



***Partnership for***  
***EXPERT Driving***

**Teen • Parent**

**IN-CAR GUIDES**

**7th Edition**

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

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# Partnership for **EXPERT** Driving

## Teacher • Teen • Parent

In-Car Guides for Effective Teen Brain Development

For use in association with:

Zone Control EXPERT Driving System's Self-paced Learning Activities  
CD-ROM or Online

and

**Your Car is a Monster!**

**Ten Habits Will Keep It Caged!**

authored by

**Frederik R. Mottola**

**7th Edition**

**[www.NIDB.org](http://www.NIDB.org) • [www.SkidMonster.com](http://www.SkidMonster.com)**

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## INTRODUCTION

# Zone Control Repetitions Develop Teen Brain Power

Developing low-risk driver behavioral patterns into life-enduring habits requires a well-designed educational plan, a dedicated and knowledgeable educator, and an informed and highly motivated learner. The purpose of these Guides is to present an educational plan that can be used as a blueprint for the teacher to provide the teen with details of specific actions that need to be performed repeatedly, over a period of time, so that habits will form. In order for the teen to have ample opportunity for guided practice, this booklet brings the parent into the educational plan. The parent is expected to provide the teen with an opportunity to practice the many behavioral patterns that are presented in the driver education program that promote EXPERT driving habits and behaviors that will last a lifetime of driving.

### What If We Were Teaching How to Play the Piano?

If we were teaching the teen to play the piano, we would need to have them learn how to read sheet music, beginning with a few notes. They would then practice and practice, playing only a few notes, until the brain



becomes wired to have the fingers respond within the blink of an eye upon reading the note. The more practice, the stronger the network within the central nervous system gets developed, and the quicker the eye-finger movement will become.

### The Power of the Zone Control System

Using the Zone Control EXPERT Driving System is like playing notes from the sheet music. Once learned, it will play exactly the same way every time. The Zone Control System provides principles that give a driver a set of standards for knowing what is the expected outcome for any situation. Classifying traffic situations into open or closed zones makes it easy for a driver to know what to do once a zone is detected as closed. For example, if we teach

a red traffic light as a closed front zone, then the actions we take for a red traffic light would be exactly the same as the actions to be taken for any closed front zone—when there is construction causing traffic to back up, that is also a closed front zone. And, when we apply the principles of Zone Control that state, *when you have a closed front zone, reduce your speed to attempt an arrival into an open zone; and check your rear zone to determine whether it is “open”, “closed”, or “unstable”*, we are getting the same repetitions from different situations. It is those repetitions that will build lasting networks within the brain to know exactly how to respond to any “closed front zone.” In adolescence, with proper repetitions, glial cells and myelin are produced within auditory and visual processing regions of the brain. This is the best opportunity for the brain to develop its sensory network of neurons to heighten the perceptual skills—seeing something, and in a flash knowing its meaning.

### It is Important that Parents Give Teens the Proper Practice

It is important that the parent help the teen to practice the same behaviors that are presented in the program so that the repetitions increase. Imagine how ineffective it would be for the teen to sit at the piano and practice a totally different method, one that contradicts the actions that were previously learned. Inappropriate practice would be more disruptive than constructive.

This program is designed so that teacher, teen, and parent are all reading and practicing the same “notes”. Soon the teen’s performance will become smooth and consistent as she responds to traffic situations harmoniously within the blink of an eye.

*In this book, for ease of reading, rather than use a neuter gender we equally use both genders by referring to him or he in some situations and to her or she in other situations.*



# How to use this program: Teacher, Teen, Parent

There are ten in-car lessons. Each lesson presents several behaviors that are grouped into Guides. Each lesson is a building block for succeeding lessons. The teen is expected to know how to perform the key behavioral patterns of each lesson before moving on to the next lesson. The teen is required to keep this book and bring it to the driver education class, the in-car sessions, and to make it available for the parent/mentor to use during practice sessions.

Each of the ten lessons in this book has five sections.

## For Teacher and Teen



The first section is the **Objectives and Key Behavioral Pattern Applications** page, which sets the standard for the teen's performance. This section is to be used by the teen as well as the classroom and the in-car Instructor.



The second section is the **Instructor's In-Car Guides**, which is used by the instructor to record the student's achievement. The Teacher will record the teen's performance by placing a √ or an X in the first column for each behavior evaluated. On following sessions, as the teacher re-evaluates behaviors, a rating is recorded in the other two columns. The "Note" box is used by the instructor to write a message to the parent that may help guide the practice session.

a rating is recorded in the other two columns. The "Note" box is used by the instructor to write a message to the parent that may help guide the practice session.



The third section is the **Student-Centered In-Car Activities**, which is a listing of approximately thirty activities per lesson that the instructor can have the teen perform. This section will set the standard for instructor awareness and performance. The activities are arranged in the same order as the In-Car Guides. An instructor can read one or two activities, then ask the teen to perform accordingly. Activities that appear with blue type are to be performed on at least three additional sessions and as often as possible.

## For Parent and Teen

The fourth section is for **Suggestions or Information for Parent/Mentors**. This page is an opportunity for the parents to gain background information relating to the lesson's content. For example, page 6 gives information for the parent about how to effectively and safely conduct the teen practice sessions.



The fifth section is the **Parent-Teen Practice Guide**, which is to be used by the parent



as a guide for giving the teen practice in the behavioral patterns of the lesson. There are only ten key behavioral patterns per lesson for the parent to select from. Many of them should be known to the parent and with very little effort can be used for evaluating correct or incorrect teen performance. The structure of the book is such that if a parent wants more information about what the teen is learning, it will be easy to thumb through the book to learn more. If the parent uses this Practice Guide, positive experience can be achieved by the teen even when the practice session is merely driving the car for a shopping trip. There is space for the parent to record okay and not okay behavior as well as the date the practice was conducted. The "Note" box is used by the parent to write questions for the teacher. Many states require a parent to keep a practice log, which this Guide can provide.

## OBJECTIVES for LESSON One

- This lesson sets the standard for how well the teen will have command of vision and the control forces of the vehicle: the brake, the steering wheel, and the accelerator.
- **The teen should perform and explain each step of all Guides accurately without hesitation. The teen is to become familiar with the operating controls of the car before each driving session and until all actions are spontaneous and smooth.**
- The teen should also demonstrate consistency in moving and stopping the car smoothly, with precision.
- The teen must continue to use the Guides from this lesson until the behavioral patterns are performed routinely.
- This lesson provides the teen with the first development of visual behavioral patterns by learning how to use the targeting concepts. “Targeting” and the use of “Transition Pegs” are very important “tools” that, once learned, will be essential in the development of perceptual skills that can prevent many of the “I didn’t see it” type of crashes.

### THE DRIVING SETTING

This lesson should take place in a **Parking Lot** to provide ample opportunity for the teen to learn by repetition without having interruptions from traffic.

## Key Behavioral Pattern Applications

### Makes Smooth Stops

A smooth braking action requires a partial release of braking pressure before the vehicle comes to a complete stop. This requires “curling” the toes back to release some of the braking pressure so that the pitch of the vehicle will be level at the moment of total stop.

### Inching and Creeping Speed Control

Inching the car means to have the car move as slowly as possible by releasing very little braking pressure. The car should move only one inch at a time. Speed is controlled with the brake. Inching speed is used for parallel parking. Creeping the car means to release all brake pressure, while holding the foot over the brake pedal (covering the brake). The car will move at a walking pace by the idle speed of the engine.

### Smooth Acceleration

Allow idle speed to place the car in motion by taking the foot off the brake. Then when acceleration is applied the movement is smooth.

### Use of steering wheel

- Hands should be in the 9-3, or 8-4 position
- Knuckles and thumbs stay on the outside of wheel
- Hand-to-hand steering for slight steering
- Hand-over-hand for greater steering inputs

### Target with Central Vision

Central vision is a narrow cone of clear visibility which allows one to make identifications. See the target to the environment with central vision.

### See Vehicle with Fringe Vision

Fringe vision surrounds the central vision. While looking straight ahead we are able to see with our upper, lower and side fringe vision. See the target to the steering wheel with fringe vision.

### Driving On Target

Driving on target involves the accurate use of vision and car placement in relationship to where you want the car to go. 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.

### Recovery of Steering

Recovery of the steering wheel is the action taken to return the tires to the straight position. A novice driver will have best control when the recovery is made by turning the wheel back to the straight position. The use of transition pegs will “tell” the driver when to straighten the tires.

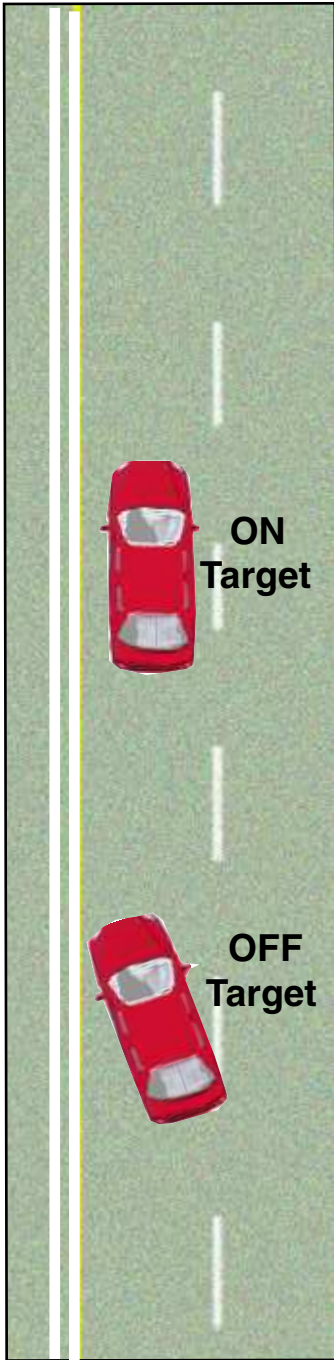
### Transition Peg Introduction

A transition peg is used for recovery of the steering wheel. While making a right turn, begin straightening the tires when the rearview mirror appears aligned with the target. When making a left turn, begin recovery as the driver’s side windshield post becomes aligned with the target.

### Turn Head before Steering

Develop the habit of turning your head in the direction of intended movement before turning the steering wheel. This will best allow the eyes to lead the car.

Rating: √ = Okay, X = More Practice Needed



**NOTES**

**1: Getting Ready To Drive**

**While Approaching The Car**

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1. Have Keys In Hand
  2. Look Under the Car
  3. Look At and Around the Car

**Before Opening The Door**

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1. Look Inside the Car
  2. Control the Door Swing

**After Entering The Car**

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1. Lock Doors - Key In Ignition
  2. Head Restraint Up To Ears
  3. Adjust Seat - Butt-In Seating
  4. Check and Adjust All Mirrors
  5. Safety Belts On All

**2: Start Engine & Orientation**

**Starting The Engine**

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1. Parking Brake On
  2. Insert Key - Foot On Brake
  3. Shift Should Be In "Park"
  4. Twist Key -Release No Delay
  5. Headlights On - day & night

**Orientation to Controls -Shift In "P"**

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1. Place Hands On Wheel
  2. Use Directional Signal
  3. Put Wipers On and Off
  4. Turn Hazards Lights On & Off
  5. Adjust Climate Control
  6. Put Parking Lights On and Off
  7. Use Headlights -Low & High
  8. Adjust Sun Visor
  9. Blow The Horn
  10. Use Of Gas Pedal
  11. Use Of Brake Pedal
  12. Use Of Shift

**3: Moving and Stopping Smoothly**

**Placing The Car In Motion**

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1. Right Foot On Brake
  2. Shift To Drive
  3. Release Parking Brake
  4. Check Driving Path

**Inching & Creeping The Car**

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1. Keep Foot On Brake
  2. Release Partial Brake
  3. Inching with Brake Control
  4. Creeping at Idle speed

**Acceleration Control**

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1. Idle Speed Movement
  2. Press Gas Smoothly
  3. Keep Steady Speed
  4. Increase Speed
  5. Decelerate Gradually

**Braking Control**

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1. Feel Braking Point
  2. Constant Pressure
  3. Normal Smooth Stop
  4. Hard Smooth Stop
  5. ABS Braking

**4: On Target - Off Target**

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1. Selection of Target
  2. Use of Central Vision
  3. Use of Fringe Vision
  4. Aiming for Targets
  5. Looking Into Turns
  6. Use of Steering Wheel
  7. Recovery at Transition Peg
  8. Gas and Brake Pedals
  9. Centers Wheel in Lane

**Key Behavioral Patterns**

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- Makes Smooth Stops
  - Smooth Acceleration
  - Use of steering wheel
  - Target with Central Vision
  - See Vehicle with Fringe Vision

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|  |  |  |
- Driving On Target
  - Recovery of Steering
  - Transition Peg Introduction
  - Turn Head before Steering



# Suggestions for Parent/Mentor

1. Always wear safety belts!
2. Be relaxed and keep your voice calm.
3. Follow the Guides step by step.
4. Give your teen only the practice that is described in each guide. Your route selection should be planned before the in-car session takes place.
5. For the first few sessions, start in parking lots or lightly traveled areas.
6. Sit in the front passenger seat with your left hand free to take over steering control if necessary.
7. 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*.
8. 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 where the car will be entering to detect future problems.
9. Have a driving dialogue with your teen. Ask him what he sees and what he will do well in advance of the maneuver you wish him to perform.

10. Be supportive and positive; this will promote success.
11. Feedback must be precise and immediate.
12. Be a good role model; your teen will respond to what is seen.
13. Learn your reference points from the right side of the car. Take a few minutes in a parking lot to learn how to steer the car from your "coaching" position.
14. **Select one of the ten sections on the Practice Guide** (see the next page) **and ask your teen** to explain to you what that behavioral pattern means, and how to perform it correctly. Before doing any driving, on each practice session, *begin by asking your teen to explain what one or two of the ten behaviors on the "Practice Guide" means.* If the teen is uncertain you can turn back a page or two and locate information under the "Key Behavioral Pattern Applications" section. **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 correctly explain or demonstrate the behavioral patterns that are stated on a guide, chances are that the in-car performance will not be effective, and in some situations it could be dangerous.

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



**Practice in the parking lot** how to give directions effectively, how to give a steering assist, and how to shift into neutral without looking at the teen or at the controls. The "open palm" method of using the shift is illustrated in the photo above.

**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 to steer the car**, put your left hand at the three o'clock position to prevent erratic steering, or to steer the car.

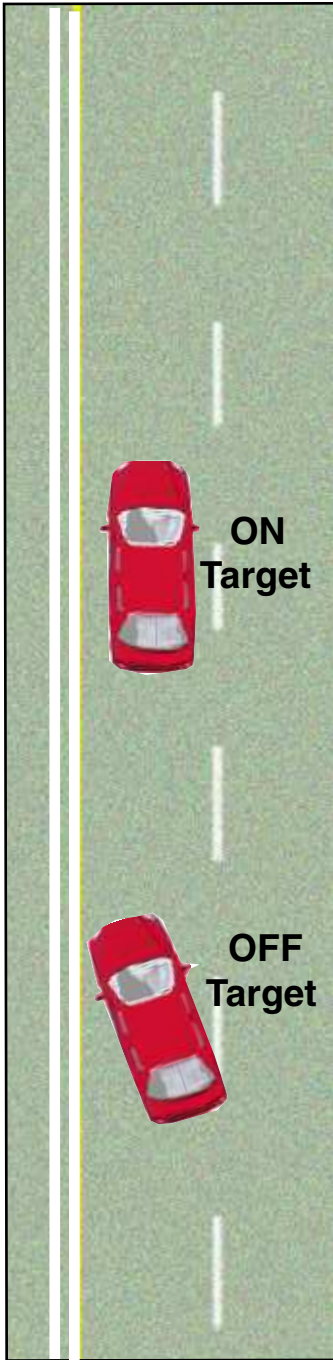
**3. In an extreme emergency situation when you want to disengage the car's acceleration power**, place your left hand on top of the shifter, as shown in the photo. With your palm open and facing down, push towards the dashboard to shift into neutral. Use the same method for a floor shift.

## Use of Guides

- The Guides are organized into Lessons with a simple-to-complex structure.
- Each Lesson is a building block for succeeding lessons.
- The **teen is expected to know** how to demonstrate the key behavioral patterns.
- The teen should be able to practice one behavior at a time.
- You should give the teen practice in performing behaviors that are listed on the "Practice Guides" sheet for the lesson that the teacher currently conducted and evaluated.
- After each practice session, record the date and sign your name in the space at the bottom of the "Practice Guides" sheet that was used for the practice session.
- You can use the "Notes" box to relay information, or to pose a question for the teacher.



