Child Passenger Safety on

School Buses

NATIONAL TRAINING

NHTSA

nsc
National Safety Council

HANDOUTS for

Pupil Transportation Participants

June 2023

Contents

REVISIONS (JUNE 2023)

Corrected image—page 8

Corrected image—pages 46-47

Handout • Introduction

COURSE RESOURCES

- School bus-related resources that support this training are available online. Bookmark the following web page for future reference. The **Child Occupant Protection Glossary** is available on this site.
  - cpsboard.org/school-bus

TERMINOLOGY

- In the school bus industry, child restraints are referred to as **Child Safety Restraint Systems** or **CSRS**.
- **Children with disabilities**: Use person-first terminology. State the "child" first and then add the disability (i.e., a "child with Down Syndrome" rather than a "Down Syndrome child").
  - Terminology changes as society changes. The term "special needs" is less-used today, with government and social agencies updating their terminology to say "children with disabilities" and "accommodation for needs" in place of "special needs."
- **Head Start** and **Early Head Start**. Head Start is a federal preschool program that serves children ages 3 to 5. Early Head Start serves children from 6 weeks through age 2.

LAWS AND GUIDELINES

Who establishes occupant protection laws for children?

Federal Government

- NHTSA **Guideline for the Safe Transportation of Pre-school Age Children in School Buses** was issued in 1999, based on NHTSA testing of preschool-size dummies seated on school bus seating.
- The guideline states that preschool-age children in a school bus should be properly secured in a CSRS that:
  - Is appropriate for the child's age, weight, height and developmental level.
  - Is properly secured to the school bus seat, using anchorages that meet FMVSS.

- one.nhtsa.gov/people/injury/buses/Guide1999/prekfinal.htm

- Head Start program
  - eclkc.ohs.acf.hhs.gov/policy/head-start-program-performance-standards-showcase/regulations-overview
    - Search "Transportation" to find 1303 Subpart F, the performance standards for Head Start transportation.

States

- GHSA (Governor's Highway Safety Association) state child passenger safety laws
  - ghsa.org/state-laws
    - These laws pertain to general transportation of children in the state, and often school bus transportation is exempt. To learn more in your state about laws related to school buses, contact your state's director of pupil transportation.
    - Find a listing of state directors at:
  - nasdpts.org/State-Director-Map

Local

- School District Rules and Policies
  - Contact your local education authorities (LEAs) to learn about the rules and child transportation policies in your area.

CSRS/School Bus Manufacturers

- Manufacturers of CSRS (child safety restraint systems) and buses establish their own use guidelines and instructions while also meeting government requirements.
  - Links to major school bus CSRS manufacturers and school bus vehicle manufacturers are found in the School Bus Resources on cpsboard.org/school-bus.
  - CSRS manufacturer contact information is also supplied on CSRS labels and in instruction manuals.
- NHTSA's car seat **Ease-of-Use Ratings** let you compare how easy it is to use certain car seat features in passenger vehicles which may provide useful information for certain ease-of-use features of conventional CSRS used on school buses, as well.
  - nhtsa.gov/car-seats-and-booster-seats/car-seat-ease-use-ratings

SCHOOL BUS SAFETY RESOURCES

- **National Association of State Directors of Pupil Transportation Services** (NASDPTS). This organization of state transportation officials provides contact information for each state's transportation director; position statements; and other resources on its website.
  - nasdpts.org

- **National Highway Traffic Safety Administration** (NHTSA). NHTSA's school bus safety page provides information on school bus regulations, seat belts on school buses, and bus stop safety.
  - nhtsa.gov/road-safety/school-bus-safety
- **American School Bus Council** (ASBC). This educational site, formed through a collaboration of trade organizations (National Association of Pupil Transportation and National School Transportation Association, NASDPTS, and the major school bus manufacturers), provides information to promote the safety and value of school buses.
  - americanschoolbuscouncil.org
- **National Congress on School Transportation** (NCST). This organization convenes delegates from each state every five years to maintain the student transportation industry's voluntary set of guidelines. Its website, hosted by NASDPTS, includes a link to the National School Transportation Specification and Procedures document.
  - nasdpts.org/ncst-nstsp
- **National Safety Council** (NSC)**.** The National Safety Council's page on school bus safety provides safety tips for at the bus stop, around the bus stop, on the bus and getting on/off the bus.
  - nsc.org/community-safety/safety-topics/school-safety/buses-safest-transportation-for-school-children
- **Safe Ride News** (SRN). Safe Ride News, a publisher of printed and online resources for the child passenger safety field, publishes materials that focus on the safety of preschoolers and children with disabilities on school buses.
  - saferidenews.com
- **School Bus Safety Facts**. Through a cooperative agreement with NHTSA, the American School Bus Council developed downloadable resources to help spread the word about school bus ridership—providing well-researched, up-to-date and accurate statistical information. These resources let communities know about the benefits of school bus ridership; informs communities about how to keep children safe in and around the school bus; and lets others know about the ways they can support the school bus in their community.
  - schoolbusfacts.com
- **The National Association for Pupil Transportation** (NAPT). This organization of public and private student transportation service providers is dedicated to operational safety and administrative efficiency of pupil transportation.
  - napt.org
- **National School Transportation Association** (NSTA). This organization is the leading resource for school transportation solutions and is a membership organization for school

bus contract-operators engaged primarily in transporting students to and from school and school-related activities.

- yellowbuses.org

- **National Conference of State Legislatures** (NCSL). This organization represents the legislatures in the states, territories and commonwealths of the U.S. to advance the effectiveness, independence and integrity of legislatures and to foster interstate cooperation and facilitate the exchange of information among legislatures.

  - ncsl.org/transportation/school-bus-safety

PROGRESS CHECK

- What term does the school bus industry use to refer to child restraints on school buses?

- At what ages do children attend Early Head Start? Head Start?

THANK YOU!

The **Child Passenger Safety on School Buses National Training** was developed from the work of national subject matter experts **Denise Donaldson**, **Susan Shutrump** and **Charlie Vits**. This course would not be possible without their time and expertise.

The Child Passenger Safety on School Buses National Training curriculum was put together, in part, thanks to the work of countless volunteers. Without their tireless efforts and dedication, this would not have been possible. The CPST community is generous and giving of their time and talents!

This curriculum was created using crowd-sourced images and video footage. Thank you to all of the talented CPSTs and all of the other individuals and organizations who helped us in the producing, acquiring, or posing for the images and videos within the curriculum, and/or who volunteered in some other capacity.

Brynn Anthony

Lin Badman-Paton ● Lin Badman-Paton (St. Cloud Police Department Community Outreach) ● Amie Barnes (IMMI) ● Brynlee Baugh ● Whitney Baugh ● Buckle Up with Brutus (Ohio State University)

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Child Volunteers

Our child volunteers have a special place in our hearts as they represent all of the children we do this work for. A special thank you to all of the kids who helped out!

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NOTES

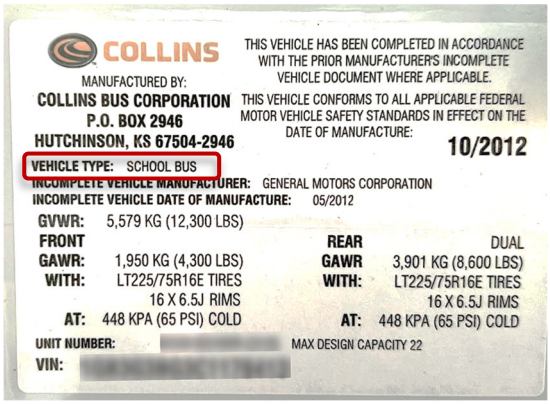
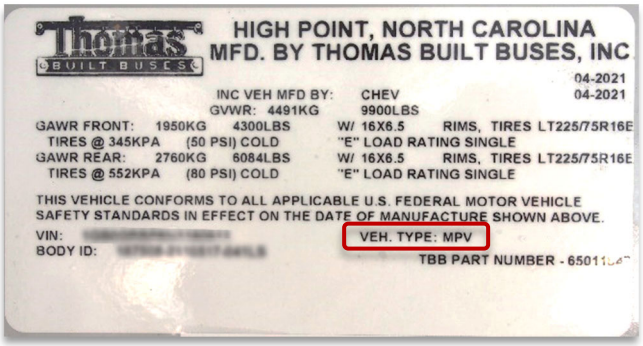
Handout • Identify School Buses

SCHOOL BUS CLASSIFICATION

Not every vehicle that looks like a bus is a school bus. Check the **vehicle certification label**, which should be located inside the bus, above the front window or door. The type should state "school bus" (not simply "bus" or "MPV"—Multi-Purpose Vehicle).

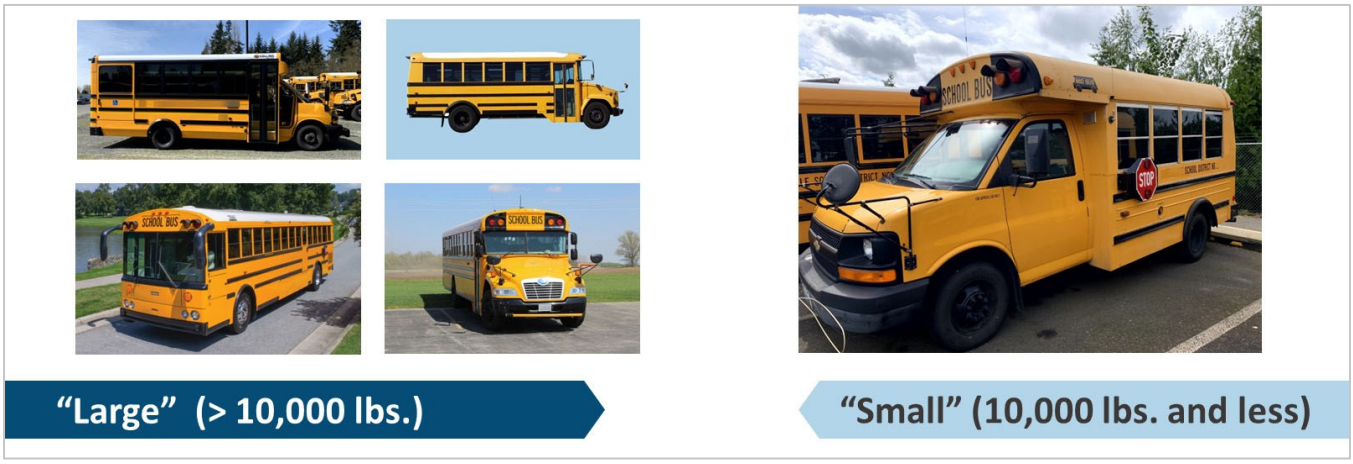
- To be classified as a school bus, a vehicle must meet the many federal safety regulations that apply to these vehicles.
- A multi-function school activity bus (MFSAB) is a school bus that meets all federal requirements for a school bus, except it lacks traffic control devices, like alternating flashing lights and stop arms.
- The mere fact that a vehicle is used by a school does not make it a school bus. When schools use non-school-bus vehicles for student transportation, like vans and SUVs, these are subject to all state laws that apply to child occupants who ride in passenger vehicles.

