



10 Habits **ZERO** Crashes!

No Crash is Acceptable!

In-Car Guides



Partnership for **EXPERT** Driving

Teacher • Teen • Parent

8th Edition

F R E D E R I K R . M O T T O L A

Partnership for **EXPERT** Driving In-Car Guides 8th Edition

For use with:

DVD: **10** Habits **Zero** Crashes

*Ten Space-Management Habits
A Gift for Life!*

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10 Habits Zero Crashes

No Crash is Acceptable!

When the key is put into the ignition, the car is like a tamed animal, ready to obey the driver's every command. However, without proper management of vision, motion control, and space, it can quickly turn into a monster. The trick is to know what makes the car turn into a monster, how to prevent it, and how to keep the monster caged.

“Caged” means “with constraints, to hold back, to have limitations.” Drivers need to know when to hold back the power of the vehicle and how to determine when it is at its limitation. This is the problem! Drivers don't always know the limitations of the vehicle, the limitations of the roadway, or their own limitations. It is very common to be at the edge of these limitations without having any negative consequences. The driver may do something that is not safe, but nothing happens. The driver gets positive feedback for wrongful behavior. When this happens frequently, it leads to bad habits. Then it's merely a matter of time and circumstance before the monster breaks out of the cage. It doesn't take any skill for a driver to speed while entering a curve, resulting in the car careening off the edge of the road and embedding itself into a tree. However, it takes considerable skills to constrain the power of the vehicle. If a driver fails to keep the monster caged it becomes difficult — sometimes impossible — to get it back into a controlled state.

No one wakes up believing that it is the start of the last day of their life. Yet, for more than 35,000 people each year, life ends on America's roadways. And each year, over 450,000 human beings have their quality of life drastically altered by permanent disabilities sustained during a car crash. These crashes are caused not only by teen drivers — they are caused by doctors, teachers, ministers, mothers, fathers, truck drivers, police officers, race car drivers, your friends, your relatives, drivers of all ages and of all educational backgrounds. The majority are good people who were suddenly confronted with a monstrous situation that was beyond their control.

A crash can be classified into one or more of these categories:

- The driver lacked awareness and failed to detect the potential crash.
- The limitation of the vehicle's traction control was exceeded.
- The driver failed to effectively use the vehicle's controls.
- The driver failed to detect and correct for others' wrongful actions.
- The driver performed a willful high-risk act of endangerment.

No driver training system will be able to prevent crashes from a driver intent on performing without regard to the consequences. Nothing short of a series of psychological consultations will help that individual. However, for drivers who want to achieve Habits for **Zero** Crashes, this program will help evaluate their driving style and serve as a guide to the development of the empowering mental skills of space management — skills that will give them a lifetime of **Zero** Crashes!

Message to Parents/Mentors

Everyone drives by habits, not by conscious actions. Many of the habits are caught through chance experiences. The techniques in this program provide teens with a structure for developing space management habits that not only eliminate their own errors, but also find, solve, and control the vehicle's space requirements to compensate for the wrongful actions of others. This program is designed to help teens become better than the average "experienced" driver.

How good is the "Experienced Driver?" If you take a look at the statistics listed in the Crash Pyramid you will see that every day of every week of every month there are nearly 100 "experienced" drivers killed on highways in the United States; and there are 1000 "experienced" drivers each day who receive life-altering injuries — some being in a coma for the rest of their life, some receiving spinal injuries making them paraplegics or quadriplegics, some receiving traumatic brain injuries, and a whole list of other injuries that affect the quality of life. Every day on our roadways over 1000 people climb to the top of the Crash Pyramid.

Most crashes are the result of failure to manage space. Two objects cannot occupy the same space at the same time; therefore a crash results. When there are two drivers involved in the crash, one has failed to manage space and the other was victimized by wrongful behavior — either one of the drivers could have had Habits for Zero Crashes to prevent that outcome.

Developing habits for best car control requires a well-designed educational plan, a dedicated and knowledgeable educator, an informed and highly motivated learner, and a concerned parent or mentor who can guide the teen's practice session to cultivate the ten habits. The In-Car Guides in this book present a scientifically structured plan that can be used as a blueprint for specific actions that need to be performed repeatedly, over a period of time, so that habits will form. Fostering teen awareness of traffic situations can result in performance that is better than that of the average driver.

The question is, "what House of Habits do you want your teen to build?" Would you want your teen to have better car control skills than the average driver? Would you want your teen to stay out of the Crash Pyramid? Is any crash acceptable? The role you play is most important in providing the teen with an opportunity to practice the many behavioral patterns that promote EXPERT Habits for Zero Crashes.

I wish you the greatest success in helping your teen build a House of Habits that achieves a lifetime of **ZERO** Crashes.

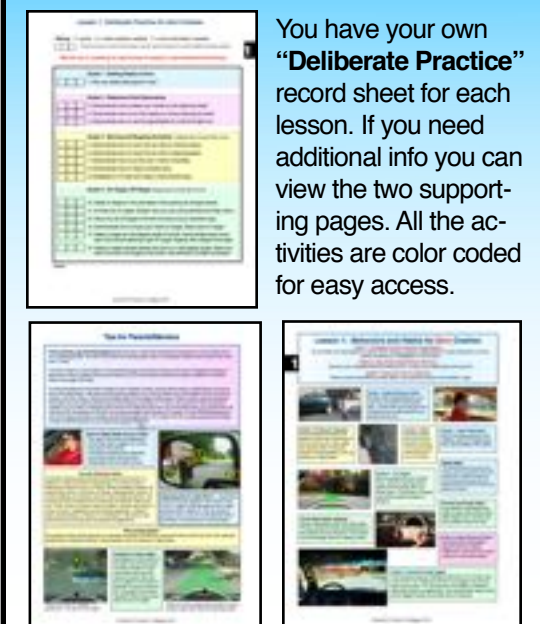
Professor Frederik R. Mottola

Suggestions for Parents/Mentors to Conduct Practice Session

Before conducting an In-Car Practice Session

The teen should complete all DVD activities for the Lesson — earning at least 80 percent of the total points available. This will prepare the mind for success.

1. Always wear safety belts; be relaxed and keep your voice calm.
2. Give your teen only the practice that is described in each lesson and behaviors from previous lessons.
3. For the first few sessions, start in parking lots or lightly traveled areas.
4. Sit in the front passenger seat with your left hand free to take over steering control if necessary.
5. Be clear with directions. Avoid using phrases like "Make a left, right here." When responding to a question, use the word "correct" instead of "right."
6. Give directions for turns well in advance. Give the location first, and then the action. Say "at the next intersection make a right turn." Think ahead to detect future problems.
7. Have a driving dialogue with your teen. Ask what he/she sees and what he will do well in advance of the maneuver you wish him to perform.
8. Be supportive and positive; this will promote success.
9. Feedback must be precise and immediate.
10. Be a good role model; your teen will respond to what is seen.
11. Learn your reference points from the right side of the car (explained in lesson two). Take a few minutes in a parking lot to learn how to steer the car from your "coaching" position.
12. Before doing any driving: On each practice session, begin by asking your teen to explain the meaning of two of the behaviors listed on the "Deliberate Practice" page. If the teen is uncertain, you can find correct information on the left side of your page and on the "Coach's" page (look for the same colored background as that of the question). When a correct response is made, give positive feedback. You should frequently ask the teen to explain or demonstrate how to perform something correctly. If the teen is not able to explain or demonstrate the behavioral patterns correctly, chances are that the in-car performance will not be effective, and in some situations it could be dangerous.



You have your own "Deliberate Practice" record sheet for each lesson. If you need additional info you can view the two supporting pages. All the activities are color coded for easy access.



Three ways for the Parent/Mentor to help the teen control the car.

1. The primary and most important method is to give clear and accurate directions with ample time for the teen to take a proper and safe action.

2. When the teen needs help steering the car, put your left hand at the steering wheel's three o'clock position to prevent erratic steering, or to steer the car back on course.

3. In an extreme emergency situation when you want to disengage the car's acceleration power, shift into neutral. To do so, place your left hand on top of the shifter, whether the shift is on the column or in the console, as shown in the photos. With your palm open (very important not to close your fist) and facing down, push forward toward the dashboard. The shift will automatically go into the neutral position. This action may be necessary if the teen gets into a panic situation and the foot freezes on to the accelerator pedal. Practice the process several times until you feel confident that the shift will stop in the neutral position.



Lesson 1 Tier One: Power Tools – House of Habits Foundation

Habit 1. Establish Driver-Vehicle Readiness

Be mentally and physically fit to drive; butt-in seating position; safety belts on; head restraints up; doors locked; windows up; headlights on at all times.

Habit 2. See Clear Path Before Moving

See that your intended Path-Of-Travel (POT) is clear; turn head before turning tires.

Habit 3. Keep the Car in Balance

Make smooth and effective starts, stops, and steering actions; use transition pegs.

1



Guide 1. Getting Ready to Drive

Be alert while approaching the car. Look into car before opening the door. Control the door swing to form a habit that will avoid hitting the car parked next to you.



Guide 3. Inching & Creeping

Inching exercise develops the ability to control the movement of the car inch by inch. Such skills are needed when moving the vehicle in close quarters, such as parking in a tight space.



Guide 3. Make Smooth Stops

During the last two seconds of braking, “curl” your toes back while keeping your foot on the brake.

Guide 1. Head Restraints

When the head restraint is adjustable, place the height at ear level, as illustrated in this photo.

Safety Belts

The vehicle should not be put into motion until all occupants have their safety belt on. Belts will keep you from being pulled away from the steering wheel and will minimize the effects of a crash.



Guide 4. On Target

See the target with your central vision. See the steering wheel aligned to the target with your fringe vision. To get back on target, look at the target and steer towards it.

Central and Fringe Vision

Look ahead to the target area, which is seen with central vision, while fringe vision monitors the car's position within the lane.

Turn Head before steering

Search intersection's left, front, right zones. The last movement of the Type to enter text head should be in the direction the car will travel. Turn head to look to the target,



Guide 4. Using Steering Wheel

- Use balanced hand position.
- Keep thumbs on outside.
- Right turns: use hand-over-hand.
- Left turns: use hand-to-hand.



Guide 4. Transition Pegs (Tpeg)

The transition peg for making a right turn is the inside rear-view mirror. For making a left turn, the Tpeg is the driver's side corner post. For moving turns the brake is released, steering wheel is straightened, and acceleration takes place at the Tpeg to keep the vehicle best in balance.

Lesson 1 Tips for Parents/Mentors

1

Prior to driving, use the DVD programs with your teen to best help advance the development of zero-crash behaviors into lifelong habits. This first in-car lesson should take place only in a parking lot. Speed never needs to be more than 10 mph.

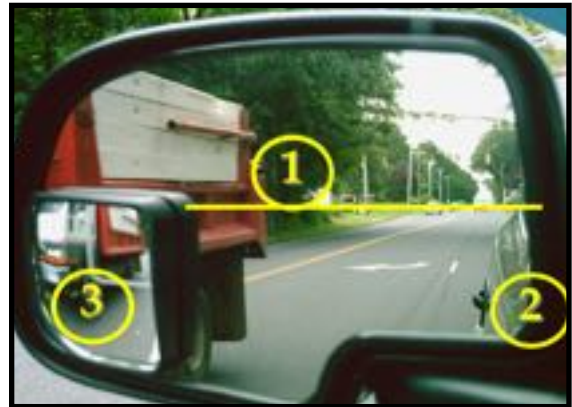
View the “Coach’s In-Car Guides” on the preceding page and note the behaviors the Coach checked as needing improvement. When possible, those are the areas the teen should continue to practice in addition to the items listed on the page to the right.

