Module 7
Distractions
Prior to starting the Parent Taught Driver Education Model Program Course 101, you must receive your student’s Parent Taught Packet from the Texas Department of Public Safety. To receive the packet, the parent must submit the application (DL92 — Request For a Parent Taught Packet). Each student should be registered separately with the Texas Department of Public Safety for the Parent Taught Driver Education Program. You can locate the application on the following web site:

http://www.txdps.state.tx.us/internetforms/Forms/DL-92.pdf

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# Module 7: Distractions (Minimum 2 hours)

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Instructional Objectives

The student legally and responsibly performs Distractions reduced-risk driving practices in the Highway Transportation System (HTS) by limiting and managing distractions and multi-task performances.

- **Distractions.** The student reduces risk by legally and responsibly limiting and managing distractions.

- **Multi-task Performances.** The student reduces risk by legally and responsibly managing multi-task performances.

- **In-Car Progress Assessment.** The student reduces risk by legally and responsibly utilizing baseline and progress assessment tools to evaluate and improve behind-the-wheel skill level (mastery equals 70% or above).

- **Driving Plan.** The student formulates a Driving Plan to endorse and promote lifelong legal and responsible reduced-risk driving practices in the Highway Transportation System (HTS).

- **Classroom Progress Assessment.** The student reduces risk by legally and responsibly completing a Progress Assessment to evaluate classroom knowledge and understanding and measure progress (mastery equals 70% or above).
Distracted driving is any non-driving activity a person engages in while operating a motor vehicle. Such activities have the potential to distract the person from the primary task of driving and increase the risk of crashing.

Distracted driving is risky:
- Each year, more than 40,000 people are killed in motor vehicle crashes and over three million are injured.
- Research indicates that driver distraction is a contributing factor in more than 25 percent of all crashes.
- Distracted driving is when an activity does not allow the driver to visually or mentally see the vehicle’s path of travel or restricts the driver’s line of sight that can limit the ability to respond to a problem.
- These visual and mental distractions may be located outside the vehicle or inside the vehicle as they cause the driver to lose attention to the task of operating the vehicle.
- A distracted driver may be in-attentive or ―lost in thought‖ — as these activities remove the driver’s mental attention from the driving task.

NOTE: In Texas it is illegal for anyone under 18 years of age to use a cell phone including texting while driving unless it is an emergency.
In 2008, nearly 6,000 people died in crashes that involved distracted driving. Distracted driving applies to anything that takes your eyes off the road, your hands off the steering wheel, or interrupts your concentration while driving. The primary responsibility of the driver is to operate a motor vehicle safely. The task of driving requires full attention and focus. Drivers should resist engaging in any activity that takes their eyes and attention off the road for more than a couple of seconds. In some circumstances even a second or two can make all the difference in a driver being able to avoid a crash.

Of special concern is the use of electronic entertainment and communication devices, especially cell phones. The relative risks of the various tasks drivers engage in are still being assessed, but in general the safest course of action is to refrain from using a cell phone while driving, which includes talking, dialing, and texting.

The National Highway Traffic Safety Administration (NHTSA) indicates that there are three main types of distraction:

- **Visual** — taking your eyes off the road
- **Manual** — taking your hands of the wheel
- **Cognitive** — taking your mind off what you’re doing

*Auditory* distraction would be another category, where your visual and/or cognitive attention would be distracted by noise(s).
Texting

While all distractions can endanger drivers' safety, texting is the most alarming because it involves all three (vision, manual, and cognitive) types of distraction.

The percentage of young drivers texting or using other hand-held electronic devices has increased from 2007, according to the National Highway Traffic Safety Administration’s 2008 nationwide survey, which provides the only nationwide probability-based observed data on driver electronic device use in the United States.

Drivers Simply Cannot Concentration Fully on Two Things At Once. According to the Insurance Institute for Highway Safety, drivers who use hand-held devices while driving are four times as likely to get into crashes serious enough to injure themselves or others.

City Ordinance, Austin, TX
(City Ordinance is that city’s regulation or law, which may not be a law all cities or the state has.)

§ 12-1-34 ELECTRONIC MESSAGING WHILE DRIVING.

(A) A driver of a motor vehicle may not use a wireless communication device to view, send, or compose an electronic message or engage other application software while operating a motor vehicle.

(B) It is an affirmative defense to prosecution of an offense under this section if a wireless communications device is used:

1. While the vehicle is stopped;
2. Strictly to engage in a telephone conversation, including dialing or deactivating the call;
3. As a global positioning or navigation system that is affixed to the vehicle;
4. For obtaining emergency assistance to report a traffic accident, medical emergency, or serious traffic hazard, or to prevent a crime about to be committed;
5. In the reasonable belief that a person’s life or safety is in immediate danger;
6. If the device is permanently installed inside the vehicle; or
7. Solely in a voice-activated or other hands-free mode.

