-teacher associations, civic associations, law enforcement, and local media to develop ongoing educational campaigns. Place posters in local stores, churches and offices. Write a letter to the editor about the importance of stopping for school buses. Ask local politicians and Traffic Safety Boards to help remind the public to stop for school buses.

# LOADING AND UNLOADING TIP

"I would like to share the following loading and unloading safety tip with other school bus drivers in NYS."

Name (if you wish):

Where employed (if you wish):

Send safety tip to: Pupil Transportation Safety Institute 224 Harrison St., Suite 300, Syracuse, NY 13202 or fax: 315-475-5033 or email: Faye@ptsi.org or give it to your local School Bus Driver Instructor (SBDI) who can submit it to the state's training program.

#### THANKS FOR CARING ABOUT CHILDREN'S SAFETY!

2009 SBSIOBSAAT

# **Highway-Rail Crossing Safety**

NYS Procedures, Tips, and Cautions for School Bus Drivers: 2006-2008

Courtesy of Pupil Transportation Safety Institute

The worst school bus accident in New York State occurred March 24, 1972 in Congers, Rockland County. Five children were killed. These procedures, tips, and cautions for school bus drivers are dedicated to those who lost their lives in the Congers tragedy, and to their families and community. If you have suggestions to add to this list, send in the form at the end of this document.

# A. KNOW YOUR BUS

- 1. Any vehicle transporting school children in New York State is a "school bus" and must stop at all tracks and follow all highway-rail crossing safety procedures. This includes **small vehicles being used as school buses**, such as Suburbans, vans, and school cars. Be very careful when stopping at railroad tracks in a small, "non-yellow" school vehicle, as other motorists may not expect you to stop.
- 2. School buses with or without passengers must stop at railroad tracks in New York State.
- 3. **Know the length of your bus**. You must know if your bus will fit safely on the other side of the tracks, or between multiple tracks. Some operations indicate the specific length (and height and weight) of the bus on a card taped to the dash of each bus.
- 4. Be aware of **blind spots** on your bus (mirrors, structural posts and pillars, fans, etc.) which could prevent you from seeing an approaching train. Compensate for "view obstructions" on your bus by "rocking before you roll" across railroad tracks.
- 5. Learn how to use **"Reference Points"** on your bus to know how far you are from the tracks. You should be able to accurately determine the distance both in front of and behind your bus. Because drivers are not all the same height, and because there are many different designs and styles of buses, reference points must be determined for each individual bus. Learning to use reference points is simple. Ask your trainer or School Bus Driver Instructor (SBDI) to teach you how to establish reference points on your bus.

# **B. KNOW THE ROUTE**

- 1. Before you leave on a **field trip or on an unfamiliar route**, find out about highway-rail crossings you will encounter. Talk to other drivers who have driven to that destination before, or to your supervisor or SBDI, about any unique features about railroad crossings you will encounter, and any safety tips they can share.
- 2. **Highway-rail crossings should be clearly noted on all route sheets**. Being a substitute driver is a difficult job. If you are a sub, check the route sheet ahead of time for any highway-rail crossings. Whenever possible, talk to the regular driver about the highway-rail crossings on the route you will be driving. Ask ahead of time about any unusual or challenging features.
- 3. Learn the train schedules for crossings on your route, but remember that trains are often off schedule. Unscheduled freight trains could come at any time, from either direction. "Any time is train time."

# C. PREPARE TO MAKE THE STOP

- 1. Well before you arrive at a crossing, **check traffic behind you**. Are vehicles following your bus too closely? Are there large vehicles behind your bus which might be able to push your bus onto the tracks? Be especially careful when driving a small non-yellow school vehicle.
- 2. Activate your 4-way hazard flashers early enough to alert vehicles behind you. Turn on your 4-way flashers at least 200 feet before the tracks in town, and at least 300 feet or more on higher speed roads. If necessary, tap your brakes lightly to "wake up" motorists behind your bus. Do NOT use either your red or yellow school bus flashers approaching or when stopped at railroad tracks. School bus flashers are for passenger loading and unloading only. Train yourself to turn off your school bus flasher master switch at the same time you turn on your 4-way hazard flashers. Link the two actions together to avoid accidentally activating your school bus flashers when you open the door after stopping at the tracks.

- 3. If possible, collect traffic behind your bus as you approach a railroad crossing. By slowing down well before the tracks, vehicles behind your bus will also be forced to slow down, preparing them for your stop. This tip is especially important when driving a smaller school vehicle or school car which is not yellow. Other motorists may not be expecting you to stop.
- 4. As you approach a crossing **on multi-lane roads, move to the right lane**. Stop at the tracks in the right lane so other traffic can go around your bus on the left. Do not pull clear off the road onto the shoulder, though stay in the driving lane. If you must be in the left lane in order to make a left turn immediately after crossing the tracks, take extra care to alert traffic behind you that you are going to stop at the tracks. Vehicles in the left lane are often traveling faster and may be less prepared to stop.
- 5. Quiet your students, and turn off the AM/FM radio, fans and heaters before you get to the stop. If your bus is equipped with a "Noise Kill" switch, use it. Hearing a train is impossible in a noisy bus. Teach your students to be quiet at every set of tracks. Explain why it's important. Some school districts and bus companies teach children a standard signal for "silence, please right now," such as blinking the dome lights on or off or raising their hand in a "V" signal. Report students who refuse to cooperate.

# D. STOP

- 1. Always stop your bus **15-50 feet from the nearest rail**. Stop with or without passengers on board. Stop at the point between 15 and 50 feet that gives you the **best visibility** down the tracks in both directions. If there's a stop line on the roadway, stop before it. Do not stop past a warning gate (unless you must make a second stop to improve your view down the tracks before crossing. See VISIBILITY PROBLEMS, below. In such a case, **never stop closer than 6 feet from the closest track**).
- 2. Check again for traffic behind the bus after you've come to a stop. Stay alert for a vehicle closing on your bus at high speed. Leave your 4-way flashers on.
- 3. Always make a full and complete stop at the crossing. **Never make a "rolling stop**" even at tracks that are seldom used. Do not allow yourself to be rushed in any way at highway-rail crossings. Being in a hurry is incompatible with school bus safety.
- 4. Never stop your bus on the tracks, or in the danger zone within 6 feet of the tracks, for any reason.

## E. CHECK FOR TRAINS AND CLEARANCE ACROSS THE TRACKS

- 1. Double-check to make sure your **school bus flasher master switch is off** before opening the bus door.
- 2. After the bus is stopped, **open the driver's window and entrance door**. Opening the window and door helps you hear and see better. Open the door at all crossings. Opening the door at railroad tracks is a recommendation of the State Education Department, the Department of Motor Vehicles, the Federal Railroad Administration, Operation Lifesaver, the National Safety Council, and the Pupil Transportation Safety Institute. If you are driving a small school vehicle such as a school car or Suburban, don't try to open a passenger door or your driver door – just open the driver's window and listen carefully.



- 3. Look and listen carefully for trains in both directions. Search carefully in both directions down the track more than once. Avoid complacency! Unless you remain alert and fully aware of the potential for danger at every crossing, it's possible to turn your head back and forth without really seeing anything! Because trains approach from a fixed angle, it's easy to miss them unless you look directly and carefully in their direction. Even though trains are very large, the field of vision they take up as they approach is small.
- 4. Move actively in your seat to be sure a train isn't hidden in a blind spot on your bus. Always **"rock before you roll."**
- 5. Check the status of **all warning signals** (flashing lights, bells, gates) at the crossing before beginning to cross. Warning signals are designed to alert motorists that a train is approaching well before it is visible. The flashing lights and bells should activate at least 20 seconds before the train arrives at the crossing. Don't make the mistake of only checking for trains that are visible. Tip: watch the crossing gate on the

opposite side of the road for signal activation as you proceed across the tracks – you can't see the one you've already passed!

