



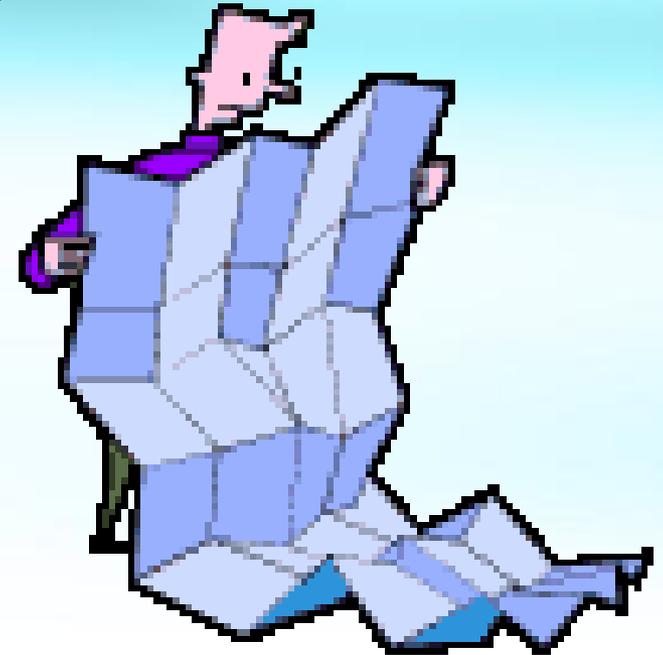
40 Years Since Congers:

A School Transportation Legacy

2012-2013 Driver Attendant Refresher

LOGISTICS

- Parking
- Bathrooms
- Emergency exits
- Cell phones/pagers
- Smoking
- Breaks
- CPR/First Aid/Defibrillator



2653

SCHOOL BUS

CASE





March 24, 1972

7:55 a.m.



- 5 fatalities
- 42 more sent to hospital
- Community wounded for decades



Program Goals



At the end of this presentation you will be able to:

- Identify lessons from NYS tragedies
- Identify lessons from National tragedies
- Describe the evolution of school bus construction
- Know NYS driver & attendant qualifications
- Understand NYS student training
- Identify changing traffic environment
- Describe the differences we have made



The next 10 years...



1972-
1982

- Article 19-A
- Required pre-service training
- Required Basic Course
- Advanced & Attendant Courses
- New Federal Motor Vehicle Safety Standards (FMVSS)
- DOT inspection program
- DMV Accident Reports

NYS – Congers 1972



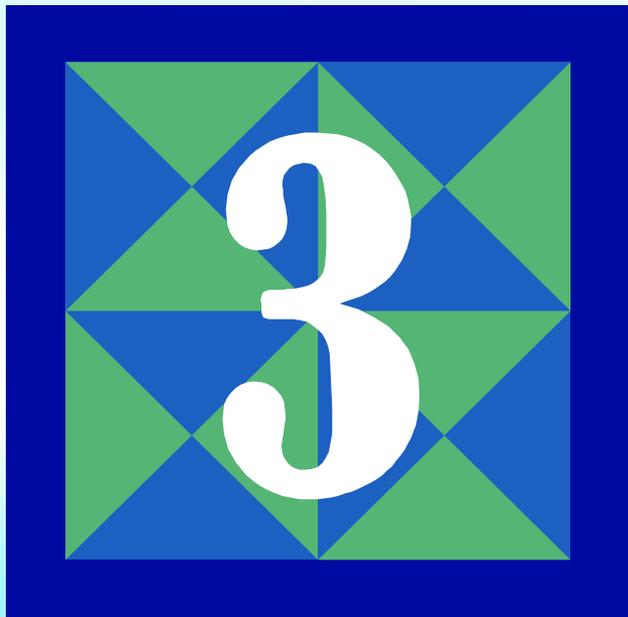
- Crossing signaling inadequate
- Route not followed
- Driver training and supervision inadequate
- Vehicle design inadequate
Body panel joints torn open, ejections



NYS - Loading Zone



- Database from 1960
- Loading zone 80% all student fatalities

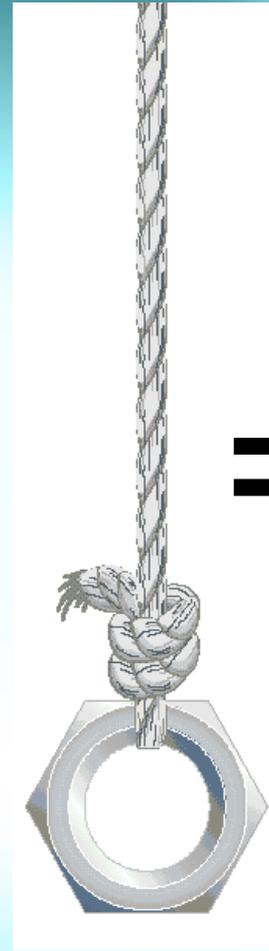


Big 3

1. OUTSIDE THE BUS
 - BOB (By Own Bus) 66%
 - PM (Passing Motorist) 30%
2. AGE OF CHILD
 - 4-8 year old 70%
3. TIME OF DAY
 - Afternoon 78%

NYS - Handrail Snagging

- NYS 1979, 1987
- Flurry of US incidents 1990's
- NHTSA \$1.50 Retrofit fix 1995
- NYS fatality 1996
- NYDOT Makes retrofit required after fatality
- Doors still snagging kids



