

Distractions

18

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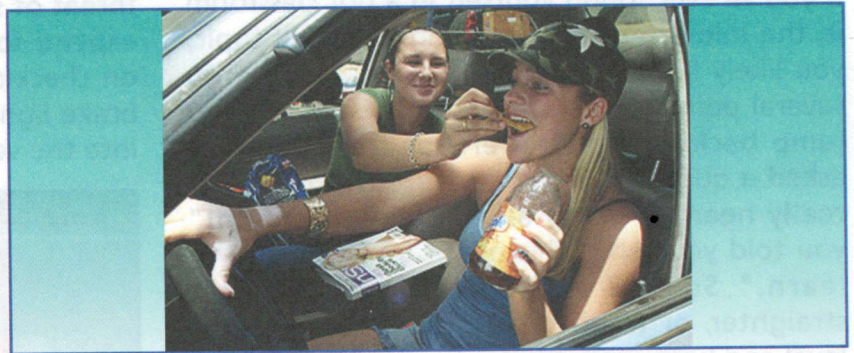
18-B
Distractions

Module Seven Review

Driving a vehicle is a great responsibility. You are accountable for your own safety, the safety of your passengers, and the safety of the other road users who share the HTS.

Processing information is your brain's ability to interpret the information provided by your senses. You must employ critical-thinking, risk-assessment, decision-making and problem-solving skills to execute responsible reduced-risk driving maneuvers.

You, the driver, are the nucleus of safe, legal and responsible reduced-risk driving. Your attitude, physical and mental condition, your driving skills and your experience are the keys to the safe and secure application of the SIPDE System.



AFTER COMPLETING THIS CHAPTER, THE STUDENT MUST BE ABLE TO RECOGNIZE, EVALUATE, AND APPLY RISK-REDUCTION STRATEGIES TO :

- divided attention tasks while controlling a vehicle in the HTS.
- multi-tasking while interacting with other road users.
- limiting distractions while maneuvering a vehicle in the HTS.
- managing distractions while maneuvering a vehicle in the HTS.

18-A

Being Aware

We are often told: "Pay attention!" But what exactly does that mean? In driving, it generally means keeping our mind focussed on the driving task. But it is more complicated than that. Attention is the brain power behind our scanning and noticing. It includes our readiness to react to what is happening both outside and inside our vehicle.

Sometimes it is automatic, but you can learn to control it by choice. Failures in attention are key factors contributing to crashes. There are two kinds of failures. The most obvious failure is not paying attention to driving.

The second kind of failure is not so obvious; it happens when you are paying attention to



driving, **but to the wrong thing.** Because of the “channel capacity” of the brain, you mostly pay attention to one thing at a time. You have to keep switching your focus among all of the items that require your attention, so reducing the demand to switch your focus is important.

You do this by learning to do many driving tasks “**automatically,**” such as staying in your lane. This means you have learned the job so well that it takes up little of your attention. As you gain experience, you will be able to spend less attention time on routine vehicle control, such as lane tracking, and more on important tasks, such as distant hazard detection.

ALERTNESS

If you’ve ever found yourself in a hot classroom in the mid-afternoon, listening to a dull topic, you likely have found your alertness level drop several points! Perhaps a loud noise made you jump back to higher alert, or the instructor asked a question and you realized you had not really heard it being asked. “**Pay attention!**” you told yourself. “This might be important to learn.” So you shifted in your seat, sat straighter, or tried to maintain your alertness level and keep your mind active and ready.

Many other factors, such as alcohol, or drugs (whether prescription, over-the-counter, or illicit), can affect brain function and alertness. Fatigue and even boredom are other main effects on alertness. Part of what keeps you alert is the mental activity that takes place as you react to the things you see.

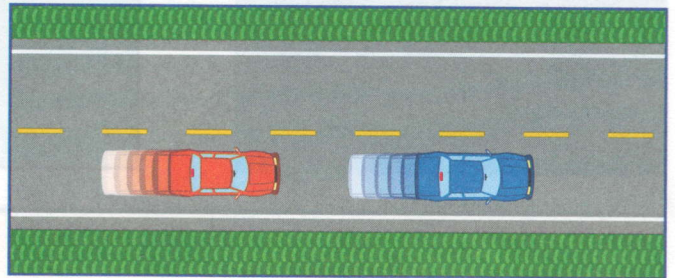
The active brain is alert. You can use that alertness, or add to it, by actively processing information while driving. You must decide whether you are actively responding, or passively sitting behind the wheel.



