



Study Sheet

Space Management Module 4

The following information is a review of the lesson you just completed. Take time to review and study this information. Remember, this important information will be needed to pass your upcoming assessment, so take the necessary time in order to feel secure about your knowledge of this segment. This is not a graded portion of the course, but should be completed as an additional exercise.

Lesson 1 - Risks While Driving

Topic 1 – What is Risk and Risk Reduction?

Risk Definition

- The word risk comes from the Latin word “risicare” which means to navigate around a cliff or rock. Risk is defined as the “chance of injury, damage, or loss.”
- “*Chance...*” — This is the probability or likelihood of a crash. To properly assess a specific risk you need to have some idea of how likely it is to happen. For example, the likelihood or chance of being in a minor “fender bender” is much greater than the chance of being in a fatal collision.

Determining Risk

- The driving task involves more than just skill to operate a motor vehicle. One of the other aspects is making reduced-risk decisions.
- Young drivers are over-represented in motor vehicle crashes and fatalities. Even though they are more likely than older drivers to be risk-takers, they do not necessarily have the ability to either properly assess the risks in driving or to handle potentially dangerous situations they may encounter.
- Our decisions about engaging in “risky” activities are based on how we assess the risk and how much risk we are willing to accept. Different people accept larger risks. Answer the following questions as closely as possible to determine your risk level. All questions may not be exact answers for everyone, but choose the closest to your situation. There are no right or wrong answers; we are just trying to determine your personal risk level. Click the next button to begin.

Topic 2 – Risk Factors

RISK Factors

There are certain risks you will take while driving a vehicle. Some of these risks are caused by nature or the highway system itself. Some other factors that can cause this high degree of risk include the driver and the vehicle.

Driver Contributed

- We will teach more about this contributor in future lessons, but drivers can contribute to the risk factor by allowing their attention to stray or being distracted. Some examples are:
 - Adjusting controls
 - Grooming
 - Using a cellular phone
 - State of Mind
 - Physical Impairment
- Of course this can also mean another driver you may encounter. You may be perfectly attentive with no distractions and still run the risk of encountering another driver with these distractions. You must always be on the alert for other drivers' mistakes. This is referred to as Defensive Driving.

Vehicle Contributed

When you own a vehicle, you have the primary responsibility of proper maintenance. Though vehicles cause many accidents, the true cause is the owner. Some of the contributing factors for vehicles causing accidents are:

- Bald or Worn Tires
- Malfunctioning Headlights
- Improperly Adjusted Brakes
- Worn Wiper Blades

Environment Contributed

As you drive, the roadway and environment can play the largest role in risks as you drive the vehicle. Even though you are a prepared and attentive driver, and even though your vehicle has been properly maintained, you still run a risk when driving. Many things are out of your hands, but must still be accounted for when driving. These things include:

- Snow and ice
- Hard rain causing slick pavement
- Road construction
- Sharp curves
- Pot holes
- Animals on roadway

Topic 3 - Driving Behaviors Which Increase Risk

Driving is a risk-taking activity. The only way to totally avoid the risks involved in driving a car is to never get into a car at all. Remember that risk is the chance of injury, damage, or loss. Here are some examples of driving behavior that would increase these chances.

- *Speeding*—This is the number one cause of crashes in Texas. This includes both driving above the posted speed and driving too fast for conditions. Increased speed leads to more severe collisions, longer braking distances, and shortens time for a driver to react. Studies have shown that young drivers are more likely to drive at higher speeds than older drivers.
- *Failure to Yield Right of Way*—This is the second leading cause of crashes in Texas. In 1994 there were approximately 300 fatalities attributed to this driving error. An example would be trying to “beat” another car while entering a freeway or a train at a crossing or ignoring a yield sign on an access road. This could be caused by impatience, aggressive driving, or inattention.
- *Driving While Intoxicated*—This is the third leading cause of crashes in Texas. Young people are often experimenting with alcohol during their early years of driving. This can be a dangerous combination. Studies have shown that driving ability decreases as Blood Alcohol Concentration (BAC) increases. It is also evident that driving is impaired much below the BAC level that is considered legal intoxication. The risk of being in a fatal collision goes up dramatically as BAC increases. This risk is even greater for young people.
- *Disregarding traffic sign or signal*—This is the fourth leading cause of crashes in Texas. This could be from inattention or from trying to “beat” a light or “roll” through a stop sign. Actions such as this can lead to crashes because of surprise or other drivers who would expect you to stop.
- *Following Too Closely*—This is the fifth leading cause of crashes in Texas. Studies have indicated that young drivers tend to leave shorter following distances than older drivers. This is often cited as an example of risk-taking behavior that could be linked to the higher frequency of crashes among young drivers.

