# Safe Railroad Crossing Procedures for School Bus Drivers

Reference Guide and Test Questions

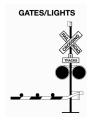
# Produced by: Video Communications











#### Introduction

Railroad crossing procedures are one of the most important safety issues for school bus drivers. Although, it is one of the safest vehicles on the highway, a school bus does not have a chance when involved in a collision with a train. Because of it's size and weight, a train cannot stop quickly.

The objective of this video is to show school bus drivers the importance of safe railroad crossing procedures. The video also goes over frequently asked questions, special situations and additional safety techniques for crossing railroad tracks.

#### The video is divided into five separate sections:

Section 1 Types of Crossings

Section 2 Signs and Signals

Section 3 Railroad Crossing Procedures

Section 4 Special Situations

Section 5 Additional Safety Techniques.

Karen Sullivan, a school bus driver Instructor for the Rocklin Unified School District, will be our host throughout the video. Karen will provide a step by step demonstration of safe railroad crossing procedures.

#### <u>Section 1 - Types of Crossings</u>

There are three different types of crossings that we will be covered in this program. They include: <u>passive crossings</u>, <u>active crossings</u> and <u>signal controlled crossings</u>.

- 1. <u>Passive Crossing</u>: This type of crossing does not have any type of control devices such as lights or cross arms. The decision to stop and proceed lies totally in the hands of the bus driver.
- a) Passive Crossings requires bus drivers to: recognize the crossing, actively search the tracks for an approaching train and decide if there is sufficient space to safely traverse the tracks.
- b) Usually the only type of warnings for these types of crossings are warning signs and pavement markings. However, drivers need to be extremely cautious when driving across passive crossings. The decision to cross, in this scenario, is totally in the hands of the school bus driver.
- 2. <u>Active Crossings:</u> These types of crossings have traffic control devices to regulate traffic. These active devices include: flashing red lights (some with bells, and some without), and flashing red lights with bells and cross arms. These types of crossings are usually found in high density traffic areas.
- 3. <u>Signal Controlled Crossings</u>: These types of crossings are controlled by traffic signals. Because they are in awkward areas, the traffic signal works in conjunction with the cross arms and lights at the crossing. The driver instructor will give a demonstration of this type of crossing.

#### **Section 2 - Signs and Signals**

School Bus Drivers need to be able to read, recognize, and understand all warning signs. These signs are a bus driver's warning system and gives them time to prepare for the tracks they are approaching.

1. This **black on yellow** sign is found at the start of most crossings, and warns the bus driver to slow down, stop, look and listen for an approaching train.

### **Black on Yellow Sign**



2. This is a **Crossbuck Sign**. This sign requires the bus driver to yield the right of way to the train. Below the Crossbuck you can also find a sign indicating the number of tracks you are approaching

## Crossbuck Sign



3. Many Crossings have **gates with flashing lights and bells**. When approaching these crossings, make sure to stop when lights begin to flash and the gate lowers. Do not proceed until the gates are completely up and all lights stop flashing.

#### **Gates with Lights and Bells**



4. You can also find **pavement markings** that can help aid in recognizing the crossing. These markings consist of an **X** with the letters "**RR**".

#### Pavement Markings



#### <u>Section 3 - Safe Railroad Crossing Procedures</u>

Every state has different laws and regulations for crossing railroad tracks in a school bus. If you have any questions about your state laws or districts policies be sure to bring them up to your supervisor.

In general, school buses must stop at all crossings, with or without passengers, and ensure it is safe before proceeding across the tracks.

#### Approaching the Crossing

- 1. When you are approaching the crossing Slow Down! It has been recommended to slow the bus even as much as a half mile before the crossing. This is to allow drivers behind the bus to react properly to the slowing bus.
- 2. The driver gives an explanation for the correct railroad crossing procedures. She starts by engaging her 4-way hazard lamps approximately 200 feet before reaching the crossing.
- 4. As the driver approaches the tracks, she scans her surroundings and checks her mirrors for any traffic behind the bus.
- 5. The driver then taps the brakes for an additional warning. This alerts traffic that the bus is about to stop.
- 6. As the driver reaches the crossing, she pulls the bus up no closer then 15 feet and no further then 50 feet, from the nearest rail. The driver then positions herself to get the best view of the track.

#### At The Crossing

1. At the crossing the driver turns off her radio, noisy equipment and quiets the bus to listen for an approaching train.

- 2. The driver then opens the service door and the drivers window and takes the time to look and listen for an approaching train. She stays focused and does not rush.
- 3. After safely viewing the track and making the judgment that it is safe to proceed, she closes the service door and checks the tracks once more before crossing the track.

#### **Crossing the Track(s)**

- 1. The driver then crosses the track in the lowest gear and does not change gears while crossing the tracks. This allows the bus to safely clear the tracks and lessens the chance of the bus stalling on the tracks.
- 2. DO NOT STOP THE BUS UNTIL COMPLETELY ACROSS THE TRACKS.
- 3. After safely crossing the tracks the drivers turns off her 4-way hazards, completing a proper railroad crossing in a school bus.

