

# Winter Driving for Bus Operators

# Leader's Guide, Fact Sheet & Quiz

Item Number: 4364

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This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

#### PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes <u>before</u> the quiz itself, which is on the final page.

#### CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

## 4364 Winter Driving for Bus Operators FACT SHEET

**LENGTH: 15 MINUTES** 

#### **PROGRAM SYNOPSIS:**

This safety video will enhance bus operator's winter driving skills and safety awareness. It features real-life driving situations as well as high quality animation to illustrate a variety of winter driving conditions and challenges that bus operator's encounter on a daily basis.

#### **PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- Steps to prepare for winter driving;
- How to keep a bus under control on ice and snow;
- How to keep passengers and pedestrians safe;
- Ways to operate articulated buses safely.

#### **INSTRUCTIONAL CONTENT:**

#### INTRODUCTION

- We know that you know how important it is to operate your bus safely at all times. But winter puts special demands on you, so you can't drive the same as you do in other seasons.
- Because conditions are different, you need to change your habits, and be extra aware of everything going on around you.
- This video will show you how to operate safely in the snow, ice and cold.

#### PREPARE FOR WINTER DRIVING

- Operating in the snow and cold takes more out of you. It's more stressful. So, besides the things you do in every season to get ready for your work assignment, what else should you do just because it's winter?
- To deal with cold weather, you need extra energy, both physical and mental. So be sure you get plenty of sleep before you head for the garage. And give yourself extra time to get to the garage. You'll be glad you did.
- Have your copy of the Snow Re-route Package with you. It has tips on safe winter driving and snow reroute information you'll need when the weather gets challenging.
- Check the weather forecast so you're mentally prepared for what Mother Nature might have in store for you.
- Dress for warmth and comfort behind the wheel. And wear your sunglasses to cut the glare from snow and ice.
- Keep your jacket with you in case you get stuck.
- Then add several things to your pre-trip checklist. First, be sure the Webasto heater is turned off while you're in the garage. And if you're operating a low floor bus, check your entrance floor heater to be sure it works.
- Turn off the engine as soon as you have enough air pressure.
- Try your windshield wipers and washers to be sure they're doing their job. The blades shouldn't leave any streaks on the windows. Then make sure air comes out of the defroster. Also check to see that you have a brush for cleaning snow off the steps.
- Check the securement straps to be sure they're off the floor. That'll keep them clean and in working order.
- And finally, if you're driving an R-TIC, be sure you have a bag of sand. You may need to put that sand under the rear duals for extra traction if you get stuck. Don't use sand inside your bus.
- Now you're ready to roll, safely and with confidence.

#### **KEEP YOUR BUS UNDER CONTROL ON ICE AND SNOW**

- To maintain control of your bus in the winter, you need to understand how ice, snow and water on the road affect your vehicle. For certain, you'll be driving on snow and ice. But there also might be even more hazardous conditions.
- For example, there might be black ice caused by fog or by moisture from car exhaust freezing on the pavement. Black ice may be invisible, or it might make the road surface look shiny and wet.

- You also might run into freezing rain. Freezing rain can form a smooth, treacherous coating of ice when the rain hits the frozen ground.
- Also, when you stop your bus, tire heat can melt some of the snow or ice on the road. And a thin layer of water on top of compacted ice and snow is actually more slippery than the ice or snow alone.
- When a street is covered with ice or snow, all you need is the crown of the pavement to make your bus lose traction and slide sideways.
- That's likely to happen when you're pulling into or out of a bus stop.
- Stopping on a hill can also cause your bus to lose traction and slide sideways.
- And of course, other drivers are dealing with the same conditions, so they could lose control of their vehicles too. What will you do in these situations?
- The most important change to make in the winter is reducing your speed to fit the conditions. Think safety first. Also, when the roads are slippery, you have to increase your following distance.
- The amount of the increase depends on the conditions.
- Accelerate gradually and smoothly to avoid spinning your drive wheels. If your wheels do spin, back off of your gas pedal.
- Transit buses have ABS brakes, and they need smooth steady pressure. The advantage of ABS brakes is that they allow you to maintain steering ability during an emergency stop.
- And scan often in all directions to identify potential hazards. You need to be super aware so you can avoid trouble such as sudden braking that might injure a passenger, losing control of your bus and sliding through a light or stop sign, and other drivers who have lost control of their vehicles.
- Turn at a walking pace.
- And accelerate smoothly after straightening out.
- Then scan all around.
- You need different winter strategies for freeways, too. Your following distance has to be even greater than when you're on the street.
- You need to be more cautious on elevated on-ramps, off-ramps, and bridge decks because they freeze first.
- When you change lanes, signal sooner than you would in dry conditions so other drivers have plenty of time to respond. But don't overreact by slamming on the brakes. Remember, you have ABS brakes, and they need smooth, steady pressure.
- Based on road conditions, you need to decide whether to use the shoulder lane. When you are in the shoulder lane, do what you can to make other drivers notice you.
- First, be sure your hazard lights are on. And if you think a driver doesn't see you, flash your high beams. If that doesn't seem to get the other driver's attention, tap your horn. Cover your brake pedal so you're ready to stop if another driver still doesn't see you.
- One more thought. People depend on us to be their transportation day in and day out, so it takes pretty terrible weather to bring our operations to a halt. But that is a possibility.
- If you think conditions are making it impossible to operate safely, like there's a blizzard causing whiteout conditions or freezing rain coating everything with a layer of ice, report those conditions to TCC right away and they'll advise you on what to do.

