Notes for driving essay

ASSIGN BUSTER

When you become a driver you are part of the “ system”. This “ system” is the Highway Transportation System (HTS) 3 parts to the HTS: 1- People 2- Vehicles – all types 3- Roadways The goal of the HTS is to move people and cargo from one place to another in a safe, efficient, and economical manner. How is the HTS regulated? By local, state, and federal government agencies. The federal government established the National Highway Safety Act. All agencies enforce the following guidelines set forth in this act. 1- Vehicle code – the laws that have been passed – Assure that these laws are obeyed 3- Motor vehicle departments set the rules to assure that driver and vehicle standards are met 4- Rules for the courts to go by for guilty or innocent 5- Engineers plan, build, and maintain roadways The driving task This involves all of the social, physical and mental skills required to drive. You MUST develop habits to perform these tasks with low-risks results. Habits you MUST develop: 1- Using knowledge and visual skills 2- Obey all traffic laws 3- Judging time and space – Anticipating how your car will react under normal and emergency situations SOCIAL SKILLS – You must be able to drive while interacting with other people – Courtesy and cooperation make low-risk driving possible PHYSICAL SKILLS You need to practice and develop the skills needed to drive, until they become a habit. MENTAL SKILLS Decision-making is a mental skill you need to develop in order to be a safe, low-risk driver. Developing the IPDE System into your driving. I – identify important information in the oncoming scene. P – predict when and where possible points of conflict will develop.

D – decide when, where, and how to communicate, adjust speed, and/or change position to avoid conflict. E – execute the right action to prevent

conflict. There are two other systems that can help you in the IPDE system: 1- The Smith System – helps develop seeing habits 2- The Zone Control System – helps you manage the space around your car. You need to develop the system approach to become a defensive driver. This will help you lower your risks and keep you and others from dangerous situations. Your Driving Responsibilities DRIVING IS A PRIVILEGE – NOT A RIGHT

The privilege is based on the assumption that you will be a responsible traffic citizen and obey the traffic laws. ATTITUDE Your attitude toward driving as well as life affects your willingness to develop the habits needed to be a safe driver. ROAD RAGE What is it and what causes it?? Breakdowns in the HTS. These occur when any part of the HTS does not work well. Collision – occurs when a vehicle has a problem and hits another object. Which is more correct? Collision or Accident? An accident is something that happens by chance… a collision is something that has a predictable cause. The most common cause for a collision is…

DRIVER ERROR (P. 9) Causes of deaths: A major cause of vehicle deaths is… LACK OF EXPERENCE Social and Economical Loss Collisions cause social and economical loss by: – property damages (p10) – time away from work or school – medical fees – insurance premiums Your financial responsibilities. – vehicle related costs: fuel, maintaince, and insurance. – Any damage that you cause while driving. Your environmental responsibilities. – air and water pollution – chemical spills – land pollution What you need to do: 1- maintain your vehicle – buy fuel efficient vehicles 3- use fuel efficient driving practices 4- recycle materials you can 5- car pool or use public transportation when you can 6- work with the government to encourage use of energy-efficient

driving DRIVERS LICENSE Most of the time young drivers simply make mistakes from inexperience. 41% of young people killed in collisions died in single car collisions. GETTING YOUR LICENSE IN SC The Graduated Licensing System 1- Permit – can drive with an adult licensed driver – must have permit for 6 months (180 days) must log at least 40 hours of driving at night 2- Intermediate (restricted) – must have had a permit for 180 days and completed a driver's education course – can drive from dawn ' til dusk by yourself – drive at night with a licensed adult – limited number of passengers – must not get into a collision or have any violation for 180 days. Violators turn the clock back to zero. – Repeated violations could land you in traffic school. 3- Full License – unrestricted driving – as related to time of day you can drive alone.

Organ Donor Program You may indicate on your license that you wish to be an organ donor. IMPLIED CONSENT PROGRAM (LAW) When you sign your license in SC you give an officer the right to test your blood alcohol content (BAC). If you refuse the test you will lose your driving privilege. WHY DO YOU TAKE A DRIVER'S EDUCATION COURSE??? Chapter 2 Signs, Signals, and Roadway Markings Traffic Signs There are three types 1- Regulatory – control traffic flow 2- Warning – alerts of a possible hazard or road condition 3- Guide – give direction Stop Signs This is the only red, octagon sign we have.

You must come to a COMPLETE(full) stop at this sign. Four-way stops – rules you need to follow 1- The first one stopped gets to go first 2- If 2 cars get there at the same time, the car on the right gets to go first 3- If 2 cars get there together and are across from each other, the car traveling straight goes first 4- If 3 or 4 cars get there together, one needs to enter the

intersection to show intent, but with caution 5- ALWAYS CHECK THE INTERSECTION BEFORE ENTERING IT Yield Signs This is the upside down triangle – red and white

You must allow others in the intersection or approaching the intersection to go first before you. This is called giving the right of way. Right of way is given, not taken. p. 2 Speed Limit Signs These are white, mostly rectangles, with black writing. They indicate what the safest maximum speed for that roadway in IDEAL conditions. Basic Speed Laws state that when conditions are not IDEAL you must not travel faster than what is safe for the conditions. Advisory Speed Limits are set for certain sections of the roadway. Once you have cleared that section you may resume the posted speed limit.