This video was produced in Utah. Texas’ laws concerning cell phone use and texting may differ.
Distractions

Most crashes involve a relatively unique set of circumstances that make precise calculations of risk for engaging in different behaviors very difficult. Thus, the available research does not provide a definitive answer as to which behavior is riskier. Different studies and analyses have arrived at different relative risk estimates for different tasks. However, they all show elevated risk (or poorer driving performance) when the driver is distracted. It is also important to keep in mind that some activities are carried out more frequently and for longer periods of time and may result in greater risk.

Every driver has from time-to-time had their attention drawn away from the driving task. The choice to engage in non-driving tasks is usually under the individual’s control and some people do so more frequently. The younger, inexperienced drivers under 20-years old have the highest proportion of distraction-related fatal crashes. They are not alone. At any given moment during the daylight hours, over 800,000 vehicles are being driven by someone using a hand-held cell phone. People of all ages are using a variety of hand-held devices, such as cell phones, mp3 players, personal digital assistants, and navigation devices, when they are behind the wheel.

The available research indicates that cell phone use while driving, whether it is a hands-free or hand-held device, degrades a driver’s performance. The driver is more likely to miss key visual and audio cues needed to avoid a crash. Hand-held devices may be slightly worse, but hands-free devices are not risk-free.

As a general rule, drivers should make every effort to move to a safe place off of the road before using a cell phone. However, in emergency situations a driver must use their judgment regarding the urgency of the situation and the necessity to use a cell phone while driving.

Some research findings show both activities to be equally risky, while others show cell phone use to be more risky. A significant difference between the two is the fact that a passenger can monitor the driving situation along with the driver and pause for, or alert the driver to, potential hazards, whereas a person on the other end of the phone line is unaware of the roadway situation. However, when two or more teens are in the vehicle, crash risk is increased. And while we can’t say for sure this is attributable to distraction, we are confident that distraction plays a role.
NHTSA is encouraging State and local government partners to reduce fatalities and crashes by identifying ways that States can address distracted driving in their Strategic Highway Safety Plans. Our state and local partners are keys to any success we will have in addressing distracted driving. NHTSA has a demonstration project with jurisdictions in Connecticut and New York to determine whether the high visibility enforcement model of enhanced, visible enforcement and focused media can reduce driver’s use of cell phones while driving. Should this approach prove to be effective, we will promote this strategy with other jurisdictions.

Responses vary by State. Many States have laws banning certain type of distractions. Currently 21 States and the District of Columbia prohibit novice drivers from using electronic communication devices (including cell phones) during the learners and intermediate stages of a three-stage graduated driver license (GDL) program. Six States ban hand held cell phone use for all drivers, and 19 States ban texting by all drivers.

States can take some steps immediately to reduce the risks of distracted driving. One example is installing rumble strips along roads to get the attention of drivers before they leave the roadway and/or deviate from their lane. States can also adopt and enforce laws to ban distracted driving; NHTSA recently developed, in conjunction with 20 safety groups and associations, a sample distracted driving law.

Generally, distraction laws fall under the jurisdiction of individual States. However, President Obama has issued an executive order prohibiting federal employees from texting while driving on government business or with government equipment. In addition, contractors conducting government business are prohibited from texting while conducting business on behalf of the government.
In addition, in January 2010, the Federal Motor Carrier Safety Administration enacted an interim ban that prohibits commercial vehicle drivers from texting while behind the wheel. In March 2010, a proposed rule was announced that would make that ban stronger and more durable.

Although not a law, DOT recently launched a national campaign to encourage the public to get involved in ending distracted driving. —Put It Down” focuses on the key messages that drivers can’t do two things at once, everyone has a personal responsibility to pay attention while behind the wheel. The implementation of legislation and high visibility enforcement will lead to increased consequences for distracted driving. Learn more about -Put It Down” and access materials at www.distraction.gov.

Cell phones. The prevalence of cell phones has grown rapidly since their inception, and the number of subscribers is projected to continue to grow substantially. The issue of using cell phones while driving has been a source of controversy for some time. The primary responsibility of the driver is to operate a motor vehicle safely. To do this, a driver must focus his/her full attention on the driving task. Cell phones may distract drivers from this task. The safest option for a driver would be to refrain from cell phone use while driving.
Distractions

Nature of the **distracted driving traffic crash** problem:

- Drivers under age 20 are most likely to be involved in distracted driving crashes almost
- 50% more likely than the next most at risk group (age 30-49).