Rating: √ = Okay, X = More Practice Needed



**NOTES**

**1: Getting Ready To Drive**

**While Approaching The Car**

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  3. Look At and Around the Car

**Before Opening The Door**

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1. Look Inside the Car
  2. Control the Door Swing

**After Entering The Car**

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1. Lock Doors - Key In Ignition
  2. Head Restraint Up To Ears
  3. Adjust Seat - Butt-In Seating
  4. Check and Adjust All Mirrors
  5. Safety Belts On All

**2: Start Engine & Orientation**

**Starting The Engine**

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1. Parking Brake On
  2. Insert Key - Foot On Brake
  3. Shift Should Be In "Park"
  4. Twist Key -Release No Delay
  5. Headlights On - day & night

**Orientation to Controls -Shift In "P"**

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1. Place Hands On Wheel
  2. Use Directional Signal
  3. Put Wipers On and Off
  4. Turn Hazards Lights On & Off
  5. Adjust Climate Control
  6. Put Parking Lights On and Off
  7. Use Headlights -Low & High
  8. Adjust Sun Visor
  9. Blow The Horn
  10. Use Of Gas Pedal
  11. Use Of Brake Pedal
  12. Use Of Shift

**3: Moving and Stopping Smoothly**

**Placing The Car In Motion**

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1. Right Foot On Brake
  2. Shift To Drive
  3. Release Parking Brake
  4. Check Driving Path

**Inching & Creeping The Car**

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1. Keep Foot On Brake
  2. Release Partial Brake
  3. Inching with Brake Control
  4. Creeping at Idle speed

**Acceleration Control**

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1. Idle Speed Movement
  2. Press Gas Smoothly
  3. Keep Steady Speed
  4. Increase Speed
  5. Decelerate Gradually

**Braking Control**

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1. Feel Braking Point
  2. Constant Pressure
  3. Normal Smooth Stop
  4. Hard Smooth Stop
  5. ABS Braking

**4: On Target - Off Target**

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1. Selection of Target
  2. Use of Central Vision
  3. Use of Fringe Vision
  4. Aiming for Targets
  5. Looking Into Turns
  6. Use of Steering Wheel
  7. Recovery at Transition Peg
  8. Gas and Brake Pedals
  9. Centers Wheel in Lane

**Key Behavioral Patterns**

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- Makes Smooth Stops
  - Smooth Acceleration
  - Use of steering wheel
  - Target with Central Vision
  - See Vehicle with Fringe Vision

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|  |  |  |
- Driving On Target
  - Recovery of Steering
  - Transition Peg Introduction
  - Turn Head before Steering

## OBJECTIVES for LESSON Two

- 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 accurately three consecutive times for each reference point. Once reference points are understood, the teen will apply them, along with the concept of targeting, to enter traffic flows and to make precision turns.
- The teen should demonstrate the ability to make precision left and right turns from a stopped and from a moving position. Each step of a turn shall be executed with accuracy. He should be able to demonstrate each step when asked to do so.
- Emphasis is placed on the individual behaviors that go into making a turn rather than to merely be concerned with the outcome of the turn.
- Of the seventeen behaviors listed on Guide 6B for making Precision Turns, only three or four behaviors should be selected for evaluation during each turn. Help the teen perfect them. When performance is consistent for those three or four, then select another group to focus on.

## THE DRIVING SETTING

Guides 5 and 6 activities should take place in a parking lot to provide ample time for the teen to consciously learn each step of making a turn without the interference from traffic. Once he understands the reference points for the turns, then have him use them while driving on street.

## Key Behavioral Pattern Applications

### Use of Reference Points

A reference point is to see from the driver's seat some part of the vehicle as it relates to some part of the roadway to know where the vehicle is actually positioned. Reference points serve as a guide to overcome the optical illusion a driver encounters.

### Side Position RP for Turns

For Right Turns, the side position should be 3 feet away from the curb. The curb will look like it is in the middle of the right half of the vehicle. For Left Turns, the center line should appear approximately one foot in from the edge of the left fender.

### Forward Position RP for Turns

For Right Turns, the forward position will be when the front bumper is even with the curb line. For Left Turns, it is when you are able to see to your target without your line-of-vision cutting across the curb line. Steering should begin at the forward reference.

### Use of Signal Lights

Signal at least 5 seconds before making the turn. Be aware of others that may enter your path.

### Legal and Smooth Stops

The legal stop, in obedience to a stop sign, is to come to a complete stop before going past the stop line. Release slight braking pressure during the last two seconds to bring the front pitch of the car slowly up to a level position.

### Target Usage for Turns

Before turning, pick a stationary target that will be in the center of your travel path when the turn is completed.

### Search Intersection, L, F, R

Search the left, the front, and the right zones to see if each will be open before entering the intersection. When it is not immediately open, identify when there will be a safe gap or hole to enter.

### Look into turn before steering

Turn your head to see your target before you turn the steering wheel. When you cannot see a target with your head turned, you will be able to see a clear path to travel. And, as the turn progresses the target will come into view.

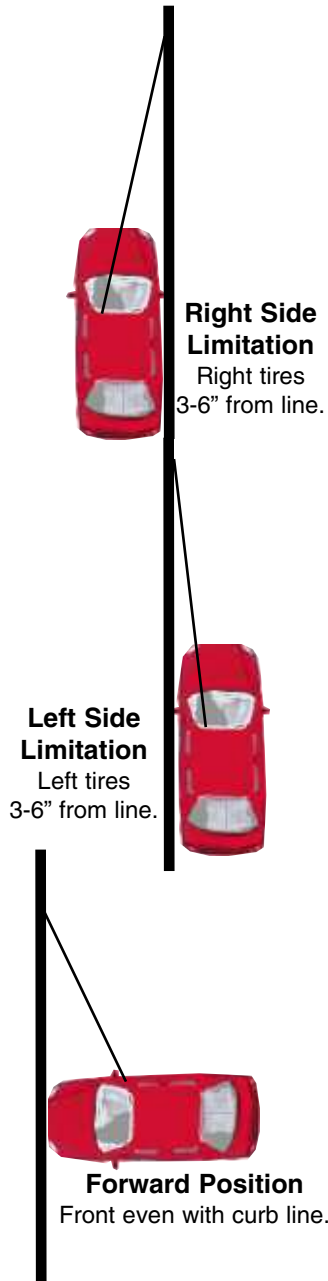
### Steering and Recovery

Be able to demonstrate hand-over-hand and hand-to-hand steering for both the turn and the recovery of the steering wheel to the straight position.

### Use of Transition Pegs

Use a transition peg for recovery of the steering wheel. While making a right turn, begin straightening the tires when the rearview mirror appears aligned with the target. When making a left turn, begin recovery as the driver's side windshield post becomes aligned with the target. See the mirror and the windshield post with fringe vision while looking at the target with central vision.

Rating: √ = Okay, X = More Practice Needed



**5: Reference Point Discoveries**


1. Line-Of-Vision Blind Spot
2. Right Side Limitation
3. Left Side Limitation
4. Front Even With Curb line
5. Rear Even With Line
6. Lane Position #2 (LP2)
7. Lane Position #3 (LP3)
8. Lane Position #1 (LP1)

**Right Turn References**


1. Side Position
2. Forward Position

**Left Turn References**


1. Side Position
2. Forward Position

**6A: Entering & Crossing Traffic**

**Select Gap From Curbside**


1. Evaluate Path to Enter
2. Mirror - Blind Spot Check
3. Locate Gap or Hole to Enter
4. Use of Signals

**While Entering Traffic Flow**


1. Avoid Hesitation
2. Look to Target Area
3. Side Position Reference Point
4. Steering Technique
5. Speed Control

**After Entering Traffic Flow**


1. Cancel Signal
2. Accurate Tracking Path
3. Re-evaluate Rear Zone
4. Look for New LOS-POTs

**6B: Precision Turns**

**Before Turning**


1. Use of Signals
2. Mirror - Blind Spot Check
3. Side Position Reference Point
4. Speed Control - Brake
5. Smooth Legal Stop
6. Forward Position Reference Pt
7. Select Target
8. Search Intersections/Gap-Hole
9. Get Commitment

**During Turn**


1. Avoid Hesitation
2. Look Into Turns, Target
3. Speed Control
4. Steering Technique
5. Accurate Tracking Path

**After Turn**


1. Precision Turn Results
2. Re-evaluate Rear Zone
3. Look For LOS-POTs

**7: Reading Instruments & Gauges**

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Demonstrates understanding and correct use of gauges

**8: Before Exiting the Vehicle**


1. How Is The Location?
- 2-3. Parked Okay/Tires Straight?
4. Keep Foot On Brake
- 5-6. Parking Brake/Shift To Park
7. Foot Off Brake
- 8-9. Accessories Off/Belts Off
- 10-11. Windows Closed/Key Out
12. Left-Rear Zone Check
- 13-14. Alarm Set/Open Door
15. Doors Locked

**NOTES**

**Key Behavioral Patterns**


- Use of Reference Points
- Side Position RP for Turns
- Forward Position RP for Turns
- Use of Signal Lights
- Legal and Smooth Stops


- Target Usage for Turns
- Search Intersection, L, F, R
- Look into turn before steering
- Steering and Recovery
- Turns Transition Pegs

# Advantages of Learning Reference Points

1. **The first and foremost advantage** you'll gain from the use of reference points is the ability to be consistently successful.

2. **Once reference points are learned** for one vehicle, the techniques can be applied to any vehicle.

3. **You can get into a larger vehicle** than you are accustomed to, such as a sport utility vehicle, van, truck, or motor home, and within 5 minutes be comfortable and confident maneuvering it in tight spaces.

4. **You can feel very comfortable getting into and out of tight parking spaces** with any vehicle.



5. **While driving in the right-side lane** you'll know exactly how far your car is positioned from the parked cars, which will reduce the frequency of swerves when doors suddenly open.

6. With the use of reference points **you can make tight right turns** into driveways, alleys and narrow streets, without the need to swerve to the left before turning; nor will you hit the curb with the right rear tire.

7. **You can feel comfortable driving in confined areas** such as: parking garages with spiral ramps, tunnels with fast moving traffic, narrow bridges with a bus or truck approaching, and highway lanes narrowed by construction barriers.

8. **You can feel confident** and operate efficiently **while passing a jogger, bicyclist, or pedestrian** on narrow roads with the least amount of movement into oncoming traffic.

9. **While going into a curve you will be able to select the best travel path** to minimize the chances of a head-on crash. During slippery roadway conditions you will be able to get the best drive line to help reduce the chances of going into a skid.

10. **You can make the best decisions** for using the various lane positions to get maximum control of the zones to either side of the vehicle.

11. **You will be able to get reliable feedback** to tell exactly where your vehicle is within the lane and increase your awareness for what is an okay or not okay lane position.

12. **If you use reference points to overcome optical illusions**, rather than "guessing", then you can make accurate decisions when you are not feeling right, such as when you are tired, ill, or after taking medication.



## Case Study

On a rainy afternoon, on a two-lane rural highway with guardrails, a driver began to pass a slow moving truck when she saw an oncoming car. Just as she moved back to the rear of the truck, the oncoming driver slammed on the brakes, lost control of the car, and slid into the path of the truck. He was thrown into the impact and he died instantly. If he knew reference points he could have taken a steering action toward the guard rail, without being intimidated, which would have made room if the car did pass.

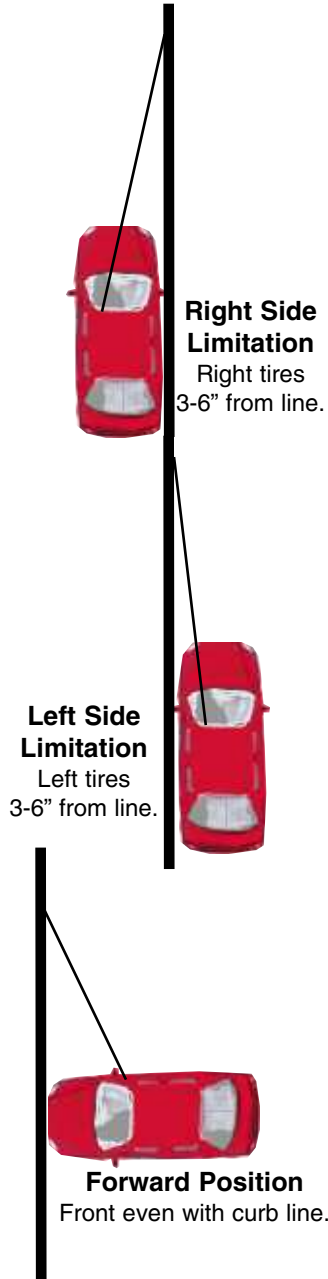
**Factors:** no reference points, no safety belts on, raining, rural road, afternoon drowsiness, guard rail, improper braking, lack of skid control, small vs. large vehicle, improper passing, not searching to target area, no headlights on.

**Any driver, of any vehicle, will benefit by learning to use reference points. For the novice teen driver, learning how to use reference points is like gaining several years of experience in how to make accurate judgments of the vehicle's road placement.**

***"Driving without reference points is like baking without a measuring cup—lacks consistency!"***



Rating: √ = Okay, X = More Practice Needed



**5: Reference Point Discoveries**


1. Line-Of-Vision Blind Spot
2. Right Side Limitation
3. Left Side Limitation
4. Front Even With Curb line
5. Rear Even With Line
6. Lane Position #2 (LP2)
7. Lane Position #3 (LP3)
8. Lane Position #1 (LP1)

**Right Turn References**


1. Side Position
2. Forward Position

**Left Turn References**


1. Side Position
2. Forward Position

**6A: Entering & Crossing Traffic**

**Select Gap From Curbside**


1. Evaluate Path to Enter
2. Mirror - Blind Spot Check
3. Locate Gap or Hole to Enter
4. Use of Signals

**While Entering Traffic Flow**


1. Avoid Hesitation
2. Look to Target Area
3. Side Position Reference Point
4. Steering Technique
5. Speed Control

**After Entering Traffic Flow**


1. Cancel Signal
2. Accurate Tracking Path
3. Re-evaluate Rear Zone
4. Look for New LOS-POTs

**6B: Precision Turns**

**Before Turning**


1. Use of Signals
2. Mirror - Blind Spot Check
3. Side Position Reference Point
4. Speed Control - Brake
5. Smooth Legal Stop
6. Forward Position Reference Pt
7. Select Target
8. Search Intersections/Gap-Hole
9. Get Commitment

**During Turn**


1. Avoid Hesitation
2. Look Into Turns, Target
3. Speed Control
4. Steering Technique
5. Accurate Tracking Path

**After Turn**


1. Precision Turn Results
2. Re-evaluate Rear Zone
3. Look For LOS-POTs

**7: Reading Instruments & Gauges**

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- Demonstrates understanding and correct use of gauges

**8: Before Exiting the Vehicle**


1. How Is The Location?
- 2-3. Parked Okay/Tires Straight?
4. Keep Foot On Brake
- 5-6. Parking Brake/Shift To Park
7. Foot Off Brake
- 8-9. Accessories Off/Belts Off
- 10-11. Windows Closed/Key Out
12. Left-Rear Zone Check
- 13-14. Alarm Set/Open Door
15. Doors Locked

**NOTES**

**Key Behavioral Patterns**


- Use of Reference Points
- Side Position RP for Turns
- Forward Position RP for Turns
- Use of Signal Lights
- Legal and Smooth Stops


- Target Usage for Turns
- Search Intersection, L, F, R
- Look into turn before steering
- Steering and Recovery
- Turns Transition Pegs

# Lesson 3

3

## OBJECTIVES for LESSON Three

- 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 targeting path.
- The teen should be able to describe the changes to his LOS-POT while operating in various traffic situations and classify what he sees 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.
- Have the teen see how various subtle conditions affect, or can affect, the Line-Of-Sight, and/or Path-Of-Travel the vehicle will be taking. It is important that you help the teen see the elements that create LOS-POT blockages by calling his attention to them at least 15 seconds ahead.
- Use Guide 10 to aid you in your detection of them. Little things that we normally take for granted as not being a risk can very quickly turn into a dangerous situation. Every crash that has occurred was most likely a mismanagement of an LOS-POT blockage by the driver.
- This lesson begins the use of the Zone Control System, which is a very powerful method for the teen to learn how to detect and manage driving risk. The more repetitions of finding LOS-POT blockages the teen experiences, the better the brain will develop a network of lightening-fast perceptual skills.

## THE DRIVING SETTING

Begin with a simple environment and continue to increase the complexity. Use residential roadways, rural two and four lanes, and State highways (not Expressways) with two to four lanes. An off-street area should be used for Backing Introduction. For Driveway/Intersection Turnabouts use a variety of driveways and roadways as your State law permits.

## Key Behavioral Pattern Applications

### Tracking Into Curves

- **Target on Approach to Curve**

A target is seen straight ahead in the center of the path you intend the car to take.

- **No Target Into Apex of Curve**

You do not want to use targets as you are traveling towards the apex of 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.

- **Use Fringe Vision To See Reference Points**

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

- **Select Target After Curve**

Your central vision enables you to look through the curve for problems and a new targeting path.

### Searching to Target Area

See if your target area is open or closed.

### Evaluating Target Path

The "targeting path" is the space you expect the vehicle will travel to arrive into the target area.

### Identifying LOS's

Identify Line-Of-Sight Blockages (LOS) caused by the Environment and by other Vehicles.

### Identifying POT's

Identify Path-Of-Travel Blockages (POT) caused by the Environment and by other Traffic.

### Target Usage While Backing

Use a target while backing in the same manner as you do when going forward.

### Vision Usage While Backing

Look over your right shoulder to see your targeting path. And, when backing a high profile vehicle, like an SUV, you need to check the inside and both outside mirrors continually as well as looking over your right shoulder. The mirrors will detect items that you may not be able to see while merely looking over your shoulder.

### Steering While Backing

When backing, turn the steering wheel from the top down in the direction you want the back of the car to go. When backing and turning, use two hands on the steering wheel. When backing straight, hold the steering wheel with the left hand at the 12 position.

### Reference Points for Backing

The driver, when looking over his left shoulder, will see the line appear in the middle of the rear side window.