- 6. Be sure there is **adequate clearance across the tracks** before beginning to cross. You should be able to stop far enough past the tracks to allow 15 feet safe clearance behind your bus. If you're not absolutely certain your bus will fit in the available space across the tracks, don't commit. Don't begin to cross if traffic on the other side of the tracks is still in the process of clearing out the available space a vehicle could stall or stop suddenly for some other reason, and your bus could be stuck on the tracks.
- 7. If you see or hear a train while stopped at a safe distance from the tracks, or the flashing lights, bells, or gates activate, **secure the bus (set the parking brake).** Leave your foot resting lightly on the service brake pedal so motorists will still see brake lights and realize you aren't moving forward. Once you are sure all traffic is stopped behind you, remove your foot.
- 8. Once a train has passed and completely cleared the crossing, **repeat the process of silencing the bus and carefully checking for trains before proceeding.** A second train could be closely behind the first: never proceed across the tracks as soon as one train has passed.

# F. CROSS THE TRACKS

- 1. If you are certain the tracks are clear in both directions, and warning signals do not indicate an approaching train, close the door and proceed quickly across the tracks. Don't move the bus with the door open. Once you have made an informed and considered decision to cross, don't hesitate. Indecision at this point could expose your bus to more danger.
- In a bus with standard transmission, don't shift gears while crossing the tracks. It's against the law. In buses with automatic transmissions, there is no need to manually downshift before crossing. Use "Drive" as you normally would when starting up from any stop.

Attempting unfamiliar procedures increases the risk of a mistake.

- 3. **Do not dawdle crossing the tracks**. Even though tracks can be bumpy for your passengers, do not go so slow that you expose them to danger any longer than necessary. (When transporting children with special medical conditions, extra caution may be necessary to avoid injuring them on bumpy tracks.)
- 4. If the warning signals (flashing lights, bells, or gates) activate just as you begin to cross, continue quickly across unless a train is obviously bearing down on the crossing. Warning signals should activate when the train is about 20 seconds from the crossing. This is ample time to cross the tracks and out of harm's



way. Panic or indecision at this point could be deadly – move quickly across the tracks. Don't try to back up. It could take to long, or another vehicle behind the bus could trap you on the tracks. If you've already stopped and carefully checked for trains, you are not breaking the law to continue across at this point. It's the safest thing to do. If the crossing gate comes down on top of your bus as you are going across, keep going. The gates are designed to break. If a gate does strike your bus as you cross, stop in a safe location after crossing and contact base by radio for guidance.

# G. LEAVING THE CROSSING

- 1. After crossing tracks, **leave your four-way hazard flashers on until your bus has resumed "road speed**" for that particular area. Don't turn them off as soon as you've cleared the tracks. Your bus still represents a hazard until it has reached the speed of other traffic in the area.
- 2. Turn off your four-way hazard flashers and turn back on your school bus flasher master switch. Link the two actions together turning off the four-way hazard flashers and turning on the school bus master switch at the same time to make it easier to remember. Forgetting to turn the master switch back on could be a serious safety problem at the next bus stop. Train yourself to double-check your master switch to make sure it's "on" as you approach the first bus stop after crossing railroad tracks. You should periodically check to make sure your school bus flashers are working along the route.

# H. AT MULTIPLE TRACKS

- 1. Multiple tracks can be more dangerous than single tracks. After one train has passed, a train on another set of tracks could be approaching. It could be hidden behind the first train. Be very careful.
- 2. If multiple tracks are close together, without room to stop safely between them, and not guarded by separate warning signals (lights, bells or gates), **only one stop should be made before proceeding**. Stop, look, and listen carefully just as at a single track. Check very, very carefully in both directions.
- 3. If you are sure there is adequate room to stop your bus between multiple tracks, you should stop at each set and perform another careful check for trains. Be sure there is room both in front of and behind your bus. Both the front and rear of your bus should be at least 15 feet from the nearest rail. Be aware of vehicles behind your bus that may not be expecting you to stop at the next set of tracks; leave your fourway hazard flashers on.
- 4. Check for clearance across all sets of tracks. Do not proceed onto a multi-track crossing unless you are absolutely sure you can cross all the tracks without stopping for any reason. If traffic ahead of your bus is lined up and beginning to move across the tracks, wait until all vehicles are off all sets of tracks before beginning to cross.
- 5. If a train is passing at a multi-track crossing, wait until it's approximately 1,000 feet or 15 seconds beyond the crossing and you are certain it's not hiding another train approaching on another track before proceeding. After one train has passed, repeat the complete process of silencing the bus and carefully looking and listening for trains before proceeding. Don't be in a hurry.

# I. VISIBILITY PROBLEMS AT CROSSINGS

- 1. Although federal and state agencies recommend that highway-rail crossings have 1,000 feet of visibility down the tracks in both directions, **many crossings have limited visibility in one or both directions**. The view can be blocked by buildings, signs, trees or brush, signal boxes, railroad equipment, or because of the angle at which the tracks intersect the roadway. Visibility problems can represent a serious challenge to the school bus driver who must cross tracks with a bus load of children.
- 2. If visibility problems exist at a highway-rail crossing you must use, **ask your supervisor or SBDI to help determine the safest possible strategy for that particular crossing.** Each challenging crossing is unique, requiring its own specific strategy about exactly where to stop the bus for best visibility, etc. A team approach is the best way to figure out the safest possible strategy. Involve local law enforcement, railroad safety personnel, NYS DOT, and Operation Lifesaver. Visit the crossing in a school bus.
- 3. Find out local train schedules, and arrange **to observe a train at the challenging crossing**. Observing a train gives you an idea of how quickly the train closes on the intersection, where it



will first become visible from the bus driver's seat, and how much time it takes from the moment the train is first visible to when it reaches the crossing. (Never assume that trains will always be on schedule. Unscheduled or late trains could arrive at any time.)

- 4. In some cases the railroad can improve visibility by **cutting trees or brush, or moving or removing other obstructions.**
- 5. In some cases, it may be necessary to **make a second stop** after your initial mandatory stop between 15 feet and 50 feet, to increase your view down the tracks at a crossing with severe visibility problems. If the second stop is past the warning gate, the gate could come down on your bus if the signals activate. Other vehicles that don't expect you to make a second stop could run into the back of your bus. Discuss the entire scenario step-by-step ahead of time with your supervisor and SBDI to work out the details of the safest possible strategy for the crossing, and to clarify any confusion.
- 6. No matter what strategy you devise with your supervisor and SBDI **never**, **never**, **never**, **stop** your bus within the danger zone: 6 feet or closer to the nearest rail. Loosened shipping materials on a train can stick out several feet from the tracks, or you could be bumped from behind and knocked into harms' way if you're closer than that.

- 7. **Making a turn across tracks from a parallel road**: If you have to make a right turn directly across tracks from a road running parallel to them, be very careful. It's hard to see back down the tracks when your bus is parallel to them, and it may be difficult to determine if there is adequate clearance on the other side of the tracks. You may need to look back through the second, third, or fourth passenger window to see down the tracks. Talk with your supervisor or SBDI about ways you could re-route to avoid such a challenging situation. For instance, a left turn over parallel tracks usually allows the bus driver better visibility. If you must turn right to cross tracks from a road running parallel to them, try to position your bus at an angle before the turn to increase your view back down the tracks. You may also be able to use your west coast mirror to look back down the tracks. Students might also help you check back down the tracks for trains. Of course, safety is still the driver's ultimate responsibility. Ask students to wipe windows clear of steam and condensation to help you see. Turn off your four-way hazard flashers and activate your turn signal once traffic is completely stopped behind you before making the turn, so other motorists will understand your intentions.
- 8. Sharply angled crossings: When the tracks and the roadway don't intersect at or near a right angle, it can be difficult to see down the tracks in one direction. Because of the angle, your bus also has to travel a slightly greater distance to be entirely across the tracks. Devise a specific strategy for the crossing with the input of your supervisor and SBDI. Determine the best position to stop your bus and best way to use your mirrors during practice runs without students on board. Learn exactly which set of bus windows to look through to maximize your view down the tracks. Appoint reliable students to keep those windows free of steam when it's cold outside, and to help you check back down the tracks.
- 9. Explain specific crossing strategies for challenging crossings to **substitute drivers**. Summarize or diagram the strategy on route sheets for subs.