DIVIDING ATTENTION - MULTI-TASKING

It is possible to be alert while still not directing attention to the driving task correctly. There are many things requiring your attention during driving, so you must divide your attention among them. Even in the best of conditions, you can only devote your attention to a couple of things at a time. That is a basic limitation of the human mind, so you must continually refocus your attention as you drive.

You can quickly get into trouble if you stop concentrating on your driving. You may let your attention focus on one thing for too long, for example, and lose awareness of other parts of the driving scene that might be changing quickly. If you devote too much attention to the threat of someone who is tailgating, you might expend too much of your visual scanning time on checking the rear-view mirror, and miss the brake lights ahead of you. You could then crash into the vehicle that is stopping just ahead.



SWITCHING ATTENTION - MULTI-TASKING

You have to learn to switch attention properly - never letting attention be “captured” by one thing, such as looking in the rear-view mirror, for more than two seconds. The tailgating example demonstrates the importance of switching attention frequently, to re-establish awareness of the situations all around you.

You must avoid getting stuck in the rut of absent-mindedly staring at the back of the vehicle ahead. This becomes a blank stare and, in fact, **you are seeing nothing.** You must also avoid spending too much time attending to something interesting although irrelevant or not dangerous, such as music, your passengers, or a billboard. **These are driving distractions.**



Most of your attention is directed by using your eyes, so the key is to keep your eyes moving, focussing for a fraction of a second on one thing, and moving on to the next thing. This will require practice because your eyes are lazy.

Advertising signs, cool people or cars, and other roadside attractions are potential distractions for your eyes. Music, passengers, and phone conversations represent distractions for your brain, so you forget to keep switching attention to look for potential hazards. It's like your brain gets stuck in a "tunnel", and occasionally needs a kick to keep the switching rate moving along.

SCANNING AND IDENTIFYING

Once you are alert and attentive, you can apply yourself to SIPDE's Scanning and Identifying, and noticing potential hazards - detecting dangers.

Sometimes, you may fail to detect a potential hazard that you should have seen. This is frequently mentioned in crash reports as a "looked but failed to see" error. Your visual system does have limits. You must recognize that you are not some futuristic robot with unerring vision, but a **human being that must keep trying to improve your abilities**. In order to view a target clearly, your eyes must fixate for a brief period with your central conic vision. **Unfamiliar and unexpected objects are less likely to be detected.**

OBSTRUCTIONS

You must look for anything that could be a threat. That means something that can move into your lane, a lane blockage, or some other change in the road, such as a patch of ice.

Often, there is something between you and where you need to look, so you have to try to look through it or past it. For example, look through the window of the vehicle ahead (though this is harder with vans and SUVs). It is often possible to see partially through a group of trees or shrubs, between buildings or signs, under big trucks, and so on. **Look through the "holes"** in these obstructions to see beyond

them, **rather than staring at the obstruction.**

If you are driving at a reasonable speed for the road conditions, fixed objects near the road should not pose a threat. Instead of looking at them, look through them to the potential hazards they might be hiding.

Your brain does not always register what your eyes see. Your eyes take pictures of the environment, but the perception takes place in your brain. The brain adds meaning or understanding to the raw data the eyes bring it.

After collisions, drivers often say they "**looked, but did not see anything coming**". This may be because of physical obstructions and visual distractions in the environment, such as parked cars or signs. It can also happen when the brain simply doesn't "**get it**", **because we tend to see what we're looking for, and we tend not to see what we do not expect.**

UNDERSTANDING CUES AND CLUES

This may help explain so many crashes involving motorcycles in which the car driver was looking for other cars, and failed to see the motorcycle. At least part of the time, you see what you expect to see based on your experiences. Your brain takes the current data from your eyes, and compares it to known patterns or templates stored in memory. Simple matches are instantaneous, but others are perhaps not so easily predictable.

You can help build your knowledge database of things that can happen on the road. This can aid perception later. Because you tend to see what you expect to see, you cannot expect something if you know nothing about it.

For example, if you are unaware that deer often come out of the woods near the road, you will be less likely to notice a blurry movement at the edge of the trees while you are scanning the driving environment. If you know that a movement there can mean a threat, you are more likely to move your eyes to it and be able to react in time.



