

Module 2 – Traffic Safety Problem

The first module of this course covers the traffic safety challenges we all face as a society. At the conclusion of this module you will be able to:

- Recognize the elements of the Roadway System;
- Identify the societal costs associated with crashes and injuries;
- Become familiar with the most common factors that contribute to crashes; and
- Recognize the responsibility we all have as road users.

As we all know the Roadway System is a complex, integrated system made up of four elements:

- Roadways;
- Vehicles;
- Drivers; and
- Other Users.

In a perfectly safe driving environment, each of these elements is predictable and in good condition. Even if the roadway, your vehicle, and you, the driver, are in good condition, every other road user presents an uncertain, unpredictable risk.

In reality, even if you think your vehicle is fully operational, the roadway is clear and dry, and you feel strong and alert, one or more of these elements may quickly and unexpectedly change.

As experienced drivers, we should be aware that roadways are classified by their function. Expressways and divided highways are classified as high speed roads and consequently pose a greater risk of potential high-impact crashes.

Two-lane rural roadways may have slower speeds but vehicles are traveling close together in the opposite direction and provide an increased risk of a head-on collision.

Did you notice a few things in this picture that should concern you as the driver? Click on the things that alert you to potential risks in this scene.

The truck is trouble! It has red flags that warn you of danger. It has an oversize load of heavy trusses sticking out – could they fall off? It's about to take a wide turn to the right and is going to use your lane to make the turn... Do you have both hands on the wheel and are you prepared for an evasive maneuver?

There is no shoulder on this road and if you need to make room for the truck and go off the road, it is in poor condition. Let's say that truck continues to steer into your lane. Where would you go if the truck comes at you head-on? On the right there are telephone poles, signs and ditch. What's your plan?

Do you ask yourself why trucks are restricted ahead? Is the road too narrow, is it in poor condition? Is the construction zone ahead creating narrow lanes?

The sign warns you of construction in 500 feet – how far away is that at the speed you are traveling? You have little time to prepare if you are traveling too fast. In the meantime, there are a few other things to worry about before the construction zone.

The pedestrian warning sign alerts you that pedestrians may enter the roadway. When you see these signs, do you scan for pedestrians in the road and on the path on both sides of the road ahead?

Sometimes the roads are slick or wet, and present a low-traction surface making it hard to control the speed and direction your vehicle is traveling. The surface area of each tire that touches the roadway is the only area that provides the traction necessary to maneuver the vehicle. In fact, for each tire, the traction being provided is very small – only about the size of a palm print.

When you encounter wet roads, loose gravel, or slippery surfaces, think about how much more dangerous those low-traction situations can be – it only takes a thin film of water to cause hydroplaning. That small surface area of each tire responsible for gripping the surface can quickly be compromised.

As we drive, we are surrounded on the road by many types of vehicles that have unique handling and operating characteristics. Here in Florida we have a large number of motorcycles whose riders can be on the road 365 days a year. They are small, fast, and sometimes difficult to see. Similarly, bicyclists are frequently part of the roadway mix.

Delivery trucks, vans, and semi-trucks can block your line-of-sight. What are these trucks blocking your view of? The two vehicles ahead are braking and the trucks are hiding an overhead exit sign and “construction zone ahead” sign.

There are other vehicles such as street sweepers, school buses, and service vehicles that can present visibility, spacial, and speed issues while driving. Be alert and prepared to react as needed to avoid a crash.

We share the road with many safe, alert, and good drivers. However, never let your guard down to the fact that inexperienced, tired, angry, ill, distracted, or impaired drivers unexpectedly surround you on the road. If you, as a driver, are not prepared to get behind the wheel, your risk multiplies exponentially.

As you all know the Roadway System is designed to move and manage vehicles and drivers on our roadways. Our integrated transportation system requires drivers to depend on each other and to follow traffic rules.

Have you noticed many Florida intersections have “no right turn on red” signs to prevent conflict with drivers making U-turns or crossing pedestrians?

All drivers need to be cognizant of others using the roadway including pedestrians, bicyclists, and motorcyclists. Motor vehicles play a large role in our lives and economy. Without them, most of us without efficient mass transportation could not easily get to work or travel outside of

our own communities. The cost of crashes is huge. To gauge how big the impact is, let's look at some statistics.

Just focusing on the most severe crashes that caused death, Florida experienced 2,444 fatalities in 2010. To put that in perspective, each year more people are killed in Florida than the entire population of Apalachicola. The traffic safety community refers to these events as crashes instead of accident because we have no control over an "accident" – crashes CAN be prevented.

