Module 8 – Maintaining Safe Margins of Space

If you maintain a safe margin of space around your vehicle you will minimize your chances of having to make sudden steering or braking maneuvers.

Rear-end crashes are the most common type of collisions because drivers follow too close to the vehicle in front of them. When there is not enough space or time to make a sudden stop or maneuver to the sides to avoid a collision, a crash becomes inevitable. According to the Department of Highway Safety and Motor Vehicles Traffic Crash Statistics Report, in 2009 30% of injury crashes were rear end collisions

Maintain a safe margin of space in the front, sides, and to the rear of your vehicle. This will give you not only a cushion but room for an escape route if you need one. The amount of space you need increases with higher speeds. The faster you travel the more space you need to react to situations on the roadway. Begin managing space by creating a safe cushion of empty space around your vehicle to use in case you need to maneuver out of a dangerous situation.

This module is about how to determine a safe following distance and how to create safe margins of space around your vehicle. At the conclusion of this module you will recognize the importance of managing space around your vehicle to reduce your risk of conflict. Positioning your vehicle with ample space to maneuver and reduce the consequences of a crash includes knowing how to: Space ahead and stopping distance; Space to the sides; Space behind; and Truck "no-zones".

Space ahead of your vehicle is important in the event you need to stop or turn to avoid an obstacle. When you are driving you have the most control over the space in front of your vehicle. You can slow down to create a gap of space or if there is more room in another lane, you can change lanes.

If the driver in front of you stops suddenly and a collision occurs you are generally considered "at fault" because you are responsible for maintaining a safe distance behind the vehicle in front of you. A safe following distance provides enough space to avoid a collision by steering and/or braking. It is your responsibility to recognize how far you need to distance your vehicle and maintain that safe space, or following distance.

On dry pavement, with good visibility, allow at least a 3-second interval between your vehicle and the vehicle ahead. This 3 second rule works well for speeds up to 50 mph; however, the faster you travel, the more distance is covered while you are trying to stop your vehicle.

If you are traveling 40 mph, in three seconds you will travel 180 feet. At 60 mph, the distance increases to 270 feet. At speeds of more than 50 mph, you should identify an alternate path which you can use if your path is suddenly blocked. Remember your stopping distance may be greater than the distance you can see ahead.

Let's look into how to apply the 3-Second Rule:

- 1. Pick out a fixed point along the road ahead: a road sign, light post, or other fixed object.
- As soon as the rear of the vehicle ahead of you passes the fixed point, start counting, "One thousand one, one thousand two, one thousand three..."
- 3. When the front of your car reaches the fixed point, stop counting. You are following too closely if you reach the fixed point before you finish counting three seconds.

The 3-Second Rule works fine when you are following vehicles that are all moving in the same direction and at relatively the same speed as you. However, you would be unable to stop in time to avoid hitting intersecting traffic or a stationary object in the road if your view is obscured by a hill, curve, inadequate lighting, or adverse weather conditions.

You should increase your following distance to greater than 3 seconds when:

- Traction and visibility are reduced;
- A driver behind you is trying to pass;
- Following a large truck or vehicle with limited rear vision;
- Following a large vehicle that is blocking your view of the road ahead;
- Following motorcycles; or when
- You are distracted.

Space to the sides of your vehicle is also important for maneuvering around obstacles to the side. Establish a safe cushion of space to all sides of your vehicle. Space to the side can be used as an escape route to avoid an unexpected hazard or threat ahead. In adverse weather or if poor road conditions exist, the establishment of more space on all sides of your vehicle may be warranted. Space to the sides of your vehicle also gives you a cushion to avoid others that might swerve into your lane.

If you are in the lane next to the centerline with oncoming traffic, position your vehicle to the right side of your lane.

If you see a bicyclist in your lane ahead, move your vehicle to the left side of your lane. When managing space to the sides of your vehicle, remember the side mirror adjustments to ensure you see as much as possible to the sides of your vehicle. In Florida, drivers must pass a bicyclist at a safe distance of not less then 3 feet. This will often require moving at least partially into an adjoining lane.