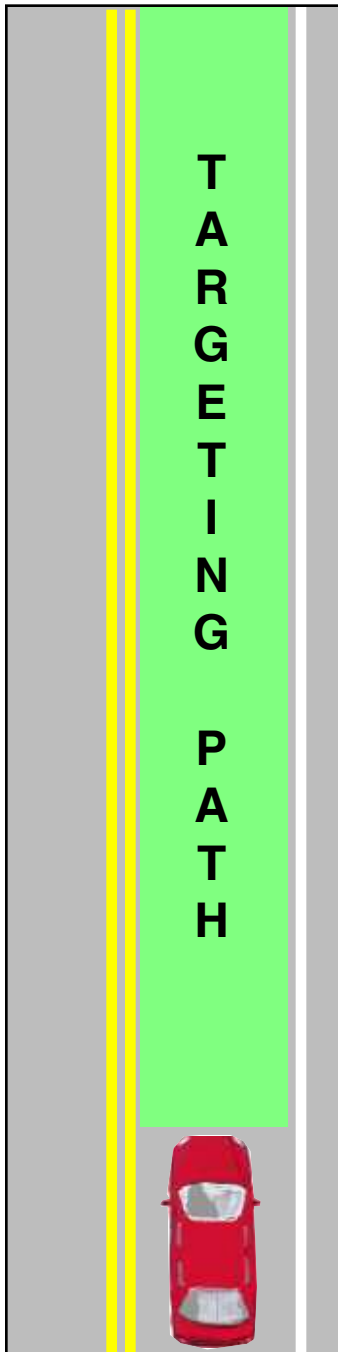
### Use of Pivot Point

To clear an object while backing and turning, use the Pivot Point, which is the corner post of the rear window. When an object is at the "pivot point" you can begin to turn and clear the object.

### Turnabouts and Risk Assessment

Consider the choices to make a turnabout that will result in the least amount of risk.

Rating: √ = Okay, X = More Practice Needed



**NOTES**

**9: Tracking and Targeting Path**

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|  |  |  |
1. Selection Of Target
  2. Aiming For Targets
  3. Accuracy Of Tracking

**Tracking Into Curves**

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|  |  |  |
1. Target On Approach
  2. No Target Into Apex
  3. Look Into Curve
  4. Use Fringe For Ref. Pts.
  5. After Curve, Target

**Tracking Into Turns**

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1. Select Target Before Turn
  2. Aim Car On Target

**Searching To Target Areas**

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|  |  |  |
1. See Target Location
  2. Evaluate Target Area
  3. Evaluate Targeting Path
  4. See Zone Changes

**11A: Backing Introduction**

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1. Foot On Brake, Shift to "R"
  2. Target Usage
  3. Turn Wheel, Top Down
  4. Look Over Right Shoulder
  5. Use All Mirrors
  6. Check Front Swing

**Reference Point Usage**

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1. Back To A Line
  2. Discover Pivot Point

**11C: Three-Point Turnabout**

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1. Performed In Parking Lot
  2. Used Non-Crowned Road
  3. Used On Crowned Road

**11D: Midblock U-Turn**

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1. Decision for site location
  2. Performance of behaviors

**10: Introduction to LOS-POT's**

**Identify LOS Caused By Environment**

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1. Curves, Hills, Intersections
  2. Buildings, Bridges, Fences
  3. Trees, Bushes, Signs
  4. Weather Conds, Snow Banks

**Identify LOS Caused By Vehicles**

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1. Parked Vehs, (Trucks, Buses)
  2. Vehs Stopped, Slow Moving
  3. Vehicles Entering Roadway

**Identify POT Caused By Environment**

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1. Red Lts, Stop & Yield Signs
  2. Intersections, Narrowing Lanes
  3. Surface: Rough, Bumpy
  4. Loose Gravel, Sand, Leaves
  5. Rain, Water, Ice, Snow

**Identify POT Caused By Traffic**

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1. Slow Moving, Turns, Stops
  2. Following Less Than 4 Seconds
  3. Pedestrians, Animals, Cars

**11B: Turnabout Driveway/Intersection**

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1. Consider Your Choices
  2. Evaluate Risk, See LOS-POTs
  3. Select A Location
  4. Check Rear, Tap Brake Lights
  5. At Intersection, Right Signal
  6. Clear Intersection
  7. Stop 12" away from Curb
  8. Shift To "R", Check Inters
  9. Back to Pivot Point
  10. Turn Wheel From Top Down
  11. Check Front Swing Of Car
  12. Back To Safety Stop Position
  13. Shift To "D", Left Signal On
  14. When Safe, Make Left Turn

**Key Behavioral Patterns**

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- Targeting Through Curves
  - Searching to Target Area
  - Evaluating Target Area
  - Evaluating Targeting Path
  - Identifying LOS blockages

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- Identifying POT blockages
  - Target usage while Backing
  - Vision & Steering for Backing
  - Reference Point for Backing
  - Use of Pivot Point

# Help the Teen become an EXPERT Driver

## Two important perceptual skills that Expert Drivers have are:

- To receive complete and accurate information within the blink of an eye.
- To act upon the information in a safe, timely, and controlled manner.



The  
**EXPERT DRIVER**  
habitually looks  
12-15 seconds ahead  
of the vehicle.

The ordinary driver looks 3-5  
seconds ahead of the vehicle.

To receive complete and accurate information, and to have time to act upon it, the teen needs to learn where to look (the target area) and what to look for (LOS-POT blockages).

## LOS-POT Blockage

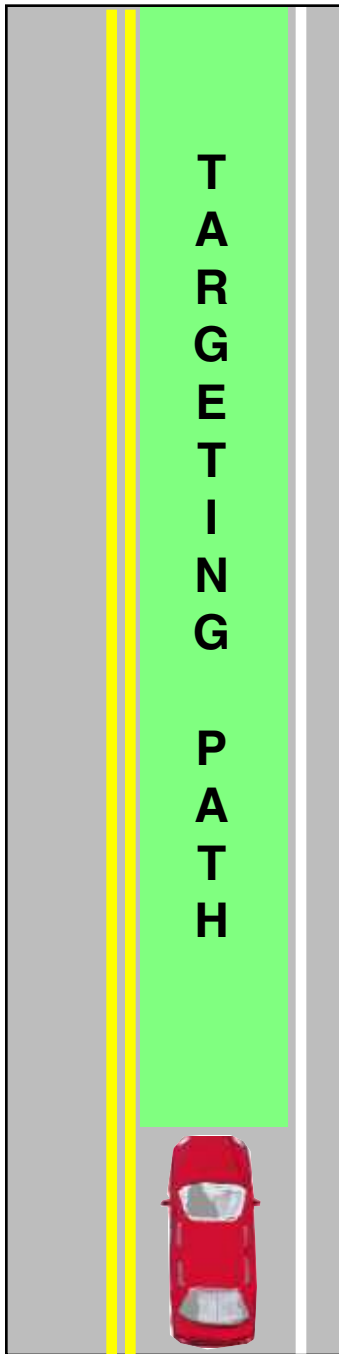
**LOS** is a change that creates a blockage (restriction) to our Line-Of-Sight that can conceal a vehicle, a person, or an animal that may come into our Path-Of-Travel.

**POT** is something that changes, or could change, the control we have over our intended Path-Of-Travel. A vehicle, stopped traffic, a red light, a stop sign, a pedestrian, or an animal could enter our path to cause a POT blockage.

**“Every crash that has occurred due to driver error was most likely a mismanagement of an LOS-POT blockage.”**



Rating: √ = Okay, X = More Practice Needed



**NOTES**

**9: Tracking and Targeting Path**

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|  |  |  |
|  |  |  |
1. Selection Of Target
  2. Aiming For Targets
  3. Accuracy Of Tracking

**Tracking Into Curves**

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1. Target On Approach
  2. No Target Into Apex
  3. Look Into Curve
  4. Use Fringe For Ref. Pts.
  5. After Curve, Target

**Tracking Into Turns**

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|  |  |  |
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1. Select Target Before Turn
  2. Aim Car On Target

**Searching To Target Areas**

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1. See Target Location
  2. Evaluate Target Area
  3. Evaluate Targeting Path
  4. See Zone Changes

**11A: Backing Introduction**

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1. Foot On Brake, Shift to "R"
  2. Target Usage
  3. Turn Wheel, Top Down
  4. Look Over Right Shoulder
  5. Use All Mirrors
  6. Check Front Swing

**Reference Point Usage**

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|--|--|--|
|  |  |  |
|  |  |  |
1. Back To A Line
  2. Discover Pivot Point

**11C: Three-Point Turnabout**

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1. Performed In Parking Lot
  2. Used Non-Crowned Road
  3. Used On Crowned Road

**11D: Midblock U-Turn**

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|  |  |  |
1. Decision for site location
  2. Performance of behaviors

**10: Introduction to LOS-POT's**

**Identify LOS Caused By Environment**

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1. Curves, Hills, Intersections
  2. Buildings, Bridges, Fences
  3. Trees, Bushes, Signs
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**Identify LOS Caused By Vehicles**

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|  |  |  |
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1. Parked Vehs, (Trucks, Buses)
  2. Vehs Stopped, Slow Moving
  3. Vehicles Entering Roadway

**Identify POT Caused By Environment**

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1. Red Lts, Stop & Yield Signs
  2. Intersections, Narrowing Lanes
  3. Surface: Rough, Bumpy
  4. Loose Gravel, Sand, Leaves
  5. Rain, Water, Ice, Snow

**Identify POT Caused By Traffic**

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|  |  |  |
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1. Slow Moving, Turns, Stops
  2. Following Less Than 4 Seconds
  3. Pedestrians, Animals, Cars

**11B: Turnabout Driveway/Intersection**

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1. Consider Your Choices
  2. Evaluate Risk, See LOS-POTs
  3. Select A Location
  4. Check Rear, Tap Brake Lights
  5. At Intersection, Right Signal
  6. Clear Intersection
  7. Stop 12" away from Curb
  8. Shift To "R", Check Inters
  9. Back to Pivot Point
  10. Turn Wheel From Top Down
  11. Check Front Swing Of Car
  12. Back To Safety Stop Position
  13. Shift To "D", Left Signal On
  14. When Safe, Make Left Turn

**Key Behavioral Patterns**

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- Targeting Through Curves
  - Searching to Target Area
  - Evaluating Target Area
  - Evaluating Targeting Path
  - Identifying LOS blockages

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|  |  |  |
- Identifying POT blockages
  - Target usage while Backing
  - Vision & Steering for Backing
  - Reference Point for Backing
  - Use of Pivot Point

# Lesson 4

## 4

### OBJECTIVES for LESSON Four

- The teen will learn how to be mentally ahead of the vehicle by at least 15 seconds and how to control the four-second danger zone. If drivers involved in crashes had 1 additional second prior to the crash, 80% of the crashes could have been reduced in severity or avoided altogether.
- During this lesson we are giving the teen training on how to have 4 seconds to avoid risky situations. The last opportunity to control a situation, to avoid being victimized by it, occurs during the final 4 seconds before approaching it.
- The teen's performance can only be as good as your expectations from her. Demand that she controls the 4-second danger zone. In order to control the 4-second danger zone, the teen must **FIND** a problem and **SOLVE** it while 15 seconds away. 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. And, that is what this lesson is all about.
- The teen should be able to recognize zone changes that affect her Line-Of-Sight and/or Path-Of-Travel. She should also be able to classify a zone as **open or closed**. This lesson gives an opportunity to apply the three steps of the Zone Control System.

### THE DRIVING SETTING

Use residential roadways, rural two and four lanes, urban areas, and state 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.

## Key Behavioral Pattern Applications

### Identifying LOS-POT in front zone

- Be able to FIND LOS-POT Blockages that create closed front zones in the Target Area, or 15 seconds ahead.
- SOLVE it in the 15 second range.
- CONTROL it at the four-second Danger Zone.

### Identifying LOS-POT in left/right zone

Be able to FIND and SOLVE LOS-POT Blockages that create closed left-front or closed right-front zones at least 15 seconds ahead. And, CONTROL them at the four-second Danger Zone

### Know & apply ABCs of Zone Control

Use the steps that are listed in Guide 14 until they become habitually performed.

### Know & apply five speed control options

Consider the five choices for various situations.

### Know & apply five lane positions

Make deliberate choices for where to position the vehicle in the lane. One of the five lane positions is usually the best, and one of the positions is usually most dangerous. Select the best choice consciously until sensitivity to lane placement becomes habit.

### Be able to judge distance in seconds

1. Take A Guess for 15 seconds ahead - note marker
2. Count Off By Seconds until you reach the marker
3. See How Accurate Your Guess Was
4. Redo At Different Speeds

### Use Three Searching Ranges

#### • FIND LOS-POT in Target Area

The first searching range is to the target area to get an overall view of the condition of your "destination" — the target area.

#### • SOLVE LOS-POT in 15 Second Range

The second range is 15 seconds ahead of your car to give you an opportunity to make the best space management decisions.

#### • CONTROL 4 Second Danger Zone

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

### Evaluate targetting path: open/closed

A closed front zone exists when any of the following three conditions are present:

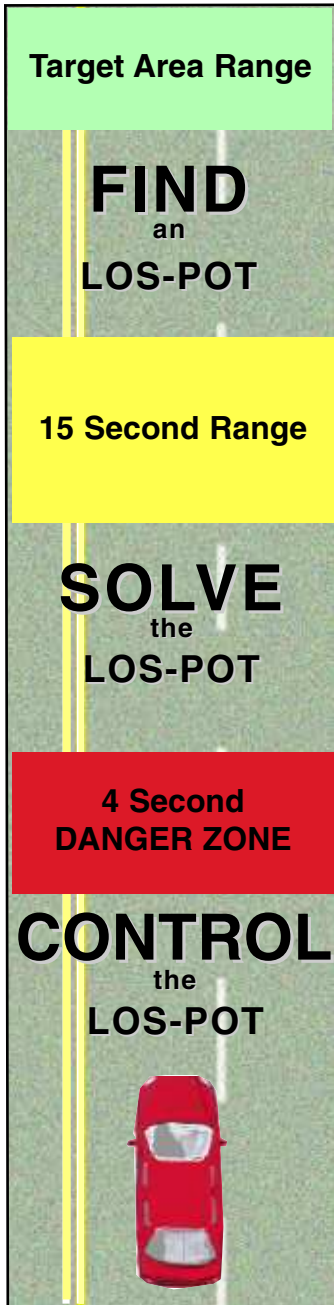
- You cannot see at least 15 seconds ahead (Closed LOS).
- You do not have at least 15 seconds of available path-of-travel (Closed POT).
- You do not have at least 4 seconds of following time when traveling behind another vehicle (Closed LOS-POT).

### Know & apply Key steps to Angle Parking

- Side position for angle parking
- Forward position for angle parking
- Target usage for angle parking
- Searching while backing out of space
- Steering while backing out of space

Rating: √ = Okay, X = More Practice Needed

**Three Searching Ranges of Zone Control**



**NOTES**

**12: Searching Target Area to T.Area**

**1. Search To Target Area**


- Tell What Target Is
- Describe Target Area
- LOS-POTs In Target Area
- Target Area Open or Closed
- Identify Targeting Path
- Respond To Zone Changes

**2. Search 15-Second Range**


- Identify LOS-POTs
- Respond to LOS-POTs

**3. Know 4-Second Danger Zone**


- Use Central Vision
- Use Fringe Vision

**4. Judge Distance In Seconds**


- Take A Guess
- Count Off By Seconds
- Accuracy Of Guess
- Different Speeds

**14: Introduction To Zone Control**

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**1. Identify LOS-POT Change**

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**2. Respond To Front Zone Change**

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- Check Rear Zone
- Apply Speed Control Option


- Keep Same Speed
- Decelerate
- Off-Gas, Cover Brake
- Off-Gas, Apply Brake
- Increase Speed

**3. Respond To Lt/Rt-Front Change**


- Check Opposite Zones
- Apply Speed Control Option
- Apply Lane Position

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**4. Improve Position From ZC**

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**5. Attempt To Keep Zones Open**

**13: Recognition Of LOS-POT**

**1. Identify LOS-POT Front Zone**


- See to Target Area
- See 15-Second Range
- See Within Danger Zone


**2. Identify LOS-POT Left-front**

- FIND in Target Area
- SOLVE 15-Second Range
- CONTROL 4-sec Danger Zone


**3. Identify Closed Zones:**

- Closed Front Zone LOS-POT
- Closed Side Zone LOS-POT

**15: Forward & Angle Parking**

**1. Before Parking**


- Check Rear Zone
- Check Parking Space


- 2. Side Position
- 3. Forward Position
- 4. Creep - Turn Wheel Fast
- 5. Line Up With Target
- 6. Straighten Car and Tires
- 7. Stop At Front Reference


**8. To "Unpark"**

- Back Slowly
- Check Traffic
- Check All Corners
- Clear Fender - Turn Wheel
- Straighten Car
- Tires Straight
- Shift To Drive

**Key Behavioral Patterns**


- **FIND** LOS-POT in Target Area
- See Path as OPEN or CLOSED
- **SOLVE** LOS-POT at 15 seconds
- **CONTROL** 4 sec. danger zone
- Judge distance in seconds


- Apply ABCs Zone Control
- Apply Speed Control Options
- Apply Lane Position Options
- Use Angle Parking Behaviors

# Zone Control EXPERT Driving System

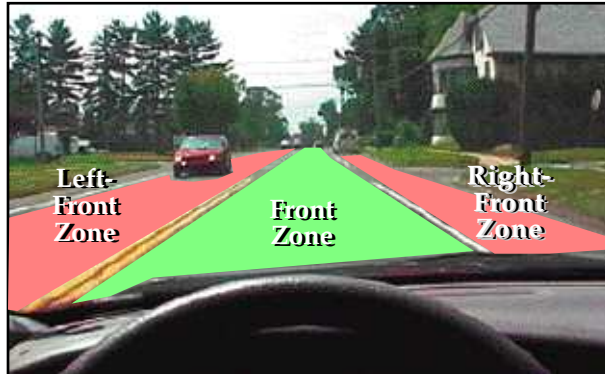
## The Zone Control Driving System

Zone Control organizes the vehicle's space requirements into six zones and three information-processing, decision-making steps. Using these three steps helps the driver to see and respond to changes in the traffic environment at a time when the best control can be achieved. This systematic process is continually repeated to develop behavioral patterns into habits. The habit of having a mental picture of what space the vehicle will occupy more than 15 seconds ahead allows the driver to identify and solve small problems before they become huge, high-risk, stressful situations.