= test



Loading Zone

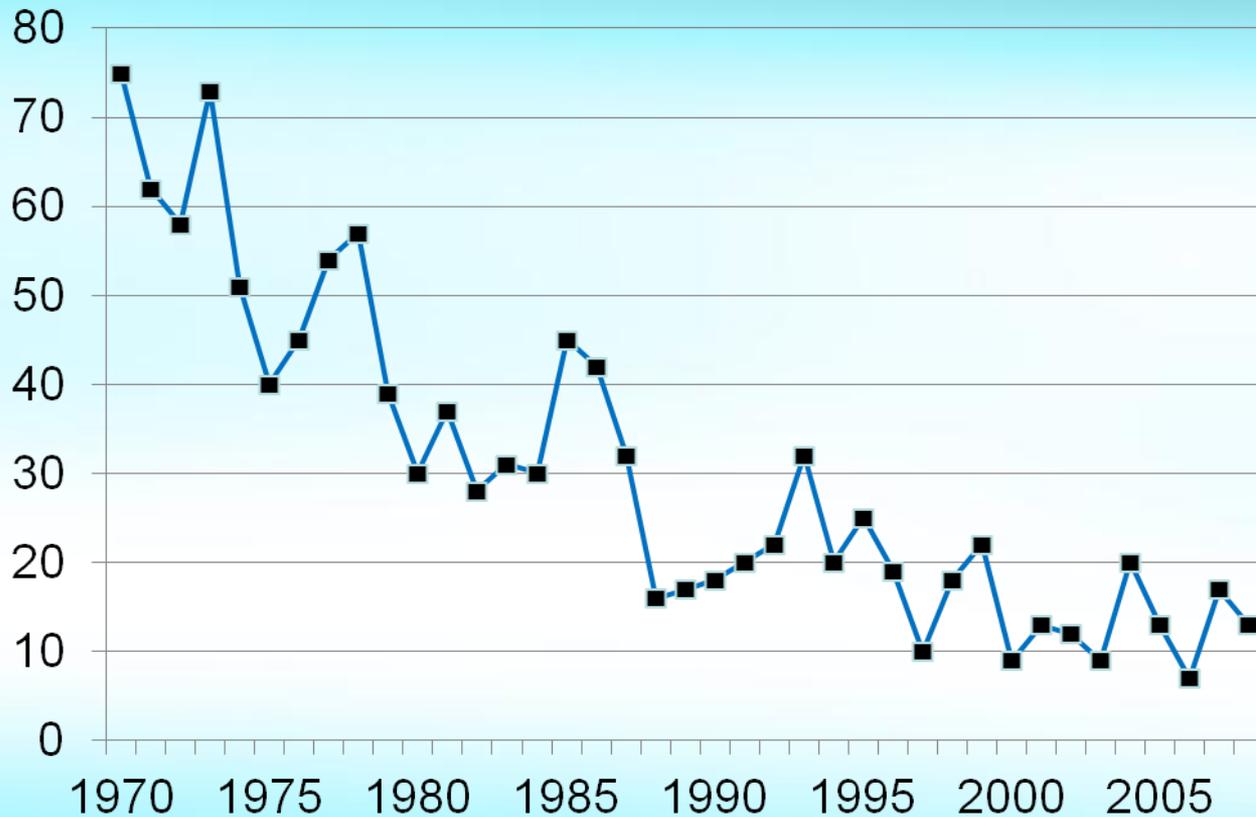
What can YOU do to protect the loading zone?



US - Kansas Survey 1970 → →



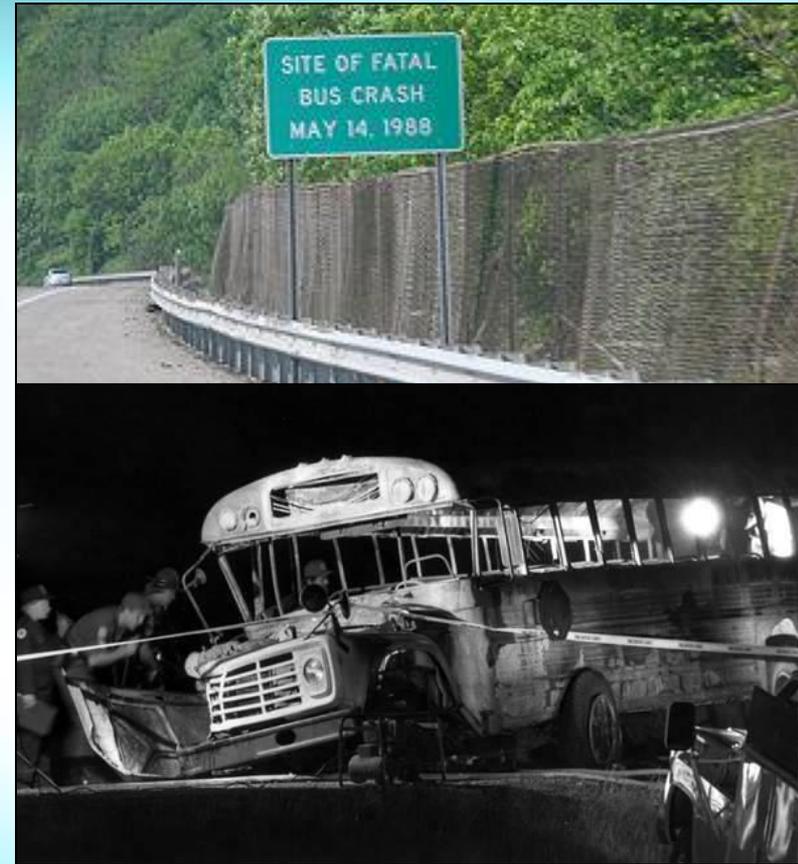
National Loading Zone Fatalities



Identifies a national problem to be addressed with training, construction & enforcement

US - Carrolton, KY

- May 14, 1988
- Church bus struck by drunk driver going wrong way on I-71
- Gas tank punctured by leaf spring 1,500° in 90 seconds
- Insufficient and blocked exits
- 27 burned to death
- New emergency exit standards
- NEVER block emergency exits!