Reasons for the **over-involvement** of drivers under age 20 in distracted driving, including:

- Lack of driving experience
- Lack of experience performing tasks which could cause distraction
- Increased risk taking
- Lack of familiarity with particular vehicles

While any driving distraction has the potential to cause a young driver to experience a crash, several specific distractions have been identified as particularly hazardous to young drivers (under age 20), these including:

- Adjusting radio/CD/cassette
- Outside person, object or event
- Other occupants

Today’s vehicles and driving environment offer numerous ways for drivers’ attention to become diverted from the driving task. **Some distractions could include:**

- Interactive communication devices-cell phones
- Grooming
- Adjusting the audio system-changing the channel, changing CDs, satellite radio
- Pagers
- Occupants-infants, children, adults
- Eating
- Moving objects
- Adjusting vehicle controls-air conditioning system, tilt of steering wheel, mirrors, seat position, dash light brightness
- Navigation systems
- Reading
- Drinking
- Foreign objects in car-insect, trash
- Personal digital assistants (PDAs)
- High radio volume
Distractions

Potential dangers of using a cell phone while driving:

- Diverting attention away from the driving task
- Looking away from the road in order to dial
- Effect on maintaining proper lane position
- Impact on ability to perceive potential problems
- Ability to make quick decisions
- Reduced situational awareness
- Ability to execute emergency maneuvers

The issue of distracted driving has been researched. Some studies indicate that using cell phones while driving may negatively affect drivers’ performance because the device may cause cognitive distractions that are significant enough to degrade a driver’s performance. Note that hands-free devices are no less likely than hand-held cell phones to cause a driver to become distracted. Attention is diverted from the driving task while using either device.

Potential benefits of cell phone:

- Ability to summon roadside assistance quickly in the event of a mechanical problem
- Ability to contact law enforcement rapidly in the event of a personal or national security concern
- Ability to contact emergency services quickly in response to a crash or emergency or medical situations

Note that in all of the above situations, the driver would be the person initiating a phone call. None of the above situations would require that a cell phone be turned on until the situation warranted action. Thus, a driver could take full advantage of all safety benefits related to having a cell phone, without having the cell phone turned on while driving. Drivers should make efforts to move to a safe place, off the road, to make such calls. Depending on the urgency of the situation, drivers must use their best judgment.

Audio Systems. Almost every vehicle sold in the US today contains an audio system. Components of such systems could include:

- AM/FM receivers
- Satellite receivers
- Cassette players
- CD players
- Supplementary speakers

Potential distractions regarding audio systems:

- Adjusting the vehicle’s audio controls. Research shows that young drivers are especially susceptible to becoming distracted while attempting to adjust their vehicle’s audio controls. Adjusting any vehicle’s audio controls almost always involves the driver reaching for a knob or button. Often, this action requires that the driver’s eyes be diverted from the driving scene for some period of time. Moving one’s eyes and having to refocus on the shorter distance between the eyes and the dash or steering wheel, even for a short time, can result in a complete discontinuation of visual feedback from the driving scene.
- Setting the audio system volume too loud
- A driver could miss out on important information that is obtained through the ears, including: emergency vehicle’s sirens, horns or screeching tires.

There can be several benefits to having an audio system aboard a vehicle. Some of these could include:

- Having access to music and other programming to help pass the miles
- Gaining the latest information on local, national and international events
- Obtaining road travel reports on weather, construction, road closures and crashes
- Used wisely, audio systems can help keep
**Distractions**

**Vehicle Occupants.** Having other occupants in the vehicle could become a distraction as well. Occupants could distract the driver by:

- Talking to or yelling at the driver
- Throwing objects inside or outside the vehicle
- Partially hanging out of the vehicle
- Yelling at persons outside the vehicle
- Unexpectedly adjusting audio system controls
- Unexpectedly adjusting vehicle controls

Research indicates that, for young drivers, the greater number of similarly-aged occupants aboard, the more likely a crash is to occur. This is a major reason why many states’ graduated driver licensing systems restrict the number of similarly-aged passengers that can be in a vehicle with a novice driver.

A driver’s goal should be to eliminate all in-vehicle distractions before driving begins. Accomplishing this goal can be done by:

- Assess all potential in-vehicle distractions before driving
- Develop a preventative plan to reduce/eliminate possible distractions
- Expect distractions to occur
- Discuss possible scenarios before getting behind the wheel

**Situations could occur outside a vehicle that could capture a driver’s attention.**

- Crash scenes/rubbernecking
- Animal in or near roadway
- Dawn/Dusk
- Road construction
- Objects in roadway
- Other vehicles
- Police

Certainly a crash scene would have the ability to grab a driver’s attention. However, it has been found that crash scenes also tend to hold a driver’s attention, keeping him or her from focusing on the driving task. Thus, some drivers tend to maintain eye contact with a crash scene, even beyond the point that they pass the scene. This phenomena, sometimes referred to as “rubbernecking,” can be quite dangerous, increasing the chance of experiencing a collision.