# J. UNDERSTAND RAILROAD EQUIPMENT AND SIGNALS

- 1. Passenger trains travel at speeds up to 120 mph. At this speed, a train travels 1,000 feet in just 6 seconds. Tracks carrying high speed trains may be marked with "High Speed Trains" warning signs. Ask your supervisor or SBDI to check with DOT or the railroad company, or to access the Federal Railroad Authority crossing database Web site, to find out maximum train speed at any crossing you use.
- 2. Because of their large size, **trains often appear to be moving much slower than they really are**. It's even harder to judge a train's speed at night. If you can see a train, wait. Never take a chance. Hundreds of motorists across the country are killed each year when they try to "beat the train" across the tracks.
- 3. An average size freight train takes about 1 ½ miles and two minutes to stop. Don't expect a train to be able to stop for your bus it can't.
- 4. "Crossbucks" signs, which are placed at every public highway-rail crossing, usually include an identification number on the signpost or signal box. Use this identification number when contacting the railroad company about the crossing.
- 5. Flashing lights, bells and gates: if any of the active warning devices at the crossing (lights, bells and gates) engage when you are stopped at the tracks, stay put and wait for the train to pass. If warning signals engage after you have already started to cross the tracks after carefully checking for trains, proceed across without delay. If the crossing gate strikes the top of your bus while you are proceeding across, keep going. It will not damage your bus; it's designed to break. Never stop or try to back up at this critical point. Other vehicles could be behind your bus. Get across the tracks as quickly as you can. (Note: flashing warning lights can be difficult to see in bright sunlight or when you're too close to them. Warning lights at crossings are usually low-wattage, powered by batteries. Check their status very carefully.)
- 6. Listen carefully for train horns: a train should sound its whistle four times, commencing about 1,300 feet from the crossing. It can be hard to hear a train whistle in a noisy bus, especially over the sound of a diesel engine. Always silence your bus at crossings. If you think you hear a train horn or whistle, stay put if you're in a safe location.
- 7. **Traffic light at a crossing**: if a traffic light controls a crossing, and it is lit green, state law does not require school buses to stop for the tracks. You may proceed with caution, searching for trains in both directions as you approach the crossing. If you feel you must stop to check for a possible train or because you're not sure if the traffic light controls the crossing, be careful to alert motorists behind your bus. They won't be expecting your stop. Tap your brake lights and activate your 4-way flashers well in advance.
- 8. **"Exempt" signs** mean either that a crossing is no longer in use, or will only be utilized by trains with a flag person to direct traffic. School buses are not required to stop at exempt crossings and may proceed

with caution. If you feel you must stop in a particular situation, be very careful to alert motorists behind your bus. They won't be expecting you to stop.

- 9. **Dead tracks** are tracks which are no longer in use. The rails may be pulled up on both sides of the crossing. A stop is still legally required unless an "Exempt" sign is posted, but be very careful vehicles behind your bus may not expect you to stop. Ask your supervisor or SBDI to contact DOT about placing an "Exempt" sign at any dead tracks you cross, or having the tracks removed.
- 10. **Domed crossings** are elevated above the level of the roadway. They can be challenging for large vehicles such as school buses. The angle of approach, break-over and departure can be so steep that a vehicle gets stuck on the tracks, or strikes its front or rear bumper in the roadway. If you must use such tracks, it might be necessary to cross at a slight angle to avoid hanging up on the tracks. When crossing a domed crossing in a smaller bus, you may have difficulty seeing across the tracks to make sure there's sufficient clearance on the other side. It may also be hard to see down the tracks or to tell how many tracks there are. The number of tracks should be posted on the crossbuck signpost.

# K. PREPARE FOR THE UNEXPECTED

- 1. **Bad weather reduces visibility** and can mask the sound of an approaching train. Use extra caution when crossing tracks in snow, rain or fog. Make sure your students are absolutely quiet.
- 2. **Highway-rail crossing signals can occasionally malfunction, or be vandalized**. Although modern crossing signals are well-designed and carefully checked, **don't assume** that flashing lights, bells or gates are functioning properly or timed correctly. It is the school bus driver's responsibility to make sure no train is approaching. Vigilant school bus drivers are the ultimate defense against a bus-train tragedy.
- 3. If a crossing gate is down or if flashing lights or bells are activated, but no train is in sight, radio your dispatcher. Never go around lowered gates unless a police officer at the crossing directs you across. Don't ask a bus attendant or student to go out and check the tracks for trains. It may take some time for police or the railroad company to respond to problems at a crossing, but school bus drivers cannot take the responsibility for crossing on their own, even if other motorists are doing so.
- 4. **Train stopped near the crossing**: a train may be stopped near the crossing, close enough to trip the warning signals. Law enforcement and the railroad company should be contacted. If this is a recurring problem, your supervisor or SBDI should work with the railroad, DOT and Operation Lifesaver to correct the situation.
- 5. If your bus stalls on the tracks, evacuate your students at once, even if no train is visible. If an approaching train is visible, perform a front/rear dual evacuation to empty the bus as quickly as possible. Teach students to move away from the tracks as quickly as possible, in the general direction from which the train is coming. The reason to evacuate in that direction is that debris from a crash (or the bus itself) could fly ahead of the impact point in the direction the train is going.
- 6. If your bus is stuck on a crossing because other vehicles are in the way, use any means to get it off the tracks. Push other vehicles out of the way if necessary. Do whatever you must to avoid a catastrophe. No school bus accident is more devastating than being hit by a train.

# **HIGHWAY-RAIL CROSSING TIP**

"I would like to share the following highway-rail crossing safety tip with other school bus drivers in NYS."

Name (if you wish):\_\_\_\_\_

Where employed (if you wish):

Send safety tip to: Pupil Transportation Safety Institute 224 Harrison St., Suite 300, Syracuse, NY 13202 or Fax: 315-475-5033 or email: Faye@ptsi.org or give it to your local School Bus Driver Instructor (SBDI) who can submit it to the state's training program.

### THANK YOU FOR CARING ABOUT CHILDREN'S SAFETY!

# New York State Safety Drill Checklist

Use this checklist as a guide to help you conduct an effective bus safety drill:

- □ **DRILL INTRODUCTION**: Stand up and face your students. Introduce yourself and explain why bus drills are important. Let your students know you care about their safety. Select two reliable Safety Drill Helpers ahead of time (select students seated near the rear of the bus, who ride most of the route) and introduce them to the rest of your students.
- □ **RIDING RULES**: Read and discuss the bus rules explain the "why" of each rule. Explain what the consequences would be if students refuse to comply.
- □ EMERGENCY EQUIPMENT AND EXITS: Let students point out and open all exits on the bus don't forget the passenger door and roof hatches. Remind them it's dangerous to play with emergency exits.
- □ **DISABLED DRIVER**: Demonstrate how to stop, secure, and shut off the bus; explain the importance of knowing what the bus number is; show students how to use the 2-way radio.
- □ SEAT BELTS: Explain your school policy regarding seat belt use; show students how to wear seat belts low across their hips, fairly tight.
- PRACTICE EVACUATION: Prevent injuries by stressing the importance of orderly evacuation practice. Safety Drill Helpers, teachers or other adults should serve as spotters as children go out the exit door. Show students how to "sit and slide" from emergency doors don't let them "jump" off the bus, or push or shove. All personal items should be left on the bus during the practice evacuation. Before the evacuation practice begins, point out a safe area to gather after they've exited from the bus. Younger students should hold hands in a "safety chain" as they walk from the bus. To protect children, the bus should be shut off and secured, with school bus flashers activated, during bus drills.
- □ SAFE LOADING AND UNLOADING DEMONSTRATION: When the evacuation practice is finished, gather your students at the front of the bus and demonstrate the Safe Crossing Rule. Review the Universal Crossing Signal and Universal Danger Signal. Remind students that cars don't always stop for buses and to "check before they step" off the bus to avoid being struck by a car passing on the right side of the bus. Let your students point out the Danger Zones around the bus; tell them never to try to get something they've dropped near the bus, or to chase after a bus they've missed. Tell children to get an adult to help them. Explain why jacket drawstrings can be dangerous. Explain that in severe weather conditions it's even more important to follow the safety rules when loading and unloading.
- **CONCLUDE THE DRILL**: Thank your students after the bus drill is complete!