BAGGAGE

- What have you seen?
- What should you do?
- Are all adults on the bus prepared?
- What are the consequences?



US - Alton, TX

- September 21, 1989
- Truck runs stop sign pushes bus into gravel pit
- Bus is barely submerged but no roof hatches
- 21 children died
- Teach children how to use ALL exits!



Emergency Exits

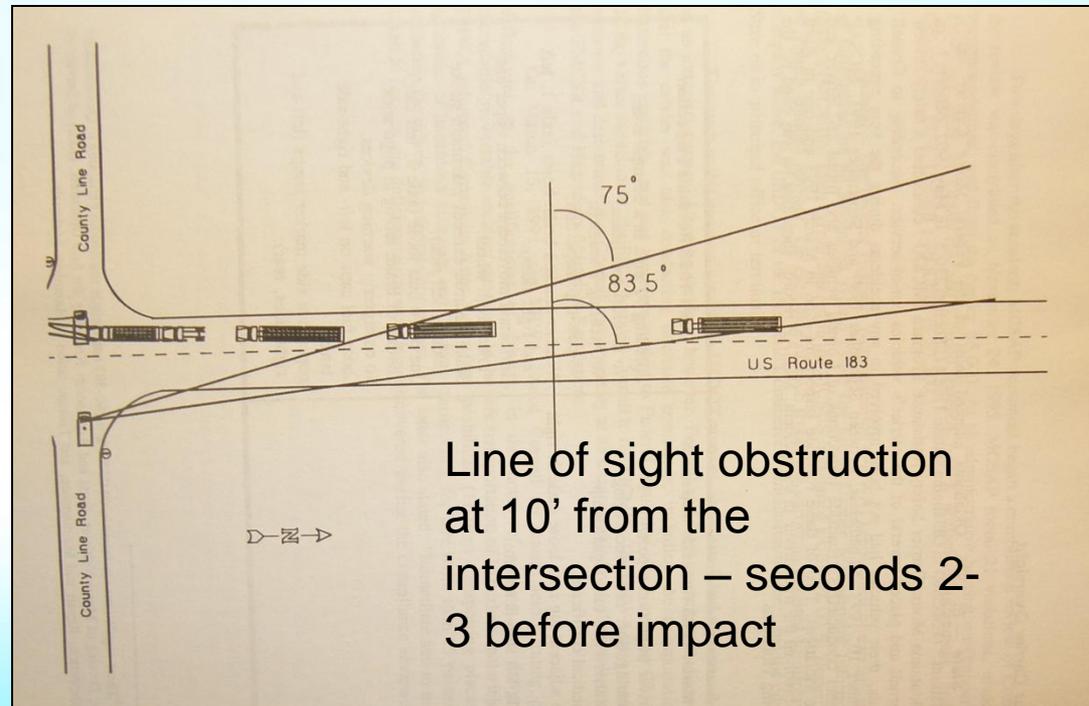
- Do YOU know how to open all exits fully?
- What exits do you teach?
- What exits are children able to practice?
- Do you teach “bus on its side?”



US - Snyder, OK

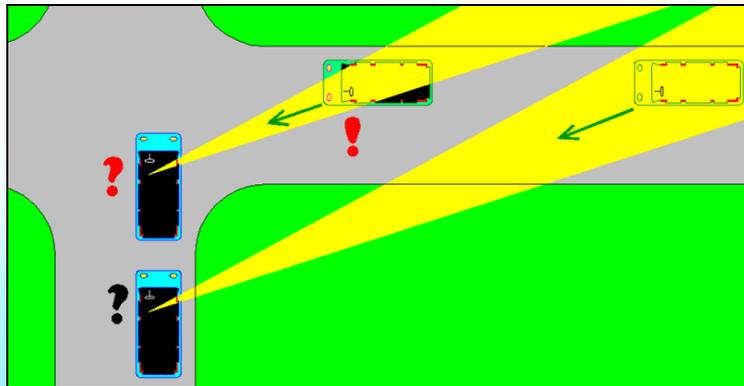
Vision obscuration

- Truck is lost in blind spot created by van conversion design
- 9 passengers, 8 ejected, 4 killed – one lap belted child minor injuries
- Rock before you roll!