Warning Signs These are yellow signs that warn you of upcoming conditions in the roadway. Most are diamond shaped with black symbols. School Signs indicate where school zones and crossings are. They are shaped like a house (pentagon). No Passing Signs are placed before where the roadway begins to narrow. Construction Signs indicate where construction zones are. They are orange signs with black symbols and letters. Railroad Signs – There are two types of railroad signs; a yellow circle with a black “ X” and two “ R” s also black and a white cross with black railroad crossing letters.

The yellow sign indicates you are approaching a railroad crossing and the white “ X” indicates where the railroad tracks begin. p. 3 Guide Signs These signs mark routes, intersections, service areas, and other points of interest. Route signs are local, state, U. S. and interstate markers. US = white shield on a black sign with black #s State = white square with black #s and letters

Interstate = red and blue shield with white letters and #s Even #s = east and west Odd #s = north and south 3 numbered route that begins with an odd # goes into a city 3 numbered route that begins with an even # goes round a city (beltway) Other guide signs are: Green = give information on destinations and distances Blue = roadway service information (hospital “ H”) Brown = recreation areas and points of interest TRAFFIC SIGNALS Include traffic lights, arrows, flashing signals, lane signals, and pedestrian signals. Traffic lights are red, green, and yellow. Red = stop Green = proceed through the intersection if it is clear to do so. Yellow = slow and stop if you can do so safely. Right turn on red and left turn on red. When can you do it. p. 4 Flashing signals: Red – treat it as a stop sign

Yellow – treat it as a yield sign Arrows tell you the direction in which your lane must travel. Green = proceed if it is clear to do so Yellow = yield and stop if possible Red = Stop only in that direction Lane Signals – these lights will switch the direction of traffic in a certain lane to control the need for traffic flow. Pedestrian Signals – allow walkers to cross at an intersection safely. “ walk” “ don’t walk” When a police officer is standing in the intersection, their directions overrule any signal. Roadway markings These are yellow or white lines as well as arrows, stop lines and crossings.

Broken Yellow Line = separates two-way traffic and you may pass when it is clear to do so. Solid Yellow Lines = separate two-way traffic and you are not allowed to pass. Shared Turn Lanes = you may enter and wait until it is clear before you turn left across traffic. Broken White Line = separates traffic traveling the same direction. You may pass if it is clear to do so. Solid White Line = indicates the right side of the road and should not be crossed. White

Arrows = indicate which direction you are allowed to travel in that particular lane. Rumble Strips — Lane Reflectors – Yellow Curb Markings Chapter 3 Basic Vehicle Controls

INSTRUMENT PANEL Speedometer – tells you how fast you are going Tachometer – tells you how many revolutions your engine makes in one minute Odometer – tells you how far your car has traveled in its lifetime Fuel Gauge – tells you how much gas is in your gas tank Temperature gauge or light – warns you when the coolant in your engine is too hot Oil pressure warning light or gauge – warns you when the oil is not circulating at the proper pressure Alternator warning light or gauge – tells you there is a problem with your electrical system, the alternator is not generating enough electricity to keep the engine running

Brake system warning light – tells you 1st that your parking brake is engaged and 2nd that there is a problem in your braking system Antilock braking system light – tells you that your ABS is working properly Safety belt light – reminds you to fasten your safety belt Air bag warning light – tells you that your air bags are working properly Turn signal indicators – tells you which direction that you have indicated you are going to turn. Most are small green arrows. High beam indicator – tells you that your high beam head lights are on, blue light. VEHICLE CONTROLS Steering wheel – controls the direction of the front wheels.

Turn right to go right and turn left to go left. Steering wheel adjustment lever – can tilt the wheel up and down Selector lever – lets you put the car in a gear. Either on the steering column or in the center console. Gear shift lever

– lets you put a manual transmission car into a gear. Ignition Starter switch – you start the engine by putting the key into the ignition switch. Page 42 – picture or positions Cruise control – lets you set and maintain a certain speed. Parking brake – keeps the car in place when it is parked. Locations? Clutch pedal – is in a manual transmission car, is located to the left of the foot brake and s pushed down (in) to change gears. Foot brake pedal – push the pedal down to slow and stop the car. Also makes the brake light on the back of your car light up. Accelerator pedal – Located to the right of the brake pedal, push it down to get the car to go faster, release the pedal to get the car to slow down. SAFETY, COMMUNICATION & COMFORT DEVICES Safety belts – always wear you seat belt when your car is in motion. It will help protect you from injury in a collision. Head restraints – padded devices that help prevent head injuries in collisions. Inside and outside rearview mirrors – these mirrors help you see what is behind your car ithout turning around and looking. Blind spots are the areas that your mirrors do not show you. Horn – located on the steering wheel. Hazard flasher control – located on the steering wheel or control panel. Turns on both sets of turn signals when engaged. Windshield wipers and washers – one switch for both usually, it turns on your wipers and squirts water onto your windshield to clean off the dirt. Light switch – controls the headlights, taillights, side marker lights, instrument panel, license plate and dome light. Hood release lever – located on the left side under the instrument panel, pull to release he hood, then go out and open by releasing the front latch. Heater, air conditioner, and defroster – heating and air conditioner warm and cool the car passenger area and the defroster keeps the windows clear of moisture. Sun visors – located above the windshield, pull down to block the sun. Seat adjustment lever –