# NATIONAL LOADING ZONE STUDENT FATALITIES 2006-2007\*

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Children killed in front of Bus	5	2	5	7	3	2	5	1	7	0	2
Children killed by Rear Wheels	4	3	4	4	3	3	1	2	7	7	1
Children killed by Passing Motorists	5	4	7	11	3	8	6	6	6	6	4
Other Scenarios	3	1	2	0	0	0	0	0	0	0	0
No Information	2	0	0	0	0	0	0	0	0	0	0
Total Children Killed	19	10	18	22	9	13	12	9	20	13	7

When Fatality Occurred											
Going to School	7	2	10	10	1	8	6	5	3	4	4
Activity Trip	0	0	0	0	0	0	1	0	0	1	0
Going Home	12	8	8	12	8	6	5	4	17	8	3
No Information	0	0	0	0	0	0	0	0	0	0	0

\*At the time of printing of this document, the 07-08 National statistics were not yet released.

Courtesy of Kansas State Education Department

http://www.ksbe.state.ks.us

# 2007-2008 NYS School Bus Accidents

# Total school bus related fatalities: 0

### Student fatalities: 0

### Private school student fatalities: 0

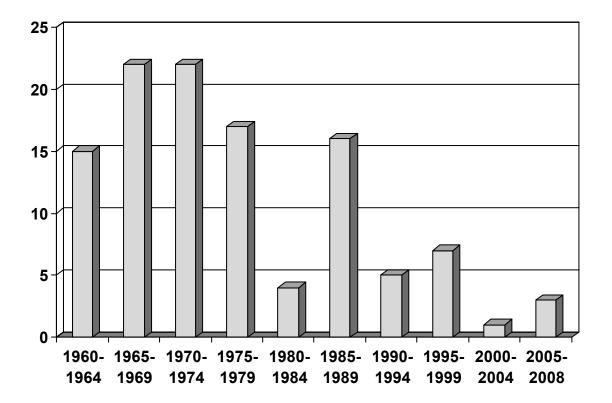
### Other motorist fatalities: 3

- September 25, 2007, motorist failed to stop at intersection in Clayton, New York and strikes the school bus fatally injuring the driver of the other vehicle.
- February 5, 2008, motorist drifted into the lane of a school bus in Poland, New York, striking the bus in the left front resulting in a fatal injury to the other motorist.
- May 7, 2008, in Liberty New York, the other motorist crested a hill out of control in the opposite lane and struck the bus killing the driver.

### Pedestrian fatalities: 0

### Bus driver or attendant fatalities: 2

- School bus drifted into lane of other motorist in Coxsackie, New York and struck other motorist head on, school bus driver died.
- In Fulton, New York, a school bus driving in the school loop with fellow school bus driver as passenger, fell forward and was thrust out service door onto the pavement and suffered a fatal head injury.



# **NYS Student Fatalities: 5 Year Blocks**

# Injuries

# Total Student Injuries: 255

Student injuries **decreased 12.9%** over the previous year.

# **Student Injuries by Month**

# Student injury severity:

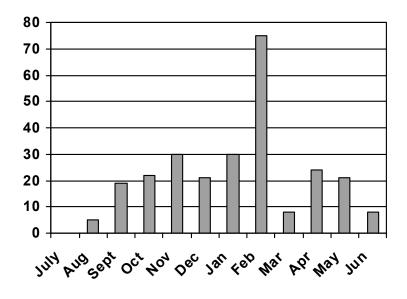
- Severe: 2
- Moderate: 13
- Minor: 240

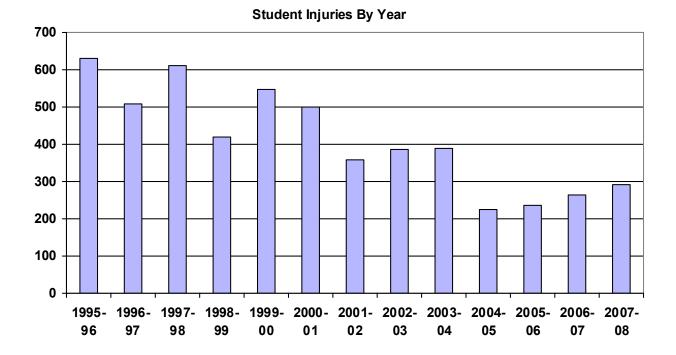
# Driver injuries: 23

Attendant/monitor injuries: 2

Other motorist injuries: 13

Pedestrian injuries: 2





# **Total accidents: 744**

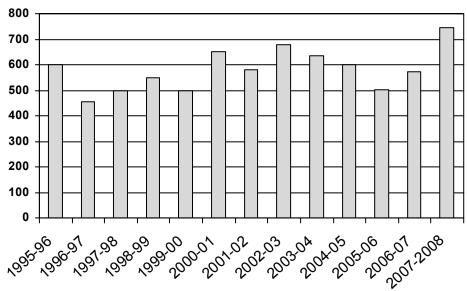
Total NYS school bus accidents increased 29.6% over the previous year.

# **Types and Characteristics of Accidents**

# Loading and unloading accidents: 21

This type of school bus accident represents 2.8% of <u>all</u> school bus accidents for the school year 2007-2008.

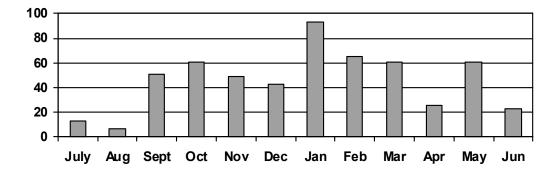
- By-Own-Bus: 0
- Passing Motorist: 3



# NYS Total School Bus Accidents by Year

# **Important Reminder from SED:**

School Bus Drivers leaving an unattended school bus or one parked on the street must properly secure the vehicle by turning off the engine, locking the ignition, removing the keys from the vehicle, and setting the parking brake (8 NYCRR 156.3 e4). In addition to setting the parking brake, drivers should turn the wheels into the curb, and pump down the pressure in the air brakes.



2007-2008 Accidents by Month

NOTE: There were 46 accident reports submitted without a date provided.

# Backing accidents: 59

• Note: backing accidents increased 73.5% over the previous year.

# Bus-bus accidents: 9

- This represents a 12.5% increase in busto-bus accidents from the previous year.
- One of the reported bus to bus accidents involved a transit bus, all others were school buses.

