



**COLORADO**  
**Department of Education**

School Finance and  
Operations Division

# Type A, Multifunction, and Small Vehicle Operator Guide

**June 2016**

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## Introduction

The Colorado Department of Education (CDE) School Transportation Unit issued these guidelines to assist public school districts and Boards of Cooperative Educational Services (BOCES) with developing policies and procedures for the safe transportation of students. These guidelines provide interpretations, suggestions, options, industry standards, best practices and ideas that are consistent with the Colorado Minimum Standards Governing School Transportation Vehicles, 1 CCR 301-25; the Colorado Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles 1 CCR 301-26, which promote safe transportation integrity in school transportation departments. It is hoped that this publication will serve as a resource to assist transportation providers as they work toward compliance with legislation and regulations.

## Acknowledgements

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## Unit 1 - Driver Role and Responsibility

Driving a School Transportation Vehicle is an extremely important task, involving knowledge of related information, visual skills, judgments, decisions and accurate responses. Competent school transportation vehicle drivers and uniformity in the operation of school transportation vehicles throughout the State of Colorado is imperative to provide efficient, economical transportation with the least amount of risk to our pupils and the public.

As a small vehicle operator you are not driving a vehicle the size as a typical school bus, however, you are still transporting students and are therefore held to a much higher standard than if you were just driving your own private vehicle. You are now one of the most trusted people in our society noting that parents are placing the safety of their children into the hands of a complete stranger. While the children are in the vehicle you are driving, their safety is entrusted to you.

School Transportation Vehicle Operators that operate their vehicle on the roadway obeying all traffic laws, exercising extreme caution, following all district policies, adhering to all state and federal requirements while maintaining good order will be appreciated and respected in their community as a person who performs a difficult and necessary service. Responsibilities of each driver are numerous and vary from seemingly insignificant tasks to very critical decision making that may involve the well-being of a passenger or liability of the school district.

### Your Personal Pre-Trip

The personal pre-trip is just as important as the vehicle pre-trip. Factors that influence a driver's well-being are physical, emotional, and mental attitude. Stress in any of these areas can affect driving performance. Under physical, emotional, or mental stress a driver may have trouble concentrating and may experience slowed reaction time.

**Be Well Rested** - Fatigue is one of the major contributing factors to accidents. A well-rested driver is more alert to emergency situations and is less likely to misjudge speed and distance. A driver who gets an adequate amount of rest is less likely to overreact to stress created by traffic and passengers.

**Physical Health** - Both illness and the medicine to combat it can interfere with concentration, coordination, and decision-making abilities. Medications such as cold treatments may cause more problems with driving ability than the illness itself. Behind the wheel of school transportation vehicle is no place to combat the flu.

**Proper Dress** - Clothing contributes both to safety and the driver's professional image. Loose clothing, drawstrings, unsecured long hair, and jewelry may be caught



in equipment. Shoes with smooth soles or spiked heels may cause ankle injuries or slipping and falling on uneven or slick surfaces. Clothing and footwear must be appropriate for road and weather conditions. Footwear should be firm and stable, with no open toes or heels, and should fit securely to the foot. Remember, clothing that is provocative, advertises drugs, tobacco, alcohol, or sex should not be worn.

**Drugs and/or Alcohol** - The possession or use of any drugs or alcohol while driving is prohibited. The use of any drugs or alcohol prior to driving a school transportation vehicle is also prohibited.

**Confidence** - Confidence is also a factor. Over confident drivers may take unnecessary chances. Under confident drivers may not make critical driving decisions in a timely manner.

**Emotional and Personal Problems** - Driving is no place to rehearse arguments or re-live family fights. When such strong emotional events dominate drivers' thoughts, safe driving observations or the ability to make sound decisions is affected.

**Mental Health** - Generally speaking, the problems that fall into this category do not come on suddenly and, while treatable, this usually requires time. Mental health is closely related to emotional upsets and/or to physical problems. Being depressed over a long period of time, with or without apparent reason, may be related to physical factors or brain chemical imbalances that characterize a mental condition. Drivers experiencing on-going mental or emotional problems may need help from a professional. Seeking out available resources is the first step.

**Self-Esteem** - These factors generally cannot be changed in a short period of time, but they do affect driving. Studies show that drivers who lack self-esteem have more accidents.

In conclusion, know when you, are "fit and ready" to drive the school vehicle. Know and acknowledge when you need help in becoming "fit and ready" to safely transport students. Safely transporting students is our business.

***Five keys to being a successful school transportation vehicle operator are:***

***Competence***  
***Positive Attitude***  
***Communication***  
***Cooperation***  
***Safety Awareness***

## **What is My Job?**

Your job is one of great public contact and public expectation. You drive a vehicle with the name of your school district/company displayed. If something goes wrong on the route, it is likely that your District will receive a phone call before you return. As a small vehicle operator, you offer a safe transportation service to many different and challenging customers. Who are your customers? The customers riding in your vehicle will include students, who may be very young and may also include young adults, through age 26. Other customers may include supervisors, teachers, parents, and coaches.

### **Performance Abilities**

- Operate varying sizes and types of school transportation vehicles used to transport pupils
- Familiarity with the geographic service area of the school district
- Knowledge of local, state, and federal rules, regulations, ordinances, and laws regarding school vehicle operation
- Alert with ability to exercise good judgment concerning emergencies, disabled vehicles, and abnormal driving

### **Responsibilities**

- Follow established schedules/routes
- Maintain appropriate fuel level in the vehicle
- Maintain an acceptable standard of cleanliness of the vehicle
- Monitor mechanical condition by performing daily inspections (pre-trip, in-between and post trips). Report deficiencies to mechanic.
- Drive safely and defensively at all times
- Be prepared to conduct emergency evacuations.
- Report vehicle and/or student accidents/injuries to transportation supervisor or his/her designee
- Administer first aid as necessary
- Uphold district small vehicle rules and regulations
- Maintain acceptable communications with transportation supervisor, staff, and the public
- Exhibit a positive image as a representative of the school district
- Determine that all carry-on items are properly handled to minimize danger

## **Types of Vehicles**

**Type A Bus** - School bus is a conversion body constructed upon a van-type compact truck or a front-section vehicle chassis, designed for carrying passengers with a driver side door. The vehicle will be under 21,001 pounds GVWR.

**Multi-Function Bus** - a motor vehicle built to federal school bus standards. Usually a different color and does not have the 8-way light system or stop arm.

**Small Vehicle** - a motor vehicle that does not meet the requirements of a Type A, B, C, or D school bus. A small vehicle is designed for normal use by the general public. Students may be transported by a small vehicle on route or multifunction trip.

## **Small Vehicle Requirements**

At a minimum the vehicle must have a CDE Annual Inspection, carry a 2 ½ pound dry chemical fire extinguisher of a type approved by UL and rated for 1A10BC, three emergency triangle reflectors in a securely mounted case, and a 24 unit first aid kit. At the beginning of each day, prior to transporting students, the vehicle must have a pre-trip inspection. This must be accomplished by either the driver or an authorized district person.

### **Driver Requirements**

At a minimum, the driver must meet the following requirements to transport students.

They must:

- possess a valid operator's license
- be 18 years of age
- provide an MVR meeting the insurability requirements of the district and/or insurance carrier prior to transporting student and annually thereafter
- complete the medical history (STU 17) with a doctor's release for any yes answer
- complete the annual written test
- the driver must pass a driving performance and pre-trip test when they are initially trained
- the driver must be able to perform all essential functions of the position

Proof of these requirements must be kept on file in the transportation department. Each person must have a training outline that lists what training was accomplished, date, topic, duration, driver signature and the instructor's name. The structure of the small vehicle operator file is up to the district; it can be by year with everyone in one file, or by person.

## **Training**

### **Pre-service training**

The small vehicle operator shall be provided with a pre-service training program and access to the CDE Type A Multifunction/Small Vehicle Guide. Districts/Service Providers are required to provide the following:



- a copy of job responsibilities
- a copy of written emergency procedures and/or contingency plans (accidents, breakdowns, etc.)
- training for the type of duties they may be required to perform
- training for type of vehicle(s) to be operated
- first aid, cardiopulmonary resuscitation and universal precautions training
- student confidentiality training prior to transporting students
- adverse weather training
- mountain driving training
- successfully pass an initial driving performance evaluation including pre-trip test prior to transporting students
- proper use of Child Safety Restraint Systems and wheelchair securement training when applicable
- training to perform all essential functions including emergency evacuations
- training on trailer towing ( if applicable)

These are minimum requirements. Proper documentation of completion of these requirements must be kept on file in the transportation department. If the operator works for multiple school districts, each school district is required to maintain a current driver qualification file. The district may have additional requirements.

### **Re-certification training**

CDE requires the operator to complete the following prior to authorization to drive students.

- successfully pass the CDE Type A Multifunction/Small Vehicle written test annually
- complete the STU-17 (medical form)
- have an approved MVR annually

### **Pre-Trip and Post-Trip**

Training shall be provided concerning pre-trip and post-trip procedures for the type of vehicle to be operated. The district procedures for reporting defects should be part of the pre-trip training. The operator of any school transportation vehicle shall perform and document a daily pre-trip and post-trip inspection prior to a vehicle being placed in service. The post-trip shall be completed at the end of daily operation of each vehicle.

### **Safety Restraints and Safety Belt Use**

The greatest lifesaving and injury reducing safety device drivers have on the bus for their own protection is the safety belt. However, if you don't use it, not only are you exposing yourself, your passengers and other motorists to danger, but you are



violating the law. Not only are you required to wear your seat belt per 4204-R-14.01 and 14.02 all passengers in the vehicle if it is under 10,000 GVWR must use their seat belts as well. As the driver, it is your responsibility to ensure that all of your passengers are secured in their seat belts prior to placing the vehicle in motion.

**1 CCR 301-26 COLORADO RULES FOR THE OPERATION, MAINTENANCE AND INSPECTION OF SCHOOL TRANSPORTATION VEHICLES (Excerpts pertaining to Small Vehicle Operations)**

**4204-R-1.00 Statement of Basis and Purpose**

- 1.01 *Colorado law provides for the State Board of Education to adopt and enforce regulations governing the safe operation of school buses used for the transportation of students pursuant to Sections 22-51-108 and 42-4-1904 C.R.S.*
- 1.02 *The purpose of these rules is to adopt and enforce regulations governing the reasonable and adequate standards of safety for the operation, maintenance and inspection of school transportation vehicles that promote the welfare of the students and afford reasonable protection to the public. These rules are designed to align with federal standards, reflect current industry practices, and incorporate recommendations from school district and service provider transportation professionals.*
- 1.03 *The Commissioner, or designee, may provide an exemption to the Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles to the extent the Commissioner finds an exemption to be appropriate.*
- 1.04 *These rules shall become effective July 30, 2016 for all student transportation.*

**4204-R-2.00 Applicability of Rules**

- 2.01 *These rules and regulations apply to the operation, maintenance and inspection of all public school transportation vehicles (School Bus, Multifunction Bus, Motor Coach Bus and Small Vehicle as defined in 1 CCR 301-25-R-5.00) transporting students to and from school, from school to school, and/or to and from school related events in vehicles owned, leased or rented by the district or under agreement with the district.*
- 2.02 *These rules are not intended to include:*
  - 2.02(a) *Private motor vehicles used exclusively to carry members of the*



*owner's household; or*

*2.02(b) Transportation arrangements not authorized by the district including but not limited to; sharing of actual gasoline expense or participation in a carpool; or*

*2.02(c) The operations of vehicles in bona fide emergency situations consistent with policies of the local board of education; or*

*2.02(d) Student transportation under public transportation programs subject to the Code of Federal Regulations 49 CFR 390 to 399.*

*2.03 These rules shall not preclude a school district or service provider from establishing a more rigid standard or policy when deemed necessary by the local board of education or service provider.*

#### **4204-R-5.00 School Transportation Vehicle Operator Requirements**

*5.03 School transportation vehicle operators, other than route operators, driving vehicles with the capacity of 15 or fewer passengers (counting the driver), including Type A Multifunction Bus and Small Vehicle, shall meet or exceed the following requirements:*

*5.03(a) The operator shall possess a valid driver's license.*

*5.03(b) The operator shall be a minimum of 18 years of age.*

*5.03(c) The district or service provider shall obtain a motor vehicle record of each operator prior to transporting students and annually thereafter.*

*5.03(d) The operator shall be given and/or have access to the CDE Type A Multifunction Bus /Small Vehicle Operator Guide prior to transporting students.*

*5.03(e) The operator shall successfully pass a Type A CDE Multifunction Bus/Small Vehicle Operator written test for the current school year prior to transporting students and annually thereafter.*

*5.03(f) The operator shall annually complete the CDE Multifunction/Small Vehicle Operators Medical Information Form (STU-17). Any yes annotations shall require a doctor's release.*



- 5.03(g) *The operator shall receive pre-service training on the type of vehicle(s) to be driven, the type of duties they may be required to perform and in student confidentiality requirements prior to transporting students.*
- 5.03(h) *The operator shall be given and/or have access to first aid information, including cardiopulmonary resuscitation and universal precautions.*
- 5.03(i) *The operator shall successfully pass a driving performance test including a pre-trip inspection prior to transporting students. This test shall be conducted in a vehicle, which is similar in type and size to the vehicle the applicant is assigned to operate. Districts have the option to re-test in subsequent years at their discretion.*
- 5.03(j) *Prior to driving a school transportation vehicle pursuant to 1 CCR 301-26-R-12.11, operators shall receive training on towing a trailer.*
- 5.04 *School transportation paraprofessional is a person assigned to assist a school transportation vehicle operator control behavior of students in the bus and/or ensure the safety of students getting on and off the school transportation vehicle.*
  - 5.04(a) *The school transportation paraprofessional shall receive pre-service training for the type of duties they may be required to perform prior to assisting with transporting students.*
- 5.05 *School transportation vehicle operators and school transportation paraprofessionals are required to be able to perform all essential functions including emergency evacuations when transporting students as determined by the school district or service provider job qualification standards.*
  - 5.05(a) *The employing school district or service provider has the authority to require at any time a medical evaluation of a school transportation vehicle operator or school transportation paraprofessional for any condition that could impair the employee's ability to operate a vehicle safely, assist student(s) as required by their position, and/or perform other required job duties, and may take appropriate action on the outcome of such evaluation.*



- 5.05(b) *School transportation vehicle operators and school transportation paraprofessionals that have medical conditions which result in temporary loss of performance abilities shall provide return to work documentation from their physician, and any other requirements per district policy to the employing school district/service provide prior to returning to their assigned duties.*

#### **4204-R-8.00 Pre-trip/Post-trip Vehicle Inspections**

- 8.01 *Each school transportation vehicle shall have a daily pre-trip and post-trip inspection performed and documented by the school transportation vehicle operator or a district or service provider authorized transportation employee. A daily pre-trip inspection shall be completed prior to a vehicle being placed in service. A daily post-trip inspection shall be completed at the end of daily operation of each vehicle.*
- 8.02 *The pre-trip and post-trip inspection requirements for school transportation vehicles, other than small vehicles, shall include at a minimum all items listed on the CDE School Transportation Vehicle (School Bus/Multifunction Bus/Motor Coach Bus) - Pre-Trip and Post Trip Requirements Form (STU-9).*
- 8.03 *The pre-trip and post-trip inspection requirements for school transportation small vehicles shall include at a minimum all items listed on the CDE School Transportation Vehicle (Small Vehicle) - Pre-Trip and Post Trip Requirements Form (STU-8).*
- 8.04 *School districts and service providers shall have a procedure in place to verify that students are not left on an unattended school transportation vehicle.*

#### **4204-R-11.00 Maintenance and Repair (Excerpts)**

- 11.04 *Any identified damage, defect or deficiency of a school transportation vehicle must be reported to the school district or service provider which:*
- 11.04(a) *Could affect the safety of operation of the school transportation vehicle, or*
- 11.04(b) *Could result in a mechanical breakdown of the school transportation vehicle, or*
- 11.04(c) *Results in noncompliance with Colorado Minimum Standards Governing School Transportation Vehicles (1 CCR 301-25) and/or manufacturer's specifications.*



*11.05 Documentation for reported defects must include name of reporting party, the date and time report was documentation of all of the following:*

- 11.05(a) The name of the school district or service provider.*
- 11.05(b) Date and time the report was submitted.*
- 11.05(c) All damage, defects or deficiencies of the school transportation vehicle.*
- 11.05(d) The name of the individual who prepared the report.*

**4204-R-14.00 Safety Restraints**

- 14.01 A school transportation vehicle operator shall have the safety belt fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.*
- 14.02 All passengers in a school transportation vehicle under 10,000 lbs. GVWR shall have their safety belts fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.*

**4204-R-15.00 Transportation of Miscellaneous Items**

- 15.01 A school transportation vehicle operator shall make a reasonable and prudent determination that all carry-on items are properly handled in order to minimize the danger to all others.*
- 15.02 All baggage, articles, equipment or medical supplies not held by individual passengers shall be secured in a manner which assures unrestricted access to all exits by occupants, does not restrict the driver's ability to operate the bus and protects all occupants against injury resulting from falling or displacement of any baggage, article or equipment. Oxygen cylinders secured to a wheelchair shall be considered to be in compliance with this subsection, provided they do not impede access to any exit.*
- 15.03 All chemicals and cleaning supplies carried on a school transportation vehicle must meet the following precautions:*
  - 15.03(a) Container is non-breakable.*
  - 15.03(b) Container is labeled with contents.*



- 15.03(c) *Pressurized aerosols are prohibited.*
- 15.03(d) *Container is secured in a bracket, or in a closed compartment in the driver's area or a compartment on the exterior of the bus.*
- 15.03(e) *Containers and quantities of products are kept to a reasonable size.*

15.04 *Interior-decorations shall not be located within the driver's area (which includes the space in front of the front barriers including the step-well, dash, walls and ceiling, the windshield, the entry door, the driver's side window, and all windows in front of the front barrier), the first two passenger windows on both sides of the vehicle and all windows on the rear of the vehicle. Other decorations within the passenger compartment shall not:*

- 15.04(a) *Cover any required lettering.*
- 15.04(b) *Impede the aisle or any emergency exit.*
- 15.04(c) *Hang from the walls and/or ceiling.*

**4204-R-16.00 Maximum Driving Time for School Transportation Vehicle Operators**

16.01 *The school transportation vehicle operator, including small vehicle operators, shall not drive nor shall the school district or service provider permit or require an operator to drive:*

- 16.01(a) *In excess of 10 hours or after being on-duty 14 hours until completing 10 hours off-duty. This would include on-duty time for all employers. Ten hours off-duty may be consecutive or accumulated in two or more periods of off-duty time with one period having a minimum of 6 consecutive hour's off-duty.*
- 16.01(b) *After being on-duty for more than 70 hours in any seven consecutive days.*

16.02 *The school district or service provider may comply with part 395 of the Federal Motor Carrier Safety Regulations (FMCSR) in place of this section.*

16.03 *Definitions:*

- 16.03(a) *Adverse driving conditions - In case of emergency, an operator may complete the trip without being in violation if such trip reasonably could have been completed absent the emergency.*



16.03(b) *Day - Means any 24-consecutive hour period beginning at the time designated by the school district or service provider.*

16.03(c) *On-duty time - Includes all time worked for any and all employers, including all driving and non-driving duties.*

16.03(d) *Off-duty time - School transportation vehicle operators may consider waiting time at special events, meal stops and school related events as off-duty if the following criteria are met: (Compensated waiting time does not necessitate on-duty time.)*

16.03(d) (1) *The operator shall be relieved of all duty and responsibility for the care and custody of the vehicle, its accessories and students, and*

16.03(d) (2) *The operator shall be at liberty to pursue activities of his/her choice including leaving the premises on which the bus is located.*

16.04 *All school transportation vehicle operators shall document that they are in compliance with this section, hours of service.*

16.04(a) *An operator's daily log, or equivalent, shall be completed for the trip in the operator's own handwriting, when the trip requires a scheduled or unscheduled overnight stay away from the work reporting location.*

#### **4204-R-18.00      *Emergency Evacuation Drills***

18.01 *Emergency evacuation drills shall be conducted with students by all school transportation vehicle operators and school transportation paraprofessionals at least twice during each school year, following the procedures in the Colorado Department of Education School Bus/Multifunction Bus/Motor Coach Bus Operator Manual.*

18.01(a) *One drill shall be conducted in the fall and the second drill conducted in the spring.*

18.01(b) *Substitute and Multifunction operators of 16 or greater capacity counting the driver) vehicles shall be trained how to conduct the emergency evacuation drills.*

18.02 *Students on school related events shall receive emergency evacuation instruction prior to departure.*



*18.03 School district and service providers shall maintain records documenting that the required evacuation drills were conducted and/or evacuation instruction was given.*

***Federal Motor Carrier Safety Administration - Mobile Phone Restriction Rules for Commercial Motor Vehicle Drivers -***

***Part 392 - DRIVING OF COMMERCIAL MOTOR VEHICLES***

*§ 392.82: Using a hand-held mobile telephone.*

*(a)(1) No driver shall use a hand-held mobile telephone while driving a CMV.*

*(2) No motor carrier shall allow or require its drivers to use a hand-held mobile telephone while driving a CMV.*

*(b) Definitions. For the purpose of this section only, driving means operating a commercial motor vehicle on a highway, including while temporarily stationary because of traffic, a traffic control device, or other momentary delays. Driving does not include operating a commercial motor vehicle when the driver has moved the vehicle to the side of, or off, a highway and has halted in a location where the vehicle can safely remain stationary.*

*(c) Emergency exception. Using a hand-held mobile telephone is permissible by drivers of a CMV when necessary to communicate with law enforcement officials or other emergency services.*



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## Unit 2 - District Responsibilities - Regulations

### District Requirements

Below are excerpts from 1 CCR 301-26, Colorado Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles.

**4.01** *School districts and service providers shall outline job responsibilities and develop job qualification standards for each school transportation vehicle operator and school transportation paraprofessionals, consistent with federal and state regulations. A copy of these requirements shall be provided to each school transportation vehicle operator and paraprofessional upon employment.*

**4.02** *School districts and service providers shall maintain separate files for each school transportation vehicle operator, school transportation paraprofessional, and school transportation annual inspector with written documentation evidencing all listed requirements indicated in Rule 5.00, Rule 6.00 and Rule 7.00, as applicable. Training documentation shall include the trainer name, date of the training, description of the training, duration of each topic covered and the signature of all attendees.*

**4.02(a)** *If a school transportation vehicle operator, paraprofessional or annual inspector works for more than one school district, each district shall maintain a file with documentation in accordance with this rule.*

**4.04** *School districts and service providers shall not permit a school transportation vehicle operator to transport students, while the operator's ability or alertness is so impaired, through fatigue, illness or any other cause, as to make it unsafe for the operator to transport students.*

**4.05** *School districts and service providers shall have written emergency procedures and/or contingency plans to be followed in the event of a crash, unexpected school closing, unforeseen route change or relocation of a student stop in an emergency.*

**4.06** *School district and service providers shall ensure that documentation outlining transportation related services and requirements, including required use of Child Safety Restraint Systems and medical and behavioral information as it relates to*



*student transportation, is available to applicable school transportation vehicle operators and paraprofessionals prior to providing transportation services.*

**8.04** *School districts and service providers shall have a procedure in place to verify that students are not left on an unattended school transportation vehicle.*

**11.01** *School districts and service providers must ensure all school transportation vehicles are systematically inspected, maintained and repaired to ensure that school transportation vehicles are in safe and proper operating condition.*

**11.02** *School districts and service providers shall have a system to document preventative maintenance, reported defects and repairs made to school transportation vehicles.*

**11.03** *School districts and service providers shall maintain separate files for each school transportation vehicle with documentation of all annual inspections, all preventative maintenance and all reported damage, defects or deficiencies and the corresponding repair and maintenance performed.*

**11.06** *Following a reported damage, defect or deficiency of a school transportation vehicle, school districts and service providers or a representative agent must repair the reported damage, defects or deficiencies, or document that no repair is necessary, ensuring that the vehicle is in safe and proper operating condition prior to transporting students.*

**11.07** *School districts and service providers shall not transport students in a school transportation vehicle which is not in safe and proper operating condition. A school transportation vehicle shall be designated as “out-of-service” by a school district or service provider, a school transportation annual inspector or the CDE School Transportation Unit.*

**11.07(a)** *Exemption - Any school transportation vehicle discovered to be in an unsafe condition while being operated on the highway, roadway or private road may be continued in operation only to the nearest place where repairs can safely be affected. Such operation shall be conducted only if it is less hazardous to the public than to permit the vehicle to remain on the highway, roadway or private road.*



**13.01** *Only district personnel, students enrolled in a district, law enforcement officials or individuals that have received prior authorization from the school district or service provider may be passengers on any school transportation vehicle.*

**13.02** *The number of passengers transported on any school transportation vehicle shall not exceed the maximum seating capacity of the vehicle. Small vehicle capacity shall not exceed the number of safety belts as designed by the vehicle manufacturer.*

**13.03** *Passengers shall not be permitted to stand in any school transportation vehicle while the vehicle is in motion. This does not preclude authorized persons (such as school transportation paraprofessionals) from completing their duties as required.*

**13.04** *School districts and service providers shall consider the size of the passengers when determining the number of passengers that can safely occupy a school transportation vehicle seat.*

**18.02** *Students on school related events shall receive emergency evacuation instruction prior to departure.*

**18.03** *School district and service provides shall maintain records documenting that the required evacuation drills were conducted and/or evacuation instruction was given.*

***If a district is towing a trailer behind a small vehicle, the operator should receive training on the trailer pre-trip/post-trip and how to properly operate the vehicle while towing a trailer.***



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## Unit 3 - Vehicle Inspections

Vehicle Inspection is a term given to the process of a recommended, systematized sequential procedure for inspecting a vehicle's condition to transport passengers.