For best development of the teen’s habits for Zero Crashes, he/she must be able to have a mental picture of what actions are to take place. If the teen cannot properly explain to you how to perform any of the actions you ask him/her to perform, park the vehicle. Read the information listed on the pages of this lesson. If there is still a need for additional information you can skip the performance of that behavior and place a “?” mark in the column for more information needed. You can write a message to the Coach in the Note box and when you arrive back home you and the teen can view the DVD. All activities on the DVD are coded according to the Guides of a Lesson. For the MYDIQ Experiences, and for the Class Discussion activities, the title listed begins with a “G” number. The “G” number represents the Guide number. A G04-20 means it is an activity that supports Guide 04.



Value of Safety Belts during a Crash

- You stay in the driving compartment.
- You’re best able to regain car control.
- You stay in the vehicle.
- The body is slowed down gradually.
- You’re not thrown into the crash.
- Passengers will not crash into you.



Smooth Braking Habits

A smooth braking action should be the goal of any driver. In addition to giving comfort to passengers, a smooth style of braking can give the driver a highly refined feedback system for determining when a reduction in space management occurs. If routine braking consistently results in jerky braking actions, the driver becomes accustomed to that type of feeling. It feels normal. Then, when a surprise traffic situation requires the driver to make a harsh, unplanned, jerky braking response, it doesn’t seem extraordinary, so there is no feedback to the driver that something went wrong with the space management!

Adjusting Driver’s Side Mirror

1. Adjust tilt to have the horizon appear in the center of the mirror. 2. Adjust viewing angle to see a slight amount of the vehicle. 3. You can obtain a convex mirror, such as the SmartView Mirror illustrated, to increase your viewing angle.

Why Inching Speed?

The purpose of this inching exercise is to develop the ability to control the movement of the car inch by inch. Such skills are needed when moving the vehicle in close quarters, such as parking in a tight space.



Practice aiming for targets in a parking lot. The tree (B) is the target.

A target is a fixed object

that appears in the center of the path you intend to drive. To select a target, first decide where you want the vehicle to travel, then aim for an object in the center of that path. A piece of tape on the 12 position of the steering wheel helps fringe vision keep the car on target.



When on street, project central vision to see a target as fringe vision sees the steering wheel.

Lesson 1: Deliberate Practice for **Zero** Crashes

Rating: \checkmark = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

With the car in a parking lot, ask the teen to explain or demonstrate the following:

Guide 1 - Getting Ready to Drive					
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				1. Why are safety belts good to use?	
Guide 2 - Start Engine & Orientation					
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				2. Demonstrate how to place your hands on the steering wheel.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				3. Demonstrate how to turn the wipers on without looking at switch.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				4. Demonstrate how to use the signal lights for a left and right turn.	
Guide 3 - Moving and Stopping Smoothly (Repeat each at least three times)					
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				5. Demonstrate how to move the car with an inching motion.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				6. Demonstrate how to move the car with a creeping speed.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				7. Demonstrate how to put the car in motion smoothly.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				8. Demonstrate how to make a smooth stop.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				9. Accelerate to 10 mph and make a hard smooth stop.	
Guide 4 - On-Target, Off-Target (Repeat each at least three times)					
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				10. Select a Target on the perimeter of the parking lot straight ahead.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				11. Aim the car on target. Explain how you are using central and fringe vision.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				12. Move the car off target to the left and stop at your transition peg.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				13. Demonstrate how to keep your head on target. Steer back on target.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				14. Select a target at a 90-degree angle to the left. Demonstrate head movement and correct steering to get on target. Repeat with a target to the right.	
<table border="1"><tr><td> </td><td> </td><td> </td></tr></table>				15. Select a target straight ahead and one at a 180-degree angle. Make several turns from one target to the other. Pay attention to head movement.	

Notes:

Lesson 2 Tier One: Power Tools – House of Habits Foundation

Continue Deliberate Practice for Developing Habits 1, 2, 3

Habit 4: Use Reference Points

Know within 3-6" where your car is positioned to the roadway; know where the car's sides and front are in relation to intersections.

2



Guide 5. Front Even with Curb

When the front of the car is even with the curb, the passenger side mirror will appear to be aligned with the curb, as the photo to the left shows. This is the **Forward Position** for making a right turn. You are able to search deep to the target area from this position. Notice the shorter view in the photo to the right.



Front bumper 8' before curb.

Guide 6A. Look to Target Area

The photos above and to the right illustrate looking deep to the target area. This is how far one should search for a gap or hole before turning the steering wheel.



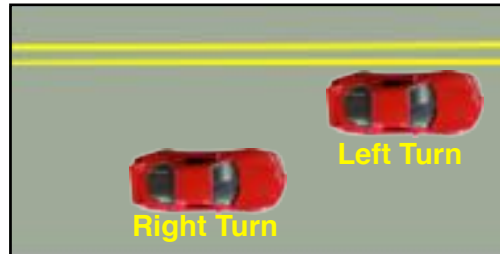
Searching left to target area.

Guide 6A. Gap and Hole

A "Gap" is an opening within a traffic cluster. A "Traffic Cluster" is a group of cars traveling close together. A "Hole" is a large space between traffic clusters.

Guide 6B. Legal stops

are made with the front of the car stopped at the stop line. **Smooth stops** are made by releasing slight pressure (curl the toes back) during the last second of stopping.



Side Positions for Turns

Guide 6A. Side Position

Side position for making a right turn: The car is 3 feet from the curb. The curb appears to be aligned with the middle of the right half of the car.

Guide 6B. Look for LOS-POTs

LOS-POT means Line-Of-Sight, Path-Of-Travel restrictions or blockages. See Lesson Three for more details about LOS-POTs.



Guide 6B. Target -Target Area

A target is a stationary object that appears in the center of the intended path of travel. The **Target Area** is the center of your travel lane where the target is located, and the space to the left and right of the target.

Once you learn to locate targets you can search to the Target Area without selecting a specific target.

Guide 8A. Passenger Exiting Vehicle

In addition to the behaviors that are listed on Guide 8, be aware of how secure the car is when passengers are exiting. Put the shift into the "park" position before anyone exits. This habit will prevent the vehicle from moving if your foot slips off the brake.

Guide 6B. Apply Brake for Turns

For turns from a stopped position, begin to take a braking action that is going to result in a complete and smooth stop. For moving turns, the brake is applied to reduce speed, and the foot will remain on the brake pedal until at the transition peg.

Guide 6B. Precision Turn Results

A precision turn uses the least amount of space from start to finish. It avoids wide and narrow turns and provides an escape path for others.



Lesson 2 Tips for Parents/Mentors

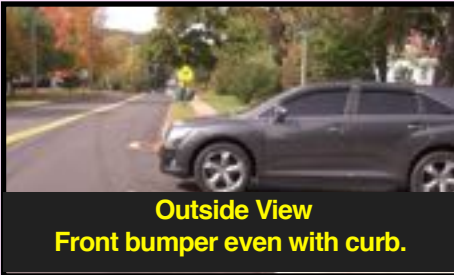
2

THE DRIVING SETTING: Begin to practice the activities in an off-street area. To allow ample time for the teen to consciously learn each step of making a turn, without the interference from traffic, it is best to begin in a parking lot. You may need to spend more than one session for the teen to successfully complete all the reference points. Once the teen understands where a reference point is for a maneuver, then have him/her use it while driving on street. Then continue to practice each step of a turn while driving in various on-street areas until the turns are made with accuracy and consistency.

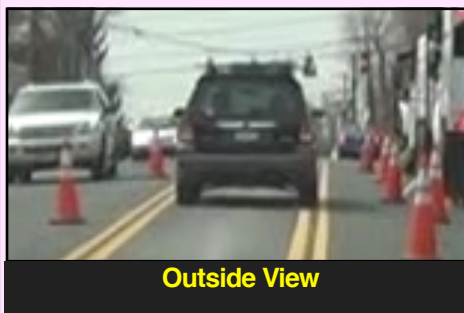
OBJECTIVES of this LESSON: There are several key behavioral patterns that the teen will be learning and practicing in this lesson. The teen has an opportunity to use reference points in this lesson. You will also have an opportunity to learn how to see and use reference points from your side of the vehicle. The teen should demonstrate precision maneuvering of the car, within 3-6 inches of accuracy, for each of the reference points described in this lesson. The teen should be able to position the car correctly three consecutive times for each reference point. Once reference points are understood and used accurately, the teen will apply them along with the concept of targeting to enter traffic flows and to make precision turns.



When the car is "On Target" the center of the steering wheel will be aligned with the center of the lane. When the car is "Off-Target" the driver must instantly do two things: 1. Turn head to the target. 2. Steer to the target.

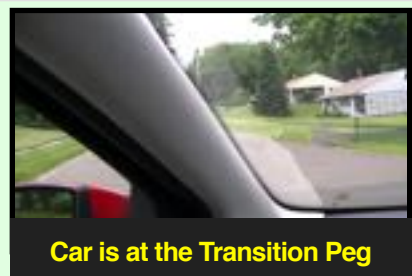


Front bumper even with curb. This position is called both the "Forward Position" for a right turn, and the "Safety Stop Position." Safety stop position gives you a 90-degree view deep into the intersection. Forward position is the placement to begin turning the steering wheel.



When learning how to use reference points it is helpful to place a piece of tape to mark where you see the left and right side reference points. The tapes makes it easy for your fringe vision to easily monitor where the tires are tracking. With this narrow work zone lane we can see both sides at the same time.

Transition Pegs Keep your head pointing toward the target, or target area. When making a left turn, straighten tires as the driver's side corner post becomes aligned with the target. For right turns straighten the tires when the rear view mirror appears in the center of your lane.



Lesson 2: Deliberate Practice for **Zero Crashes**

Rating: √ = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 1: **Establish Driver-Vehicle Readiness**

1. Demonstrate how to use shift selector and parking brake before exiting car.

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Review Habit 2: **See Path Before Putting Car in Motion**

2. Demonstrate how to turn head before turning steering for a right turn.

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Review Habit 3: **Keep the Car in Balance**

3. Explain where the transition peg is located for making a left and right turn.

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Guide 5 - Reference Discoveries (Repeat each at least three times)

4. Place the car's right tires 3-6 away from a line in the parking lot. Explain the reference point that you used.

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5. Place the front bumper even with a line. Explain the reference point used.

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6. Use a line and place the car in Lane Position 2, then in LP3.

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7. Use a parking line as a curb line. Demonstrate the side position for making a right turn, then a left turn. Explain the reference point used.

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Guide 6A - Entering Traffic (Repeat each at least three times)

8. Explain the difference between a "gap" and a "hole" in a traffic flow.

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9. With the car parked with a view of a traffic flow, identify where there are gaps and holes within the traffic flow.

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Guide 6B - Precision Turns (Note: When the teen is able to follow your directions in a safe and consistent manner, go to a lightly traveled residential area to make turns.)

10. Prepare to make a right turn. Demonstrate: 1. signal light and mirror usage, 2. proper side position, 3. smooth legal stop, and 4. the forward position.

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11. While stopped at the right turn forward position Demonstrate: 1. where the target will be, 2. how to search for a gap or hole, 3. how to turn head.

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12. Explain to me where the transition peg is for a right and left turn.

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13. Prepare to turn. Locate gap or hole, turn head to target.

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14. Repeat steps 10-13 at least ten times; then apply them for left turns.

Notes:

2

Lesson 3 Tier One: Power Tools – House of Habits Foundation

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4

Habit 5. Use MATRIX for Zone Control Search

Search to the Target Area (Matrix A Window); FIND LOS-POT (Line-Of-Sight, Path-Of-Travel) blockage; check other zones for additional information.

3

Guide 9. Tracking is the path the vehicle actually travels. Accuracy of tracking means placing the vehicle where you want it to go. You should be able to place the car into lane positions 1, 2 or 3 with consistent accuracy.



Get Speed Control Before Apex of Curve

To have accurate tracking you need to have control of speed before reaching the apex. The apex of the curve is the sharpest point, the peak, where the curve changes from entry to the curve to exiting the curve. It is the point of the curve that requires the most demand for the tires to grip the road. With excessive speed, you will not be capable of steering the car into the curve.