Attention-grabbing events occurring outside the vehicle will likely be surprising and/or rare, such as a crash or sighting a hot air balloon. While these may be interesting events, drivers must remember that safe driving remains the priority.

A driver’s goal should be to eliminate all in-vehicle distractions before driving begins. Accomplishing this goal can be done by:

- Assess all potential in-vehicle distractions before driving
- Develop a preventative plan to reduce/eliminate possible distractions
- Expect distractions to occur
- Discuss possible scenarios before getting behind the wheel
Distractions

By giving advanced thought toward addressing in-vehicle distractions, new drivers can be better prepared to actually deal with these distractions.

Cell phones. The best practice would be to refrain from talking on a cell phone while driving. Utilize voice mail or other passengers for help with taking cell phone calls. In emergency situations, it is the responsibility of the driver to use his/her best discretion.

Audio systems
- To reduce risk, responsible drivers will minimize any adjustment to the audio system.
- Non-drivers can be assigned audio system responsibility, thereby resulting in maximum audio flexibility, with minimal impact on the driver’s attention.
- The audio system’s volume should be put at a level that always permits the driver to be fully aware of any warning sounds in the traffic environment.

Vehicle occupants. In the unlikely event of an extreme situation, the driver, who is responsible for and in control of his or her vehicle, must decide whether an occupant or occupants should be removed from the vehicle.

In Summary:
- Distractions can occur while driving.
- Young drivers are especially susceptible to distraction while driving.
- Distracted driving can cause collisions, resulting in injuries, deaths and property damage.
- Costs associated with such crashes, including those resulting from criminal and civil proceedings, can be extremely high.
- With some forethought and pre-drive planning, drivers can prevent many potential distractions from taking place while driving.
- By developing a plan to deal with distractions that might occur while driving, drivers can become that much better prepared and equipped to deal with those that do occur.
- The potential for drivers to become distracted is expected only to increase over time.

Many drivers currently engage in many distraction-causing activities, without giving any consideration to how their driving might be negatively affected. The responsible driver will be aware of potential distractions and minimize both the chance of his/her occurrence and the negative impact should they occur.

Of most importance, a driver must maintain his or her attention to the driving task. While a distracting event could be considered a negative event, the results of a crash caused by the event could be far worse. The driver is completely and solely responsible for operating his or her vehicle in a safe manner. This includes the responsibility for controlling everything that occurs within the vehicle as well. If a distracted driver experiences a crash, the responsibility falls upon the driver, not the distraction.
Distractions

Research on distracted driving reveals some surprising facts:

- Driving while using a cell phone reduces the amount of brain activity associated with driving by 37 percent. (Source: Carnegie Mellon)
- Nearly 6,000 people died in 2008 in crashes involving a distracted driver, and more than half a million were injured. (NHTSA)
- The younger, inexperienced drivers under 20 years old have the highest proportion of distraction-related fatal crashes.
- Drivers who use hand-held devices are four times as likely to get into crashes serious enough to injure themselves. (Source: Insurance Institute for Highway Safety)
- Using a cell phone use while driving, whether it's hand-held or hands-free, delays a driver's reactions as much as having a blood alcohol concentration at the legal limit of .08 percent. (Source: University of Utah)

Other distracting activities include:

- Using a cell phone
- Eating and drinking
- Talking to passengers
- Grooming
- Reading, including maps
- Using a PDA or navigation system
- Watching a video
- Changing the radio station, CD, or Mp3 player
Distractions

There are many reasons for distracted driving, including busy lifestyles, stressful jobs, and the presence of children and pets in the car. Many people use technology such as cell phones and other electronic devices as their main means of communication. They forget to put these devices down when they should be paying close attention to their driving for the sake of their own safety and that of others.

Everyone is guilty to a certain extent. The youngest Americans are most at risk, but they are not alone. At any given moment during the daylight hours, over 800,000 vehicles are being driven by someone using a hand-held cell phone. People of all ages are using a variety of hand-held devices, such as cell phones, mp3 players, computer tablets, personal digital assistants, and navigation devices, when they are behind the wheel.

The available research indicates that whether it is a hands-free or hand-held device, the cognitive distraction is significant enough to degrade a driver’s performance. The driver is more likely to miss key visual and audio cues needed to avoid a crash.

Some research findings show both activities to be equally risky, while others show cell phone use to be more risky. A significant difference between the two is the fact that a passenger can monitor the driving situation along with the driver and pause for or alert the driver to potential hazards, whereas a person on the other end of the phone line is unaware of the roadway situation.