You can improve perception by tuning up visual expectations when driving in a new area, whether a new neighborhood in the city, or a rural or wooded area, by predicting possible hazards before you drive there. As you learn more about how to see and what to look for, and practice your scanning ability, you will find driving easier and more satisfying. **A good driver is an active scanner.**

LIMITATIONS OF PERCEPTION

As noted, the human brain and senses have limitations. For example, you may be very good at detecting movement in your peripheral vision, but not very good at judging the "closing speed" between yourself and an oncoming or slow-moving vehicle. In fact, most people are not; most rear-end crashes involve a vehicle hitting another that is already stopped.

ANTICIPATION

Novice drivers may believe they are doing well by handling the current situation. But situations are continually changing; around every curve and over every hill there is a new driving environment. Good drivers with plenty of

experience have seen enough to anticipate what might be ahead. They act accordingly. They see clues that remind them of previous situations - and what they might expect this time.

As they drive, they are thinking about potential hazards that could be ahead, and take those into account when making speed and space management choices. Their first choice is to reduce speed in keeping with the conditions. They find opportunities to see far ahead by looking past, or through, obstructions.

Seeing is important to good driving, but being able to anticipate what you cannot yet see is just as important. Doing so will help you direct your attention to where something might appear, and avoid your being clueless in a "It came out of nowhere!" situation.

Driving "mindfully" instead of absent-mindedly will help you become a steady, superior driver. If you don't try to improve your decisions all the time, then you may face a situation in which a bad decision results in a near-miss or worse.

It's better to frequently self-monitor than to get a harsh "wake-up call" because of a crash.

18-B Distractions

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While driving, you must be totally aware of the driving environment around your vehicle. The SIPDE System is based on a continuous searching of the road ahead, to the rear, and to the sides.

This information will then be used to identify hazards, predict, and then decide what vehicle control inputs are needed to reduce risk. This requires your complete attention. With this in mind, you must consciously try to avoid any distractions that will divide your attention span and thinking processes.

A distracted driver is a dangerous driver. Taking your eyes off the road for two seconds at 60 mph means you have traveled blindly for half the length of a football field. **Let's look at some key behaviors that can help you prevent collisions due to some of the most common driver distractions.**

INSIDE VEHICLE DISTRACTIONS

Familiarize yourself with and adjust the vehicle controls before you begin your trip - as part of your pre-drive protocol.



DISTRACTIONS - INSIDE THE VEHICLE

Passengers and pets

- Laughing with passengers
- Arguments / disturbing conversations
- Tending to children or pets

Music

- Adjusting CD/Radio equipment
- Reaching for CDs
- Headphones or playing music too loudly

Cell Phones

- Hand-held or hand's free cell phones
- Text messaging

Food, beverages, and smoking

- Eating, drinking, and smoking
- Reaching for food, beverages, and cigarettes
- Managing hot fluids
- Managing fluids for spillage

Grooming

- Combing hair
- Flossing
- Applying makeup
- Shaving

Other

- Reaching for vehicle controls or other objects
- Reading a map, GPS, book, or newspaper
- Completing a crossword puzzle
- Working or playing (on a computer or other electronic device)
- Taking notes; writing letters

If a distraction causes you to react 1/2 second slower to a hazard, the risk (chance) of you becoming involved in a crash doubles!

ENTERTAINMENT SYSTEMS

Before departure, memorize how to use the most important knobs and buttons on the sound system. When parked, adjust treble, bass and balance to your favorite settings. Then, when driving, you only need a few features, such as volume, and skipping a song or changing the



station. It is better to listen to a oft-heard tune rather than search incessantly for something different. If you have a front seat passenger, let them act as your DJ while you drive.

Do not let your entertainment system steal your attention. Sure, most of the time, a second or two to glance down to change a setting does not result in a crash. But the next time it just might, and you or your friend could spend the rest of your lives in a wheelchair.

Keep the volume low. Most people find clean, clear sound at a moderate volume more enjoyable than a loud sound where the speakers start to buzz or distort. Moreover, you will be able to hear what's going on outside of your vehicle (sirens, horns, and other roadway cues). For the same reason, you should **never use headphones while driving.**

Turn off your system, or turn the volume to zero when reversing, parallel parking, or if other complex driving situations arise (construction zones). Notice how much better you can concentrate?

COMMUNICATION SYSTEMS

Pull over to a safe place before you use the cell phone. Hand-held and hands-free cell phones distract the driver from the driving task and can lead to collisions. **In Texas, all drivers under the age of 18 are prohibited from using a wireless communication device while driving.**



Statistics



In 2014, in Texas, there were **483 people killed in crashes involving distracted driving**. (Crash Highlights 2014 TX DOT).