11C. Three-Point Turnabout

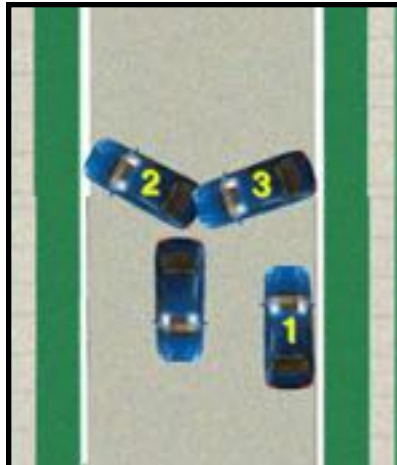
1. Evaluate The Risk • evaluate the traffic flow and LOS-POT blockages
2. Select Location, Signal right • pick a location with a legal and safe sight line
3. Stop 3-6" From Curb • use reference points
4. Check LOS-POTs • see others and be seen
5. The car is parked at right curb • Left Signal On
6. Blind Spot Check over the left shoulder
7. If Clear, Creep & Turn Wheel Fast
8. Smooth Speed Control
9. Stop Before Curb • use forward reference pt.
10. Foot On Brake, Shift To Reverse
11. Check Traffic Left, Right, Rear
12. Look Over Right Shoulder
13. Creep & Turn Wheel Fast
14. Stop Before Curb • use rear reference point
15. Foot On Brake, Shift To Drive
16. Check Intended Path of Travel
17. Check Left, Front, Right for open zones
18. When Clear, Move Car toward Target Area

Use Fringe Vision To See Reference Points

Your fringe vision enables you to see reference points to determine the position of the vehicle into the curve.

Use Central Vision into Curve

As the car gets closer to the curve, and it is time to select a new target, look through the curve with central vision until you see another straight-away for a new target.



LOS-POT Blockage is Created by Following

a truck with less than 4 seconds of space. The closer you are to any vehicle ahead, the more control you give them over the actions you will be taking. You are not able to make the decision to "go" or "slow."



Reference Point for Rear Bumper

Look over your left shoulder and see the line appear in the middle of the rear side window (see the arrows).



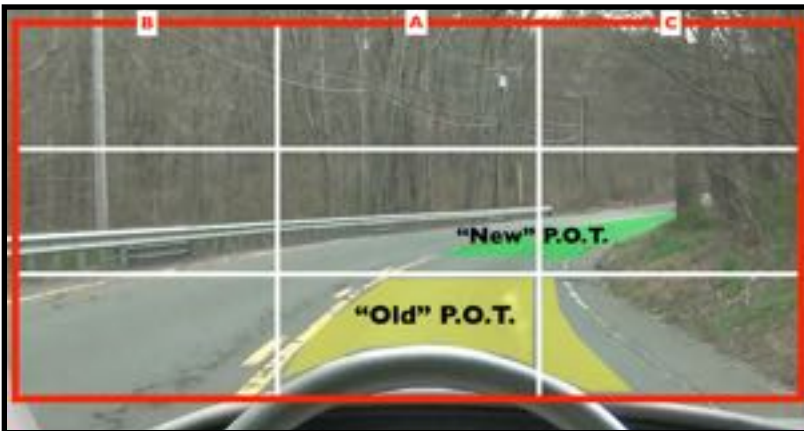
Lesson 3 Tips for Parents/Mentors

THE DRIVING SETTING: Begin with a simple environment and continue to increase the complexity. Use residential roadways, rural two and four lanes, and open secondary highways with two to four lanes of traffic. An off-street area should be used for Backing Introduction. For Turnabouts use a quiet residential street without children present. If there are children's toys in the area, do not conduct the turnabout there.

OBJECTIVES of this LESSON: The teen will be given the opportunity to position the vehicle accurately within a travel lane and to use the concept of targeting to identify potential and/or actual problems that affect the control of the path of travel. The teen should be able to describe the changes to his LOS-POT while operating in various traffic situations and classify what is seen as having, or not having, an effect upon the LOS (line-of-sight) and upon the POT (path-of-travel) of the vehicle's movement.

Backing Introduction: The teen should demonstrate the ability to perform the skills necessary for moving and tracking the car in reverse while operating in close quarters.

3



Evaluate Matrix A Window

On approach to curves, see what the condition of the A window will be when you arrive into the target area. Is it going to be a left or right curve? What lane position will be best for your approach? You want to have speed control.

Our old Path-Of-Travel is the path we have been occupying to get to our target area. Once the road begins to curve, and we are able to see "into" the Matrix B or C window, we then have a "new" Path-Of-Travel.

Evaluate Path Of Travel (POT)

Before making a turn, look into the turn to see to the target area for your new path of travel. The "path of travel" is the space you expect the vehicle will travel to arrive into the target area.



See New Target Area After Curve

Your central vision enables you to look through the curve for problems and evaluate the new Path of Travel you will take.



Turning the Wheel when Backing

When backing and taking a large turning action, use hand-over-hand, or hand-to-hand steering. When backing straight, hold the steering wheel with the left hand at the 12 position; turn the steering wheel from the top down in the direction you want the back of the car to go. Aim for a target.

Use Pivot Point To clear an object (mailbox) while backing and turning, use the passenger side rear window post as the pivot point, which is the moment for steering to take place.



Lesson 3: Deliberate Practice for **Zero Crashes**

Rating: √ = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 2: **See Path Before Putting Car in Motion**

1. Demonstrate how to use creeping and inching speed while backing.

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Review Habit 3: **Keep the Car in Balance**

2. Demonstrate use of Transition peg to make smooth, efficient turns.

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Review Habit 4: **Use Reference Points**

3. Demonstrate the placement of the car to its left and right limitations.

Guide 9 - Tracking and Path of Travel (Repeat each at least three times)

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4. Search the A window of Matrix for curves.

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5. Use central vision to look into the B or C window on approach to curves.

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6. Demonstrate precision tracking for making a tight right turn.

Guide 10 - Intro to LOS-POTs (Repeat each at least three times)

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7. Identify in B or C windows LOS Blockage caused by the Environment.

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8. Identify in B or C windows LOS Blockage caused by Vehicles.

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9. Identify in A window POT Blockage caused by the Environment.

Guide11A - Backing Introduction (Repeat each at least three times)

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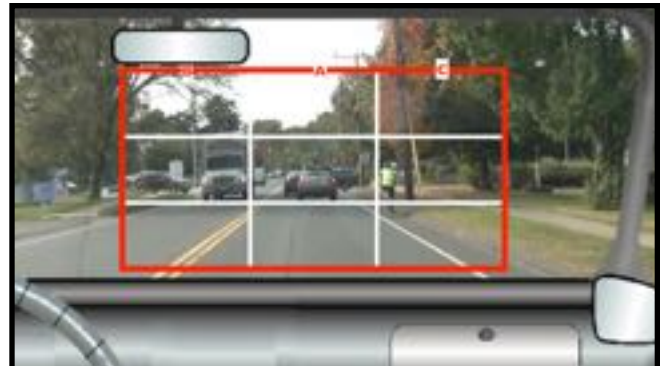
10. In a parking lot, select a target and back towards it using mirrors.

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11. In a parking lot, select a target, look over right shoulder, back to it.

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12. Select a target, use all three mirrors and look over shoulder to back to it.



Driver's view of Matrix (The same Matrix view.) **Passenger's view of Matrix**

Lesson 4 Tier Two: Building the House of Habits

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4

Habit 5. Use MATRIX for Zone Control Search

Search to the Target Area (Matrix A Window); FIND LOS-POT (Line-Of-Sight, Path-Of-Travel) blockage; check other zones for additional information.

Habit 6. Take Zone Control Actions

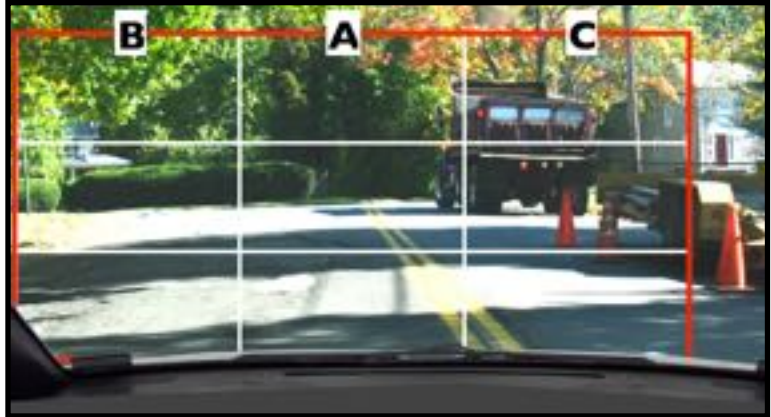
SOLVE LOS-POT; determine whether it is a "Go" or a "Slow" condition; CONTROL the 4-second danger zone, be prepared to make adjustments; know your Stopping Distance and your Point Of No Return.

Three Searching Ranges

FIND: The first searching range is the A Window of the Matrix, looking into the target area.

SOLVE: The second range is 15 seconds ahead of your car. This is the time to decide what is the best Lane Position, Speed Selection, and Communication to implement.

CONTROL: The third range is the 4-second immediate path the car is ready to occupy. This is the 4-second Danger Zone.



4



Using Side Fringe Vision After we identify with our central vision a zone change to the left or right of our path of travel, we can keep account of it with our side fringe vision. Our central vision will be free to make other zone checks. In this situation, the C Window is closed by the LOS-POT blockage created by the parked construction truck and trailer. Our central vision must continue to search the A and B Windows for vehicles turning the corner into our path.

- 1. Take A Guess For 15 Seconds Ahead** Take a guess: where do you think 15 seconds ahead is.
- 2. Count Off By Seconds** Pick out a marker (a road sign, a mailbox, a telephone pole) and then start counting 1001, 1002, 1003, etc., until the front of your car reaches that marker.
- 3. See How Accurate Your Guess Was** By taking a guess before counting you can best develop the ability to make accurate assessments of the 15 second searching range because you get instant feedback. If you do not take a guess, and merely count off the seconds, your mind is not engaged.
- 4. Redo At Different Speeds** After 15-20 trials of taking guesses, your accuracy will become consistent.

- 1. Before Parking** search for cars and pedestrians. Check Rear Zone. Locate space.
- 2. Side Position** Get at least 6-8 feet from parked cars.
- 3. Forward Position** is to seeing a target in the center of the space (see photo).
- 4. Creep and Turn Wheel Fast**
- 5. Line up with Target** If target is close, like a parking meter, it will shift toward the center of your car as you get closer to it.
- 6. Straighten Tires**
- 7. Stop at Forward Reference.**



The diagram shows the car at the Side and Forward Position, ready to turn the steering wheel.

To measure separation space from the vehicle ahead use the same process. Take a guess, pick a marker that the back of the car ahead passes. Count until your car arrives at the marker.



This photo shows a driver's view at the Forward Position for entering a perpendicular parking space.

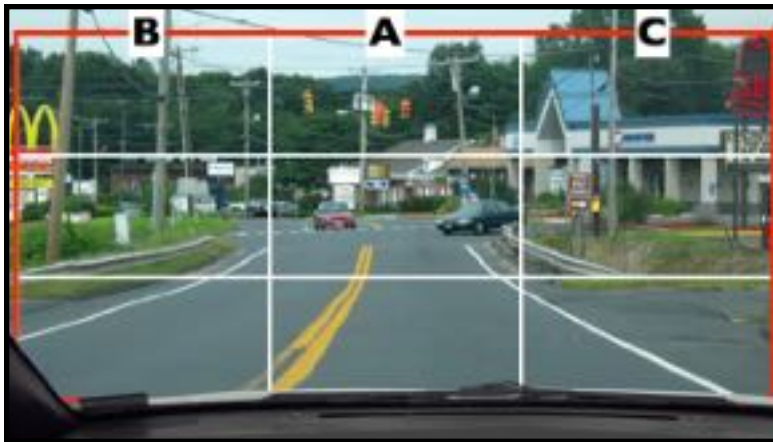
Lesson 4 Tips for Parents/Mentors

THE DRIVING SETTING: Use residential roadways, rural two and four lanes, urban areas, and open secondary highways with two to six lanes of traffic. As always, begin in the least complex roadway and traffic situations. As performance becomes consistently acceptable, increase the complexity of roadways.