- *Improper Turns*—Examples of improper turns would be turning wide in a right turn or cutting corners on left turns. Sometimes improper turns are caused by a failure to control speed going into a turn.
- *Unsafe Passing*—This could be illegal passing or passing without sufficient clearance. It is possible that lack of driving experience or risk-taking could contribute to this problem.
- *Failure to Wear a Safety Belt*—Even though failure to wear a safety belt is seldom the immediate cause of a crash, it often makes the consequences of the crash worse. Studies have indicated that failure to wear safety belts is often associated with higher risk drivers. For example, in one such study, researchers at General Motors Research Laboratories found that drivers who tended to leave shorter following distances were also ones who most often failed to wear a safety belt.

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Topic 4 - Guidelines for Risk-Taking

Never risk more than you can afford to lose.— One example is that of a young driver who breaks a specific traffic law or parental rule, which will result in the loss of his license. In this situation, the young driver might be risking too much. Another example would be in gambling. If you cannot afford to lose a certain amount of money, you should never wager that much.

Do not risk a lot for a little.— An example of this behavior might be ignoring a railroad crossing to save a few seconds or even minutes of time. The risk of a very severe crash or an expensive ticket is not worth that small amount of time savings.

Consider the odds and your situation.— There are elements of driving that are beyond your control such as other drivers, weather, and pedestrians. There are some that are well within your control such as speed, use of alcohol, wearing your safety belt and obeying traffic signals. Always try to use the things you can control to help deal with those things you cannot.

Topic 5 – Keys to Reducing Risk

The ten keys to reducing risk are:

- 1. Decision-making is most crucial driver skill**
- 2. Procedural tasks vs. processing tasks**
- 3. Learning from good and bad experiences**
- 4. Learning by observation**
- 5. Procedures and experience equals habits**
- 6. Work for developing best procedures and experience**
- 7. Greater the resistance to change often means the greater the need for changing habits**
- 8. Practice is key to sound habits and judgments**
- 9. What to practice is important**
- 10. Good habits and judgment deteriorate over time**

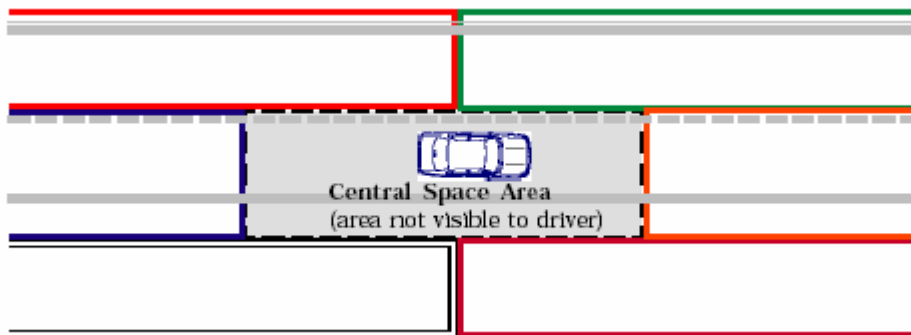
Lesson 2 - Space Management

Topic 1 - What is Space Management?

There are many ways a driver can be involved in a crash. Many crashes result from a change in the driver's ability to control the target area, sightline, or travel path before driving into the poor situation.

- There are three basic elements to Space Management. Speed control, lane positioning, and communication. You will manage your space by using these three tools, which provides the guidelines for the most appropriate decision in any given situation.
- In the state of Texas the space management system is referred to as the SEE IT system. This is a three-stage process and includes: Search, Evaluate and Execute. These three steps within this space management system must be actively practiced to develop them into a decision-making process. While driving, all three steps will be used for any one situation. When there is more than one change, the three steps should be used for the most critical line of sight or path of travel problem. Achieving the very best use of speed control, lane positioning, and communication is the most important goal.

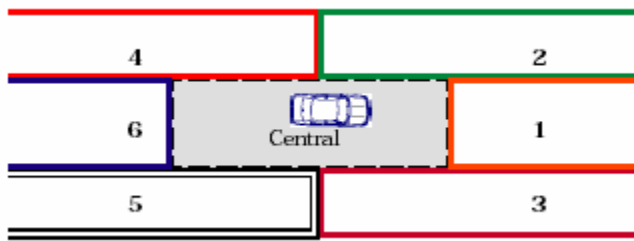
Space Areas



There are seven basic areas of operating space around the vehicle. The diagram shows the six zones, areas, or spaces surrounding the car which are visible to the driver. The vehicle occupies the central area, which includes the driver and the space occupied by the vehicle that is not visible to the driver.

- A zone is an area of space around a vehicle that is the width of a lane and extends as far as the driver can see.
- Each area must be managed in order to reduce risk of collision. Let's go through each space and familiarize them with you.