A 2015 AAA study estimates that over **70% of teen crashes involve distractions**.



Text messaging is even worse as you must look at the device to type. Drivers under 25 are much more likely to send text messages or emails while driving. Among 16-25 year olds, **approximately 70% admitted to sending text messages or emails while driving** compared to 14% for other drivers.

Some systems include ways to recite email or messages via a computer-generated voice while you drive. The question you have to ask yourself is: "Is it more important for me to get home safely, or to risk not getting home at all, just because I wanted five fewer emails in my inbox?"

Hands-free accessories are inadequate because researchers have found that it is the distraction of listening and talking that is the main problem. Telephone conversations can impair your scanning patterns, reaction times, decision making, speed and throttle control, and lane tracking abilities. Of course, **you should keep both hands on the steering wheel**, but even

more important **is to keep your "brain on the road."**

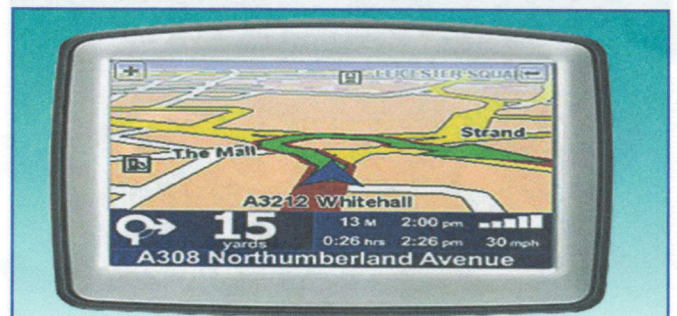
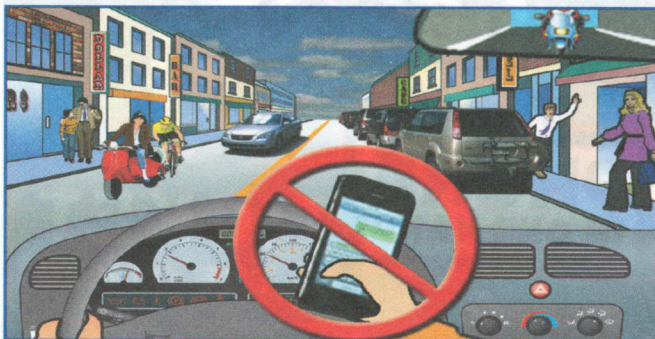
Further, the Institute for Highway Safety has concluded that drivers who use cell phones while driving are four times more likely to be involved in collisions.

NAVIGATION SYSTEMS (GPS)

Navigation or route guidance systems are becoming more common, and can include large screens in the middle of the dashboard. These may be combined with traffic flow data and Global Positioning Satellite (GPS) information to help us with driving directions or route choice.

If you can, choose a system that does not require using keys or a touch screen to enter information, but rather uses voice recognition. Also, there appears to be some safety benefit to having driving directions read out by a computer-generated voice, rather than having to read the screen. Some researchers have found that turn-by-turn instructions may be less distracting than route information displayed on a map.

In all cases, you can prepare for your trip before you depart by entering the locations you wish to visit into your GPS database. Then you can call up the pre-entered locations when you wish to visit them and you will not have to enter data or search while on the road. If you need to add a location, park in a safe local to do so; or enter the location before starting off.



Statistics



Studies have shown that the risk of a fatal crash for a 16 to 17 year-old increases **48%** if one "peer" passenger is present, **158%** if two are present, and **207%** when three or more "peers" are present in the vehicle.



PETS

Transporting pets can be a problem. This can be solved by bringing someone along to control the animal with a leash, pet seat restraint or using a pet carrying case. Besides preventing your pet from seat hopping, leashes can protect if a crash should occur. Plan ahead and this distraction can be solved.

PASSENGERS

Passengers can contribute to crashes by encouraging speeding, risky passing, or even by "daring" you to take some deliberately risky action. They may also distract you with shouting, horseplay, or other inappropriate behavior. As a novice driver, you are just learning to focus your attention on driving, so any distraction can cause problems.

People in a group generally make riskier decisions than the same people would if they were alone. This is called "group think" and probably occurs because the group decision spreads the responsibility around. Driving a vehicle is neither a group activity, nor a group responsibility. Remember, when you are the



driver, **you are fully responsible for what you do** - there is no spreading the blame. It will be you alone shouldering the punishment for your driving errors, not your peers nor your passengers.

Before departure, refuse to drive until everyone buckles up and establish rules - no arms or heads out the window or sunroof. Bring along distractions to amuse younger children.