The next classification of crashes is "injury". For the victim of a serious injury, costs of recovery and rehabilitation are often staggering. In fact, injuries are often worse in cost and suffering than fatalities. In 2010, Florida had almost 200,000 individuals injured in vehicle crashes. That's about equal to the population of Tallahassee. Injuries and death associated with traffic-related crashes is one of our society's largest problems.

In addition to injury and fatality rates, there were 235,461 total vehicle crashes in Florida in 2010. In Florida, annually there are approximately 645 crashes per day – about one crash every minute, every day, all year long.

Many collisions are unreported for obvious insurance reasons, so the number of collisions is truly unknown. We do know, nevertheless, that collisions cost us billions of dollars related to property damage, medical costs, insurance premiums, and lost time at work. In addition, the cost of personal or family disruptions as well as mental and physical suffering can't possibly be measured in dollars.

The top five contributing factors to crashes in Florida are:

1. Inattention;
2. Failure to yield right of way;
3. Failure to keep in proper lane;
4. Driving under the influence of alcohol, drugs, or medication; and
5. Failure to obey traffic signs and signals;

Many of these factors are often combined to cause a crash. Later we'll go through each of these factors in depth and how they may be prevented by using defensive driving techniques.

Even though you may be enclosed in your very personal world, in a seemingly safe vehicle, protected and secure...remember, you are surrounded by strangers depending on you and each other to obey the rules of the road.

Many drivers display a lack of courtesy; courtesy being defined as nothing more than showing respect for the rights and privileges of others using the roadway. It's simply a matter of displaying good manners and obeying the rules while driving.

It is our social responsibility to pay attention, manage our distractions, and control our vehicle with "due care". Here's a distracted driver who just rear-ended the vehicle ahead. This is a potentially dangerous situation. They and their vehicles have become magnets for a secondary

crash. Inattentive drivers may not see them until it is too late. Florida law requires vehicles to be removed from the roadway when there are no injuries involved in a crash. How much will this collision cost both of these drivers in time, repair, and insurance premiums? You must pay attention!

If you obey the rules and another driver doesn't, it is still YOUR responsibility to avoid a collision if possible. If you see another vehicle run a red light and enter your traffic path, and if you can stop or maneuver to avoid the collision, it is your responsibility to demonstrate that "due care."

If there is no crosswalk, marked or unmarked, and a pedestrian dashes in front of your vehicle, it is *your* responsibility to try to avoid a collision – even though they are not supposed to cross the section of road immediately in front of you. The concepts of defensive driving – "watching out for the other person" come into play in these types of driving scenarios.

Always get in the habit of looking twice. Look Left. Look right. Look left AGAIN. What we learned about crossing the street as a pedestrian also applies as a driver. Let's take a closer look with this video.

Patience is also a responsibility drivers must develop and practice whether traveling to the job or running errands. It seems as though everyone in our "time-starved" world is in a hurry.

It is often extremely difficult to exercise patience. A simple solution to being more patient is often to allow yourself more time for your trip. Leave early and recognize how to control your emotions. We will discuss more about emotions and other driving responsibilities later in the course.

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. Fatalities related to motor vehicle traffic are listed as the number ____ cause of accidental death.
 - a. Five
 - b. Three
 - c. Four
 - d. One

The answer is d. one.

2. The number one cause of annual fatalities due to motor vehicle crashes is:
 - a. speeding
 - b. failure to maintain lane position
 - c. failure to obey traffic signals
 - d. inattention

The answer is d. inattention.

3. The roadway system is made up of multiple elements including:
- a. roadways
 - b. vehicles
 - c. drivers
 - d. all of the answers are correct

The answer is d. all of the answers are correct.

And now let's review the lesson.

Here's a quick review of the key messages in this module. Injury and death associated with traffic-related crashes is one of our largest societal problems. Fatalities related to motor vehicle traffic are the number one cause of accidental death. In a perfectly safe driving environment, even if the roadway, your vehicle, and you the driver are in good condition, every other road user presents an uncertain, unpredictable risk. Many factors contribute to crashes. Crashes are not accidents – they can be avoided.

Our integrated transportation system requires drivers to depend on each other and to follow traffic rules. It is our social responsibility to stay focused on the task of driving. Pay attention, manage your distractions, and control your vehicle with "due care".

It is crucial to be alert and stay focused on the task of driving and "watch out for the other person". These defensive driving techniques will be discussed in depth later in the course. This concludes Module one. Module two is about our Florida state laws.

The next module presents information on understanding all of your responsibilities as a licensed driver in Florida. This concludes the module on the Traffic Safety Problem.