### Zone Locations

The roadway is divided into six zones. All three frontal zones, as illustrated here, extend from our vehicle to the target area. The front zone is the lane we are traveling in. The left-front zone is a lane width to our left. The right-front zone is a lane width to our right.



### Zones are either Open, Closed, or Changed

- 1. OPEN ZONE:** There is space to operate without a blockage to the LOS-POT.
- 2. CLOSED ZONE:** The zone is not available for your POT, and/or there is a LOS blockage.
- 3. CHANGED ZONE:** A worsened zone condition. It is an open zone changed to a closed LOS-POT, or a zone that was already closed and has an additional change.

## Three Searching Ranges for Zone Control

### A. Target Area - **FIND**

- Use step A of Zone Control
- Evaluate Targeting Path
- Find LOS-POT Blockages

### BC. 15 Second - **SOLVE**

- Use steps B and C of Zone Control
- Check other zones for available lanes
- Get the best: Speed Control, Lane Positioning, Comm.

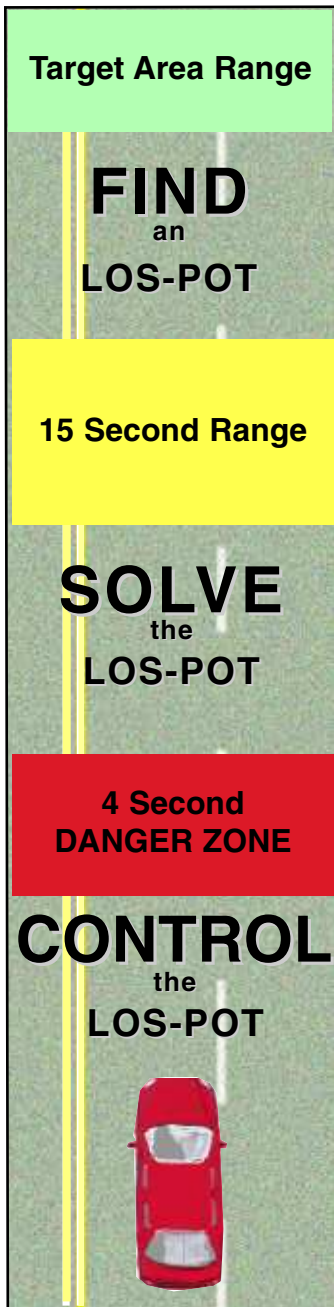
### BC. 4-Sec Danger Zone - **CONTROL**

- Re-evaluate steps B and C of Zone Control
- Be Certain your solution still works
- Reach the **Point Of No Return (PONR) under your control**



Rating: √ = Okay, X = More Practice Needed

**Three Searching Ranges of Zone Control**



**NOTES**

**12: Searching Target Area to T.Area**

**1. Search To Target Area**


- Tell What Target Is
- Describe Target Area
- LOS-POTs In Target Area
- Target Area Open or Closed
- Identify Targeting Path
- Respond To Zone Changes

**2. Search 15-Second Range**


- Identify LOS-POTs
- Respond to LOS-POTs

**3. Know 4-Second Danger Zone**


- Use Central Vision
- Use Fringe Vision

**4. Judge Distance In Seconds**


- Take A Guess
- Count Off By Seconds
- Accuracy Of Guess
- Different Speeds

**14: Introduction To Zone Control**

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**1. Identify LOS-POT Change**

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**2. Respond To Front Zone Change**

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- Check Rear Zone
- Apply Speed Control Option


- Keep Same Speed
- Decelerate
- Off-Gas, Cover Brake
- Off-Gas, Apply Brake
- Increase Speed

**3. Respond To Lt/Rt-Front Change**


- Check Opposite Zones
- Apply Speed Control Option
- Apply Lane Position

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**4. Improve Position From ZC**

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**5. Attempt To Keep Zones Open**

**13: Recognition Of LOS-POT**

**1. Identify LOS-POT Front Zone**


- See to Target Area
- See 15-Second Range
- See Within Danger Zone


**2. Identify LOS-POT Left-front**

- FIND in Target Area
- SOLVE 15-Second Range
- CONTROL 4-sec Danger Zone


**3. Identify Closed Zones:**

- Closed Front Zone LOS-POT
- Closed Side Zone LOS-POT

**15: Forward & Angle Parking**

**1. Before Parking**


- Check Rear Zone
- Check Parking Space


- 2. Side Position
- 3. Forward Position
- 4. Creep - Turn Wheel Fast
- 5. Line Up With Target
- 6. Straighten Car and Tires
- 7. Stop At Front Reference


- 8. To "Unpark"
- Back Slowly
- Check Traffic
- Check All Corners
- Clear Fender - Turn Wheel
- Straighten Car
- Tires Straight
- Shift To Drive

**Key Behavioral Patterns**


- **FIND** LOS-POT in Target Area
- See Path as OPEN or CLOSED
- **SOLVE** LOS-POT at 15 seconds
- **CONTROL** 4 sec. danger zone
- Judge distance in seconds


- Apply ABCs Zone Control
- Apply Speed Control Options
- Apply Lane Position Options
- Use Angle Parking Behaviors

# Lesson 5

## OBJECTIVES for LESSON Five

- A major objective of this lesson is to prepare the teen to safely approach and travel through intersections.
- Each year over 30 per cent of all crashes occur at intersections, and at least a third of those are rear-end crashes. This lesson places emphasis on approaching intersections and rear zone control.
- The teen should demonstrate an awareness of how to control space while stopping in a traffic situation. To demonstrate awareness, one needs to see the closed POT and respond to it in a manner that is consistent with our space management principles.
- Most often the stop in traffic will occur at intersections. Therefore, each red traffic light, or each stop sign that is approached gives an opportunity to demonstrate space control. Many fatal highway rear-end crashes can be avoided with the timely detection of a rear zone condition and effective use of communications.

## THE DRIVING SETTING

Use residential roadways, rural two and four lanes, urban areas, and State 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.

5

## Key Behavioral Pattern Applications

### Effective sending of communication

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

### Responding to communication

When you effectively receive communications from others your actions should follow the principles of Zone Control.

### Getting commitment from others

Anytime you are attempting to communicate with others you must not assume that your intentions are known until you get a commitment. To get a commitment is to receive a message from others that they acknowledge you.

### Being courteous

So much stress 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 at least 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!

### See intersections in target area as zone change

Manage the LOS-POT blockages before entering the intersection. Control the rear zone on approach. Search left, front, right zones (45 degree angle while approaching, 90 degree angle when stopped) before entering.

### Time arrival into open zone

Reduce speed to give the light time to change to green.

### Locate and apply PONR before Intersection

The Point-Of-No-Return (PONR) is the last opportunity you have to stop the car without entering the intersection. The car will be 2 seconds away from the intersection.

### Apply appropriate stop: Staggered, Legal, Safety

- **Staggered Stop** is stopping or preparing to stop, so that you can see the stop line to the front of your car. This gives turning trucks and buses clearance from your car.
- **Legal Stop**, front of car is even with the stop line.
- **Safety Stop**, front of car is at curb line to best see traffic.

### Stopped with vehicle in front - See Tires

With a stopped car in front, stop where you can see it's rear tires touching the pavement. This will give you an escape path, if needed, to get around it.

### Awareness and Control of rear zone

- **Open Rear Zone** No one closer than two seconds, and at least 12 seconds visual sight line.
- **Closed Rear Zone** You do not have an open zone.
- **Unstable Rear Zone** An open or closed zone that has the potential to become worse.

### See "Sand Barrels" to rear

The more stopped cars to your rear, the less risk of injury from a rear impact. The stopped rear vehicles act as sand barrels (like the yellow ones seen at some highway exits) to absorb the force of impact.

### Use Mirrors

As your foot goes onto the brake pedal, your eyes should go to the rear view mirror. Check the mirrors after seeing a zone change and before and after stopping, turning, lane changing.

### Check mirror's blind spots

Even with side view mirrors there is a blind area where another vehicle alongside you may not be detected. Three ways to compensate for the mirror's blind areas are by: Convex Mirror checks, Over-the-shoulder checks, Move the head forward while checking the outside mirrors.

### Recognize rear zone conditions

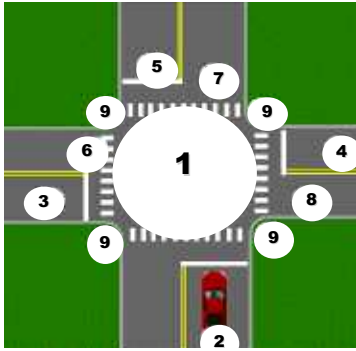
- **Open Rear Zone** is with no one closer than two seconds, and at least 12 seconds visual sight line.
- **Closed Rear Zone**, you do not have an open zone.
- **Unstable Rear Zone** is an open or closed zone that has the potential to become worse.

### Control of rear zone

When you recognize which type of situation you have to the rear — open, closed, or unstable — and you detect the condition at least 12 seconds before you need to stop, you will have many options to control the rear zone.

Rating: √ = Okay, X = More Practice Needed

**Help Teens Search Intersections**



1. Search your immediate POT in the intersection. Look for traffic lights, other vehicles, LOS blockages, pedestrians.
2. Search your rear zone immediately after seeing the intersection, before braking, and while stopped.
3. Search for traffic approaching from the left zone.
4. Search for traffic approaching from the right zone.
5. Search for oncoming traffic in the front zone.
6. Before making a left turn, search for an open path to enter.
7. When going straight, search your intended POT.
8. Before making a right turn, search for an open path to enter.
9. Search all corners for pedestrians.

**NOTES**

**16: Communications**

**1. Effective Use of:**

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- Signal Lights
  - Headlights
  - Brake Lights
  - Horn
  - Lane Position
  - Speed Control
  - Hand Signals

**2. Time Communications**

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- Send Messages
  - Receive Messages

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3. Respond To Communications
  4. Get Commitment
  5. Courteous To Others

**17: Approach Intersection**

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1. See Inter. In Target Area
  2. Check The Rear Zone
  3. Select Best Lane/Position
  4. Search Left, Front, Right
  5. Speed Control For LOS-POTs
  6. Point-Of-No-Return

**7. Stopping: No Car In Front**

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- Staggered Stop
  - Legal Stop
  - Safety Stop

**8. Stopping: Car In Front**

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- See Rear Tires
  - Delay Moving 2 Seconds

**9. Stopped In Traffic**

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- Unstable Rear Zone
  - Identify "Sand Barrels"
  - Communicate
  - Know Escape Path

**18: Rear Zone Control**

**1. Use Of Mirrors**

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- After Seeing Zone Change
  - Before & After Braking
  - Stopped In Traffic
  - Before & After Turns
  - Before & After Lane Change
  - Use Mirrors Effectively

**2. Check Blind Areas**

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- Convex-Mirror Check
  - Head Movement Check

**3. Rear Zone LOS-POT Change**

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- Fast-Closing Vehicles
  - LOS Restrictions

**• Tailgater Types**

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- Charger
  - One Pacer
  - Habitual

**4. Awareness Of Rear Condition**

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- Open • Closed • Unstable
  - Take Action/Control Rear
  - Effective Speed/Control Rear

**19: Stopping In Traffic**

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1. See Closed POT - 12 Seconds
  2. Check Rear Zone
  3. Time Arrival Open Zone
  4. Communicate to Rear
  5. Braking Without Delay
  6. Control the Rear Zone
  7. Gradual Approach to Stop
  8. Make Smooth Stop
  9. Monitor Rear

**10. A Car In Front**

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- Stop To See Tires
  - Delay Start-Up 2-Sec.

**Key Behavioral Patterns**

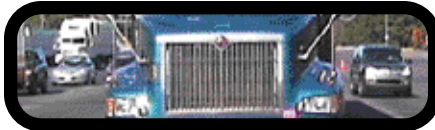
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- Send-Receive Communications
  - Gets commitment, is courteous
  - FINDS Intersection in Target A
  - CONTROLS Rear zone
  - Search Left, Front, Right zones
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- Locates & Applies PONR
  - Staggered, Legal, Safety stops
  - Stops to See Tires
  - See "Sand Barrels" to rear
  - Times Arrival into open zone

# Using the Rearview Mirror

## Take that Stick of Dynamite out of your trunk!

### Why Check Mirrors?

If someone placed a stick of dynamite that could explode at any moment in the trunk of your car, would you want to know about it? A vehicle plowing into you from behind, especially a large truck, can have the potential energy to do more damage to you and your family members than that stick of dynamite. Suppose you see a problem ahead of you that you need to brake for. You may not be able to stop your car effectively if you cannot prevent the vehicle to your rear from pushing you into the problem! You cannot control your front zone if you do not control your rear zone. In order to control your rear zone you need to have time and information. Checking your mirrors can give you the information. And the sooner you check them, the more time you will have to solve a problem.



### 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 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

The rear zone is either open, closed or unstable.

- When a vehicle is at least 2 seconds away from your rear bumper, and not gaining on you, your rear zone is **open**.
- When a vehicle is closer than 2 seconds, your rear zone is **closed**.
- When a vehicle is closing in on you, your rear zone is **unstable**, and can become a very dangerous condition.

It is easy to get into the habit of evaluating your rear zone and taking the best actions.

### Responding to Zone Conditions

**Open Rear Zone:** You want to keep monitoring your rear zone to detect any change in movement to your rear. You can usually do this by using your peripheral vision while you are searching your front and right-front zones. When you see a zone change affecting any of your three front zones, you will need to direct your central vision into the mirror to evaluate the condition to the rear.

**Closed or Unstable Rear Zone:** When the rear zone is closed, especially when it is unstable, you need to **pay more attention to your front zone** to gain as much communication time as possible, alerting the driver in back of an impending braking action. Take note of how the driver to your rear responds to minor braking actions as they occur. This could tip you off to situations when there may be a drowsy, distracted or intoxicated driver as a threat to you, before you run out of options for gaining control.

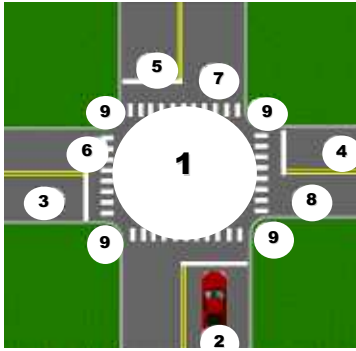
### When You are Most at Risk

You are at the greatest risk of having someone crash into you when you're stopped at an intersection. The higher the speed limit the more potential for damage. Stopping for work zones, toll booths, and for other traffic delays on limited access highways leads to the most fatal crashes. Your only defense begins by knowing what is happening to your rear zone as soon as possible.



Rating: √ = Okay, X = More Practice Needed

**Help Teens Search Intersections**



1. Search your immediate POT in the intersection. Look for traffic lights, other vehicles, LOS blockages, pedestrians.
2. Search your rear zone immediately after seeing the intersection, before braking, and while stopped.
3. Search for traffic approaching from the left zone.
4. Search for traffic approaching from the right zone.
5. Search for oncoming traffic in the front zone.
6. Before making a left turn, search for an open path to enter.
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**NOTES**

**16: Communications**

**1. Effective Use of:**

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- Signal Lights
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**2. Time Communications**

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- Send Messages
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1. See Inter. In Target Area
  2. Check The Rear Zone
  3. Select Best Lane/Position
  4. Search Left, Front, Right
  5. Speed Control For LOS-POTs
  6. Point-Of-No-Return

**7. Stopping: No Car In Front**

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- Staggered Stop
  - Legal Stop
  - Safety Stop

**8. Stopping: Car In Front**

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- See Rear Tires
  - Delay Moving 2 Seconds

**9. Stopped In Traffic**

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|  |  |  |
- Unstable Rear Zone
  - Identify "Sand Barrels"
  - Communicate
  - Know Escape Path

**18: Rear Zone Control**

**1. Use Of Mirrors**

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- Charger
  - One Pacer
  - Habitual

**4. Awareness Of Rear Condition**

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  - Take Action/Control Rear
  - Effective Speed/Control Rear

**19: Stopping In Traffic**

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**10. A Car In Front**

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- Stop To See Tires
  - Delay Start-Up 2-Sec.