Let your passengers know you need to concentrate on your role as a driver. Ask them to help by avoiding conversations or arguments that would distract you. In a positive way, they can assist by acting as the music DJ (provided it is not too loud), handling any calls or texts and/or by being the navigator.

Listen to your passengers if they express fear because of your driving (speed, tailgating, etc.), they request that you slow down, they offer to drive, they are holding onto the door handle, or they ask to get out of your vehicle. **They are attempting to offer a positive influence.**

How you react to peer pressure and what sort of pressure you place on others is up to you. The best approach is to set your personal standards as to how much driving risk you want to accept in your life. Do this when you are alone and have time to think it over carefully.

Sometimes it's helpful to talk with someone whose judgment you respect. Once you've





decided what your standards are, stick with them, and do not let peers pressure you into changing them. An adrenaline-packed situation where a group of teens are in a risk-taking mood is a poor time for anyone to be deciding what standards are most appropriate.

When peers suggest risky behavior, responsible drivers will select responsible conduct. **Some approaches to counteracting the pressure may even be acceptable to peers, such as:**

Question the action:

"Are my best interests being considered?" or
 "What kinds of pressures are being used right now?"

State the problem:

"Will this action result in doing something illegal or harmful?" or
 "Does the pressure interfere with my right to decide what's best for me?"

State the consequences:

"If I give in, what price might I pay?"
 "Could I get in trouble or be arrested?"
 "Might I harm myself, my passengers or others?"

Suggest alternatives:

"I've got a better idea. Let's go to a movie, or for a burger."

Leave the situation:

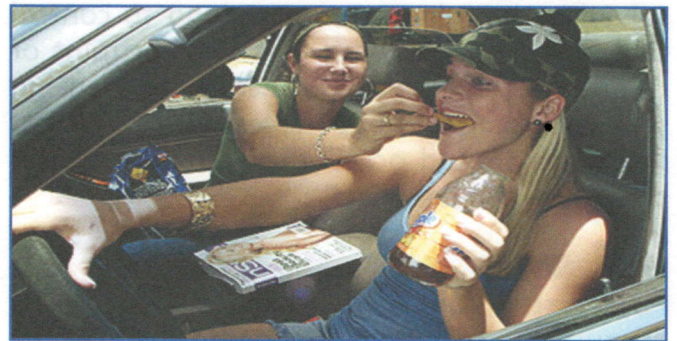
"I've gotta go. If you change your mind, I'll meet you later."

Saying "No" can be critical to your safety, so how you say "No" is extremely important. Don't attack others, or sound unsure of

yourself. Respond in an assertive manner while being respectful of others. Doing so can help you gain acceptance without making others feel angry or threatened.

This approach can prompt other people to take the same stand you have taken. You can help be a positive influence on your peers, as well as resisting negative pressure. **Peer pressure can be a strong positive force for safe and healthy decisions.**

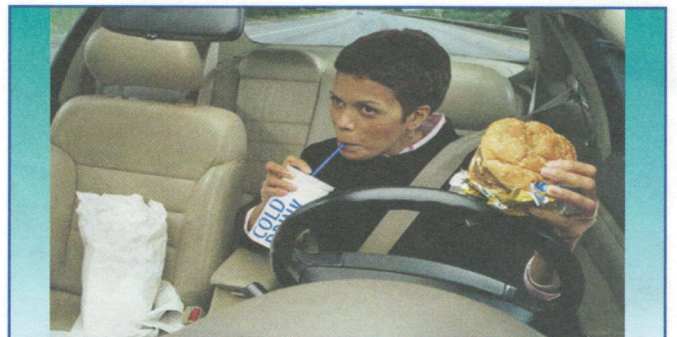
When you are a passenger, try to exert a positive influence on the driver and any other passengers to help make the driving environment safer.

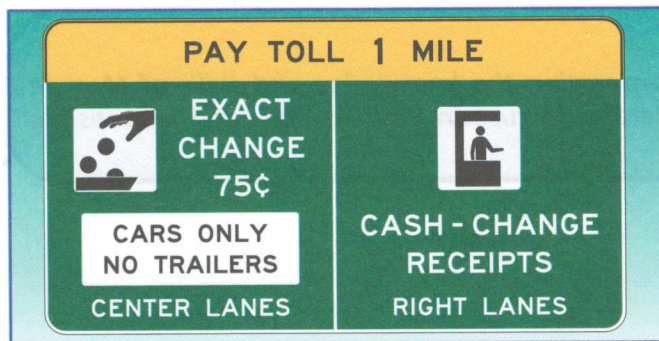


EATING / GROOMING

Eating while driving is not only messy, but dangerous. It usually involves driving with one hand and juggling your food or beverage with the other. Leave a little early to allow yourself time to stop for a bite to eat or take advantage of planned rest stops. Pull over to a safe location, and enjoy your meal.