Area Familiarization



1. This is zone 1 or the front zone.
2. This is zone 2 or the left-front zone.
3. This is zone 3 or the right-front zone.
4. This is zone 4 or the left-rear zone.
5. This is zone 5 or the right-rear zone.
6. This is zone 6 or the rear zone.
7. This is the Central Space, the space the vehicle occupies.

Condition of Space

Condition of space is determined by a variety of circumstances while driving. Some of those include open zones, closed zones and changing zones. Once you understand these principles, it will become clearer how to manage your space.

We will be talking about Line of Sight, Path of Travel and Target Area in this section, so let's review. Line of Sight is the distance you can see ahead in the direction you are looking. Your Path of Travel is the space your vehicle will occupy and your target area is the section of the roadway where the target is located in the center of your intended path, as well as the area to the right and left.

1. Open Zone is a space where you can drive without a restriction to your line of sight or to your intended path of travel. Notice in the photo, there are no restrictions in front of the vehicle. This would tell you that your zones are open and you would be free to move forward with no problems.
2. Closed Zone is a space not open to you because of a restriction in your line of sight or intended path of travel.
3. Changing Zone is a worsening zone, space, or area condition. It is often an open zone that is changing to a closed line of sight or path of travel or a closed zone with additional problems or changes.

Topic 2 – SEE IT

Search Patterns

A visual search pattern is necessary as you determine your zones status. There are many types of search patterns that you can use, but a pattern of regular intervals and sequence is the most suitable for this purpose. Here are some guidelines that you can use as you establish the best search pattern for you. Earlier in the course, you learned about your 4-6 second and 12-15 second ranges. This is where that knowledge will become necessary.

1. You should look first at your target area.
2. The next step is looking at your front, left-front and right-front 12-15 second range. Be sure and look for possible problems such as intersections and driveways.
3. Check your rear zones using your rear-view and side-mirrors.
4. Now, check your 4-6 second range for any immediate problems.
5. Once again, check your 12-15 second range in front.
6. Now back to your 4-6 second range.
7. Another check on the rear zones.
8. Finally, check your speed.

This search pattern will be continuous throughout your driving task. Remember to allow each search area a very small amount of time. If you are evaluating any range longer than just an instant, you could possibly miss something else in another range. Don't stare, keep constant eye movement.

How to Evaluate

- During the evaluation process, you must be able to determine how an event will affect you and your vehicle. You will be making a split-second judgment about the consequences of your move. Many of these judgments will be minor, but at times, critical decisions will be made that may have a huge impact on your life.
- The evaluation step deals with changes in the zones or spaces that we have learned about. In nearly all decisions that you will make during this process, you will have seen or heard something within a zone that made you stop for an instant and evaluate the next move.
- As you are evaluating your circumstances, remember that the safest position in traffic is the place where the fewest vehicles surround you. Space is the key, and your objective is to always surround yourself with as much space as possible. Your decision may be to slow down or adjust your speed to reduce the risk of conflict. This is part of the evaluation process.

- Experience will be a key ingredient during your driving maturity. You will improve daily as you continue to evaluate little things during each driving episode.

Evaluate the Other Driver

- One thing that you will learn quickly is that the other driver may not always do the right thing. This is part of the evaluation process. You can't ever assume that another driver will do what he is suppose to legally or even what would be common sense. During this step, you should try to look for signs and clues of what they might do.
- Try to determine as quickly as possible what path the other driver might be taking. Determine if that path will interfere with yours and what you will do if that happens. Remember; always try to leave an open zone for your escape.
- There may be times that you will have to deal with two or more drivers or obstacles at the same time. If this occurs, try to separate the hazards. Deal with only one at a time if possible. This may mean that you will have to adjust speed or lane position. There will be times that you won't be able to adjust for the hazards separately. In this case, give as much space as possible to the greater hazard.

Evaluate your Vehicle

- While evaluating your vehicle and how you can expect it to react, you must understand that a few things will determine such reactions. Speed is the largest controllable factor. You, as the driver, have control of your speed under all conditions. If there is an obstacle in one of your zones, speed of the vehicle should be your first step when evaluating your response.
- A vehicle responds differently upon certain conditions of the roadway. A slick surface means that more time is going to be needed to stop your vehicle. Traction is the key. When evaluating your response to a situation, always use proper judgment about the condition of your road and tires.

Execute

- Once the evaluation and decision has occurred, you must now follow through with that decision. The execution step involves performing the necessary routine or maneuvers that must be accomplished in order to avoid a conflict.
- This could be a small action such as releasing the accelerator or it could mean quickly turning the steering wheel. The timing and placement of your vehicle depends on your decisions and execution.