OBJECTIVES of this LESSON: During this lesson the teen will get practice in how to be at least 15 seconds mentally ahead of the vehicle to FIND and control the four-second danger zone before it turns into an uncontrollable critical second. In order to FIND a problem the teen needs to know where to search and what to search for, and do it on a habitual level. That is what this lesson is all about. The use of the Matrix will help sort out where to look to FIND LOS-POT Critical Seconds, how to SOLVE them when they are 15 seconds away, and how to CONTROL them when they get within the 4-Second Danger Zone. The A, B, C windows of the Matrix should be classified as open or closed zones. This lesson gives an opportunity to apply the three steps of the Zone Control System. The teen's performance can only be as good as your expectations and the effort you make to provide an effective deliberate practice session.

PARKING: The teen should demonstrate the ability to park the car forward into a 45 degree angle parking space with smoothness and consistency. Angle parking is designed for head-in parking only. Recognize two-way and one-way traffic patterns. Ask the teen to explain the meaning of each step listed on Guide 15 Forward and Angle Parking.

4



Because we “see meaningful information” with the mind, and not with the eyes, it is important that we tell the eyes what to look for. Using the Zone Control System, we are telling the eyes to look for LOS-POT Blockages, critical seconds, and changes in any of our zones. We can then see a potential danger early enough to defuse it. The Matrix helps to compartmentalize a traffic scene into small segments that can be managed in a timely manner.

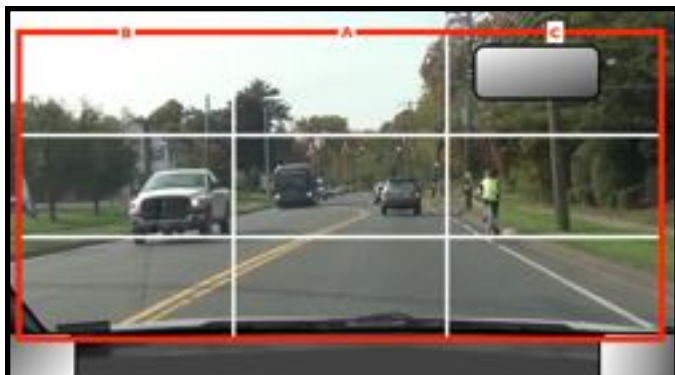
CONTROL: 4 Second Danger Zone

The 4-second Danger Zone is the space ahead within 4 seconds of travel time. It is very important that you acquire the skills to search all three ranges: the target area, the 15 second range, and the 4-second Danger Zone. To CONTROL the 4-second Danger Zone, update the conditions you originally detected when you were evaluating your path of travel. If you were to look only at your 4-second Danger Zone before searching to your target area, you would consume three or four seconds and not have time to FIND, SOLVE, and CONTROL the LOS-POT blockage.



A is Angle Parking. Only drive forward into the space. **B is Perpendicular Parking.** You can drive in forward or back into the space. **C is Parallel Parking.** Back into the space.

The first step of the Zone Control System is to FIND one LOS-POT blockage. That should turn your alert switch on. Then, SOLVE and CONTROL to manage the space. Repeat until the total process takes place by habit.



Check Opposite Zones. After you FIND a side zone change, in this case the bicyclist in the C Window, check the zone in the opposite direction, the B Window. Making a speed reduction will create an open B Window.

Lesson 4: Deliberate Practice for **Zero** Crashes

Rating: √ = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:.

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Review Habit 2: See Path Before Putting Car in Motion

1. Demonstrate turning your head before turning the steering wheel.

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Review Habit 3: Keep the Car in Balance

2. Demonstrate effective hand-over-hand and hand-to-hand steering.

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Review Habit 4: Use Reference Points

3. Demonstrate the forward position for a right turn.

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Review Habit 5: Use Matrix to Find LOS-POT Blockages

4. Demonstrate how to re-evaluate LOS-POTs as they enter B or C window.

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Guide 12 - Search to Target Area (Repeat each at least three times)

5. Use Matrix A window. Evaluate a "Go" or a "Slow" condition.

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6. Identify LOS-POT at 15-Second Range.

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7. Identify 4-Second danger zone.

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8. Demonstrate how to measure space in seconds.

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Guide 13 - Recognition of LOS-POTs (Repeat each at least three times)

9. Identify LOS-POT at 15-Second Range.

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10. FIND LOS-POT Critical Second in Matrix A window (Target Area).

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11. SOLVE to have control of Critical Second before it enters B or C window.

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12. CONTROL Critical Second when in B or C window.

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Guide 14 - Introduction to Zone Control (Repeat each at least three times)

13. When there is a closed front zone, check your rear zone.

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14. Select best speed choice for go or slow condition.

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15. When you have a closed C window, check for an open B window.

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Guide 15 - Angle Parking (Repeat each at least three times)

16. In a parking lot. Practice Forward Angle Parking (See Coach's Guide 15)
Demonstrate proper side position, explain reference point used.

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17. Demonstrate Forward Position for Angle Parking.

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18. Select Target, creep and turn onto target.

Notes:

Lesson 5 Tier Two: Building the House of Habits

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4, 5, 6

Habit 7. Control the Danger Square (Intersection)

FIND LOS-POT blockage, SOLVE and CONTROL it; check for clear left, front, right zones before entering danger square; time arrival into an open zone.

Habit 8. Get Rear Zone Control

When your foot goes on the brake, check the rearview mirror; before moving to either side check side view mirror; make a head and eyes movement in that direction.

Habit 10. Interact Courteously With Others

Send and receive communications in a timely and positive manner; empower yourself and reduce stress by being courteous.

Send Timely Messages

Communication must take place early enough for others to receive and act upon the signals you send.

Receive Timely Messages

You must read others' communications in a timely manner to gain control of the situation and not be surprised into making a high-risk response.



Which Scene Do You Want?

You are approaching a construction site on the interstate highway. You begin braking. When would you like to know that there is an approaching 18-wheeler closing your rear zone? The top photo would give you more time and space to get the driver to slow down.

Three Rear Zone Conditions

Open Rear Zone

No one closer than two seconds, and at least 12 seconds visual sight line.

Closed Rear Zone

A vehicle to the rear is less than two seconds away.

Unstable Rear Zone

An open or closed zone that has the potential to become worse.

Guide 16. Communication Techniques

Signal Lights

Signal lights should be used 5 seconds before making any change in speed or direction to give others enough time to see it and respond.

Headlights

Flashing headlights can warn oncoming vehicles of some danger they are driving into. Also, it can send a courteous message that you are allowing a vehicle to enter in front of you to cross or join a traffic flow.

Brake Lights

A tapping of the brake pedal flashes the brake lights to warn traffic to the rear of a slow-down or stop.

Horn

Use the horn in a short tapping manner rather than a long sustained blast.

Lane Position of Other Cars

By reading the position of other vehicles you can be tipped off to what is likely to happen.

Speed Control of Other Cars

A driver's speed can communicate to you what will be taking place. For example, if a car pulls out of a side road and doesn't accelerate in a normal brisk manner, you can expect that driver to make a turn soon.

Hand Signals

There are times when a hand signal communicates more effectively than the signal lights, such as if you're attempting to enter a long line of slow moving bumper-to-bumper traffic.

Tailgater Types

Charger: Excessive speed on approach; Competitive; Wants to pass you; May force an opportunity to pass.

One Pacer: Travels at one pace (below, at, or above speed limit); Gradual approach to your vehicle; Will close gap as you slow; Will stay back as you increase speed; Doesn't pass at first opportunity.

Habitual: Consistently tailgates; Will stay with you on speed increase; Highly distracted (talking to passenger, etc.); Most dangerous of all tailgaters.

When stopped, see the tires of the vehicle ahead touching the road.



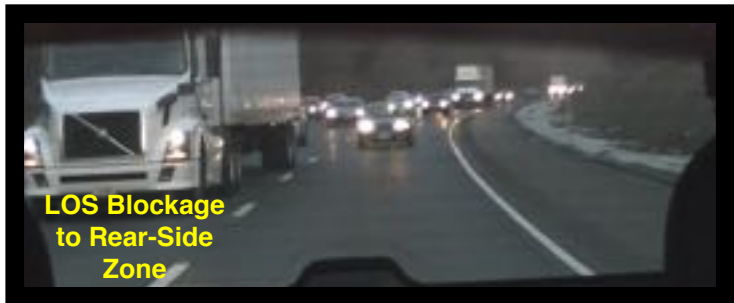
Lesson 5 Tips for Parents/Mentors

THE DRIVING SETTING: Use residential roadways, rural two and four lanes, urban areas, and open secondary highways with two to six lanes of traffic. As always, begin in the least complex roadway and traffic situations. As performance becomes consistently acceptable, increase the complexity of roadways.

OBJECTIVES of this LESSON: The major objective of this lesson is to prepare the teen to safely approach and travel through danger squares. Each year in the United States over 30 per cent of all crashes occur at danger squares, and at least a third of those are rear-end crashes. Therefore, this lesson places emphasis on approaching danger squares and rear zone control. Some key behavioral patterns include: identifying LOS-POT blockages, searching left, front, right zones, staggered, legal, safety stops, and managing three tailgater types. Many rear-end crashes can be avoided with the proper detection of a rear zone condition and effective use of communications. Several communication techniques will be experienced and practiced during this lesson.

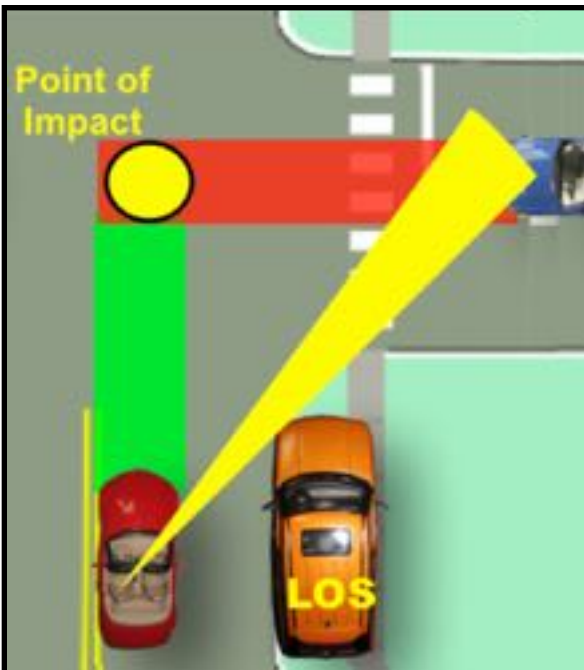
Guide 16. Be Courteous – Its a Gift to Yourself

There is so much stress that creeps into our lives unnecessarily. One way to minimize stress is to eliminate some of the competitive situations that occur while driving. If you set your goal to strive for one or two situations each day when you can be courteous to others, it can put you into a win-win situation. You help someone, which in turn gives you a good feeling, as compared to trying to compete with someone and losing. Spread some goodwill; be courteous!



5

A large vehicle in your rear zone creates an LOS blockage. Notice what you were not able to see when the truck was to your rear. To get the most accurate information always use outside mirrors before making a lane change.



Fast Closing Vehicles

When you see a fast-closing vehicle behind you, tap your brake pedal to flash the brake lights and get the driver's attention. The sooner you see the closing vehicle, the more time you will have to communicate, which is why you need to check the rear zone as soon as you see a reason to reduce your speed.



Make a 45-Degree Search when approaching a danger square that has an LOS blockage.