# Rollover or layover: 3

Fire incidents: 0

Head-on Collisions: 16

# Side Swipe Accidents: 166

# Rear- Ended: 220

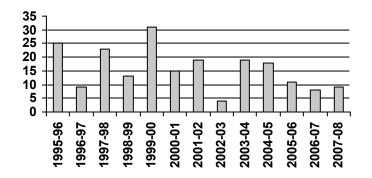
- 56 were while the bus was loading/unloading which is 38 more than last year.
- 5 were while the bus was stopped at the Railroad Crossing. Last year there were 3 rear end accidents at Railroad Crossings.
- 104 were while the bus was stopped in traffic.
- 15 were while the bus was in the process of turning.
- Remainder were miscellaneous traffic collisions.

# Pedestrian Accidents: 7

# Non-collision injury accidents: 10

• This is **7 more** than last year's total.

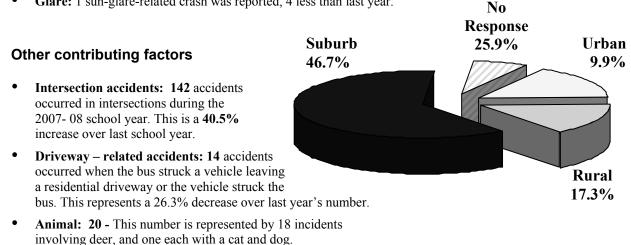
# **Bus-Bus Accidents by Year**

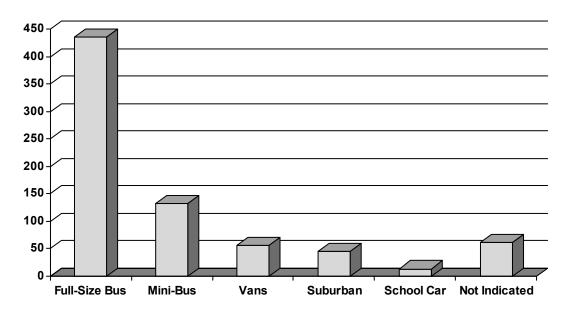


# Weather factors:

Winter weather conditions were a significant contributing factor in 78 accidents, a 27.8% increase from last year.

- Snow: 34 snow-related accidents were reported, making snow an issue in 4.5% of all accidents.
- Wet Road Conditions: 35 accidents were reported on wet roads. This makes up 4.7% of all reported accidents for 2007-2008.
- Glare: 1 sun-glare-related crash was reported, 4 less than last year.





# Vehicle size

Full-size buses (conventional or flat-front) accounted for 58.6% of all accidents; minibuses accounted for 17.7%; vans accounted for 7.5%; suburban's accounted for 6%; school cars accounted for 1.7%.

# **Preventability: 31%**

According to information provided in the reports and following National Safety Council guidelines, 31% of all school bus accidents could have been prevented by the bus driver; this is a 35.4% decrease over last year's 48%.

# **Driver information:**

# Gender:

• Males represented 43.1% and females 42.7% of accident drivers.

# Age:

- The average bus driver's age was **58** for all reported accidents in 2006-2007.
- **48** accidents involved school bus drivers 70 years of age or older.

# **Reports Sent To SED Incomplete:**

- **406** accident report forms were submitted incomplete and were returned for completion. This represents 54.5% of all reports filed.
- SED encourages you to carefully complete the accident forms to assist in providing comprehensive data. This data is used to focus training in New York State and ultimately improve safety to the children riding our buses

This report was prepared by the Pupil Transportation Safety Institute for the New York State Education Department. Its purpose is to provide School Bus Driver Instructors, school bus drivers, attendants, monitors, dispatchers, supervisors, mechanics, 19-A Examiners, and safety officials with information about current trends in New York State school bus accidents. Ultimately, it is hoped that this information will help prevent future accidents.

# 2008-2009 New York State School Vehicle Accident Reporting Requirements

If the following conditions are met, the bus driver must file NYS DMV Form MV104F, "Accident Report for School Vehicles," within 10 days. Failure to file is a misdemeanor and can result in a license or registration suspension.

# Use the MV104F only if the following conditions are met:

If the school vehicle involved in the accident (see below) was owned or contracted for by a school; (Note: "school vehicle" may include any type of vehicle, including a passenger car or van, so long as it is owned or contracted for by a public or private school and being used for transportation to or from school or school activities. The term "school vehicle" is **NOT** limited to yellow school buses.)

**And** the school vehicle was <u>in the process of transporting</u>, or <u>picking up or discharging</u>, students, children of students, teachers, bus monitors, or supervisory personnel;

(Note: the bus is considered "involved in the accident" even if it didn't physically contact another vehicle or person, if the bus driver had activated, or should have activated, the flashing yellow overhead warning lights as the bus approaches a stop, or had stopped with its red flashers activated, until children are safely out of the roadway and at least 15 feet from the bus.)

(Note: if no passengers were being transported, picked up, or discharged when the accident occurred – for instance, a bus driver "deadheading" back to base, or a mechanic road-testing a bus – do <u>not</u> use the MV104F.)

# And one or both of the following:

An <u>injury or death</u> occurred to any party involved in the accident (injury can range from complaint of pain with no visible injury, to severe injuries. See the back of the MV104F for definition of injury categories);

# and/or

<u>Property damage</u> (including damage to a vehicle or a fixed object such as a fence, house, pole, etc.) occurs to any one party in excess of \$1000.

# If the above conditions are not met, do not file an MV104F. However, you

may still be required to file an MV104, "Report of Motor Vehicle Accident."

If the above conditions <u>are</u> met, the bus driver must file the report within 10 days. Your supervisor should have a blank MV104F form, or they may be obtained from DMV; ask your supervisor for assistance in completing the form.

# Follow these guidelines in completing the form:

- 1. Print legibly, using black ink, or type.
- 2. Your vehicle (the school vehicle) is Vehicle No. 1 (left side of form)
- 3. If you are filing the report because damage to another vehicle or fixed property is in excess of \$1,000, clearly state that damage was in excess of \$1,000 in the section "Describe Damage to (Vehicle No. 2)" on right side, middle, of form.

<u>All</u> sections of the form must be filled out. This includes the center "SCH" section (which runs the entire width of the form) which asks for information about bus driver experience and training and date," as well

as <u>the 11 boxes along the right side of the form</u>. (Fold the form in half vertically so the back matches with the front, for an explanation of what the boxes mean).

If more than two vehicles were involved, use a second MV104F. Note page numbers at top of forms.

In the "ALL PERSONS INVOLVED" section, names of all passengers on the bus must be listed, not just those injured. For injuries, consult the "Injury Codes" section on the back of the MV104F to determine classifications. Note that even a "complaint of pain – no visual injury" constitutes an injury in this instance.

In describing the accident, carefully and honestly explain your version of what happened. The form is a legal document. Answer this question in your explanation: "How did you first become aware that an accident was going to occur or had occurred?" Attach additional sheet(s) of description if you wish.

# Non-collision injuries

Injuries that result from non-collision events, such as a student falling from a bus seat, <u>may</u> still need to be reported on the MV104F. NYS Vehicle and Traffic Law (Section 605) does not restrict accident reporting requirements to collisions but to "a motor vehicle which is <u>in any way</u> involved in an accident" (emphasis added). Report non-collision school vehicle injuries on the MV104F:

If the injury resulted from the actions of the bus driver or another motorist: For instance, if the injury occurs when a student falls from the bus seat because the bus swerved suddenly to avoid a car running a stop sign, the MV104F should be filed, because careless actions on the part of the other motorist contributed to the injury.

**Or,** if the bus goes off the road because the bus driver failed to properly negotiate a curve, and the student falls from the seat when the bus hits a bump on the shoulder, the MV104F should be filed.

**Or,** if a student riding in a wheelchair tips over and is injured, an MV104F should be filed, since the wheelchair was not adequately secured during transport.

**However,** if one student injures another during a fight on the bus, or a student slips and falls on the bus steps, a MV104F does not have to be filed, since bus driver actions did not contribute to the injury.

<u>Note:</u> additional requirements beyond reporting an accident according to the above guidelines, such as drug and alcohol testing, may also apply after an accident. Ask your Supervisor or Manager for assistance.