usually at eh lower front or left side of the seat. GETTING READY TO DRIVE Outside Checks 1- Walk around the car looking for obstructions and spills. 2- Glance at the tires. 3- Where are the front wheels pointed. 4- Make sure that the windows are clean and clear. Lights also. – Check back window ledge for sight obstructions. 6- Look inside for any unwanted passengers. Getting into the car 1- Have your keys ready, especially if you enter from the road side. 2- Walk around the front of your car and back to the door facing traffic. 3- Get in quickly, lock the doors and put the key in the ignation. Inside Checks 1- Lock the doors 2- Adjust your seat and steering wheel so that you are about 10 inches from the wheel 3- Your hands should be able to reach the steering wheel with your elbows slightly bent and you should be able to reach the pedals with your knees slightly bent. – Your head restraint should be adjusted to hit the middle of your head. 5- Adjust your rear view mirror and side mirrors 6- Fasten seat belts. DRIVING AN AUTOMATIC VEHICLE Gear selector lever positions: P = park – transmission is locked in this position. R = reverse – used for backing up (backup lights) N = neutral – allows the wheels to roll without engine power D = drive – moves your car forward (overdrive) Low (L1, L2 or 1, 2) = allow you to put more power to the wheels at lower speeds Starting the Engine 1- make sure that the parking brake is set 2- gear selector is in park – don’t press the accelerator (fuel injection) 4- Turn the key to ON and then START. Release the key when the engine starts 5- Check your gauges, lights and fuel level CHAPTER 4 Managing Risks with the IPDE Process The IPDE Process Every driver uses some kind of process to help them drive. Those who don’t, have a higher risk of collisions. The IPDE process helps reduce these risks. Risk can cause collisions. Factors that contribute to this risk are the driver, the vehicle, the roadway and the

environment. Driver-contributed factors: – adjusting the radio – being angry or upset – blurred vision grooming – driving while drinking – cell phones If you are doing one or more of these and the driver you meet is doing one or more of these then you are increasing your risk. You can control what you do but you can’t be sure about what the other driver is doing. Vehicle-contributed factors: – bald tires – bad brakes – dirty windshield – broken or burnt out headlights – worn out wiper blades Roadway and environment-contributed factors: – bright sun – construction – dark shadows – snow or ice – sharp curves

Good drivers make an effort to lower these risks if at all possible. Taking care of your vehicle and practicing a process, such as the IPDE, you can lessen your risks while you drive. The IPDE process Safe driving depends of your ability to see and analyze traffic situations correctly. The driving task is mostly a thinking task. When you are not thinking about your task of driving you increase your risk of a collision. By using the IPDE process you can develop the habits that allow you to drive more effectively while thinking of other things. The four parts of the IPDE, identify, predict, decide and execute.

The IPDE process can be enhanced with the aid of The Smith System: – Aim High – Get the big picture – Keep your eyes moving – Leave yourself a way out – Make sure they can see you As well as the Zone Control System: – See a zone change – Check other zones – Create time and space by getting the best speed control, lane position, and communication Identify – you must know when to look, where to look, how to look and what to look for. The

sooner you can learn to identify the correct things the more time you will have to react.

The Zone Control System aids you in this. You have six zones around your car, each zone is about the width of a lane and extend as far as the driver can see. (pic. 65) An open zone is a space you can drive without a restriction to your line of sight or your intended path of travel. Your target area is the section of the road that is the center of your intended path. Far out there, up the road. A closed zone would be an area that your car can not go into without conflict. Book example is a red traffic light. You have to react to the light. The sooner you identify the closed zones the more time you have to respond.

You should develop searching habits in three ranges: 1- your target area range – as far as you can see 2- 12-15 second range – 12 to 15 sec. in front of you 3- 4-6 second range – where your car will be in 4-6 seconds How to develop an Orderly Visual Search Pattern: steps on page 67 Your Field of Vision affects how you search. Most people have a field of vision which covers about 90 degrees to each side or 180 degrees total. Central Vision is what you are focusing on, it’s about 10 degrees. Peripheral Vision is the rest of your field of vision that is not in focus.

When you are scanning the scene you need to Aim High in Steering. This means to look down the road, into your target area, and not just in front of your car. You also need to keep your eyes moving, this helps you scan the scene. If you put all of these scanning methods together you will Get the Big Picture. What do you need to look for? Look for open zones – you want to

look for things that could cause the open zone to close. Look for other users – look for anyone who could affect your path of travel. Ground viewing – look at the vehicle approaching for clues that they will come into your path.

Look for roadway features and conditions – intersections, hills, curves, width of the road (multilane to single lane, change in width of lane, surface & hazards) Look for traffic controls – know where controls are located at different times and places. Predict – once you have identified, you need to predict how the hazard might affect your path of travel. How you go through the predicting process will help determine how the hazard may affect you. Learning how to look at a situation is important. You must identify all possible hazards to determine what each one may do. Knowledge of driving laws and this class will help you predict.