Avoid driving next to another vehicle or in your side blind spots. Recognize your blind spots and keep out of that space for other vehicles.

When you see a vehicle approaching in the merge lane to your side, reduce the risk of collision by moving safely to your left or right depending on the direction of the merge. Create space to your side to allow the other driver a smooth merge without conflict. If there is no space to the side to change lanes, you should maintain a constant speed; it is incumbent on the vehicle merging to perform the maneuver safely dictated by traffic flow and conditions. If you slow down or speed up you become a changing variable.

When you have a hazard on your left and right, manage the hazard by creating more space in front or behind your vehicle. Speed up or slow down to create safe cushion of space between you and the hazard.

Space behind your vehicle is critical if you need to stop or slow quickly and it is also the most difficult space to manage. Space behind creates a safeguard or buffer from being rear-ended.

Use the following techniques to help manage the space behind your vehicle:

- Maintain a smooth, steady speed.
- Do not slow down or stop without communicating to the driver behind you. Communicate your intention to stop or slow by tapping your brakes or signaling with your left arm turned down at the elbow.
- Prior to slowing, check your rear-view mirror for vehicles behind you.

If you are being tailgated, increase your following distance from the vehicle in front of you. Signal early for turns, stops, and lane changes. If you are traveling in a left lane on a divided highway and a tailgater persists in following too closely, identify a safe gap of space in the lane to your right, signal, and change lanes. Distance yourself from the tailgater and allow them to get in front of your vehicle.

In general, the bigger and heavier the vehicle, the longer it takes to accelerate and stop. Larger vehicles are also less maneuverable than smaller vehicles. Blind spots around large vehicles are called "no-zones" because occupying these zones is extremely dangerous and not recommended.

Stay out of the "no-zones". If you have to enter the no-zone, get in and out quickly and safely! Do not enter a no-zone and linger - a truck driver might see you before you enter and forget you are there. If you see a truck begin to enter your lane when you are in the no-zone, never assume the driver is aware of your vehicle location. Maneuver out of no-zones as soon as possible.

If a truck has a long and broad hood, the driver may also have restricted vision up to 20 feet beyond his or her front bumper. Long semi-trucks can have a blind spot of up to 200 feet behind the truck. A good tip is to not pull back into the lane in which the truck is traveling until you can see roadway between your vehicle and the truck in the rear view mirror.

Let's see if we can remember some important points. You will now be asked some review questions based on this CBT. You may select your answer by choosing the corresponding button or by pressing the corresponding letter on your keyboard.

- 1. The 3 second rule works well for speeds up to __ mph;
 - a. 50
 - b. 55
 - c. 60
 - d. 65

The answer is a. 50.

- 2. In Florida, drivers must pass a bicyclist at a safe distance of not less then:
 - a. 7 feet
 - b. 5 feet
 - c. 3 feet
 - d. 1 foot

The answer is c. 3 feet.

- 3. To help manage the space behind your vehicle:
 - a. Vary your speed to keep the driver behind you alert
 - b. Do not bother using your brakes, the driver behind you can predict your actions
 - c. Before slowing check your mirrors for traffic behind you
 - d. All of the answers are correct

The answer is c. Before slowing check your mirrors for traffic behind you.

And now let's review the lesson.

This module described the importance of having a safe cushion of space around your vehicle. Space provides a safe stopping distance, an escape route if needed and room to maneuver if you have an unexpected obstacle in your path.

You have the most control over the space in front of your vehicle. You need space ahead to slow or stop. Remember your stopping distance increases with your speed. The faster you travel the more space you need to stop. Use the three-second rule with speeds under 50 miles per hour. Space to the sides provides an area to maneuver if another vehicle swerves into your lane. Space behind is important to avoid being rear-ended. Space behind is also the most difficult to manage.

Drivers of large vehicles and big semi trucks have limited visibility around their vehicles with very large blind spots. Be aware of the areas around large vehicles where you are not seen. Avoid the "no zones" - if you *have* to be in those areas, get out of them quickly.

The next module presents information on defensive driving techniques for sharing the road with other types of vehicles and road users. This concludes the module on maintaining safe margins of space.