BUS LABEL EXAMPLES

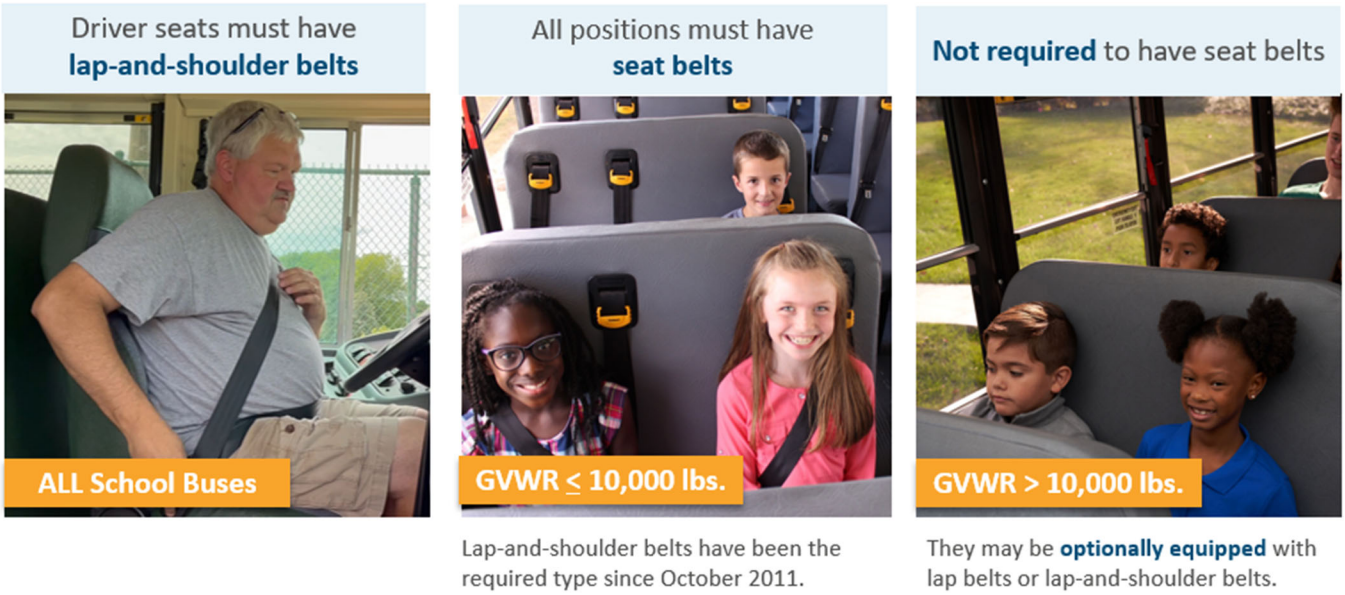
School Bus	Non-School Bus
	

SCHOOL BUSES AND GVWR

- While it is **not** important to know the different school bus types for purposes of installing CSRS in school buses—it *is* important to know the school bus's **gross vehicle weight rating** (GVWR).
  - Several different school bus types are shown in the following illustration.
  - To confirm school bus weight information, check the GVWR given on the vehicle certification label.
- GVWR is the maximum loaded weight under which a vehicle can safely operate as prescribed by the manufacturer.



SEAT BELTS ON SCHOOL BUSES



Lap-and-shoulder belts have been the required type since October 2011.

They may be **optionally equipped** with lap belts or lap-and-shoulder belts.

LATCH ON SCHOOL BUSES

- School buses are exempt from tether anchor requirements, but school buses of any size may be ***optionally equipped*** with lower anchors and/or tether anchors.

School buses are **exempt** from **tether anchor** requirements.

Since 2003, school buses with a GVWR of **10,000 lbs. or less must have** a set of lower anchors for two of the bus's seating positions.

Additional positions may optionally be equipped.

MULTI-FUNCTION SCHOOL ACTIVITY BUS (MFSAB)

- A multi-function school activity bus (MFSAB) is a school bus that meets all federal requirements for a school bus, except it lacks traffic control devices, like alternating flashing lights and stop arms.
  - MFSABs may not be used for street pick-up/drop-off of students.
  - It is sometimes hard to distinguish a MFSAB from a non-school bus.
  - Check the vehicle certification label to be sure it states Multi-Function School Activity Bus or MFSAB as the type.

PROGRESS CHECK

- Where is the vehicle certification label found?
- What is the importance of the vehicle certification label?
- At what GVWR must a school bus be equipped with seat belts?
- What is the difference between a school bus and a multi-function school activity bus?

NOTES

Handout • Federal Motor Vehicle Safety Standards

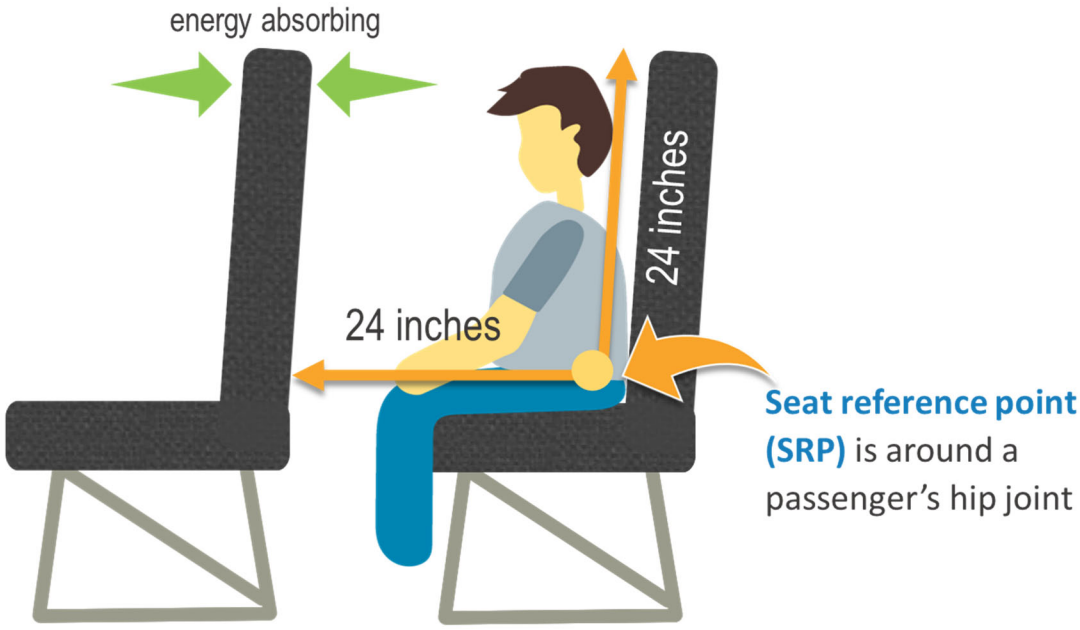
STATE AND LOCAL REQUIREMENTS

- Does your state, municipality, or district have requirements for seat belts on school buses, in addition to federal standards?
  - Visit the following link to state law information:
  - ncsl.org/transportation/school-bus-safety

FMVSS RELATED TO SCHOOL BUSES AND CSRS

COMPARTMENTALIZATION

- NHTSA requirements in FMVSS 222 make certain that school bus seating has the features needed for compartmentalization to provide protection in frontal or rear-end collisions.



Compartmentalization: Row Spacing Options and Trade-Offs

24 inches

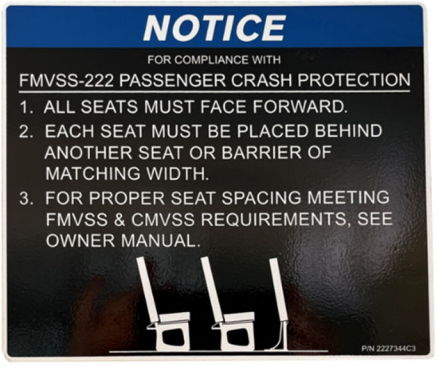
Maximum Allowed Spacing

Provides space for most CSRS and leg-room in between rows

Less than 24 inches

Maximum Capacity Spacing

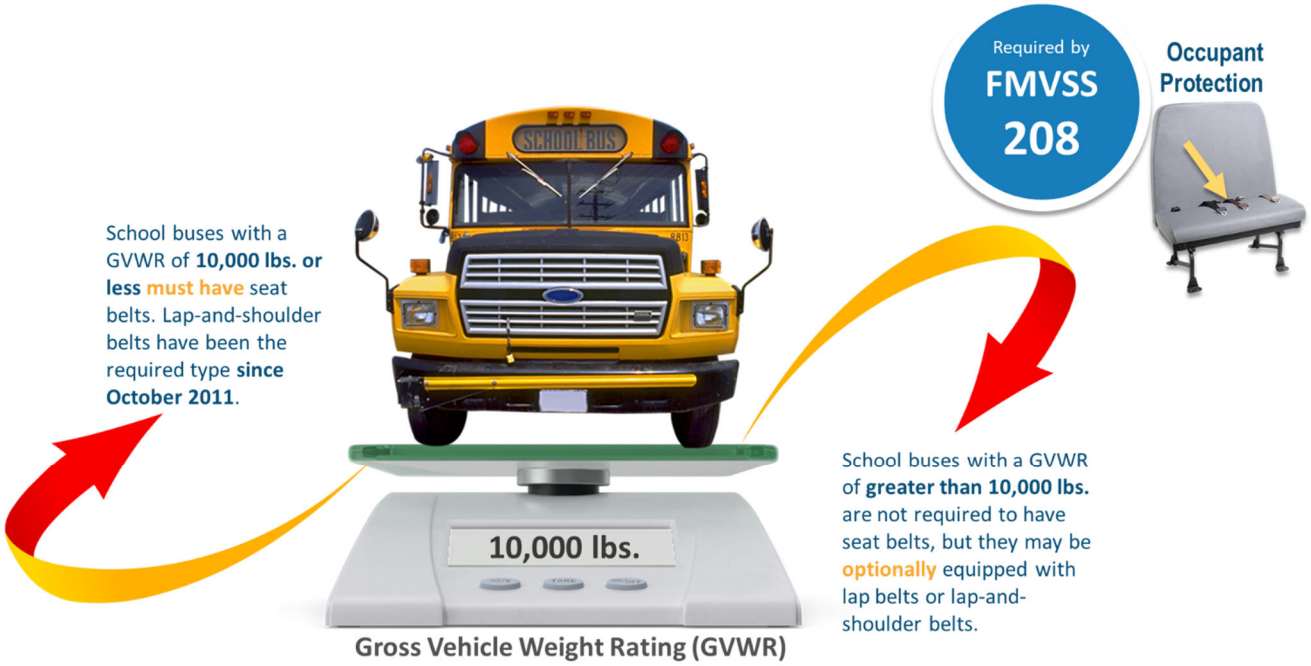
Narrower seat spacing between rows allows for more rows on the school bus



Row Spacing and Rear-Facing CSRS

- When rows are spaced close together it is challenging to find a rear-facing CSRS that will fit properly.
- Row spacing closer together than 24" may not accommodate rear-facing CSRS.