You know what the driver is supposed to do and how they are supposed to react to certain traffic situations. You must however make yourself prepare ahead of time for situations that could occur. Play the head games at times. The main thing that makes you a better predictor is EXPERENCE. You can’t get it if you don’t experience it. The two things that you must be able to predict are the actions of other vehicle users and the way your car is going to react in situations. When predicting the actions of others you need to look at their path of travel, the actions they may make, do I have an open zone? , and where might the point of conflict be?

Predicting the reactions of your vehicle is the easiest of this process. You should know what condition your car is in, how are the tires, how soon can I stop, etc. Decide – Once you have identified and predicted what may

happen, you now need to decide what you need to do. Maintain, swerve, brake, speed up, or just communicate with my lights or horn. You may decide to change your speed. You can avoid conflicts by maintaining, slowing down, or speeding up. To make a change in direction you need to look at your zones. Try to leave yourself a way out or cushion so you are able to move into that area without conflict.

You may also avoid conflict by changing you position in your lane. You may need to be centered, slightly left or slightly right in your lane. If you decide that all you need to do is communicate with the other driver you may do this by your lights, horn, car position or eye contact. You want to try to minimize your number of hazards by separating the hazards. Sometimes you are going to have to pick the hazard that will possibly do the least amount of damage. This is compromising space. Give way to the big truck swerving into your lane. Execute- Once you make your decision you need to execute it. Remember, DON” T second guess yourself.

The three areas that you have execution control over are speed control, steering, and communication. The hardest thing when driving is how so I handle multiple conflicts that occur? Being able to use the IPDE process effectively takes practice and time. You are not as good at using it today as you will be next week. You will learn how to use the IPDE process selectively. This means that you start one process and something else will come up that makes you begin the process all over again. Remember this: You used the IPDE Process getting to this class today and you will use it again going to every class you take today.

Chapter 5 Natural Laws and Car Control In this chapter you will learn about gravity and energy of motion, friction and traction, stopping distance and controlling the force of impact. Gravity – Gravity is the force that pulls you to the earth. Going up and down hills in a car you can feel the pull of gravity. You need to be able to adjust your driving to accommodate for this pull. The point at which your car’s weight is evenly distributed is called the center of gravity. The lower the center of gravity, the better the handling of the car. Energy of Motion – Energy of motion is called kinetic energy.

What you must understand about this energy is the way it will affect your driving. The faster your vehicle is moving, the more energy you have, the heavier it weighs, the more energy of motion it has. Two important facts to know” 1- Your energy of motion doubles when the weight doubles 2- Your energy of motion increases by the square when your speed increases by a certain amount. (speed doubles – energy quadruples) If your energy of motion increases your stopping distance will also go up that amount. Friction and Traction Friction is the force that keeps your tires from sliding on the road.

Traction makes it possible for your vehicle to grip the road for you to change speed and direction. The grooved surface of the tire is called the tread. This tread cuts through the water on the road allowing your tire to grip the road. As the amount of tread decreases, the amount of traction also decreases. If the tire tread gets worn almost completely off (bald tire) the possibility of a blowout becomes great. A blowout is when the tire loses all pressure at once. The way your tire is inflated also determines how much of the tire tread is

touching the road. An under inflated tire causes the tread to gap in the middle.

An over inflated tire causes the tire tread to only touch in the middle (like a balloon) Things that could reduce the traction you have are: 1- bad tires 2- bad shocks 3- faulty steering system 4- road surfaces Checking for traction while you are driving can be done but must be done carefully. – check rear zone – brake gently for response – if you don’t slow down reduce speed Driving on curves can be very tricky. The energy of motion tries to keep your car in a straight line but the traction from the tires pulls you around the curve. Driving around curves: – Speed – reduce your speed to avoid skids 2- Sharpness – the sharper the curve the more traction you will need to go around it. 3- Banked – most curves are banked, this helps prevent your car from wanting to stay in a straight line. 4- Load – The heaver the load or weight of your vehicle the more friction it is going to take to get through the curve. Stopping Distance Total Stopping Distance – the distance your car travels while you are making a stop. Total stopping distance is made up of three parts: 1- perception distance 2- reaction distance 3- braking distance Look at the chart on page 98.

To estimate the distance you need to stop you can use the four second rule. – pick a spot in the road, a sign or driveway – When the car in front of you reaches that point begin counting, one-thousand one, one-thousand two… – If your car gets to that same point after you reach one-thousand four you have enough space to stop if you need to. Factors that affect you’re stopping distance: – Speed – the higher the speed the longer the distance – Car condition – worn out tires, etc need more distance – Surface – rain, snow, ice,

dirt, leaves & gravel increase the distance Driver ability – if distracted or impaired you increase the distance – ABS – helps when stopping while turning – Hills – up or down hills shortens or lengthens the distance – Loads – the weight of your vehicle, heavier takes longer. Force of Impact The force at which a moving object hits another object is force of impact. Force of impact is determined by: 1- Speed 2- Weight 3- Distance between impact and stopping Safety Belts When you are in a collision, three collisions actually take place. First the car hits an object and stops.

Second, you hit the inside of the car or a restraining device (seat belt) Third, your body organs slam against your skeleton or each other. There are two types of restraining devices: 1- restraining devices – seat belts 2- passive restraining devices – air bags (automatic) Air Bags Air bags deploy automatically. They are there to protect your life. When an air bag deploys it comes out at a speed over 200 mph. Air bags are designed to work with the seat belts. Just relying on the air bag will not save your life. To avoid the air bag injuring your arms or shoulders you need to keep your hands about 9 and 3 or a little below.