**Key Behavioral Patterns**

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|  |  |  |
- Send-Receive Communications
  - Gets commitment, is courteous
  - FINDS Intersection in Target A
  - CONTROLS Rear zone
  - Search Left, Front, Right zones
- |  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
- Locates & Applies PONR
  - Staggered, Legal, Safety stops
  - Stops to See Tires
  - See "Sand Barrels" to rear
  - Times Arrival into open zone

# Lesson 6

## OBJECTIVES for LESSON Six

- With the skyrocket price of gasoline, conservation of fuel is a benefit to all. One of the major objectives of this lesson is the management of space and avoiding unnecessary acceleration. Timing of traffic lights gives the driver an opportunity to save fuel and to demonstrate effective space management.
- The teen should demonstrate the ability to see a red traffic light early enough to be able to reduce speed gradually for several seconds. This gives the red light time to change to green and eliminates the need to stop. The most gas-consuming phase of driving is putting the vehicle into motion from a stopped position.
- Every traffic light that one can avoid stopping at results in fuel conservation as well as reducing the risk of rear end crashes. Always get control of the rear zone when stopping.
- The teen should be able to verbally state when an LOS-POT change is detected. This is the "A" step of the Zone Control System. She is not expected to see all zone changes.
- Once she does "see" and verbalize the zone change, she should perform the "B" step by checking at least one other zone and stating its condition. She does not need to verbalize the "C" step; she should take the actions necessary to get the best speed control, lane position and communication to create the best space management.

## THE DRIVING SETTING

Use residential roadways, rural two and four lanes, urban areas, and State 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 it be on the passenger side.

6

## Key Behavioral Pattern Applications

### See Traffic Light in Target Area

When checking the condition of the target area, look for status of the traffic light. What color and for how long?

### See red lights as closed zones

As soon as the red light is detected, make an attempt to arrive into a green traffic light with no stopped traffic.

### Adjust speed to arrive into green lights

Each car stopped at the red light will add one second to the time it takes for the last car to move. If there are six cars stopped at the light, it will take six seconds after the light changes before the car ahead of you will be able to move.

### Left Turns at Green Traffic Lights

1. Waiting to make a left turn at a green traffic light, with oncoming traffic, is a high risk rear zone exposure.
2. **Get 1/4 Into Intersection (unless your state law prohibits waiting in the intersection).** *You must never enter the intersection unless you are certain that you will be able to make the turn.* The only opening to make a left turn, without a turn arrow, may occur when the green light changes to yellow. If you make the commitment to enter the intersection, you must continually make the **four checks** to find the safest opportunity to make the turn and clear the intersection.

### Left turn at green light - 4 checks

1. **Check REAR For Unstable Zone** caused by fast closing traffic and continue the monitoring until "sand barrels" are there
2. **Look For A GAP To Enter** in the traffic flow
3. **See An Open Turning PATH** that you want to enter
4. **See The LIGHT Change** When you see the green light changing to yellow, look to see if oncoming traffic is stopping and be ready to complete your turn without delay.

### Using ABC's of Zone Control effectively

**A. Alert Switch On:** FIND conditions when your LOS-POT has blockages that prevent you from seeing something that may occupy the space where you intended to put your vehicle. Or, something prevents you from maintaining the speed or lane position en route to your target area.

**B. Before Acting:** SOLVE the blockage:

- **Check Rear Zone.** See what actions are needed to control the rear zone while braking.
- **Check Opposite the zone change.** See if the zone is open; look for related information.
- **Check for an Alternate Path.** If the space you intended to occupy is no longer available, it is good to know where you can safely put the car as an alternative path of travel.

**C. Create Time/Space Management:** SOLVE the blockage by getting the best choice of Speed Control, Lane Positioning, and Communication.

### Evaluate need for lane changing

Consider the reason for making a lane change. Avoid unnecessary lane changes

### Move by lane positions

Use the least amount of space. When entering from the right, enter LP3. When entering from the left, enter LP2.

### Time arrival into open zones

Get the best opening of the lane to be entered and attempt to arrive into an open side zone.

### Key steps for backing into space

Reduce your risk and liability. When you back in you only need to control a static parking space. But, when you back out of a space, you need to control the whole dynamic parking lot that is always changing, which is difficult to do.

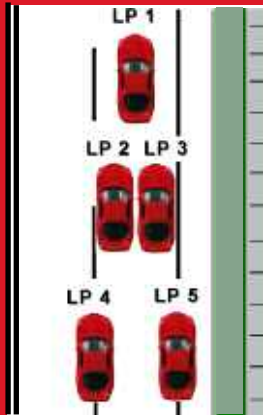
Rating: √ = Okay, X = More Practice Needed

# 17 CONTROL ACTIONS for EXPERT Driving

## Speed Control

1. Same Speed
2. Decelerate
3. Cover Brake
4. Apply Brake
5. Accelerate

## Lane Position



## Communication

1. Signal Lights
2. Headlights
3. Brake Lights
4. Horn Usage
5. Hands, Arms
6. Speed Altered
7. Lane Position

## NOTES

## 20: Traffic Lights: Timing


1. See Light In Target Area
2. See Red Light As Closed Zone
3. Check Rear Zone
4. Alert Rear -- Tap Brake Lights
5. Begin Constant Braking
6. Time Arrival Into Open Zone
7. At 10 mph, Go or Stop
8. Green Light, Scan Intersection
9. Red Light, Make Smooth Stop

### Left Turn At Green Light

- Waiting For Opening Get 1/4 Into Intersection


1. Check **REAR** until stable
2. Look for a **GAP/HOLE**
3. See Open **PATH** to enter
4. See **LIGHT** change

## 21: ABCs of Zone Control

### A. Alert switch on:

--	--	--

- See Zone Change

### B. Before acting:

- Check Other Zones:


- Options Available
- Related Information
- Open Zones
- Escape Path

### C. Create time/space:


- Get Best Speed Control
- Get Best Lane Position
- Send/Receive Communication

## Key Behavioral Patterns


- See Red Light as Closed Zone
- Adjust speed to get Green Lt.
- 45 degree Intersection Search
- Rear, Gap, Path, Light checks
- Use ABCs of Zone Control
- Evaluate before Lane Change
- Use LPs during Lane Change
- Time arrival for open side zone
- Perpendicular, backs In space

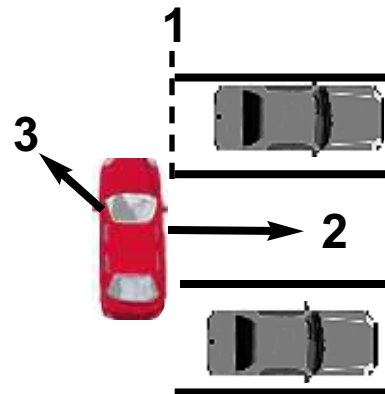
## 22: Lane Changes


1. Why Change?
2. Check Other Lanes
3. Mirror Checks
4. Signal For Communication
5. Move To LP 2 or LP 3
6. Check Blind Spot
7. Time Arrival Open Side Zones
8. Increase Speed If Needed
9. Enter LP 2 or LP 3
10. Release Signal Light Lever
11. Mirror Check
12. Best Lane Position

## 23: Perpendicular Parking - Backing Into Space


1. Side Position
2. Forward Position
3. Select 45-Degree Target
4. Creep - Turn Wheel Fast
5. Use The Least Forward
6. Line Up Car With Space
7. Shift To Reverse
8. Back To Rear Pivot Point
9. Inch - Turn Wheel Fast
10. Get Car Straight In Space
11. Inch - Straighten Tires
12. Back To Rear Reference

Begin with these three steps.



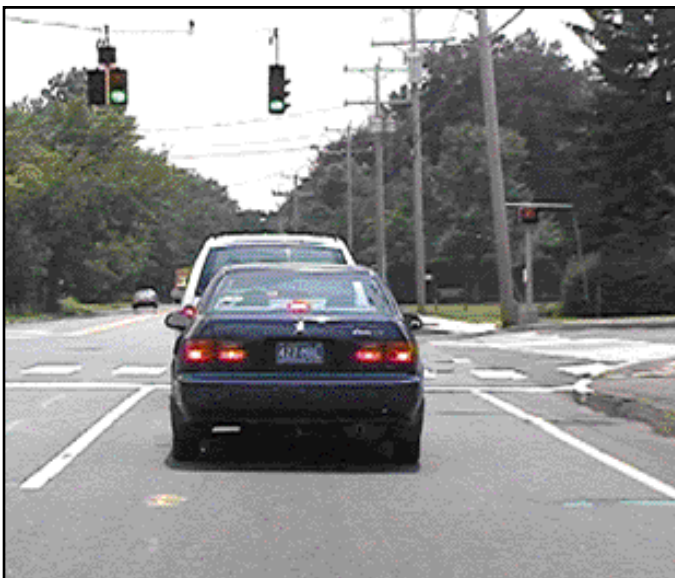
### Advantages Gained by Backing Into a Perpendicular Space

1. Can get into and out of tight spaces.
2. Takes less time to park and "unpark."
3. Better view while leaving space.
4. Avoids backing out into traffic.
5. Others let you cut into traffic flow.
6. Gives you best control and less stress.
7. Reduces your liability if a crash occurs.
8. Less risk of hitting something, or being hit.

# See Red Light as Closed Front Zone



**The traffic light is turning red. Try to time your arrival for a green light.** The red light is a closed front zone. By treating it as a closed front zone—rather than as a red light—you will have an opportunity to practice a behavioral pattern that can be very valuable in a number of other closed front zone situations. An example of a similar situation occurs when you are on a highway and all traffic comes to a sudden stop because of construction or a crash. That becomes a high-risk moment, which you would have very few opportunities to “practice”. When you see a red light as a closed front zone, adjust speed to arrive into an open zone. Most drivers only learn that a red light means to stop. By setting a higher standard (i.e. to arrive at the intersection with a green light rather than a red light), you are able to give yourself a test situation where you can have success or failure. There will be thousands of red traffic lights that you will be approaching. That will give you thousands of opportunities to have success!



**The traffic light just changed from red to green. There are two cars stopped. How many seconds before the vehicle in front of you is able to move?**

**Answer:** The vehicle in front will not move until two seconds after the light changes. It takes one second per vehicle, normally, before the last vehicle is able to move. If it takes longer, there could be a problem delaying the traffic flow such as: a car stopped to make a left turn, a pedestrian crossing, a stalled car, or an inattentive driver.



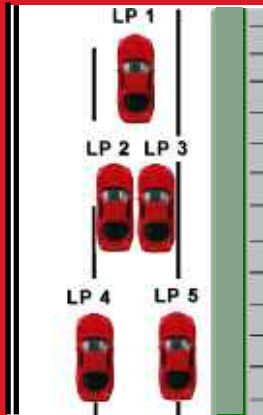
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## Lane Position



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1. Signal Lights
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4. Horn Usage
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## NOTES

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5. Begin Constant Braking
6. Time Arrival Into Open Zone
7. At 10 mph, Go or Stop
8. Green Light, Scan Intersection
9. Red Light, Make Smooth Stop

### Left Turn At Green Light

- Waiting For Opening Get 1/4 Into Intersection


1. Check **REAR** until stable
2. Look for a **GAP/HOLE**
3. See Open **PATH** to enter
4. See **LIGHT** change

## 21: ABCs of Zone Control

### A. Alert switch on:

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- See Zone Change

### B. Before acting:

- Check Other Zones:


- Options Available
- Related Information
- Open Zones
- Escape Path

### C. Create time/space:


- Get Best Speed Control
- Get Best Lane Position
- Send/Receive Communication

## Key Behavioral Patterns


- See Red Light as Closed Zone
- Adjust speed to get Green Lt.
- 45 degree Intersection Search
- Rear, Gap, Path, Light checks
- Use ABCs of Zone Control
- Evaluate before Lane Change
- Use LPs during Lane Change
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- Perpendicular, backs In space

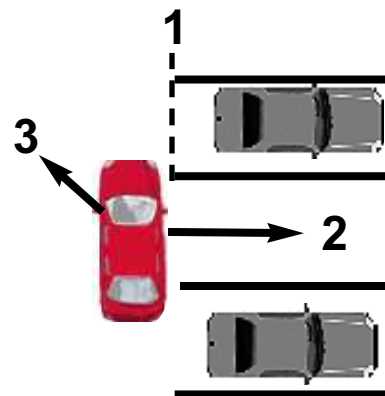
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1. Side Position
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4. Creep - Turn Wheel Fast
5. Use The Least Forward
6. Line Up Car With Space
7. Shift To Reverse
8. Back To Rear Pivot Point
9. Inch - Turn Wheel Fast
10. Get Car Straight In Space
11. Inch - Straighten Tires
12. Back To Rear Reference

Begin with these three steps.



### Advantages Gained by Backing Into a Perpendicular Space

1. Can get into and out of tight spaces.
2. Takes less time to park and "unpark."
3. Better view while leaving space.
4. Avoids backing out into traffic.
5. Others let you cut into traffic flow.
6. Gives you best control and less stress.
7. Reduces your liability if a crash occurs.
8. Less risk of hitting something, or being hit.

# Lesson 7

## OBJECTIVES for LESSON Seven

- This lesson presents life-saving behavioral patterns to help a teen avoid the major cause of single vehicle fatalities: 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 marking, and to 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.
- This lesson provides practice in how to keep 4 seconds of following time. With four seconds of following time the teen will have control over the actions the vehicle ahead takes and eliminate being surprised and victimized by it.
- Teen drivers have a tendency to get distracted easily. When a teen is distracted, and the car ahead makes a sudden braking action, it is a combination for disaster. Keeping four seconds of space is essential for any driver, especially a teen. And, it provides time to make very valuable adjustments.
- The use of Practice Commentary demonstrates the ability to use the ABC steps of Zone Control to identify and solve LOS-POT problems. The teen should acquire familiarization with the practice commentary in order to be proficient in practicing the ABC steps without the use of the guide from this lesson.

## THE DRIVING SETTING

Use residential roadways, rural two and four lanes, urban areas, and State highways with two to six lanes of traffic.

7

## Key Behavioral Pattern Applications

### Respond to stop/yield signs

There are two behaviors at a stop sign: to come to a complete stop and to effectively search to be certain the intersection will be clear before entering.

### Respond to traffic signals

- **Point-Of-No-Return** While approaching a green light, be prepared for the light to change to yellow. The point of no return is that point at which you are not able to stop without entering the intersection (two seconds away).
- **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 be able to make your best decision as you see the light changing.
- **Green Lt, Search Intersection** Do not expect that a green light will prevent other drivers from coming into your path. Always search the left, front and right zones before entering an intersection.

### Demonstrate right of way laws

- Must yield to pedestrians at all times, especially when a pedestrian is at or in the crosswalk with no traffic light.
- When turning left, you must yield to oncoming traffic.
- Drivers on a minor road yield to vehicles 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 at 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.

### Respond to pavement markings

**Yellow lines** separate opposite traffic flows.  
**White lines** separate traffic moving in the same direction.  
**Solid lines** generally mean you should not cross.  
**Broken lines** mean it is permissible to cross.

### See and respond to curves in target areas

The initial detection of a curve is seen in your target area.

### Test Tire-Road Grip

Before entering the curve when roads are wet from rain, dew, snow, ice, apply the brakes to test the tire-road grip. If the tires slide, reduce speed before entering the curve.

### Look for Oncoming Traffic-Get Best Lane Position

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

### Look Into Curve - See 4 Seconds of Road

Look into the curve by turning your head before you turn the steering wheel. If you cannot see at least four seconds of road while entering the curve, your speed is too fast. Reduce speed immediately. If speed reduction is needed do it before getting to the apex. Attempt to see if your exiting path is open. For right or left curves, exit in lane position one.

### Evaluate POT at hillcrest--Be Curious!

Approach a hillcrest in lane position one. Search over the crest to see if you have an open POT. Look for the option of moving into lane position three if there is a problem caused by oncoming traffic in the left-front zone.

### Adjust Closure Rate to front vehicle

Closure rate is how fast you gain on the car in front. When you find yourself gaining on the car ahead, evaluate why.

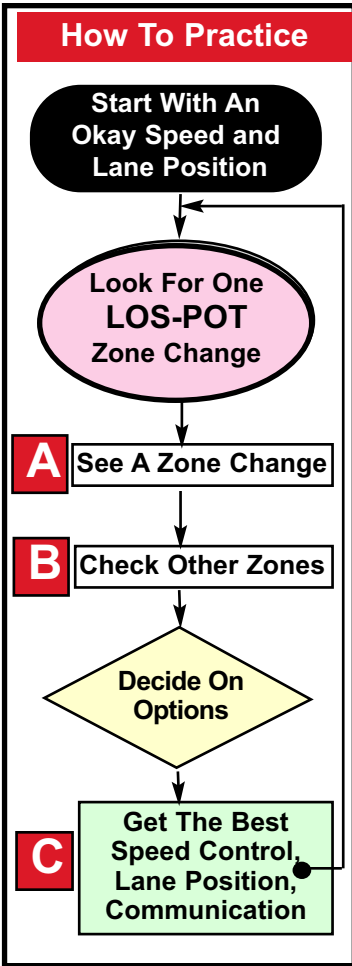
### Keep four seconds of time

When traveling behind another vehicle, try to keep at least four seconds of following time/space. This will give you independence from the actions of the vehicles ahead.

### Use practice commentary effectively

- A. Verbalize when you Find one LOS-POT blockage.
- B. State the condition of the Other Zones you check.
- C. Then, take actions. Practice for ten minutes at a time.