Topic 3 - Space Cushion

Your space cushion is the space or gap that could be used as an escape route between you and a vehicle or obstacle while driving. This can be in the front, back or sides. You should always maintain a practical distance, four-second or more when creating your space cushion.

Lane Position

Lane positioning is one of the most important steps in the space management process. By changing your lane position, you will be able to avoid many conflicts. Obviously, these lane position changes are minor and would not always be the correct call. There may be times that drastic measures should be taken such as straddling the line or even driving off the road if absolutely necessary. Should these become true options, remember to check your zones in back and make sure you don't become the problem for another driver. In all instances, return to position number one as soon as you can safely do so. We have learned a little about lane positioning in Module 1, but as a review, read below.

1. *Lane Position 1* – Your vehicle is centered in the lane. Under normal conditions, this is the best and safest position. This gives you the maximum space around your vehicle at all times.
2. *Lane Position 2* – Your vehicle is 3 to 6 inches from the left line of the lane. If you see an obstacle coming up in your right-front zone, you may choose to take this position in order to avoid that obstacle.
3. *Lane Position 3* – Your vehicle is 3 to 6 inches from the right line of the lane. If you see an obstacle coming up in your left-front zone, you may choose to take this position in order to avoid that obstacle.

Speed Control Options

Speed is your very best option as a space cushion control. After making the determination of your zone conditions, your speed allows you to create your best option. You have these choices for speed control:

- Stay at the same speed
- Reduce the speed
- Take your foot off the accelerator and cover the brake
- Take your foot off the accelerator and apply the brake
- Increase your speed

Used effectively and timely, these choices should provide you with the correct option to maintain a safe space cushion at all times.

Communications

You don't necessarily associate communications with driving, however, communications is a vital part of the driving task. Communication skills can help you to effectively see and be seen by other drivers. No driver likes surprises. Effective communication skills while driving minimizes the unexpected by you and by the drivers in which you are sharing the roadway. As you gain more experience as a driver, you will rely more and more on these tools. It is important that you not only communicate to other drivers, but acknowledge that you receive their communication as well. Such acknowledgments include: delaying an action that you were taking, give a positive indicator such as a nod or a hand signal.

1. *Signal Lights* – A signal light should be used each time you are turning, changing lanes, pulling to or away from a curb, or parallel parking. You should always signal at least four seconds prior to turning or making a lane change. This is probably the most common communication tool.
2. *Horn* – In many instances the horn can be considered an aggressive communication tool unless used appropriately. The horn should be lightly tapped in order to gain the attention of another driver or pedestrian. A long and sustaining blow can irritate and cause others to be angry. Early detection of an incident is always encouraged so a light tap is all that is needed.
3. *Headlights* – Most new vehicles have the option to continuously run your headlights. Upon disengagement of the vehicles engine, the lights are automatically turned off. This is both good and bad. The headlights remaining on during the course of your driving assures that approaching vehicles are aware of your presence and will be more prepared to encounter you, however, as a communication tool, the headlights can also be effective by flashing at approaching vehicles as a warning of upcoming danger. They can also be used as an alert when crossing a double-yellow line.
4. *Positioning* such as a vehicle in the lane position 2 might mean that a turn to the left can be expected. A vehicle that is angled in the street is most likely pulling into or out of a parallel-parked position. A vehicle positioned close to parked cars could be double-parked.
5. *Speed* of other vehicles – Speed relates a message. A vehicle that is traveling directly behind you and approaching rapidly is communicating to you that he plans to pass you at the first opportunity. A vehicle that is slowing down ahead of you is communicating that he plans to turn soon. There are many ways that speed provides a message, it will take some experience as a driver to decipher some of these messages.

Four-Second Rule

As we have learned earlier in this course, it is a good rule to stay at least four seconds behind the vehicle you are following. This is called the following distance. It is also

referred to as your front space cushion. As you will remember, you measure your following distance by locating a vehicle ahead of you, find a fixed object that the vehicle is passing and count. As you reach the same fixed object, that tells you how many seconds have passed. If you are less than four seconds, you are too close.

Topic 4 - Getting Familiar with Traffic Lights

Point of No Return

- It is important to understand traffic lights and rules that go along with traffic lights. Many space related issues will occur during your driving experiences that are associated with signal lights. By studying and understanding these signal light principles, you will be prepared to deal with intersections effectively.
- There is a concept called “PNR” or “Point of No Return” when dealing with signal lights. This concept means that you should select an object or an imaginary line within an intersection. This imaginary line is your PNR. This PNR will guide you as to whether to continue crossing the intersection. Indecision is very dangerous. Using the signal light concepts, you should be able to make up your mind well before the PNR, but if you happen to get to the PNR and the light is still yellow, you should proceed through the intersection. Avoid slamming on your brakes at an intersection in order to stop for a red or yellow light. This type of maneuver could cause a collision from an approaching car from the rear.