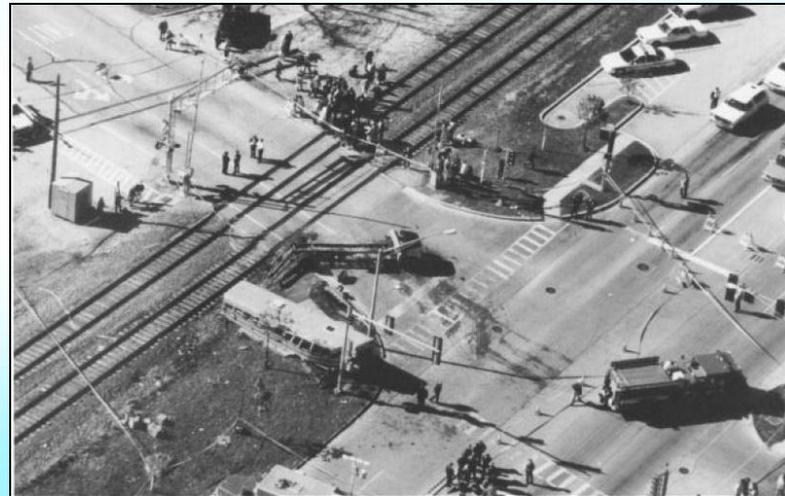
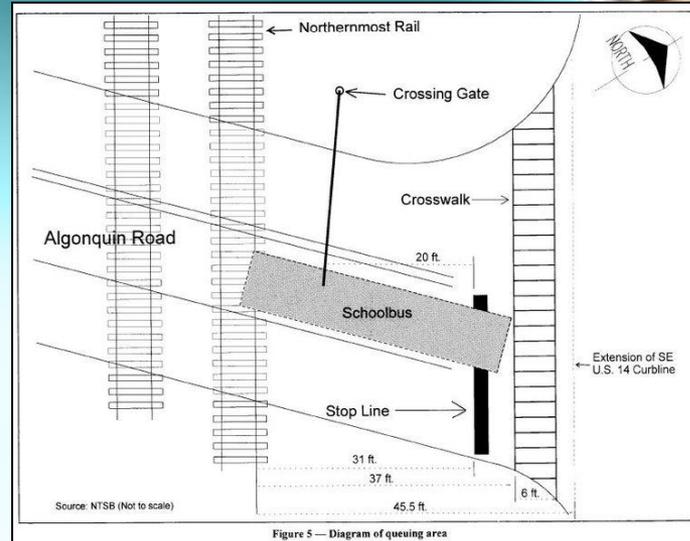
Blind Spots

- Where are yours?
- Are they moving?



US – Fox River Grove, IL

- October 25, 1995
- Not enough space
- Sub driver ignores signals and student warnings
- 7 die, 21 injured
- Don't get caught!



Crossings

- What difficult crossings do you face?
- What strategies do you use?
- How do you plan for crossings as a sub or field trip driver?

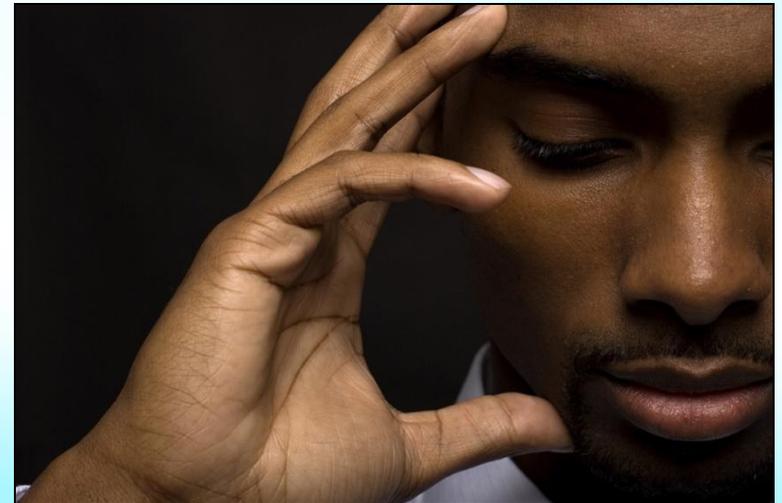


Sobering Stories and Data

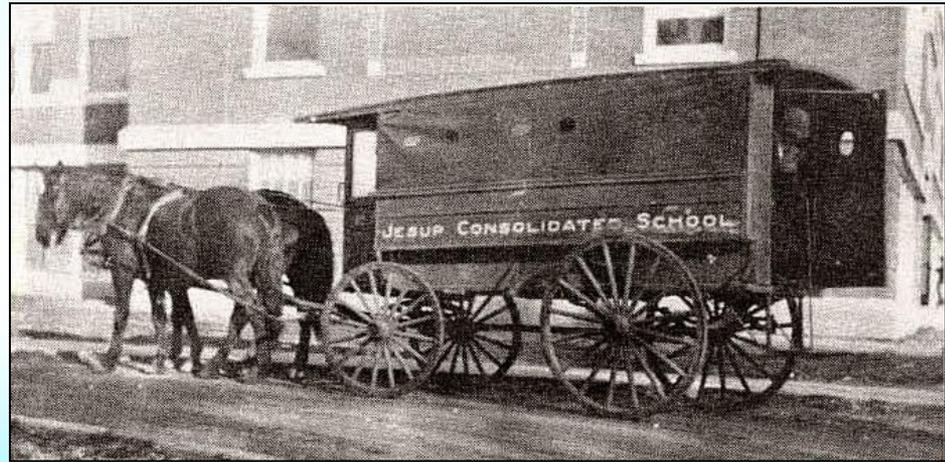
- Congers
- Big 3
- Dragging
- Kansas Loading Zone Survey
- Carrolton
- Alton
- Snyder
- Fox River Grove



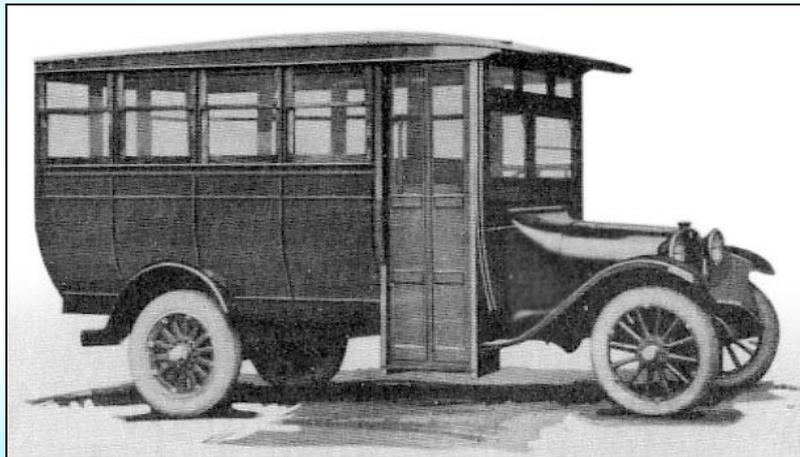
What is your key learning from all these tragic events?