Rating: √ = Okay, X = More Practice Needed



**NOTES**

**24: Laws, Signs, Signals & Marks**

- 1. Respond To Stop/Yield Signs
- 2. Respond To Signal Lights
  - Point Of No Return
  - Red Light & Right Turn On Red
  - Yellow Changing Lights
  - Green Light, Search Inter
- 3. Signal Arrows: Gr, Yel, Red
- 4. Flashing Signal Lights
- 5. Respond to Traffic Signs
  - Regulatory Signs
  - Warning Signs
  - See Sign As Traffic Cue
- 6. Respond To Pave Markings
- 7. Demo Right-of-Way Laws
  - Check Rear Zone
  - Check LOS-POT
  - Check Escape Path

**25: Approaching Curves and Hills**

- 1. See Curve In Target Area
- 2. Check Rear Zone
- 3. Test Tire-Road Grip
- 4. See A Left or Right Curve
- 5. See 4 Seconds of Road
- 6. Get Best Speed Control
- 7. Look For Cars/Get LP
- 8. See LOS-POT at Apex
- 9. Look Into Curve For POT
- 10. Evaluate New Target Area
- 11. Evaluate Targeting Path
- 12. Hill Approach LP 1
- 13. At Hillcrest, Evaluate POT
- 14. Hillcrest LP 1

**26: Following Other Vehicles**

- 1. Adjust Front Closure Rate
- 2. Become Alert Slower Vehicle
- 3. Keep 4 Seconds Of Time
- 4. Try To Improve LOS
- 5. Read Traffic 12 Seconds Ahead
- 6. Control The Rear Zone
- 7. Respond To Communications
- 8. When Front Car Slows
- 9. Explain Benefits

**27: Practice Commentary**

- 1. Start With An Okay:
  - Speed For Conditions
  - Lane Position
- 2. Look For One LOS-POT
- 3. Use The ABC's For One LOS-POT
  - A. See an LOS-POT Zone Ch
  - B. Check The Other Zones
  - C. Get The Best:
    - Speed Control
    - Lane Position
    - Communication
- 4. Repeat The ABC's
  - Commentary Practice effective
- 5. Practice For 10-20 Minutes
  - Successful results achieved



**Key Behavioral Patterns**

- Responds to Signs, Markings
- Applies Right Of Way laws
- FINDS Curves in Target Area
- Evaluates Traction Envelope
- Gets Best LP, Speed Control
- CONTROLS 4 sec Danger Zone
- Looks into Curves/Hill crests
- 4 Seconds Following Space
- Adjusts Closure Rate
- CONTROLS Rear Zone

# Four-Seconds Following Time Puts You In Control

## Learning How to Keep Space

To effectively keep four seconds of space, one needs to learn how to develop it into habit. Knowing what to do is not the same as doing it automatically without thought. To acquire space management into habit, the following levels of learning must take place.

1. Learn how to estimate space.
2. Learn how to manage the front zone closure rate.
3. Learn how to read the actions of the vehicle you are following.
4. Learn how to read the actions of the drivers to your rear.
5. Learn traffic's speed for the different travel lanes you operate in.
6. The more often you keep four seconds of space, the more advantages will be gained.

## 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 space between you and the vehicle ahead will allow you to become sensitive to a closure of space. If you keep the amount of following space that the average driver keeps, which is 1.5 seconds, you may not be alerted to a fast closure rate until you are 2 seconds away from the vehicle in front. If, on the other hand, you have 4 seconds of following 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

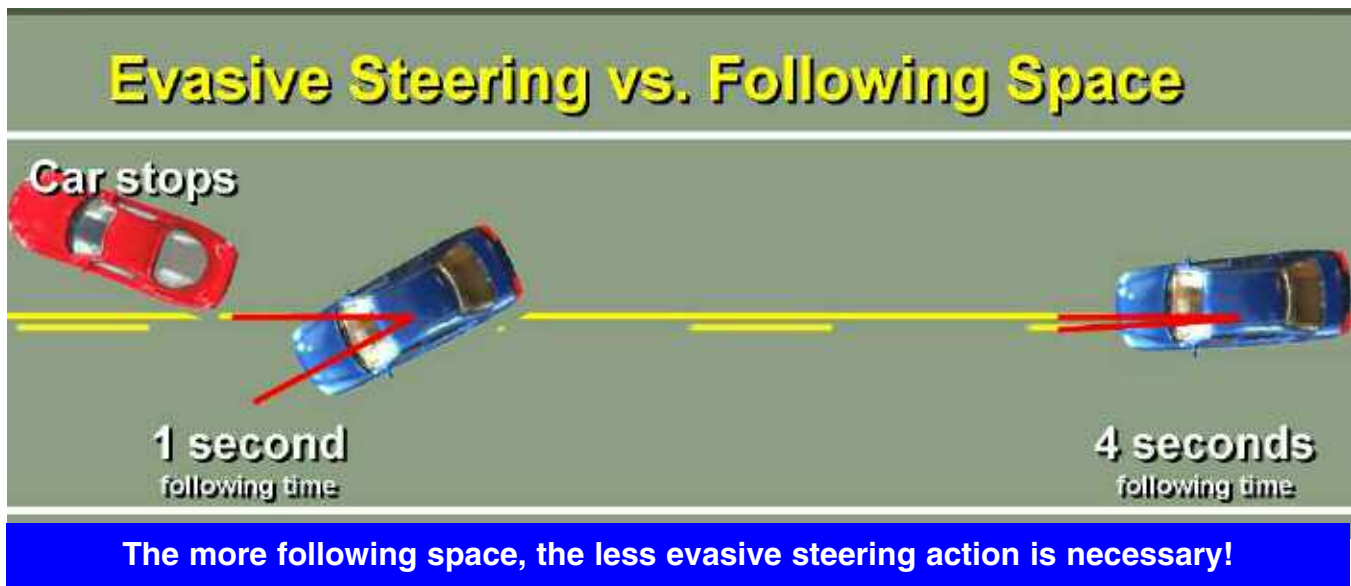
danger zone. Therefore, you can have a very precious 3 seconds of additional time to cope with whatever problem is causing your closure. It could be a stalled vehicle, a sudden stop of traffic on the highway, a construction site, or any number of things that cause the vehicles ahead to be traveling slower than your speed.

## Read the Actions of the Front Vehicles

The slower the front car is going in relation to your speed, the greater your rate of closure is going to be. Many times the reason the car is going abnormally slow — which results in your fast closure rate — is that the driver may be looking for an address or a street. The driver is very likely to brake and make a quick turn without adequate use of signal lights. Without training, the average driver will keep less space as the vehicle in front slows, which creates a stressful reactive situation based on the front cars actions. As the front car slows, be proactive and adjust your speed in a like manner until you can make a decision on how to handle the changing situation.

If you see the driver in front reducing speed, receive that as a communication that your following time may be affected. Adjust your speed to keep the front zone open. Be alert to a hard, sudden braking action from that vehicle. Avoid being victimized by a surprise action.

The larger the front vehicle, the more your Line-Of-Sight will be blocked. Try to gain the best view of situations ahead by keeping more space between you and that vehicle.

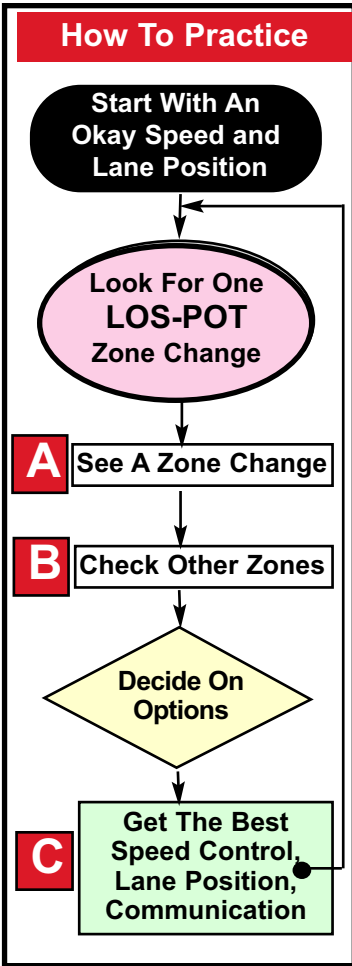


## Advantages Gained by Keeping Four Seconds

- Gives you time to become conscious of a need to correct a fast closure rate.
- Your eyes can search beyond the vehicle in front.
- Removes the control the front vehicle has over your actions.
- Will eliminate, or minimize, surprises from the actions of the first vehicle.
- Removes the stress of being surprised by sudden braking actions of vehicles ahead.
- Makes you more conscious of the disadvantages of keeping a lesser amount of time.



Rating: √ = Okay, X = More Practice Needed



**NOTES**

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- FINDS Curves in Target Area
- Evaluates Traction Envelope
- Gets Best LP, Speed Control
- CONTROLS 4 sec Danger Zone
- Looks into Curves/Hill crests
- 4 Seconds Following Space
- Adjusts Closure Rate
- CONTROLS Rear Zone

# Lesson 8

## OBJECTIVES for LESSON Eight

- The Timing of Side Zones is more difficult for the driver than the timing of traffic lights. The more success the teen had in using Zone Control and timing traffic lights, the easier it will be to time side zones.
- 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 and take inventory of which weak areas need additional practice.

## THE DRIVING SETTING

Use residential roadways, rural two and four lanes, urban areas, and State highways with two to six lanes of traffic. For Guide 29 begin by using an off-street area, such as a parking lot with an upgrade. Then use lightly traveled roadways with upgrades where it will be safe to move to the side of the road.

For Guide 30 start in a parking lot. Set up a parking space that measures six feet wide by twenty-four feet long. If you have traffic cones and pole extensions available, use them. The pole extensions should be as high as a car. Or, 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.

## Key Behavioral Pattern Applications

### 8

#### Identify Fixed Side Zone Change

A fixed zone change is an LOS-POT blockage that is not moving, is not likely to move before you reach its location, or is moving at no faster than a jogging pace. A parked car, a construction site, and a jogger are examples of a fixed side zone change. A jogger, or a pedestrian, because of the slow predictable speed they travel, are treated the same as a “fixed” zone change.

#### Identify Moving Side Zone Changes

A moving side zone change has three commonly occurring conditions: it will be an oncoming vehicle, it will be a vehicle that you are passing, or it will be a vehicle that is passing you. You are able to manage space in relation to the moving side zone by changing your speed to alter the location where you pass each other.

#### 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.

#### Time Right Zone with Fixed Left Zone

To time the right zone—which would be a moving right-front zone—you would need to change your speed to arrive alongside each zone change, the fixed and the moving, at separate times.

#### Improve Lane Position Away from Zone Change

Take a lane position that will give you the best separation from the zone change.

See Page 48 for illustrations.

#### With Closed Left and Right Zones, Reduce Speed

With both a closed left-front and a closed right-front zone you have no option to move away from either zone change. Your only option is to take a braking action. The habit of reducing speed when a closed left and right zone is present will give you more time to evaluate the situation and increase your control.

#### Making Lane Change, Time Open Side Zone

When making a lane change evaluate the side zone condition where you will be entering the new lane. Avoid moving into a closed zone. For example, when making a lane change from the left lane into the right lane avoid entering the right lane where there may be a parked vehicle to your right. When making a lane change from the right lane to the left lane, avoid moving into the lane where there may be oncoming or stopped traffic.

#### While Passing, Time Open Side Zone

While passing, try to avoid passing the vehicle at a time when it is passing a fixed or moving zone change.

#### Communicate for Best Control

When a fixed or moving side zone is not stable—use an effective communication technique in a timely manner to stabilize the situation.

#### Get Best Speed Control

Select the best of the five speed choices.

#### Set the EXPERT Driving Standard

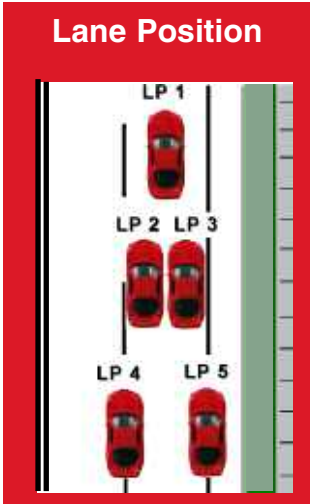
Set the standard to have the teen keep at least one of the side zones always open. And, when that is not possible then put into effect the best selections of the 17 EXPERT Actions.

Rating: √ = Okay, X = More Practice Needed

# 17 CONTROL ACTIONS for EXPERT Driving

## Speed Control

1. Same Speed
2. Decelerate
3. Cover Brake
4. Apply Brake
5. Accelerate



## Communication

1. Signal Lights
2. Headlights
3. Brake Lights
4. Horn Usage
5. Hands, Arms
6. Speed Altered
7. Lane Position

## 28: Timing Side Zones


1. Identify Fixed Side Zone Ch
2. Identify Moving Side Zone Ch
3. Time Left Zone With Fixed Rt
4. Time Rt Zone With Fixed Lt
5. Improve Lane Position
6. With Closed Left & Right
7. Making Lane Change
8. While Passing, Time Open
9. Comm. For Best Control
10. Get Best Speed Control

## 30: Parallel Parking


1. Rear Zone Control
2. Speed Control
3. Locate Parking Space
4. Side Position - 2 or 3 Feet
5. Stop Even With Space
6. Go Forward
7. Back To Rear Pivot Point
8. Check Left-Front Corner
9. Creep and Turn Wheel Fully
10. Move Car To 45° Angle
11. Creep and Time Turning to clear front car
12. Straighten Tires - Center Car

## 29: Hill Stops and Starts

### 1. Pull To Side Of Road To Stop


- Find Location To Stop At
- Check Rear Zone - Signal
- Move To Side Of Rd - Stop
- Keep Foot On Brake Pedal
- Apply Parking Brake
- Shift To Neutral
- Release Foot From Brake
- Be Certain Parking Br Holds

### 2. Starting The Car In Motion


- Put Right Foot On Brake
- Shift To Drive
- Check Mirrors
- Put Left Signal Light On
- Move Right Foot To Gas Pedal
- Press Gas Pedal Slightly
- Check Over Left Shoulder
- Check Your Forward Path
- Release Parking Brake
- Increase Gas As Needed
- Should Be No Roll Back
- Cancel Signal

## NOTES

## Lesson Reviews


- Review Lesson One
- Review Lesson Two
- Review Lesson Three
- Review Lesson Four
- Review Lesson Five
- Review Lesson Six
- Review Lesson Seven

## Key Behavioral Patterns

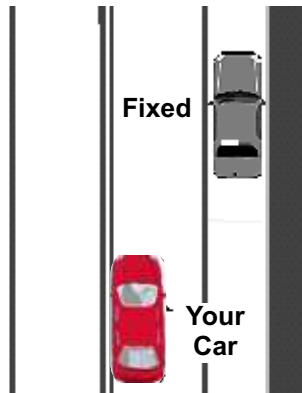

- FIND Fixed Side Zone Change
- FIND Moving Side Zones
- Time arrival into open zone
- Get Best Speed Control
- Rear Control before exiting flow


- Car Control parking on hill
- Rear Control Parallel Parking
- Side Position effective
- Use of Pivot Point

# Timing Side Zones

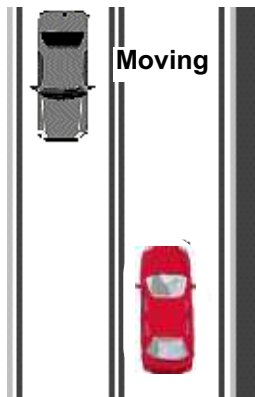
## Fixed Zone Change

A fixed zone change is one that is not moving, and is not likely to move before you reach its location. A parked car is an example of a fixed side zone change.



## Practice Using the ABCs of Zone Control

- A. FiND an LOS-POT
- B. Check Other Zones
- C. Select the best choice of Speed, Lane Positioning, Communication



## Moving Side Zone Change

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.

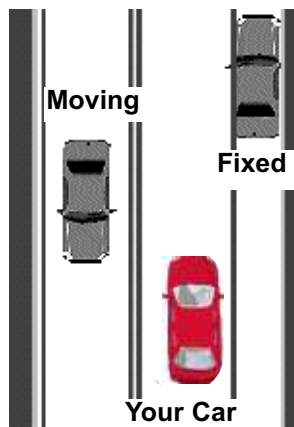
## 17 EXPERT ACTIONS

### Speed Control

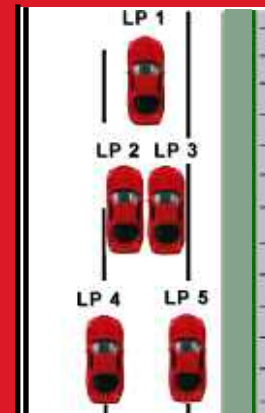
1. Same Speed
2. Decelerate
3. Cover Brake
4. Apply Brake
5. Accelerate

## Time Left Zone With Fixed Right Zone

To time the left zone, which is the moving zone change, pass the moving car and the fixed parked car separately.



### Lane Position



## Time Right Zone With Fixed Left Zone

To time the right zone, which would be a moving right-front zone, you would need to change your speed to arrive alongside each zone change, the fixed and the moving, at separate times.

## With Closed Left and Right, Reduce Speed

With a closed left-front and a closed right-front zone you have no option to move away from the zone change. Your only option is to take a braking action. The habit of reducing speed with a closed left and right zone will give you more time to evaluate the situation and increase your control.