SEAT BELTS ON SCHOOL BUSES

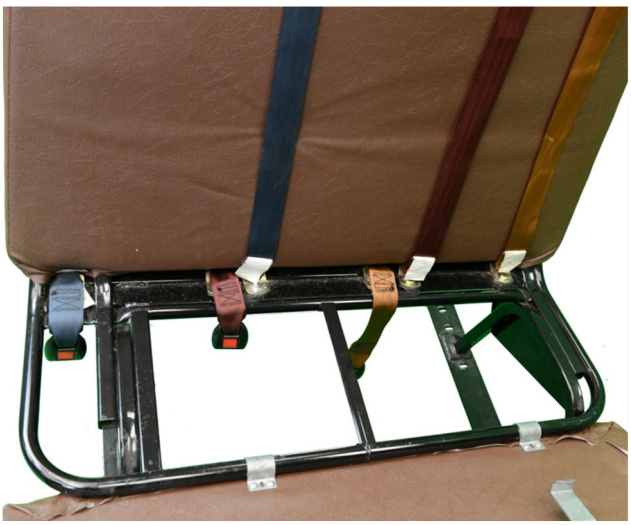


SEAT BELT ASSEMBLIES

FMVSS 209 regulates the component requirements for lap belts and lap-and-shoulder belts. Check that seat belts indicate compliance with FMVSS 209.

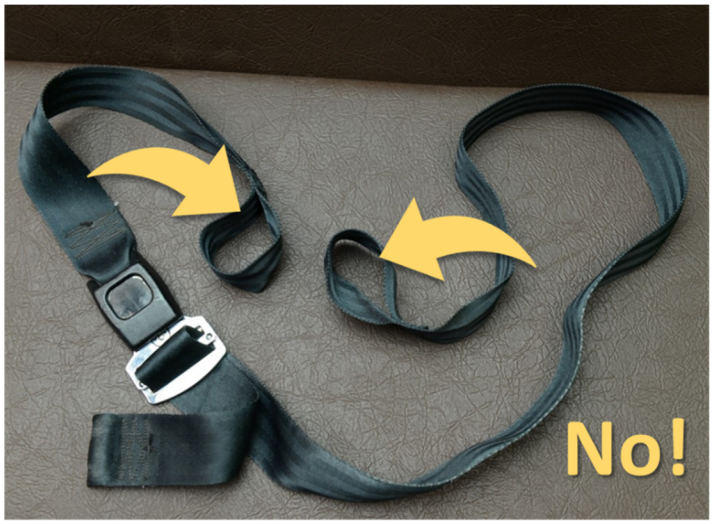
REINFORCED SEATING

FMVSS 210 regulates occupant protection system anchorage points be adequately strong to withstand crash loads by using reinforced bus seat frames.



SEAT BELT ASSEMBLIES—NON-COMPLIANT RETROFITTING

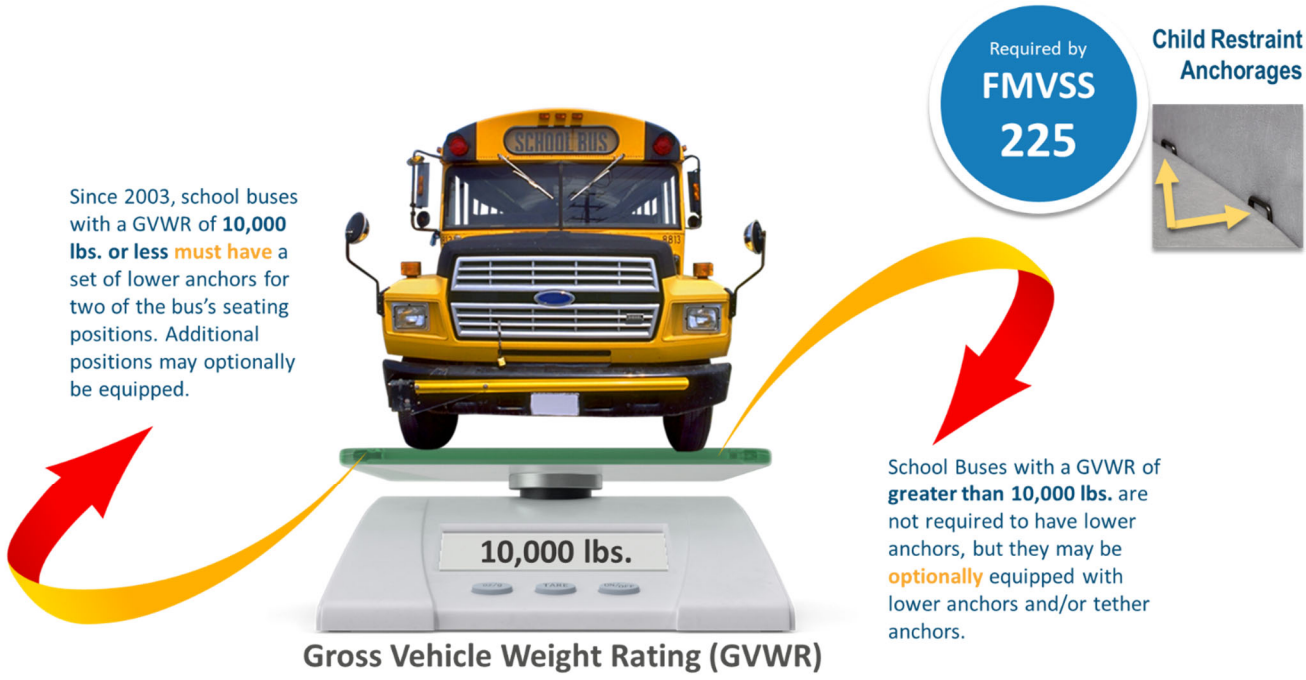
- Too frequently, school bus seat belts that have been installed through retrofit are non-compliant with FMVSS 209.
- It is important to check for compliance by lifting the bus seat cushion to see how the seat belts are attached.



Seat belt that loops around the bus frame

Seat belt knotted around the bus frame

LATCH ON SCHOOL BUSES



REPLACEMENT—ENTIRE SCHOOL BUS SEAT

Though existing seating cannot be reinforced, new seating can sometimes be installed into the bus.

- The replacement seating must also meet all federal standards, and the bus's owner and the installer must also ensure that it has been installed according to all applicable FMVSS. Detailed records of these changes need to be kept.
- Replacing an FMVSS 222 school bus seat with one that meets FMVSS 210 is usually quite difficult and costly.

REPLACEMENT—INTERCHANGEABLE SEATBACKS

A better alternative for pupil transportation providers who plan ahead and order reinforced seating is to purchase that which allows the seatback to be easily replaced with versions that have different features.

- For instance, when this type of reinforced seating is present, a plain seatback can be swapped out later with one that has seat belts and/or integrated CSRS.
- This process involves just a few bolts, so the value to pupil transportation providers is that they can easily make relatively inexpensive modifications if their needs change in the future.

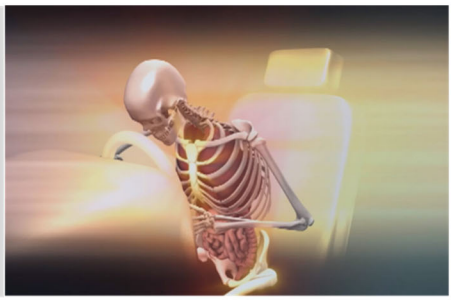
PROGRESS CHECK

- Seating that meets FMVSS 222 provides _____ for the occupants, meaning it has regulated row spacing and seatback characteristics.
- FMVSS 213 regulates _____.
- Why must a school bus seat with seat belts meet FMVSS 210?

NOTES

Handout • Crash Dynamics and Occupant Restraint

STAGES OF A CRASH

Vehicle crash	Human crash	Internal crash
		
The vehicle crash causes the vehicle to crush and deform.	In the human crash, occupants collide with parts of the interior.	In the internal crash, internal organs are still moving toward the point of impact and collide with bone or other organs.