Vehicles - Horse Drawn



Vehicles - Wood Body



Vehicles – Steel Body



INTERNATIONAL SCHOOL BUSES



International school buses have kept a reputation throughout the country for economy, dependability, comfort, and safety. Economical operation is especially important in holding the school transportation budget to a minimum figure. Dependability is important in maintaining the high attendance averages for which consolidated schools are famed. Comfort and safety are assured by sturdy chassis and body construction.

School bus requirements vary with road conditions, length of routes, and the number of children to be carried. To meet widely different school transportation needs, there are International chassis in a range of sizes and wheelbases.

When investigating school transportation equipment, it is not only important to give consideration to the merits of the vehicle itself but also to the policies of the manufacturer. The responsibility of the Hercules Company is well known everywhere. Internationals are designed according to modern engineering principles and are backed by more than thirty years' experience in the production of quality automotive units. Service is provided by 350 Company-owned branches and service stations and thousands of International stock dealers throughout the country.



Special Needs



TRANSPORTING HANDICAPPED

Safe small buses do many big jobs better

Ohio Boards of Reformation alone purchased 148 Coach and Equipment small buses during 1973 to transport physically and mentally retarded children. And that's some BIG job.

Large floor area provides space for various combinations of wheelchairs/ seated passenger layouts. This extra-bonus use makes it an extra-good buy.

Students confined to wheelchair can be conveniently loaded, either with strong light-weight aluminum ramps or with push-button ease for large children on hydraulically operated elevator.

Never runs out of jobs to do

- Transporting handicapped
- Public/private schools
- Sunday schools
- Summer camps
- Team events/field trips

the answer
to the problem of
transporting physically
handicapped school children.

ORTHO-COACH

THE COACHETTE CO.

11844 E. NORTHWEST HIGHWAY
• P. O. BOX 11365
TELEPHONE DAVIS 7-4045 •
DALLAS 18, TEXAS

AUTOLIT Automobile - Truck - Motorcycle 1900 to Present
ORIGINAL Sales Brochures, Manuals, Books, Posters,
Catalogs, and MUCH More. World's largest selection!

“Father” of the Yellow School Bus

- Organized 1939 national conference to standardize school buses
- Columbia University Professor
- Stamford, NY native
- Established “school bus chrome”



Frank W. Cyr 1900-1995

Vehicles – 1977 FMVSS

- Joint strength
- Fuel tank protection
- Rollover protection
- Seat design/Barriers

Later:

- Stop arms
- Mirror requirements
- Seat belts
- Emergency exits



Passive vs. Active

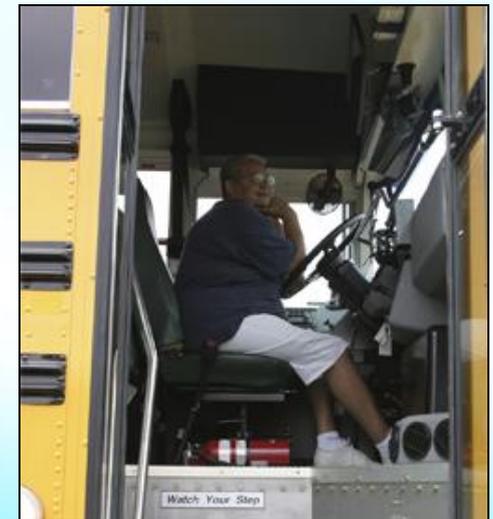
- PASSIVE = No operator action
- ACTIVE = must be activated
- Which FMVSS are PASSIVE and which are ACTIVE?
- What do you need to do for the active ones?
- For the passive ones?



Bus Driver – Qualifications

- Physical
- 21 years old
- 3 character references
- DDPR, BTW, Written exam
- 3 hour Pre-service
- Refreshers
- Basic Course
 - 20 hours 1977
 - 30 hours 1998
- Fingerprinting 24/7/365
- CDL
- PPT
- Drug testing
- PJ's Law

Do you remember when it started?



Attendant/Monitor – Qualifications

- 3 hour Pre-service
- 10 hour Basic Course
- Refreshers
- PPT
- Fingerprinting
(NYSED)

**Do you
remember
when it
started?**



1950's Physical



**MEDICAL EXAMINATION REPORT
FOR
SCHOOL BUS DRIVERS AND SUBSTITUTE SCHOOL BUS DRIVERS**

PLEASE READ SUGGESTIONS CAREFULLY BEFORE GIVING EXAMINATION

Attention: Medical Examiner:

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

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

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

Name of applicant.....

Address

Date of medical examination.....Date of birth..... Age.....