Staggered Stop is like a yield, you only need to stop if there is a reason to stop, such as leaving space for a bus turning.

Lesson 5: Deliberate Practice for **Zero** Crashes

Rating: \checkmark = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 4: **Use Reference Points**

1. Demonstrate use of reference points for LP1, LP2, LP3.

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Review Habit 5: **Use Matrix to Find LOS-POT Blockages**

2. Search the B and C Windows for LOS-POT Critical Seconds.

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Review Habit 6: **Turn Decisions into Zone Control Actions**

3. Evaluate A Window for a Go or Slow Condition. Get best speed control.

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Review Habit 7: **Control the Danger Square**

4. Before entering Danger Square, Find worst LOS-POT blockage.

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Guide 16 - Communications (Repeat each at least three times)

5. Demonstrate and Explain how and why signal lights are used before turning.

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6. Explain why signal light should be used 5 seconds before turning.

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7. Explain how a vehicle's lane position communicates a driver's intended action.

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8. Identify drivers who are performing in an aggressive, competitive manner.

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Guide 17 - Approach Danger Squares (Repeat each at least three times)

9. Demonstrate a 45-degree search while approaching a danger square.

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10. Demonstrate how to make a 90-degree search before entering the danger square. Explain why it is a good habit.

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11. Demonstrate "See Rear Tires" when stopped to the rear of a vehicle.

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Guide 18 - Rear Zone Control (Repeat each at least three times)

12. State the rear zone condition each time you check the rearview mirror.

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13. Identify which type tailgater you have: Charger, One pacer, Habitual.

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14. Identify which rear zone condition you have: Open, Closed, Unstable.

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Guide 19 - Stopping in Traffic (Repeat each at least three times)

15. See closed zone in Matrix A Window.

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16. Time arrival into an open zone.

Notes:

Lesson 6 Tier Two: Building the House of Habits

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4, 5, 6,7, 8, 10



Guide 20. Four Searches at a green light waiting to turn. Enter no more than $\frac{1}{4}$ way into intersection, **but only if you are certain you will be able to leave when the light changes**. 1. Check **REAR** for Unstable Zone of fast closing traffic and continue monitoring until there are at least two vehicles stopped in back of you. 2. Look for a **GAP** to enter in the traffic flow. 3. See an open turning **PATH** you want to enter. 4. See the **LIGHT** changing to yellow; look to see if oncoming traffic is stopping. If able, complete your turn without delay.

Some States will not allow drivers to wait in the intersection because drivers that fail to clear the intersection create traffic jams for crossing vehicles. The four checks give you the best preparation to clear the intersection in a timely manner.



See Red Lights as a closed front zone — a "slow" condition. As soon as the red light is detected, check the rear zone and make an attempt to arrive into a green traffic light with no stopped traffic.

Points of Conflict

When approaching and entering a danger square, evaluate the locations that are most likely to create a point of conflict.



Outside Mirror Adjustment and Why

Adjust the outside mirrors to see a slight amount of the side of the car. This will allow you to see if there is a vehicle to your rear attempting to jump into the gap you want to enter. The effective use of the outside mirror is essential when entering and leaving a roundabout. The high volume of vehicles moving from inside to outside lanes creates constant changes you cannot see in the rearview mirror.



Roundabout Lane Usage: When entering, yield to any vehicle in the roundabout. When there is a gap or hole, enter in the outside lane. Know which exit you will be taking. If you are going to take the first exit, stay in the outside lane. If you are not taking the first exit, move to the inside lane. In our photo, if you are going to take the West exit you will stay in the inside lane until you pass the North exit, at which time you will check your passenger side mirror for a clear lane change into the outside lane.

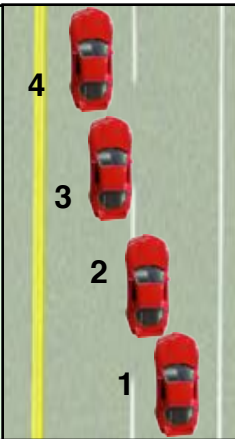
Lesson 6 Tips for Parents/Mentors

THE DRIVING SETTING: Use residential roadways, rural two and four lanes, urban areas, and open secondary highways with two to six lanes of traffic. For practice of Guide 23 use an off-street training area. Use an available parking space or mark a 10 by 18 foot area with traffic cones or carton boxes to represent a parking space. After practice, use a parking space with cars to both sides. If only one car is available to park next to, let the car be on the passenger side as the car is backed into the space.

OBJECTIVES of this LESSON: One of the major objectives of this lesson is to avoid unnecessary acceleration into closed zones. Timing of traffic lights gives the driver an opportunity to save fuel and increase awareness of traffic events, which leads to good space management. The teen should demonstrate the ability to visualize a “go” or “slow” condition in the Matrix’s A Window. Seeing a red traffic light early enough to be able to reduce speed gradually for several seconds will give the red light time to change to green and eliminate the need for you to stop. The most gas-consuming phase of driving is putting the vehicle into motion from a stopped position. Every traffic light one can avoid stopping at results in reduced stress, fuel conservation, and a reduction of exposure to rear-end crashes.

Four Key Steps for Precision Lane Change

1. Use outside mirror to find potential gap or hole.
2. Signal, move into LP2, view outside mirror, locate gap, check blind area.
3. MOST IMPORTANT, move only into LP3 to provide an escape path for speeders.
4. Check rearview mirror, get proper speed, take LP1.



Visualize Matrix Windows

The power of the Matrix is it helps to quickly detect present and future elements within a traffic scene in a timely manner — giving you best control of a LOS-POT’s critical second.



Find, Solve, Control the Critical Seconds. Every LOS-POT blockage has a moment when a trap could be sprung, creating drastic change to the management of your vehicle’s POT. The more practice gained in using the Matrix, the less likely you will be victimized.

6



Driver’s body is in center of space.



45-target is aligned to edge of mirror.

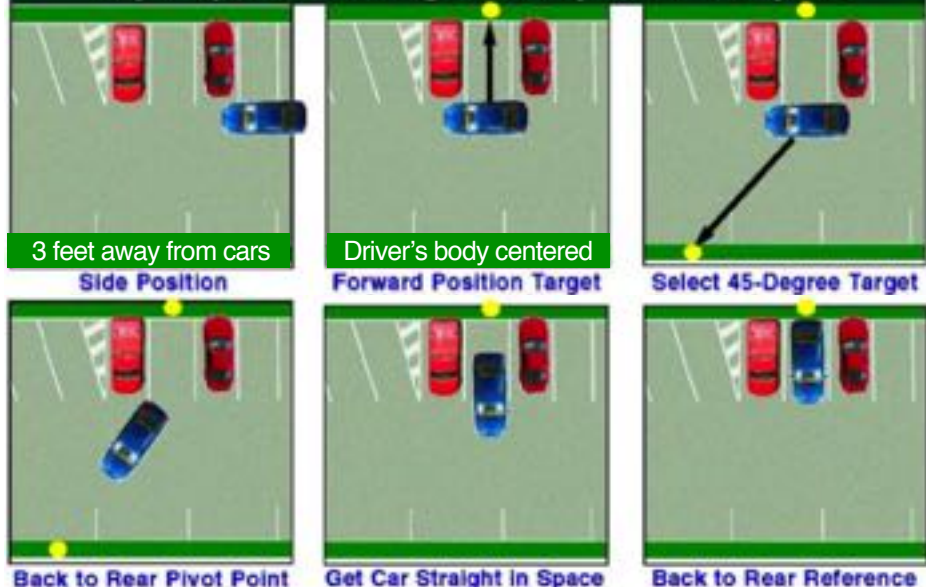


Pivot Point
Side of the parked car is in rear pivot point. Turn the steering to enter space.

Guide 23. Backing into Space

1. Get 3-4 feet of side space.
2. Line body with center of space.
3. Select a 45-degree forward target as shown in diagram.
4. Creeping speed, turn the steering wheel fast to get to 45-degree target.
5. Check to see if back of car is aligned with parking space.
6. Back to pivot point, turn tires.
7. Straighten tires, stop at ref. point.

Key Steps for Backing Into Perpendicular Space



Lesson 6: Deliberate Practice for **Zero** Crashes

Rating: \checkmark = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 5: **Use Matrix to Find LOS-POT Blockages**

1. Demonstrate how to find LOS-POT Blockages in the Matrix A Window.

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Review Habit 6: **Turn Decisions into Zone Control Actions**

2. Demonstrate where your PONR is when approaching a green traffic light.

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Review Habit 7: **Control the Danger Square**

3. Locate LOS-POT Blockages while approaching Danger Squares.

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Review Habit 8: **Get Rear Zone Control**

4. Demonstrate how to evaluate and control rear zone when stopping in traffic.

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Review Habit 10: **Interact Courteously with Others**

5. Find at least three situations where you can be courteous to others.

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Guide 20 Traffic Light Timing (Repeat each at least three times)

6. Use A Window of the Matrix to manage "Go" or "Slow" approach to lights.

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7. Demonstrate how to do a 45-degree search on approaches to green lights.

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8. Demonstrate a 90-degree search before moving when the light turns green.

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Guide 21 - Entering Exiting Roundabouts (Repeat each at least three times)

9. Explain how you would yield to other traffic and the direction you will turn.

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10. Demonstrate how to use your outside mirror when exiting the roundabout.

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Guide 22 - Precision Lane Change (Repeat each at least three times)

11. Demonstrate how to use outside mirrors to find a gap or hole to enter.

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12. Demonstrate when and how to use the signal indicator for a lane change.

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13. Demonstrate the use of Lane Positions for making a precision lane change.

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Guide 23 - Backing into Perpendicular Space (Repeat at least three times)

14. Use the Coach's Guide 23 and perform each step, one at a time. When one step is performed incorrectly, start over again at step one.

Notes:

Lesson 7 Tier Two: Building the House of Habits

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4, 5, 6, 7, 8, 10

Habit 9. Get Control With Vehicle in Front

FIND stopped or slow vehicle, close in gradually; when traveling at same speed, keep 4 seconds of separation space; stopped behind a vehicle, see its rear tires touching the road.

Empower Yourself With 4 Seconds

- You have time to become conscious of moments when you are closing in too fast on stopped vehicles.
- Your eyes can search beyond the vehicle in front.
- You remove the front vehicle's power to victimize you.
- Eliminate, or minimize, surprises from the actions of the first vehicle.
- Removes the stress that occurs when you are surprised by sudden braking actions of vehicles ahead.
- Makes you more conscious of the disadvantages of keeping a lesser amount of time.



Which scene would you want to be in as the bus applies its brakes? You are in control in the top scene. In the bottom scene, the bus controls your actions. The travel speed is exactly the same in both scenes.



Practice Commentary for Increased Attention & Control

You do not need to speak out loud.

1. Look to your A window and ask yourself, "do I have a go or slow?"
2. Ask, "are there LOS-POTs?" Where are the "Critical Seconds?"
3. When A Window is closed: Adjust Speed. Evaluate Rear Zone.
4. When B and/or C Window will have LOS-POT, get best Speed Selection, LP and Communication.
5. Control Critical Second within the Four-Second Danger Zone.
6. Full attention at Critical Second as the A, B, or C Window becomes full.

Stay Out of the Inside Lane Except to Pass

While acquiring the 4-second habit, avoid traveling in the inside lanes (fast lanes) of highways. The most aggressive drivers are usually found there. Whatever speed you travel at, there will always be a vehicle on your tail wanting you to go faster.

Adjust Front Closure Rate

Closure occurs when your vehicle is traveling faster than the vehicle ahead of you. Closure rate is how fast you gain on the vehicle in front. It is best to acquire a habit that will make you sensitive to any closure of space. The habit of keeping more space between you and the vehicle ahead will allow you to become more sensitive when there is a closure of space. If you have 4 seconds of separation space as your habit, then when you get within 5 seconds of the vehicle you are gaining on, an alert will sound within you to say you are approaching your danger zone.