#### Storage and Containment Areas

- 1. The driver must pay attention to the amount of room needed to safely clear the intersection. This means that the bus, after crossing the intersection, has enough containment or storage area to completely clear the tracks, even if traffic is stopped in front of the bus. Remember the bus is very long and it needs sufficient room to clear the tracks.
- 2. As a general rule, you should add 15 feet to the length of your bus to determine an acceptable amount of containment or storage area.
- 3. The video gives a demonstration of this procedure at a busy light rail crossing. In the scene, a bus driver waits at the crossing and does not proceed across the crossing until the traffic has cleared.
- 4. The bus driver must know the length of their bus and the driver must become proficient at judging distances in an intersection. Remember, if it doesn't fit, do not commit!
- 5. The driver also performs an additional safe railroad crossing procedures in a conventional style bus.

#### **Section 4 - Special Situations**

- 1. If you run into an **abandoned or unused track**, treat it as a useable track and approach it the same way you would as a track being heavily used.
- 2. Be on the lookout for **malfunctioning crossing gates and lights**. You should never drive around a malfunctioning gate it is extremely dangerous and illegal. If you suspect a malfunction, report it to dispatch immediately and do not proceed until it is safe to do so.

- 3. If you get stuck between gates, or the cross arm comes down on any part of the bus, **drive through the cross arm and break it**. Cross arms are not very strong and they are designed to break. Don't forget, if the cross arm is coming down, that signals that a train is coming. Then your only course of action is to get across the crossing immediately.
- 4. If the bus stalls on the railroad tracks, issue an immediate **evacuation** for all occupants aboard the school bus.
- 5. In the video, during a staged evacuation, the bus driver leads the students in an angle away from the tracks and in the direction of the train. The reason for doing so is to reduce the chance of the students or bus driver being struck by flying debris, if the train collides with the stalled bus.
- 6. If the view of the tracks is not adequate, do not attempt to cross them until you can see that no train is approaching.
- 7. Additional caution must be exercised when crossing in bad weather conditions such as; fog, snow, and rain.
- 8. Preparation and confidence is the main ingredient for the bus driver if any of these situations were to occur.

#### <u>Section 5 - Additional Safety Techniques</u>

- 1. When approaching the crossing, slow down and test your brakes to make sure they will safely bring the bus to a complete stop.
- 2. Keep your foot on the brake so you can't move or be shoved into the path of the train.
- 3. Never attempt to pass, stop, or back up on the railroad tracks.
- 4. Never change gears on the tracks and always cross in the lowest gear. If your bus has a manual transmission, do not shift gears when crossing a track.
- 5. A train moving at 60 MPH is moving at approximately 90 feet per second and can cover a quarter mile in about 15 seconds. It takes a bus approximately 15 seconds to cross a set of tracks. So even though a train may seem to be a long distance away, there actually may not be enough time to cross tracks before the train arrives. So be sure to leave plenty of room for error.
- 6. Never attempt to race a train and cross the tracks just ahead of it. More than one fatality has occurred because a bus driver became impatient and wasn't able to make it across an intersection.
- 7. Try and avoid "inching up" to get a better look at the tracks. A trains engine can overhang the track by 3 feet on either side. So keep your distance at all times. The only time you should inch up is if you haven't made it to the 15 foot limit line.

- 8. Use the rock and roll method to get the best possible view of the tracks. This requires you to shift your body in order to obtain the best possible view of the track.
- 9. Be aware of the number of tracks you will be crossing and make sure no trains are approaching from either direction on any other tracks, and double check all tracks before continuing.
- 10. Know your route. Map out any crossings along your bus driving route to help spot and perform correct crossing procedures, when driving a new route or in bad weather.

# **Test Questions**

Whenever crossing tracks, the bus driver should keep the bus in the lowest gear.  True False
2. Inching the bus up, so it's very close to the track, is a good practice because it allows the driver to get a clearer view of the tracks.
True False
3. Four-way Hazard Lamps should be turned on:  a. 100 feet from crossing  b. 150 feet from crossing  c. 200 feet from crossing  d. 250 feet from crossing
4.Is it okay to go around a cross arm, if there are no trains in sight and other vehicles are going around it. True False
5. What type of sign is this?
TRACKS
6. Passive Crossings have flashing lights and bells at the crossing.  True False
7. You do not have to stop at a signal controlled crossing when the light is green.  True False
8. If a train is in the immediate vicinity, the driver should immediately switch gears and get across the track as quickly as possible to avoid being hit.  True False
9. Once a train has passed an active crossing, there is no reason to re check the tracks for another on coming train.  True False
10. You should addfeet to the length of the bus to determine adequate containment or storage area.

#### **Test Answers**

- 1 .true
- 2. false
- 3. c
- 4. false
- 5. crossbuck
- 6. false
- 7. true
- 8. false
- 9. false
- 10. 15 feet