NOTES

TYPES OF CRASHES

FRONTAL

Image courtesy of the Iowa Pupil Transportation Association

Image courtesy Archbold Buckeye

REAR-END

SIDE, LATERAL, T-BONE

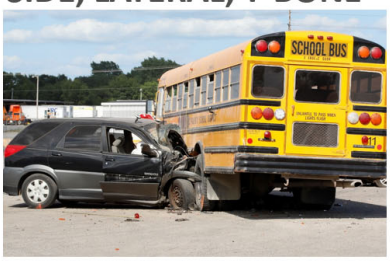


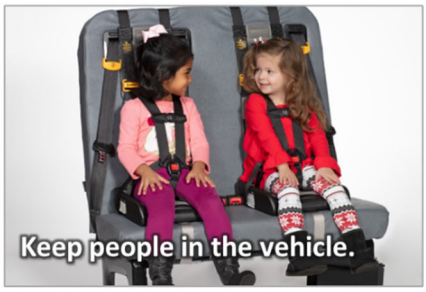
Image courtesy of the Iowa Pupil Transportation Association

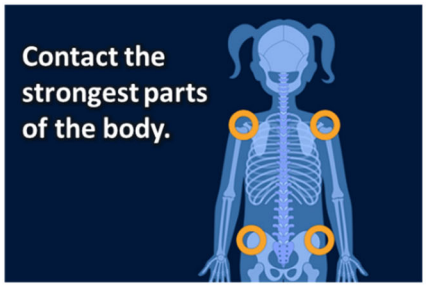
ROTATION/SPIN

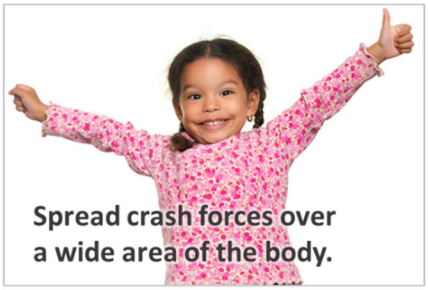
ROLLOVER

Image courtesy of Dean Transportation

BASIC PRINCIPLES OF OCCUPANT RESTRAINT







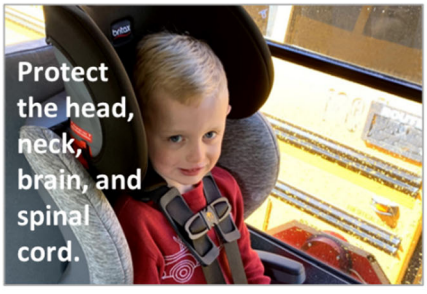


Image courtesy of CChIPS and Injury Biomechanics Research Center (IBRC)

PROGRESS CHECK

- What are three stages in any crash?

- What are the five basic principles of occupant restraint?

NOTES

Handout • Occupant Protection for Children

ON SCHOOL BUSES, SAFETY HAS THREE STAGES

STAGE 1
Rear-facing in a CSRS with a harness

STAGE 2
Forward-facing in a CSRS with a harness

STAGE 3
Riding on a school bus seat, with a seat belt whenever available.

Stage 1 • CSRS For Use Rear-Facing

Rear-Facing Only CSRS

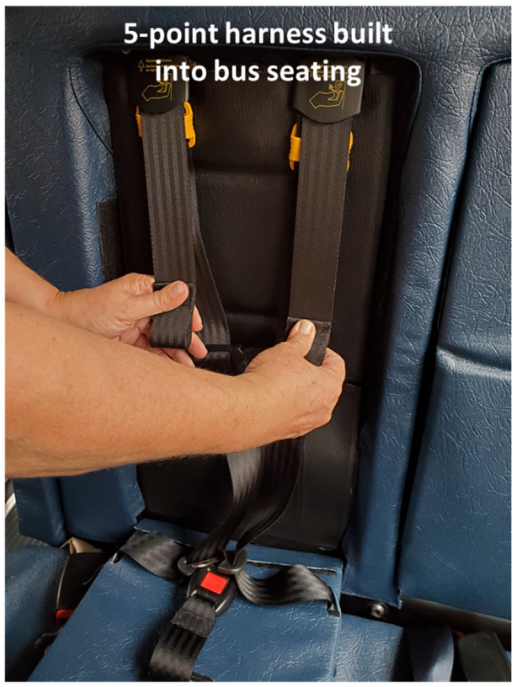
Rear-Facing Convertible CSRS

Stage 2 • CSRS for Use Forward-Facing

CSRS with a Cam Wrap

- A cam wrap is a CSRS anchorage made of strong, adjustable webbing that wraps vertically around a school bus seatback, through the seat bight.
- CSRS with a cam wrap are designed for use only on a school bus.
- Originally, they were developed specifically to provide options for school buses that don't have other anchorage hardware such as seat belts or LATCH.
- They can be used on any type of school bus seating.

Integrated CSRS



Stage 3 • School Bus Seats and Seat Belts

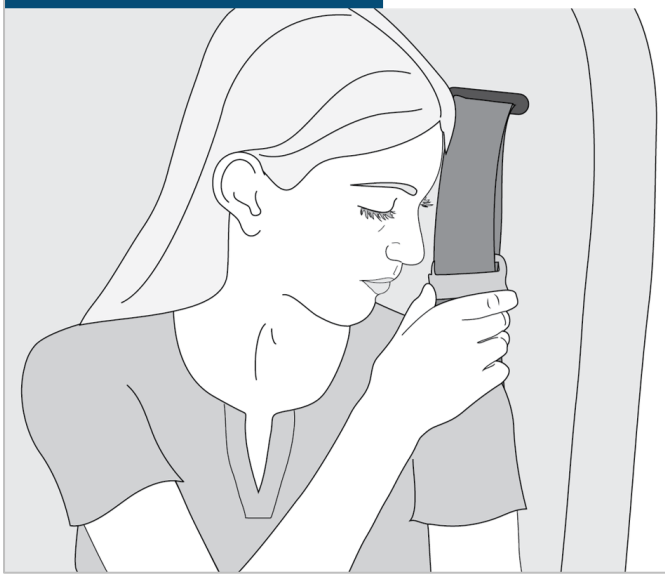
Why aren't booster seats used on school buses?

Passenger vehicle seats are made for an adult's body.

VS

School bus seats are sized to match kids' bodies.

STAGE 3 Use a Seat Belt, When Possible



- Lap-and-Shoulder belts are move protective than lap belts and are proven to provide better protection in a crash.
- Shoulder-height adjuster should sit **at** or **just above** shoulder.

PROGRESS CHECK

- What are the stages of protection for children riding on school buses?

- Why aren't booster seats needed on school buses?

- A cam wrap is an anchorage method used only on a school bus for some CSRS consisting of _____ that _____.

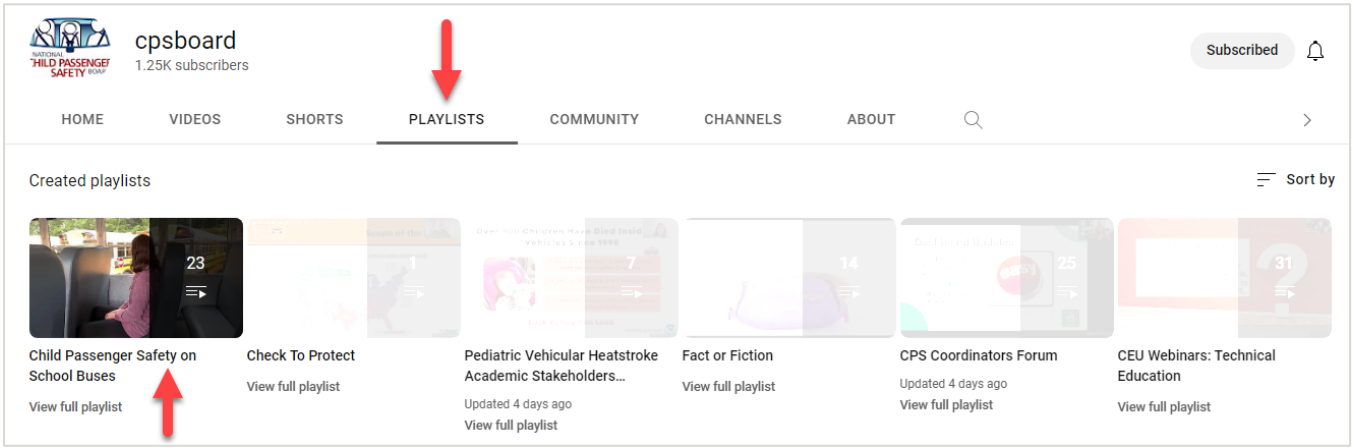
- How do school buses offer occupant protection when seat belts are not present?

NOTES

Handout • CSRS Basics: Concepts and Features

SCHOOL BUS VIDEO PLAYLIST ON YOUTUBE

- How-to videos for CSRS on school buses are available at the CPS Board YouTube Channel.
  - youtube.com/cpsboard
    - Open the **Child Passenger Safety on School Buses** playlist.



5 STEPS WHEN USING CSRS

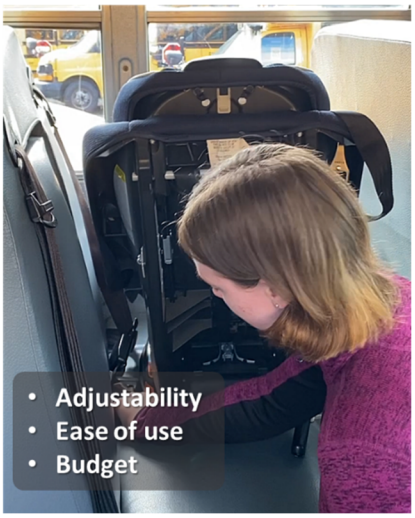
SELECTION	Choose the right car seat for the child AND the bus.
DIRECTION	Face the CSRS the right way.
LOCATION	Choose an appropriate location on the bus.
ADJUST/FIT	Adjust the CSRS to fit the child properly.
INSTALLATION	Secure the CSRS to the bus seating.

SELECTION BASICS

What fits the **CHILD**?

What fits the **BUS**?

What **FEATURES** matter?

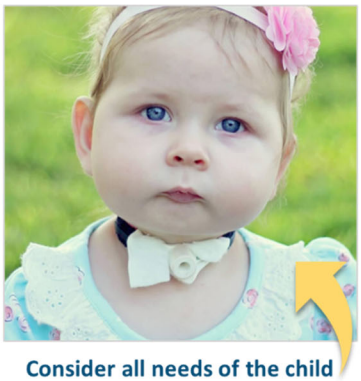


LOCATION BASICS

Choose a Location That Meets These Criteria

Enable a proper installation

Accommodate necessary child supervision



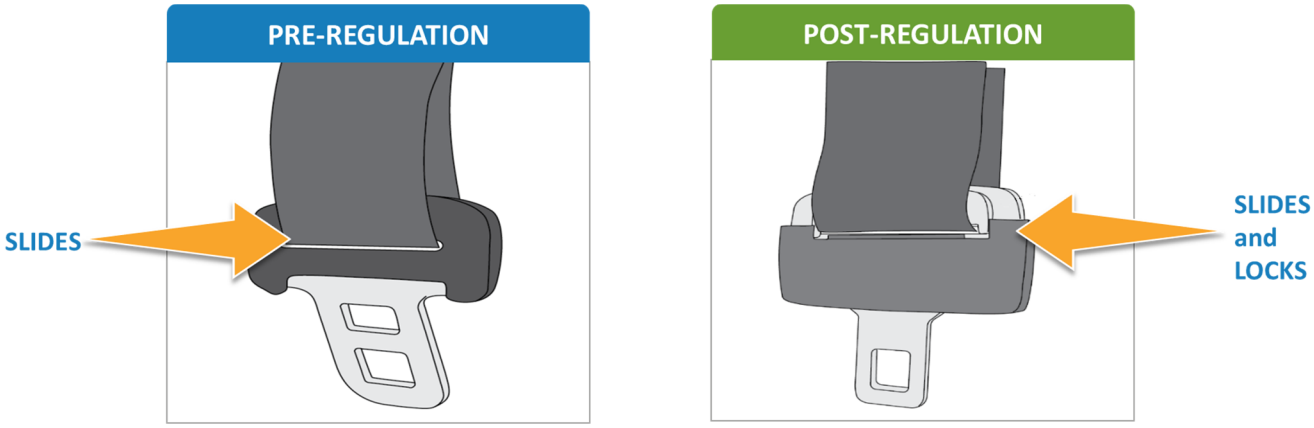
Consider all needs of the child

Consider needs and safety of other passengers

Location and Emergency Evacuation Concerns

Do not use a row with an emergency exit to install a CSRS.