During the inspection, drivers try to locate possible mechanical, electrical and/or other conditions by feeling, touching, looking, listening and/or smelling that may cause an interruption of timely service or a collision.

Even though many school districts perform inspections somewhat differently, the procedures are basically the same. Performing the inspection is an implied driver duty.

The transportation of pupils is a sensitive job requiring concern for safety and liability.

**Never attempt to drive a defective school bus.**

### **Why Should I Perform Inspections?**

#### **Model Traffic Code for Colorado**

##### **202. Unsafe vehicles - penalty - identification plates.**

*(1) It is unlawful for any person to drive or move or for the owner to cause or knowingly permit to be driven or moved on any highway any vehicle or combination of vehicles which is in such unsafe condition as to endanger any person, or which does not contain those parts or is not at all times equipped with such lamps and other equipment in proper condition and adjustment as required in this section and sections 204 to 231 and part 3 of this Code, or which is equipped in any manner in violation of said sections and part 3 or for any person to do any act forbidden or fail to perform any act required under said sections and part 3.*

*(2) The provisions of this section and sections 204 to 231 and part 3 of this Code with respect to equipment on vehicles shall not apply to implements of husbandry or farm tractors, except as made applicable in said sections and part 3.*

*(3) Nothing in this Code shall be construed to prohibit the use of additional parts and accessories on any vehicle, consistent with the provisions of this Code.*

*(4) Any person who violates any provision of this section commits a class A traffic infraction.*



#### **4204-R-8.00 Pre-trip/Post-trip Vehicle Inspections**

- 8.01 *Each school transportation vehicle shall have a daily pre-trip and post-trip inspection performed and documented by the school transportation vehicle operator or a district or service provider authorized transportation employee. A daily pre-trip inspection shall be completed prior to a vehicle being placed in service. A daily post-trip inspection shall be completed at the end of daily operation of each vehicle.*
- 8.02 *The pre-trip and post-trip inspection requirements for school transportation vehicles, other than small vehicles, shall include at a minimum all items listed on the CDE School Transportation Vehicle (School Bus/Multifunction Bus/Motor Coach Bus) - Pre-Trip and Post Trip Requirements Form (STU-9 - see addendum).*
- 8.03 *The pre-trip and post-trip inspection requirements for school transportation small vehicles shall include at a minimum all items listed on the CDE School Transportation Vehicle (Small Vehicle) - Pre-Trip and Post Trip Requirements Form (STU-8 - see addendum).*
- 8.04 *School districts and service providers shall have a procedure in place to verify that students are not left on an unattended school transportation vehicle.*

#### **Safety of Passengers**

Safety is the most important reason you inspect your vehicle. Good inspections provide safety for you and for other road users. A vehicle defect found during an inspection could save you problems later. You could have a breakdown on the road that will cost time and dollars, or even worse, cause a crash because of the defect. School officials and parents trust us with the safety of their children while they are in our care. If you did not perform your pre-trip and a child was injured due to a malfunction of your vehicle that you may have discovered during the course of a pre-trip, how would you possibly explain to that parent why you did not perform your duties as required?

#### **Prevent Breakdowns**

A vehicle inspection can, if done properly prevent breakdowns. You are trying to prevent a breakdown by maintaining your bus in its best possible condition. By using a prepared checklist many items can be checked to determine if the bus is safe and ready to drive.

Preventing breakdowns can eliminate frustrations for you. For instance, by checking the fan belt, its potential to break while on route can be reduced. This will eliminate the frustration of having to wait for repairs or a bus replacement during the bus run.

Every breakdown regardless of the severity causes you and your students to be placed in potentially unsafe circumstances. Anytime a vehicle is along the edge of a roadway it creates a hazard for other motorists, and a school bus on the shoulder will have more than the usual amount of people stopping asking if you need assistance, thus creating an even bigger hazard.

When a school vehicle has a breakdown it causes great anxiety to some of our younger students, and if you have any medically fragile students it could be life threatening. For instance, consider the student that is a severe diabetic and needs medication at particular times and you are delayed for a substantial amount of time due to a breakdown that could have been prevented by doing a thorough pre-trip.

### **Reduce Delays**

Repairing worn and broken parts not only eliminates frustrations for you, but it also eliminates delays for your passengers. When students do not arrive on time to their destination, problems are caused for the students, teachers and parents.

When students do not arrive on time the phones in the transportation department start to ring “off the walls”! Many families depend on their students to arrive within a specific time frame due to work schedules, and after school events. In the morning when a bus runs late, it could make parents late for work which causes them unnecessary stress and conflict, or worse yet, expose students to potential threats from wildlife, environment and potential predators.

### **Prolong Vehicle Life**

The daily inspection will help keep the bus in good working order. This, in turn, will prolong the life of the bus and reduce transportation costs.

***You are responsible for what happens on your bus run. Vehicle inspection helps make for a safer trip.***

## **Types of Vehicle Inspections**

- Pre-Trip
- Between-Trip
- Post-Trip
- Preventative Maintenance
- Annual Inspections
- School Transportation Assistance Review (STAR) - Vehicle Inspection

## Pre-Trip

One of the most important inspections is the one that you perform as a school bus driver. During this inspection you will check every component listed on your pre-trip inspection form to determine if your bus is ready for operation.

You have already reviewed the reason for conducting the inspection and found that they are both legal and required by local school districts.

As you become aware of defects you must report them immediately. You have a responsibility to drive a safe bus. Mechanics cannot make necessary repairs, nor do they know something is in need of repair, unless they receive appropriate feedback from you.

Pre-trip inspection forms must be kept by your district for at least six months. The inspection form must be filled out completely with great care. Each inspection form should have a full driver signature.

You may want to consider keeping a copy of your pre-trip inspections to verify that you have completed the pre-trip inspection in the event it is ever questioned by supervision.

Your trainer will go over the specific items of the pre-trip inspection, what should be checked, how it is checked and how to determine if it is defective.

## Between- Trip Inspections

After you complete a bus run and have some layover time you should perform a Between Trip Inspection. There are a number of items that should be checked. Check for pupils remaining in the bus. This is accomplished by walking from the front to the back of the bus, and checking in and around every bus seat. Leaving even one child unattended on a school bus is a serious concern for families and schools. The possibility of leaving a child on the bus after a completed bus route is not acceptable and has potentially serious safety ramifications. This is a preventable problem that can be addressed with an effective policy that requires drivers to check their bus before they exit it at the end of their route. **See 1 CCR 301.26, 4204-R-6.22**

- Check for adequate fuel
- Check for vandalism of seats, walls, windows, etc., that may have occurred during the trip
- Check for anything that should not be on the bus, such as a bag or package that might look suspicious

- Check for materials that pupils may have left behind
- Pick up trash on the floor, sweep if needed
- Secure bus if not going out on a run immediately

### **Post Trip Inspections**

When you complete your final run for the day a number of things should be checked to secure the vehicle and get ready for the next day.

In addition to items listed on the STU-8 and STU-9 the Post Trip Inspections may include:

- Check for pupils remaining in the bus. This is accomplished by walking from the front to the back of the bus, and checking in and around every bus seat.
- Refuel bus. Record mileage and amount of fuel taken in
- Check for needed supplies
- Clean bus interior. The heaviest amounts of dirt are brought on your bus in the morning when students have been waiting outside to board. If you sweep your vehicle after your morning run, in the afternoon all you have to do is pick up any trash and do a quick sweep and your bus will look neat and clean all day long. Studies show that school buses that are kept clean demonstrates to students that the driver takes pride in caring for the vehicle and in return students will take better care of it as well. It also shows that buses that are well kept, drivers have less discipline issues.
- Park bus in designated location
- Secure the vehicle
- Close windows and door
- Remove key (follow your district procedures)
- Remove other equipment, if required
- Turn in items left by pupils
- Turn in all necessary paperwork and records

### **Preventative Maintenance**

#### **4204-R-11.00      *Maintenance and Repair***

**11.01      *School districts and service providers must ensure all school transportation vehicles are systematically inspected, maintained and***



*repaired to ensure that school transportation vehicles are in safe and proper operating condition.*

11.02 *School districts and service providers shall have a system to document preventative maintenance, reported defects and repairs made to school transportation vehicles.*

11.03 *School districts and service providers shall maintain separate files for each school transportation vehicle with documentation of all annual inspections, all preventative maintenance and all reported damage, defects or deficiencies and the corresponding repair and maintenance performed.*

11.04 *Any identified damage, defect or deficiency of a school transportation vehicle must be reported to the school district or service provider which:*

11.04(a) *Could affect the safety of operation of the school transportation vehicle, or*

11.04(b) *Could result in a mechanical breakdown of the school transportation vehicle, or*

11.04(c) *Results in noncompliance with Colorado Minimum Standards Governing School Transportation Vehicles (1 CCR 301-25) and/or manufacturer's specifications.*

11.05 *Documentation for reported defects must include all of the following:*

11.05(a) *The name of the school district or service provider.*

11.05(b) *Date and time the report was submitted.*

11.05(c) *All damage, defects or deficiencies of the school transportation vehicle.*

11.05(d) *The name of the individual who prepared the report.*

11.06 *Following a reported damage, defect or deficiency of a school transportation vehicle, school districts and service providers or a representative agent must repair the reported damage, defects or*



*deficiencies, or document that no repair is necessary, ensuring that the vehicle is in safe and proper operating condition prior to transporting students.*

**11.07** *School districts and service providers shall not transport students in a school transportation vehicle which is not in safe and proper operating condition. A school transportation vehicle shall be designated as “out-of-service” by a school district or service provider, a school transportation annual inspector or the CDE School Transportation Unit.*

**11.07(a)** *Exemption - Any school transportation vehicle discovered to be in an unsafe condition while being operated on the highway, roadway or private road may be continued in operation only to the nearest place where repairs can safely be affected. Such operation shall be conducted only if it is less hazardous to the public than to permit the vehicle to remain on the highway, roadway or private road.*

**11.08** *Following a school transportation vehicle being placed “out-of-service”, a school district, service provider or a representative agent must make required repairs, ensuring that the vehicle is in safe and proper operating condition prior to transporting students. In the event of being placed “out-of-service” during an annual inspection, the school transportation vehicle must successfully pass a CDE annual inspection prior to transporting students.*

**11.09** *The preventative maintenance inspection on air drum brake systems shall include, at a minimum, that the brake rod travel has been measured and documented. The applied pressure method shall be used.*

**11.09(a)** *The inspection interval shall not exceed 4,000 miles for buses equipped with a manual slack adjuster air brake system.*

**11.09(b)** *The inspection interval shall not exceed 6,000 miles for buses equipped with an automatic slack adjuster air brake system.*



- 11.10 *The preventive maintenance inspection interval on air disc brake systems shall not exceed 6,000 miles and shall include, at a minimum; inspection and documentation of:*
- 11.10(a) *Inspect the pad thickness by checking the mechanical wear indicators.*
  - 11.10(b) *Inspect the visible part of the rotors for cracks, excessive wear, damage, etc.*
  - 11.10(c) *Inspect running clearance. If the caliper has no movement or appears to move greater than the distances indicated by the manufacturer, then a full wheel removal inspection will be necessary.*
- 11.11 *The preventive maintenance inspection interval for hydraulic brake systems shall not exceed 6,000 miles and shall include, at a minimum, inspection and documentation of:*
- 11.11(a) *Proper parking brake operation.*
  - 11.11(b) *Proper brake fluid level and clarity.*
  - 11.11(c) *Adequate pedal reserve.*
  - 11.11(d) *Proper hydraulic/vacuum assist operation.*
  - 11.11(e) *Visual inspection for brake fluid leakage.*
- 11.12 *If brake adjustment or repair is needed, the work shall be completed by or supervised by a DOT or equivalent qualified brake inspector meeting the requirements of 49 CFR 396.25.*

## **School Transportation Assistance Review (STAR) Vehicle Inspection**

Approximately every 4 years the CDE School Transportation Unit will be performing an on-site review of all district vehicle inspections and garage operations. During that review CDE will randomly do a visual inspection of school transportation vehicles to determine any potential non-compliant concerns with the vehicles and required documentation. It will also review and any non-compliant concerns with annual inspectors and inspections performed for the district either by in-house technicians or outside CDE approved inspection sites. During the visual inspection if CDE determines that a vehicle(s) has defects that are listed in the CDE Out of Service Criteria or other

defects determined to be potentially dangerous, the vehicle will be placed Out of Service until all repairs have been completed.

Some of the most common items found during STAR reviews;

- First Aid Kit - Missing and/or missing items
- Seats - padding broken down, seat bottoms not secured
- Clean Up Kit - Missing and/or missing items
- Instructional stickers by emergency exits peeling or missing
- Lack of documentation
- Unsecured items in the passenger compartment
- Cleaning supplies, unmarked, unsecured (not permitted to hang on the inside of wastebasket)
- Electrical Systems/Lights - headlights, tail lights, inoperative or with broken lenses
- Emergency exits - hard to open due to lack of inspection, buzzers not working

**ALL** of the items listed above should be discovered by the school transportation vehicle operator performing a thorough pre-trip, between trip and/or post trip inspection.



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## Unit 4 - Vehicle Operations

Driving a school transportation vehicle takes a great deal of skill and understanding of procedures relating to vehicle operations and laws, or “Rules of the Road” that we must follow. There is an extremely high expectation from the public that we should be nothing short of the very best drivers on the road, because we are transporting members of their families. It is important to follow ALL traffic laws not only when you are driving a school transportation vehicle, but in your private vehicle as well. How you drive your private vehicle, is more than likely how you will drive your school vehicle.

### **A Defensive Driver Has These Five Characteristics!**

**Knowledge...** knowing traffic laws, recognizes hazards, avoid collisions, and act correctly, in time.

**Alertness...** aware of your own physical, mental condition that could affect your driving skills.

**Foresight...** ability to anticipate & prepare for hazards, sizing up traffic situations as far ahead as possible, changes in the driving situation could be a threat to your safety.

**Judgment...** looking for alertness in any traffic situation, passing when safe, not making risky maneuvers, driver is in control of their behavior.

**Skill...** behind the wheel, ability to operate vehicle properly & safely. Being able to make turns, change gears, and pass safely & legally

### **5 Keys to Driving Safely**

Aim High in Steering - Look ahead 12 to 15 seconds.

Get the Big Picture - See what's going on around you.

Keep your eyes moving - Mirrors, mirrors, mirrors.

Leave yourself an out - Plan ahead, cushion.

Make sure they see you - Eye contact, horn, touch air brakes.

### **Driving Fundamentals**

#### **Before Driving...**

Adjust seat and apply seat belt

Adjust all mirrors

Make sure you know the location and can reach to operate all controls



### **Before Starting Engine...**

- Make sure the park brake is set
- Transmission is in park

### **Vans and Suburban's...**

- Warm up no faster than 1000 rpm's
- Check all gauges for operation (oil, volts, temperature)

### **Automatic Transmissions...**

- Know the shift pattern
- Depress the brake
- Move selector to proper gear
- Release the parking brake
- As vehicle speed increases, vehicle will shift to higher gear

***Allowing a vehicle to coast in neutral is against state law and it can also cause transmission damage***

### **Steering and Turning...**

- Make all maneuvers smooth and correctly
- Hold the steering wheel with a firm grip using both hands at all times.
- Hand positions recommended are 10-2, 9-3, 8-4 w/ air bag

### **Mirrors...**

- Get the "Big Picture", keep your eyes moving
- Looking—Ahead, Left, Right and to the Rear
- Mirror checks every, 8 to 10 sec. Or more often in unique situations

### **Lane Use and Position on Roadway...**

- Center your vehicle in the proper lane
- The shoulder of the road and parking lanes are only for stopping and parking
- If traveling in 2 or more lanes in same direction, stay in the far right lane unless passing
- Drive a safe distance behind other traffic - follow the Basic Speed Law
- If in doubt, always yield right-of-way. Never take it!

### **Changing Lanes...**

- Check traffic approaching from the rear of your vehicle
- Give advanced notice of intention to change lanes by engaging the turn signal
- Move to passing lane, when passing is complete engage turn signal to move back into the right lane
- Cancel your turn signal
- Lane changes should be smooth

### **Left and Right Turns...**

- Check traffic on all sides of your vehicle
- Signal 100' prior to turning at lower speeds in city or town areas
- Signal 200' prior to turning at 40 mph or higher speeds



### **Before Turns...**

- Downshift and/or brake before entering turns
- Position your vehicle in proper lane giving proper notice to surrounding traffic
- Wait behind stop lines, signs, crosswalks or sidewalks
- When clear make turn in one complete maneuver

### **Check Right-of-Way for...**

- Traffic, signals, signs, pedestrians, vehicles
- Never shift or brake in a turn
- Enter proper lane
- Cancel your signal

### **Turning Around and Backing Maneuvers...**

- Signal well in advance by tapping brakes, engaging turn signals, etc.
- Engage Hazard Warning Lights
- Tap your horn
- Check all mirrors for traffic and obstacles (look over shoulder to clear blind spots)
- Let traffic pass - before backing
- Use caution - back slowly
- NO U-TURNS on Highways or Interstates (if exit is missed, go to next exit)

### **Curves...**

- Approaching a curve, check traffic in all directions
- Before entering curve, reduce speed, brake if necessary,
- Keep your vehicle in your lane of travel
- Continue checking traffic in all directions

### **Expressways...**

- Before entering, check traffic
- Use proper turn signals
- Merge smoothly into proper lane
- On expressway - maintain proper lane, spacing and speed
- Check mirrors constantly monitoring the traffic in front of, beside and behind you.
- Exit expressway- check traffic
- Use proper turn signals
- Do not decelerate until you have entered the exit lane

### **Starting - Upgrade...**

- Check traffic all directions
- Accelerating slightly, not to roll backward
- Allow distance between you and the vehicle located in front of you
- Starting - Downgrade...
- Check traffic and release accelerator - select a safe speed
- Downshift (to reduce speed), braking used if additional slowing is needed prior to descending
- Once a safe speed is obtained, apply brake enough to feel slow down
- Reduce speed 5mph under safe speed, release brakes, this application should be about 3 to 4 seconds



Once speed increases to the safe speed repeat the procedure

### **Intersections...**

Observe traffic - at least 3 times before approaching intersection

Monitor any fast approaching traffic

Left or right turn signals left on (by other drivers, may not turn)

Traffic not stopping for stop signs or traffic signals

### **Stopping at intersections...**

Always yield right-of-way

Stop behind- stop lines, signs, crosswalks first, when clear, pull forward of obstruction, then stop a second time

Re-check intersection

Proceed

Check mirrors

Cover brake-prepare to brake if needed

### **Distance...**

Always drive a safe distance behind traffic

2 second following rule

Add 10 seconds to following distance in adverse weather conditions

### **Changing Lanes...**

Check traffic in front of, beside and behind your vehicle

Looking for traffic entering new lane ahead or adjacent

Engage turn signal (3 flashes)

Proceed then cancel turn signal

### **Passing...**

Check traffic signs, road markings to determine if passing is permitted

Check oncoming traffic, beside and behind your vehicle that may also be preparing to pass

Engage turn signal

When clear move into the passing lane

When there is ample room between your vehicle and vehicle you just passed

Engage turn signal and move back to the right lane approx. 1 to 1 1/2 vehicle length ahead of passed vehicle

Cancel turn signal

### **Stopping...**

Weight and road conditions affect stopping distance, if possible check braking capabilities.

Apply brakes smoothly easing off the pedal just prior to achieving a complete stop.

When traveling behind other vehicles, make sure you allow ample distance between you and the vehicle ahead of you. You need to be able to see their back tires touching the ground

### **Parking...**

Always leave yourself plenty of room to move out of parking area

Turn wheels toward the curb

Shift to park  
Set park brake

### **Rear Overhang and Tail Swing...**

Unlike a passenger car, buses have additional room behind the rear wheels to the outside of the bumper. This additional length requires closer observation when making turns as the tail swing can extend three to five feet over the curb. It is especially important when backing into a parking space that you stop so the overhang isn't going to hit anything, not until the rear tires hit the curb. At that point, it may be too late and you have hit the tree next to the curb.

### **Road Rage**

The main characterized of road rage is short periods of irrationality. When this occurs, driver's experience "exaggerated anger", irritation, aggravation and impatience! These emotions lead to: Impaired judgment, saying or doing things they may later regret, engaging in risky driving behaviors, attempting to punish or retaliate against the offending driver.

### **How to Avoid Road Rage**

- Avoid eye contact – aggressive motorist may feel challenged if you stare them down.
- Don't cut in front of motorists no matter how big of hurry you're in.
- Allow fellow motorist to "cut in" during a traffic jam.
- In rural areas, pull over to allow motorists to pass if several cars pile up behind you.
- Don't drive in the fast lane - that's fine for your fellow motorist, but not for those of us who may be traveling slower
- Don't allow your students to aggravate fellow drivers, such as by making obscene gestures or comments.
- Don't tailgate - always maintain a safe distance from the vehicle in front of you.
- Use your horn sparingly - if you must get someone's attention in a non-emergency situation, tap your horn lightly.
- Give the other driver the benefit of the doubt - assume that their mistakes are not intentional or personal.



## **1 CCR 301-26 COLORADO RULES FOR THE OPERATION, MAINTENANCE AND INSPECTION OF SCHOOL TRANSPORTATION VEHICLES (Excerpts)**

### **4204-R-12.00 Operation of a School Transportation Vehicle**

- 12.01 *A school transportation vehicle shall not be operated in a manner which is unsafe or likely to cause an accident or damage of the vehicle.*
- 12.02 *A school transportation vehicle shall not be placed in motion on a roadway, highway or private road with the passenger entry door/service door open.*
- 12.03 *A school transportation vehicle's headlights or daytime running headlights shall be activated while the vehicle is in operation.*
- 12.04 *A school transportation vehicle shall not be fueled while students are on board, except in instances when unloading the students would present a greater hazard or peril to their safety.*
- 12.05 *Use of tobacco products as defined in Section 18-13-121(5), C.R.S., use or possession of controlled substances, use or possession of alcohol and use or possession of marijuana aboard any school transportation vehicle shall be prohibited at all times.*
- 12.06 *A school transportation vehicle operator shall not consume food unless the vehicle is stopped at a safe location with the park/emergency brake set.*
- 12.07 *When a school transportation vehicle is equipped with a roof mounted strobe lamp, the use of the strobe lamp is permitted only when the vehicle presents a hazard to other motorists, such as loading or unloading students in inclement weather or to enhance visibility of the vehicle when barriers inhibit such visibility.*
- 12.08 *A school transportation vehicle operator may use the strobe, in addition to the four-way hazard lamps, to warn other motorists that the vehicle is not in motion or is being operated at a speed of twenty-five miles per hour or less.*
- 12.09 *The school transportation vehicle operator shall use extreme caution when backing. Before backing on a roadway, highway or private property, the horn or audible warning device shall be sounded and four-way hazard lamps actuated or there shall be a person outside the vehicle giving direction.*
- 12.09(a) *Backing a school transportation vehicle when students are outside of the vehicle at a student stop is prohibited.*



- 12.10 *School transportation vehicles including Type A, B, C and D School Bus, Multifunction Bus and Motor Coach Bus shall not be operated with a trailer or other vehicle attached while students are being transported.*
- 12.11 *School transportation small vehicles, with the capacity of 15 or fewer passengers (counting the driver), may tow trailers while students are being transported to the extent that trailering is a necessary component of a district sponsored program.*

***Per CRS 25-14-103.5. Prohibition against the use of tobacco products and retail marijuana on school property - legislative declaration - education program - special account (Excerpt)***

*(1) The general assembly finds that many of the schools in this state permit the use of tobacco products in and around school property. The general assembly further finds that secondhand smoke generated by such activity and the negative example set and frequently imitated by our school children are detrimental to the health and well-being of such children as well as to school teachers, staff, and visitors. Accordingly, the general assembly finds and declares that it is appropriate to create a safe and healthy school environment by prohibiting the use of tobacco products on all school property.*

*(2) As used in this section, unless the context otherwise requires:*

*(a) "School" means a public nursery school, day care center, child care facility, head start program, kindergarten, or elementary or secondary school through grade twelve.*

*(b) "School property" means all property, whether owned, leased, rented, or otherwise used by a school, including, but not limited to, the following:*

*(I) All interior portions of any building used for instruction, administration, support services, maintenance, and storage and any other structure used by a school; except that such term shall not apply to a building primarily used as a residence;*

*(II) All school grounds surrounding any building specified in subparagraph (I) of this paragraph (b) over which the school is authorized to exercise dominion and control. Such grounds shall include any playground, athletic field, recreation area, and parking area; and*

*(III) All vehicles used by the school for the purpose of transporting students, workers, visitors, or any other persons.*



*(c) "Tobacco product" shall have the same meaning as set forth in section 18-13-121 (5), C.R.S.*

*(d) "Use" means the lighting, chewing, smoking, ingestion, or application of any tobacco product.*

*(3) (a) (I) The board of education of each school district shall adopt appropriate policies and rules that mandate a prohibition against the use of all tobacco products and all retail marijuana or retail marijuana products authorized pursuant to article 43.4 of title 12, C.R.S., on all school property by students, teachers, staff, and visitors and that provide for the enforcement of such policies and rules.*

Notice that this says “use” of tobacco products. Noting that there are many drivers that use tobacco products, it is not prohibited for you to carry them on your person or in your private bag, purse, etc. However, it is prohibited from using tobacco products at any time, not just when students are on board. There are many people that have medical conditions that can be aggravated by tobacco smoke, so if you are going to smoke tobacco make sure you are far enough away from the school transportation vehicle that smoke does not enter the vehicle. Smoking is prohibited on school property.

