

Phase 1

Co-Driver Practice

In-Car Practice Guides

Professor Mottola's Driving MIND using Zone Control Strategies

Directions:

Perform the Driving MIND eCoach activities for preparation to Co-Driver Practice. Do these Co-Driver Activities at your own pace.

As a Co-Driver, from the front seat or from the back seat, select one Guide to concentrate on performing its actions as if you were the driver. When possible repeat that one guide two or three times. Then, rate yourself for the level of your skill according to this scale:

4 = No Hesitation You can perform the strategy without any thinking, no hesitation.

3 = Hesitated You are able to perform the strategy but it doesn't come spontaneously.

2 = Coached You are able to perform the strategy with some coaching.

1 = Practice You need more practice to better perform the strategy.

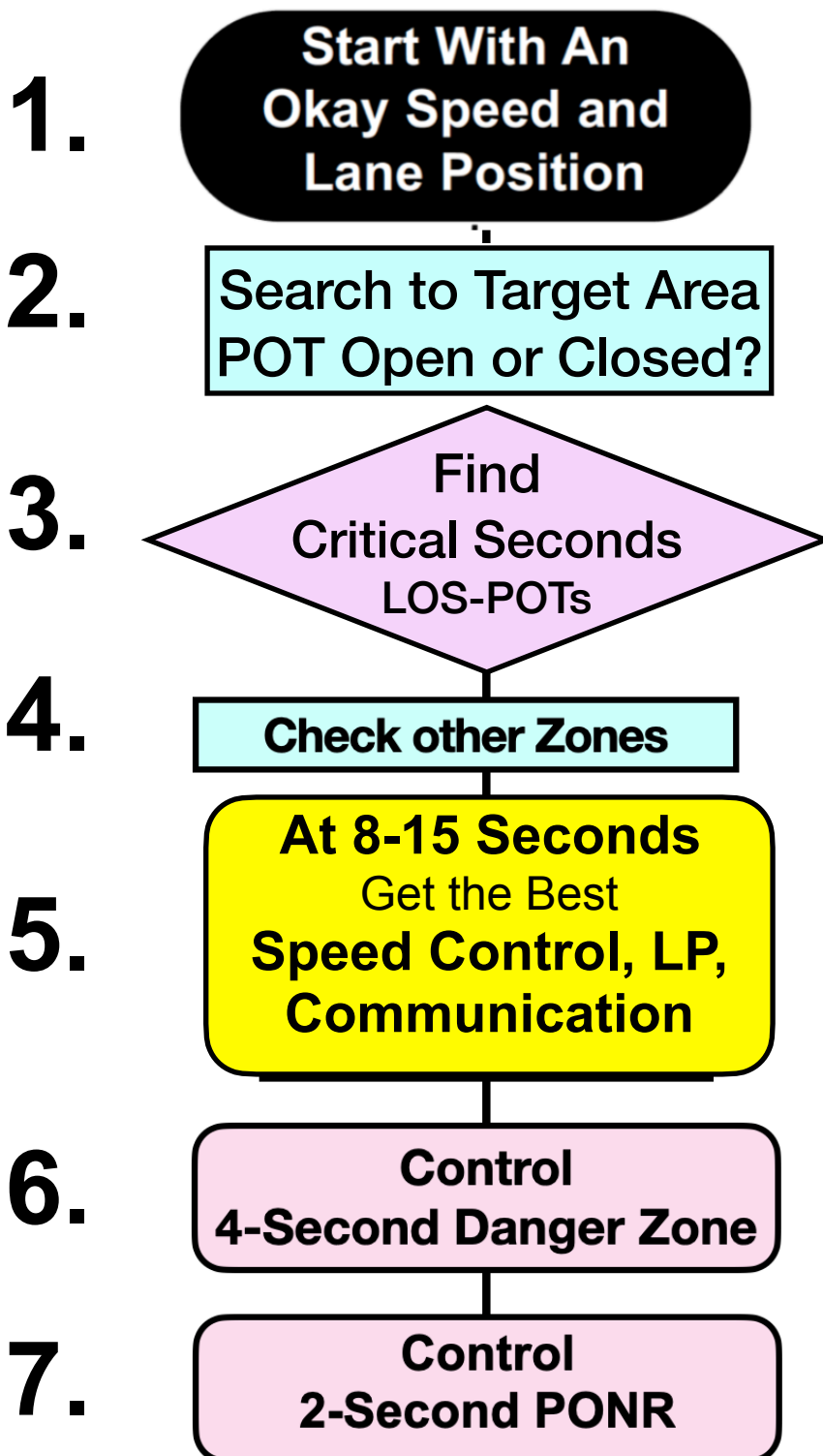
See the next slide for how to manage space. Perform each Guide until you earn a "4" rating.