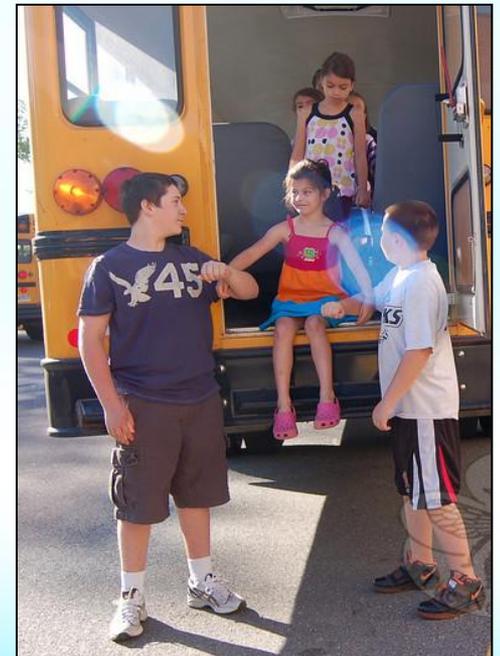
1. Past history: Tuberculosis..... Heart disease..... Frequent colds or sore throat.....

1a. Has applicant ever had any convulsions or periods of unconsciousness?

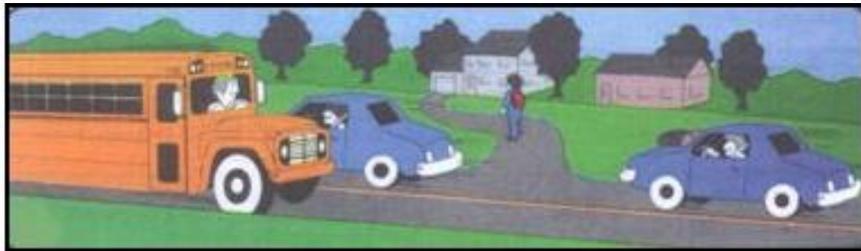
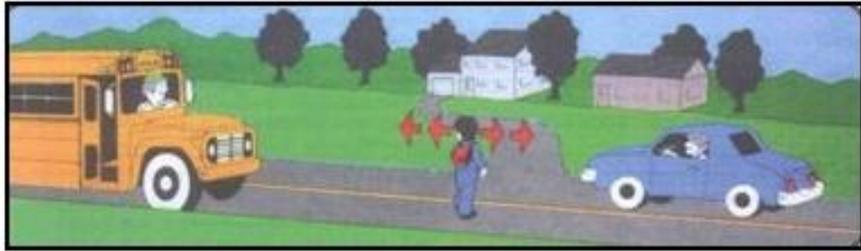
2. Height (barefoot).....ft.....in. Weight (stripped)lbs.

Student Training

- Bus drill 3x/year
 - Loading/unloading
 - Walking/Waiting/Riding
 - Emergencies/evacuation
- Seat belt instruction 3x/year
 - how and when to wear
- Daily instruction
- Bus helpers
- Driver in the classroom



Universal Crossing/Danger Procedures



- Check before you step

- I C U, U C Me
- Wait for my signal

- Left-Right-Left

- Horn means go back

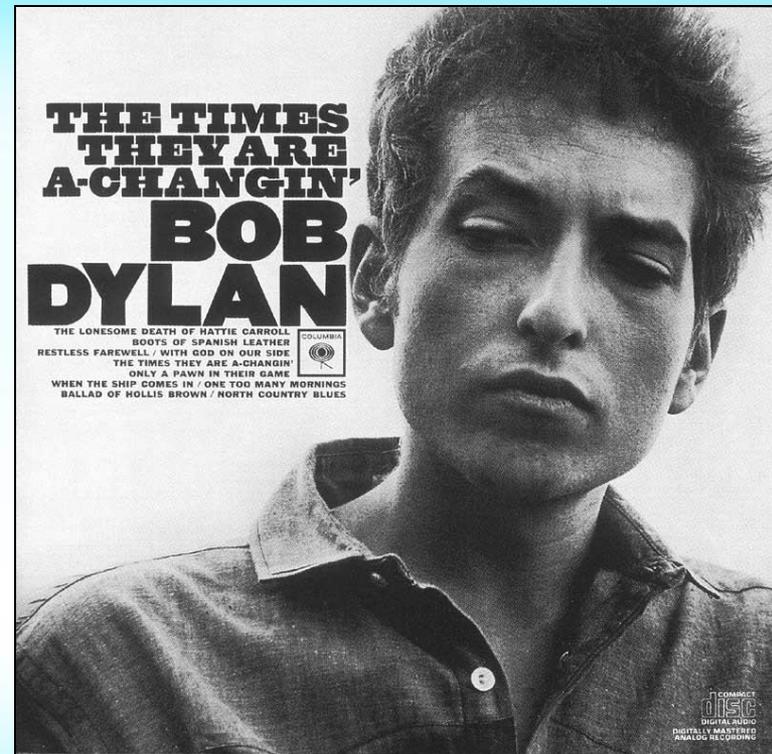


What's changed...changing?