#### **KEEP PASSENGERS AND PEDESTRIANS SAFE**

- Our number one priority is passenger safety.
- But winter throws unique problems at our passengers.
- Passengers are moving slower just because of their thicker clothes and boots. And both their hearing and peripheral vision are reduced by hats and other head gear. And on top of all that, our passengers have to negotiate slippery surfaces, both inside and outside the bus.
- At bus stops, our standard is to stop about 6 inches from the curb to let passengers exit and board the bus. But wait a minute!
- A bus stop might be blocked by a snow drift or by plowed snow. What will you do to respond to these winter conditions and keep your passengers safe?
- As part of your overall awareness of winter conditions, you need to find the balance between two requirements. First, keep your passengers safe. And second, don't get stuck. That means you have to scan far ahead so you can plan how to handle each bus stop.

- Be on the lookout for stops that are blocked by snow drifts or plowed snow.
- To avoid getting stuck or losing control of your bus, choose the safest place to stop, which might not be the standard six inches from the curb or at the bus stop sign.
- It's up to you to decide where to stop.
- But don't try to put your ramp down in a snowbank. You might not be able to get the ramp or flap all the way down or it might get stuck.
- Instead, you might need to stop in or beyond a crosswalk if it's the only clear space near the bus stop. And if you are stopping away from the curb, you need to kneel your bus to use your lift or ramp, so passengers don't have to negotiate a high step to board the bus.
- If you think passengers might have difficulty using the rear door because of snow or ice, direct them to use only the front door.
- Again, whatever the conditions happen to be, you need to balance passenger safety with keeping control of your bus. The key to that balance might be to stay away from the curb. Lots of times that'll keep you rolling and give passengers the room they need to exit and board safely.
- Because of all the ways winter slows passengers down, give them a little more time to board. Check your aisle mirror to be sure they get to their seats or handholds before you pull out. That's especially important in low floor buses where the first seats are seven feet away from the fare box. And be sure your passengers have moved well away from the bus before you pull out.
- Keep an eye on the steps front and back.
- Use your brush to clear snow away before it gets hard packed.
- Be sure pedestrians know you're there. Make eye contact with them whenever possible. You might need to tap your horn to get their attention.
- And always accelerate and brake smoothly. In every way, stay alert and keep everyone, including you, safe.

#### **OPERATE ARTICULATED BUSES SAFELY**

- Winter throws extra challenges at our tick operators because of the way our ticks are built. You're pushing a longer vehicle with the back wheels, so it's harder to maintain traction.
- When you turn on a slick pavement, the back end can swing out.
- As we saw with a 40-foot bus, the crown of the road can cause an R-TIC's tail to lose traction and slide sideways. And if you try to pull out when the front wheels are even just a little bit stuck in the snow, the midsection can get pushed out with disastrous results.
- So what will you do different to keep an R-TIC safe in the winter?
- In a previous section of the video, we talked about the importance of scanning far ahead. When you're operating an R-TIC, that's even more important.
- Because R-TICs are heavier, they need more space to stop. Always start smoothly and turn slowly.
- If your trailer does suddenly slide out of control, or if your midsection starts to push out, straighten your front wheels and let up on the accelerator. Never brake or accelerate hard in an attempt to regain control.
- If you do get stuck, straighten your front wheels, press the deep snow and mud switch, and drive forward. And don't forget to release the switch if you get unstuck.
- If the deep snow and mud switch doesn't get you out, first turn it off and secure your bus. Then throw some sand under the rear duals to increase your traction. If you still can't get free, call in.