At which curve are there more single vehicle crashes?



More crashes occur at slight curves in the road because drivers fail to see a need to reduce speed.

Lesson 7 Tips for Parents/Mentors

THE DRIVING SETTING: Use residential roadways, rural two and four lanes, urban areas, and open secondary highways with two to six lanes of traffic.

OBJECTIVES of this LESSON: This lesson presents a set of life-saving behavioral patterns that can help a teen avoid the major cause of single vehicle fatalities, which is when a teen drives with excessive speed into a curve and loses control of the vehicle. No other vehicle is involved. The teen makes a wrong decision that cannot be undone. This lesson helps the teen respond effectively to laws, signs, signals and markings, and learn what makes speed excessive on an approach to a curve. The teen learns how to reduce speed while there is still adequate time before entering the curve to maintain car control. Use of vision, lane positioning and speed control are practiced.

A second type of crash that teens are involved in is rear-ending a vehicle. This lesson provides practice in how to keep 4-seconds of separation time from the vehicles ahead. Separation space can put the teen in control and eliminate surprises from others' wrongful actions.

Point-Of-No-Return (PONR) is that point at which you are not able to stop without entering the "critical second."

Yellow Changing Lights
The purpose of a yellow light is to clear the intersection. By knowing where your point of no return is, you'll see the light changing and be able to make your best decision.



Right-of-Way Laws

- **Must yield to pedestrians** at all times, especially when a pedestrian is in crosswalk with no traffic light.
- **When you are turning left turn**, you must yield to oncoming traffic.
- **Drivers on a minor road** must yield to any vehicle on a main road.
- **On two equal roads**, drivers coming from the left must yield to vehicles coming at the same time from the right.
- **At a 4-way stop sign**, the driver reaching the intersection first gets to go first. When arrival is equal, the driver on the left yields to car on right.
- **At Roundabouts**, entering vehicles must yield to vehicles that are in the roundabout.

- **See Curve In A Window** for best speed management.
- **See a Left or Right Curve** to get an effective drive line curve.
- **See Radius Of Curve** to determine an effective speed selection. More crashes occur at slightly curved roads, rather than very sharp curves, because drivers don't see them as a danger to their control.

• Test Tire-Road Grip
When roads are wet from rain, dew, snow, ice, apply the brakes to test the tire-road grip before entering the curve. If the tires slide you want "Slide Space" and speed reduction on the straightaway.

• Control Speed Before Apex
The most demand placed upon the grip of your tires to the road comes at the Apex. Reducing speed before the Apex will give you best control.

Red Light and Right Turn On Red
When you see a red light, reduce speed to time your arrival into an open zone with a green light.
When making a right turn with a red light, make a complete stop and check the intersection for open zones before entering.
When making a left or right turn with a green light, turn your head before turning your tires to look for pedestrians that may be in the crosswalk.



For Speed Control in Curve, See 4 Seconds

Keep 4 seconds of road visible. When you have less than 4 seconds of road visible, brake before going into the curve to see more road. When braking, hold partial brake pressure until you're at the transition peg.

Find Oncoming Traffic - Get Best Lane Position

If there are no oncoming vehicles, the approach into a right curve could be in lane position two. If there is oncoming traffic, take lane position one. For a left curve, the approach begins in LP3 if the right-front zone is open. If closed, take LP1.

Look into the curve much as you look into a turn, by turning your head before you turn the steering wheel. Attempt to see if your exiting path is open. For right or left curves, exit in lane position one.
Look for the option of moving into lane position three if there is a problem caused by oncoming traffic in the left-front zone.

Lesson 7: Deliberate Practice for Zero Crashes

Rating: \checkmark = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 4: **Use Reference Points**

1. Approaching a curve, demonstrate use of fringe vision for Lane Positions.

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Review Habit 6: **Turn Decisions into Zone Control Actions**

2. With open B window, use LP2 on approach to right curve, exit in LP1.

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Review Habit 6: **Turn Decisions into Zone Control Actions**

3. With open C window, use LP3 on approach to left curve, exit in LP1.

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Review Habit 3: **Keep the Car in Balance**

4. Use transition peg to make a smooth transfer from brake to gas exiting curve.

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Review Habit 8: **Get Rear Zone Control**

5. Before moving the vehicle to either side, check the outside mirror.

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Guide 24 (Repeat each at least three times)

6. Find a Warning Sign. Explain what actions you should be prepared to take.

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7. Use Warning sign as a cue to: Check rear, Find LOS-POT, Find Escape Path.

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Guide 25 (Repeat each at least three times)

8. See Curve in A Window. Test road surface for Tire Grip.

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9. As the Curve enters B or C Window, direct your vision in that Window.

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10. Explain "slide space" and demonstrate how to use it.

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Guide 26 - Habit 9 (Repeat each at least three times)

11. Demonstrate how to measure space from your car to the vehicle ahead.

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12. Demonstrate a controlled Closure Rate on approach to vehicle ahead.

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13. Demonstrate 4-seconds of separation space and explain its value.

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Guide 27 (Repeat each at least three times)

14. Look in the A Window for a Critical Second to be controlled.

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15. Evaluate LOS-POT in the B or C Present Window.

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16. Evaluate the A, B, and C windows. Demonstrate and explain the best Speed, Lane Position, Communication.

Notes:

Lesson 8 Tier Three: Living in the House of Habits

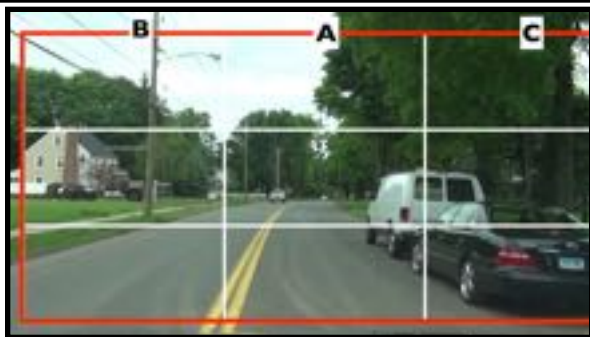
Continue Deliberate Practice for Developing Habits 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Deliberate Practice grows behavior into habit. You can practice use of the Selective Attention Matrix each day as a driver, or as a passenger, to increase the control you have over your intended path of travel. The series of photos below illustrate that you do not need to learn how to handle complex traffic situations by being in heavy traffic. What makes for effective practice is having a routine that you use and use and use until it becomes habit. Use the Matrix!

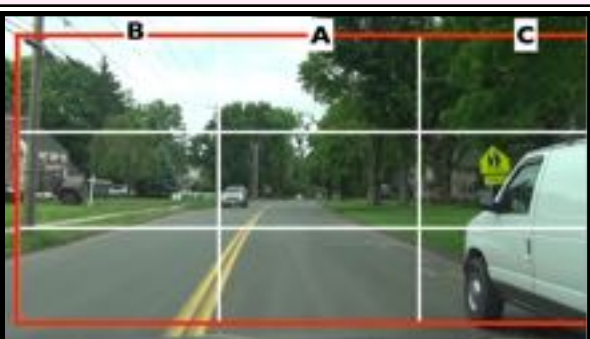
Guide 28B Control Critical Second



You Find in your A window that you will have parked vehicles creating an LOS-POT Blockage in your C window. There is no timing problem with the oncoming car.



This is a Critical Second. Vehicles or people could enter your POT. You manage it by taking LP2 and being alert.



This is another Critical Second. You can do a Ground Viewing Search and a 45-Degree Search for control.

8



Guide 30: Parallel Parking

1. Rear Zone Control, Signal

Check for cars to the rear. Tap brake lights and put right signal on to warn rear traffic of slow-down.

2. Speed Control

Avoid making fast stops.

3. Locate Parking Space

Search for an available and acceptable parking space.

4. Side Position - 3 Feet from parked cars

Use reference point to ground level.

5. Stop Even With Space

While stopped even with the space, let traffic to the rear know that you are planning to park. Evaluate the parking space for adequate size and see that there are no objects that you might drive over, or back into.

6. Go Forward

Pull forward beyond the pivot point.

7. Back to Rear Pivot Point

Back to the rear pivot point, which conceals the left-rear corner of the parked vehicle, to align rear bumpers.

8. Check Left-Front Corner Swing

Check outside mirror to be certain that the swing of the car will not move into the path of any passing cars.

9. Creeping Speed, Turn Wheel Fully to the right (toward curb)

10. Move Car to 45-degree Angle

When the car is at a 45 degree angle, the curb-side rear corner of the parked car should appear aligned with your body.

11. Creep and Time Turning to Clear Front Car

Turn the wheel to the left (away from curb). The closer your front bumper gets to the front car, the tighter space you can park in.

12. Straighten Tires, Center Car

Straighten tires to center car. When parked on an upgrade or downgrade, turn tires accordingly.

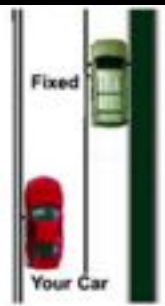
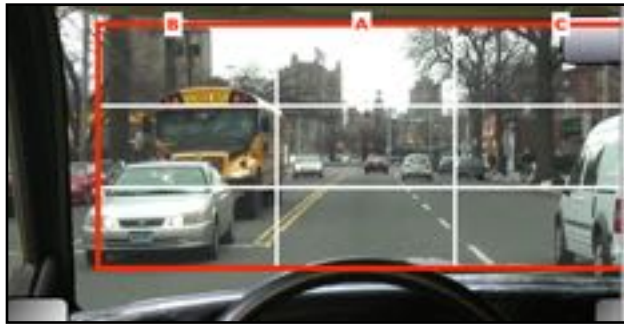
Lesson 8 Tips for Parents/Mentors

THE DRIVING SETTING: Use residential roadways, rural two and four lanes, urban areas, and open secondary highways with two to six lanes of traffic. For Guide 29 use an off-street area, such as a parking lot with an upgrade, to begin with. Then use lightly traveled roadways with upgrades where it will be safe to move to the side of the road. Practice of parallel parking should begin in a lightly traveled parking lot.

OBJECTIVES of this LESSON: This lesson becomes a test situation for the teen to see how well space is being managed. When there are inconsistent or wrongful actions, go back to previous guides to work more on those building blocks. This lesson provides opportunity to go back to all previous guides to take inventory on which weak areas need additional practice.


Parking: In a parking lot, set up a parking space that measures six feet wide by twenty-four feet long. You can use a stack of carton boxes to represent the rear corners of the front parked car. Once the teen performs successfully, use one car (the front car) in an on-street residential area; then use two cars. After consistency is achieved with two cars in a lightly traveled area, you can use urban streets with heavier traffic flows. This task, parallel parking, gives the teen an opportunity to apply the behavioral patterns learned from the previous backing and parking guides to a new situation.

1. Identify Fixed Side Zone Changes
A fixed zone change is one that is not moving and is not likely to move before you reach its location.


In this photo we have LOS-POT blockages in our B and C windows. We take LP1 and time for an open B window.

2. Identify Moving Side Zone Changes
An example of a moving side zone change is an oncoming vehicle. By changing your speed, you can alter the location where you pass each other.




In this photo we are at a Critical Second with a closed C window. Our foot covers the brake, we take LP2 and use a Ground Viewing search. (see below)

3. Time Left Zone With Fixed Right Zone
To time the left zone — which is the moving zone change — you will pass the moving car and the fixed parked car separately.




We have a bicyclist that will be in our C window. We let the truck pass us to clear our B window. We will time oncoming cars for an open "B" before we pass the bicyclist.

8

Guide 28 Timing Side Zones: Evaluate a zone change as fixed or moving. Set the standard to keep at least one of the side zones open. Get the best timing to improve the situation with as much empty space as possible. To have success you must recognize situations at least 15 seconds ahead. When you see a closed side zone decide how to best control the situation. Then, evaluate whether you have the best speed control, lane positioning, and communication.