### Communication

1. Signal Lights
2. Headlights
3. Brake Lights
4. Horn Usage
5. Hands, Arms
6. Speed Altered
7. Lane Position

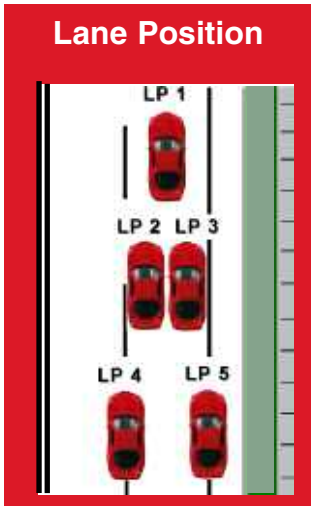


Rating: √ = Okay, X = More Practice Needed

# 17 CONTROL ACTIONS for EXPERT Driving

## Speed Control

1. Same Speed
2. Decelerate
3. Cover Brake
4. Apply Brake
5. Accelerate



## Communication

1. Signal Lights
2. Headlights
3. Brake Lights
4. Horn Usage
5. Hands, Arms
6. Speed Altered
7. Lane Position

## 28: Timing Side Zones


1. Identify Fixed Side Zone Ch
2. Identify Moving Side Zone Ch
3. Time Left Zone With Fixed Rt
4. Time Rt Zone With Fixed Lt
5. Improve Lane Position
6. With Closed Left & Right
7. Making Lane Change
8. While Passing, Time Open
9. Comm. For Best Control
10. Get Best Speed Control

## 30: Parallel Parking


1. Rear Zone Control
2. Speed Control
3. Locate Parking Space
4. Side Position - 2 or 3 Feet
5. Stop Even With Space
6. Go Forward
7. Back To Rear Pivot Point
8. Check Left-Front Corner
9. Creep and Turn Wheel Fully
10. Move Car To 45° Angle
11. Creep and Time Turning to clear front car
12. Straighten Tires - Center Car

## 29: Hill Stops and Starts

### 1. Pull To Side Of Road To Stop


- Find Location To Stop At
- Check Rear Zone - Signal
- Move To Side Of Rd - Stop
- Keep Foot On Brake Pedal
- Apply Parking Brake
- Shift To Neutral
- Release Foot From Brake
- Be Certain Parking Br Holds

### 2. Starting The Car In Motion


- Put Right Foot On Brake
- Shift To Drive
- Check Mirrors
- Put Left Signal Light On
- Move Right Foot To Gas Pedal
- Press Gas Pedal Slightly
- Check Over Left Shoulder
- Check Your Forward Path
- Release Parking Brake
- Increase Gas As Needed
- Should Be No Roll Back
- Cancel Signal

## NOTES

## Lesson Reviews


- Review Lesson One
- Review Lesson Two
- Review Lesson Three
- Review Lesson Four
- Review Lesson Five
- Review Lesson Six
- Review Lesson Seven

## Key Behavioral Patterns


- FIND Fixed Side Zone Change
- FIND Moving Side Zones
- Time arrival into open zone
- Get Best Speed Control
- Rear Control before exiting flow


- Car Control parking on hill
- Rear Control Parallel Parking
- Side Position effective
- Use of Pivot Point

# Lesson 9

## OBJECTIVES for LESSON Nine

- This lesson explores 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 all the previous lessons be performed successfully and consistently so that they become habit.
- Night driving for the teen creates additional problems. Due to visibility limitations, driver drowsiness, passenger distractions, and aimless “cruising”, passing on two-lane roadways at night contains a very high risk. There very seldom are situations where there is opportunity for the training vehicle to pass another vehicle. However, simulated passing situations, **as presented in the Coaching Tips on pages 52-53**, will give the teen ample practice to develop the key behavioral patterns for passing safely.
- The teen is presented with simulated vehicle failures and roadway problems that divides ones attention between the driving environment and problem solving.

## THE DRIVING SETTING

Nighttime conditions should exist 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 created with a new moon. Use all types of roadways. For Guide 32 begin by using four-lane highways with two lanes going in the same direction. Limited access highways may then be used. However, refer to Guide 34 “Getting On and Off Highways” first. After skills are developed use open secondary highways with two to six lanes of traffic. For Guide 33 begin each of the problems at speeds of only 10 m.p.h in a vacant parking lot.

## Key Behavioral Pattern Applications

### Night Driving: Vehicle Readiness

Properly functioning lights are essential during nighttime driving. Acquire the habit of checking your car's lights each night before driving.

### Night Driving: Driver Readiness

- To see effectively at night, avoid exposure to the sun's rays and wear sun glasses during the day.
- At night, you are more likely to be fatigued, which could cause eye fixations.

### Night Driving: Environmental Problems

- Illumination is reduced when there is a new moon as compared to a full moon. Be aware of the difference.
- Rural roadways may offer no street lighting, making you more dependent upon your headlights.
- Urban areas have distracting neon signs that could prevent you from seeing traffic lights and other vehicles.
- Change in temperature and early morning dew can result in "black ice" on freezing road surface.

### 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 targeting path.
- 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.

### Being Passed: Tailgater Type

You can know what to expect from a tailgater ready to pass you if you know which type it is. The "charger" will pass you very quickly at the first opportunity. The "one pacer" will take more time to decide to pass and to execute the pass. The "habitual" tailgater may never attempt to pass you.

### Select passing location—Adjust LP and Space

Look ahead to your target area to see what opportunities there will be for someone to pass you. Select the best opportunity for one to pass you. When you want to be passed, moving into lane position three will communicate that message and give additional space to separate from the side of your car. The driver that passed may suddenly make a speed reduction, forcing you to brake to avoid a crash. The best habit is to reduce your speed for you to control your following space.

### Passing: Evaluations of Risk

There are seldom opportunities for a driver education student to practice passing other vehicles. Therefore, we need to create simulated passing situations.

### Responding to problems:

Nighttime environmental problems.  
Drowsy driving conditions and how to prevent them.  
Distracted driving events and how to prevent them.  
Looking for an unfamiliar location.  
Coping with a brake failure.  
Engine stall results in loss of power steering.  
How to cope with a tire blowout.  
How to prevent vehicle rollovers.  
How to prevent and correct skids.

Rating: √ = Okay, X = More Practice Needed

**NOTES**

**31: Night Driving**

**1. Adjust For Visibility Limits**


- **Vehicle Readiness**
- Clean Lights, Windows, Mirrors
- Check brake lights, signal lights
- Keep Dash Lights Low
- **Driver Readiness**
- Avoid Glaring Lts; Recovery
- Depth Perception Evaluated
- Nighttime Envir. Problems
- New Moon, dark nights
- Rural Roadways, no lights
- Urban Areas, overload

**2. Searching At Night**


- Look Beyond Headlights
- Look To Target Area
- Use High Beam
- Look For Cars Without Lights
- See Curve & Intersection Early

**3. Interacting With Others**


- Look for Pedestrian Locations
- Dim High Beam
- Communicate One Flash
- To Car - 12 Seconds away
- No Flash Passing Trucks
- Use Other Cars' Headlights

**32A: Being Passed**

**1. Being Passed**


1. Identify Type Of Tailgater
2. Plan Ahead For Passing
3. Select Passing Location
4. Adjust Lane Position
5. Communicate If Needed
6. Adjust Speed
7. Adjust Following Time

**32B: Passing**


1. Why Pass? - Risk vs. Gain
2. Keep At Least 3 Seconds
3. Select Best Passing Location
4. Mirrors - Head Checks - Signal
5. Check Front and Side
6. Avoid Hesitation
7. Accelerate Smoothly
8. Keep Searching
9. See Headlight
10. Return to Lane, Cancel Signal

**33: Responds To Problems**

**1. Coping With Car Problems**


- Brake Failure
- Pump Brakes
- Downshift
- Hold Parking Brake Release
- Stab Parking Brake
- Take Escape Path

• **Engine Stalls**


- Steer Firmly
- Open Palm - Neutral

• **Restart Engine**


- Shift To Drive
- Take Escape Path

**2. Roadway & Driver Problems**


- Locate and Park Near.....
- Locate and Stop at .....
- Your Tire Just Blew Out
- Emergency Vehicle from rear
- It's Beginning To Rain
- Missed Your Turn

**3. Skid Detection, Correction**


- Keeps head on Target
- Makes steering corrections

**Key Behavioral Patterns**


- **Adjust Speed at Night**
- **Adjusts to Environment**
- **Looks beyond Headlights**
- **FIND Pedestrian High risk area**
- **Identify tailgater type**


- **Select Passing Location**
- **Evaluate Passing Risk**
- **Respond to car problems**
- **Respond to roadway problems**
- **Detects and Corrects Skids**

# 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.



Rating: √ = Okay, X = More Practice Needed

**NOTES**

**31: Night Driving**

**1. Adjust For Visibility Limits**


- **Vehicle Readiness**
- Clean Lights, Windows, Mirrors
- Check brake lights, signal lights
- Keep Dash Lights Low
- **Driver Readiness**
- Avoid Glaring Lts; Recovery
- Depth Perception Evaluated
- Nighttime Envir. Problems
- New Moon, dark nights
- Rural Roadways, no lights
- Urban Areas, overload

**2. Searching At Night**


- Look Beyond Headlights
- Look To Target Area
- Use High Beam
- Look For Cars Without Lights
- See Curve & Intersection Early

**3. Interacting With Others**


- Look for Pedestrian Locations
- Dim High Beam
- Communicate One Flash
- To Car - 12 Seconds away
- No Flash Passing Trucks
- Use Other Cars' Headlights

**32A: Being Passed**

**1. Being Passed**


1. Identify Type Of Tailgater
2. Plan Ahead For Passing
3. Select Passing Location
4. Adjust Lane Position
5. Communicate If Needed
6. Adjust Speed
7. Adjust Following Time

**32B: Passing**


1. Why Pass? - Risk vs. Gain
2. Keep At Least 3 Seconds
3. Select Best Passing Location
4. Mirrors - Head Checks - Signal
5. Check Front and Side
6. Avoid Hesitation
7. Accelerate Smoothly
8. Keep Searching
9. See Headlight
10. Return to Lane, Cancel Signal

**33: Responds To Problems**

**1. Coping With Car Problems**


- Brake Failure
- Pump Brakes
- Downshift
- Hold Parking Brake Release
- Stab Parking Brake
- Take Escape Path

• **Engine Stalls**


- Steer Firmly
- Open Palm - Neutral

• **Restart Engine**


- Shift To Drive
- Take Escape Path

**2. Roadway & Driver Problems**


- Locate and Park Near.....
- Locate and Stop at .....
- Your Tire Just Blew Out
- Emergency Vehicle from rear
- It's Beginning To Rain
- Missed Your Turn

**3. Skid Detection, Correction**


- Keeps head on Target
- Makes steering corrections

**Key Behavioral Patterns**


- **Adjust Speed at Night**
- **Adjusts to Environment**
- **Looks beyond Headlights**
- **FIND Pedestrian High risk area**
- **Identify tailgater type**


- **Select Passing Location**
- **Evaluate Passing Risk**
- **Respond to car problems**
- **Respond to roadway problems**
- **Detects and Corrects Skids**

# Lesson 10

## OBJECTIVES for LESSON Ten

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, 35. As the teen learns 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.

This lesson should be used over several practice sessions until all Behaviors, Procedures and the Ten Habits are well on their way to consistently successful performance. 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.

## 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.

## Key Behavioral Pattern Applications

### Getting On the Limited Access Highway

#### On-Ramp Behavior

- 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:** With a car in front, keep 4 or more seconds of space for independent action.
- 3. Slow On Ramp Speed:** A slower ramp speed gives you more time to find a gap or hole, and it prevents a slowdown or stop while in the acceleration lane.

#### On Acceleration Lane

- 4. Search For Gap To Enter:** With a slower speed on the ramp, you have more time to find a gap to enter.
- 5. Blind Spot Checks:** If your vehicle has a convex mirror attached to the outside, it will show vehicles not seen in existing outside mirrors. Without a suitable convex mirror, a head movement check is needed.
- 6. Signal Light On:** Put your left signal light on, much like making a left lane change.
- 7. Accelerate Briskly:** Once a gap is found, accelerate rapidly to enter the traffic flow at highway speed.

#### Highway Entry

- 8. Precision Lane Entry:** Use precision lane positioning to occupy the least amount of lane space while entering.
- 9. Mirror Checks:** Immediately after entering, check the mirrors to update the rear zone status.

### Getting Off 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 are exiting.
- 4. Change Lanes, If Needed:** Use correct precision lane changing techniques if lane changing is necessary.
- 5. Test Brakes Before Exit:** While in the deceleration lane, before committed to the exit ramp, apply brakes to test them. If there is a problem, you can stay on the highway.
- 6. Controlled Braking:** Use constant pressure for controlled braking. Reduce speed to expect a tight curve on exit ramp.

### Evaluation of 10 Model Driving Habits:

#### 1. Establish Driver-Vehicle Readiness

- Driver Fitness, Butt in seat, Safety Belts On
- Doors Locked, Windows Up
- Headlights On during daytime

#### 2. See Path Before Putting the Car in Motion

- See the targeting path you intend to use is clear
- Turn head in direction of intended movement before turning wheel.

#### 3. Keep the Car in Balance

- Make smooth and effective starts, stops and steering
- Use transition pegs for effective transfer of braking, acceleration and steering forces

#### 4. Use Reference Points

- Know within 3-6 inches where your car is positioned
- Know where the sides, front and rear of the car are in relation to the intersection

#### 5. Do the Zone Control LOS-POT Searching

- Search to the Target Area • Evaluate Travel Path for LOS-POT blockage
- FIND** LOS-POT blockage • Check other related zones

#### 6. Turn Decisions into Zone Controlled Actions

- SOLVE** LOS-POT blockages 12 -15 seconds away.
- Gain **CONTROL** of: speed, lane positioning, communication
- Re-evaluate LOS-POT at 4-second Danger Zone
- Be prepared to make adjustments at the 4-second Danger Zone
- Know your Stopping Distance and your PONR

#### 7. Search Left, Front, Right Zones before Intersections

- Identify LOS blockage
- Check that the left, front and right zones are clear
- When you see a red light, or stopped traffic, reduce speed to time your arrival into an open zone

#### 8. Get Rear Zone Control

- When your foot goes on the brake, check the rear zone
- Before moving to a side, check mirrors and blind spots
- When backing, check over right shoulder and check all mirrors continuously

#### 9. Get Control With a Vehicle in Front

- When approaching a vehicle, close in gradually
- When traveling at same speed, keep 4 seconds following space
- Stop behind vehicles to see rear tires touching the road

#### 10. Interact Courteously With Others

- Empower yourself and reduce stress by being courteous, rather than competitive, while driving
- Send and receive communications in a timely manner

Rating: √ = Okay, X = More Practice Needed

**NOTES**

**34: Limited Access Highways**

**1. Getting On The Highway**

- |  |  |  |                            |
|--|--|--|----------------------------|
|  |  |  | 1. Check The Rear Zone     |
|  |  |  | 2. Keep 4 Seconds of Space |
|  |  |  | 3. On Ramp, Slow Speed     |
|  |  |  | 4. Search For Gap To Enter |
|  |  |  | 5. Blind Area Checks       |
|  |  |  | 6. Signal Light On         |
|  |  |  | 7. Accelerate Briskly      |
|  |  |  | 8. Precision Lane Entry    |
|  |  |  | 9. Mirror Checks           |

**2. Getting Off The Highway**

- |  |  |  |                               |
|--|--|--|-------------------------------|
|  |  |  | 1. Plan 12 Sec. Plus For Exit |
|  |  |  | 2. Get Rear Zone Status       |
|  |  |  | 3. Communicate                |
|  |  |  | 4. Change Lanes, If Needed    |
|  |  |  | 5. Test Brakes Before Exit    |
|  |  |  | 6. Controlled Braking         |

**Guide A  
Behaviors Performance Inventory**

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Place a check each time Guide A on page 58 is used.

**Guide B  
Procedures Performance Inventory**

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Place a check each time Guide B on page 59 is used.

**Guide C  
Ten Model Driving Habits Inventory**

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Place a check each time Guide C on inside of back cover is used.

**Procedures and Behaviors on Limited Access Highway**

**Target Area Searching**


- FINDS** LOS-POT in Target Area
- SOLVES** 15 seconds away
- CONTROLS** 4-sec. danger zone

**Following Other Vehicles**


- becomes Alerted to slow vehicles
- adjusts Front Closure rate
- keeps four-seconds space
- controls the rear zone

**Lane and Speed Selection**


- selects best legal lane for travel
- uses far-left lane only for passing
- uses lane effectively
- selects best and legal speed

**Approach To Interchanges**


- see open/closed zones
- check rear zone
- lane position/speed control

**Precision Lane Change**


- evaluate zones and blind spots
- make final blind spot check
- move to LP2 or LP3
- enter new lane in LP2 or LP3

**Approach To LOS Curves**


- see curve in target area
- check all zones for options
- left curve: LP3, LP1, LP1
- right curve: LP2, LP3, LP1
- effective speed control

**Passing/Being Passed**


- identify type of tailgater
- evaluate gain versus risk
- check all zones for LOS-POTs
- control speed and lane position
- time side zone during pass

**Key Behavioral Patterns**


- Smooth Limited Access entry
- Keeps 4 second space
- Searches for Gap or Hole
- Uses Mirrors Effectively
- Accelerates Effectively


- Uses Lane Positions on entry
- Plans 15 seconds for exiting
- Gets Rear Zone Control
- Tests Brakes before exit ramp
- Speed Controlled before ramp

# Limited Access Highways

## Getting On The Highway

### On Ramp Behavior

#### 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 independent action.

#### 3. Slow On-Ramp Speed

Avoid going fast on the ramp to prevent a slowdown or stop while in the acceleration lane.