The objective of the *Driving MIND* is to “Manage Space.”

“Managing space” requires cultivating habits that spontaneously control the space the vehicle will be using. To cultivate habits, *practice the same actions* over and over until they take place without thought.

How To Practice



1

As a Co-Driver search to the target area. Follow this sequence listed below. Pretend you are the driver. Think of what actions you would take. When at the 2-second PONR, cover an imaginary brake and make a 45^a search. Do this often to earn a 4 rating.

Searching Target Area to T.Area

1. Search To Target Area

4	3
2	1

- Find and describe the Target
- Describe Target Area
- Critical Second in Target Area
- Target Area Open or Closed
- Identify Targeting Path
- Respond To Zone Changes

2. Search 15-Second Range

4	3
2	1

- Identify LOS-POTs
- Respond to LOS-POTs

3. Know 4-Second Danger Zone

4	3
2	1

- Get best Speed Control
- Get best Lane Position
- Best Communication

4. Use 2-Sec. PONR (Point of No Return)

4	3
2	1

- 100% Focus
- Cover Brake
- 45° Search

Training Dates

Rating:

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Recognition Of LOS-POT

1. Identify LOS-POT Front Zone

4	3
2	1

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

2. Identify LOS-POT Left-front

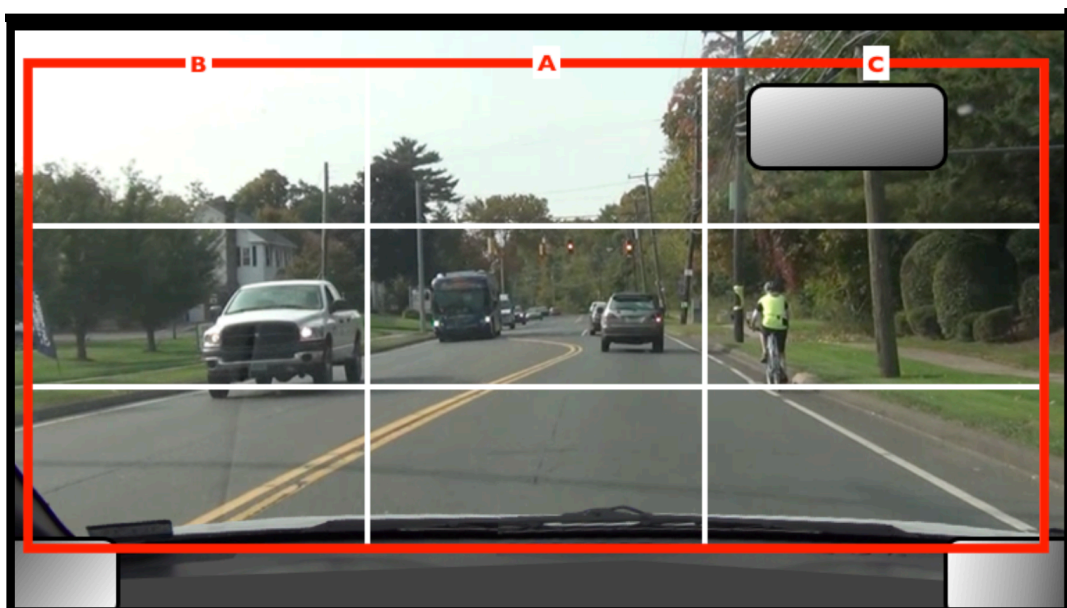
4	3
2	1

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

3. Identify Closed Zones:

4	3
2	1

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



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

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Use of Selective Attention Matrix

1. Start Evaluation of Future Window

4	3
2	1

- Is it a Go or Slow?
- Will there be LOS-POTs?