Ground Viewing Habit

1. Look under front of truck to detect someone coming into your POT.
2. With tires turned the truck can enter your POT.
3. Check truck's mirror to see if the driver is ready to open his door.

Lesson 8: Deliberate Practice for Zero Crashes

Rating: √ = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 2: **See Path Before Putting Car in Motion**

1. Demonstrate Forward Position and turning of head for left turns.

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Review Habit 3: **Keep the Car in Balance**

2. Demonstrate consistent performance of smooth starts and stops.

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Review Habit 4: **Use Reference Points**

3. Demonstrate Side Position for making left turns.

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Review Habit 5: **Use Matrix to Find LOS-POT Blockages**

4. Demonstrate how to keep four seconds of separation space from car ahead.

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Review Habit 6: **Turn Decisions into Zone Control Actions**

5. Demonstrate how to make adjustments at the Critical Second.

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Review Habit 7: **Control the Danger Square**

6. When the traffic light is red, time arrival into a green light with traffic moving.

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Review Habit 8: **Get Rear Zone Control**

7. Demonstrate when foot goes on brake, eyes go into rearview mirror.

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Guide 28 (Repeat each at least three times)

8. Identify a Fixed LOS-POT in the C Window, time arrival for open B Window.

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9. Identify a Moving LOS-POT in the B Window, time arrival for open C window.

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10. With closed B and C Windows, adjust speed and take LP1.

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11. Demonstrate how to plan ahead for best control of B and C Windows.

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Guide 30 - (Note: See information on Guide 30 for sequence. Finding an on-street parking space may be difficult. See "Tip" on left page for how to practice in a parking lot).

12. Demonstrate correct side position and explain reference point being used.

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13. Demonstrate stopping even with space.

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14. Get car's rear bumper lined up with the front car's rear bumper. Explain how the "Pivot Point" reference is used.

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15. Check left-front corner swing. Use creeping speed. Turn wheel fully.

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16. Move car to 45-degree angle. Creep and time turning to clear front car.

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17. Straighten tires. Center car in space.

Notes:

Lesson 9 Tier Three: Living in the House of Habits

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Ten Habits Zero Crashes for Three Stages of Car Control

Prevention Stage

There are three stages of car control. The easiest and best stage to have opportunity for successful car control is the prevention stage. This is the stage where the ten habits provide automatic protection. For example, while approaching a curve you: See it 30 seconds ahead in your target area, reduce your speed, select good lane positioning on your approach, look into the curve, use braking and acceleration controls effectively and all ten habits are working for you.



Detection Stage

The detection stage gives a warning that the driver is putting the car into harm's way. For example, while approaching a curve during rainy conditions, the driver gets distracted while putting the wipers on and speed is too fast. But the driver's good four-second habit easily detects a violation in the danger zone. The driver has time to brake the car while still going straight, and while within the traction capabilities of the tire's grip to the road.



Correction Stage

The driver goes too fast into the curve and fails to reduce speed until the car begins to slide to the outside of the curve. The monster is out of the cage. The driver now has less than one second to take corrective actions to get the car back in control. *What is easier, to keep the car from becoming a monster, or to get a raging monster back into its cage?*



The control of the car is dependent upon **four tire patches contacting the road**. Each patch is about the size of your hand. Whether they are managed or mismanaged depends upon your habits. Too much speed, too much braking, too much steering all occurring at the same time results in an out-of-control situation. The vehicle is in an out-of-balance condition.

The tire patches leave contact with the road, causing the monster to break out of its cage.

The Problem

A driver never knows of all of the risk factors that are likely to combine within a fraction of a second, calling for a demand of more traction. If only one or two risk factors are present they are not likely to result in a crash. It



is when there are several risk factors occurring at the same time that the monster gets fed.

The Solution

We need to eliminate those risk factors contributed by our performance and acquire a system of habits that can serve to automatically give low-risk behavioral patterns that will provide protection against an over-accumulation of risk factors. **A driver needs the ten empowering habits there, like an insurance policy, to prevent the monster from breaking out of the cage.**

Ten EXPERT Habits Work for You to Meet Winter Driving Demands

- You will have vehicle readiness by clearing all snow and ice (LOS blockages) off your car before driving.
- You will plan for turns and curves early by applying the brake at least five seconds before beginning to turn the steering wheel.
- Once the brake is applied, you will keep your foot on the brake with partial pressure until at your transition peg; then accelerate.
- When you get within the 4-second danger zone of an intersection you will search the left, front and right zones to be sure space is open. When it's not, a reduction in speed will take place.
- When entering a traffic flow at an intersection, a search deep to the left, front, and right zones, for a hole or gap, will give you extra time that is needed to get moving when there is reduced traction.
- When stopping to the rear of a car at traffic lights and other situations, you will stop to see its rear tires, which will give you sliding room.
- When moving with a car in front, you'll keep at least 4 seconds of space, which will prevent you from crashing into skidding cars ahead of you.
- Effective mirror usage will prevent skidding while lane changing.
- If a skid does occur, your eyes, mind, and hands will have as habit the behavior of steering toward your target area, which is the single most important skill needed to regain car control. Your foot stays off the pedals.

Lesson 9 Tips for Parents/Mentors

THE DRIVING SETTING: Nighttime conditions should exist for some of the practice sessions for this lesson. Pay attention to whether there is a full moon or a new moon. Illumination from a full moon is totally different from the reduced light of a new moon. Use all types of roadways. For Guide 32 begin with four-lane highways with two lanes going in the same direction. Limited access highways may then be used. However, first refer to Lesson's Ten Guide 34: "Getting On and Off Highways." After skills are developed use open secondary highways with two to six lanes of traffic.

OBJECTIVES of this LESSON: This lesson combines three high-risk situations: driving at night, passing other vehicles and coping with vehicle failures. In order for the teen to be successful in this lesson it is necessary that the behavioral patterns from Lessons in Tier One and Two have been successfully performed. If there are weak areas of performance, go back to that Lesson for additional practice. Night driving for teens creates additional problems due to visibility limitations, driver drowsiness, aimless "social driving," and the change in vehicle balance with passengers in the car.



Search Beyond Your Headlights

In this photo, the circled area shows a red light and headlights of approaching vehicles.

Searching at Night

- Look at least 15 seconds beyond range of headlights.
- Look To Target Area For Clues that will tell you if it is open or closed. Evaluate your path of travel.
- Use High Beams when: no cars are passing; no vehicles are ahead; there are no oncoming cars; not in the city.
- Glance To Right to avoid glare from oncoming cars.
- Look For Cars Without Headlights entering from gas stations and other illuminated parking areas.
- See Curves and Intersections Early (in your target area), to know what decisions you will need to make.
- Look for Pedestrian Locations. Use association skills to anticipate where pedestrians may enter your path — you see a mid-block marked crosswalk, look for pedestrians.

Practice Guide 32B Passing "Red Truck" There will be few opportunities for the teen to be in a situation where passing a vehicle should, and could, take place. Therefore, you can provide simulated practice by use of a "pretend red truck" to develop judgement and perceptions necessary for a successful pass.

While on a two lane highway, ask your teen to pretend there is a very slow moving "red truck" in front and he/she is to find a safe and legal location to pass. When a location is found, ask the teen to explain and demonstrate — **without leaving your lane** — one step at a time as listed on Guide 32B.



Once the teen selects a location and begins the "passing," count 1001, 1002, etc. If an oncoming vehicle passes your car within 10 seconds from the beginning of the "pretend" pass, it would not have been safe. Evaluate all the actions on the Guide. Repeat often. Use the "red truck" in various traffic environments. And, especially perform this simulation during nighttime conditions.

Common Error: The most critical behavioral pattern that will need to be experienced is that of effectively searching for a safe and beneficial passing location and opportunity. During an actual passing situation the teen will not accelerate quickly, or adequately, which can result in a prolonged exposure. All of the behavioral patterns are likely to need extensive practice by the teen. Use the simulated pass situation with the "red truck" in all types of situations.

Lesson 9: Deliberate Practice for **Zero** Crashes

Rating: √ = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 8: **Get Rear Zone Control**

1. Demonstrate before moving to either side Check Outside Mirror on that side.

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Review Habit 8: **Get Rear Zone Control**

2. When backing, use inching or creeping speed, check all mirrors continuously.

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Review Habit 9: **Get Control with a Vehicle in Front**

3. Close in on stopped traffic gradually. Stopped traffic is a “slow” condition.

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Review Habit 9: **Get Control with a Vehicle in Front**

4. Identify other drivers who are consuming space rather than managing space.

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Review Habit 10: **Interact Courteously With Others**

5. Find situations where you can be courteous to others.

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Guide 31 To take place during nighttime conditions. (Repeat each at least three times)

6. Guess how many seconds away various objects are, then count by 1001, 1002, etc. until you reach the object to see how accurate you were.

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7. Demonstrate how and when to use high beam headlights.

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8. Search into the Matrix A Window for Go or Slow conditions.

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9. Search into the Matrix A Window to see to the target area.

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10. Detect curves in the A Window and get best speed, lane positioning.

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11. Identify locations where pedestrians are likely to enter your POT.

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Guide 32A - Being Passed (Repeat each at least three times)

12. Identify the type of tailgater: Charger, One pacer, Habitual. Explain how each is likely to perform while passing you.

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13. Demonstrate how to plan for where the pass will take place.

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14. Demonstrate how to use speed and lane position while being passed.

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Guide 32B - Passing (Repeat each at least three times)

15. See the notes in the page to the left on how to perform “pretend passing of a red truck.”

Notes:

Lesson 10 Tier Three: Living in the House of Habits

Continue Deliberate Practice for Developing Habits 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Guide 34: Getting On the Highway

1. Check The Rear Zone

When planning to get onto a limited access highway be aware of the status of the rear zone. When there is a closed rear zone, go slower to avoid abrupt stops.

2. Keep 4 Seconds of Space

If there is a vehicle in front, keep 4 or more seconds of space for you to have independent merge options.

3. On Ramp, Outside Mirror

Avoid going fast on the ramp to prevent a slowdown or stop while in the acceleration lane. If your vehicle has a convex mirror attached to the outside, it will show vehicles not seen in existing outside mirrors. Without a convex mirror, check the outside mirror, then turn your head slightly and roll your eyes rearward.

4. Search For Gap To Enter

With a slower speed on the ramp, you have more time to find a suitable gap to enter.

5. See length of Merge Lane

Know how much space you have to time your merge. The smaller the merge area the slower your speed while locating your merge gap or hole.

6. Find Gap, Signal Light On

When you know where you will be entering put your left signal light on, much like making a left lane change.



Metered Ramp

Some entrance ramps, where there is a very high volume of traffic, will use traffic lights to show a green light when a car is able to enter a safe gap.

7. Accelerate Briskly to Blend In

Once a gap is found, accelerate rapidly to enter the traffic flow at highway speed.

8. LP2 to LP3 for Precision Lane Entry

Use precision lane positioning, like making a precision lane change to enter the least amount of lane space.

9. Mirror Checks

Immediately after entering, check the mirrors to update the rear zone status..

10. Adjust Speed to Traffic Flow for best control.

Guide 34: Exiting the Highway

1. Plan 12 Seconds For Exit

Plan for your exit as early as possible. You should have all the problems associated with exiting solved at least 12 seconds before the exit.

2. Get Rear Zone Status

Once your exit is located, evaluate the condition of your rear zone.

3. Communicate

Use of signal lights and/or a tap on the brake pedal can alert rear traffic that you're exiting.

4. Change Lanes If Necessary

Use correct precision lane changing techniques if lane changing is necessary.

5. Test Brakes Before Exit

While in the deceleration lane, before you are committed to the exit ramp, apply the brake to feel its effect. If there is a problem (stuck cruise control, stuck accelerator pedal, brake failure), you can stay on the highway and have time to solve the problem.



6. Controlled Braking on Exit Ramp

Keep constant pressure on brake pedal until you are beyond the apex of the exit ramp.