You don’t want to sit too close to the air bag, @ 10 away is good. Tilt your steering wheel to deploy the bag at your chest and not your face. Of course, child seats need to be in the rear seat or facing away from the air bags. Some air bags now have a feature that senses the weight of the person in the seat and will deploy in two stages. Some vehicles have switches for you to turn the passenger air bag off. Other protective devices in vehicles today: n Automatic seat belts n Front and rear crush areas n Energy absorbing bumpers n Side door beams n Reinforced windshields Energy absorbing

steering wheel and column n Padded dash n Child seats built in n Head restraints Chapter 6 Performing Basic Vehicle Maneuvers STEERING Straight forward: hands should be at a comfortable spot, look ahead and avoid looking at your feet and hands. You need to pay attention to what is approaching you. Try to avoid over or under-steering: over-steering is when you make too sharp of a turn and you weave from side to side; under-steering is when you don’t turn the wheel enough to keep it on its intended path. When you are trying to back a straight line (driving test skill) you need to: – keep the brake pressed and put the car in reverse 2- turn your body to the right, put your right arm over the back of the passenger seat and look out of the back window. 3- Place your left hand at 12 o’clock on the steering wheel 4- Release your pressure on the brake enough to get moving 5- Adjust your position by turning the wheel in the direction that you wish to go 6- Keep you foot over the brake (covering) and take quick glances to the front and sides checking for traffic. When you wish to stop keep looking out of the back window until you have come to a complete stop. SIGNALING

Make it a habit to signal your intent every time you plan to turn or stop. You must use your turn signals when you are making a left or right turn, changing lanes, & pulling over to the side of the road. Make sure that you know the hand signals for when you are driving. Left arm out and angled up = right turn Left arm out and pointing straight out = left turn Left arm out and angled down = braking You need to remember to signal early but not too early. CHANGING LANES You must be able to make the lane change smoothly and safely each and every time. Try to get the steering down. You don’t want to over or understeer. Steps for a lane change: – Check traffic in

front and to the side in which you are going to move into 2- Signal your intent and check your blind spot 3- Increase your speed slightly as you steer into the next lane; if it is clear to do so 4- Cancel your signal, if it did not do so automatically, and adjust your speed and steering. MAKING TURNS AND TURNABOUTS Two methods for steering your car: 1- Hand over hand 2- Push – pull Left and Right Hand Turns You should make a turn only after you have checked traffic. 1- Look for pedestrians and oncoming vehicles; check your rear zone for cars getting ready to pass you. – Plan well in advance. Put yourself in the correct lane well before the turn. 3- Obey all traffic signals and controls plus roadway markings. When turning left you MUST yield to oncoming traffic. Procedures for turning: (page 114) 1- Get in the proper lane 2- Brake early and get to the proper speed 3- Do a visual search 4- Before the crosswalk you should be at about 10 mph 5- Turning right you need to check left then right and begin your turn when your front bumper reaches the curve of the curb line. 6- For a left turn check left then right and then left again.

Begin your turn when your front bumper gets to the center of the intersection. 7- As you begin your turn check your blind spot and turn into the first lane you come to. When you are backing to your left you want to look more over your left shoulder to where you are trying to back. If backing right you want to look over your right shoulder. You will use hand over hand steering and do the visual search before you begin the maneuver. Turnabouts Precautions when you are planning to do a turnabout: •Be sure that local laws permit it •Need at least 500 feet of visibility Don’t do on hills or curves or within 200 feet of an intersection •Should not be done where

high-speed traffic or any traffic would be •Check all zones while doing the turnabout U-Turn Select your spot and signal right to move over and stop. When the way is clear, turn on your left signal and move into the lane Check your front and left rear zones and your blind spot. Turn the wheel hard left and move through the turn until you have completely turned around. Driveway turnabouts Backing into on the right Pull in on the left Pull in on the right Which of these is the safest? Three point turnabout (driving test skill)

Check your zones, signal right and pull to the curb (or side of road) and stop Signal left, turn the wheel hard left and pull across the road as far as you can Signal right, put the car in reverse, turn the wheel hard right and back as far as you need to back Signal left, put the car in Drive, turn the wheel hard right and pull forward finishing the turnabout. Parking When you are trying to park you need to have speed control, steering control and accurate judgment. Before parking you need to find a space big enough for your car to get into. Avoid end spaces or beside large trucks or poorly parked vehicles.