Distracted driving comes in various forms, such as cell phone use, texting while driving, eating, drinking, talking with passengers, as well as using in-vehicle technologies and portable electronic devices. There are other less obvious forms of distractions including daydreaming or dealing with strong emotions.

System (NASS) General Estimates System (GES) show that:
- In 2008, there were a total of 34,017 fatal crashes in which 37,261 individuals were killed.
- In 2008, 5,870 people were killed in crashes involving driver distraction (16% of total fatalities).
- The proportion of drivers reportedly distracted at the time of the fatal crashes has increased from 8 percent in 2004 to 11 percent in 2008.
- The under-20 age group had the highest proportion of distracted drivers involved in fatal crashes (16%). The age group with the next greatest proportion of distracted drivers was the 20- to-29-year-old age group (12%).
- Motorcyclists and drivers of light trucks had the greatest percentage of total drivers reported as distracted at the time of the fatal crashes (12%).

Use of Electronic Devices While Driving. A 2008 survey by the National Highway Traffic Safety Administration (NHTSA) reveals an increase in the use of electronic devices while driving and some regional differences in this practice. The survey indicates that the percentage of young drivers texting or using other hand-held electronic devices has increased from 2007, It also indicates an estimated 11 percent of all vehicles that had drivers who were using some type of phone (hand-held or hands-free).

- Nationwide, those drivers observed visibly manipulating hand-held electronic devices increased from 0.7 percent to 1.0 percent.
- Some 1.7 percent of drivers 16 to 24 years old were observed visibly manipulating hand-held electronic devices, up from 1.0 percent the previous year.
- More drivers in Western States were observed manipulating hand-held electronic devices (2.1%) than in the other regions of the country (from 0.4% in the Northeast to 0.8% in the Midwest).
- The use of hand-held devices increased the most in the West, from 0.6 percent in 2007 to 2.1 percent in 2008.
- The observed use rate of hand-held electronic devices was higher among females (1.2%) than among males (0.8%).
Distractions Outside the Vehicle

Many driver distractions are located outside the vehicle

- Distracted pedestrians (reading, eating, talking, using electronic devices such as cell phones, mp3, computer tablets, etc.)
- Vehicle swerved into lane
- Driver changed lane into path of travel
- Traffic slowed or stopped
- Driver encroached into lane
- Emergency vehicle
- Bright vehicle lights
- Billboards and signs
- Driver being chased by police
- Officer directing traffic
- Animal in roadway (deer, dog, elk, etc.)
- Sunrise, sunset
- People in roadway (child, basketball game, crowd, etc.)
- Objects in the roadway (broken glass, garbage can, etc. holes)
- Crash scene
- Road construction
- Hills
- Trees
- Bicyclist
- Vision obstructed
- Tire blowout
Distractions Inside the Vehicle

Distractions inside the vehicle can have deadly consequences

- Eating or drinking
- Preparing food to eat (folding paper, adding mayo, etc.)
- Choking on food
- Spilling food or drinks
- Eating and drinking distractions are even more risky at speeds above 45 mph
- Other occupants in the vehicle. Distractions involving other occupants in the vehicle occur at any time but are overrepresented when driving on multi-lane roadways, at intersections, or other roadway junctions
- Talking, arguing with passenger
- Passenger doing something (yelling, grabbing, reaching, fighting, sleeping)
- Child/infant distraction
- Looking at passenger(s) in the front or rear seat
- Objects that move within a vehicle can cause drivers to make quick movements that can lead to serious consequences
- Dog (barking, jumping, hitting steering wheel)
- Insect (swatting, flying into window, into vehicle)
- Objects falling off seat, spilled groceries, spilled beverage
- Object rolling under accelerator or brake pedal
- All actions involved with smoking can be a distraction (searching for a cigarette, lighting the cigarette, dropping the cigarette, the cigarette blowing back into the vehicle when trying to dispose of it out the window and it can cause forest fires)

Photo Courtesy AAA Foundation for Traffic Safety

Photo Courtesy AAA Foundation for Traffic Safety

Photo Courtesy AAA Foundation for Traffic Safety
Distractions Inside the Vehicle

Distractions inside the vehicle:

- Dialing, talking or answering a cell phone
- Adjusting radio, cassette, or CD
- Adjusting the radio has contributed to driver distractions and collisions more often than adjusting a tape or CD player
- Carelessness or inattention, even for a second to change the radio station, causes more collisions than other internal distractions
- Wearing headphones does not allow the driver to listen for conditions outside the vehicle and increases the driver’s divided attention
- Using device/object in the vehicle (plugging in cell phone charger)
- Reaching for something on the floor (cassette, water bottle, purse), candy, packages falling, object in backseat, other objects (wallet, pills, inhaler), something on the front passenger seat, a beverage, music devices
- Throwing away trash
- Rolling down the window
- Putting on makeup or shaving
- Using a computer, GPS, or other electronic device
- Reading a map, paper, mail, or book
- Writing
Distractions

A report by the National Highway Traffic Safety Administration indicates that distractions and inattention caused 68% of rear-end crashes.