Traffic Lights

- *Fresh Green Light* – This is a light that you will notice during your 12-15 second scan that is red and has just turned green during your 4-6 second range. You know that this light will more than likely stay green during your intersection cross and you will not have to be concerned with it.
- *Stale Green Light* -- This is a light that you will notice during your 12-15 second scan that is green and has just been green for some time. You know that this light will more than likely change to yellow at or about the time of your approach to the intersection. This light is cause for concern and you should slow down and be prepared to stop if it turns yellow within your 4-6 second range scan.
- *Steady Yellow Light* – A steady yellow light is a message to slow and most likely stop at an intersection. If a light has been yellow for more than one second, you should always stop and wait for the green light. Most yellow lights can be expected to time out at 2-3 seconds in urban areas and 4-5 seconds in rural areas. Always be prepared to stop when the yellow light is steady.
- *Fresh Red Light* – As you search ahead on your 12-15 second range check, you will notice that this light has turned red. This most likely will mean that by the

time you arrive at the intersection, the light will be ready to turn green. As you gain experience, you can time your arrival so that you don't have to stop.

Topic 5 - Handling Other Drivers

As we work towards maintaining our space on all sides of our vehicles, we will run into circumstances that will be beyond our control in many cases. The largest obstacle that you will encounter will be other drivers. These occurrences will be trying at best and sometimes downright frustrating. During this course you will be lessoned in road rage and how to avoid it, but there will be times that a person will invade your space and the only thing you will be able to do about it is to take a defensive posture and try to stay out of their way.

- You might as well get acquainted with these drivers now. At least you will know what to call them as you encounter them.
- As you drive, you will eventually come in contact with a driver who will move into your space. Most likely, they are just unaware of their invasion. They are just trying to stay with the pack and have misjudged a gap or their ability to perform a driving maneuver.
- It is best in this situation to allow the thief to make their intended move, hope that they can pass you and that you can avoid any true conflict with this person. Use your speed control and possible lane positioning to help you get out of this person's way.
- Another driver you should be a little concerned with is one that closes your rear space. Again, this person is not intentionally trying to be annoying; this is just the character of their driving. This driver is the car in the rear zone that is closing the zone very quickly. Their speed is bothersome at first, but most likely, they will change lanes and pass you without any conflict. You should be aware of this person, but not overly concerned unless they show additional signs of aggressive driving. Speed and lane control will allow this person to pass without any problem.
- Possibly the most annoying driver is the driver constantly in your blind spot. No matter how fast or how slow you seem to go, he paces your speed and stays in your right-rear zone. This driver usually isn't aware of his inadequacies in driving. This is a common and comfortable place for him to drive. Usually through deceleration you are able to allow this menace of the road to pass. There are times that speed doesn't work and you may have to move into another lane and then slow down. Be sure and check all zones before making such a maneuver.

- The next driver to be on the alert for is the person that tends to speed up very quickly, drop speed and then speed up again. You feel as though he is pushing you to an uncomfortable speed. This is very dangerous and you should make every effort to avoid conflict with this driver. The first thing to do to try to get your space back is to change lanes. This driver may try to pull around you when you put your signal on to change lanes. This could be very dangerous. Generally this driver feels provoked in some way. He may feel that you have done something to him and he is in the first stages of Road Rage. Be careful with this driver and quickly take steps to get out of his way.
- The most dangerous driver is the Tailgater. This person closes your rear zone quickly and then stays in a very uncomfortable position on your rear bumper. This is an extremely dangerous situation and one that needs to be eliminated as quickly as possible. The good thing about a tailgater is that generally it doesn't have anything to do with Road Rage or him being upset with you. This is just his way of driving and he probably feels very comfortable with the space he is giving you. The quickest way to get out of this situation is to tap your brakes gently, which will alert him that you may be stopping soon. Most times this will get him out of your rear zone space. If this doesn't work, change lanes and let the Tailgater pull ahead of you.

Topic 6 - Using System Basics

There are some basic principles you should be aware of as you study the space management concepts.

Search - To search effectively, drivers need to know what to look for, where to look, and how to evaluate if a potential problem could be a good or poor situation. The structure of the space management system can give a rapid response to a number of variables.

1. **Evaluate** - After searching and seeing a changing or closed space area, evaluate the conditions of the opposite space areas before making a decision.
2. **Execute** - After evaluating the related space areas, make a conscious act in selecting the best speed, lane position, and communication tool.
3. **Conditions** - New conditions are always presenting themselves when driving. A driver must constantly question the present conditions based on risk probability and potential consequences.
4. **Processing information** - These are some of the processing evaluations that a driver would make for any driving situation. The speed and lane position selected are usually based upon what the legal limitations are, what the destination is, and what is comfortable for the driver.
5. **Decision-making** - Whatever the choices for speed and position, the space management system recommends looking for how the group of ongoing conditions

could cause less control over **line of sight**, and/or **targeting area**, and/or **path of travel**. In other words, the driver should watch for changes to the space areas to the front and rear of the vehicle.