# To obtain MV104F forms, contact NYS DMV, Forms Inventory Control, Empire State Plaza, Albany, NY, 12228.

For questions about reporting a school bus accident, contact the Pupil Transportation Safety Institute at 800-836-2210

# SCHOOL BUS DRIVERS: IMPORTANT SAFETY ALERT **CHILDREN'S CLOTHING CAUGHT ON THE BUS** Across the U.S., children continue to be injured or killed when their clothing is caught in the bus handrail, door, or other equipment, and they are dragged by the bus. Long jacket or sweatshirt drawstrings, backpack straps, or long scarves or other loose clothing are especially dangerous. Your vigilance can prevent a tragedy. Remember these student loading and unloading safety tips: • <u>Never</u> move the bus unless you are absolutely certain all children are safely out of the Danger Zones. Never rush while unloading children. • Count children as they exit the bus - if you've lost count of a child outside the bus, shut the bus off, secure it, and check underneath. • Watch for children with long drawstrings or other loose clothing, or children carrying loose papers or other items - expect the unexpected. • Make sure your bus handrail is not attached to the bus at such an angle that it can easily catch a drawstring - check with your supervisor dangerous handrails should be changed immediately. • Remember that children's clothing has also been caught in bus doors. the fire extinguisher, seatbelts, and the step outside the entrance door. • After discharging, carefully scan the entire area before moving, and be alert for any warnings (from bystanders, teachers, or motorists outside the bus, or students inside) as you pull away from the stop. Quiet your passengers and turn radio down so you can hear last-second warnings. LOADING AND UNLOADING CHILDREN **IS THE MOMENT OF TRUTH -**LET NOTHING DISTRACT YOU

Courtesy of the Pupil Transportation Safety Institute 800-836-2210

# **IMPORTANT TRAFFIC/PEDESTRIAN SAFETY ORGANIZATIONS**

### AAA Foundation for Traffic Safety

607 14<sup>th</sup> Street NW, Suite 201 Washington, DC 20005 Tel: 202-638-5944 or contact your local AAA <u>http://www.aaafoundation.org/home</u> email: info@aaafoundation.org

### Insurance Inst. For Highway Safety

1005 N. Glebe Road, Ste. 800 Arlington, VA 22201 (703) 247-1500 <u>http://www.hwysafety.org</u> email: publications@iihs.org

### National Association for Pupil Transportation (NAPT)

1840 Western Avenue Albany, NY 12203 1-800-989-NAPT <u>http://www.napt.org</u> email info@napt.org

### National Transportation Safety Board (NTSB)

490 L'Enfant Plaza, SW Washington, DC 20594 202-314-6000 <u>http://www.ntsb.gov</u> email subscription service: www.ntsb.gov/registration/registration.htm

### National Safety Council

1121 Spring Lake Drive Itasca, IL 60143-3201 630-285-1121 http://www.nsc.org email: info@nsc.org

### New York Association for Pupil Transportation (NYAPT)

266 Hudson Avenue Albany, NY 12210 (518) 463-4937 <u>http://www.nyapt.org</u> email: nyapt-lak@nycap.rr.com

### New York Governor's Highway Traffic

Safety Committee 6 Empire State Plaza, Room 414 Albany, NY 12228 (518) 474-5111 www.nysgtsc.state.ny.us

### New York School Bus Contractors Assoc.

One Stueben Place, 2<sup>nd</sup> Floor Albany, NY 12207 (518) 461-0066 <u>http://www.nysbca.com</u> email: faheyw@wemed.com

### National Highway Traffic Safety Administration (NHTSA) 400 7th St., SW Washington, DC 20590 888-327-4236 http://www.nhtsa.dot.gov email: http://www.nhtsa.dot.gov/email.cfm

### National School Transportation Association (NSTA)

113 South West Street, 4<sup>th</sup> Floor Alexandria, VA 22314 703-684-3200 <u>http://www.schooltrans.com</u> email: <u>info@yellowbuses.org</u>

### **Operation Lifesaver**

1420 King St., Suite 401 Alexandria, VA 22314 800-537-6224 <u>http://www.oli.org/oli</u> email: general@oli.org

# Pupil Transportation Safety Institute, Inc. (PTSI)

224 Harrison St., Suite 300 Syracuse, NY 13202 (315) 475-1386 www.ptsi.org email: info@ptsi.org

### School Bus Fleet Magazine

2106 S. Western Ave Torrance, CA 90509 310-533-2400 http://www.schoolbusfleet.com email: steve.hirano@bobit.com

### **School Transportation News**

P.O. Box 789 Redondo Beach, CA 90277 800-477-8816 http://www.stnonline.com email: bpaul@stnonline.com