- Other typical kinds of crashes caused by driver distractions involve backing up, making lane changes, and merging.
- Drivers with high risk driving habits are more likely to perform activities that may be distracting while driving, such as:
  - read and write
  - manipulate vehicle controls for extended periods of time
  - focus on an external distraction
  - have an emotionally charged discussion with passengers
  - reach for objects inside their vehicle
  - use a cell phone
  - perform grooming activities

High risk drivers tend to have higher levels of no hands on the steering wheel, their eyes directed inside rather than outside the vehicle, and their vehicles wander in the travel lane or cross into another travel lane. Driver distraction, and its effect on hazard recognition and vehicle control, has been a prominent topic on highway safety agendas, as well as for the U.S. Congress, state legislatures, the media, and the public at large. Much of this attention stems from the enormous increase in cellular telephone use by drivers, and the prospect of similar growth in other in-vehicle technologies.

Driving involves all of the driver’s senses: visual, kinesthetic, hearing, touch, and smell.

- The senses are bombarded with input to the brain while driving.
- All the input must be weighed by the driver before action is taken.
- Drivers must decide what is crucial for decision to change speed, change position on the road, or communicate if the driver gets too much information to be processed, the driver:
  - Panics
  - Shuts down the important process of predicting and deciding
- Reacts abruptly without planning appropriate speed, position, or communication

One of the reasons crashes happen within an area close to home is the driver learns to anticipate speed, signals, signs, and the roadway.

- When a distraction happens, the driver is often not prepared mentally to see developing hazards.
Complicated visual or mental tasks divide our attention into smaller and smaller bits of information that the brain can process. These examples show how multi-task performances in the brain try to process too many bits of information:

- What does a computer do when there are too many bits of information to process? *(The computer slows or crashes)*
- What can drivers ask you to do when they drive in a new city or have too much information to process? *(Some turn off the radio, ask their passenger to quiet down, or concentrate more carefully.)*
- What have you noticed other drivers doing when they are not paying attention to driving? *(Swerve to another lane, slow down, or wait too long at a traffic signal.)*
- What would happen if you were juggling three balls and someone suddenly threw a fourth one or suddenly called out your name? *(The juggler would probably drop the other balls and have to start over again.)*

With complicated visual and mental tasks, the human brain slows down, misses a problem (crashes), or fails to identify a major hazard:

- New drivers must learn how to complete multi-task performances within the driving task and manage other potential problems by using the reduced risk driving practices.
- New drivers often have this situation occur at the start of learning to drive because new drivers tend to need to watch everything around the car.
- When drivers try to watch everything it is difficult to keep a proper speed and lane position, due to over stimulating the eyes and the brain.
- Due to training and experiences, many drivers operate at different levels of precision performance of skills and reduced-risk decision-making.

Developing the SEE space management process will help develop the visual and mental divided attention tasks needed to reduce risk while distracted:

- A driver starts with one visual and mental activity, then adds other activities to a driving system to mentally manage the space and time around the vehicle (do not add more than you can manage).
- Using a mental driving system allows the driver to develop a habit of using the eyes to search for the information that the brain needs to process.
- A driving system allows the driver time to evaluate the path of travel and the line of sight for problems, so that time is available to execute a change in speed or position and communicate intentions to others.

Distractions

*Distractions in Austin-area toll roads. Kevin Stillman/ TxDOT 11/19/2008*
Multi-Task Performances

- Multi-task performances necessary to perform the vehicle operation and control procedures for each vehicle movement.
- How and why multi-task performances distracts drivers and other roadway users including vulnerable roadway users by dividing attention.
- How inappropriate management of multi-task performances and distractions causes the type of crash encountered by novice drivers as reported by the Texas Department of Transportation, including single vehicle crashes.
- Lateral maneuver procedures to re-establish lane position for off-roadway recovery.
- Countermeasures to limit and manage multi-task performances.
- Reduce risk by legally and responsibly managing multi-task performances.

Distractions are a bigger challenge for a new driver than an experienced driver who has learned how to manage the multi-task performances, such as dividing attention from the path of travel to check speed, check mirror, check lane position, and check radio are all learned activities.