6. **Adjustments** - Drivers should watch for slight changes, make minor adjustments for best speed control and lane position, and use effective communication.

Space Management Practices

There are certain steps that you should begin training yourself so that one day they will become habit. This list of practices will help you as you manage your space.

1. Smooth balance can be accomplished through the use of speed, steering and braking. Balance of the vehicle is important as you begin your driving task.
2. As you determine the front zone is closed, use your three principles of speed, lane control and communications to place yourself in a better situation.
3. Use as little space as possible when making lane changes and turns.
4. When you detect a problem ahead, keep an open zone as an option should you need to get away from the situation.
5. Stay true to the four-second rule.
6. As you make your stop in traffic, be sure you can view the bottom of the rear tire on the vehicle ahead of you.
7. Timing is important in space control, try to make sure you have at least one open zone when you arrive.
8. Traction is important when turning on a curve, always slow down and adjust your speed to the condition of the roadway.
9. Use lane position when approaching a turn or curve in the road.
10. Reduce speed when using lane position 1.
11. If you determine that a zone is closing to your front, always reduce speed.

Lesson 3 - Changing Lanes

Topic 1 – Lane Change Description

Changing lanes is a maneuver you will use quite often. As a driver you must be able to change lanes smoothly and safely.

Reasons to Change Lanes

When preparing to change lanes, the first step should be to ask, “Do I need to change lanes?” or “Is there a reason for this lane change?” Here are some good reasons for changing lanes.

1. Slow-moving vehicle blocking your path
2. Your lane ends
3. Your destination ahead requires a turn from a lane other than the one you are in
4. Pedestrian, animal, or bicycle in your lane
5. Risk reduction from approaching hazards

Topic 2 - Advanced Planning

Once you have determined that there is a reason for changing lanes, you must plan ahead in order to make the change safely. Consider these three things as you plan your move:

1. *Visibility* – Check the path of travel in your lane. Look for vehicles ahead of you and behind you to determine what they are going to do. Now look 20 to 30 seconds ahead into the path of travel of the lane you want to enter. Keep an eye out for other vehicles signaling to move into that same lane. If so, wait until they have made their move before making yours and then check again before proceeding.
2. *Time* – Decide whether or not you need to increase or decrease your speed in order to safely enter the new lane.
3. *Space* – Make sure that there is a large enough gap available for you to move in to.

Topic 3 - Steering Control

- Having control of your steering is critical when changing lanes.
- Over steering can cause you to turn too sharply into the new lane. This can be very dangerous at higher speeds.
- The goal is to change lanes as smoothly as possible.

Topic 4 – Gap Selection

What is a Gap?

When you are changing lanes you must make a gap selection. Your parent or instructor may help you make your selection the first few times. You will be looking to see if traffic is moving and that there is a clear space for you to move into. The size of the gap and current conditions will determine how gradually or how quickly you make your lane change.

Gap Selection During Lane Change

When changing lanes you must yield until there is a clear gap in the traffic that will:

1. Allow you to make your move safely into the center of the desired lane
2. Maintain the flow of traffic so that no other vehicle is forced to slow down, speed up or change lanes to avoid collision

Lane Change Steps

Follow these steps once you are ready to make your lane change:

1. Check traffic in the zone you are wanting to enter as well as the zone alongside your new lane position
2. Check rear zones through the rear view mirror
3. Signal and make a blind-spot check over the appropriate shoulder. Be careful not to pull the steering wheel as you turn to glance over your shoulder.
4. Normally it is best to increase your speed slightly as you move smoothly into the next lane.
5. Cancel your signal, adjust your speed and check your rear-view mirror to get an update of your rear zone status.

Lesson 4 - Turn/Turns Abouts

Topic 1 – Protected / Unprotected Turns

Protected Turns

- Some intersections provide a traffic light with a green arrow for a protected turn. Keep in mind that a traffic light cannot ensure your protection. It is up to you to clear the intersection as if there were no light before making your turn.
- Your green arrow means that other drivers are supposed to yield to your “Right of Way.”

Unprotected Turns

- If the traffic light does not provide a green arrow you will be making an unprotected turn. This typically means the signal light is green for you AND for oncoming traffic and red for cross traffic.
- In this case, oncoming traffic going straight or turning right has the “Right of Way” and you must yield until it is safe to make your turn.
- Always read the lights and signs to determine who has the right of way, then make sure all other traffic is obeying the right of way before entering the intersection and making your turn.