Place a CSRS next to the window if another child sits on the same bench seat.



Sliding Latch Plate
BEFORE 10/2011

Locking Latch Plate
SINCE 10/2011

MAINTENANCE: CLEAN CSRS PROPERLY

- Refer to the CSRS manufacturer's instructions before cleaning a CSRS, and strictly follow the cleaning instructions provided.
- Never use any chemicals (including, but not limited to, starch, bleach, alcohol, etc.) when cleaning CSR, unless permitted explicitly by the CSRS manufacturer.
- Most chemicals weaken CSRS materials including plastic, webbing and buckles. Additionally, chemicals may wash the flame retardancy.
  - In general, use only mild soap and water to clean plastic, fabric and webbing.

- Rinse soap well and allow to thoroughly dry before reassembly and use.
  - Use only water on buckles.
  - Never use soap or lubricate buckles as this can cause them to malfunction.
  - However, do follow instructions to use water to clean buckles if gunk collects inside.
- Only air dry a CSRS harness or other parts made of webbing. Most padding must be air dried, too.
- Never iron webbing.

PROGRESS CHECK

- What five steps of CSRS use should always be considered?

- What is the first thing to consider when selecting a CSRS?

NOTES

Handout • CSRS Types: Conventional and Integrated

PROS AND CONS OF CONVENTIONAL CSRS ON SCHOOL BUSES

Among the pros, the most compelling reason to use a conventional CSRS is that it is the only way to safely transport children who must ride rear-facing. Here are some additional details.

PROS

- The only option for rear-facing
- Accessible, relatively affordable, readily available at retail stores or through institutional/bulk sales distributors
- Provide side/head support, protection
- May allow a child to recline forward-facing

CONS

- Can be used only on buses equipped with seat belts or lower anchors; if CSRS requires tether use, a tether anchor option is also needed.
- Can be more difficult and time consuming to install because of limitations of space and access to anchorages
- Bulkier than other forward-facing CSRS, limiting capacity
  - Two CSRS will fit on a 39" bench seat
  - Some models are difficult to fit between rows when space is tight.
- Tend to be heavier and more difficult to maneuver on or off the bus
- Take more space to store when not in use

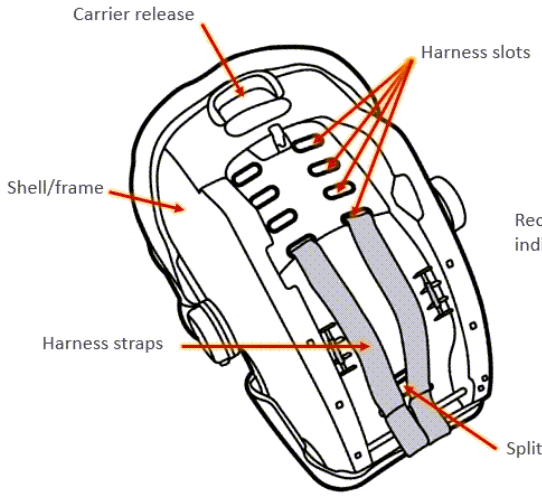
CONVENTIONAL CSRS—REAR-FACING AND FORWARD-FACING TYPES

CONVENTIONAL CSRS—CHILD SIZES

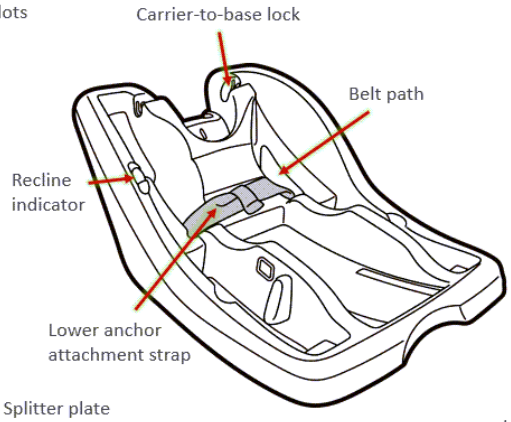
When Rear-Facing	When Forward-Facing
	
TYPICAL HEIGHT REQUIREMENTS[1] Top of child's head at least one inch from the top of the shell	**TYPICAL HEIGHT REQUIREMENTS**[1] Shoulders below the highest harness slot Ears below the top of the shell
TYPICAL WEIGHT CAPACITIES[1] Minimum: 4 or 5 pounds Maximum: 22, 30, 32, 35, 40, 45, or 50 pounds	**TYPICAL WEIGHT CAPACITIES**[1] TYPICAL WEIGHT CAPACITIES* Minimum: 20 or 22 pounds Maximum: 40, 50, or 65 pounds *Also check for height minimums and age minimums—sometimes age 2.*

[1] Always check CSRS labels and manufacturer instructions for model-specific use guidance.

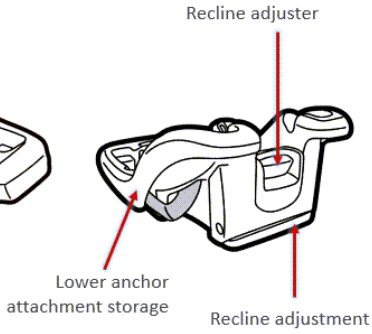
REAR-FACING ONLY CSRS PARTS



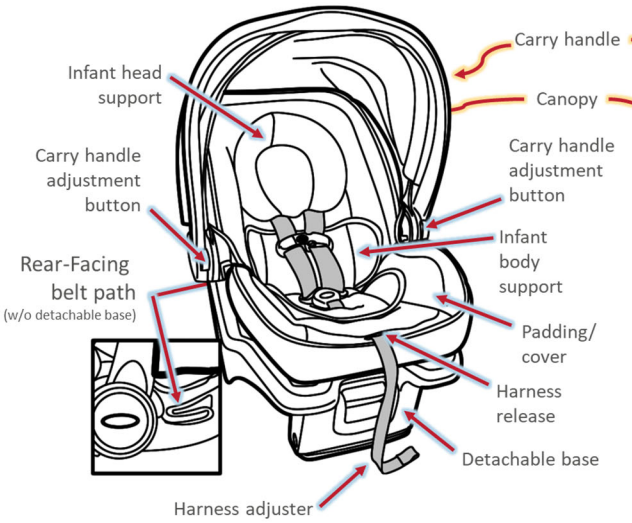
Carrier, rear view



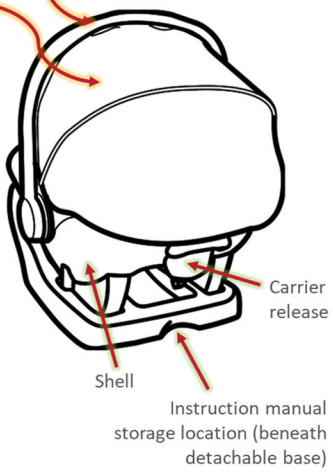
Detachable base, rear view

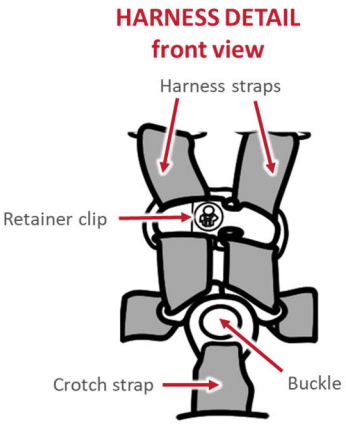


Detachable base, front view



Carrier on detachable base, front view



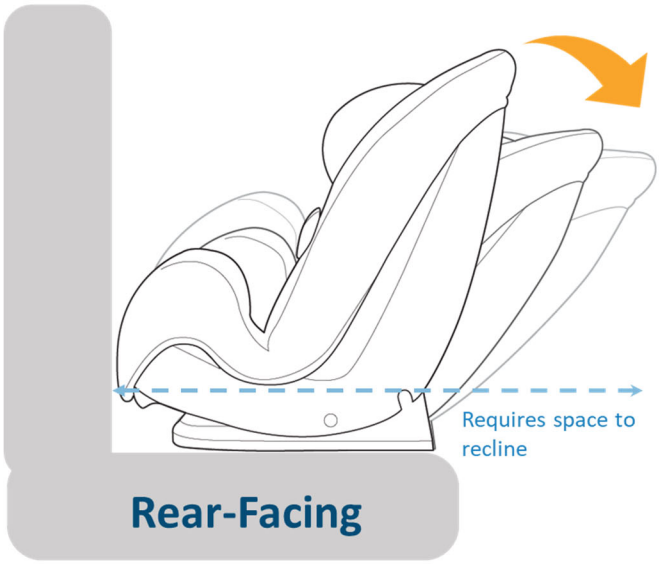


CONVERTIBLE/COMBINATION/ALL-IN-ONE* PARTS

* Convertible CSRS shown

CONVENTIONAL CSRS—RECLINE ANGLE BASICS

Install a CSRS at the recline angle specified in its instruction manual.