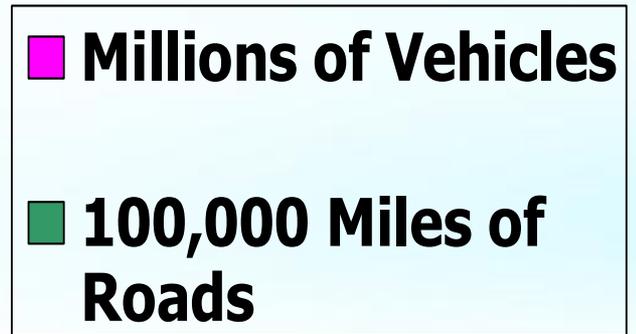
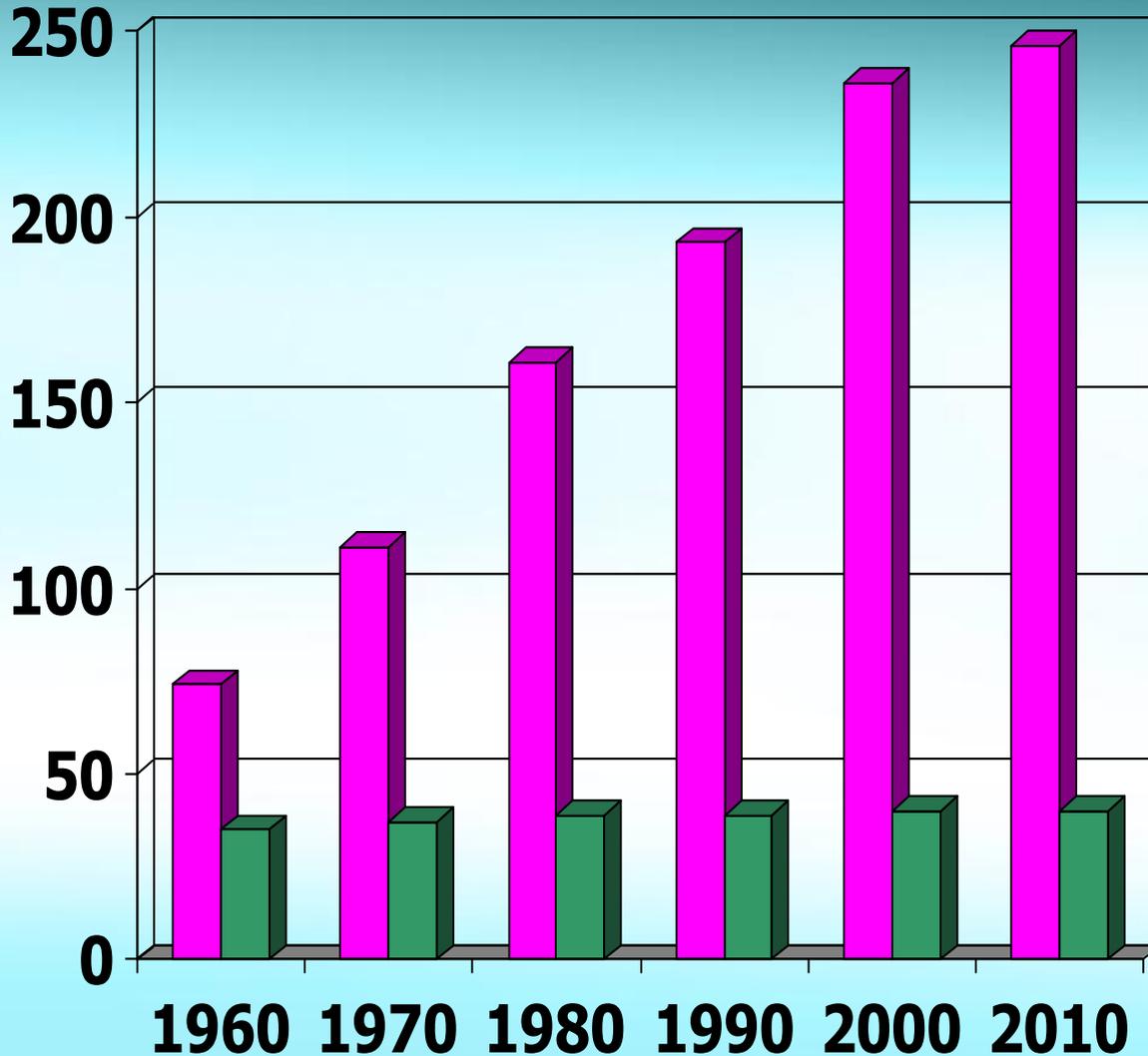


Let's take a look at:

- Changes in miles of road and number of motorists
- Risk of all school travel modes
- Risk of modes changing
- NYS performance changes



US Traffic Environment

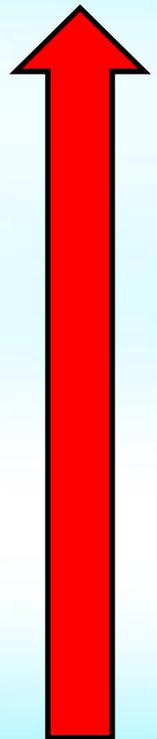


US Injury and Fatality Rates



School Travel Mode	Total users	Deaths/100 Million Trips	Total deaths
Car – teen driver	6 mill	13.2	448
Bicycle	.8 mill	9.6	46
Walking	4.7 mill	4.6	131
Car – adult driver	18 mill	1.6	169
Bus	20 mill	.3	21

RISK



Teen Drivers

44 times
more
dangerous
than the
school
bus!