#### CONCLUSION

- As we've seen, operating a bus in the winter is different. You need to be extra aware of weather and road conditions, and you need to adjust operating habits to fit those conditions.
- The most important changes are be prepared, get plenty of rest, dress appropriately, and add several things to your pre-trip checklist.
- Be sure your Wabasto heater is off while you're inside the garage and turn off the engine too once you have enough pressure. If you're operating a low floor bus, check your entrance heater to be sure it works.
- Double-check wipers, washers, and defrosters. Be sure you have a brush.
- Check the securement straps to be sure they're off the floor, and if you're operating an R-TIC, be sure you have sand to put under your rear duals in case you get stuck.
- To control your bus safely on slick roads, slow down and increase your following distance.

- · Accelerate gradually and smoothly.
- Scan often and in all directions so you're ready to respond to slippery roads and other drivers.
- Turn at a walking pace and accelerate slowly after straightening out, then scan all around.
- On freeways, increase your following distance even more, and keep in mind that bridge decks, elevated on-ramps, and off-ramps freeze first. When you change lanes on the freeway, signal early so other drivers know you're there.
- Brake sooner so you can slow down smoothly.
- When you're in the shoulder lane, use your hazard lights, high beams, and horn if needed to make sure other drivers know you're there, and always be ready to stop if another driver doesn't see you.
- To keep passengers safe and avoid getting stuck, think ahead and scan ahead. Plan how you're going to make each stop.
- Choose the safest place to exit and board passengers, which may not be the standard six inches from the curb or may not even be at the bus stop. Find a level place that's as clear of snow and ice as possible.
- If you do stop away from the curb, kneel your bus and deploy your ramp or lift so passengers don't have to negotiate a high step into the bus.
- If passengers will have to go over ice or through snow when using the rear door, direct them to use the front door only.
- Give passengers more time to exit, board, and reach a secure place.
- Before you pull out, check your aisle mirror to be sure entering passengers are ready and exiting passengers have moved away from the bus.
- Keep the front and back steps clear.
- Be sure pedestrians see you. Warn them if needed.
- Always accelerate and brake smoothly.
- When operating an R-TIC, keep in mind that your bus needs more space to stop. Start slow, turn slow, and scan far ahead to keep your bus under control and anticipate problems.
- If the trailer or midsection start to slip and swing out, straighten your front wheels and let up on the accelerator.
- If you're stuck, straighten your wheels and try the deep snow and mud switch. If the deep snow and mud switch doesn't do the job, first turn it off and then try putting sand under the drive wheels. If that doesn't work, call in.
- Make these strategies part of your overall winter operating plan. They'll help you control your bus. They'll also keep passengers, pedestrians, other drivers, and you safe in the winter.

#### WINTER DRIVING FOR BUS OPERATORS

#### **ANSWERS TO THE REVIEW QUIZ**

- 1. a
- 2. a
- 3. a
- 4. b
- 5. a
- 6. b
- 7. a
- 8. a
- 9. a

### WINTER DRIVING FOR BUS OPERATORS REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.

NameDate	
	Dress for warmth and comfort behind the wheel, including having a jacket and sunglasses with you.  True
	False
2.	A thin layer of water on top of compacted ice and snow is actually more slippery than the ice or snow alone.
	True False
a.	Accelerate gradually and smoothly to avoid spinning your drive wheels.  True  False
4.	Always put your ramp down in a snowbank.
	True False
5.	Because of all the ways winter slows passengers down, give them a little more time to board.
	True False
a.	If the trailer of your articulated bus suddenly slides out of control, brake hard in an attempt to regain control.  True False
7.	If you do get stuck, straighten your front wheels, press the deep snow and mud switch, and drive forward.
	True False
8.	To control your bus safely on slick roads, slow down and increase your following distance.
	True False
	When you're in the shoulder lane, use your hazard lights, high beams, and horn if needed to make sure other drivers ow you're there.
	True False