INSTALLATION—LAP BELT TIPS

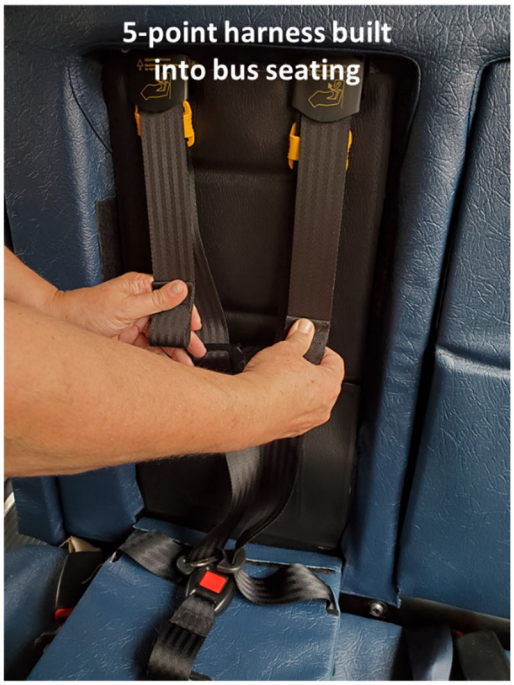
- Buckle segment at aisle side.
- Use matching segments.
- Place a maximum of two conventional CSRS per school bus seat using the two outboard seat belt systems.

NOTES

TESTING FOR TIGHTNESS

- Always test for tightness at the belt path, as this provides a true measure of proper installation.
- Testing a rear-facing CSRS by grasping it at the top may result in more than 1 inch of movement, even if the CSRS is properly installed.

INTEGRATED (BUILT-IN) CSRS



PROS AND CONS OF INTEGRATED (BUILT-IN) CSRS

PROS

- Easy to use; no installation necessary. Simply folds up for storage.
  - No bulk; accommodates CSRS use, even when rows are spaced close together.
  - Unused CSRS require no storage space; simply fold up the cushioned cover.
  - Do not expire, though must be carefully evaluated for damage/wear and not used if unsafe. Replace worn or damaged components with new components from the bus manufacturer.

CONS

- Limited capacity (two CSRS per 39" bench seat) compared to CSRS models that install using a cam wrap.
- Add to cost of bus seating; pricier than some other CSRS options.
  - Do not provide side support or any recline, which may be needed for children with disabilities.

PROGRESS CHECK

- Why are conventional CSRS sometimes used on school buses?

- Why should a rear-facing CSRS recline?

- What types of anchorages may be used for installation of a conventional CSRS?

- What is the “pinch test?”

NOTES

Handout • CSRS with Cam Wraps

WHAT IS A CAM WRAP?

A **CSRS anchorage method** in which strong, adjustable webbing wraps vertically around a school bus seatback (through the seat bight). Webbing that forms a safety restraint for the child is either permanently attached to or hooked onto the cam wrap.

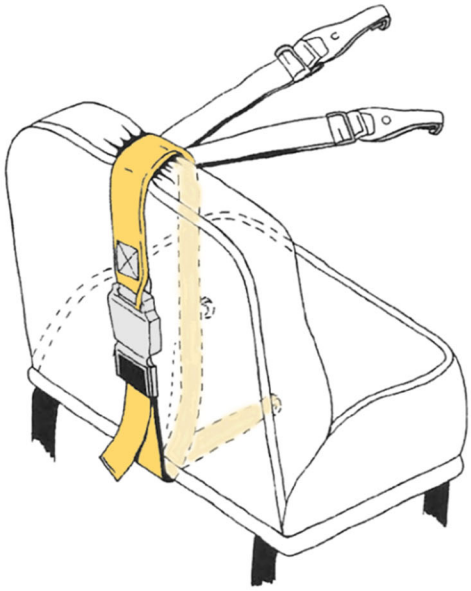


Diagram at right shows a "seat mount" cam wrap with attachment points for a safety vest.

PROS AND CONS OF USING CSRS WITH CAM WRAPS

Cam wraps were made just for school buses, so they have many benefits for usage in this environment. However, there are also a few disadvantages.

PROS

- Lightweight and can easily fit between school bus rows.
- Easy to move and store when not in use.
- Row capacity isn't usually limited. (Most fit three to a 39" bench.)
  - Some may be used on FMVSS 222 seating (if no seat belt or lower anchors needed).
- Some models, in particular safety vests, have features that discourage children from unbuckling and may be an option for children who have behavioral issues.

CONS

- There is no rear-facing option.
- All models seat the child fully upright.
- Most provide no side support for the child.
- Limits the use of the row behind the CSRS to restrained occupants only.

CSRS WITH CAM WRAP—TYPES

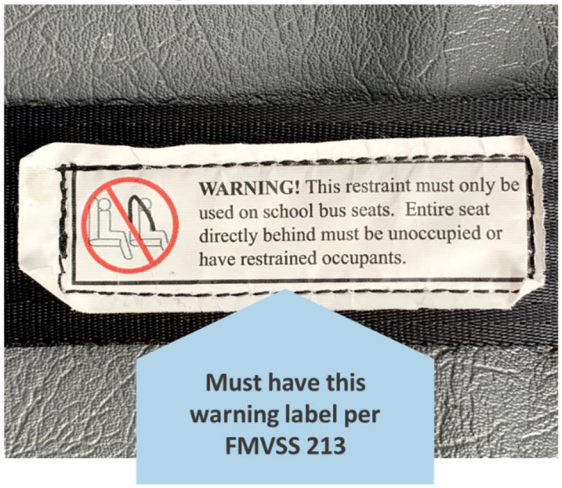
Belt Converters	School Bus Only CSRS	Safety Vests
		
Belt converter CSRS add upper-body and crotch-strap protection to a lap belt, turning that 2-point form of restraint into a 5-point CSRS.	*School bus only CSRS feature a 5-point harness attached to a seatback and cushion. May be installed on any type of school bus seating; seating need not be reinforced as no seat belt is needed.*	*A safety vest is made up of two parts: a closely fitted 5-point vest made of webbing that encircles the body; and a cam wrap seat mount. Safety vests may be used on any type of bus seating; the seating does not have to be reinforced.*
TYPICAL WEIGHT CAPACITIES[2] Minimum: 25, 30 or 31 pounds Maximum: 168 pounds	**TYPICAL WEIGHT CAPACITIES[1]** Minimum: 20 or 25 pounds Maximum: 65 or 90 pounds	**TYPICAL WEIGHT CAPACITIES[1]** Minimum: 20, 31, or 81 pounds Maximum: XS/S—85 or 90 pounds M/L—165 or 168 pounds

[2] Check with manufacturer for age minimums, height limits, and options for custom-made sizing.

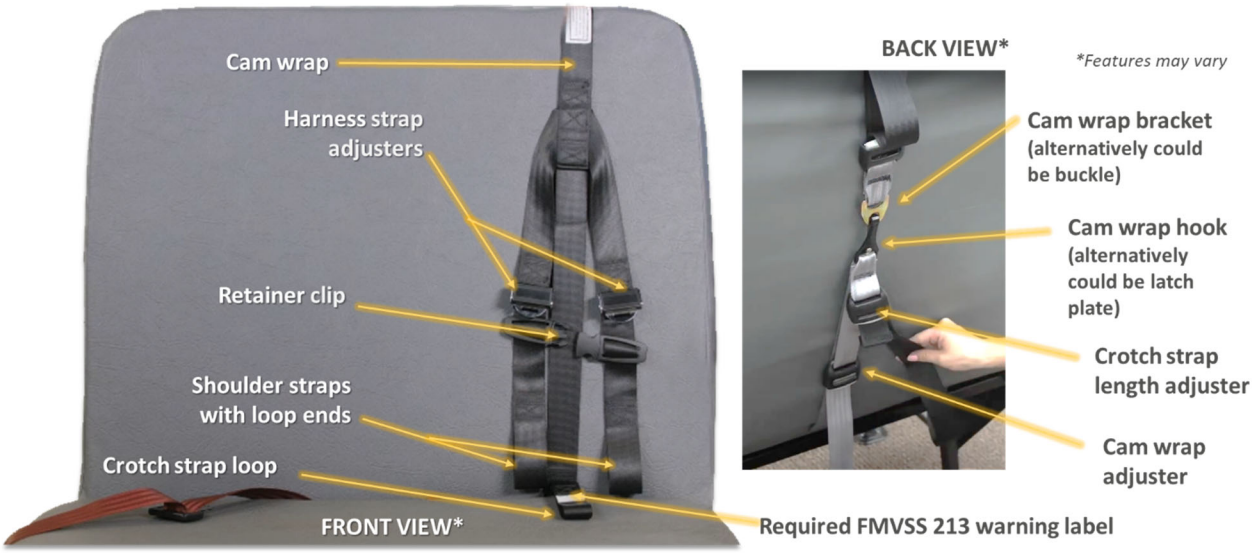
REQUIREMENTS FOR CSRS WITH A CAM WRAP USE