As a school bus driver, the public holds you at a higher expectation. Please do not wear clothing that promotes the use of tobacco, alcoholic or controlled substances. Follow your districts dress code.

### **1 CCR 301-26 4204-R-14.00      *Safety Restraints***

*14.01 A school transportation vehicle operator shall have the safety belt fastened, worn correctly, and properly adjusted prior to the school transportation vehicle being placed in motion.*

*14.02 Operators and students in a small vehicle (9 or less passengers) shall have their safety belts fastened, worn correctly, and properly adjusted prior to the small vehicle being placed in motion.*

*14.03 Students requiring restraint devices, including safety (lap) belts, shall have support documentation within the students IEP indicating transportation as a related service.*

### **Who and how many can ride on the school bus?**

#### **4204-R-13.00 Authorized Passengers**



- 13.01 *Only district personnel, students enrolled in a district, law enforcement officials or individuals that have received prior authorization from the school district or service provider may be passengers on any school transportation vehicle.*
- 13.02 *The number of passengers transported on any school transportation vehicle shall not exceed the maximum seating capacity of the vehicle. Small vehicle capacity shall not exceed the number of safety belts as designed by the vehicle manufacturer.*
- 13.03 *Passengers shall not be permitted to stand in any school transportation vehicle while the vehicle is in motion. This does not preclude authorized persons (such as school transportation paraprofessionals) from completing their duties as required.*
- 13.04 *School districts and service providers shall consider the size of the passengers when determining the number of passengers that can safely occupy a school transportation vehicle seat.*

This is pretty self-explanatory, but what about the chaperones' 6-month old baby or the drivers' 3-year-old that isn't enrolled in a school sponsored program? They may ride ONLY if they are given authorization. If they are given authorization then you, the school bus driver, will be responsible for the proper securement of that child. Check your district policy.

Per the CDE Annual Inspection/Operation Rules Resource Guide definition of In-Use Capacity - Due to variations in sizes of children of different ages, the number of students that can safely occupy a school bus seat. (NCST)

**Excerpt: \*The National Association of State Directors of Pupil Transportation Services\*** believes all children riding in school buses, or other buses used to transport pupils to and from school or school-related activities, should be properly and safely seated facing forward. In addition, the State Directors Association believes there should be adequate space on the seat for the child to be seated completely within the seating compartment. \*School Bus Seat Capacity Position Paper 1999

National Highway Traffic Safety Association recommends that all passengers be seated entirely within the confines of the school bus seats while the bus is in motion. Federal motor vehicle safety standard No. 222, "School Bus Passenger Seating and Crash Protection" requires that the interior of large buses provide occupant protection so that children are protected without the need to buckle-up. Occupant crash

protection is provided by a protective envelope consisting of strong, closely-spaced seats that have energy-absorbing seat backs.

Persons not sitting or sitting partially outside of the school bus seats will not be afforded the occupant protection provided by the school bus seats.

Manufacturers seating capacity in school buses can vary greatly depending on the vehicle. They normally set the capacity limits based on 3 students per seat. So for 3 students to fit in each seat they would be required to be elementary students that are quite small. Attempting to put 3 secondary or high school students in one seat would make it very uncomfortable for the students and more than likely cause one of them to have their feet in the aisle producing a trip hazard and reducing the use of compartmentalization. If you believe that your bus is overloaded, check with your supervisor to see what can be done to reduce your student count. Also, check your district policy regarding “in-use” capacity.

### **Use of Hazard Warning Lights**

Drivers may, under specific circumstances may use their hazard warning lights to provide an extra margin of safety and also during the course of conducting a student loading and discharging passengers when you are in a school transportation small vehicle.

*Pursuant to Section 42-4-1903(2), C.R.S., school transportation vehicle operators are not required to actuate the alternating flashing red warning signal lamps on a school bus when the student stop is at a location where the local traffic regulatory authority has by prior written designation declared such actuation unnecessary and when discharging or loading passengers who require the assistance of a lift device and no passenger is required to cross the roadway. Further, Type A Multifunction Buses with 15 or fewer passenger capacity (counting the driver) and school transportation small vehicles do not have the functionality to control traffic. In these instances, the school transportation vehicle operator shall stop as far to the right off the roadway as possible to reduce obstruction to traffic, activate the four-way hazard warning lamps a minimum of 200 feet prior to the student stop, continue to display the four-way hazard warning lamps until the process of discharging or loading passengers has been completed, and deactivate the four-way hazard lamps before resuming motion. Students are prohibited from crossing any lanes of traffic to access the student stop or after disembarking.*

## Per the Colorado Commercial Drivers Manual -

Use the four-way emergency flashers for times when you are driving very slowly or are stopped. Warn other drivers in any of the following situations:

**Trouble Ahead...**The size of your vehicle may make it hard for drivers behind you to see hazards ahead. If you see a hazard that will require slowing down, warn the drivers behind by flashing your brake lights.

**Tight Turns...** Most car drivers don't know how slowly you have to go to make a tight turn in a large vehicle. Give drivers behind you warning by braking early and slowing gradually.

**Stopping on the Road...**Truck and bus drivers sometimes stop in the roadway to unload cargo or passengers, or to stop at a railroad crossing. Warn following drivers by flashing your brake lights. Don't stop suddenly.

**Driving Slowly.** Drivers often do not realize how fast they are catching up to a slow vehicle until they are very close. If you must drive slowly, alert following drivers by turning on your emergency flashers if it is legal.

## Basic Speed Law

### *Colorado Model Vehicle Code - 1101. Speed limits.*

*(1) No person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions then existing.*

*(2) Except when a special hazard exists that requires a lower speed, the following speeds shall be lawful:*

*(a) Twenty miles per hour on narrow, winding mountain highways or on blind curves;*

*(b) Twenty-five miles per hour in any business district, as defined in section 42-1-102 (11) CRS;*

*(c) Thirty miles per hour in any residence district, as defined in section 42-1-102 (80) CRS;*

*(d) Forty miles per hour on open mountain highways;*



*(e) Forty-five miles per hour for all single rear axle vehicles in the business of transporting trash that exceed twenty thousand pounds, where higher speeds are posted, when said vehicle is loaded as an exempted vehicle pursuant to section 507 (3);*

*(f) Fifty-five miles per hour on other open highways which are not on the interstate system, as defined in section 43-2-101 (2), C.R.S., and are not surfaced, four-lane freeways or expressways;*

*(g) Sixty-five miles per hour on surfaced, four-lane highways which are on the interstate system, as defined in section 43-2-101 (2), C.R.S., or are freeways or expressways;*

*(h) Any speed not in excess of a speed limit designated by an official traffic control device.*

*(3) No driver of a vehicle shall fail to decrease the speed of such vehicle from an otherwise lawful speed to a reasonable and prudent speed when a special hazard exists with respect to pedestrians or other traffic or by reason of weather or highway conditions.*

*(4) Except as otherwise provided in paragraph (c) of subsection (8) of this section, any speed in excess of the lawful speeds set forth in subsection (2) of this section shall be prima facie evidence that such speed was not reasonable or prudent under the conditions then existing. As used in this subsection (4), “prima facie evidence” means evidence which is sufficient proof that the speed was not reasonable or prudent under the conditions then existing, and which will remain sufficient proof of such fact, unless contradicted and overcome by evidence bearing upon the question of whether or not the speed was reasonable and prudent under the conditions then existing.*

*(5) In every charge of violating subsection (1) of this section, the complaint, summons and complaint or penalty assessment notice shall specify the speed at which the defendant is alleged to have driven and also the alleged reasonable and prudent speed applicable at the specified time and location of the alleged violation.*

**\*“posted speed limit” would also include the speed indicated on any advisory speed signs.**

**Let’s look at the words “reasonable and prudent”.**

Reasonable is described as;



(of a person) having sound judgment; fair and sensible. "no reasonable person could have objected" synonyms: sensible, rational, logical, fair, fair-minded, just, and equitable; as much as is appropriate or fair; moderate. "a police officer may use reasonable force to gain entry" synonyms: within reason, practicable, sensible;

Prudent is described as;

Acting with or showing care and thought for the future. "no prudent money manager would authorize a loan without first knowing its purpose" synonyms: wise, well judged, sensible, politic, judicious, sagacious, sage, shrewd, advisable, well advised

Just remember who is going to determine if your speed was reasonable and prudent! Your idea of reasonable may not be the same as their idea of reasonable. Always error on the side of safety and reduce your speed.

When you are on school grounds, you should always be going at an extremely low speed, even creeping due to the high volume of people in the general vicinity. If a student were to dart out in front of your vehicle, or slip off the curb would you be able to stop?

### **SLOW DOWN ON SCHOOL PROPERTY!**

Per the Colorado Commercial Driver Manual, when you're driving in heavy traffic, the safest speed is the speed of other vehicles. Vehicles going the same direction at the same speed are not likely to run into one another. In many locations, speed limits are lower for trucks and buses than for cars. It can vary as much as 15 mph. Use extra caution when you change lanes or pass on these roadways. Drive at the speed of the traffic, if you can without going at an illegal or unsafe speed. Keep a safe following distance.

The main reason drivers exceed speed limits are to save time. But, anyone trying to drive faster than the speed of traffic will not be able to save much time. The risks involved are not worth it. If you go faster than the speed of other traffic, you'll have to keep passing other vehicles. This increases the chance of a crash, and it is more tiring. Fatigue increases the chance of a crash. Going with the flow of traffic is safer and easier.

***Of all the space around your vehicle, it is the area ahead of your vehicle - the space you're driving into - that is most important.***

## **Managing Your Space**

### **The Need for Space Ahead**

You need space ahead in case you must suddenly stop. According to accident reports, the vehicle that trucks and buses most often run into is the one in front of them. The most frequent cause is following too closely. Remember, if the vehicle ahead of you is smaller than yours, it can probably stop faster than you can. You may crash if you are following too closely.

How Much Space? How much space should you keep in front of you? One good rule says you need at least one second for each 10 feet of vehicle length at speeds below 40 mph. At greater speeds, you must add 1 second for safety. For example, if you are driving a 40-foot vehicle, you should leave 4 seconds between you and the vehicle ahead. In a 60-foot rig, you'll need 6 seconds. Over 40 mph, you'd need 5 seconds for a 40-foot vehicle and 7 seconds for a 60-foot vehicle.

To know how much space you have, wait until the vehicle ahead passes a shadow on the road, a pavement marking, or some other clear landmark. Then count off the seconds like this: "one thousand and-one, one thousand-and-two" and so on, until you reach the same spot. Compare your count with the rule of one second for every ten feet of length. If you are driving a 40-foot truck and only counted up to 2 seconds, you're too close. Drop back a little and count again until you have 4 seconds of following distance (or 5 seconds, if you're going over 40 mph). After a little practice, you will know how far back you should be. Remember to add 1 second for speeds above 40 mph. Also remember that when the road is slippery, you need much more space to stop.

Make sure you know the length, height, width, weight to determine clearances for your vehicle.

### **Behind (Tailgaters)**

You cannot prevent other vehicles from following you too closely, however, there are a few things you can do to reduce some of the risk they create.

Slow down - Reduce your speed slowly. By reducing your speed, you reduce risk. If you are traveling at a slower speed, and they want to pass..... let them.

Increase your following distance - When you slow down you should also increase the distance between your vehicle and the vehicle in front of you. This will give you more room to avoid a sudden stop and reduce the possibility of being struck from behind.

Avoid sudden changes - Signal early. Give them time to react if you are turning.

Do Not Play Tricks - Flashing your taillights or applying your brakes suddenly will not do anything but escalate your frustration and increase the possibility of injury to your passengers.

### **Below**

On occasion there may be animals and other debris in the roadway. Know how much clearance you have between your vehicle and the roadway. Don't take the chance that you could get your vehicle hung up or worse yet have considerable damage done to your undercarriage. Also, do not attempt to go through flood waters no matter what the depth, turn around find a different route.

### **Delineators**

Delineator posts are green posts with colored reflectors. They are in high risk and informational areas of roadways to convey a variety of messages to motorists. Below are some specifics on delineators.

Delineator—a retro-reflective device mounted above the roadway surface and along the side of the roadway in a series to indicate the alignment of the roadway, especially at night or in adverse weather.

### **Type III**

- 1) Three Amber Front Reflectors - These are designed to warn the motorist of existing objects. These objects may not always be in the roadway, but are close enough to the edge of the road, to be a potential hazard. Typically, they are near underpass piers, bridge abutments, guardrails, and culvert heads. If a guardrail approach end is not flared, there will be a Type III delineator immediately in advance of the approach end.
- 2) Two White Front and One Red Back Reflector - These are designed to warn motorists of acceleration and deceleration lanes ahead. The red reflector is for warning motorists of the wrong way.
- 3) Two Amber Front and One Red Back Reflector - These are normally installed in medians for left-turn deceleration lanes.



- 4) One Blue and Two Yellow Front Reflectors - These are installed at crossover locations of divided highways.
- 5) Three Blue Front Reflectors - These are for Department of Transportation maintenance crew workers. These are installed at the bridge joints.
- 6) Three Green Front Reflectors - These are for Department of Transportation maintenance workers. These are installed in front of approaching guardrails with flare ends, not on bridges. They can be found in front of curb heads.
- 7) Red Reflectors - Runaway truck ramps are bordered on each side by red reflectors spaced not more than 50 feet apart.

**Delineation Posts** - The white and amber reflectors on the green posts along the roadway are called cat eyes. The color and number of cat eyes on a post indicate a particular hazard or condition at the edge of the roadway.

- |   |              |
|---|--------------|
| • Edge of the road  | single white |
| • Right side of roadway   | single white |
| • Left side of roadway  | single amber |
| • On and off ramps  | two white    |
| • Minor problem area  | single amber |
| • Moderate to serious problem area  | two amber    |
| • Life-threatening problems<br>(Culverts, bridges, guardrails, heavy crossroad traffic) | three amber  |

Delineator panels are a striped marker consisting of a vertical rectangle with alternating black and retro-reflective yellow stripes sloping downward at an angle of 45 degrees toward the side of the obstruction on which traffic is to pass. These types of delineators can be seen on the end of guard rails, on bridges, etc.

## Traffic Control Devices

Standardized traffic controls are used to control and guide driver behavior. Most school bus drivers will be familiar with these devices because of their experience with driving automobiles. This section will briefly review all types of traffic control devices, highlighting some of the less understood, newer devices. Traffic signs can convey many different types of messages to the driver. They inform the driver of laws, warning of hazards ahead, or information and guidance.



### Standard Colors:

Red	Stop or prohibition
Green	Movements permitted, direction, guidance
Blue	Motorist services guidance
Yellow	General warning
Black	Regulation
White	Regulation
Orange	Construction and maintenance warning
Brown	Public recreation and scenic guidance

### Standard Shapes:

Octagon	Stop
Horizontal Rectangle	Guidance information
Diamond	General warning
Pentagon	School warning
Pennant	No passing warning
Vertical Rectangle	Regulatory except for stop and yield
Equilateral Triangle	Yield
Round	Advance warning for RR crossing

The United States has moved toward an international system of traffic signs emphasizing pictures and symbols rather than written messages. These signs provide instant communication with the driver since they can be understood at a glance without having to be read. Some of the present word signs will remain in use. These signs have proven effective in the past and contain easily understood messages. The three classifications of traffic signs are described below. For consistency, they use standard colors and shapes.

### Regulatory Signs

Regulatory signs inform highway users of traffic laws or regulations. These signs are generally rectangular with a black legend on white background. Other colors and shapes are also used. The two most common regulatory signs indicate right-of-way. These are the stop sign and yield sign. Regulatory signs are used to control speeds, such as maximum and minimum speed limits. They are also used to control turning movement. As an example, you may recognize these signs with a red circle and a slash mark, which means “no” or “do not.”

Regulatory signs control parking. When parking is prohibited, the parking signs have red lettering, such as “No Parking at Any Time,” “No Stopping Standing or Parking,” or “No Parking, Bus Stop.” When parking is permitted, the lettering is green, such as “One Hour Parking.”

Regulatory signs can also be used to supplement information given by traffic signals, such as “Stop Here On Red” or “Crosswalk.” Finally, regulatory signs are used for a variety of other controls, such as to provide axle weight limits (GVWR) or “Road Closed to Through Traffic.”

## **Warning Signs**

Warning signs inform the driver of situations ahead that may require extra care. These signs are yellow with black lettering and generally are diamond-shaped.

Warning signs can be used to show changes in horizontal alignment, such as turns, curves, and winding roads. Various types of intersections ahead are indicated symbolically. These signs can indicate cross roads or “T” and “Y” intersections.

Advance warning of traffic control devices can be provided. Sometimes a written message is used, such as “Stop Ahead,” or a picture of the device ahead is used, such as a yield sign or traffic signal. Warning signs are used to show converging traffic lanes, such as the symbolic merge sign or the message or symbolic sign for showing that the right lane ends. They are also used to indicate narrow roadways, such as “Road Narrows” or “One Lane Bridge.” Changes in highway design are shown on warning signs as well. Examples include divided highway ahead, divided highway ends, or two-way traffic.

Traffic engineers are increasing the use of roundabouts. Drivers must use particular attention to both warning signs and pavement indicators in these areas. If the driver becomes confused in these areas, the driver must not stop in the roundabout. The driver should proceed to a connecting road to re-route.

Highway grades and advance warning of railroad crossings are indicated on warning signs. Roadway surface conditions, such as bumps, soft shoulders, and slippery conditions, are also indicated. Various kinds of entrances and crossings are shown on warning signs, such as truck entrance, deer crossing, and bicycle crossing.

Warning signs are used to indicate advisory speeds, such as exit and ramp speeds. A special type of warning sign is the pennant-shaped “No Passing Zone” sign. When

used, it is on the left side of the road and is used in conjunction with the regulatory “Do Not Pass” sign.

Finally, school signs are special kinds of warning signs utilizing the pentagon shape. These indicate school area and school crossing.

## **Guide Signs**

Guide signs are the third major classification of traffic signs. Guide signs guide drivers along streets and highways, inform them of intersecting routes, or direct them to their destination, be it a city, river, park, or some similar type of destination.

Guide signs are generally rectangular in shape and have a white message on a green background. On conventional roads and streets, black messages on white backgrounds are frequently used as an alternative. Also, different colors and shapes are used for special purposes.

Guide signs are used to indicate junctions of highways, the direction of a highway, alternate routes, the end of a particular numbered route, and temporary routes. A variety of advance route turn arrows and directional arrows are common guide signs.

Two of the most typical guide signs are the familiar destination and mileage signs. On some of the interchanges, symbolic destination signs are used. A special type of guide sign is used for recreation areas. These signs have a white message on a brown background.

Another special guide sign is the service sign. These are white messages on a blue background. These illustrate the location of a phone or hospital. They also indicate that there are no barriers to the handicapped.

Other service signs indicate gas, food, lodging, or camping either through symbolic or message signs. Mileposts are another form of guide sign. Mileage always runs from south to north or west to east and begins at the state line or at a junction where the route begins. Guide signs are also used to show the locations of airports, bus stations, and train stations.

Finally, special panels reading “Exit Only” advise drivers of an imminent lane end situation.

These signs use the warning sign combination of black letters on a yellow background.

Highway construction and maintenance signs fall into the same three major classifications as other signs, namely regulatory, warning, and guide signs. Regulatory signs used in construction and maintenance zones use the normal standard colors, shapes, and messages.

Warning guide signs also use the standardized shapes and messages, but are distinctive in the black letters used on an orange background.

Typical construction and maintenance warning signs warn of construction or a detour ahead. They can also warn of road work, shoulder work, or a survey crew ahead. Typical construction and maintenance guide signs provide information on the length of a construction or maintenance zone or the direction of a detour.

Electronic traffic signals are valuable devices to control traffic and assign right-of-way. The message in traffic signals is relayed primarily through the use of colors; therefore, the meaning of the colors has been standardized.

- A steady circular green signal permits traffic to proceed if it is safe to do so.
- A steady circular yellow signal always follows a circular green signal or green arrow and warns that the red signal is about to be shown. Drivers must stop if it is possible, and safe to do so.
- A steady circular red signal means stop and remain stopped until a green signal is shown and it is safe to proceed.
- A steady green arrow may be used instead of a steady circular green signal. The driver is permitted to proceed in the direction(s) of the arrow(s) if it is safe to do so.
- A flashing circular red signal means stop and remain stopped until it is safe to proceed. Flashing red signals are used at particularly dangerous locations.
- A flashing circular yellow signal is a warning of a particular hazardous location.

Drivers may proceed through, but should use extreme caution.

Like traffic signs and signals, roadway markings have a definite purpose and convey a special meaning. In some cases, they supplement the regulations and warnings conveyed on traffic signs and signals. In other instances, they are used alone as there is no other way to effectively communicate this information. Roadway markings are standardized as to color and type of line.

- White lines delineate separation of traffic flows in the same direction.
- Yellow lines delineate separation of traffic flows in the opposite direction.
- Broken lines are permissive in nature. When traffic permits, broken lines may be crossed.
- Solid lines are restrictive in nature. Generally, they are not to be crossed.
- Double solid lines indicate maximum restriction. They are not to be crossed.

Broken white lines separate traffic lanes moving in the same direction when the roadway has more than one lane of traffic moving in the same direction. Drivers are to drive between the lines and not straddle the lines. When traffic permits, broken white lines may be crossed to change lanes.

A solid white line is used to mark the edge of the roadway/pavement. Pavement edge lines should not be crossed at moderate to high speeds. They may be crossed, however, at slow speeds when it is necessary to pull off onto the shoulder. When solid white lines separate lanes of traffic moving in the same direction, it is recommended to not cross lanes.

Broken yellow lines separate traffic moving in the opposite direction. When the broken yellow line is on the driver's side of the road, it may be crossed if oncoming traffic permits. Solid yellow lines also separate traffic moving in the opposite direction. When the solid yellow line is on the driver's side of the road, it must not be crossed.

A solid and broken yellow line used together is to delineate a left turn lane. The left turn lane is marked on both sides by both a solid and broken yellow line. Drivers turning left must turn from this lane.

A double solid yellow line is used to indicate that traffic from both directions is prohibited from crossing.

White arrows are used to show direction of travel for a given lane.

Pavement markings are sometimes used to delineate pedestrian crosswalks. These are marked by solid white lines. When lines are used, they run all the way across the pavement. If a stop is required, drivers must stop before crossing the pedestrian crosswalk.

Pavement markings are also sometimes used to delineate where a driver is to stop. These stop lines are wide solid white lines painted across a traffic lane. If used in conjunction with a painted pedestrian crosswalk, the stop line will come before the crosswalk. Drivers must stop before the stop line, if a stop is required.

## Unit 5 - Activity Trips

An activity trip is an exciting and special experience for our students. Most activity trips involve bus transportation, and it is important that transportation providers are aware of possible challenges. Challenges, such as selecting the wrong route, running out of fuel, or arriving late to your destination, can occur. In addition, pupil problems can develop because of inadequate food or rest stops. The best way to ensure a safe and happy trip is through pre-planning. Most activity trips will take the driver out of the local district. If problems occur, the driver will probably have a more difficult time getting assistance. Problems, therefore, take on a more critical nature. Without proper planning, minor problems can become major problems.

Most school transportation operators drive the same streets and roads every day. One of the potential challenges arises when the rural driver is asked to drive a vehicle in a different environment, such as in a metro area like Denver or Colorado Springs. The same challenge holds true for the driver who may be very familiar with metro driving and is asked to drive on mountainous terrain. Therefore, route planning is critical.

### **Route Planning**

The State of Colorado has many diverse geographical challenges, from the plains to the mountains, rapidly changing weather conditions, wildlife, etc. Therefore, it is absolutely critical that the school transportation vehicle operator be prepared for anything that could potentially take place. Make sure you consult with your supervisor to ensure that you have all the details of the trip and to ask questions.

### **Departure Times and Locations**

When the school transportation department schedules a trip they do their very best to estimate the punch-in, departure, arrival and return times. As a driver, it is very important that you try to maintain the estimated time schedule.

Know the exact location and time that you will be picking up the students that will be transported on the trip.

Plan your route. Technology today can give you excellent directions and maps. Determine the route you plan to take, considering road conditions, tolls (who is expected to pay for the toll), traffic congestion, weather, hazards, tunnels, etc. Have an alternate route in mind just in case you need to use it.

Depart on time. Now we know that there are occasions when you may leave the pick-up location late by no fault of the driver. If you are running late, there should be enough time “built-in” the transport time to give you a few minutes flexibility. **DO NOT SPEED!!!** If the sponsor is late and tells you to “get us there on time”, do your

best but do not violate the law and risk your license because the sponsor ran late.