Chevron Signs Provide Extra Warning

The State usually spends money for these signs only after there have been a number of excessive-speed crashes. Reduce speed early when you see an exit ramp this sharp.

Lesson 10 Tips for Parents/Mentors

THE DRIVING SETTING: Use limited access highways such as: interstate highways, freeways, turnpikes, and parkways. In addition, practice should take place on all types of roadways in all types of environments.

OBJECTIVES of this LESSON: The teen is given the opportunity to practice getting on and off limited access highways. While driving on the highway the following guides should be used: 12, 13, 14, 16, 18, 19, 21, 22, 24, 25, 26, 27, 31, 32, 33. By having the teen learn all of the behavioral patterns in these guides over the duration of this program, this lesson puts them into a different environment with higher speeds, which becomes a good testing situation for how well developed the behaviors are on a habitual level. When you find areas that are weak, go back to the guide in which those behaviors were presented and give more concentrated practice to help the teen improve.

Readiness for Freeways (Limited Access Highways)

All preparation and development of skills necessary for managing space at higher freeway speeds occurs before the teen ever enters the freeway. In many ways, driving on a freeway is a test of how consistent the teen was able to cultivate space management habits learned during lessons one to nine. If the teen has areas of weakness, provide opportunity to gain more practice to improve before driving on a freeway.



Space Management Habits for Freeway Driving

1. Consistently reads A, B, C Windows of the Matrix.
2. Effective use of speed control for "slow" conditions.
3. Consistent use of Lane Positions.
4. Maintains 4-second separation space.
5. Effective use of inside and outside mirrors.
6. Detects and manages rear zone conditions.
7. Attempts to keep a B or a C Window open when passing, being passed, and at merge areas.
8. Able to make precision lane changes.
9. Reads communication from vehicles' movements.

When the double broken line changes to a solid and broken line, it is communicating that the temporary lane is coming to an end. Look for vehicles that may want to move into your lane.



On a rural section of an Interstate highway in Vermont there were three vehicles in our A Window. Vehicles "1" and "2" kept their positions for over a mile. Why? What should they have done differently? **Driver "1"** by staying in the left lane was blocking that lane and prevented car "2" from having an escape path. He should have passed the two cars and returned to right lane. **The left lane should be used only for passing.**

Driver "2" failed to acquire the 4-second separation habit. He is now being controlled by the actions of the front vehicle. He had nothing to gain by being so close, and there was a lot to lose.

The trailer truck, which we want to pass, is in a slow lane (double broken lines say it is a temporary lane). We reduced our speed to allow the AT&T truck to pass us to open our B window before we pass.

Lesson 10: Deliberate Practice for **Zero Crashes**

Rating: √ = great, X = more practice needed, ? = more information needed

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Place the rating in the first of three boxes. Use the next two boxes for two other additional practice sessions.

Ask the teen to explain, demonstrate, or perform the following:

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Review Habit 8: **Get Rear Zone Control**

1. Before moving to either side Check Outside Mirror on that side.

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Review Habit 8: **Get Rear Zone Control**

2. When your foot goes on the brake, check rearview mirror.

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Review Habit 9: **Get Control with a Vehicle in Front**

3. Close in on stopped traffic gradually. Keep 4-seconds while moving.

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Review Habit 9: **Get Control with a Vehicle in Front**

4. Identify other drivers who are consuming space, rather than managing space.

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Review Habit 10: **Interact Courteously With Others**

5. Find situations where you can be courteous to others.

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Guide 34 - Getting On Highway (Repeat each at least three times)

6. Do a simulated entrance to a highway by entering a traffic flow from a curb parked position. Evaluate Path of Travel, Use outside mirrors, head movement.

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7. On Entrance Ramp, keep four seconds of separation, know rear condition.

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8. Evaluate length of merger area, Find a gap or hole to enter, Adjust speed.

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9. Enter the travel lane in LP3 to leave escape path for others if needed.

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Guide 34 - Driving On Highway (Repeat each at least three times)

10. Demonstrate effective speed and lane usage for the traffic flow.

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11. Practice making a Precision Lane change.

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12. Only use the inside lane for passing.

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13. Use Matrix to see Future A window, and Control the B and C windows.

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Guide 34 - Exiting Highway (Repeat each at least three times)

14. At One-Mile sign, plan for move into correct exiting lane.

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15. Make precision lane change, Control speed into merge area.

Notes:



10 Habits Zero Crashes

No Crash is Acceptable!

1. Establish Driver-Vehicle Readiness

Be mentally and physically fit to drive; butt-in seating position; safety belts on; head restraints up; doors locked; windows up; headlights on at all times.

2. See Clear Path Before Moving

See that your intended Path-Of-Travel (POT) is clear; turn head before turning tires.

3. Keep the Car in Balance

Make smooth and effective starts, stops, and steering actions; use transition pegs.

4. Use Reference Points

Know within 3-6" where your car is positioned to the roadway; know where the car's sides and front are in relation to intersections.

5. Use MATRIX for Zone Control Search

Search the Matrix A Window to the Target Area; FIND LOS-POT (Line-Of-Sight, Path-Of-Travel) blockage; check other zones for additional info.

6. Take Zone Control Actions

SOLVE LOS-POT; determine whether it is a "Go" or a "Slow" condition; get the best: speed control, lane positioning, and communication; CONTROL the 4-second danger zone, be prepared to make adjustments; know your Point-Of-No-Return.

7. Control the Danger Square (Intersection)

FIND LOS-POT blockage, SOLVE and CONTROL it; check for clear left, front, right zones before entering danger square; time arrival into an open zone.

8. Get Rear Zone Control

When your foot goes on the brake, check the rearview mirror; before moving to either side check side view mirror; make a head and eyes movement in that direction; when backing, use "inching" or "creeping" speed and check all mirrors continuously.

9. Get Control With Vehicle in Front

FIND stopped or slow vehicle, close in gradually; when traveling at same speed, keep 4 seconds of separation space; stopped behind a vehicle, see its rear tires touching the road.

10. Interact Courteously With Others

Send and receive communications in a timely and positive manner; empower yourself and reduce stress by being courteous; set a daily goal to be courteous to at least one person; avoid competitive, aggressive driving.

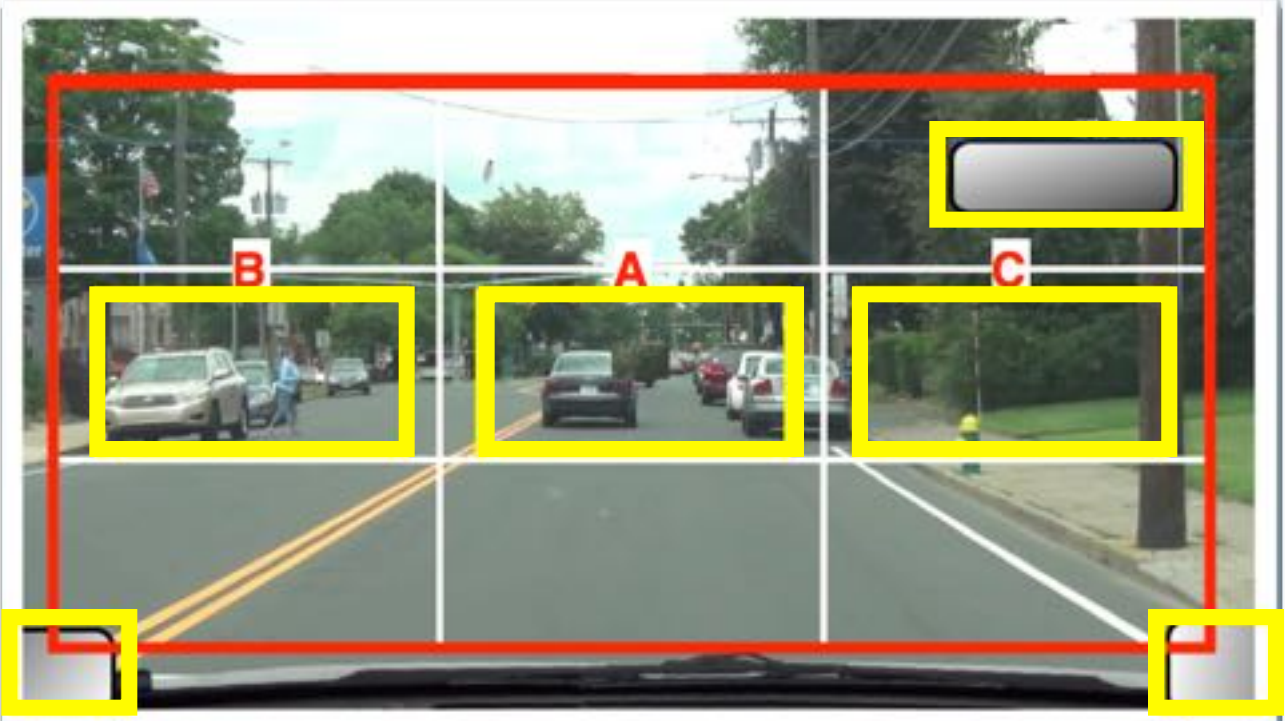
No Crash is Acceptable!

Ten Deliberate Practice Actions for Habit Development

1. Operate your vehicle with a Smooth and Balanced Motion.
2. Manage Speed for "Go" or "Slow" Conditions.
3. Use Six Searching Ranges of the Selective Attention Matrix in a timely manner.
4. Control the Front, Side and Rear Buffer surrounding your vehicle.
5. Establish a forward comfort buffer of four-seconds from vehicles ahead.
6. Find, Solve, and Control Critical Seconds of LOS-POTs.
7. Use Reference Points for accurate vehicle placement.
8. Seek Opportunities to Be Courteous at least twice a day.
9. Use Lane Positions for Awareness and to Manage Side Zones.
10. Time Arrival into Open Zones

Selective Attention Matrix

Six Searching Locations to Manage Space



Every space management opportunity begins with searching into the A Window.

Deliberate Practice Cultivates Positive Habits

This cycle fosters habit development:

Awareness • Action • Reward

Awareness: detect a condition that needs attention.

Action: the response made to the condition detected.

Reward: how you benefit by the action.

In-Car Guides

Tier One: Power Tools — House of Habits Foundation

1	Guide 1: Getting Ready to Drive	Guide 3: Moving, Stopping Smoothly
	Guide 2: Starting Engine, Controls	Guide 4: On-Target, Off-Target

2	Guide 5: Reference Point Discoveries	Guide 7: Instruments & Gauges
	Guide 6A,B: Entering Traffic, Precision Turns	Guide 8: Before Exiting the Car

3	Guide 9: Tracking & Path of Travel	Guide 11A: Backing Introduction
	Guide 10: LOS-POT Blockage Intro	Guide 11BC: Turnabouts, 3-point Turn

Tier Two: Building the House of Habits

4	Guide 12: Search Target Area to Target Area	Guide 14: Zone Control System Intro
	Guide 13: Recognition of LOS-POTs	Guide 15: Forward & Angle Parking

5	Guide 16: Communication Options	Guide 18: Rear Zone Control
	Guide 17: Approaching Danger Squares	Guide 19: Stopping in Traffic

6	Guide 20: Traffic Light Timing, Left Turns	Guide 22: Precision Lane Changes
	Guide 21: Enter, Exit Roundabouts	Guide 23: Backing into Parking Space

7	Guide 24: Responding to Laws, Signs	Guide 26: Separation from Vehicles
	Guide 25: Approaching Curves, Hills	Guide 27: Selective Attention Matrix

Tier Three: Living in the House of Habits

8	Guide 28A: Timing Side Zones	Guide 29: Hill Stops and Starts
	Guide 28B: Control the Critical Second	Guide 30: Parallel Parking

9	Guide 31: Night Driving Conditions	Guide 32B: Passing
	Guide 32A: Being Passed	Guide 33: Responding to Problems

10	Guide 34: Limited Access Highways	Driving On Highways
	Getting On Highways	Getting Off Highways