	Front Rear Side												ذ	ذ	٤	ć	٤	ذ	ć	2	2	ذ	٢	ذ	ذ	٢	ذ	ځ	2	2	2	2	ځ	~ ~	~ ~		6	ć	ذ	2	2	2	2	٤	ذ	2	-	-	-	-	-	=
Comments				None	None	None	None	Bus Collision with Truck	ذ	2	2	د	2	2	Struck by Another School Bus	None	None	None	None	None	None	None	None	None	None	None	None	None	None	Sibling also struck	Sibling also struck	None	None	None None		None	None	None	Inj. after Alighting-Caus. Unkn.	None	None	Snowplow Stuck Bus	None	None	None	Train/School Bus Collision	н	=	-	-	None	N
Safety Equipment				ذ	2	?	\$	2	ć	ć	2	2	2	6	6	2	٤	٤	ć	2	2	ذ	2	ć	ذ	2	٤	\$	?	?	?	2	٤	۰ <i>د</i>			~ ~	ذ	ذ	2	?	5	2	5	2	2	-	-	-	-	ذ	c
Bus	Design			ذ	2	2	2	2	\$	ć	د	6	6	6	2	2	6	٤	ذ	2	6	٤	2	٢	ذ	2	6	2	2	2	2	2	6	~ ·			6	6	ć	2	2	6	2	٤	6	2	-	-	-	-	ۍ	c
Passengers	on board	at time of	Fatality	ذ	2	5	\$	2	6	ć	6	ć	ć	6	2	ć	ذ	ż	ż	2	ć	ż	2	ć	ذ	2	ć	\$	2	5	5	2	ć	~ ~	~ ~ ~		6	ć	ć	2	5	6	2	2	ż	6	-	=	-		ż	
Bus	Cap			ć	2	2	ć	2	ć	ć	2	ذ	ż	6	2	6	٤	ذ	ć	2	5	ذ	2	ć	ć	2	ذ	ć	2	2	2	2	6	~ ·			6	ć	ć	2	2	2	2	ذ	ć	2	-	-	-	÷	ذ	
Contract	or	District		ذ	2	5	ć	2	ć	ć	2	ć	ć	6	2	2	٢	ż	ż	2	2	ذ	2	ć	ذ	2	ć	ć	2	5	5	2	ۍ	~ c			~	ć	ć	2	5	2	2	خ	ć	2	-	-	-	÷	6	•
Driver	Emp.	Status		\$	2	2	د	2	ć	ć	ذ	2	ć	6	2	2	٢	٤	ć	2	6	ذ	2	ć	\$	2	ذ	د	2	2	2	2	ذ	~ ·			6	ć	ć	2	2	6	2	5	2	6	-	-	-	-	د	
Driver	Experience	on route	(In Years)	ذ	2	2	2	2	ć	ć	2	2	ż	6	2	6	٤	ذ	ż	2	2	ذ	2	ć	ذ	2	6	2	2	2	2	2	2	¢ 0			6	ć	ć	2	2	2	2	ذ	ż	2	-	-	-	-	ذ	
School Bus	Driving	Experience	(In Years)	ذ	2	2	5	2	ć	ć	5	2	ذ	6	2	2	٤	ć	ć	2	5	٤	2	ć	ذ	2	٤	5	?	2	?	2	٤	~ ·			6	ذ	ż	2	2	5	2	2	6	2	-	-	-	-	٤	
Day Of	Week			Monday	Wednesday	Monday	Friday	Friday	Friday	Monday	Monday	Friday	Tuesday	Tuesday	Tuesday	Tuesday	Monday	Friday	Friday	Monday	Monday	Friday	Friday	Tuesday	Friday	Friday	Wednesday	Wednesday	Monday	Friday	Friday	Monday	Monday	Wednesday	Monday	Tuesday	Friday	Wednesday	Wednesday	Wednesday	Friday	Tuesday	Monday	Tuesday	Wednesday	Friday	-	-		÷	Friday	i
Date				02/01/60	O4/06/60	01/30/61	04/14/61	09/08/61	11/17/61	11/27/61	04/09/62	06/22/62	11/06/62	12/18/62	01/29/63	03/05/63	03/09/64	04/24/64	03/12/65	05/02/66	10/03/66	01/20/67	01/27/67	03/21/67	09/15/67	01/05/68	01/10/68	03/06/68	03/11/68	12/13/68	12/13/68	01/20/69	02/10/69	04/23/69	05/26/20	10/14/69	11/07/69	12/10/69	04/29/70	05/27/70	06/12/70	01/26/71	03/08/71	02/08/72	02/23/72	03/24/72	-	-	-	-	01/05/73	
School District				ذ	2	2	2	2	ć	ć	2	ذ	Oakfield/Ala.	Romulus	Islip #12	Marcellus	Salmon River	Grand Island	Greenburgh #2	Canandaigua	Gouverneur	Lowville	Gandor	Lancaster	Rome	Farmingdale	Kingston	Sherrill	Plainview	Cortland	Cortland	North Merrick	Mexico	Fulton	Southhampton	NYC	NYC	Wappingers Falls	NYC	Cazenovia	Plainview	Marcus-Whitman	Troy	St. Lawrence Norwood-Norfolk	Hauppauge	Nyack	-	-	-	÷	ذ	
County													Genesee	Seneca	Suffolk	Onondaga	Franklin	Erie	Westchester	Ontario	St. Lawrence	Lewis	Chemung	Erie	Oneida	Nassau	Ulster	Oneida	Nassau	Cortland	Cortland	Nassau	Oswego	Oswego	Cuffoll		NYC	ster	NYC	Madison		Yates	Rensselaer	St. Lawrence	Suffolk	Rockland	-	-	-	-	Schenectady	
AM	AM+	PM	+M4	ż	٤	2	ć	2	ذ	ė	ذ	ذ	ذ	6	ć	ذ	ė	ė	ė	٤	ذ	ż	٤	ė	ż	٤	ذ	ć	2	2	2	2	2				ΡM	ć	Mq	ΡM	2	ΡM	ΡM	РМ	MA	AM	AM	AM	AM	AM	ż	
Sex				٤	Ч	ш	ш	Μ	Σ	Σ	ш	ш	ш	Σ	Μ	Μ	٤	Μ	Μ	Μ	Μ	Ч	Μ	ш	٤	Μ	Μ	ш	Σ	Μ	н	ц	ш	ш и		L LL	ш	Σ	Σ	Μ	ш	Μ	Μ	Μ	Μ	Μ	Μ	-	-	:	Ч	
Age				9	7	9	10	7	14	ذ	10	7	9	5	5	5	5	5	18	11	9	5	5	7	9	7	5	5	7	9	5	9	5	∞ :	4	9 6	<u>c</u>	10	9	7	9	9	5	5	11	14	14	16	-	18	9	
Type				BOB	BOB	PM	BOB	PBC	ΡM	Md	ΡM	Md	Md	BOB	BAB	PM	BOB	BOB	BOB	PM	BOB	BOB	BOB	BOB	PM	BOB	BOB	BOB	PM	BOB	BOB	BOB	BOB	PM	PBCE	Md	aCa	MOH	5	PM	BOB	PBC	BOB	PM	PM	PBC	PBCE	PBC	PBCE	PBCE	BOB	
SCHOOL TY	BUS	FATALITY	NUMBER	+	2	3	4	5	9	7	80	0	10	-	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			33	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	

None	None None None None None None Backed Over by Another Bus Sipped Under Bus in Lgg Area V. Inster/Head-OVPU TR. None	None None None None None None None None	None None None None None None None None	None None None None None None None None	None     None       Same As Above     Same As Above       Same As Above     Same As Above       Same As Above     Last of 4 runs       Jacket Caught in Dor. Oragged     None       Nore     Last of 4 runs       Jacket Caught in Dor. Oragged     None       Bus going Stit. Ahead. Vic.     Vic.       Vark in xing zone by trick     Mechanic Subbing Route by trick       Methanic Subbing Route by trick     Mechanic Subbing Route by trick       Merchanic Subbing Route by trick     Mechanic Subbing Route by trick       Marry drop drigs. on route stris.     Sitt. Ahead. Vic.       Viale. sitk. Dy minst waved     Second run       Strict. Ahead. Vin Last row     Sitt. Ahead. Vic.       Viale. sitt. Ahead. Vin Last row     Sitt. Ahead. Vic.	None         ?           None         .           None         .           None         .           Sit. By Another Bus in Log, Atea         .           None         .           Sit. By Another Bus in Log, Atea         .           None         .         .           Sit. By Another Bus in Log, Atea         .           None         .         .           Sit. By Another Bus in Log, Atea         .           None         .         .           Sit. By Another Bus in Log, Atea         .           None         .         .           Sit. By Another Bus in Log, Atea         .           None         .         .           Sit. By Another Bus in Log, Atea         .           None         .         .           Sit. Atea         .
2	2 2 2 2 8BGC 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
ۍ د	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	· · · · · · · · · · · · · · · · · · ·	* * * * * * * * * * * * * * * * * * * *			
~ ~ ~		- ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		-     -       -     - <tr td=""></tr>		
~ ~ ~	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	+++++++++++++++++++++++++++++++++++++++	<del>· · · · · · · · · · · · · · · · · · · </del>			* * * * * * * * * * * * * * * * * * * *
~ ~ ~	~ ~ ~ ~ ~ = ~ ~ ~ ~ ~ ~ ~ ~	+++++++++++++++++++++++++++++++++++++++				
~ ~	~ ~ ~ ~ = ~ ~ ~ ~ ~ ~ ~ ~	Seb 1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<ul> <li>?</li> <li>?</li></ul>		
~ ~ ~	· ~ ~ ~ . ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	20167 20167 20167 20167		? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?	<ul> <li>?</li> <li>?</li></ul>	2 2 2 2 2 2 2 2 2 2 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
~ ~ ~	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	A & A & A & A & A & A & A & A & A & A &	1     1 <td></td> <td></td> <td></td>			
Tuesday Thursday Tuesday	Monday Wednesday wednesday Friday Friday Friday Friday Friday	Wednesday Wednesday Wednesday Wednesday Friday Friday Friday Thursday Wednesday Wednesday Wednesday				
	_ +  +  +  +  +  +  +  +  +  +  +  +  +					
s			<del>·                                    </del>			
Monroe Suffolk Sullivan	Lewis Hamilton Clinton " NYC Oneida Chenango Oswego Otsego	<del></del>	+++++++++++++++++++++++++++++++++++++++			
M M M	+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$	Lewis Lewis Clinton - Clinton - Clin	Lewis Control Clinton NYC Clinton NYC NYC NYC NYC NYC NYC NYC NYC	Lewis Current Curre		
6 M 6						
54         BOB           55         BOB           55         BOB           55         56           55         BOB           55         BOB           55         BOB           55         BOB           60         BOB           60         BOB           61         BOB           62         PM           63         BAB           64         BOB           65         PBC           66         PBC           66         PBC           66         PBC           66         PBC	7		M         M	M         M         T         T         M	м         п         п         м         п         м         м         п         м         м         п         м	