Additional stops? Determine with the trip advisor if there will be any additional stops for food and restroom use on your way to the event or on your return trip. Follow your district policy when it comes to permitting students to eat in school transportation vehicles. Some suggestions are not to permit canned beverages or soda fountain beverages that do not have sealable lids. Make sure your passengers know where the trash container is and request that they use it. For your comfort and the comfort of your passengers, it is suggested that there should be no more than 90 minutes between stops.

Know the exact location of your destination. If this is your first time to the location, you may consider looking on-line to view where the entrances and exits are to the facility.

Drop off and pick-up locations at the event. Before you arrive ask the trip advisor where they would like to unload students and the exact location and approximate time you need to be there to load students. These times are often times not set in stone, as an athletic event may take longer than expected because it went into overtime. Make sure you are there on time and waiting for your students with a vehicle that has already had a pre-trip inspection and the heat/air conditioning is already on. Do not make them wait for you!

Where will you park? Depending on the size of the vehicle you are driving, finding adequate parking can be a nightmare. Will there be a charge for parking? Will the location support your vehicle weight? Is there easy access in and out of the parking spot? Could you get pinned in? Can you adequately secure the vehicle? At some events, there will be a designated area for school transportation parking.

What is expected of the driver? Is the driver expected to stay at the destination? Be available if threatening weather is a possibility? Is the driver welcome to accompany the group? Make sure you give the trip advisor your phone number or a means to contact you in the event of an emergency prior to leaving the destination site. Make an agreement as to the exact time the driver should return to depart. Refer to your district policy regarding the expectations of the driver and vehicle once you arrive at your activity destination.

Don't leave until all passengers are on board. Make sure that all passengers are accounted for prior to departing. The trip advisor is responsible for the student count and assuring that all the students are on board before departing.

Returning to District. Once you arrive back to the district and students are unloading, be polite and ask them to clean up as much trash as possible. Make sure that all

students are out of the vehicle and that they have not left any personal belongings in the vehicle. Follow your district policies regarding fueling, paperwork and of course the cleanliness of the vehicle.

One of the most common complaints of operators is that when they were preparing to take an activity trip they arrived to find that the previous driver had left the vehicle in an unsatisfactory condition. Trash on the floor, empty drink bottles/cans, food spilled on the seats and floor and they have to depart in a few minutes. Put yourself in their position; is that how you would want to find a vehicle that you were planning to use? Even if your district does not require you to clean the vehicle, be polite and pick up as much as you can.

*Leave your vehicle in the condition that you would want to find it if you were the next person using the same vehicle.*

### **The Chaperone/Sponsor Responsibilities**

Make sure your chaperone/sponsor knows what their responsibilities are. Double check your district policy, but they may include the following;

- Communicating
  - Trip plans
  - Special student needs
- Providing passenger information
- Assisting in maintaining passenger control
- Supervising
  - Rest stops
  - Food stops
- Field trip activity
- Assembly of students and head counts
- Passenger instruction

## **Behavior Problems and Concerns**

Concerns may arise while on a field trip due to the nature and length of the trip. Unless adequate plans are made and precautions taken, passenger behavior problems will arise. The following conditions should be identified:

### **Fatigue**

Trip organizers and drivers should plan a sufficient number of rest and comfort stops to avoid problems arising from fatigue. It is recommended that there be approximately 90 minutes between stops.

### **Excitability**

Trip organizers and drivers should recognize that passengers may get excited due to the nature of the trip. An opportunity should be provided for pupils to vent some of this excitement before an effort is made to restrain them. The group leaders or chaperones should handle problems arising from this situation.

### **Discomfort**

The driver should be alert for conditions that may lead to a pupil's discomfort. The temperature of the bus should be closely monitored and sufficient fresh air be provided to the passengers.

### **Guidelines**

Trip organizers and drivers should discuss guidelines that are to be followed during the trip. Some school districts provide written guidelines to trip organizers for review before trips are booked. The group leader or chaperone should discuss these guidelines with passengers before the trip begins.

## Unit 6 - Accidents and Emergency Procedures

### Accidents

**Procedures** - In the case of an accident the driver should:

- Stop and secure the vehicle immediately.
  - Activate 4-way hazard lights, if operable.
  - Remain at the scene of the accident (there is a severe penalty for any person convicted of leaving the scene of the accident).
  - Make certain all passengers are safe. If it is determined that it is unsafe to keep passengers inside the school transportation vehicle, evacuate the passengers to a safe place, away from traffic.
  - Notify the proper law enforcement authority and school administrator immediately. If necessary, request emergency medical assistance. On accident alert days, follow the reporting procedures as set out by the local law enforcement agency.
  - Check for injuries; render any person injured in the accident reasonable assistance. *Remember: Never do more than you are trained to do.*
  - Remain alert regarding fire or the possibility of fire in any of the vehicles involved in the crash.
    - Check for ruptured fuel tank and fuel lines.
    - Check for electrical fire.
    - Check for hot tires that may catch fire. This is caused by metal rubbing against a tire from impact to the final resting place.
  - Mark the scene with emergency reflective triangles as specified earlier in this unit if possible.
  - Information such as names, license numbers, registration numbers, location, time, road and weather conditions, insurance information, and witnesses, should be obtained and accurately written down.
  - If possible, a transportation staff member should be at the scene to render assistance and take pictures.
1. **Documents** - If involved in an accident, the investigating officer may ask the driver to provide:
- The appropriate driver's license



- DOT medical card
- Proof of insurance
- Vehicle registration
- Pre-trip documentation
- Current CDE Affidavit of Annual Inspection

**2. Emergency Packet** - Your District may require additional information.

- Seating Charts (2)
- Exchange of Information Form
- Witness Information Form

When you come upon an accident, use caution and continue moving. Staying too long at an accident can lead to another accident, and puts the drivers behind you at risk.

**Precautionary Measures**

- Remain alert and briefly size up the accident scene.
- Resist the urge to rubber neck.
- Begin braking early to warn other drivers to slow down, but do not stop completely.

Be prepared in case you are involved in an accident or are stopped by law enforcement. Always carry your Driver's License, DOT Medical Card, and the Vehicle Insurance and Registration.

**Planning for an Emergency**

***4204-R-4.00 School District and Service Provider Employment Responsibilities***

- 4.05** *School districts and service providers shall have written emergency procedures and/or contingency plans to be followed in the event of a traffic accident, vehicle breakdown, unexpected school closing, unforeseen route change or relocation of a student stop in an emergency. Districts/Service Providers are required to have written emergency plans for accidents and breakdowns not only on daily routes but on activity trips as well.*

### Pre-trip your vehicle

The best deterrent from a breakdown is to inspect your vehicle and do a thorough pre-trip prior to departing on the trip. If a defect is found it is best to find it while you are still at the district rather than 50 miles up on a mountain highway. Make sure you do an additional pre-trip prior to leaving for your return trip for the same reasons.

### Emergency Contact Information

Before you depart on your trip make sure you have the following contact information

- Driver Supervisor or District Designee (work and cell)
- District Office during school hours
- After-hour numbers for mechanic, principals, supervisor for your district
- Depending on district policy, if permitted a copy of the CDE Emergency Contact List on board would provide you with other outside districts contact information if you are ever in need of mutual aid due to a breakdown or accident.

### Emergency Evacuations

#### **4204-R-18.00      *Emergency Evacuation Drills***

*18.01 Emergency evacuation drills shall be conducted with students by all school transportation vehicle operators and school transportation paraprofessionals at least twice during each school year, following the procedures in the Colorado Department of Education School Bus/Multifunction Bus/Motor Coach Bus Operator Guide.*

*18.01(a) One drill shall be conducted in the fall and the second drill conducted in the spring.*

*18.01(b) Substitute and Multifunction operators of 16 or greater capacity (counting the driver) vehicles shall be trained how to conduct the emergency evacuation drills.*

*18.02 Students on school related events shall receive emergency evacuation instruction prior to departure.*

*18.03 School district and service providers shall maintain records documenting that the required evacuation drills were conducted and/or evacuation instruction was given.*

Review the evacuations plans with your passengers, and document it. Make sure they know how to operate all exits, communications and where emergency equipment is located.

*Remind passengers that there must be unrestricted access to ALL exits.  
No wastebaskets, equipment etc. can be placed in front on any exits.*

Students should know the location of the first aid kits, how to shut off the engine, and set the park brake; unless disabilities of students preclude this.

The emergency evacuation drill should be as close to the real thing as possible. The drill should be discussed with the students prior to the day of the drill. The drill should follow the evacuation procedures for the appropriate exit(s) used.

### Medical Emergencies

What is the district/service provider policy if a student or driver should become ill on the trip? Do any of the passengers have any medical concerns that you should be aware of? Epilepsy? Allergy to bees?

### Vehicle Information and supplies

Prior to departing on your trip make sure that the vehicle you will be driving has a current CDE Annual Inspection Affidavit inside the vehicle, registration and current proof of insurance.

Make sure that you have adequate cleaning supplies, trash bags, etc.

### Staking Out Your Vehicle

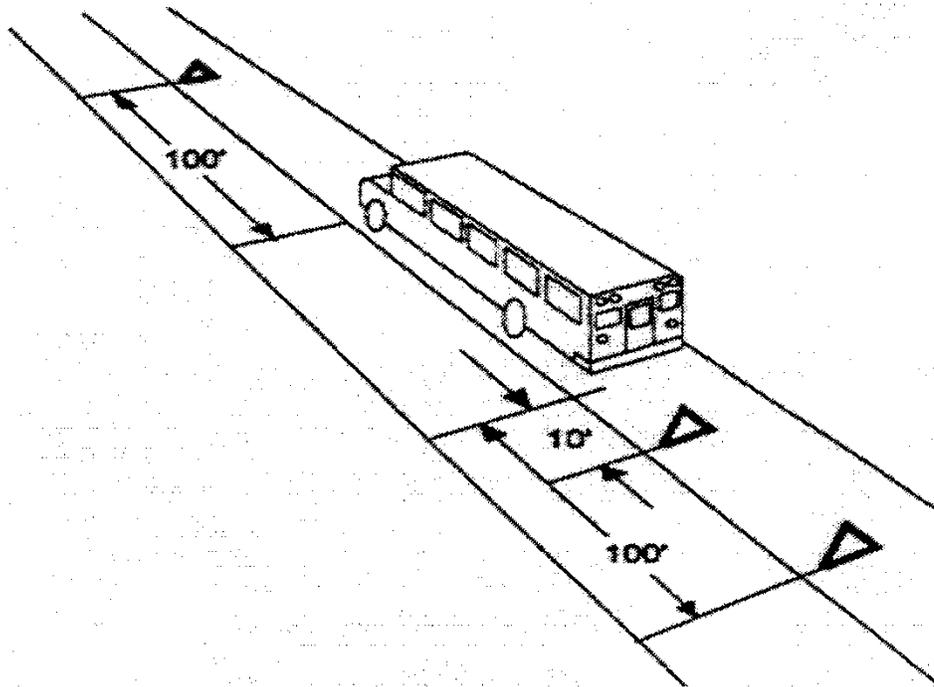
**Emergency Triangles** - Each school transportation vehicle is equipped with three emergency reflective triangles. In case of a breakdown, accident or other emergency, the driver, paraprofessional, or qualified individual will place the triangles as the law requires. SEE FOLLOWING EXAMPLES.

When you pull off the road and stop, activate the 4-way hazard lamps. Taillights may not provide adequate warning to motorists. Drivers have crashed into the rear of a parked vehicle because they thought it was moving normally.



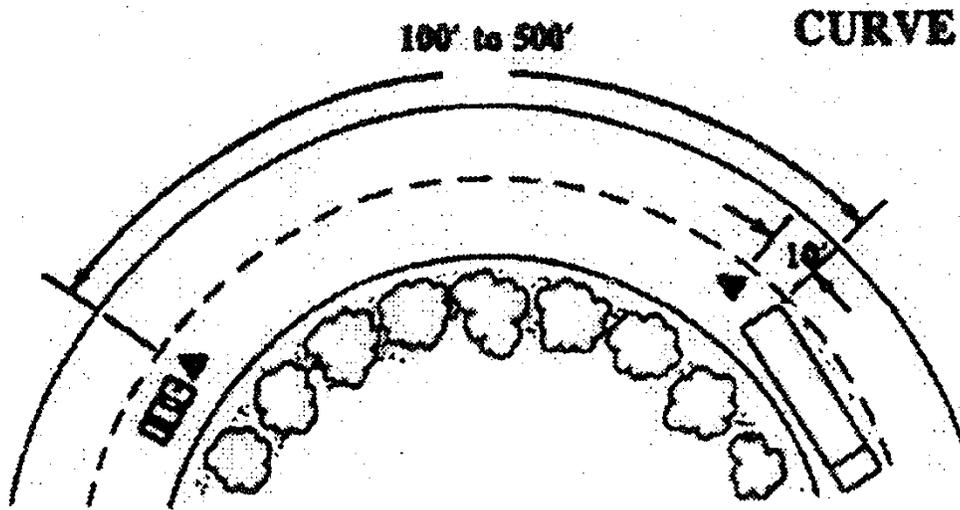
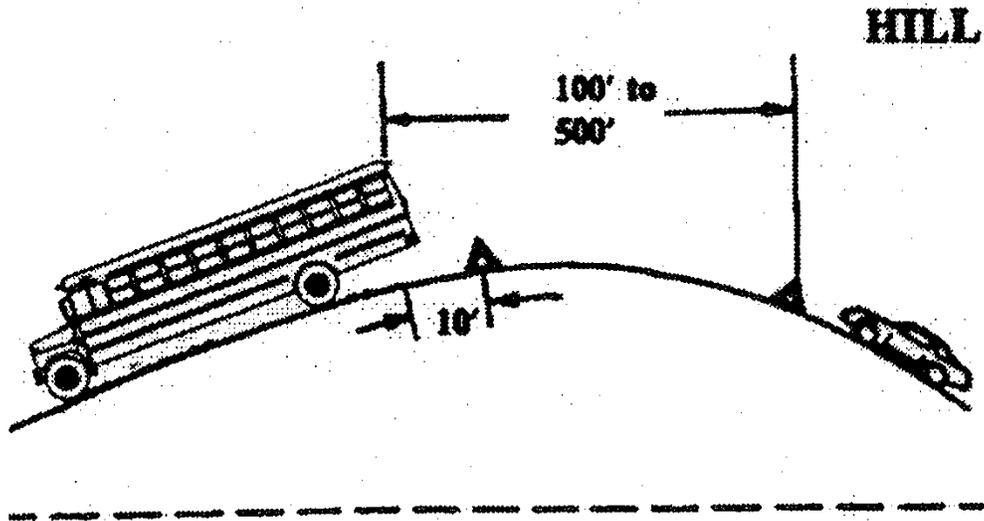
If you must stop on a road or shoulder of a road, set your emergency reflective triangles within 10 minutes. Placement should be at the following locations:

- On the traffic side of the vehicle, within 10 feet from the front or rear corners to mark the location of the vehicle.
- About 100 feet behind and ahead of the vehicle, on the shoulder or in the lane you are stopped in. (See figure below).





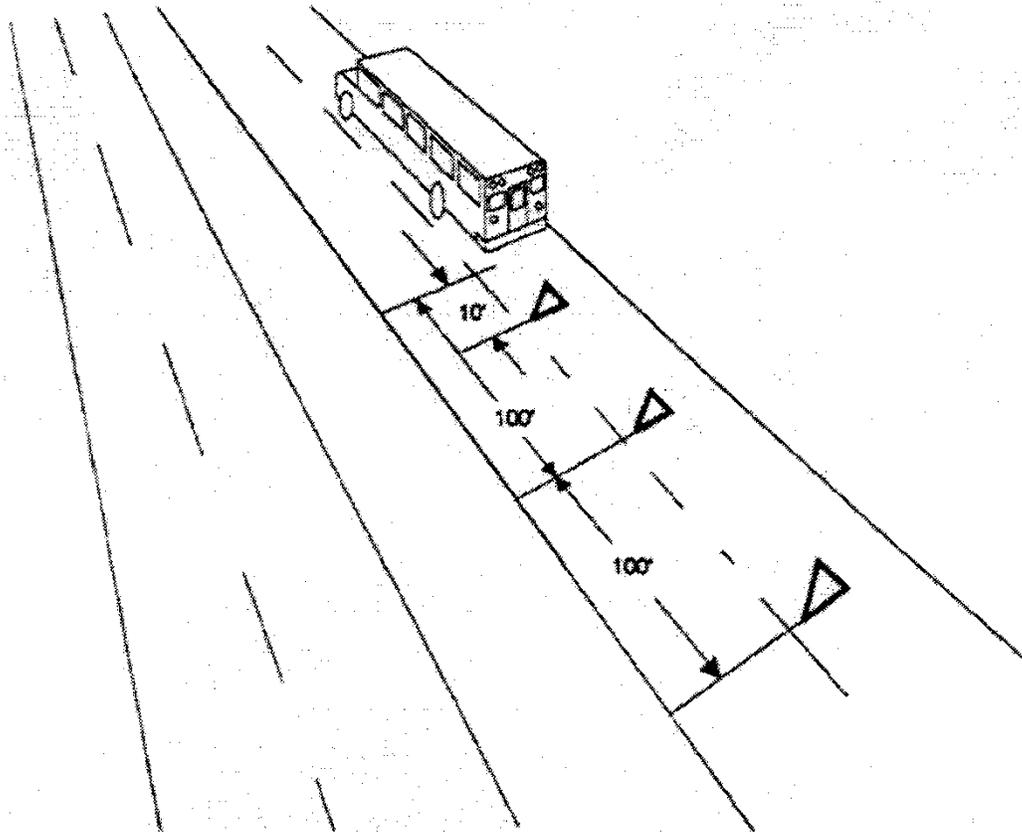
Back beyond any hill, curve, or other obstruction that prevents other drivers from seeing the vehicle within 500 feet. (See figure below).



*Reminder: If the line of sight is obstructed due to a hill or curve, move the rearmost triangle to a point giving adequate warning.*



If you must stop on or by a one-way or divided highway, place warning devices 10 feet, 100 feet, and 200 feet toward the approaching traffic. (See figure below)



When placing the triangles, hold an assembled triangle toward the oncoming traffic. This enhances safety by increasing visibility to other drivers (especially at night).

When the triangles are unfolded for use, the weighted base must be turned so it makes a cross with the bottom of the triangle to keep the triangle from tipping over.

***Safety of the students is your first priority, not the fire!***

### **Small Vehicle Required Emergency Equipment**

1 CCR 301-25, 2251-R-20.06

20.06(a) - *Three (3) emergency triangle reflectors in a securely mounted case.*

20.06(b) - *One 24 unit first aid kit as found in 20.02.*

20.06(c) - *One securely mounted 2½ pound, dry chemical fire extinguisher with a minimum rating of 1A10BC.*

20.06(d) - *One durable webbing cutter having a full width handgrip and a protected blade. The cutter shall be mounted in a location accessible to the seated driver.*

20.06(e) - *One basic body fluid clean-up kit as found in 20.04.*

### **Optional Emergency Equipment may include:**

- Blankets
- 2-way radio, cellular phone
- Emergency information forms
- Accident check list
- Student list
- Flashlight
- Disposable mask
- Bag of salt, kitty litter, or sand

### **Fire Extinguisher Operation**

- Hold the extinguisher upright. It should not be held on its side when operating.
- Twist and pull safety pin, breaking seal.



- Squeeze the handle to discharge powder. Aim at the base of the fire closest to you and progress forward, moving the discharge cone from side to side in a sweeping motion.
- Turn extinguisher on and off as desired to control the fire.
- After use, report extinguisher for replacement or recharge.

With engine fires, never open the hood, it could cause a flashback. Do your best to direct the fire extinguisher stream through grill or under fenders?

If possible, stand upwind from burning material to prevent standing in smoke and heat. Avoid standing near areas of flammable, unburned materials that could catch fire in a flashback.

The fire extinguisher is to help you safely evacuate students from a burning vehicle. It does not have sufficient capacity to extinguish a major vehicle fire.

#### Contents of the 24 unit First Aid Kit:

<u>Item</u>	<u>Unit(s)</u>
Adhesive Tape	1
1-inch adhesive bandage	2
2-inch bandage compress	1
3-inch bandage compress	1
4-inch bandage compress	1
3-inch x 3-inch plain gauze pads	1
Gauze roller bandage 2 inch wide	2
Plain absorbent gauze - ½ square yard	4
Plain absorbent gauze - 24-inch x 72 inch	3
Triangular bandages	4
Scissors, tweezers	1
Space rescue blanket	1
Non-latex disposable gloves, pair	1
CPR mask or mouth to mouth airway	1

***Caution: Replace gloves on a yearly basis. Be aware that people can be allergic to latex. Never administer medicines, ointments, sprays, or other chemicals.***

**Body Fluid Cleanup Kits -**

**1 CCR 301-25, 2251-R-59.04**

*Body fluids of all persons should be treated as if they contain infectious agents (germs). The term “body fluids” includes blood, semen, drainage from scrapes and cuts, feces, urine, vomit, respiratory secretions (e.g. nasal discharge) and saliva. Contact with body fluids presents a risk of infection with a variety of germs. However, in general, the risk is very low and dependent on a variety of factors including the type of fluid with which contact is made. Put on disposable gloves prior to the cleanup process. Body fluids must be contained or removed immediately, using established district procedures. Wash contacted area with warm, soapy water as soon as possible.*

**Contents of Body Fluid Cleanup Kit:**

<u>Item</u>	<u>Unit(s)</u>
Antiseptic towelette	1
Disinfectant towelette	1
Absorbing powder (capable of ½ gallon absorption)	1
Non-latex disposable gloves, pair	1
Disposable wiper towels	2
Disposable scoop bag with closure mechanism and scraper	1
Moisture and dustproof kit of sufficient capacity to store the required items.	

**Emergency Procedures**

Despite good design, engineering, and preventative maintenance programs, there may be mechanical failures. The driver should do the following in case of a bus breakdown:

**Mechanical Failure/Breakdown Procedure**

1. Stop the vehicle as far to the right of the road as possible or on the shoulder of the road, as conditions permit.
2. Activate 4-way hazard lamps, if operable.
3. Keep passengers in the vehicle unless conditions are unsafe.
4. If location of the vehicle is unsafe, evacuate the children to a safe place away from traffic. Conditions such as possibility of fire, bus stalled on railroad tracks or other dangers may warrant evacuating the students.



***Reminder: If emergency conditions exist, evacuate the students first and then worry about securing the external area around the bus.***

5. Notify your school authorities, giving bus number, location of the bus, description of the breakdown and if you have to evacuate the vehicle.
6. Place emergency triangles as specified previously in this unit.

***Do not move the vehicle unless instructed by a law enforcement officer/fire department or as posted.***

***Exceptions: C.R.S. 42-4-1602 (2).*** When an accident occurs on the traveled portion, median, or ramp of a divided highway and each vehicle involved can be safely driven, each driver shall move such vehicle as soon as practicable off the traveled portion, median, or ramp to a frontage road, the nearest suitable cross street, or other suitable location.

*If vehicles have to be moved, mark the pavement around each tire, if possible.*

*Never admit fault, but be cooperative with the investigating officer. Provisions will need to be made for transporting children to their homes or to school.*

***Never do more than you are trained to do.***

## **School Bus Emergency Evacuations**

Planning for emergencies and knowing what to do at the time of an emergency will prevent panic and confusion. When a large number of passengers are moving rapidly to evacuate a bus, there is always the possibility of panic and injury. The safety of the students is to be given first priority. In the majority of emergency situations, the bus is the safest place for the passengers unless extenuating circumstances warrant evacuation from the bus.

The following are examples of serious types of emergencies that may require emergency evacuation. In most cases, the front door evacuation is the safest.

- **Front-end accidents** - Determine which of the exits may be used. Check for any serious injuries. Look for fire.
- **Rear-end accidents** - Follow the same procedures for a front-end accident. Do not use the rear exit. Look for fire.



- **Broadside accidents** - Determine which exit may be used. Follow the same procedures as for front/rear-end accidents.
- **Rollover accidents** - Remain as calm as possible; use rear exit, roof hatches, if available, and windows along top if they are free of broken glass. If fire does not exist and the bus is not lying on the front door side, this exit may also be used. Follow steps outlined for front/rear-end evacuation.
- **Fire** - Follow the evacuation procedures outlined for rear-end and front-end accidents. Use the exit furthest from the fire. **DO NOT PANIC.** Many injuries are caused by panic rather than by fire itself. This can be avoided if everyone stays calm.
- **Railroad crossing** - Use front-end or rear-end accident evacuation procedures. Stay clear of all traffic, and keep students in a group. **DO NOT** re-enter the bus. Have students move away from tracks, in the direction of the oncoming train at a 45° angle from the tracks.
- **Blizzard** - (visibility zero). Remember, it is warmer inside than out.
- **Flood waters** - Remain calm. Do not drive through water rushing across the roadway unless instructed to do so by a law enforcement officer. If the vehicle stalls during a water crossing, notify dispatch. Evacuate passengers if situation warrants. What is the safest option for the students?

***Under no circumstances should any student move another student who is injured without the permission of the bus driver or emergency responder attending the accident. The driver needs to be aware of language barriers and prepare ahead of time to address the situation.***

Students should know the location of the first aid kits, how to shut off the engine, and set the park brake; unless disabilities of students preclude this.