You need to learn some reference points for parking. You will be exposed to standard reference points, these are for a typical vehicle and driver, and you will learn your personal reference points, ones that you like to use. Angle parking: This parking is done diagonally to the curb. Mostly in shopping center parking lots. 1- Check for peds. Position your car about 6 feet from the parked cars. Signal right and begin braking. 2- Check your right blind spot and continue braking. 3- Move forward until you can see the middle of the space without obstructions. Turn your wheels hard right and ease into the space. – Straighten your wheels when you are in the center of the space and pull forward as far into the space as you can. Perpendicular parking: This

parking is when your car is at a right angle to the curb. 1- Set up about 8 feet from the line of parked cars or as far over as you can. Signal right, check your blind spot, and begin braking. 2- Check traffic to the rear and continue braking. 3- Turn hard right when your front bumper passes the back bumper of the car to the left of the parking space. Slowly enter the space and check your rear right to make sure that you have missed the car. – Straighten the wheels when you are centered in the space and pull forward. Leaving both of these spaces (angle and perpendicular) 1- Ease straight back with your foot covering the brake. 2- When your front bumper is even with the rear bumper of the car to your left turn hard right. 3- Back into the nearest lane and straighten your wheels. Put the car in drive and pull away. Parallel parking (driving test skill) This is parking your car parallel to the curb. Select your space that is 5 – 6 feet longer than your car. 1- While approaching the space, signal right and brake.

Stop with your car 2-3 feet away from the car on the right and your back bumper even with the back bumper of the car to the right. Put the car into reverse and check traffic. Turn the wheel hard right and ease into the space. 2- When the back of your seat is even with the back bumper of the car to the right straighten the wheels. Ease straight back into the space. 3- When your front bumper is even with the rear bumper of the car to your right turn the wheels hard left. Ease back looking out of your rear window. 4- When your car is parallel to the curb straighten the wheels and stop.

Pull forward and center your car in the space. Put the car in park. My cues when we do this in the car: Wheels – hard right, straight, hard left Reference points – back bumpers even, rear of seat even with bumper, front bumper

even with the rear bumper, don’t hit the barrier. Parking on hills: Up hill with a curb – turn the wheels left, ease back to touch the curb, engage parking brake, put car in park, turn the car off. Up hill without a curb, Downhill with or without a curb – turn the wheels to the right, ease until you touch the curb (if there is a curb), engage the parking brake, turn the car off.

Chapter 7 Negotiating Intersections Searching the Intersection When you are approaching any intersection there are things that you need to look for. The main cause of collisions in intersections is the driver’s failure to identity a safe path of travel. Clue you need to look for: Signs and lights Roadway markings Crossing traffic Park car on the cross street Turning traffic Rows of fences and mailboxes Traffic stopping Power lines Most intersections are + or X, but some are Y or T When you are approaching an intersection you need to check your front zones to make sure that your path of travel in open.

Look for anything that may cause your path to close and cause you to change your plans. The closer you get to the intersection the more you need to search your side zones for obstructions. Scan and focus on what may cause you a problem, don’t just keep your eyes in constant motion. Once you approach your point of no return you need to continue through the intersection but still scan your zones. Your point of no return is the point at which you can no longer make a safe stop outside of the intersection. Sometimes when you get close to the intersection your path of travel closes causing you to need to change lanes.

Do this at an intersection only if there is no other option. You are not allowed to legally change lanes within the intersection. If your decision at the

intersection is to stop, for what ever reason, you now need to do the full 180 degree scan before you inter the intersection. Controlled Intersections A controlled intersection is one that has signs or lights that determine the right of way. With signs – The two signs that control an intersection are Stop and Yield. At a stop sign you MUST come to a complete stop and at a yield sign you need to slow down and give the right of way to any vehicle in the intersection.

At stop signs you need to begin your search of the intersection well back of the stop sign. As you approach you need to scan front, as well as 45 degrees to the right and left for anything that may interfere with your path of travel. Crossing Traffic with a blocked view• Search your front and rear zones, look for pedestrians and prepare to make your legal stop at the sign, ease up to the intersection and stop again, scan for obstructions and inter the intersection only when it is clear for you to go through the intersection without conflict. (7 sec gap) Joining traffic – right turns Go through the same checks as above. When you get stopped at the sign and can’t see, ease up until you can without going into the intersection and stop again. Look for a gap of at least 7 seconds. When you have a clear path make your turn and accelerate keeping the car about 4 feet from the side of the road. Joining traffic – left turns • Do your scans as with the other approaches. Stop at the sign and pull forward and stop again before entering the intersection. When the way is clear (7 sec gap) move forward and recheck your zones. Accelerate into the proper lane and adjust your steering.

Light Controlled Intersections When you are approaching an intersection controlled by lights you need to use your IPDE process to determine what the

intersection will be like when you reach it. How may the lights change your path of travel? Stale Green Light – this Is a light that has been green for a while, expect It to change Fresh Green Light – this is a light that has Just turned green, you may still not have a safe path of travel. Check your intended path for obstacles. Yellow Light – this is a light that is telling you that the intersection is closing to your traffic lane.

If you have reached the “ point of no return” you have to determine whether to proceed through or try to stop, hat can influence this decision? Red Light – at this light you MUST stop. You need to check your rear zones as you apply the brakes. An unprotected left turn is a left turn done at an intersection that does not have a left turn green arrow. You MUST be sure that you can complete the turn before beginning it Protected Left Turns At these turns you will have three things apparent 1- Left turn light, this is an entire light sequence (R, Y, G) to guide you at your left turn. – Green arrow – appears with the normal light system, when the arrow goes off you simply do not have a protected left turn. 3- Delayed green light – at these lights you light is green and the opposing traffic light is still red. Turning on Red Light Right on red means that you are allowed to make a right hand turn at a red light AFTER you have made a complete stop and have scanned the intersection. When it is safe to proceed you can make the turn. Left on red is allowed in most states when you are turning left from a one-way street onto a on-way street going to your left.