Learning to drive involves learning how to develop manage multi-task performances:

- Know how to operate the vehicle controls
- Be able to keep the vehicle on the road
- Be able to keep the vehicle in the lane
- Be able to place the vehicle in different lane positions to avoid risk
- Be able to keep the vehicle in the planned path of travel while checking speed
- Be able to adjust speed and lane position while checking for pedestrians, animals or bicyclists

In addition, manage multi-task performances includes dividing the mental and visual attention to the target and dashboard, examples include the target and:

- Intersection controls
- Intersection entry and exit
- Entry, apex, and exit to a curve

- Use turn signal, check mirrors, brake, accelerate, moves to the left or right, and check speed
- Adjusting or fastening seat belt
- Adjusting mirrors, lights and/or climate controls
- Operating windshield wiper and/or cruise control
**Multi-Task Performances**

**What are critical driver behaviors to the driving task?**

- The path of travel … It is crucial to keep a car within the lane of travel
- The line of sight … Allows the driver to see far enough ahead to have the time and space needed to make speed and position adjustments
- Operating a vehicle requires coordination of skills
  … Eyes, hand and foot
  … Repetitive actions must be used
  … Procedural tasks must be accurate
  … Driving a vehicle is a mental process
  … A mental driving system is needed to manage time and space
  … Drivers must search for and recognize when there is a line-of-sight or path-of-travel restriction
- Drivers must respond with appropriate
  … Speed adjustments
  … Position adjustments
  … Communication of intentions

**Allowing managing multi-task performances** can lead to missed brake lights, missed traffic sign or signal, missed animal or pedestrian, or a drift out of the lane position

- A driver can learn to operate the vehicle with simple eye, hand, and feet coordination, but the driving task is a mental process that needs constant attention to the path-of-travel in order to keep the vehicle within the lane space and adjust to any restrictions in the path of travel
- It is important to recognize that taking attention from the path of travel means the vehicle is moving on the roadway without the driver seeing where the vehicle is going or mentally processing any new information
- This is why it is so critical never to look away from the path-of-travel for more than one-half second at a time without moving visual and mental attention back to the path-of-travel

Photo Courtesy of AAA Foundation for Traffic Safety
Driving is a job that requires **multi-task performances** to ensure the job is done legally, responsibly, and safely. At times the multi-task performances requires a driver to divide attention (changing attention) from the path of travel to traffic, roadway, weather, vehicle, passengers, gauges, etc. Failure to correctly divide attention produces unsafe driving. Dividing attention is a learned activity.

- **Dividing Attention** – Changing attention from the path of travel to traffic, roadway, weather, vehicle, passengers, gauges, etc.
- **Multi-Task Performances** – Tasks necessary for the safe vehicle operation in the HTS including signaling, changing gears, checking gauges, checking mirrors, checking blindspot, etc.

**Multi-task performances** are tasks necessary for the safe vehicle operation in the HTS including signaling, checking the instrument panel, changing gears, checking gauges, checking mirrors, checking blindspot, checking speed, checking lane position, changing gears, accelerating, braking, or a combination of the above, etc.

However, it is important to recognize that dividing attention from the path of travel while completing some of the multi-task performances means the vehicle is moving on the roadway without the driver seeing where the vehicle is going or mentally processing any new information. Because of this it is very important that the driver become very familiar with the vehicle’s control devices. A driver must be able to reach without looking to activate the signal lever, gear shift, headlights, windshield wipers, etc.

Multi-task performances such as checking the mirrors, checking the instrument panel, checking the blindspot, etc. do require the driver to take his/her eyes off the roadway and this action requires time management.

**Multi-Task Performances Time Management.** Techniques to divide attention between multi-task performances. It is so critical never to look away from the path of travel for more than ½ second at a time. Then the visual and mental attention must be placed back to the path of travel.

It is essential to understand the **increased risk** associated with dividing attention to a task other than driving, i.e., talking on a cell phone, talking to friends in the car, or tuning a radio. Any of these activities tend to lower one’s level of alertness directed to driving and, typically, has an adverse effect on steering.

Experiences at dividing attention between multi-tasks performances are similar to learning how to juggle a bunch of balls. First the learner has to be able to handle one ball, then two balls, then three or four balls. These are similar objects and yet many people have not learned how to juggle three simple objects.
New drivers often have this situation occur at the start of learning to drive as a need is felt to watch everything around the car. When drivers try to watch everything it is difficult to keep a proper speed and lane position, due to over stimulating the eyes and the brain. Many new drivers feel like they cannot do all these things at one time.

Visual targeting may be interrupted by multi-task performances. When a driver performs a multi-task, the driver takes visual and mental attention away from roadway including the line of sight and path of travel.

There is evidence that a driver can handle a few activities and still keep mental control of the driving process. Most drivers will have problem or incidents if the activity level gets above their threshold for visual or mental attention.