The emergency evacuation drill should be as close to the real thing as possible. The drill should be discussed with the students prior to the day of the drill. The drill should follow the evacuation procedures for the appropriate exit(s) used.

## **General Procedures for Evacuations**

Follow these general procedures in any evacuation. Above all—remain calm.

**Evaluate the situation.**

- Is evacuation necessary?



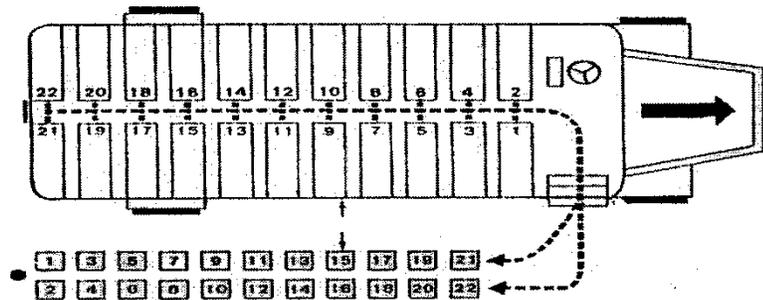
- Injuries?
- Which exit is best to use?
- Determine a safe waiting area.
- Notify proper authorities.

There may be different procedures and practices between practice drills and real evacuations.

### Secure Vehicle (all drills)

- Set park brake.
- Put transmission in neutral (automatic) reverse (manual) or Park if so equipped.
- Turn off engine.
- Turn on 4-way hazard lamps (if operable).
- Determine which door is best to use for the evacuation.
- Know the number of students on the bus.

### Front Door Evacuation



**Emergency  
Evacuation Using**

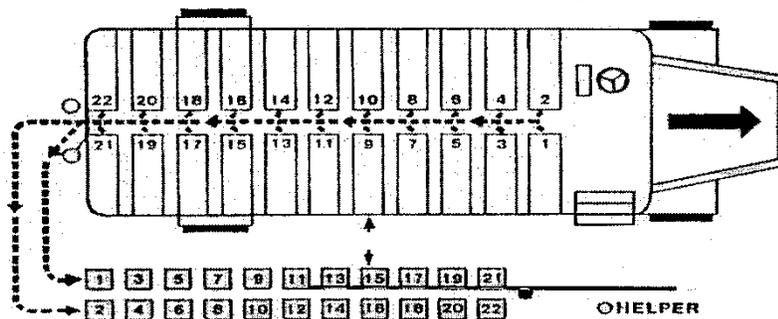
### Front Door

- Notify the proper authorities and school administrators as soon as possible.
- Driver should stand and face students.
- Get students' attention - speak clearly and concisely.
- Announce - "Remain seated, emergency evacuation, front door." Tell students the location of the safe waiting area, at least 100 feet or more from the bus and roadway. All belongings are to be left on the bus. Students should be supervised, if possible.



- Evacuate the bus by dismissing students. Driver should move backwards down the aisle, dismissing the students row by row.
  - If possible, give the first aid kit(s) to the first two responsible students exiting the bus. Do not impede the flow of the students exiting.
  - Begin at the front of the bus, starting at the right side; alternate side-to-side, row by row, until students have exited the bus.
- Check each seat as you move back to the front of the bus to make sure all students have evacuated the bus.
- Account for all students.
- Render first aid if necessary.

### Rear Door Evacuation



### Emergency Evacuation Using Rear Door

Use the rear door when front door evacuation is impossible or unsafe to use, or when it is imperative to evacuate as quickly as possible by using rear exits.

- Notify proper authorities and school administrators as soon as possible.
- Announce, “Remain seated, emergency evacuation, rear door.” Tell students the location of the safe waiting area. All belongings are to be left on the bus.
- Assign two (2) “helpers” to assist students. Have them “sit” on the floor at the emergency door and “scoot” out of the door onto the ground. One helper is positioned with their back to the emergency door, so door will not swing against the students. The other helper is positioned on the other side of door area.
- Helpers need to hold a hand open, palm upward and extended for the student to place his/her hand on it. The other hand will support the upper part of the arm of the student to minimize the possibility of the student falling forward.

***Helpers are very important in preventing injuries when exiting the bus from the rear door***



- Evacuate the bus by dismissing students. **Driver will move backwards from rear row of seats**, dismissing students row by row.
- Begin at the back row and continue to the front; alternate side-to-side, row-by-row, until students have exited the bus. If possible, give the first aid kit(s) to the last two responsible students when they are out of the bus.
- Students should sit at the rear door, and then scoot through the door onto the ground with the helper assistance.
- Students should walk to the safe waiting area.
- Check all seats for students as you move towards the back of the bus.
- Have the helpers “assist” you out of the rear of the bus.
- Account for all students.
- Render first aid as necessary.

### **Emergency Evacuation - Front & Rear Doors (Combined)**

Follow procedures outlined for both front door and rear door evacuations. (Driver will not be able to dismiss the rows.)

***The fastest method for bus evacuation is the combined evacuation, using front and rear doors.***

### **Side Door Evacuation**

Follow the above procedures for a rear door evacuation with the following exception to dismissing the students:

Begin at the seat nearest the exit, approximately 6<sup>th</sup> from the rear. Work to the rear alternating side-to-side, (a closed space), then return to seat immediately in front of the rear side exit and work to the front alternating side to side.

Using a side door exit is a more difficult evacuation procedure because of the height of the door from the ground. With small children you might have to assist them from the door to the ground.

### **Emergency Evacuation Using Side & Front Door Exits**

Begin at the seat nearest the side exit, work to the rear alternating side to side (a closed space). Use a helper to evacuate front door students. Driver should return to the front of the bus, check for students while exiting through the front door.

## **Emergency Evacuation - Students with Special Needs**

Care should be taken to plan for students with special needs who are riding on the bus. Know procedures to be followed to safely evacuate each student. It is advisable to talk to parents or guardians of the students with disabilities to properly plan for an emergency evacuation. Teachers and school staff who work with these students can also help communicate the individual needs of each child. The Colorado Department of Education has guidelines for preparing an evacuation plan. Responsible students may be assigned to help a student with special needs get to a safe area away from the bus, traffic and other dangers. The plan should address each student's characteristics and abilities. A written plan should be developed, maintained with the route sheet, and out of sight of everyone who may get on the bus. All drivers should be familiar with where the plan is located and review it prior to departing on a route.

When possible, make sure to include students with special needs in the discussion, as well as having them participate in the actual drill. If you wish to include students with special needs in the drill, get permission from parents/guardians.

Stand, facing students and tell them they are having an emergency evacuation drill. Remind students to leave books, lunches, etc., on the bus. The drill should be timed. Most important is how the students exit the bus; calmly, orderly, and following directions. When the drill is over, have the students get back on the bus. Spend a few moments discussing the drill. Point out the positive things that occurred and discuss ways to improve the drill.

## Unit 7 - Adverse Weather and Mountain Driving

### Adverse Weather Driving

In this section, there is information on adverse weather conditions, driving techniques, and information pertinent to School Bus Driving in all weather conditions experienced in Colorado.

Becoming aware of the effects on the performance of the vehicle and the proper procedures to counter the effects of the conditions will provide the understanding required to respond correctly. Slow down, pull over, or make the decision to reschedule. Safety must be the driver's primary concern.

### Wind

Strong winds affect the handling of a school bus. It may be harder to steer and stay within the lane of travel during high winds. Wind gusts can push on the side of the bus, causing it to thrust sideways. In extreme situations, roof hatches have popped open and ripped off. Extreme wind may also cause difficulty keeping the bus in the proper lane of traffic. Overcompensated steering can cause the bus to tip over or leave the lane of travel. Wind may blow around debris that can hit the bus causing damage or injuries.

Strong winds increase just prior to, and in the beginning of a change in weather. During thunderstorms, dust storms, and blizzards, visibility can be severely impaired. Operators should be cautious when crossing bridges and overpasses, driving between hills, exiting tunnels, on open straight-aways, and when passing high-profile vehicles.

### Tips for driving in strong winds:

- **Grip** - Keep a strong grip on the steering wheel. Anticipate wind gusts.
- **Speed Reduction** - Reduce speed to lessen the effect of the wind, or pull off the road and wait.
- **Pull Over** - Pull onto a solid shoulder, side road, or parking lot.
- **Call** - Contact Dispatch to convey the situation and ask for instructions.
- **Observe Surroundings** - Watch for blowing debris, falling trees or power lines. Reduced visibility may occur from blowing dust, sand, or snow.
- **Prepare** - Always be prepared for the unexpected.

### Tornados

A tornado is a violently rotating column of air. In the northern hemisphere, tornados rotate counterclockwise. They develop in warm, moist air, in advance of an eastward moving cold front. Most tornados move southwest to northeast. The average forward

speed of a tornado is 30 mph, but can be up to 70 mph. When the temperature is between 65 and 84 degrees and the dew point is above 50, the dangers of a tornado are at the highest. They often accompany severe thunderstorms. Tornadoes are common in eastern Colorado. Though they are rare, tornadoes are possible in the mountains, foothills, and western valleys.

### **Tornado Signs**

- Green-colored Sky
- Hail
- Wall Cloud
- Funnel Cloud

Many say a tornado sounds like a freight train approaching. If a tornado does not appear to be moving, it may be coming toward you. If you are in the bus and see a tornado, evacuate to a safe location, preferably a building. When in a building, go to an interior room or basement, away from windows, and have all passengers sit and cover their heads with their hands. When in the direct path of a sighted tornado and shelter in a building is not available and an evacuation is ordered, escort passengers to a nearby ditch, culvert, or depression. Direct all passengers to lie face down on the ground with their hands covering their head. They should be far enough away so the bus cannot topple on them. Avoid areas that are subject to flash floods. Never go under a bridge or overpass. This area can become the equivalent of a wind tunnel.

### **Microbursts and Macro bursts**

Microburst's and Macro bursts are intense, localized downdrafts of air that spread on the ground causing rapid changes in wind direction and speed. They are capable of producing winds of more than 100 mph that can cause significant damage. A macro burst can cause more damage to a widespread area than a microburst. They are hard to detect, so be careful when thunderstorms and high winds are in the area. Keep a tight grip on the steering wheel and pay attention to weather watches and warnings.

### **Lightning**

Sudden storms can produce lightning. If a severe storm produces lightning, the safest place is in the bus. Avoid touching metal objects or pulling over in high-risk areas (canyons, near power lines, or tall trees).

### **Water on Roadways**

Water on brake drums will reduce braking efficiency. A light application of the brakes can prevent excessive water between the drum and brake pads. During excessively wet conditions or after passing through standing water, it may be necessary to apply the brakes slightly for a short distance to dry them out and restore normal braking.

Never attempt to drive in flowing water, as the depth and force of the current is unknown. Dangers may not be visible. There may be debris, downed power lines, or washed out portions of the road.

### **Slippery Surfaces**

Bus braking or steering cannot occur unless there is traction. Road conditions may reduce traction and require slower speeds. When slick road conditions exist, it will take longer to stop and be harder to steer the bus without skidding. Slippery surfaces can more than double stopping distances.

### **Common Slippery Surfaces**

- **Shaded Areas** - Shady parts of the road may remain icy and slippery long after open areas have melted and dried.
- **Bridges** - When the temperature drops, bridges will freeze before roads. Be especially careful when the temperature is near freezing (32° F).
- **Snow** - There are different types of snow that provide different levels of traction. The most traction comes either from dry granular or very cold snow. Packed snow may provide better traction than freshly fallen snow. As variations in temperature occur, at or near the freezing/melting point (32°F), vehicles will have the least amount of traction. This presents the most dangerous road conditions of ice on snow, or snow on ice.

Roads are most hazardous when snow or ice begins to melt. Take extra caution on packed snow or icy roads when the outside temperature is near the melting/freezing point (32° F).

### **Black Ice**

When the temperature is below freezing and the road appears wet, it could be black ice. This is a thin layer of transparent ice that can be present anywhere, especially in high-traffic intersections and windswept areas.

### **Hail**

While similar to ice, hail provides a unique set of hazardous circumstances. Hail on roadways can produce an extremely slippery and uneven road surface. Large hail can break the windshield and windows. Children should protect themselves from flying glass should a window break.

### **Rain**

When it starts to rain, the water mixes with oil and other road grime making the road very slippery. Standing water on the roadway may lead to additional challenges such as hydroplaning.



## Hydroplaning

Hydroplaning can occur on any wet road surface. The first 10 minutes of a light rain can be the most dangerous. When a tire encounters more water than it can scatter, water pressure in the front of the wheel pushes water under the tire, thus separating the tire from the road surface with a thin film of water. The result is loss of traction, steering, braking, and power control.

### How to avoid hydroplaning

- Slow down when roads are wet. The faster the speed, the harder it is for tires to scatter water properly.
- Stay away from puddles and standing water.
- Do not use cruise control, if equipped.
- Drive in a lower gear.
- Avoid hard braking.
- Try to avoid making sharp or quick turns.

## Mud/Mudslides

Wet, non-paved or paved roads where excessive mud is present can be slippery and may be virtually impassable.

## Heat

Excessive heat may cause the tar in the road pavement to rise to the surface. These areas can become soft or slippery.

## Other

Anti-icing and de-icing materials used on roadways (i.e. gravel, magnesium chloride, and salt) to improve traction. In some instances, these materials can decrease traction.

## Skids

A skid happens when a vehicle's tires lose traction on the road. Some common ways this can happen are:

- **Over-braking** - Either braking too hard and locking up the wheels or using the retarder when the road is slippery.
- **Over-steering** - When the operator turns the wheels sharper than the bus can turn at a given moment.

- **Over-acceleration** - When the drive wheels' spin due to too much power sent from the operator.
- **Driving too fast** - Serious skids result from driving too fast for road conditions. Operators who adjust their driving to the conditions do not over-accelerate and do not have to over-brake or over-steer from gaining too much speed.

### **Drive-Wheel Skids**

The most common skid is one where the rear wheels lose traction through excessive braking or acceleration. Rear wheel braking skids occur when the rear drive wheels' lock. This usually happens on slippery surfaces. Because locked wheels have less traction than rolling wheels, the rear wheels usually slide sideways in an attempt to "catch up" with the front wheels. In a bus, the vehicle will slide sideways into a "spin out".

#### **To correct a drive-wheel skid**

- Stop accelerating.
- Stop braking to allow the rear wheels to roll again.
- Turn into the direction of the skid by looking where you want the bus to go.
- Counter-steer after control of the bus resumes by turning the steering wheel in the direction desired.

### **Front-Wheel Skids**

Driving too fast and having inadequate tread depth on the front tires causes most front-wheel skids. In this type of skid, the front of the bus tends to go in a straight line regardless of how much the steering wheel is turned. This causes extreme difficulty (if not impossibility) when steering around a curve or turn.

#### **To correct a front-wheel skid**

- release the accelerator and do not brake. This will allow the front wheels to turn again and regain traction.

Learning to stay off the brake and react quickly during a skid takes a lot of practice. The best place to practice this is on a large driving range or "skid pad".

### **Winter Driving**

Weather conditions can be unpredictable, placing extra demands on the bus and operator. Always be prepared for winter roads and adjust speed to the existing conditions. Three key elements to safe winter driving are to stay alert, slow down, and stay in control. Drive according to highway and weather conditions. Some bridges



and overpasses in Colorado are heated or have de-icing sprayers. This creates an abrupt change in road conditions. Scan ahead and be aware of these locations.

In winter and especially during poor weather conditions, it takes longer to stop on a slippery road. It is important to leave plenty of space between the bus and the vehicle ahead to avoid sudden braking situations. A guide to safe spacing in these conditions is to double the “four - five second rule”.

Using a lower gear than you normally would for the type of road helps the driver maintain control of the vehicle in winter driving conditions.

Be aware that snow on the road may be slippery, drifted, or hard-packed. It can also be smooth, soft, rutted, or slick-tracked. Slick track happens when traffic has packed the snow enough to cause icy conditions. Because the bus usually tracks wider than the preceding vehicles that formed the hard pack, ruts or slick tracks, maintaining control may be difficult. Rather than allowing the bus to sway back and forth between the two narrow tracks or ruts, adjust lane positioning to ride in the untracked snow within the lane. Riding outside of the tracks or ruts will help to maintain speed and steering control.

Wet snow can cause slushy roads. Heavy slush can build up in the wheel wells of the bus and can affect steering. Remember to look ahead to recognize hazards in plenty of time to respond.

### **Pre-Trip**

Completing a through pre-trip is even more critical during the winter months. Items such as windshield wipers, washer fluid, defrosters, lights and tire conditions have an increased need to be in working order when you consider the possible winter weather conditions you may be exposed to.

### **Reduced Visibility**

School Bus Operators can expect to experience any and all of the following driving hazards that may result in reduced visibility. The most important response is to slow down. Maintain a speed that allows safe continuation in these conditions:

Fog	Darkness	Terrain
Smoke	Sun	Debris
Light Variations	Hail	Dust
Rain		

### **Road Conditions**

**Shaded areas** - these sections of the roadway may remain icy for an extended time as they are not exposed to the sun.



**Bridges** - Bridges freeze before the road does, pay attention to the temperature.

**Black Ice** - When the road only looks wet, but the temperature is below freezing there is a higher risk that the roadway has developed a thin and very dangerous layer of ice. Intersections with high volume and windswept areas are especially prone to this condition.

**Hydroplaning** - When due to high volumes of water collecting on the roadway the tires lose traction. With the loss of traction, you may lose the ability to stop and/or steer. If you do feel your vehicle hydroplaning, do not apply the brakes, take your foot off the accelerator and simply slow down.

**Water** - Never attempt to drive through flowing water that is going across the road as it is difficult to estimate the force and depth of the flow.

**Magnesium Chloride** - is a de-icing chemical used on the highways in the winter. It can coat the windows, and lights of your vehicle causing visibility problems.

**Snow and Ice** - Snow can vary in texture from slushy, granule, large flakes and freezing rain. Testing your braking capabilities is a good idea to give you a “feel” for the traction level and braking distances.

**Snow Plows** - Most snow plows display a flashing yellow and blue light when plowing. They use the yellow light only when not plowing. Plows can overshoot the road shoulder and leave a “false shoulder” of snow with little foundation to support the weight of your vehicle.

### **Additional Hints and Reminders**

- Check road conditions prior to departure.
- Speed should be conservative when conditions are less than perfect. Maintain a speed that allows you to stop quickly in the event of the unexpected.
- Know your limits and the bus’s limits. Pull off to a safe location rather than continuing in adverse or unsafe conditions.
- Test traction and braking ability in a safe location free from traffic or other hazards.
- False shoulders exist in all seasons (i.e. snow, tall grasses and heavy rains). Be aware of your surroundings at all times.
- Increase following distance.

**Steep grades, winding roads, blind curves, falling rocks, wildlife, and unpredictable weather can present great potential risk and serious consequences.**

## **Mountain Driving**

Mountain driving presents unique problems and situations that require greater attention to the same driving skills and expertise expected of all operators of school buses and small vehicles. Other hazards include high winds, sightseeing motorists and bicyclists. The margin for error is reduced and minor mistakes can develop into major problems. Mountain driving requires a high level of concentration and a respect for the terrain.

- Be alert and well rested.
- Do a personal fitness check.
- Be aware of your own limitations.
- Inquire about weather and road conditions prior to departure but be aware of sudden weather changes.
- Ensure that the vehicle used is in safe mechanical condition and has all the needed equipment by performing a complete pre-trip inspection prior to departure.

Increase the following distance in inclement weather to accommodate limited visibility and expanded stopping distance.

## **Target Speed**

Target speed is the speed a driver determines is safe for a driving condition. When the bus speed increases above the target speed, the driver slows to 5 mph below the target speed and allows the bus speed to increase naturally back to the target speed. Repeat this process as needed. If this process is happening often, the driver has not shifted down to a gear that will provide the engine compression to hold the vehicle at or below the target speed.

## **Maintaining Control**

The driver must keep the vehicle under control by maintaining a safe road speed (at or below the posted limit). Drivers should maintain control of the vehicle by primarily using the transmission (gearing down) and then using the service brakes.

## **Speed Control**

### **Maintaining Vehicle Control with the Transmission and Engine**

Engine compression is the first source of braking power. Before coming down a long steep grade, select a gear low enough to maintain a safe speed with engine

compression, while minimizing brake use. This is especially important with a standard transmission. You should be aware that an automatic transmission may up-shift even when manually placed in a lower gear if the engine reaches maximum RPM's. If RPM's are too high, it may not be possible to down shift a standard transmission.

### **Maintaining Vehicle Control with the Brakes**

In mountain driving, the force of gravity plays a major role. Gravity will tend to make the vehicle speed up when going down steep grades. The speed of the vehicle must be low enough to prevent brake overuse and avoid overheating.

Brake shoes and pads are designed to push against the brake drum and rotors to slow the vehicle. This action creates friction, which produces heat. While brakes are designed to take a lot of heat they can fail from excessive heat caused by attempting to slow down from too high a speed, too many times, or too quickly.

Brake "fade" (less stopping power) occurs when heat build-up causes the brake lining to glaze or deteriorate at high temperatures. This decreases the effectiveness of the brakes, and in extreme cases, will no longer slow the vehicle. Never exceed a safe controlled speed. The most effective braking method is to firmly apply the brakes to 5 mph below your safe speed, release the brake and allow the vehicle speed to increase. Repeat as needed when vehicle exceeds safe speed.

### **Effect of Speed on Stopping Distance**

Whenever speed is doubled, it takes an average of four times as much distance to stop and the vehicle has four times the destructive power if it crashes.

### **Effect of Vehicle Weight on Stopping Distance**

The heavier the vehicle, the more work the brakes must do to stop it and the more heat they generate.

### **Pitch and Grade**

One of the hardest techniques to learn may be reading terrain. Maintain a safe scanning distance and scan the entire area for changes in grade, upcoming curves, wildlife, and traffic. When possible, look through the trees beyond the curve before entering.



## **Tips for Reading Terrain**

- Whitewater - indicates a steep grade
- Objects that seem to change size rapidly - indicate a steep grade
- Canyon walls that appear to close in ahead of the bus - indicate a possible narrow road ahead
- Do not blindly follow the traffic ahead of you - other drivers may misinterpret terrain.

## **Curves**

**Speed and Curves** - Set the vehicle to a safe speed before entering a curve. Never exceed the posted speed limit. Since the posted speed limit is designed for a standard vehicle, road conditions and the weight of your vehicle will determine your safe speed which may be below what is posted. Only accelerate after passing the middle of a curve. Gravity can produce this slight acceleration on downhill curves. Braking in a curve may result in reduced vehicle control. The speed limit on a narrow winding mountain road is 20 mph.

## **Lane Position in Curves**

Stay centered in the lane to keep a safe clearance on all sides of the vehicle. Watching your and other vehicles lane position will help avoid collisions. Hugging either side reduces margin for error or space needed to avoid hazards such as rocks, soft shoulders, other vehicles, animals, bicyclists or other obstructions.

## **Animals**

Impact with a big game animal will cause damage to motor vehicles. However, if you take evasive action, the result could be a more serious crash. Concentrate on retaining control of your vehicle, unfortunately hitting the animal may be your best option.

## **Backing**

Avoid backing unless there is no other safe alternative. When vehicles meet on a road that is not wide enough for both vehicles to pass safely, the vehicle going downhill must yield the right-of-way by backing up to a wider place or stopping to leave adequate space.

## **Emergencies**

As you drive, always expect the unexpected. In cases of emergencies, always look for areas that can be used to safely slow or stop your vehicle. Sideswiping hillsides, rocks, small trees, or guardrails may be a safer alternative to avoid more serious consequences. Utilize emergency escape ramps or lanes, if available. Hitting wildlife

may also be safer than swerving and losing control of your vehicle. Use your best judgment when making decisions in emergency situations.

### **Delineators**

Delineator posts are green posts with colored reflectors. They are in high risk and informational areas of roadways to convey a variety of messages to motorists. Below are some specifics on delineators.

**Delineator**—a retro-reflective device mounted above the roadway surface and along the side of the roadway in a series to indicate the alignment of the roadway, especially at night or in adverse weather.

### **Type III**

- 1) Three Amber Front Reflectors - These are designed to warn the motorist of existing objects. These objects may not always be in the roadway, but are close enough to the edge of the road, to be a potential hazard. Typically, they are near underpass piers, bridge abutments, guardrails, and culvert heads. If a guardrail approach end is not flared, there will be a Type III delineator immediately in advance of the approach end.
- 2) Two White Front and One Red Back Reflector - These are designed to warn motorists of acceleration and deceleration lanes ahead. The red reflector is for warning motorists of the wrong way.
- 3) Two Amber Front and One Red Back Reflector - These are normally installed in medians for left-turn deceleration lanes.
- 4) One Blue and Two Yellow Front Reflectors - These are installed at crossover locations of divided highways.
- 5) Three Blue Front Reflectors - These are for Department of Transportation maintenance crew workers. These are installed at the bridge joints.
- 6) Three Green Front Reflectors - These are for Department of Transportation maintenance workers. These are installed in front of approaching guardrails with flare ends, not on bridges. They can be found in front of curb heads.
- 7) Red Reflectors - Runaway truck ramps are bordered on each side by red reflectors spaced not more than 50 feet apart.