Victim Location	Front Rear Side			Middle Right	Right rear wheels			Right front wheel	Right rear	Opposing lane	Right Side		Front Left Tire										
Comments				1987 Toyota Van	Drawstring caught in handrail	Utility pole leaning in	Hit and run driver	Driver ran over child	Child ran 2 blocks 2 catch bus	Truck turning into inter. Struck child	Driver passed bus on right side, struck child	Child running for bus, was struck & killed by passing motorist	Reported by media, student ran back to the bus after being discharged and crossed										
Safety Equipment				None	Handrail/not retrofitted	2	2	Stop Arm/Crossing Arm	Stop Arm	No Crossing Gate	Stop Arm												
Bus	Design			NCV	CONV	?	?	CONV	CONV	CONV	CONV		CONV										
Passengers	on board	at time of	Fatality	4	2	2	2	2	35	6	46												
Bus	Cap			9	?	?	?	72	66	66	65												
Contract	or	District		Chalet	Advance	Suffolk	Atlantic	National	Caravan	Wykagyl	District		Educational Bus Trans. Co.										
Driver	Emp.	Status		РТ	2	6	ć	ΡT	FT	FT	F												
Driver	Experience	on route	(In Years)	0	2	2	2	3 Months	3 Months	6	5												
School Bus	Driving	Experience	(In Years)	0	٤	ذ	ذ	6	9	15	5												
Day Of	Week			Thursday	Thursday	Friday	Thursday	Wednesday	Monday	Monday	Friday	Wednesday	Monday										
Date				02/02/95	02/08/96	05/21/96	06/21/96	01/29/97	05/18/98	01/04/99	05/21/04	06/20/06	11/06/06										
School District				Cairo-Durham	Irvington	Bay Shore	NYC	Amherst	NYC	New Rochelle	Stockbridge Valley CSD		Copiague CSD										
County				Greene	Westchester	Suffolk	Queens	Erie	Brooklyn	New Rochelle	Madison		Nassau										
AM	AM+	PM	+M4	AM	PM	PM	PM	PM	AM	ΡM	ΡM	AM	Μd										
Sex				Σ	ш	Μ	Μ	Μ	Σ	ш	ш	ш	Μ										
Age				13	14	17	8	6	6	6	7	5	9										
Type				PBC	DRAG	HOW	PM	BOB	BOB	PM	ΡM	ΡM	BOB										
SCHOOL	BUS	FATALITY	NUMBER	101	102	103	104	105	106	107	108	*109	*110	111	112	113	114	115	116	117	118	119	

\* MV104f forms have not yet been received for these fatalities - reports are excerpted from media accounts.

Please Note Correction: In the 2008 SBSIOBSAT a 05/22/06 fatality was recorded. Although this was a tragic accident, that fatality is no longer included in this statistical summary since State Education historical data parameters and definitions require that only transported student fatalities be included.

	Victim Location/Driver Side	Front Rear Side				2	=	=	EJECTED & CRUSHED BY BUS	EJECTED & CRUSHED BY BUS	
	Victim Location	Front Rear Side				Ejected-Bus Rolled Over			DRVR TICKET SPEED	SNOW, SLUSH, 3 T 25 S INJRD	
	Safety Equipment					6		н	NONE	NONE	
	Bus	Design				٤	Ŧ	=	CHARTER	COACH	
	Passengers	on board	at time of	Fatality		٢		Ŧ	27	27	
	Bus	Cap				ć			49	49	
	Contract	or	District			Contract	-	Ŧ	GRAY	LINE	
	Driver	Emp.	Status			٤	-	-	Ħ	FT	
	Driver	Experience	on route	(In Years)	<u> </u>	ذ	-	-	0	0	
	School Bus	Driving	Experience	(In Years)		٤	-	-	0	0	
	Day Of	Week				Wednesday	-	-	Saturday	Saturday	
	Date					01/03/73			04/11/92	04/11/92	
	School District					Vestal	-	"	E Meadow	E Meadow	
	County					Tioga	-	-	Warren	Warren	
	AM	+M+	ΡM	+M4		+M4	-	-	-		
	Sex					Μ			Σ	-	
	Age					15		16	13	12	
	Type					PBCE	PBCE	PBCE	PBCE	PBCE	
≡	CHARTER	BUS	FATALITY	NUMBER		1001	1002	1003	1004	1005	

KEY:						
түре						
	BAB BY ANOTHER BUS #12,63					
	BOB BY OWN BUS 57 FATALITIES					
	HOW HEAD OUT OF WINDOW #36, 72, 99, 103	CHILD LOCATION AT TIME OF SCHOOL BUS ACCIDENT	CIDENT			
	JFB JUMPED FROM BUS #94, 98		PEDESTRIAN		PASSENGER	UNKNOWN
	PBC PASSENGER BUS COLLISION #5, 40, 44, 46, 65, 82, 87, 96, 97, 101		BAB	2	HOW 4	? 1
	PBCE PASSENGER BUS COLLISION EJECTION #32, 45, 47, 48, 1001-1005		BOB	57	JFB 2	
	PM PASSING MOTORIST 25 TOTAL		PM	28	PBC 10	
	DRAG # 73, 84, 102		DRAG	ю	PBCE 4	
	? UNKNOWN ACCIDENT CAUSE OR SITUATION #37		TOTAL	88	TOTAL 20	TOTAL 1
			GRAND TOTAL 88+20+1=109			
TIME						
	AM REGULAR TRIP TO SCHOOL					
	PM REGULAR TRIP HOME FROM SCHOOL	CHILD LOCATION AT TIME OF COACH ACCIDENT	E			
	AM+ ACTIVITY TRIP DAYTIME		PASSENGER			
	PM+ ACTIVITY TRIP AFTER SCHOOL		PBCE	5		
			TOTAL	5		
DRIVER EMPLOYEE STATUS	YEE STATUS					
	PT PART TIME, REGULAR EMPLOYEE LESS THAN 8 HOURS PER DAY			40 FATAL ACCIDENTS SINCE 7/1/77	ITS SINCE 7/1/77	
	FT FULL TIME EMPLOYEE	BUS DESIGN IN FATAL ACCIDENTS				
	SUB SUBSTITUTE, DOES NOT WORK ON A REGULAR BASIS		CONVENTIONAL SCHOOL BUS	36		
	FLOATER FILLS IN FOR REGULAR DRIVERS ON A REGULAR BASIS		VAN STYLE SCHOOL BUS	-		
			COACH BUS	-		
SAFETY EQUIPMENT	MENT		TRANSIT STYLE SCHOOL BUS	0		
	CM MINIMUM REQUIRED CROSSOVER MIRRORS		NON CONFORMING VEHICLE	-		
	CM+ MORE EXTENSIVE MIRROR SYSTEM THAN REQUIRED		UNKNOWN	5		
	PA OUT SIDE THE BUS PUBLIC ADDRESS SYSTEM		TOTAL	44		
	SAF STOP ARM IN FRONT OF BUS					
	SAR STOP ARM IN REAR OF BUS	DISTRICT/CONTRACTOR ACCIDENT TYPE AND FREQUENCY	FREQUENCY			
	OMS OUTSIDE MOTION SENSOR			BOB	PM PASSENGER	TOTAL
	CCA CROSSING CONTROL ARM		DISTRICT	5	4 3	11
			CONTRACT	15	5 6	26
			TOTAL	20	8	37
		AVERAGE YEARS DRIVING EXPERIENCE = 6				
		DRIVER WAS TWO MONTHS OR LESS ON ROUTE = 40%	'E = 40%			