Perform all grooming activities prior to driving your vehicle or upon reaching your destination.





TOLL BOOTHS

When your trip will include toll highways, make sure you have the necessary change prepared and readily at hand. If you use these roads frequently, invest in an EZ Pass. This will remove the distraction of having to stop and pay as well as improve fuel efficiency (no stop and then accelerate to return to cruising speed).

IN GENERAL

If you **MUST** attend to something else while driving, be sure to lengthen the following distance between your vehicle and the vehicle ahead of you.



OUTSIDE VEHICLE DISTRACTIONS

The most common distractions outside the vehicle involve unusual sights that capture your attention. They cause you to stare and forget the driving task. Examples of these are: collision scenes, construction zones, wild animals, crowds of people and unusual vehicles.

DISTRACTIONS - OUTSIDE THE VEHICLE

Unusual sights

- People-watching
- Reading billboards
- Acting like a passenger (looking everywhere but at the road ahead)

Construction zones

- Watching the workers instead of watching out for the workers
- Looking at construction equipment

Collision scenes

- "Rubbernecking" – Paying too much attention to a collision scene

Other traffic

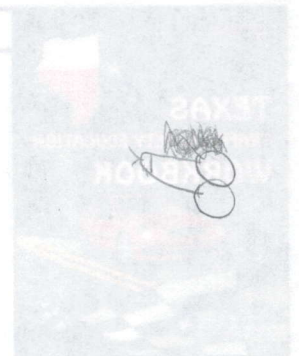
- Playing road games with other cars (especially cars carrying peers)
- Engaging in road rage behaviors with other drivers

Other:

- Watching the skyline (weather; aircraft, etc.) instead of focusing attention on the path in front of the vehicle
- "Rubbernecking" to watch a police officer pull over another vehicle
- Looking at a scenic view

If a distraction causes you to react 1/2 second slower to a hazard, the risk (chance) of you becoming involved in a crash doubles!

The trick is to glance at the scene and immediately return your eyes to scanning the traffic situation. You can always return for another quick glance later, after you have checked your driving environment and are sure that the next glance can be performed safely.





DRIVING PLAN

The student formulates a Driving Plan incorporating the knowledge and skills of Module Seven (Distractions) to endorse, to promote and to sustain lifelong legal and responsible reduced-risk driving practices in the HTS.



Module Seven Review

VOCABULARY - WRITE A SHORT DEFINITION FOR THE FOLLOWING :

- | | | |
|------------------------|----------------------|--------------------------|
| • Dividing attention | • Head phones | • Negative peer pressure |
| • Switching attention | • Cell phones | • Positive peer pressure |
| • Multi-tasking | • Pet restraints | • Outside distractions |
| • Distractions | • Navigation systems | • Rubbernecking |
| • Entertainment system | • Passengers | |

TEST A- ANSWER THE FOLLOWING QUESTIONS.

- A) How can you manage searching and identifying the driving environment?

B) How can you divide your attention without being distracted?

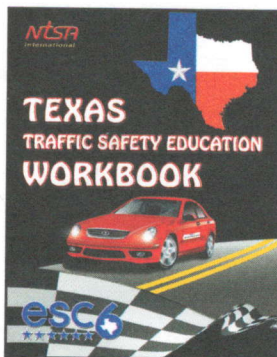
C) What can you do to adapt to your lack of experience as a driver?
- A) What are some of the distractions you may face when driving?

B) Explain how you can help limit distractions prior to driving.

C) What can you do to control distractions while driving?
- A) What can you do to limit the distraction presented by peer passengers?

B) As a passenger in a friend's vehicle, what can you do to help the driver?

C) How can you handle negative peer pressure?



TEXAS TSE STUDENT WORKBOOK

Check your comprehension and mastery of the contents of this Module by completing the corresponding exercises that are found in the complement to the **TEXAS TSE STUDENT MANUAL**:

TEXAS TSE STUDENT WORKBOOK

Complete the assigned questions in the workbook. If necessary, review the chapters when uncertain of an answer and refer to your instructor for further guidance.