**Delineation Posts** - The white and amber reflectors on the green posts along the roadway are called cat eyes. The color and number of cat eyes on a post indicate a particular hazard or condition at the edge of the roadway.

- Edge of the road single white
- Right side of roadway single white

- |                                    |              |
|------------------------------------|--------------|
| • Left side of roadway             | single amber |
| • On and off ramps                 | two white    |
| • Minor problem area               | single amber |
| • Moderate to serious problem area | two amber    |
| • Life-threatening problems        | three amber  |
- (Culverts, bridges, guardrails, heavy crossroad traffic)

Delineator panels are a striped marker consisting of a vertical rectangle with alternating black and retro-reflective yellow stripes sloping downward at an angle of 45 degrees toward the side of the obstruction on which traffic is to pass. These types of delineators can be seen on the end of guard rails, on bridges, etc.

## **Other Considerations on Mountain Driving**

### **Passenger Well-Being**

When planning a mountain trip, think about your passengers.

- Breaks should be taken as needed where safe pullout areas can be found.
- Motion/car sickness - Have the passenger sit up front with one or more windows open for fresh air. You may need to adjust your driving to accommodate the needs of your passengers.
- Altitude Sickness - Even passengers that live in high altitude areas may suffer from altitude sickness. Make sure they drink fluids, relax and get to a lower altitude as soon as possible.

### **Bicycles**

Bicyclists on the road have the same rights and responsibilities as motor vehicles. Pass only when necessary and only when it can be done in a safe manner. State law requires a three-foot separation between bicycles and vehicles on the roadways. It is permitted for vehicles to cross the double yellow line to provide this cushion of safety. Be aware at higher speeds, the tail wind created by vehicles can affect the bicyclist.

### **Other Motorists**

Many motorists are uncomfortable on mountain roads due to fear and may crowd the center of the road. Sightseeing motorists may drift to either side of the roadway or stop abruptly. Be aware of pedestrian traffic in unexpected locations on or off the roadway.



## **Self-Preservation**

When driving long distances, you may experience fatigue, illness or minor aches and pains. Safe driving involves smart driving. Pay attention to your body and take measures to remain alert and prevent muscle soreness.

**The only remedy for fatigue is sleep. Always use your best judgment.  
Pull over and stop anytime you cannot drive safely.**



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## Unit 8 - First Aid Information

### Per Colorado Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles 1 CCR301-26 (Excerpts)

*5.01(j) The operator shall have written documentation evidencing that they have received first aid training, including cardiopulmonary resuscitation and universal precautions within 90 calendar days after initial employment. If the operator holds a current first aid, cardiopulmonary resuscitation certificate it will meet the requirements of this section. Operators shall receive first aid training and/or re-certification every two (2) years thereafter.*

*5.02(i) The operator shall have written documentation evidencing that they have received first aid training, including cardiopulmonary resuscitation and universal precautions within 90 calendar days after initial employment. If the operator holds a current first aid, cardiopulmonary resuscitation certificate it will meet the requirements of this section. Operators shall receive first aid training and/or re-certification every two (2) years thereafter.*

*5.03(h) The operator shall be given and/or have access to first aid information, including cardiopulmonary resuscitation and universal precautions.*

### **First aid is the immediate and temporary care given to the victim of an accident or sudden illness until medical services can be obtained.**

- Ask a conscious victim if you may assist them.
- Use common sense and a reasonable level of skill, not to exceed the scope of the individual's training in emergency situations.

All drivers will, at some point, will find a need to administer first aid. The objective of first aid is to save life and prevent further injury. Therefore, it is necessary to know and understand the principles of basic first aid.

It is important that drivers understand what **not** to do as well as to know what to do.

This unit is designed to teach the basic fundamentals of first aid. Bus drivers should not administer any first aid beyond that in which they have been trained.

The most noticeable indicators of an emergency are abnormal sights, odors, noises, and personal appearances or behaviors. An emergency or serious illness may be difficult to recognize. When assessing if there is an emergency, often times, those who



are injured the most will be the quietest. If you have any reason to suspect that something may be wrong, check the injured or ill person.

Common sense and a few simple rules are the keys to effective first aid. Some of the important ideas to remember when rendering first aid are:

- First aid is not a substitute for medical care. Call your dispatcher and/or your emergency services number (911) as soon as you identify a need for first aid care.
- First aid procedures apply only to immediate temporary needs.
- Only accepted first aid procedures should be used in all cases.
- Remaining calm. Children will react to your anxiety, which can make the situation worse. Reassure your victim that you can help.

Injuries to victims vary in severity. The individual in control must make sound decisions as to which victims need care first.

### **Good Samaritan Law**

*13-21-108. Persons rendering emergency assistance exempt from liability.*

*(1) Any person licensed as a physician and surgeon under the laws of the state of Colorado, or any other person, who in good faith renders emergency care or emergency assistance to a person not presently his patient without compensation at the place of an emergency or accident, including a health care institution as defined in section 13- 64-202 (3), shall not be liable for any civil damages for acts or omissions made in good faith as a result of the rendering of such emergency care or emergency assistance during the emergency, unless the acts or omissions were grossly negligent or willful and wanton. This section shall not apply to any person who renders such emergency care or emergency assistance to a patient he is otherwise obligated to cover.*

*(2) Any person while acting as a volunteer member of a rescue unit, as defined in section 25-3.5-103 (11), C.R.S., notwithstanding the fact that such organization may recover actual costs incurred in the rendering of emergency care or assistance without compensation at the place of an emergency or accident shall not be liable for any civil damages for acts or omissions in good faith.*

*(3) Any person, including a licensed physician, surgeon, or other medical personnel while acting as a volunteer member of a ski patrol or ski area rescue unit, notwithstanding the fact that such person may receive free skiing privileges or other benefits as the result of his volunteer status, who in good faith renders emergency care or assistance without other compensation at the place of an emergency or accident shall not be liable for any civil damages for acts or omissions in good faith.*

## Your First Aid Kit

It is important that drivers know where the first aid kit is located and what it contains. Before departing on any trip make sure you have found the location of your kit and that you have inspected it to ensure that it has the required contents. Then, if an emergency occurs, they will not waste valuable time looking for the first aid kit or looking for items they know are not in the kit.

### ***2251-R-20.00 Emergency Equipment.***

Contents of the 24 unit First Aid Kit: Item Unit(s)

Adhesive Tape 1

1-inch adhesive bandage 2

2-inch bandage compress 1

3-inch bandage compress 1

4-inch bandage compress 1

3-inch x 3-inch plain gauze pads 1

Gauze roller bandage 2 inch wide 2

Plain absorbent gauze - ½ square yard 4

Plain absorbent gauze - 24-inch x 72 inch 3

Triangular bandages 4

Scissors, tweezers 1

Space rescue blanket 1

Non-latex disposable gloves, pair. 1

CPR mask or mouth to mouth airway 1

Moisture and dustproof kit of sufficient capacity to store the required items.

Everyone should, unless they have been disabled, use first aid whenever it is apparent that death or severe and/or permanent injury to others may follow. No medication, however, should be administered without a physician's directive.

## **Blood Borne Pathogen Protection**

Many people are afraid to act in an emergency. They may be concerned they may contract a disease from the injured party. Individuals administering first aid need to take some basic steps to protect themselves from blood borne pathogens (infectious disease, bacteria, or viruses) found in body fluids of others. Your employer is required to give you more detailed training in blood borne pathogen procedures.

**Following basic guidelines can help reduce disease transmission when providing first aid:**

- Be prepared by having a first aid kit handy and stocked with protective equipment and supplies such as disposable gloves and biohazard bags on the bus.
- Before providing care, use protective barriers, such as eye protection, non-latex disposable gloves or a clean dry cloth, between the victim's body fluids and yourself.
- Cover any cuts, sores, scrapes and skin conditions you may have.
- Avoiding contact with blood or body fluids when possible.
- Do not eat, drink or touch your mouth, nose or eyes when giving first aid.
- Do not touch objects that may be soiled with blood or body fluids.
- Dispose of any materials contaminated with blood or body fluids as directed by your employer's blood borne pathogen policy.
- Always wash your hands thoroughly with soap and warm running water when you are done giving first aid, even if you wore disposable gloves.
- Be prepared by having protective equipment

For more detailed information regarding First Aid Procedures contact your local School Nurse or visit the CDE School Nursing and Health website located at [http://www.cde.state.co.us/healthandwellness/snh\\_home](http://www.cde.state.co.us/healthandwellness/snh_home)

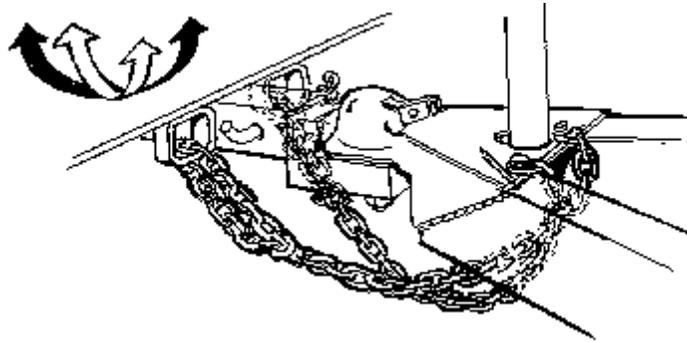


## Unit 9 - Trailer Towing

Before you hitch any trailer to your car or truck, consult your owner's manual to find out the vehicle's maximum towing capacity. While larger, more powerful vehicles can tow more than smaller, less powerful ones, some subcompact cars, particularly front-drive versions, can't tow at all. Typical family-size cars can usually tow 1,000 to 2,000 lbs. Large cars and light trucks are rated from 2,000 lbs. to nearly 10,000 lbs.

If you tow a trailer, you are subject to new and different challenges on the highway than you may have previously encountered. Towing a trailer is no small responsibility and should be undertaken with great care and an eye toward safety first. An accident with a tow vehicle and trailer can have much greater consequences than carelessness with a small car. Like an airline pilot who is responsible for expensive equipment and many lives, you should take your responsibilities as a tow vehicle driver very seriously and learn all you can about doing the job safely and well. Whether you tow a light boat or camping trailer behind your car, a vacation trailer behind a motorhome or a cargo trailer to haul a race car or move personal belongings, balancing the load and preparing the trailer and tow vehicle are critical to safe handling.

### The Trailer Ball and Safety Chains

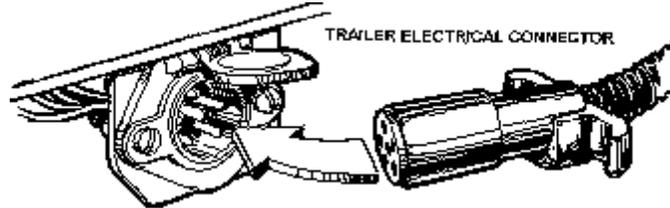


The ball should be located so the trailer sits level when connected to the tow vehicle. The vehicle should be able to accept this weight without a major change of attitude. The ball should be lightly greased so the hitch rotates smoothly on it. Safety chains should be long enough for tight turns and be crossed (right to left and left to right). This will help create a "saddle" if you have a tongue failure and will help maintain control while stopping. Don't allow these chains to drag on the pavement, because they can be ground to an unsafe condition in a very short amount of time. Always inspect the hitch and tongue for cracks when hooking up. Rust is your enemy and can cause premature failures. Check lights and brakes each time the trailer is hooked up. Try to do things in the same order each time and use a checklist. Don't forget to retract the jack. Don't ever hook a trailer up half way or you may forget to finish the



job. Don't start if you can't finish, and don't ever leave the receptor pin out for a minute.

**Trailer Lighting and Connections**



All your lights must work to be legal and safe. The weakest link is the connector. They corrode easily and need constant attention to keep the system working. (Be careful when cleaning connectors not to short them out.) The wiring to the connector should be carefully routed so that it can't come apart in tight turns or chafe through and short out. Remember, electric brakes also run through this connector. Have an observer confirm your brake lights, blinkers and running lights are working properly each time you hook up.

Complete the rest of the daily pre-trip inspection as required by your district. This will now include the key items on your trailer, such as: tires, wheels, lights, hitch, safety chain, emergency equipment. Also, verify that the annual inspection for both vehicles is current.

**Recommended Hitch Weight Percentages**

TYPE OF TRAILER	PERCENT OF WT. ON TONGUE
Single Axle	10% minimum/15% maximum
Tandem Axle	9% to 15%
Travel Trailer	11% to 12%
5th Wheel	15% to 25%

**Placing the Load**

It would be overly simplistic to say, "put the heavy items over the axles". Sometimes a lot of little items can far outweigh one big one. The value of an item should be one of the first considerations of where it is put in a trailer. Arrange the load so that these items are protected by their location. Don't put big, heavy items in a place where they can't be securely tied down. A glued down rug makes a great floor for a cargo trailer. Things stay put and don't slide around. Of course, it would be easy to say everything should be securely tied down but it would be also unrealistic. Start with top heavy items if you have them. That's usually a good place to start because you



must have plenty of room available to properly tie them down. Tying them straight down is not secure enough. They need to be tied off at several angles or they could fall over in an abrupt change in speed or direction. You need room to accomplish this. Smaller items can be used to fill the spaces around them later.

The smaller items can be loaded in such a way that they balance out the load. They should be located so that they will stay put. Placing them next to items that have already been tied down helps, but your main concern should be to not lose the balance of the trailer. Don't forget you can also get one side of a trailer a lot heavier than the other without a little planning. This can cause a very serious problem when cornering, even causing the trailer to turn over in a sudden turn.

Top heavy loads can cause problems not only in cornering but also in hard braking. They have a tendency to make the trailer "dive" in hard braking conditions. This suddenly increases tongue weight and can decrease front axle loading just when you need steering and those big front disc brakes the most. Center top heavy items or arrange the remainder of the load to act as a counter weight to minimize this effect.



***Top heavy loads can cause trailer "dive" under hard braking, possibly reducing steering and braking control.***

Never place heavy objects on add-on devices hung on the rear bumper or placed across the tongue frame. A bicycle may be fine to hang out in back, but not a motorcycle. This places heavy objects where they will dramatically affect handling in corners or bumps. Heavy weights placed well behind the axle can also aggravate swaying in turns.

The best advice is to use good common sense and to always allow plenty of margin for safety. The purpose behind this information and test is to give you the necessary information to make intelligent, informed decisions when loading. The ultimate responsibility for using that information correctly lies with you and you alone.

### **Your Responsibilities as a Driver**

Towing a trailer has a responsibility similar to properly driving your car. You wouldn't think of letting your children drive on the road without the proper training, and you shouldn't take a fully loaded trailer that could be improperly loaded onto a busy road to learn with. It is a skill that has to be developed and a responsibility that shouldn't



be taken lightly. If you're towing a travel trailer for the first time, you have to start learning with a full load. Drive only when traffic is light and don't drive where traffic conditions might force you into driving faster than you are comfortable with. Don't be embarrassed to ask questions or park when it is windy. Learn what it takes to keep from ruining your transmission when pulling heavy loads up a hill or burning your brakes up going down the other side. It is a skill that you can take pride in. The hardest skill to learn is to know when not to tow a trailer.

Travel trailers, boat trailers, and specialty trailers are usually designed to have the proper hitch weight, but it would be intelligent to check them. Make sure your hitch is capable of handling the load. You can still screw up the design by putting something heavy where it was never intended to go. Another way of getting in trouble with a boat is towing it when it has a lot of water in the bilge from a rainstorm. If you add heavy items to this type of trailer, put the extra weight over the axles.

### Driving in Windy Conditions



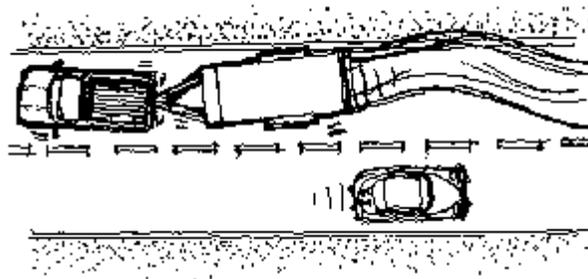
Wind can create havoc when towing a trailer, causing oscillations or sudden pulling to one side. Thirty mile an hour crosswinds can blow you off the road if there is a sudden gust. For example, say a hard gust of wind hits your rig from the left. Your rig pitches to the right and moves towards right. In order to stay on the road, you turn left. With the rig leaning to the right, the centrifugal force generated by the left turn can be the added ingredient that puts you on your side, or worse yet, down the side of a ravine. The only way to help lower the risk traveling in these conditions is to slow down. This eliminates the centrifugal force that happens when you correct, and if the wind did blow you over it wouldn't be such a violent crash. The safest way is not to drive in extremely windy conditions. That's what the professional haulers do, and so should you. Park it until it's safe to continue. Wind can also have a dramatic effect on your fuel mileage when towing a heavy load. Plan your fuel stops accordingly.

***NOTE: Several types of trailer sway control braces are available that can minimize the effects of wind gusts and passing trucks.***



### Wind from Passing Trucks

An interesting thing happens when being passed by faster moving buses or large trucks. Large vehicles develop a high pressure wave of air in front of them and low pressure area to their rear as they go down the highway. This is variable and is dependent on the shape of the truck and the existing wind conditions. The effect is such that as the truck comes up to pass on your left, first your trailer and then your tow vehicle will be pushed to your right by the truck's "bow wave". As the truck passes, the low pressure zone will then pull you back to the left. You must steer first left and then right to counter the effect. It's not particularly dangerous, but it does keep you on your toes.

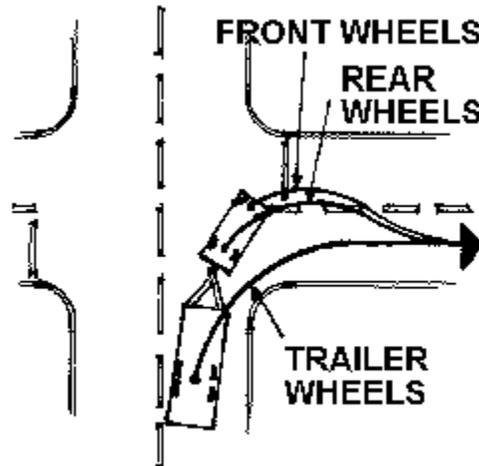


### Handling Trailer Sway

If swaying occurs, steer as little as possible while you slow down. Because of your natural lag in reaction time, quick steering movements will actually make things worse and cause the oscillation to increase. Application of the trailer brake usually tends to help keep the vehicles aligned, while heavy braking with the tow vehicle may reduce trailer stability. Until the problem is identified and solved, travel at reduced speeds.



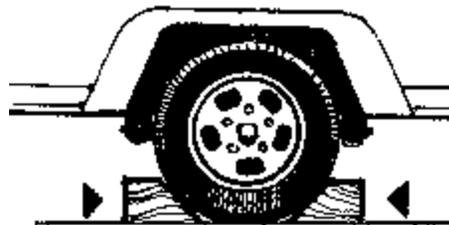
*Heavy items loaded to one side of the trailer can cause oscillation or handling problems in turns.*



*The longer the trailer, the wider you must swing in a turn to make sure the trailer wheels clear the inside curb.*

### Something to Think About. . .

A temporary increase in loading occurs during dips or bumps in the road. A severe dip causes increased weight to suddenly be placed on hitch, axles and tires. Though hitch manufacturers take this into consideration in their designs, an overloaded or old, cracked and rusted hitch or tongue can be suddenly stressed beyond capacity, causing it to fail. Watch for bumps and large dips in the road and try to slow down for them. A conservative safety margin in loading will also be helpful in this type of unforeseen circumstance.



*Whenever the trailer is detached from the tow vehicle, block the wheels so it is impossible for the trailer to roll off on its own. Better yet, don't ever detach the trailer on any grade.*

### **Accelerating**

The added weight of your trailer and cargo will cause the engine to work harder when accelerating. Allow your vehicle to gradually reach a comfortable driving speed.



## **Backing**

It's always helpful to have a spotter outside your vehicle to guide you when backing up. Make certain you can see your spotter in your side mirrors at all times. Then place one hand at the six o'clock position on the steering wheel and back up slowly, turning the wheel to the left to make the trailer move left. Turn the wheel to the right to make the trailer move right.

## **Braking**

Use firm and steady pressure on the brake pedal. "Slamming" the brakes can cause the trailer to jackknife.

## **Cornering**

The turning radius of a trailer is usually smaller than that of the towing vehicle. When turning, drive your vehicle slightly past the normal turning point and then begin your turn. Cornering at a wider angle will allow both your vehicle and the trailer to make the turn.

## **Driving On Steep Grades**

To avoid straining brake and engine components, reduce your speed and shift the transmission into a lower gear before going down a steep grade. When driving up a long, steep grade, shift to a lower gear to maintain speed and avoid lugging (the sluggish stuttering of your vehicle's engine when it needs to be shifted to a lower gear). Also watch your engine temperature gauge for any signs of overheating.

## **Parking**

In selecting a parking spot, allow yourself a lot of room to maneuver. Always block the wheels on both the trailer and your vehicle after you park. Parking on inclines is not recommended.

## **Passing**

Passing is not recommended when you are towing a trailer. If you must pass, allow yourself additional time and distance to safely pass the other vehicle. Signal your intention to pass well in advance, and make certain your trailer is clear of the vehicle you have passed before you reenter the lane.

## **The Driver**

Apart from adding to the driver's legal responsibilities, towing requires a greater degree of knowledge and skill than normal driving. When towing, you should:

- allow for the extra length and width of the trailer when entering traffic;



- apply the accelerator, brakes and steering smoothly and gently to avoid sway, especially in wet or slippery conditions;
- maintain a space of at least 4 seconds between you and the vehicle in front to allow for a longer stopping distance;
- engage a lower gear in both manual and automatic vehicles to increase vehicle control and reduce brake strain when travelling downhill;
- allow more time and a greater distance in which to overtake. When towing, your vehicle's capacity to accelerate is reduced;
- if possible, reverse with a person watching the rear of the trailer;
- where areas are provided, pull off the road to allow traffic building up behind you to overtake;
- be aware that towing is more stressful than normal driving and is more likely to cause fatigue. Therefore, more rest stops should be planned.
- Always reduce your normal driving speed when towing. On curves or entrance and exit ramps, reduce your speed to 5 mph below the posted speed.
- Be alert and wear your seatbelt.

## **Colorado Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles 1 CCR 301-26 (Excerpts)**

### ***4204-R-5.00 School Transportation Vehicle Operator Requirements***

*5.03 School transportation vehicle operators, other than route operators, driving vehicles with the capacity of 15 or fewer passengers (counting the driver), including Type A Multifunction Bus and Small Vehicle, shall meet or exceed the following requirements:*

- 5.03(a) The operator shall possess a valid driver's license.*
- 5.03(b) The operator shall be a minimum of 18 years of age.*
- 5.03(c) The district or service provider shall obtain a motor vehicle record of each operator prior to transporting students and annually thereafter.*
- 5.03(d) The operator shall be given and/or have access to the CDE Type A Multifunction Bus /Small Vehicle Operator Guide prior to transporting students.*
- 5.03(e) The operator shall successfully pass a Type A CDE Multifunction Bus/Small Vehicle Operator written test for the current school year prior to transporting students and annually thereafter.*



- 5.03(f) *The operator shall annually complete the CDE Multifunction/Small Vehicle Operators Medical Information Form (STU-17). Any yes annotations shall require a doctor's release.*
- 5.03(g) *The operator shall receive pre-service training on the type of vehicle(s) to be driven, the type of duties they may be required to perform and in student confidentiality requirements prior to transporting students.*
- 5.03(h) *The operator shall be given and/or have access to first aid information, including cardiopulmonary resuscitation and universal precautions.*
- 5.03(i) *The operator shall successfully pass a driving performance test including a pre-trip inspection prior to transporting students. This test shall be conducted in a vehicle, which is similar in type and size to the vehicle the applicant is assigned to operate. Districts have the option to re-test in subsequent years at their discretion.*
- 5.03(j) *Prior to driving a school transportation vehicle pursuant to 1 CCR 301-26-R-12.11, operators shall receive training on towing a trailer.*

**4204-R-14.00 Safety Restraints**

- 14.01 *A school transportation vehicle operator shall have the safety belt fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.*
- 14.02 *All passengers in a school transportation vehicle under 10,000 lbs. GVWR shall have their safety belts fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.*

**CRS. Title 42 - Vehicles and Traffic**

- (105) *"Trailer" means any wheeled vehicle, without motive power, which is designed to be drawn by a motor vehicle and to carry its cargo load wholly upon its own structure and that is generally and commonly used to carry and transport property over the public highways. The term includes, but is not limited to, multipurpose trailers as defined in subsection (60.3) of this section.*



**42-4-502. Width of vehicles**

- (1) *The total outside width of any vehicle or the load thereon shall not exceed eight feet six inches, except as otherwise provided in this section.*
- (2) (a) *A load of loose hay, including loosely bound, round bales, whether horse drawn or by motor, shall not exceed twelve feet in width. (b) A vehicle and trailer may transport a load of rectangular hay bales if such vehicle and load do not exceed ten feet six inches in width.*
- (3) *It is unlawful for any person to operate a vehicle or a motor vehicle which has attached thereto in any manner any chain, rope, wire, or other equipment which drags, swings, or projects in any manner so as to endanger the person or property of another.*
- (4) *The total outside width of buses and coaches used for the transportation of passengers shall not exceed eight feet six inches.*
- (5) (a) *The total outside width of vehicles as included in this section shall not be construed so as to prohibit the projection beyond such width of clearance lights, rearview mirrors, or other accessories required by federal, state, or city laws or regulations. (b) The width requirements imposed by subsection (1) of this section shall not include appurtenances on recreational vehicles, including but not limited to motor homes, travel trailers, fifth wheel trailers, camping trailers, recreational park trailers, multipurpose trailers, and truck campers, all as defined in section 24-32-902, C.R.S., so long as such recreational vehicle, including such appurtenances, does not exceed a total outside width of nine feet six inches.*
- (6) *Any person who violates any provision of this section commits a class B traffic infraction.*

**42-4-506. Trailers and towed vehicles**

- (1) *When one vehicle is towing another, the drawbar or other connection shall be of sufficient strength to pull all weight towed Colorado Revised Statutes 2013 402 Title 42 thereby, and said drawbar or other connection shall not exceed fifteen feet from one vehicle to the other, except the connection between any two vehicles transporting poles, pipe, machinery, or other objects of a structural nature which cannot readily be dismembered and except connections between vehicles in which the combined lengths of the vehicles and the connection does not exceed an overall length of fifty-five feet and the connection is of rigid construction included as part of the structural design of the towed vehicle.*



- (2) When one vehicle is towing another and the connection consists of a chain, rope, or cable, there shall be displayed upon such connection a white flag or cloth not less than twelve inches square.*
- (3) Whenever one vehicle is towing another, in addition to the drawbar or other connection, except a fifth wheel connection meeting the requirements of the department of transportation, safety chains or cables arranged in such a way that it will be impossible for the vehicle being towed to break loose from the vehicle towing in the event the drawbar or other connection were to be broken, loosened, or otherwise damaged shall be used. This subsection (3) shall apply to all motor vehicles, to all trailers, except semitrailers connected by a proper fifth wheel, and to any dolly used to convert a semitrailer to a full trailer.*
- (4) Any person who violates any provision of this section commits a class B traffic infraction.*

**42-4-1405. Riding in trailers.**

*No person shall occupy a trailer while it is being moved upon a public highway. Any person who violates any provision of this section commits a class B traffic infraction.*



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## Unit 10 - Addendum

1. Acknowledgement of Receipt and Understanding of Colorado Department of Education Type A Multifunction Bus/Small Vehicle Operator Guide
2. Colorado Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles 1 CCR 301-26
3. STU - 8  
School Transportation Vehicle (Small Vehicle) Pre-Trip and Post Trip Requirements (STU 8)
4. STU -9  
School Transportation Vehicle (School Bus) Pre-Trip and Post Trip Requirements
5. STU-17  
Multifunction/Small Vehicle Operators Medical Information Form
6. License and Training Matrix



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## Certification of Receipt and Understanding

I, \_\_\_\_\_ (Please Print) certify that I have been given and/or have access to the Colorado Department of Education Type A Multifunction Bus/Small Vehicle Operator Guide.