Topic 2 – Steering Method

Hand-Over Hand

Here are the steps for hand over hand steering method for turning left. Right turn hand over hand steering is executed exactly the same way in the opposite direction.

Step 1: Always start from a balanced hand position.

Step 2: With your left hand pull down and to the left. Your right hand should be pushing the steering wheel to the left about a quarter of a turn

Step 3: Release your left hand and cross it over your right hand and grasp the wheel near the top of the wheel.

Step 4: Your left hand should continue to pull down as you release your right hand until your turn is complete.

After completing your turn, make sure the wheel straightens back to a balanced hand position.

Push-Pull Steering

On some turns, you may prefer to use push-pull steering. Follow these steps for turning left. Again, right turns are executed exactly the same way in the opposite direction.

Step 1: With your right hand, grasp the steering wheel at the 4 o'clock position.

Step 2: Your right hand pushes the steering wheel up to the 12 o'clock position while your left hand slides up to the 11 o'clock position and pulls down.

Step 3: As your left hand pulls down to make the turn, your right hand slides to returns to its original position until the turn is complete.

With this method, neither hand leaves the steering wheel or crosses over the other.

Topic 3 – Right Turn

Prepare for Right Turn

Prepare for a right turn approximately 200 to 300 feet before the intersection.

- **Check** for traffic signals, signs or special markings that will control your movement.
- **Choose** the correct lane, move into that lane when it is clear to do so, and reduce your speed.
- **Signal** about 3-4 seconds or 150 feet before making your turn to let other drivers know you are about to turn right.
- **Position** your car to the right side of the right lane and check the traffic approaching or in the intersection.
- If you are at a red signal or stop sign be prepared to **yield** for pedestrians or cyclists who may be crossing in the crosswalk you are about to enter.

Execute Right Turn

Now you are ready to execute a right turn by following these steps:

1. If you are at an intersection that is not controlled by a traffic signal or stop sign, look to your left and proceed only when you have found a six- to eight-second gap in traffic.
2. When your tires are at the point where the curb begins to curve, look through the curve to see your path of travel. Begin turning by using either the hand over hand or push pull steering methods.
3. Follow the general path of the curve, staying in the right lane and staying in your path of travel.
4. Complete your turn by bringing your steering to a balanced position. Make sure your turn signal is off.

Topic 4 – Left Turn

Prepare for Left Turn

Prepare for a left turn following many of the same steps you would use for a right turn. The main difference is that when you are turning left you must yield the right of way to cross traffic as well as vehicles approaching from the opposite direction. Follow these steps:

- **Check** for traffic signals, signs or special markings that will control your movement. Check to your left and rear to make sure that no one is trying to pass you on your left.
- **Choose** the correct lane, signal and move into that lane when it is clear to do so.
- **Stop** behind the stop line if there is one.
- Remember to **Signal** about 3-4 seconds or 150 feet before making your turn to let other drivers know you are about to turn left.
- **Position** your car just to the right of the centerline or just to the right of the left curb on a one-way street.

Execute Left Turn

Follow these procedures when turning left from a two-way street onto another two-way street:

1. Check your intersection and path of travel for other vehicles, pedestrians or other obstacles.
2. Do not turn until you have at least a nine-second gap to your right and a seven-second gap to your left. Remember you must also yield to approaching traffic.
3. You are now ready to enter the intersection. Move forward until you are one lane width away from the center of the intersection. Look through the turn to see your path of travel.
4. Begin turning by using either the hand over hand or push pull steering methods.
5. Follow the path of travel and move into the lane nearest the centerline.

Complete your turn by bringing your steering to a balanced position. Make sure your turn signal is off.

Topic 5 – Special Turns

Special Situations

- When you turn left from a two-way street onto a one-way street enter the lane of traffic closest to the intersection.
- Turning left from a one-way street onto another one-way street is exactly the same as any other left turn except you do not have to cross a lane of cross traffic.
- When you are turning from a one-way street onto a two-way street move into the far left lane and turn onto the first lane of traffic moving in your direction.

Special Turns

- U-Turns should only be made after first making sure the turn is legal and that there is enough clear space to make the turn without braking or interfering with traffic flow. If you question any of these points – DO NOT MAKE A U-TURN. (*Watch demonstration*)
- The two-point turn is another turnabout that requires you to either head into or back up into a driveway to change direction. (*Watch demonstration*)
- Three-point turns or Y turns should only be performed in neighborhood or rural areas. This is a dangerous maneuver because you not only cross traffic lanes, but you stop across a traffic lane. (*Watch demonstration*)
- Backing turns are frequent and you should get in the habit of performing these steps.
 - When backing to the right, look over your right shoulder for any obstructions or on-coming traffic.
 - Using the hand-over-hand method, pull the wheel to the right, the back of your vehicle will go in the direction you turn the wheel.
 - Always be looking backwards towards the direction you want to go.
 - Always back slowly and make quick and continuous glances during your turn.
 - When the back of the car is at its lined position, begin unwinding the steering wheel to finish in a straight position.
 - Backing to the left is the opposite of the steps to the right, however, when backing left, you will need a wider space. The front wheels move farther to the right than the rear wheels and more caution is needed. Practice this maneuver many times.