Some states allow this if you are in a left turn only lane (two way traffic) and are turning onto a one way street. A controlled railroad crossing has lights and/or a stop arm. You must come to a complete stop and stay until the

lights have stopped flashing and the arm has come up. DO NOT EVER go around the stop arm to cross. Uncontrolled Intersections An uncontrolled intersection is one in which there are no traffic controls. As you approach one of these intersections you MUST expect traffic problems. NEVER assume that the other driver will give you the right of way. You must really use your IPDE process as you approach these intersections.

It is best to treat these intersections as yield signs. There are also uncontrolled railroad crossings. Simply slow down, scanning the tracks for trains and do not cross if you see or hear one coming. Determining Right of Way Right of way describes the privilege of having immediate use of a certain part of the roadway. Right of way is GIVEN not taken. You may have to YIELD and allows others to go first in order to be safe. Judging Gaps A gap is the distance between two vehicles. When you are at an intersection you have to make sure that you can successfully get through the intersection. Chapter8 Sharing The Roadway

With Motorcycles: About 2000 people a year are killed on motorcycles. The primary reason is there are so many body parts not protected when riding a motorcycle. You MUST use the IPDE process when motorcycles are around. They can hide in spots, they spend longer times in your blind spots and many cyclist take more chances that car drivers do. ‘••••• • ‘•••• • ••- ••• • ‘ ‘ -i -•• ‘• -‘- ;••; •;• Problem areas in which you need to really look for motorcyclist: a vehicle turning left in front of a motorcycle a vehicle turning right at an intersection or into a driveway a motorcycle turning left inblindspots a tailgating motorcyclist one passing you on the right or left – meeting an oncoming motorcycle When you are going to pass a motorcycle

you need to stay well back to avoid shocking the cyclist, use the entire lane to make the pass and wait until you can see them in your rearview mirror to move back over. It is just like passing a vehicle. With Bicycles, Mopeds and Motor Scooters: Bicyclist need to remember that when they are on the road they have the responsibility to follow ALL of the traffic laws just as the other vehicles do. They need to wear a helmet, know the rules for riding on roads as well as idewalks, and wear light colored clothing (especially at night), keep from wearing headphones, and keep their bike in good condition. When you encounter a bike you need to increase your scanning to avoid serious conflict. If you pass a bike you need to follow the same rules as passing a car. Remember that some bicyclist do not have great control over their bike and may swerve or fall into your path. Mopeds and scooters create the same types of problems as bikes do. They are low powered and very small. They are hard to see and the people riding them may not be able to handle them properly.

People on mopeds and scooters do not have to have a drivers license but they do have to follow the rules of the road, just as bicyclist and drivers do. Pedestrians Pedestrians are the most vulnerable users of the HTS. It is the drivers responsibility to protect the pedestrians. Children and old people are at most risk. Children do not know about consequences and old people may not hear or see well. When you drive in an area with pedestrians you need to heighten you IPDE usage. Look for pedestrians in areas where you expect to see them. Playgrounds, sidewalks, residential areas, parks, and parking lots.

Sharing the roadway with emergency vehicles is a common thing in populated areas. You should yield the right of way to the emergency vehicles

when they are traveling with their light and/or sirens on. Simply move to the right side of the road if you can and or to the lane as far to the right as possible. If you have to you can stop but make sure that you are as little a hazard as possible. With Trucks: The type of truck you need to really worry about when driving are the big semis (18 wheelers, tractor trailer, transfer). The main reason is that they are sooo big and can do a whole lot of damage to your car in a very little amount of time.

These larger trucks make wide right turns. When you are near one and they put on their right turn signal you have to make sure that you are not to their right because the trailer of the truck will turn into your lane when they turn. You need to avoid following these trucks because they have big blind spots which make you hard to see. If you can not see their face in the mirror, they can not see your car. Use caution when passing a truck. Because their blind spots are larger you have to make sure that they see you during your pass as well as before your pass.

When you meet a large truck on a two lane roadway you need to prepare for the after wave when they go by. The air that they push to the right and left will make your car jump of vibrate. Also on wet roads the trucks will throw up water that will cover your windshield. Simply grasp the steering wheel tightly and steer through the problem. Chapter 9 Driving in Urban Traffic Adjusting to Urban Traffic Two of the main factors that make urban driving difficult: 1- Traffic is more dense – there are more cars, buses, trucks and pedestrians per mile than on rural roads – City hazards are closer to you – more things are closer to your car than in the country. Mile per mile, city roads have the highest number and variety of hazards. It takes time to do the IPDE process

and in cities you don’t have as much time to process the information as in the country. When you are on urban streets you have to pay attention and try to identify hazards as early as possible. Following Traffic on City Streets Space cushion refers to the space between your car and the car in front of you. If you have a good space cushion you have some advantages: 1- You can see further ahead and get the “ big picture” – You can be seen better 3- You have more time to do the IPDE process 4- You are in better position to avoid the car in front of you if they stop suddenly. The 3-second following distance. When you are 3 seconds behind you have enough cushion to avoid most collisions in most normal driving situations. 1- Pick out a spot on the road ahead 2- When the car in front gets to that spot begin counting; 1001, 1002, 1003 3- If your car has not gotten to the spot by 1003 you have enough cushion to avoid a collision. If you reach the spot before you get to 1003, you need to back off a little.