I hereby certify that I have read and understand the Colorado Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles 1 CCR 301-26.

I understand that I am responsible, pursuant to these rules, to operate a school transportation vehicle within the Rules set forth in 1 CCR 301-26 and the laws of the State of Colorado as applicable to my job responsibilities.

I understand that I am required to receive training and provide all of the documentation required per the School Transportation Vehicle Operator Requirements indicated in 1 CCR 301-26, 4204-R-5.00 that are applicable to my job responsibilities.

Driver Signature \_\_\_\_\_ Date \_\_\_\_\_

School District \_\_\_\_\_

Trainer(s) Name \_\_\_\_\_ (Please Print)

Trainer(s) Signature \_\_\_\_\_



**COLORADO**  
**Department of Education**  
School Finance and  
Operations Division

**DEPARTMENT OF EDUCATION**  
**Colorado State Board of Education**

**COLORADO RULES FOR THE OPERATION, MAINTENANCE AND INSPECTION OF SCHOOL  
TRANSPORTATION VEHICLES**

**1 CCR 301-26**

**4204-R-1.00 Statement of Basis and Purpose**

- 1.01 Colorado law provides for the State Board of Education to adopt and enforce regulations governing the safe operation of school buses used for the transportation of students pursuant to Sections 22-51-108 and 42-4-1904, C.R.S.
- 1.02 The purpose of these rules is to adopt and enforce regulations governing the reasonable and adequate standards of safety for the operation, maintenance and inspection of school transportation vehicles that promote the welfare of the students and afford reasonable protection to the public. These rules are designed to align with federal standards, reflect current industry practices, and incorporate recommendations from school district and service provider transportation professionals.
- 1.03 The Commissioner, or designee, may provide an exemption to the Rules for the Operation, Maintenance and Inspection of School Transportation Vehicles to the extent the Commissioner finds an exemption to be appropriate.
- 1.04 These rules shall become effective July 30, 2016 for all student transportation.

**4204-R-2.00 Applicability of Rules**

- 2.01 These rules and regulations apply to the operation, maintenance and inspection of all public school transportation vehicles (School Bus, Multifunction Bus, Motor Coach Bus and Small Vehicle as defined in 1 CCR 301-25-R-5.00) transporting students to and from school, from school to school, and/or to and from school related events in vehicles owned, leased or rented by the district or under agreement with the district.
- 2.02 These rules are not intended to include:
  - 2.02(a) Private motor vehicles used exclusively to carry members of the owner's household; or
  - 2.02(b) Transportation arrangements not authorized by the district including but not limited to; sharing of actual gasoline expense or participation in a car pool; or
  - 2.02(c) The operations of vehicles in bona fide emergency situations consistent with policies of the local board of education; or

2.02(d) Student transportation under public transportation programs subject to the Code of Federal Regulations 49 CFR 390 to 399.

2.03 These rules shall not preclude a school district or service provider from establishing a more rigid standard or policy when deemed necessary by the local board of education or service provider.

#### **4204-R-3.00 Non-Compliance**

3.01 CDE will perform periodic School Transportation Advisory Reviews (STAR) of school districts and service providers to evaluate and assist with compliance of these rules.

3.01(a) CDE will provide school districts and service providers written notification of the STAR findings.

3.01(b) Upon receipt of the written notification of STAR findings, school districts or service providers shall respond in writing to outline corrective actions if necessary.

3.02 CDE shall revoke or suspend the certificate for a school transportation annual inspector, school transportation annual inspector hands-on tester or inspection site under the following circumstances:

3.02(a) A school transportation annual inspector, school transportation annual inspector hands-on tester or inspection site does not meet the requirements outlined in these rules.

3.02(b) School transportation annual inspections or hands-on tests have not been properly conducted.

#### **4204-R-4.00 School District and Service Provider Employment Responsibilities**

4.01 School districts and service providers shall outline job responsibilities and develop job qualification standards for each school transportation vehicle operator and school transportation paraprofessionals, consistent with federal and state regulations. A copy of these requirements shall be provided to each school transportation vehicle operator and paraprofessional upon employment.

4.02 School districts and service providers shall maintain separate files for each school transportation vehicle operator, school transportation paraprofessional, and school transportation annual inspector with written documentation evidencing all listed requirements indicated in Rule 5.00, Rule 6.00 and Rule 7.00, as applicable. Training documentation shall include the trainer name, date of the training, description of the training, duration of each topic covered and the signature of all attendees.

4.02(a) If a school transportation vehicle operator, school transportation paraprofessional, or school transportation annual inspector works for more than one school district, each district shall maintain a file with documentation in accordance with this rule.

- 4.03 School districts and service providers shall ensure all employees required to possess a commercial driver's license (CDL) shall be in a US DOT approved substance abuse testing program.
- 4.04 School districts and service providers shall not permit a school transportation vehicle operator to transport students, while the operator's ability or alertness is so impaired, through fatigue, illness or any other cause, as to make it unsafe for the operator to transport students.
- 4.05 School districts and service providers shall have written emergency procedures and/or contingency plans to be followed in the event of a traffic accident, vehicle breakdown, unexpected school closing, unforeseen route change or relocation of a student stop in an emergency.
- 4.06 School district and service providers shall ensure that documentation outlining transportation related services and requirements, including required use of Child Safety Restraint Systems and medical and behavioral information as it relates to student transportation, is available to applicable school transportation vehicle operators and paraprofessionals prior to providing transportation services.

#### **4204-R-5.00 School Transportation Vehicle Operator Requirements**

- 5.01 School transportation vehicle route operators (transporting students to and from school or from school to school) driving a School Bus with the capacity of 16 or greater passengers (counting the driver) and school transportation vehicle operators, other than route operators, driving vehicles with the capacity of 16 or greater passengers (counting the driver), including a School Bus, Multifunction Bus and Motor Coach Bus, shall meet or exceed the following requirements:
  - 5.01(a) The operator shall possess a valid commercial driver's license (CDL) with the proper class and endorsements for size and type of vehicle(s) to be driven and the associated Medical Examination Report pursuant to 49 CFR 391.43.
  - 5.01(b) The operator shall be a minimum of 18 years of age.
  - 5.01(c) The district or service provider shall obtain a motor vehicle record of each operator prior to transporting students and annually thereafter.
  - 5.01(d) The operator shall be given and/or have access to the CDE School Bus/Multifunction Bus/Motor Coach Bus Operator Guide prior to transporting students.
  - 5.01(e) The operator shall receive a minimum of six hours of in-service training annually which may include required training in 1 CCR 301-26-R-5.00. A portion of this annual in-service requirement may occur during the school year.
  - 5.01(f) The operator shall successfully pass a CDE School Bus/Multifunction Bus/Motor Coach Bus Operator written test for the current school year prior to transporting students and annually thereafter.

- 5.01(g) The operator shall successfully pass a driving performance test including a pre-trip inspection prior to transporting students and annually thereafter. This test shall be conducted in a vehicle, which is similar in type and size to the vehicle the applicant is assigned to operate. Districts have the option to re-test at their discretion.
- 5.01(h) The operator shall receive pre-service training on the type of vehicle(s) to be driven, the type of duties they may be required to perform and in student confidentiality requirements prior to transporting students.
- 5.01(i) The operator shall have written documentation evidencing that they have received first aid training, including cardiopulmonary resuscitation and universal precautions within 90 calendar days after initial employment. If the operator holds a current first aid, cardiopulmonary resuscitation certificate it will meet the requirements of this section. Operators shall receive first aid training and/or re-certification every two (2) years thereafter.
- 5.01(j) The operator shall receive training regarding the proper use and maintenance of Child Safety Restraint Systems (CSRS) and proper wheelchair securement, when the operator is engaged in transportation involving these systems and devices prior to transporting students.
- 5.02 School transportation vehicle route operators (transporting students to and from school or from school to school) driving vehicles with the capacity of 15 or fewer passengers (counting the driver), including Type A Multifunction Bus and Small Vehicle, shall meet or exceed the following requirements:
- 5.02(a) The operator shall possess a valid driver's license.
- 5.02(b) The operator shall be a minimum of 18 years of age.
- 5.02(c) The operator shall have a current physical examination (not to exceed two years) consistent with the requirements of 49 CFR 391.43.
- 5.02(d) The district or service provider shall obtain a motor vehicle record of each operator prior to transporting students and annually thereafter.
- 5.02(e) The operator shall be given and/or have access to the CDE Type A Multifunction Bus /Small Vehicle Route Driver Guide prior to transporting students.
- 5.02(f) The operator shall receive a minimum of six hours of in-service training annually which may include required training in 1 CCR 301-26-R-5.00. A portion of this annual in-service requirement may occur during the school year.
- 5.02(g) The operator shall successfully pass a CDE Type A Multifunction Bus/Small Vehicle Route Operator written test for the current school year prior to transporting students and annually thereafter.



- 5.02(h) The operator shall successfully pass a driving performance test including a pre-trip inspection prior to transporting students and annually thereafter. This test shall be conducted in a vehicle, which is similar in type and size to the vehicle the applicant is assigned to operate. Districts have the option to re-test at their discretion.
- 5.02(i) The operator shall receive pre-service training on the type of vehicle(s) to be driven, the type of duties they may be required to perform and in student confidentiality requirements prior to transporting students.
- 5.02(j) The operator shall have written documentation evidencing that they have received first aid training, including cardiopulmonary resuscitation and universal precautions within 90 calendar days after initial employment. If the operator holds a current first aid, cardiopulmonary resuscitation certificate it will meet the requirements of this section. Operators shall receive first aid training and/or re-certification every two (2) years thereafter.
- 5.02(k) The operator shall receive training regarding the proper use and maintenance of Child Safety Restraint Systems (CSRS) and proper wheelchair securement, when the operator is engaged in transportation involving these systems and devices prior to transporting students.
- 5.03 School transportation vehicle operators, other than route operators, driving vehicles with the capacity of 15 or fewer passengers (counting the driver), including Type A Multifunction Bus and Small Vehicle, shall meet or exceed the following requirements:
- 5.03(a) The operator shall possess a valid driver's license.
- 5.03(b) The operator shall be a minimum of 18 years of age.
- 5.03(c) The district or service provider shall obtain a motor vehicle record of each operator prior to transporting students and annually thereafter.
- 5.03(d) The operator shall be given and/or have access to the CDE Type A Multifunction Bus /Small Vehicle Operator Guide prior to transporting students.
- 5.03(e) The operator shall successfully pass a Type A CDE Multifunction Bus/Small Vehicle Operator written test for the current school year prior to transporting students and annually thereafter.
- 5.03(f) The operator shall annually complete the CDE Multifunction/Small Vehicle Operators Medical Information Form (STU-17). Any yes annotations shall require a doctor's release.
- 5.03(g) The operator shall receive pre-service training on the type of vehicle(s) to be driven, the type of duties they may be required to perform and in student confidentiality requirements prior to transporting students.



- 5.03(h) The operator shall be given and/or have access to first aid information, including cardiopulmonary resuscitation and universal precautions.
- 5.03(i) The operator shall successfully pass a driving performance test including a pre-trip inspection prior to transporting students. This test shall be conducted in a vehicle, which is similar in type and size to the vehicle the applicant is assigned to operate. Districts have the option to re-test in subsequent years at their discretion.
- 5.03(j) Prior to driving a school transportation vehicle pursuant to 1 CCR 301-26-R-12.11, operators shall receive training on towing a trailer.
- 5.04 School transportation paraprofessional is a person assigned to assist a school transportation vehicle operator control behavior of students in the bus and/or ensure the safety of students getting on and off the school transportation vehicle.
- 5.04(a) The school transportation paraprofessional shall receive pre-service training for the type of duties they may be required to perform prior to assisting with transporting students.
- 5.05 School transportation vehicle operators and school transportation paraprofessionals are required to be able to perform all essential functions including emergency evacuations when transporting students as determined by the school district or service provider job qualification standards.
- 5.05(a) The employing school district or service provider has the authority to require at any time a medical evaluation of a school transportation vehicle operator or school transportation paraprofessional for any condition that could impair the employee's ability to operate a vehicle safely, assist student(s) as required by their position, and/or perform other required job duties, and may take appropriate action on the outcome of such evaluation.
- 5.05(b) School transportation vehicle operators and school transportation paraprofessionals that have medical conditions which result in temporary loss of performance abilities shall provide return to work documentation from their physician, and any other requirements per district policy to the employing school district/service provide prior to returning to their assigned duties.

**4204-R-6.00 School Transportation Annual Inspector Requirements**

- 6.01 School transportation annual inspector is a person qualified to perform annual inspections on a school transportation vehicle to confirm the vehicle complies with CDE regulations.
- 6.02 School transportation annual inspectors shall meet or exceed the following requirements:
- 6.02(a) The school transportation annual inspector shall be in possession of a valid driver's license with the proper class and endorsements for the size and type of vehicle(s) to be inspected.



- 6.02(b) The school transportation annual inspector shall provide a Brake Inspector Qualification Certificate meeting the requirements of 49 CFR 396.25 to the school district or service provider.
- 6.02(c) The school transportation annual inspector shall have at least two years verifiable experience in the maintenance of light, medium or heavy duty vehicles.
- 6.02(d) The school transportation annual inspector shall successfully pass the CDE initial hands-on performance test.
  - 6.02(d)(1) A certified school transportation annual inspector hands-on tester must proctor the hands-on performance test.
- 6.02(e) The school transportation annual inspector shall successfully pass the CDE annual inspector qualification written test initially, and every three years thereafter pass the CDE annual inspector recertification written test.
  - 6.02(e)(1) A representative of the district or service provider, other than a school transportation annual inspector candidate, shall grade the written test.
- 6.03 A school district or service provider with an Inspection Site Certificate shall submit a CDE Application for CDE Annual Inspector Qualification or Recertification Form (STU-20) to CDE verifying that the above requirements have been satisfied. CDE will issue an Annual Inspector Certificate.
- 6.04 If any of the above requirements become invalid, the annual inspector certificate is invalid until the requirement(s) is made valid.
- 6.05 If a school transportation annual inspector has an expired certificate, the certificate can be recertified as follows:
  - 6.05(a) If the certificate has been expired less than six months, then the CDE Annual Inspector Recertification Written Test is required.
  - 6.05(b) If the certificate has been expired between six and 12 months, then the CDE Annual Inspector Qualification Written Test is required.
  - 6.05(c) If the certificate has been expired for more than one year, then both the CDE Annual Inspector Qualification Written Test and the CDE hands-on performance test are required.

**4204-R-7.00 Annual Inspector Hands-On Tester**

- 7.01 School transportation annual inspector hands-on tester is a person qualified to proctor hands-on tests to annual inspector candidates.



- 7.02 School transportation annual inspector hands-on testers shall meet or exceed the following requirements:
- 7.02(a) The school transportation annual inspector hands-on tester shall have maintained a CDE Annual Inspector certificate for a minimum of two years.
  - 7.02(b) The school transportation annual inspector hands-on tester shall have satisfactorily completed a four hour CDE school transportation annual inspector hands-on tester training.
  - 7.02 (c) The school transportation annual inspector hands-on testers shall have completed a four hour brake training in the last three years or have maintained an ASE School Bus or Medium/Heavy Duty Truck or Transit Bus Brake Certification.
  - 7.02(d) The school transportation annual inspector hands-on tester candidate shall submit a CDE Application for Certification or Recertification of CDE Annual Inspector Hands-On Tester Form (STU-30) verifying that the above criteria have been satisfied. CDE will issue an Annual Inspector Hands-On Tester Certificate.
  - 7.02(e) The school transportation annual inspector hands-on tester shall conduct at least two hands-on tests every three years or attend a CDE school transportation annual inspector hands-on recertification training to recertify as a school transportation annual inspector hands-on tester.
- 7.03 If any of the above requirements become invalid, the hands-on tester certificate is invalid until the requirement(s) is made valid.

#### **4204-R-8.00 Pre-trip/Post-trip Vehicle Inspections**

- 8.01 Each school transportation vehicle shall have a daily pre-trip and post-trip inspection performed and documented by the school transportation vehicle operator or a district or service provider authorized transportation employee. A daily pre-trip inspection shall be completed prior to a vehicle being placed in service. A daily post-trip inspection shall be completed at the end of daily operation of each vehicle.
- 8.02 The pre-trip and post-trip inspection requirements for school transportation vehicles, other than small vehicles, shall include at a minimum all items listed on the CDE School Transportation Vehicle (School Bus/Multifunction Bus/Motor Coach Bus) – Pre-Trip and Post Trip Requirements Form (STU-9).
- 8.03 The pre-trip and post-trip inspection requirements for school transportation small vehicles shall include at a minimum all items listed on the CDE School Transportation Vehicle (Small Vehicle) – Pre-Trip and Post Trip Requirements Form (STU-8).
- 8.04 School districts and service providers shall have a procedure in place to verify that students are not left on an unattended school transportation vehicle.

**4204-R-9.00 Inspection Site Certification**

- 9.01 A CDE Inspection Site Certificate is required at each facility/location where annual inspections for school transportation vehicles are performed.
- 9.02 The inspection site shall meet or exceed the following criteria to acquire and maintain an inspection site certificate.
- 9.02(a) The inspection site shall be large enough to accommodate the vehicle, equipment and tools necessary to perform the inspection.
- 9.02(b) The inspection site shall have a floor surface or pad adequate to safely support the maximum weight of the largest vehicle to be inspected.
- 9.02(c) The inspection site shall have adequate lighting and ventilation.
- 9.02(d) The inspection site or inspector shall, at the time of inspection, have the equipment and tools necessary to properly complete the annual inspection.
- 9.02(e) The inspection site or inspector shall have tools designed and calibrated to take accurate readings of appropriate measurements, such as brakes and tires.
- 9.03 The district or service provider shall submit a request for an inspection site certificate on the CDE Application for Inspecting Site Certification Form (STU-22) that the above criteria have been satisfied.
- 9.04 The district or service provider shall post the CDE Inspection Site Certificate at the inspection site.

**4204-R-10.00 Annual Inspection**

- 10.01 School districts and service providers shall ensure all school transportation vehicles and trailers pursuant to 1 CCR 301-26-R-12.11 have a CDE annual inspection conducted by a CDE certified annual inspector.
- 10.01(a) Recently purchased school transportation vehicles shall successfully pass a CDE annual inspection prior to transporting students.
- 10.02 Annual inspection results shall be documented on the CDE Affidavit of Annual Inspection for School Transportation Vehicles Form (STU-25).
- 10.02(a) A copy of the current Affidavit is maintained inside the vehicle and a copy is placed in the vehicle file.
- 10.03 All annual inspection criteria of school transportation vehicles must meet or exceed manufacturer's specifications. The annual inspection shall be documented and shall include

at a minimum all fields listed on the CDE Annual Inspection and Preventive Maintenance Requirements Form (STU-26).

- 10.04 All annual inspection criteria of trailers must meet or exceed manufacturer’s specifications and shall include at a minimum all fields listed on the CDE Trailer Annual Inspection and Preventive Maintenance Requirements Form (STU-27).
- 10.05 During the annual inspection, all four wheels shall be pulled for full inspection of the foundation brake system. The three exceptions are:
  - 10.05(a) School transportation vehicles with less than 4,000 miles since the previous annual inspection shall have two wheels (one front and one rear) pulled different than those pulled for the previous inspection.
  - 10.05(b) School transportation vehicles equipped with a retarder meeting the specifications outlined in 1 CCR 301-25-R-33.00, shall have two wheels (one front and one rear) pulled which are different than those pulled for the previous inspection.
  - 10.05(c) Trailers pursuant to 1 CCR 301-26-R-12.11 shall have 50 percent of the wheels pulled different than those pulled for the previous inspection.

**4204-R-11.00 Maintenance and Repair**

- 11.01 School districts and service providers must ensure all school transportation vehicles are systematically inspected, maintained and repaired to ensure that school transportation vehicles are in safe and proper operating condition.
- 11.02 School districts and service providers shall have a system to document preventative maintenance, reported defects and repairs made to school transportation vehicles.
- 11.03 School districts and service providers shall maintain separate files for each school transportation vehicle with documentation of all annual inspections, all preventative maintenance and all reported damage, defects or deficiencies and the corresponding repair and maintenance performed.
- 11.04 Any identified damage, defect or deficiency of a school transportation vehicle must be reported to the school district or service provider which:
  - 11.04(a) Could affect the safety of operation of the school transportation vehicle, or
  - 11.04(b) Could result in a mechanical breakdown of the school transportation vehicle, or
  - 11.04(c) Results in noncompliance with Colorado Minimum Standards Governing School Transportation Vehicles (1 CCR 301-25) and/or manufacturer’s specifications.
- 11.05 Documentation for reported defects must include all of the following:

- 11.05(a) The name of the school district or service provider.
- 11.05(b) Date and time the report was submitted.
- 11.05(c) All damage, defects or deficiencies of the school transportation vehicle.
- 11.05(d) The name of the individual who prepared the report.
- 11.06 Following a reported damage, defect or deficiency of a school transportation vehicle, school districts and service providers or a representative agent must repair the reported damage, defects or deficiencies, or document that no repair is necessary, ensuring that the vehicle is in safe and proper operating condition prior to transporting students.
- 11.07 School districts and service providers shall not transport students in a school transportation vehicle which is not in safe and proper operating condition. A school transportation vehicle shall be designated as “out-of-service” by a school district or service provider, a school transportation annual inspector or the CDE School Transportation Unit.
- 11.07(a) Exemption - Any school transportation vehicle discovered to be in an unsafe condition while being operated on the highway, roadway or private road may be continued in operation only to the nearest place where repairs can safely be affected. Such operation shall be conducted only if it is less hazardous to the public than to permit the vehicle to remain on the highway, roadway or private road.
- 11.08 Following a school transportation vehicle being placed “out-of-service”, a school district, service provider or a representative agent must make required repairs, ensuring that the vehicle is in safe and proper operating condition prior to transporting students. In the event of being placed “out-of-service” during an annual inspection, the school transportation vehicle must successfully pass a CDE annual inspection prior to transporting students.
- 11.09 The preventative maintenance inspection on air drum brake systems shall include, at a minimum, that the brake rod travel has been measured and documented. The applied pressure method shall be used.
- 11.09(a) The inspection-interval shall not exceed 4,000 miles for buses equipped with a manual slack adjuster air brake system.
- 11.09(b) The inspection-interval shall not exceed 6,000 miles for buses equipped with an automatic slack adjuster air brake system.
- 11.10 The preventive maintenance inspection interval on air disc brake systems shall not exceed 6,000 miles and shall include, at a minimum; inspection and documentation of:
- 11.10(a) Inspect the pad thickness by checking the mechanical wear indicators.
- 11.10(b) Inspect the visible part of the rotors for cracks, excessive wear, damage, etc.