Lesson 5 – Parking

Topic 1 – Choosing Parking Space

Parking can be one of the most difficult experiences of driving. Parking takes practice. It takes good control of speed and steering as well as accurate judgment of space.

In order to park safely you will need to understand how to choose a parking space, the reference points needed and the different ways to park. These include: Curb parking, angle parking, perpendicular parking, parallel parking and parking in special situations.

Choosing a Parking Space

Choosing a safe parking space is your first step.

- The easiest and safest is a parking space that will let you park without backing up.
- If this isn't possible, try to find a space with plenty of room for getting in and out easily. Keep in mind the size of your vehicle.
- Avoid spaces where someone has parked poorly on one side.

Topic 2 - Reference Points

It is a good idea to use reference points on your vehicle when parking. Reference points can be a sideview mirror, a hood ornament or center of the hood or perhaps door handles or even wiper blades. As you learn your vehicle and practice parking it is a good idea to select one of these points to use as a guide for lining up with other vehicles.

Topic 3 - Curb Parking

Curb Parking is the simplest way to park. All you have to do is make sure you have moved safely into the proper lane and slowly ease to a stop parallel to the curb. Be sure that you stay far enough behind the car in front of you to leave plenty of room to get out. Parking on a corner or just behind a driveway ensures that no one will park in front of you.

Topic 4 - Angle Parking

There will be many times when you will see angled parking spaces in a parking lot or even in some small cities. In these instances, everything is designated to go one way.

To angle park:

- Stay at least five to six-feet from parked cars so that you can see and maneuver better once you have found an empty spot.
- Stay alert for cars backing out to leave their space. Signal to show that you are ready to make a turn.
- Move forward slowly until you can see the center of the space, use the center of the car to target through the space.
- Steer sharply, about a half turn of the wheel. Move ahead at about 3- to 5-miles per hour into the space midway between the lines.
- Stop with your wheels straight.

Topic 5 - Perpendicular Parking

Perpendicular parking is used when parking lots are set up to park at a 90-degree angle to the curb.

- Position your car eight feet away from the row of parked cars – or as far away in the lane as possible.
- Signal for a turn and determine your reference point so that your front bumper just passes the taillight of the first car just before your space.
- Turn the wheel sharply and slowly enter the stall. Check your rear fenders for clearance.
- Stop with your wheels straight and your car centered in the space.

Many drivers consider it safer to back into a perpendicular space because it is easier to back into a space than to back out into traffic.

Topic 6 - Parallel Parking

Parallel parking is used when parking next to a curb in the space between two parked cars. Sometimes parallel parking is your only option. Remember, you need a space at least five feet longer than your car to park safely and comfortably. At first, parallel parking seems hard but with a little practice you will soon master this maneuver.

- First, signal for a right turn and then pull your vehicle up directly even with the front vehicle and about two- to three-feet away from it. A good reference point is to line up the backs of the front seats.
- Shift into reverse and check to make sure the way is clear. Look over your right shoulder and back slowly as you turn your wheel all the way to the right. Aim for the right rear corner.
- Back up slowly until your vehicle is at a 45-degree angle from the curb. If you look at the curbside rear bumper of the front vehicle, it should appear lined up with the doorpost.
- Now turn the wheel sharply to the left and back slowly until your vehicle is parallel to the curb.

Switch into drive and slowly center your vehicle in the space.

Topic 7 - Special Parking

- Parking in a driveway or garage is similar to perpendicular parking. You must make sure to center your vehicle. Good positioning requires being able to judge the space to both sides of your vehicle. In a garage, remember to check both the front and back bumper for clearance.
- Parking on a hill is no different than parking on a flat surface except that you need to make sure that your vehicle doesn't roll.
- If you are parking downhill with a curb turn your wheels towards the curb until you feel them touch it. If there isn't a curb, park as close to the shoulder as possible and turn your wheels sharply towards the shoulder.
- When parking uphill, move forward until your vehicle is parallel to the curb. Just before stopping turn the wheel all the way to the left or away from the curb. Shift the car into neutral and allow your car to slowly roll backwards until the back of the front right tire touches the curb. Shift to park.
- When parking uphill without a curb, turn the wheels all the way to the right so that if your vehicle rolls it won't roll onto the roadway.
- In each of these situations don't forget to set your parking brake.