Row Behind

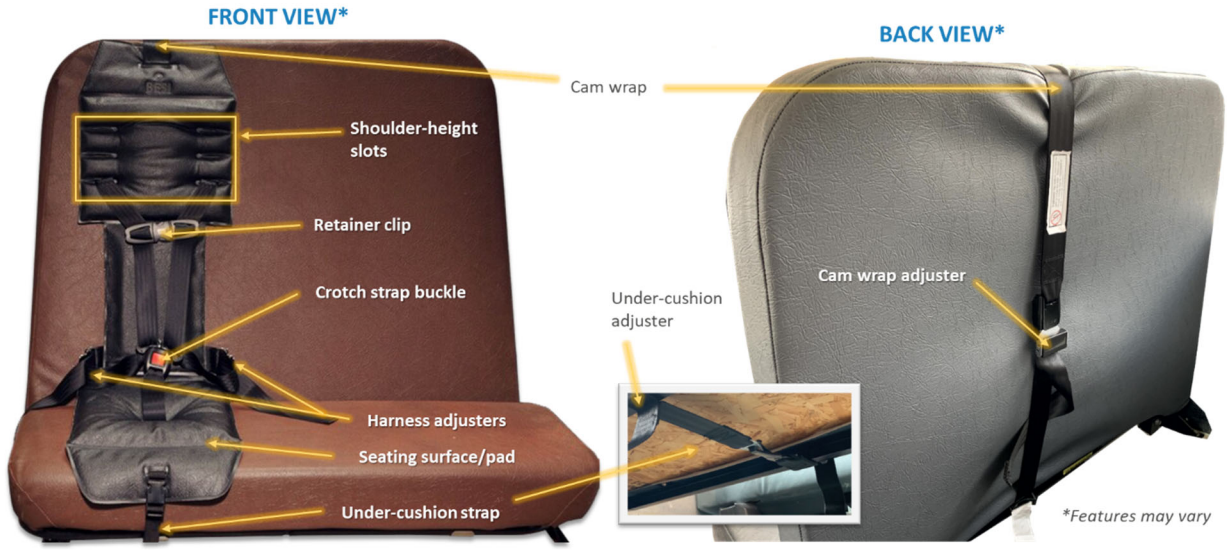
Cam Wrap Label



BELT CONVERTER–PARTS

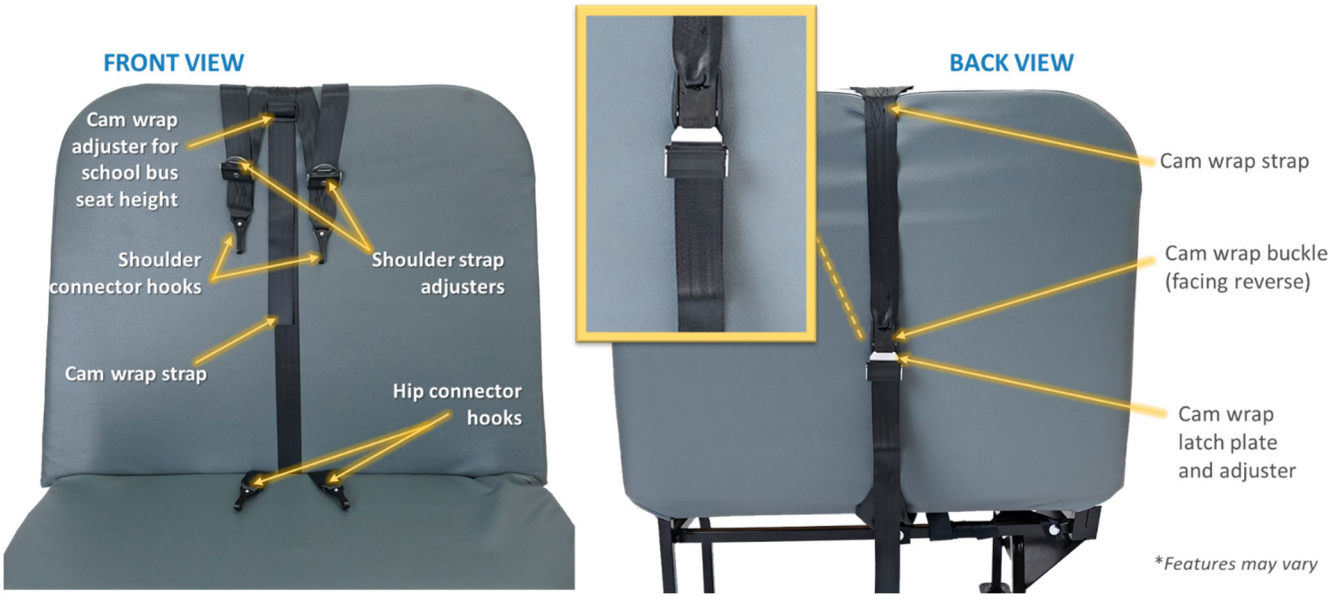


SCHOOL BUS ONLY CSRS—PARTS (SINGLE CAM WRAP)

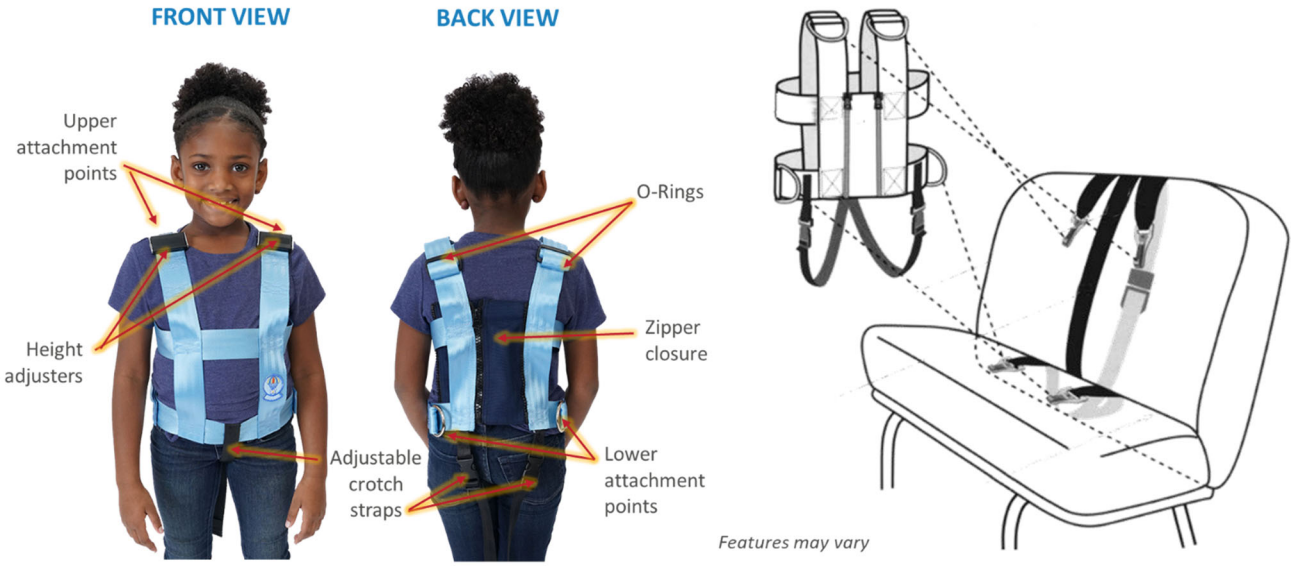


SCHOOL BUS ONLY CSRS—PARTS (DOUBLE CAM WRAP)

SAFETY VEST CSRS—SEAT MOUNT PARTS



SAFETY VEST CSRS—SAFETY VEST PARTS



PROGRESS CHECK

- What types of CSRS attach using a cam wrap?
- Why are cam wraps suitable for use on buses but not other vehicles?
- Which CSRS have the highest occupant weight ratings?
- Which CSRS has a strap that runs under the school bus seat cushion to stabilize the CSRS on the cushion?
- Which CSRS often features a zipper? Where does the zipper go?

NOTES

Handout • CSRS and Students with Disabilities

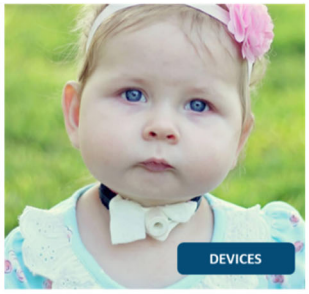
INDIVIDUALS WITH DISABILITIES EDUCATION ACT

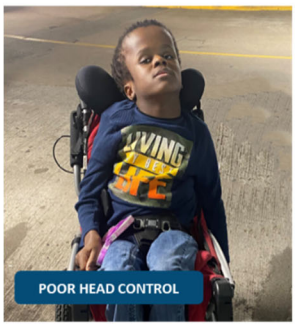
- The **Individuals with Disabilities Education Act** (IDEA) lays the foundation for educational rights of children with disabilities.
- It is through IDEA that children with disabilities are entitled to an IFSP (Individualized Family Service Plan, pre-birth to 3) and an IEP (Individualized Education Program, age 3 to 21).
  - Transportation is legally regarded a "related service" on a child's IEP. Therefore, all aspects of the law apply to the time a student spends in transport.
  - Since IEP/IFSP are overall education documents, the topic of transportation can be (and too often is) easily overlooked.
- All children with an IEP/IFSP should be given an Individualized Transportation Assessment (ITA) that considers the child's transportation needs.
- If the ITA finds that any transportation modifications are necessary, an Individualized Transportation Plan (ITP) should be documented as well.
- Some students who need transportation accommodations don't meet the qualifications under IDEA. These students have rights for transportation accommodations under Section 504 of the Rehabilitation Act of 1973, which protects equal access rights for students.
  - The needs of students with a Section 504 Plan tend to be less involved than those of children who fall under IDEA, but since these students may require transportation accommodations, similar transportation plans should be prepared for these students as well.

AAP POLICY STATEMENT

- American Academy of Pediatrics: School Bus Transportation of Children with Special Health Care Needs:
  - publications.aap.org/pediatrics/article/141/5/e20180513/37887

NEEDS THAT NECESSITATE THE USE OF CSRS





ADAPTIVE CSRS

*The CSRS model shown features extra support including an **abductor**, **wedge**, **body supports**, **height adjusters** and **adjustable head rests**.*

WHAT IS RELEVANT TO PUPIL TRANSPORTATION PROVIDERS?

RELEVANT	NOT RELEVANT
✓ Physical challenges	☒ A child's complete medical history
✓ Behavioral, emotional or communication issues	☒ A child's specific diagnosis
✓ Positioning and mobility needs	☒ A child's family history
✓ Rescue/quick-relief medications	☒ All medications a child takes
✓ Sensory issues.	

SAFETY VEST FOR BEHAVIOR MODIFICATION

If a safety vest is used for a child for the sole purpose of behavior modification, it is important to demonstrate that the pupil transportation provider has taken this step while respecting the student's right to ride in the least restrictive environment possible.

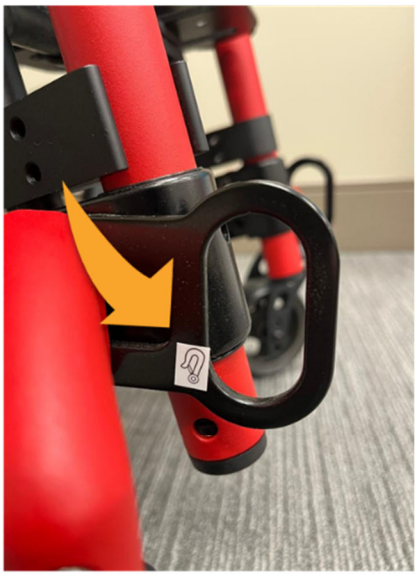
DO	DON'T
✓ Try all other interventions.	☒ Jump immediately to a CSRS.
✓ Stress that safety vests meet FMVSS 213.	☒ Call them "harness" or "restraint"
✓ Reassess needs at a later date.	☒ Make modifications to the CSRS.
✓ Involve the full IEP/IFSP team.	☒ Decide unilaterally, without input of all IEP/IFSP team members.