- 11.10(c) Inspect running clearance. If the caliper has no movement or appears to move greater than the distances indicated by the manufacturer, then a full wheel removal inspection will be necessary.
- 11.11 The preventive maintenance inspection interval for hydraulic brake systems shall not exceed 6,000 miles and shall include, at a minimum, inspection and documentation of:
- 11.11(a) Proper parking brake operation.
  - 11.11(b) Proper brake fluid level and clarity.
  - 11.11(c) Adequate pedal reserve.
  - 11.11(d) Proper hydraulic/vacuum assist operation.
  - 11.11(e) Visual inspection for brake fluid leakage.
- 11.12 If brake adjustment or repair is needed, the work shall be completed by or supervised by a DOT or equivalent qualified brake inspector meeting the requirements of 49 CFR 396.25.

#### **4204-R-12.00 Operation of a School Transportation Vehicle**

- 12.01 A school transportation vehicle shall not be operated in a manner which is unsafe or likely to cause an accident or damage of the vehicle.
- 12.02 A school transportation vehicle shall not be placed in motion on a roadway, highway or private road with the passenger entry door/service door open.
- 12.03 A school transportation vehicle's headlights or daytime running headlights shall be activated while the vehicle is in operation.
- 12.04 A school transportation vehicle shall not be fueled while students are on board, except in instances when unloading the students would present a greater hazard or peril to their safety.
- 12.05 Use of tobacco products as defined in Section 18-13-121(5), C.R.S., use or possession of illegal controlled substances, use or possession of alcohol and use or possession of marijuana or cannabinoid product, except as otherwise allowed by law, aboard any school transportation vehicle shall be prohibited at all times.
- 12.06 A school transportation vehicle operator shall not consume food unless the vehicle is stopped at a safe location with the park/emergency brake set.
- 12.07 When a school transportation vehicle is equipped with a roof mounted strobe lamp, the use of the strobe lamp is permitted only when the vehicle presents a hazard to other motorists, such as loading or unloading students in inclement weather or to enhance visibility of the vehicle when barriers inhibit such visibility.

- 12.08 A school transportation vehicle operator may use the strobe, in addition to the four-way hazard lamps, to warn other motorists that the vehicle is not in motion or is being operated at a speed of twenty-five miles per hour or less.
- 12.09 The school transportation vehicle operator shall use extreme caution when backing. Before backing on a roadway, highway or private property, the horn or audible warning device shall be sounded and four-way hazard lamps actuated or there shall be a person outside the vehicle giving direction.
- 12.09(a) Backing a school transportation vehicle when students are outside of the vehicle at a student stop is prohibited.
- 12.10 School transportation vehicles including Type A, B, C and D School Bus, Multifunction Bus and Motor Coach Bus shall not be operated with a trailer or other vehicle attached while students are being transported.
- 12.11 School transportation small vehicles, with the capacity of 15 or fewer passengers (counting the driver), may tow trailers while students are being transported to the extent that trailering is a necessary component of a district sponsored program.

#### **4204-R-13.00 Authorized Passengers**

- 13.01 Only district personnel, students enrolled in a district, law enforcement officials or individuals that have received prior authorization from the school district or service provider may be passengers on any school transportation vehicle.
- 13.02 The number of passengers transported on any school transportation vehicle shall not exceed the maximum seating capacity of the vehicle. Small vehicle capacity shall not exceed the number of safety belts as designed by the vehicle manufacturer.
- 13.03 Passengers shall not be permitted to stand in any school transportation vehicle while the vehicle is in motion. This does not preclude authorized persons (such as school transportation paraprofessionals) from completing their duties as required.
- 13.04 School districts and service providers shall consider the size of the passengers when determining the number of passengers that can safely occupy a school transportation vehicle seat.

#### **4204-R-14.00 Safety Restraints**

- 14.01 A school transportation vehicle operator shall have the safety belt fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.
- 14.02 All passengers in a school transportation vehicle under 10,000 lbs. GVWR shall have their safety belts fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.

#### **4204-R-15.00 Transportation of Miscellaneous Items**

- 15.01 A school transportation vehicle operator shall make a reasonable and prudent determination that all carry-on items are properly handled in order to minimize the danger to all others.
- 15.02 All baggage, articles, equipment or medical supplies not held by individual passengers shall be secured in a manner which assures unrestricted access to all exits by occupants, does not restrict the driver's ability to operate the bus and protects all occupants against injury resulting from falling or displacement of any baggage, article or equipment. Oxygen cylinders secured to a wheelchair shall be considered to be in compliance with this subsection, provided they do not impede access to any exit.
- 15.03 All chemicals and cleaning supplies carried on a school transportation vehicle must meet the following precautions:
- 15.03(a) Container is non-breakable.
- 15.03(b) Container is labeled with contents.
- 15.03(c) Pressurized aerosols are prohibited.
- 15.03(d) Container is secured in a bracket, or in a closed compartment in the driver's area or a compartment on the exterior of the bus.
- 15.03(e) Containers and quantities of products are kept to a reasonable size.
- 15.04 Interior-decorations shall not be located within the driver's area (which includes the space in front of the front barriers including the step-well, dash, walls and ceiling, the windshield, the entry door, the driver's side window, and all windows in front of the front barrier), the first two passenger windows on both sides of the vehicle and all windows on the rear of the vehicle. Other decorations within the passenger compartment shall not:
- 15.04(a) Cover any required lettering.
- 15.04(b) Impede the aisle or any emergency exit.
- 15.04(c) Hang from the walls and/or ceiling.

#### **4204-R-16.00 Maximum Driving Time for School Transportation Vehicle Operators**

- 16.01 The school transportation vehicle operator, including small vehicle operators, shall not drive nor shall the school district or service provider permit or require an operator to drive:
- 16.01(a) In excess of 10 hours or after being on-duty 14 hours until completing 10 hours off-duty. This would include on-duty time for all employers. Ten hours off-duty may be consecutive or accumulated in two or more periods of off-duty time with one period having a minimum of 6 consecutive hours off-duty.

- 16.01(b) After being on-duty for more than 70 hours in any seven consecutive days.
- 16.02 The school district or service provider may comply with part 395 of the Federal Motor Carrier Safety Regulations (FMCSR) in place of this section.
- 16.03 Definitions:
- 16.03(a) Adverse driving conditions - In case of emergency, an operator may complete the trip without being in violation if such trip reasonably could have been completed absent the emergency.
- 16.03(b) Day - Means any 24-consecutive hour period beginning at the time designated by the school district or service provider.
- 16.03(c) On-duty time - Includes all time worked for any and all employers, including all driving and non-driving duties.
- 16.03(d) Off-duty time - School transportation vehicle operators may consider waiting time at special events, meal stops and school related events as off-duty if the following criteria are met: (Compensated waiting time does not necessitate on-duty time.)
- 16.03(d)(1) The operator shall be relieved of all duty and responsibility for the care and custody of the vehicle, its accessories and students, and
- 16.03(d)(2) The operator shall be at liberty to pursue activities of his/her choice including leaving the premises on which the bus is located.
- 16.04 All school transportation vehicle operators shall document that they are in compliance with this section, hours of service.
- 16.04(a) An operator's daily log, or equivalent, shall be completed for the trip in the operator's own handwriting, when the trip requires a scheduled or unscheduled overnight stay away from the work reporting location.

**4204-R-17.00 Route Planning – Student Loading and Discharge**

- 17.01 School transportation small vehicles, Type A Multifunction Buses with 15 or fewer passenger capacity (counting the driver) and School Buses (Types A, B, C, and D) may be used to transport students to and from school. Multifunction Buses Type B, C and D and Motor Coach Buses shall not be used to transport students to and from school.
- 17.02 The location of student stops shall consider factors including:
- 17.02(a) Ages of the students.

17.02(b) Visibility.

17.02(c) Lateral clearance.

17.02(d) Student access.

17.02(e) Control of other motorists.

17.02(e)(1) Student stops for Type A Multifunction Buses with 15 or fewer passenger capacity (counting the driver) and school transportation small vehicles should be located off of the roadway whenever possible.

17.03 School transportation vehicle operators shall stop at least 10 feet away from students at each designated stop. The school transportation vehicle operator shall apply the parking brake and shift the vehicle into neutral or park prior to opening the service door of a bus or passenger door(s) of a small vehicle.

17.04 The school transportation vehicle operator shall stop as far to the right of the roadway, highway or private road as possible before discharging or loading passengers, allowing sufficient area to the right and front of the vehicle but close enough to the right to prevent traffic from passing on the right so students may clear the vehicle safely while in sight of the operator.

17.04(a) Exception: The school transportation vehicle operator may block the lane of traffic when passengers being received or discharged are required to cross the roadway.

17.05 Student stops shall not be located on the side of any major thoroughfare whenever access to the destination of the passenger is possible by the use of a road or street which is adjacent to the major thoroughfare.

17.06 If students are required to cross a roadway, highway or private road on which a student stop is being performed, they are prohibited from crossing a roadway, highway or private road constructed or designed to permit three or more separate lanes of vehicular traffic in either direction or with a median separating multiple lanes of traffic. This does not include crossing the roadway, highway or private road with the assistance of a traffic controls signal or with the assistance of a crossing guard.

17.07 Four-way hazard lamps shall be used on private property such as parking lots.

17.08 Alternating flashing red warning signal lamps shall not be activated within 50 feet of an intersection if the intersection is controlled by a traffic control signal.

17.09 Routes shall be planned as to:

17.09(a) Eliminate, when practical, railroad crossings.



- 17.09(b) Have stops be a minimum of 200 feet apart since alternating flashing amber warning signal lamps must be activated a minimum of 200 feet in advance of the stop.
- 17.09(b)(1) Exception: Student stops located in areas where wildlife may create a high risk of threat to students' safety while they are waiting and/or walking to a student stop, may designate student stops less than 200 feet apart upon detailed written approval by the school district board of education and/or their designee. A copy of the written approval shall be kept in the school transportation office and route operators shall be given written notice of the exception and have it indicated on route sheets.
- 17.10 Pursuant to Section 42-4-1903(2), C.R.S., school transportation vehicle operators are not required to actuate the alternating flashing red warning signal lamps on a school bus when the student stop is at a location where the local traffic regulatory authority has by prior written designation declared such actuation unnecessary and when discharging or loading passengers who require the assistance of a lift device and no passenger is required to cross the roadway. Further, Type A Multifunction Buses with 15 or fewer passenger capacity (counting the driver) and school transportation small vehicles do not have the functionality to control traffic. In these instances, the school transportation vehicle operator shall stop as far to the right off the roadway as possible to reduce obstruction to traffic, activate the four-way hazard warning lamps a minimum of 200 feet prior to the student stop, continue to display the four-way hazard warning lamps until the process of discharging or loading passengers has been completed, and deactivate the four-way hazard lamps before resuming motion. Students are prohibited from crossing any lanes of traffic to access the student stop or after disembarking.
- 17.11 School transportation vehicle operators shall not relocate a student stop without approval of the school district or service provider.
- 17.12 School transportation vehicle operators of School Buses, Multifunction Buses and Motor Coach Buses, whether transporting students or not, shall apply the following procedures during the process of approaching, stopping and crossing railroad tracks:
- 17.12(a) Activate the four-way hazard lamps not less than 200 feet from the railroad crossing to alert other motorists of the pending stop for the crossing.
- 17.12(b) Stop the bus within 50 feet but not less than 15 feet from the nearest rail.
- 17.12(c) When stopped, the bus should be as far to the right of the roadway as possible and should not form two lanes of traffic unless the highway is marked for four or more lanes of traffic.
- 17.12(d) Use a prearranged signal to alert students to the need for quiet aboard the bus when approaching railroad tracks. Turn off all noise making equipment (fans, heater, radio, etc.)



- 17.13 After quietness aboard the stopped bus has been achieved, bus operators shall open the service door and operator window. The bus operator shall listen and look in both directions along the track(s) for any approaching train(s) and for signals indicating the approach of a train.
- 17.13(a) If the tracks are clear, the bus operator shall close the service door and may then proceed in a gear low enough to permit crossing the tracks without having to manually shift gears. The bus operator shall cancel the four-way hazard lamps after the bus has cleared the tracks.
- 17.13(b) When two or more tracks are to be crossed, the bus operator shall not stop a second time unless the bus is completely clear of the first crossing and has at least 15 feet clearance in front and at least 15 feet clearance to the rear.
- 17.13(c) Before crossing the tracks, the bus operator shall verify that there is enough space after the tracks for the bus plus 15 feet if it is necessary to stop after crossing the tracks.
- 17.14 School transportation vehicle operators of School Buses, Multifunction Buses and Motor Coach Buses are not required to stop at crossings controlled by a red, amber, green traffic control signal when it is in the green position or when the crossing is controlled by a police officer or human flag person.

#### **4204-R-18.00 Emergency Evacuation Drills**

- 18.01 Emergency evacuation drills shall be conducted with students by all school transportation vehicle operators and school transportation paraprofessionals at least twice during each school year, following the procedures in the Colorado Department of Education School Bus/Multifunction Bus/Motor Coach Bus Operator Guide.
- 18.01(a) One drill shall be conducted in the fall and the second drill conducted in the spring.
- 18.01(b) Substitute and Multifunction operators of 16 or greater capacity (counting the driver) vehicles shall be trained how to conduct the emergency evacuation drills.
- 18.02 Students on school related events shall receive emergency evacuation instruction prior to departure.
- 18.03 School district and service providers shall maintain records documenting that the required evacuation drills were conducted and/or evacuation instruction was given.



## School Transportation Vehicle (Small Vehicle) Pre-Trip and Post Trip Requirements (STU 8)

**ALL ITEMS ON THIS CHECKLIST ARE MANDATORY.**

**USE OF THIS SPECIFIC CHECKLIST IS NOT MANDATORY.**

"Per 1 CCR 301-26, 4204-R-8.03 The pre-trip and post-trip inspection requirements for small vehicles, shall include at a minimum all items listed on the CDE School Transportation Vehicle (Small Vehicle) Pre-Trip and Post Trip Requirements (STU-8) Form."

Front of Vehicle	Rear of Vehicle	In Cab - continued	Post-Trip
Light Lens Condition	Light Lens Condition	Service Brake	Student Check
<b>Engine Compartment</b>	Doors	Dome Lights	Walk Around
Oil Level	Tailpipe/Muffler	Emergency Kit	Articles left on the Bus
Coolant Level	<b>In Cab</b>	Body Fluid Kit	Open windows/doors
Power Steering Fluid	Safety Belt	Communications	Damage Vandalism
Fan Belt(s)	Triangles	Seat Belt Cutter	Mechanical Problems
	ABS		Operational Problems
	Temperature Gauge		
<b>Tire</b>	Oil Pressure Gauge		
Inflation	Voltmeter Gauge		
Condition	Left Turn Signal		
Depth	Right Turn Signal		
<b>Exterior Lights</b>	Hazard Lights		
Hazard	Headlights		
Turn Signals	High Beams		
Brake	Horn		
Reverse lights	Heater(s)		
<b>Driver/Fuel Area</b>	Defroster		
Door	Mirrors		
Mirror	Windshield		
Fuel Tank	Wipers		
Fuel Leaks	Washers		
Fuel Cap	Parking Brake		
<b>Trailer</b>			
<b>Tire</b>	<b>Other Equipment</b>	<b>Load</b>	<b>Post-Trip</b>
Inflation	Hitch/Receiver	Load Securement	Walk Around
Condition	Coupler	Load Distribution	Damage Vandalism
Depth	Draw Bar	<b>Brakes</b>	Mechanical Problems
<b>Exterior Lights</b>	Electrical Plug and Cable	Controller	
Clearance	Jack/Tongue Support	Break-away	
Hazard	Safety Chains	<b>Wheels</b>	
Turn Signals	Mirror Extensions	Lug Nuts	
Brake		Axle Hub Oil Seal	

## School Transportation Vehicle (School Bus)



## Pre-Trip and Post Trip Requirements (STU 9)

**ALL ITEMS ON THIS CHECKLIST ARE MANDATORY.**

**USE OF THIS SPECIFIC CHECKLIST IS NOT MANDATORY.**

"Per 1 CCR 301-26, 4204-R-8.02 The pre-trip and post-trip inspection requirements for school transportation vehicles, other than small vehicles, shall include at a minimum all items listed on the CDE School Transportation Vehicle (School Bus) Pre-Trip and Post Trip Requirements (STU-9) Form."

Front of Vehicle	Side of Vehicle	In Cab	Passenger Items
Light Lens Condition	Light Lens Condition	Safety Belt	Steps
<b>Engine Compartment</b>	Reflectors	Fire Extinguisher	Handrail
Oil Level	<b>Driver/Fuel Area</b>	Electrical Fuses	Step Light
Coolant Level	Door	Triangles	Lift
Power Steering Fluid	Mirror	Safe Start	Seating Secured
Water Pump	Fuel Tank	ABS	
Belt or Gear	Fuel Leaks	Temperature Gauge	<b>Post-Trip</b>
Alternator	Fuel Cap	Oil Pressure Gauge	Student Check
Belt or Gear	<b>Under Vehicle</b>	Voltmeter Gauge	Walk Around
Air Compressor	Drive Shaft	Air Gauge	Articles left on the Bus
Belt or Gear	Exhaust System	Left Turn Signal	Open windows/doors
Leaks	Frame	Right Turn Signal	Damage Vandalism
Hoses	<b>Rear Suspension</b>	Hazard Lights	Mechanical Problems
<b>Steering</b>	Springs	Headlights	Operational Problems
Box	Spring Mount(s)	High Beams	
Hoses	Shock(s)	Horn	
Pitman Arm	U-Bolts	Heater(s)	
Drag Link	Air Bag	Defroster	
<b>Front/Rear Brakes</b>	Air Bag Mount	Mirrors	
Slack Adjustor	<b>Wheels</b>	Windshield	
Brake Chamber	Rim	Wipers	
Brake Hose or Line	Lug Nuts	Washers	
Drum or Disk	Axle Hub Oil Seal	Parking Brake	
Linings or Pads	Spacers	Service Brake	
<b>Tires</b>	<b>Rear of Vehicle</b>	Dome Lights	
Inflation	Light Lens Condition	Emergency Door Alarm	
Condition	Reflectors	Emergency Window Alarm	
Depth	Splash Guard	Emergency Kit	
<b>Exterior Lights</b>	Emergency Door	Body Fluid Kit	
Clearance	<b>Air Brake Check</b>	Seat Belt Cutter	
Hazard	*1 Compressor	Student Mirror	
Turn Signals	*2 System Leaks	Communications	
Overhead Amber	*3 Low Air Warning		
Overhead Red	*4 Valve Set or Hydraulic Brake Check		
Stop Arm (including operation)			* If No Air Brakes Line Out Components
Brake			
Tail			
Reverse			



### Multifunction/Small Vehicle Operators Medical Information Form

Per 1 CCR 301.26, 4204-R-5.02(d) The operator shall annually complete the CDE Multifunction/Small Vehicle Operators Medical Information form (STU-17). Any yes annotations shall require a physician's release.

Operator Name \_\_\_\_\_ New Operator  Yes  No  
 District/Contractor \_\_\_\_\_ District Phone# \_\_\_\_\_  
 Operator Email \_\_\_\_\_ Contact Phone# \_\_\_\_\_

Do you currently have any of the following conditions?

- Yes  No Head/Brain injuries or disorders
- Yes  No Seizures/Epilepsy
- Yes  No Eye Disorders or Impaired Vision (except corrective lens)
- Yes  No Ear Disorders or Loss of Balance
- Yes  No Heart Disease/Heart Attack or other Cardiovascular Condition
- Yes  No Heart Surgery (Valve replacement, bypass, angioplasty, pacemaker)
- Yes  No High Blood Pressure (DOT standards)
- Yes  No Muscular Disease
- Yes  No Shortness of Breath
- Yes  No Lung Disease, Emphysema, Asthma, Chronic Bronchitis
- Yes  No Kidney Disease
- Yes  No Severe Digestive Problems
- Yes  No Diabetes or Elevated Blood Sugar
- Yes  No Nervous or Psychiatric Disorders
- Yes  No Severe Depression
- Yes  No Loss or altered consciousness
- Yes  No Fainting/Dizziness
- Yes  No Stroke or Paralysis
- Yes  No Chronic Low Back Pain
- Yes  No Sleep Disorder/Apnea/Daytime/Sleepiness/Loud Snoring
- Yes  No Other - Please explain \_\_\_\_\_

If you indicated "yes" on any of the above listed questions, a physician's release is required and shall be maintained in a district file, prior to transporting students in a school transportation vehicle.

I certify that the above information was provided voluntarily and is complete and true. I understand that failure to accurately complete this form will exclude me from driving a school transportation vehicle while transporting students.

Operator Signature \_\_\_\_\_ Date \_\_\_\_\_

Transportation Official \_\_\_\_\_ Date \_\_\_\_\_

STU-17 Maintained in the Small Vehicle Operator Qualification File.



**COLORADO**  
Department of Education  
School Finance and  
Operations Division



Classification	Route	Route	Route	Multifunction	Multifunction	Multifunction Type A	Motor Coach	Small Vehicle (includes suburban, van, etc.)	Technicians/ Annual Inspectors	Technicians/ Annual Inspectors
Type of Vehicle including driver	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	16 or more passenger GVWR <u>less</u> than 26,001 pounds	15 or less Passenger GVWR <u>less</u> than 26,001 pounds	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	16 or more passenger GVWR <u>less</u> than 26,001 pounds	15 or less Passenger GVWR <u>less</u> than 26,001 pounds	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	15 or less Passenger GVWR less than 10,001 pounds	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	15 or less Passenger GVWR <u>less</u> than 26,001 pounds
Pre-Employment/ Random Drug Testing	Yes	Yes	Yes	Yes	Yes	District Policy	Yes	District Policy	Yes	District Policy
Required License	CDL	CDL	Valid Operator	CDL	CDL	Valid Operator	CDL	Valid Operator	CDL	Valid Operator
Required CDL Vehicle Class	B	C	N/A	B	C	N/A	B	N/A	B	N/A
Required License Endorsements	"P2" Passenger "S" School Bus	"P1" Passenger "S" School Bus	N/A	"P2" Passenger "S" School Bus	"P1" Passenger "S" School Bus	N/A	"P2" Passenger "S" School Bus	N/A	"P2" Passenger	N/A
Required Age	18	18	18	18	18	18	18	18	District Policy	District Policy
Required Medical Exam	USDOT DOT Physical)	USDOT DOT Physical)	USDOT DOT Physical)	USDOT DOT Physical)	USDOT DOT Physical)	CDE STU-17	USDOT DOT Physical)	CDE STU-17	USDOT DOT Physical)	District Policy
MVR Pre-employment and Annually	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	District Policy	District Policy
Required First Aid/CPR Training	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Information	District Policy	District Policy
Required Written Test	Multifunction/ Motor Coach/ Route School Bus	Multifunction/ Motor Coach/ Route School Bus	Multifunction Type A/ Route Small Vehicle	Multifunction/ Motor Coach/ Route School Bus	Multifunction/ Motor Coach/ Route School Bus	Multifunction Type A/ Route Small Vehicle	Multifunction/ Motor Coach/ Route School Bus	Multifunction Type A/ Route Small Vehicle	District Policy	District Policy

Classification	Route	Route	Route	Multifunction	Multifunction	Multifunction Type A	Motor Coach	Small Vehicle (includes suburban, van, etc.)	Technicians/ Annual Inspectors	Technicians/ Annual Inspectors
Type of Vehicle including driver	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	16 or more passenger GVWR <u>less</u> than 26,001 pounds	15 or less Passenger GVWR <u>less</u> than 26,001 pounds	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	16 or more passenger GVWR <u>less</u> than 26,001 pounds	15 or less Passenger GVWR <u>less</u> than 26,001 pounds	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	15 or less Passenger GVWR less than 10,001 pounds	16 or more Passenger GVWR <u>greater</u> than 26,001 pounds	15 or less Passenger GVWR <u>less</u> than 26,001 pounds
Required Mountain and Adverse Training	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	District Policy	District Policy
Required Confidentiality Training	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	District Policy	District Policy
Required Pre-Service Training	Yes School Bus Route Driver	Yes School Bus Route Driver	Yes Small Vehicle Route	Yes School Bus Driver	Yes School Bus Driver	Yes Small Vehicle	Yes School Bus Driver	Yes Small Vehicle	District Policy	District Policy
Annual In-Service Training	Yes Minimum 6 Hours	Yes Minimum 6 Hours	Yes Minimum 6 Hours	Yes Minimum 6 Hours	Yes Minimum 6 Hours	N/A	Yes Minimum 6 Hours	N/A	District Policy	District Policy
Required Driving Performance Evaluation	Yes Annually	Yes Annually	Yes Annually	Yes Annually	Yes Annually	Yes Initially	Yes Annually	Yes Initially	District Policy	District Policy
Required Random Drug Testing	Yes	Yes	District Policy	Yes	Yes	District Policy	Yes	District Policy	District Policy	District Policy
Required Substance Abuse Training	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	District Policy	District Policy
Trailer Training if applicable	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted	Yes	District Policy	District Policy