New drivers often have this situation occur at the start of learning to drive as a need is felt to watch everything around the car. When drivers try to watch everything it is difficult to keep a proper speed and lane position, due to over stimulating the eyes and the brain. Many new drivers feel like they cannot do all these things at one time.

Dividing attention between multi-task performances can be utilized to place a vehicle within a lane position. A driver may look to the path of travel, center, left side, or right side lane placement reference points to position the vehicle within the lane.

In addition to backing or parking a vehicle, a driver may divide attention between multi-task performances to look at the path of travel to the rear or side lane placement reference points.

Multi-task performances relate to vehicle movements including moving forward, stopping, lateral maneuver, turning, and backing. While performing vehicle movements, dividing attention could lead to missed brake lights, missed signal, missed animal, or just a drift out of the lane position. A driver must learn to operate the vehicle with simple eye, hand, and feet coordination.

A driver must not allow the multi-task performances to become a distraction that keeps the driver from returning his/her visual attention to vehicle movements on the roadway. The driving task is a mental process that needs constant attention to the path of travel in order to keep the vehicle within the lane space and adjust to any restrictions in the path of travel.

Countermeasures to effectively time the multi-task performances reduces the risk. A driver must apply time management techniques to execute multi-task performances. It is so critical never to look away from the path of travel for more than ½ second at a time. Then the visual and mental attention must be moved back to the path of travel. **If more time is needed to complete the multi-task performance, a driver should use more than one look and always remember to return visual and mental attention back to the path of travel between looks.**

In some instances, **reducing vehicle speed** will allow the driver to reduce risk by allowing more time and space to complete divided attention tasks. If a driver does not effectively time multi-task performances, dangerous consequences may occur including running into something, losing control of the vehicle, running off-road, etc.
In-Car Progress Assessment

In-Car Progress Assessment Tool located in Module 13: In-Car Instruction

The student reduces risk by legally and responsibly utilizing an in-car progress assessment tools to evaluate and improve behind-the-wheel skill level (mastery equals 70% or above). The student is assessed with a In-Car Progress Assessment Tool while demonstrating the ability to:

- perform pre-drive tasks including pre-start and pre-drive maintenance procedures performed prior to and after entering the vehicle;
- utilize occupant protection and correct posture, seating, steering wheel, and hand positions;
- locate, identify, and respond appropriately to vehicle symbols (alert and warning);
- utilize vehicle devices (control, information, safety, communication, convenience, and comfort);
- perform starting tasks including engine starting, engine operation, and starting-maintenance procedures;
- describe vehicle operating space;
- perform vehicle operation and control tasks to accelerate, decelerate, steer (straight, right, and left), move forward, back, turn (left and right), perform lateral and turnabout maneuvers, stop, and park at various speeds;
- perform blindspot and mirror checks;
- perform multi-task performances utilizing countermeasure to compensate for divided attention;
- sustain visual attention and communicate while executing vehicle maneuvers;
- utilize a space management system; and
- perform post-drive tasks including stopping, engine shut-down, post-drive maintenance, exiting including a visual check to ensure that all passengers especially children and animals are out of the vehicle, and securing procedures.
A **Driving Plan** incorporates the Knowledge and Skills of Module 7: Distractions into the Driving Plan whereby the student may utilize the Driving Plan to develop and sustain legal and responsible reduced-risk driving practices. When describing a Driving Plan, the student will use the information learned from Module 7: Distractions to develop a positive driving culture as it relates to **“Safety, Economy, and Civility.”**

**Safety** or the reduction of risk or injury. Legal and responsible reduced risk driving practices.

**Economy** or the reduction in the use of our environmental resources. Consumer responsibility, conservation, environmental protection, and litter prevention.

**Civility** or the increase in polite and respectful acts—Share the Road. Sharing the roadway with other roadway users including but not limited to motorcyclists, bicyclists, pedestrians, trucks, work zone/construction workers, animals, trains, etc.

The student will describe his/her **Driving Plan** in the Student Workbook.

**Driving Plan Structure:**

**Safety:** I will use the information I learned in Module 7: Distractions to develop legal and responsible reduced risk driving practices by … (student completes statement)

**Economy:** I will use the information I learned in Module 7: Distractions to conserve our environmental resources and develop environmentally friendly driving practices by … (student completes statement)

**Civility:** I will use the information I learned in Module 7: Distractions to develop courteous driving behaviors to share the roadways with other roadway users by … (student completes statement)
To achieve mastery of Module 7: Distractions, the student must score 70% or above on the classroom progress assessment. The student may want to discuss the results of the scored Progress Assessment tool with the instructor. The student should utilize the scored assessment tool to improve classroom knowledge and understanding.

The Module 7: Distractions classroom progress assessment can be located in the Classroom Assessment Booklet.