### On Acceleration Lane

#### 4. Search For Gap To Enter

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

#### 5. Blind-Spot Checks

If your vehicle has a convex mirror attached to the outside, it will show vehicles not seen in existing outside mirrors. Without a suitable convex mirror, a head movement check is needed.

### Highway Entry

#### 6. Signal Light On

Put your left signal light on, much like making a left lane change.

#### 7. Accelerate Briskly

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

#### 8. Precision Lane Entry

Use precision lane positioning to occupy the least amount of lane space while entering.

#### 9. Mirror Checks

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

#### Guides to use while on the highway:

12, 13, 14, 16, 18, 19, 21, 22, 24, 25, 26, 27, 31, 32, 33, 35.

## Getting Off 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 Needed

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

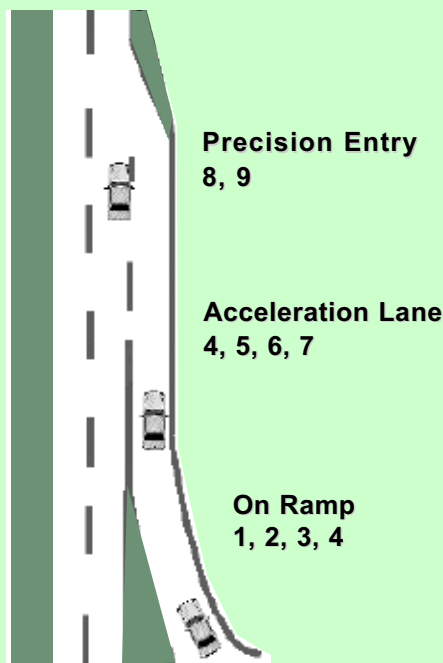
### 5. Test Brakes Before Exit

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, you can stay on the highway.

### 6. Controlled Braking

Use constant pressure for controlled braking.

## Getting On The Highway





Rating: √ = Okay, X = More Practice Needed

**NOTES**

**34: Limited Access Highways**

**1. Getting On The Highway**

- |  |  |  |                            |
|--|--|--|----------------------------|
|  |  |  | 1. Check The Rear Zone     |
|  |  |  | 2. Keep 4 Seconds of Space |
|  |  |  | 3. On Ramp, Slow Speed     |
|  |  |  | 4. Search For Gap To Enter |
|  |  |  | 5. Blind Area Checks       |
|  |  |  | 6. Signal Light On         |
|  |  |  | 7. Accelerate Briskly      |
|  |  |  | 8. Precision Lane Entry    |
|  |  |  | 9. Mirror Checks           |

**2. Getting Off The Highway**

- |  |  |  |                               |
|--|--|--|-------------------------------|
|  |  |  | 1. Plan 12 Sec. Plus For Exit |
|  |  |  | 2. Get Rear Zone Status       |
|  |  |  | 3. Communicate                |
|  |  |  | 4. Change Lanes, If Needed    |
|  |  |  | 5. Test Brakes Before Exit    |
|  |  |  | 6. Controlled Braking         |

**Guide A Behaviors Performance Inventory**

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Place a check each time Guide A on page 58 is used.

**Guide B Procedures Performance Inventory**

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Place a check each time Guide B on page 59 is used.

**Guide C Ten Model Driving Habits Inventory**

--	--	--	--	--	--	--	--

Place a check each time Guide C on inside of back cover is used.

**Procedures and Behaviors on Limited Access Highway**

**Target Area Searching**

- |  |  |  |                                     |
|--|--|--|-------------------------------------|
|  |  |  | <b>FINDS</b> LOS-POT in Target Area |
|  |  |  | <b>SOLVES</b> 15 seconds away       |
|  |  |  | <b>CONTROLS</b> 4-sec. danger zone  |

**Following Other Vehicles**

- |  |  |  |                                  |
|--|--|--|----------------------------------|
|  |  |  | becomes Alerted to slow vehicles |
|  |  |  | adjusts Front Closure rate       |
|  |  |  | keeps four-seconds space         |
|  |  |  | controls the rear zone           |

**Lane and Speed Selection**

- |  |  |  |                                     |
|--|--|--|-------------------------------------|
|  |  |  | selects best legal lane for travel  |
|  |  |  | uses far-left lane only for passing |
|  |  |  | uses lane effectively               |
|  |  |  | selects best and legal speed        |

**Approach To Interchanges**

- |  |  |  |                             |
|--|--|--|-----------------------------|
|  |  |  | see open/closed zones       |
|  |  |  | check rear zone             |
|  |  |  | lane position/speed control |

**Precision Lane Change**

- |  |  |  |                                |
|--|--|--|--------------------------------|
|  |  |  | evaluate zones and blind spots |
|  |  |  | make final blind spot check    |
|  |  |  | move to LP2 or LP3             |
|  |  |  | enter new lane in LP2 or LP3   |

**Approach To LOS Curves**

- |  |  |  |                             |
|--|--|--|-----------------------------|
|  |  |  | see curve in target area    |
|  |  |  | check all zones for options |
|  |  |  | left curve: LP3, LP1, LP1   |
|  |  |  | right curve: LP2, LP3, LP1  |
|  |  |  | effective speed control     |

**Passing/Being Passed**

- |  |  |  |                                 |
|--|--|--|---------------------------------|
|  |  |  | identify type of tailgater      |
|  |  |  | evaluate gain versus risk       |
|  |  |  | check all zones for LOS-POTs    |
|  |  |  | control speed and lane position |
|  |  |  | time side zone during pass      |

**Key Behavioral Patterns**

- |  |  |  |                               |
|--|--|--|-------------------------------|
|  |  |  | • Smooth Limited Access entry |
|  |  |  | • Keeps 4 second space        |
|  |  |  | • Searches for Gap or Hole    |
|  |  |  | • Uses Mirrors Effectively    |
|  |  |  | • Accelerates Effectively     |

- |  |  |  |                                 |
|--|--|--|---------------------------------|
|  |  |  | • Uses Lane Positions on entry  |
|  |  |  | • Plans 15 seconds for exiting  |
|  |  |  | • Gets Rear Zone Control        |
|  |  |  | • Tests Brakes before exit ramp |
|  |  |  | • Speed Controlled before ramp  |

Rating: √ = Okay, X = More Practice Needed

**NOTES**

- \_\_\_ **Basic Skill Techniques** (Guide 3)
  - \_\_\_ Acceleration \_\_\_ Braking \_\_\_ Steering \_\_\_ Shifting
- \_\_\_ **Reference Point Usage** (Guide 5)
- \_\_\_ **Targets** \_\_\_ **Target Area** \_\_\_ **Targeting Path** (G 9)
- \_\_\_ **Target Area to Target Area Searching** (Guide 12)
- \_\_\_ **LOS-POT detection** (12 seconds, or more, ahead) (Guide 14)
- \_\_\_ **Identifying open/closed zones** (Guide 14)
- \_\_\_ **Searching Intersections** (left, front, right zones) (G 17)
- \_\_\_ **Searching into Curves and Over Hills** (Guide 25)

**Using The ABC's Of Zone Control** (Guide 21)

**A** \_\_\_ **FIND** See a LOS-POT Zone Change

**B** \_\_\_ **SOLVE** Check Other Zones (for options & escape path)

**C** \_\_\_ **CONTROL** Get The Best Control

- \_\_\_ Speed Selection \_\_\_ Lane Position
- \_\_\_ Communication

- \_\_\_ **Lane Position Usage** (Guide 21)
  - \_\_\_ Straight -- with left /right zone changes
  - \_\_\_ Curves -- approach, apex, exit positions
- \_\_\_ **Rear Zone Control** unstable, closed, open (Guide 18)
  - \_\_\_ Inside mirror (moving, stops, turns)
  - \_\_\_ Outside mirrors
  - \_\_\_ Convex mirrors (danger zone ok/not ok)
  - \_\_\_ Over-shoulder checks
  - Type Tailgater: \_\_\_ Pacer \_\_\_ Charger \_\_\_ Habitual
- \_\_\_ **Following Time/Space** (Guide 26)
  - \_\_\_ Closure Rate on approach
  - \_\_\_ Moving at same speed -- 4 seconds
  - \_\_\_ When stopped -- see the tires
  - \_\_\_ Before moving -- delay start 2 seconds
- \_\_\_ **Communication and Courtesy** (Guide 16)
  - \_\_\_ Timing \_\_\_ Technique \_\_\_ Commitment



**Rating:** √ = Okay, X = More Practice Needed

**NOTES**

- \_\_\_ **Precision Turns** (Guide 6)
  - \_\_\_ side position
  - \_\_\_ forward position
  - \_\_\_ searching intersection
  - \_\_\_ looking into turns
  
- \_\_\_ **Approach To Intersections** (Guide 17)
  - \_\_\_ see open/closed zones
  - \_\_\_ check rear zone
  - \_\_\_ lane position/speed control
  - \_\_\_ searching left, front, right
  - \_\_\_ staggered, legal, safety stop
  
- \_\_\_ **Timing Arrival for Open Zone** (Guides 20 & 28)
  - \_\_\_ Traffic Lights
  - \_\_\_ Stopped Traffic
  - \_\_\_ Side Zones
  
- \_\_\_ **Left Turn at Green Lights** (Guide 20)
  - \_\_\_ Rear
  - \_\_\_ Gap
  - \_\_\_ Path
  - \_\_\_ Light
  
- \_\_\_ **Precision Lane Change** (Guide 22)
  - \_\_\_ evaluate zones and blind spots
  - \_\_\_ make final blind spot check
  - \_\_\_ move to LP2 or LP3
  - \_\_\_ enter new lane in LP2 or LP3
  
- \_\_\_ **Approach To Curves** (Guide 25)
  - \_\_\_ see curve in target area
  - \_\_\_ check all zones for options
  - \_\_\_ left curve: LP3, LP1, LP1
  - \_\_\_ right curve: LP2, LP3, LP1
  - \_\_\_ effective speed control
  
- \_\_\_ **Passing/Being Passed** (Guide 32)
  - \_\_\_ identify type of tailgater
  - \_\_\_ evaluate gain versus risk
  - \_\_\_ check all zones for LOS-POTs
  - \_\_\_ control speed and lane position
  
- \_\_\_ **Getting On/Off Highways** (Guide 34)
  - \_\_\_ slowest speed on entrance ramp
  - \_\_\_ evaluate gap to enter
  - \_\_\_ effective speed on acceleration lane
  - \_\_\_ getting off the highway: plan ahead, test brakes
  
- \_\_\_ **Backing Techniques & Turnabouts** (Guide 11)
  - \_\_\_ creep at a walking pace
  - \_\_\_ effective searching
  
- \_\_\_ **Perpendicular Parking** (Guide 23)
  - \_\_\_ side position
  - \_\_\_ 45-degree target, go forward
  - \_\_\_ evaluate alignment to space
  - \_\_\_ back to pivot point, turn wheel
  - \_\_\_ forward position
  
- \_\_\_ **Hill Stops and Starts** (Guide 29)



# GUIDE C: Performance of Ten Habits Inventory

## NOTES

**Directions:** Use this Guide on three different in-car sessions.

Place a √ or an X each time an observation is made. √ = Okay, x = Not Okay

1	2	3	<b>Ten Model Driving Habits Inventory</b>
			<b>1. Establish Driver-Vehicle Readiness</b> <ul style="list-style-type: none"> <li>• Driver Fitness: mental/physical</li> <li>• Butt In Seating Position</li> <li>• Safety Belts On, Head Restraints Up</li> <li>• Doors Locked, Windows Up</li> <li>• Headlights On during daytime</li> </ul>
			<b>2. See Path Before Putting the Car in Motion</b> <ul style="list-style-type: none"> <li>• See that the Targeting Path you intend to use is clear.</li> <li>• Turn head before turning steering wheel.</li> </ul>
			<b>3. Keep the Car in Balance</b> <ul style="list-style-type: none"> <li>• Make smooth and effective starts, stops, and steering actions.</li> <li>• Use transition pegs for braking, acceleration and steering forces.</li> </ul>
			<b>4. Use Reference Points</b> <ul style="list-style-type: none"> <li>• Know within 3-6" where your car is positioned to the roadway.</li> <li>• Know where the car's sides and front are in relation to intersection.</li> </ul>
			<b>5. Do the Zone Control LOS-POT Searching</b> <ul style="list-style-type: none"> <li>• Search to the Target Area.</li> <li>• Evaluate Targeting Path for LOS-POT(Line-Of-Sight, Path-Of-Travel) blockage.</li> <li>• <b>FIND</b> LOS-POT blockage.</li> <li>• Check other related zones.</li> </ul>
			<b>6. Turn Decisions into Zone Control Actions</b> <ul style="list-style-type: none"> <li>• <b>SOLVE</b> LOS-POT blockage while 12-15 seconds away.</li> <li>• Gain <b>CONTROL</b> of: speed, lane position, and communication.</li> <li>• Re-evaluate LOS-POT at 4-second Danger Zone.</li> <li>• Be prepared to make adjustments at the 4-second Danger Zone.</li> <li>• Know your Stopping Distance and your Point-Of-No-Return.</li> </ul>
			<b>7. Control the Intersection</b> <ul style="list-style-type: none"> <li>• Identify LOS blockage.</li> <li>• Check for clear left, front and right zones before entering.</li> <li>• With a red light, or stopped traffic, reduce speed to time your arrival into an open zone.</li> </ul>
			<b>8. Get Rear Zone Control</b> <ul style="list-style-type: none"> <li>• When your foot goes on the brake, check the rearview mirror.</li> <li>• Before moving to either side, check mirror and blind areas.</li> <li>• When backing, check over shoulder and all mirrors continuously.</li> </ul>
			<b>9. Get Control With a Vehicle in Front</b> <ul style="list-style-type: none"> <li>• When approaching a vehicle, close in gradually.</li> <li>• When traveling at same speed, keep 4 seconds following time.</li> <li>• When stopped behind a vehicle, see its rear tires touching road.</li> </ul>
			<b>10. Interact Courteously With Others</b> <ul style="list-style-type: none"> <li>• Empower yourself and reduce stress by being courteous.</li> <li>• Send and receive communications in a timely manner.</li> </ul>





## Lessons and Guide Titles

1	Guide 1: <b>Getting Ready To Drive</b> Guide 2: <b>Starting Engine, Orientation to Controls</b>	Guide 3: <b>Moving and Stopping Smoothly</b> Guide 4: <b>On-Target, Off-Target</b>
2	Guide 5: <b>Reference Point Discoveries</b> Guide 6A & 6B: <b>Entering Traffic &amp; Precision Turns</b>	Guide 7: <b>Reading Instruments and Gauges</b> Guide 8: <b>Before Exiting the Car</b>
3	Guide 9: <b>Control of Tracking and Targeting Path</b> Guide 10: <b>Introduction to LOS-POT Blockages</b>	Guide 11A: <b>Backing Introduction</b> Guide 11B: <b>Turnabouts, Driveway-Intersection</b>
4	Guide 12: <b>Searching Target Area to Target Area</b> Guide 13: <b>Recognition of LOS-POTs, Open/Closed Zones</b>	Guide 14: <b>Introduction to the Zone Control System</b> Guide 15: <b>Forward and Angle Parking</b>
5	Guide 16: <b>Communication Options</b> Guide 17: <b>Approaching Intersections</b>	Guide 18: <b>Rear Zone Control</b> Guide 19: <b>Stopping In Traffic</b>
6	Guide 20: <b>Traffic Lights: Timing and Turning Left</b> Guide 21: <b>Using the ABC's of Zone Control</b>	Guide 22: <b>Lane Change With Precision</b> Guide 23: <b>Backing Between Cars, Perpendicular Parking</b>
7	Guide 24: <b>Responding to Laws, Signs, Signals, Markings</b> Guide 25: <b>Approaching Curves and Hillcrests</b>	Guide 26: <b>Following Other Vehicles</b> Guide 27: <b>Practice Commentary</b>
8	Guide 28: <b>Timing Side Zones</b> Guide 29: <b>Hill Stops and Starts</b>	Guide 30: <b>Parallel Parking</b>
9	Guide 31: <b>Night Driving Conditions</b> Guide 32: <b>Being Passed and Passing</b>	Guide 33: <b>Responding to Problems</b>
10	Guide 35A: <b>Behaviors Inventory</b> Guide 35B: <b>Procedures Inventory</b>	Guide 35C: <b>Ten Habits Inventory</b>

***“This is not your father’s Driver Education!”***

## Guides Provide a Blueprint for **EXPERT** Driving Habits

The Guides are like a blueprint that provides precise steps necessary for the development of Expert driving habits that will last a lifetime. Each Guide provides an opportunity to build upon behavioral patterns that were learned in earlier Guides, and to perform them with different applications. The Guides are structured from the simple to the complex to aid in habit development. A behavioral pattern is presented in one Guide, then applied to different situations in several other Guides.

Recent brain research has found that repetition of single actions (behaviors) develops a powerful network of glial cells and neurons in the brain that can give the teen the ability to perform better, even with little driving experience, than the ordinary driver who may have many years of experience. It is the structure of the repetitions that gives the teen the “right” experience within a short period of time. The teens learn and practice into habit the techniques that expert drivers are characterized by.

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