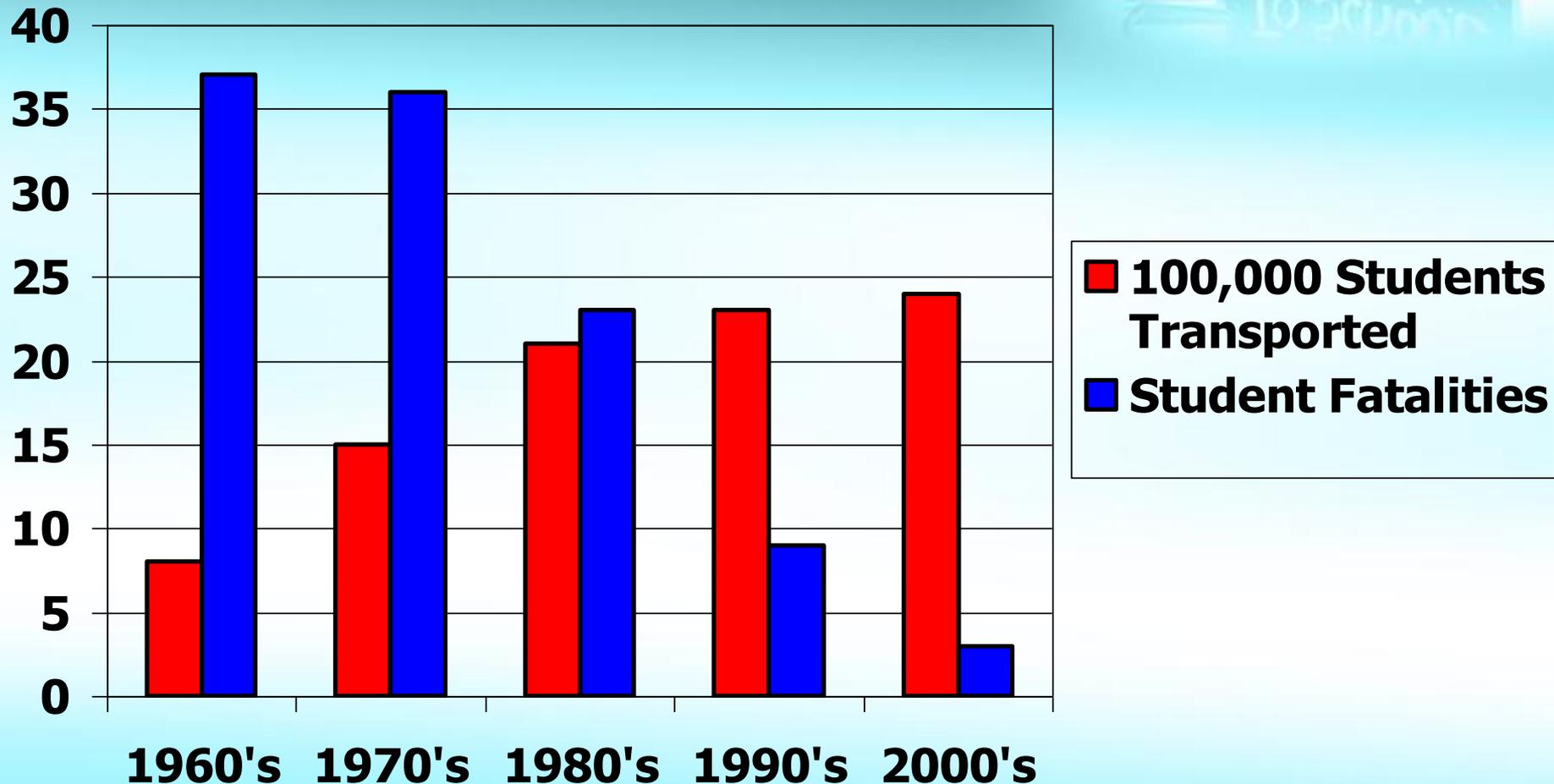
If school buses are safest...



What can we do
– what can you
each do – to
have more
children riding
the school bus?



NYS Public School Bus Riders



Decade fatality risk changes

60's 1 in 216,000 riders

70's 1 in 417,000 riders

80's 1 in 913,000 riders

90's 1 in 2,555,000 riders

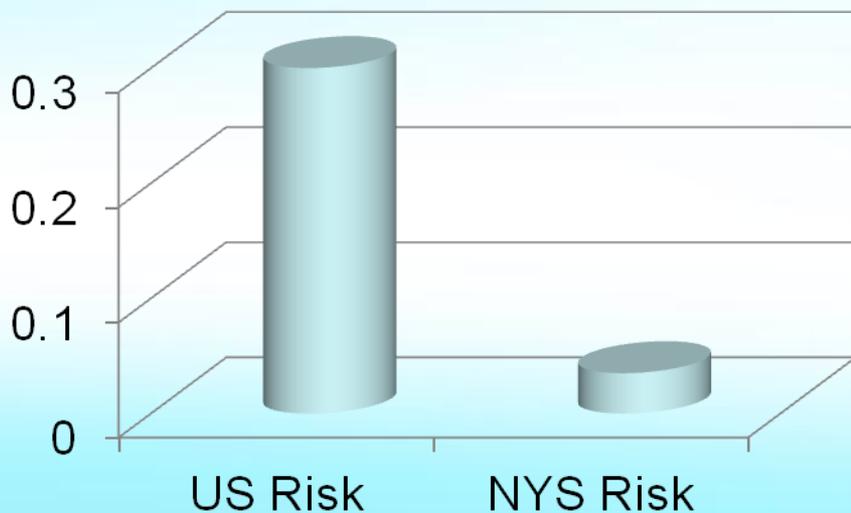
00's 1 in 8,000,000 riders

37 times safer!!!!



NYS to US 2000-2009

- US bus travel = .3 fatalities per 100 million trips
- NYS school bus travel in 00's = .035 per 100 million trips



Your last chance....



- Questions?
- Comments?
- Observations?

Test your knowledge....



1. What have we learned from NYS tragedies?
2. What have we learned from National tragedies?
3. How have school buses changed?
4. Explain how NYS bus staff are qualified
5. What training do NYS students get?
6. How has the traffic environment changed?
7. Describe the difference school transportation professionals have made in children's safety





and....

Never Forget!