WHEELCHAIRS ON SCHOOL BUSES

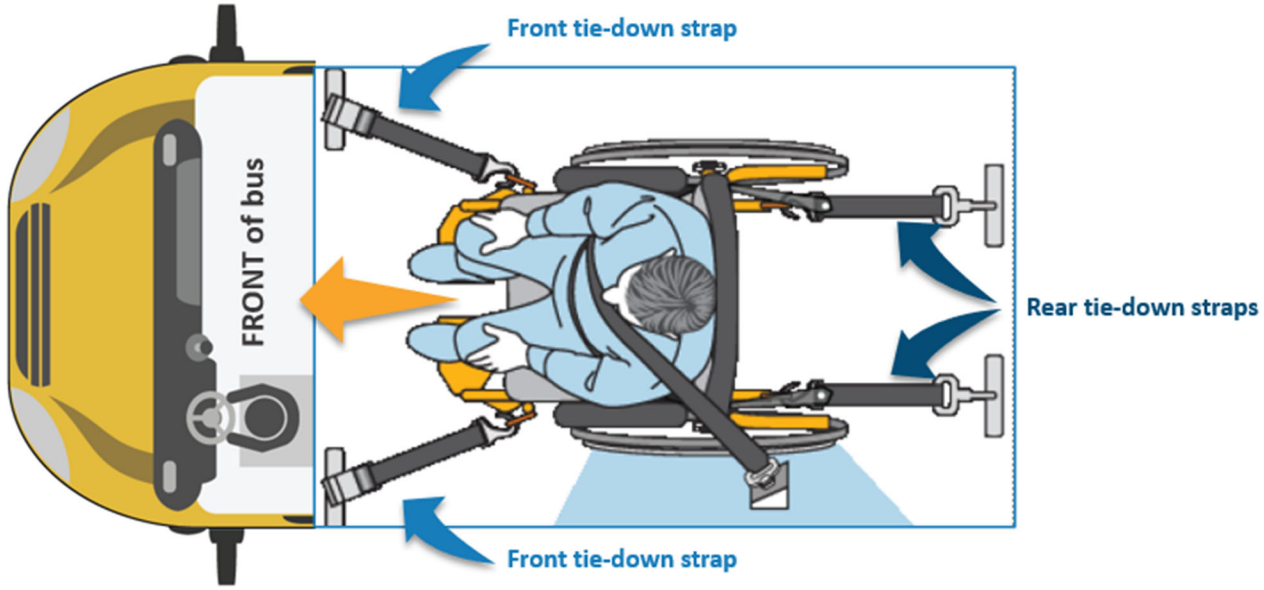
- Experts, including the American Academy of Pediatrics, note that it is always safer for a child who rides in a wheelchair to transfer to a school bus seat (using an appropriate CSRS) for transit.
- Therefore, whenever possible, the child's transportation plan should indicate that the child should ride in a CSRS whenever possible—that is, whenever the child's size, medical condition, and the capabilities of the bus staff allow it. Staff must be trained to conduct the transfer properly.
- If a wheelchair must be used on the bus, use one that meets voluntary standard WC19 whenever possible.
- WC19 wheelchairs have been tested to confirm they are crashworthy and have the features shown.

WC19 Labels

Ample openings for occupant restraint system



Securement point label



Four-Point Securement

In the four-point securement diagram above, the front tiedowns anchor outboard to increase stability while the rear tiedowns anchor directly behind the securement points.

ADDITIONAL TRAINING AND RESOURCES

- **Safe Travel for All Children** is designed to serve as an enrichment course for Child Passenger Safety Technicians who are interested in learning about transportation of children with disabilities.
  - Visit preventinjury.pediatrics.iu.edu for more information.
- Download the Ride Safe brochure that promotes wheelchair transportation best practice.
  - wc-transportation-safety.umtri.umich.edu/ride-safe-brochure/

PROGRESS CHECK

- What information about a child with disabilities is important for a pupil transportation provider to know?

- What are the advantages and challenges of using an adaptive CSRS on a bus?

- What should be considered before using a CSRS for behavioral challenges?

NOTES

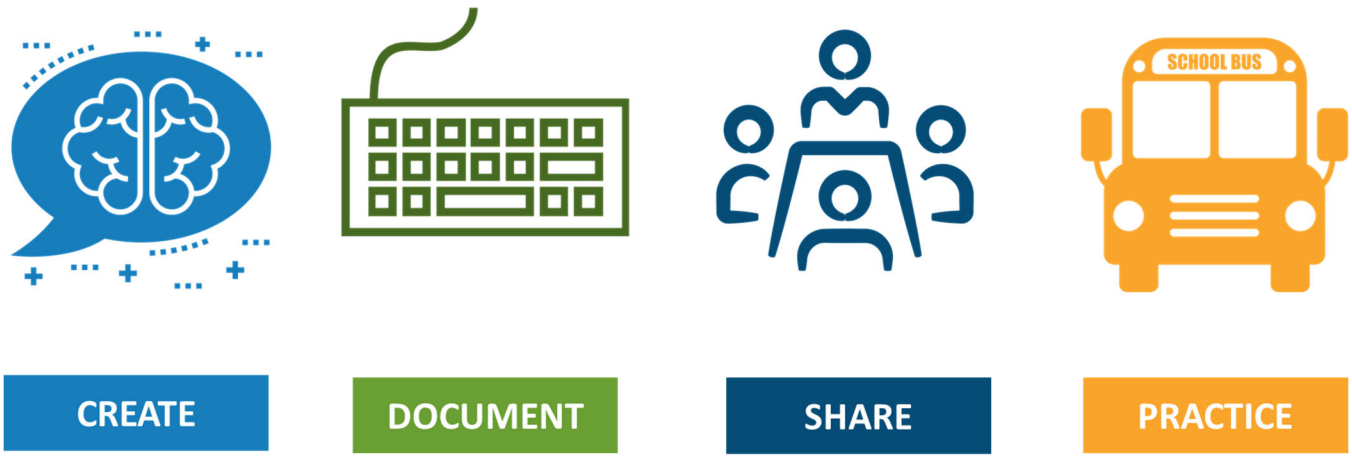
Handout • CSRS and Emergency Evacuation

EVACUATION PLANNING

Evacuation planning must be put into writing, shared with all responsible parties and practiced with all bus occupants. Preschoolers and children with disabilities are likely to need more training and practice opportunities than other students, so pupil transportation providers of these students must plan more time for drills.

A plan should include details such as:

- Who will help, including assignment of specific responsibilities.
- Route-specific information, including a seating plan.
- Individual child considerations, like behavior, communication, abilities, etc.
- A guide on how to evacuate each child including extraction from/with their CSRS.
- The location and use of emergency equipment available on the bus.
- A safety plan for evacuees once outside of the bus.



MAKE EVACUATION PLANS INDIVIDUALIZED

Using the various assessment resources, evacuation plans should include a listing of child abilities and areas for concern.

Include a description of:

- Physical capabilities
- Cognitive abilities
- Communication abilities
- Ability to take instructions. Must be in a language they can understand.
- Ability to verbally communicate needs or concerns
- Behavioral concerns
- Anticipated reaction to unusual, stressful environment

WHAT MAKES STUDENTS IN CSRS DIFFERENT?

- Most will need help getting out of their CSRS due to age, developmental level, and/or physical or cognitive needs.
- A multi-step process for evacuation is necessary for some CSRS.
- Certain situations require the bus to be equipped with special equipment that's readily accessible for use in an emergency.

Most will need help getting out of their CSRS

Emergency equipment may be needed

METHODS TO EVACUATE

EMERGENCY EQUIPMENT

Drag mat / evacuation aid

First Aid Kit

Guide Rope

Guide rope image: Hopscotch School Supply

BELT CUTTERS

NOTES

Evacuating a Child in a 5-Point Harness

1. Cut both harness straps between the retainer clip and the buckle.
2. Pull downward on the retainer clip to remove it from the webbing.
3. The child may stand or be lifted out of the CSRS.

Blue tape shows where to cut a 5-point harness

Evacuating a Child in a Belt Converter

1. Cut the lap belt.
2. Grab the lap belt by the buckle and pull it out of the loops of the harness and crotch strap(s).
3. If there is a retainer clip, grab it and raise the shoulder straps over the child's head.

DO NOT cut the cam wrap of a belt converter. This will not release the seat belt that's securing the child.

Evacuating a Child in a Safety Vest

1. Cut the cam wrap at the back of the bus seat, ***below*** the buckle and adjuster hardware.
2. Grab the buckle and adjuster and lift it above the seatback.
   - The other cam wrap end will slide through the seat bight.
3. The child may stand or be lifted off of the bus seat.

PROGRESS CHECK

- What should be included in a written evacuation plan?

- What are the methods used to evacuate a child in a CSRS from a school bus?

- In what ways do CSRS help during an emergency situation and evacuation?

NOTES

Handout • Next Steps

PROVIDING SCHOOL BUS TRAINING AND SUPPORT

CPSTs who have successfully completed the **Child Passenger Safety on School Buses National Training** are able to teach the training. To prepare to teach the school bus course:

- CPSTs should have a solid understanding of the topic area if they opt to deliver the **Child Passenger Safety on School Buses National Training** in the future.
- View the videos available on the YouTube School Bus Playlist to review the content from this course as well as supplemental topics.
- Respect your limits and seek help from CPSTs who have more experience with pupil transportation when needed.
- It is best practice to include pupil transportation providers on the Instructor Team either as presenters, if they are CPSTs, or as helpers with the hands-on activities. Doing so will help with answering pupil transportation questions during the training.

CONNECT!

Connect with Pupil Transportation Providers

- If you need help connecting with school districts in your area, the National Association of State Directors of Pupil Transportation Services (NASDPTS) recommends contacting the state director. Visit the following website for an interactive map listing each state director's contact information.
  - nasdpts.org/State-Director-Map

Connect with State/IHS CPS Coordinators

- Reach out to your state CPS Coordinator/Training or local Indian Health Service contact. Let them know that you have completed the **Child Passenger Safety on School Buses National Training** and are willing to serve as a community resource. Find a listing of state coordinators at:
  - cpsboard.org/state-coordinators

Connect with Head Start Programs

- Find Head Start centers in your area by visiting the following link and filtering by state or locality.
  - eclkc.ohs.acf.hhs.gov/center-locator

RESOURCES

- School bus-related resources that support this training are available online.
  - cpsboard.org/school-bus
- NHTSA offers an online, self-paced, **School Bus Driver In-Service Curriculum** providing a refresher training to help reduce the number of school transportation-related crashes and improve the safety of students in and around the school bus.
  - nhtsa.gov/school-bus-safety/school-bus-driver-service-curriculum
- How-to videos for CSRS on school buses are available at the CPS Board YouTube Channel.
  - youtube.com/cpsboard
    - Open the **Child Passenger Safety on School Buses** playlist.

NOTES