The faster you are traveling the bigger your space cushion will be. Being Followed on City Streets A tailgater is a vehicle that is following you too closely. The main hazard of a tailgater is that if you have to do a sudden stop they will hit you in the rear. They think that they are saving time by going so fast and getting close to you. If you have a tailgater behind you, you need to increase your following distance so you will not have to react as quickly when a car in front of you makes a sudden stop or move. When you are meeting cars in the city you have to really look ahead for your front zone to close.

Oncoming drivers may cross the center line and block your path. Reasons that people cross the center line are: 1- driver impairment 2- poor judgment

3- poor visibility 4- reduced space 5- sudden moves for others 6- vehicle failure 7- turning car, buses or trucks 8- double parked vehicles Managing Space on Urban Streets Look ahead – try to see at least one block ahead but if you can see farther, look as far as you can but IDENTIFY possible problems. , When you are approaching a traffic light and you first see the light green you need to expect it to change.

If you see a green light but the crosswalk light is flashing “ don’t walk” you need to anticipate that the light is getting ready to change. NEVER speed through an intersection trying to beat the light. Covering you brake means that you have taken your foot off of the accelerator pedal and have it in front of the brake pedal, but not pushing it down. You are anticipating that you are going to need to brake. This takes away your reaction distance/time if you need to brake suddenly. Riding your brake means that you have your foot on the brake pedal and you are pushing it down slightly.

Most people that two foot drive end up riding their brakes. On city streets that have parked cars on your right you need to anticipate that a car door may open when you get to it. To help avoid hitting the door you need to drive about the width of a car door away from parked cars. Chapter 10 Driving in Rural Areas Characteristics of Rural Traffic 82% of all of the roadway miles in the US are considered rural roads. When you approach a curve on a rural road with an advisory speed limit, you should be at that posted speed before you enter the curve.

Advisory speeds are posted to help keep cars from having a collision on a curve because they entered the curve at too great a speed to control the car.

Speed kills on rural roads. Twice as many deaths occur on rural roads as opposed to urban roads. On rural roads in normal (ideal) conditions the 3 second rule for following is sufficient. If you are following another car using the 3 second rule and a car cuts in between you and the other car you need to reestablish your 3 second rule with the new car. The basic speed rule states that you should not drive faster than the road or traffic conditions allow you to.

It is more difficult to maintain control of your car at higher speeds. When you are driving on rural roads you are going to encounter slow moving vehicles, animals in the road and oncoming traffic that is close to you. Roadside hazards that you will come across are narrow shoulders, bridges, ditches, guardrails, and trees. You are not going to have as many tailgaters here because of the type of driving you are doing plus there are not as many cars on the road. In rural areas your speed is going to be faster so your IPDE process is affected. At higher speeds you decrease your time to make a decision using the process.

So the faster you are driving, the farther you need to look ahead so you can perform the IPDE process. When driving on these roads you may see mailboxes, reflectors on posts, or small utility lines. These are all clues that you are approaching a driveway. When you are driving in the mountains you are going to come to sections of the road that have sharper curves and steeper hills. When you are going down a steep hill you should NEVER shift your car into neutral. If you change gears you need to shift to a lower gear to avoid burning your brakes. Passing in rural areas is done generally on two lane/two way roads.

If you are passing another car you must make sure that you can complete the pass safely and before the passing area ends. When you think that you need to pass another car you need to think before you pass. One main question that you need to ask is, is it safe to pass here? When driving at night on rural roads you are going to encounter car light that pop up from around curves or hills. To avoid being temporarily blinded you need to look to the right side of the road, white line. Chapter 11 Driving on Expressways An expressway is defined as a roadway that has limited-access or controlled-access.

Driving on expressways is more dangerous because of the higher speeds and the number of cars. For this reason, collisions on expressways are generally more serious. Expressways have minimum speed limits posted. If you are going below this minimum speed then you are a hazard on the roadway. To drive effectively on expressways you must be willing to cooperate with other drivers. They also have multiple lanes which means that when you change lanes you need to do so one lane at a time. You are driving on an expressway and you need to exit; the ramp you need to get off on is totally Mocked by traffic, preventing you from getting over.

Wiat should you do? Go to the next exit and come back up the expressway. If you get onto the wrong entrance ramp you should go ahead and get on the expressway and travel to the next exit, get off and turn around. It is NEVER permissible to back up an entrance ramp. The entrance lane has three parts; the ramp, the acceleration lane and the merging lane. When you are coming down the ramp you need to check for a gap to merge into by looking over your left shoulder as well as into your left mirror. If you are entering an

expressway on the entrance ramp and your way is blocked so that you can not merge onto the road you should avoid stopping.

Stopping on the ramp in the acceleration lane can cause a rear end collision. If you are driving in a group of car on an expressway you are driving in a “ wolf pack”. You are driving in the center lane of the expressway and you keep getting passed on the right and left, you should move into the right lane to avoid being a hazard. Highway hypnosis happens when you get lulled into staring while driving. If you stare for long enough you will put yourself to sleep. If you are taking a long trip on expressway you need to plan ahead for food, fuel and rest This will make your trip more enjoyable and safe.