2. Look For Critical Second

3. Evaluate B and C Present Windows

- See an LOS-POT Blockage
- Check The Other Zones

4	3
2	1

4. Get The Best Control Action

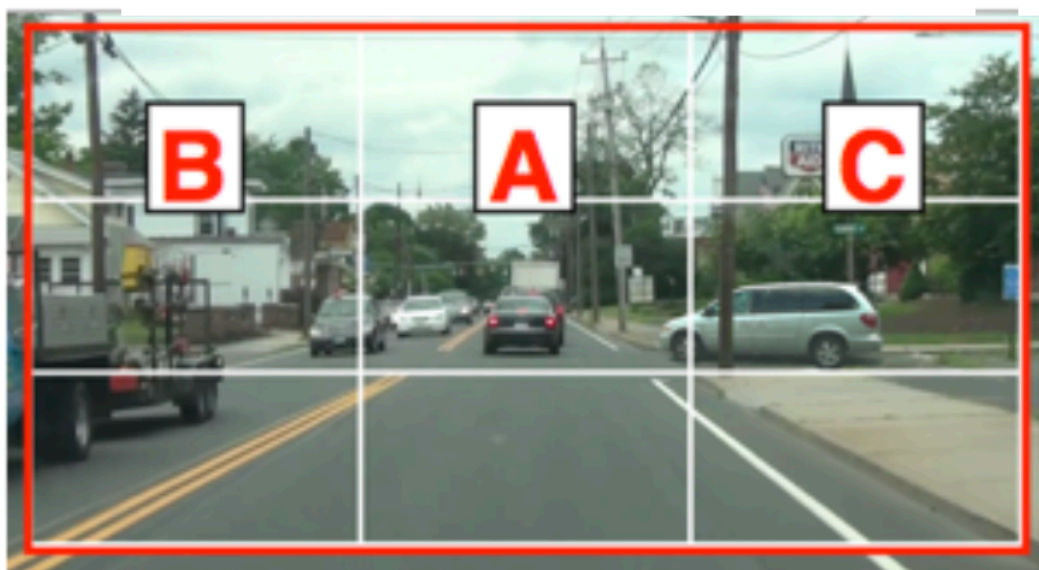
- Speed Control
- Lane Position
- Communication

5. Verbalize Conditions of the Windows

- Control Critical Second at PONR
- Full Attention - Adjust Speed & LPs

6. Practice For 10-20 Minutes

- Successful results achieved



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Take the Self-Quiz

You're a pedestrian ready to cross this street.

1. What does the Zone Control Language call this truck?
2. In addition to making a 90° search for vehicles and bicycles before stepping beyond this truck, where else should you search and what are you searching for?
3. Where is a 90° Search? Which search is shown here?



Response

1. This truck is an **LOS-POT Blockage**.
2. A search to the rear for vehicles making left turns into your path and search ahead for vehicle making a right turn into the street.
3. A 90° Search is to the target area. A 45° Search is shown in the photo.

Buffer and Zone Control

1. Identify a Closed Zone

- Find Critical Seconds
- Find LOS-POT Blockage

2. Respond To Front Zone Change

4	3
2	1

- Check Rear Zone
- **Apply Speed Control Option**
- Keep Same Speed
- Decelerate
- Off-Gas, Cover Brake
- Off-Gas, Apply Brake
- Increase Speed

- **Take Best Actions for Control**

4	3
2	1

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

3. To Measure Separation Space

- Take a guess
- Select a marker
- Vehicle ahead passes marker
- Begin counting
- Stop counting when you reach the marker

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Take the Self-Quiz

You're a driver preparing to enter the road.

1. What type of space separation is shown in photos A and B?
2. How do you learn to make accurate judgement of the size of separation space?
3. Why do you want to time how many seconds it takes you to cross a road?



Photo A

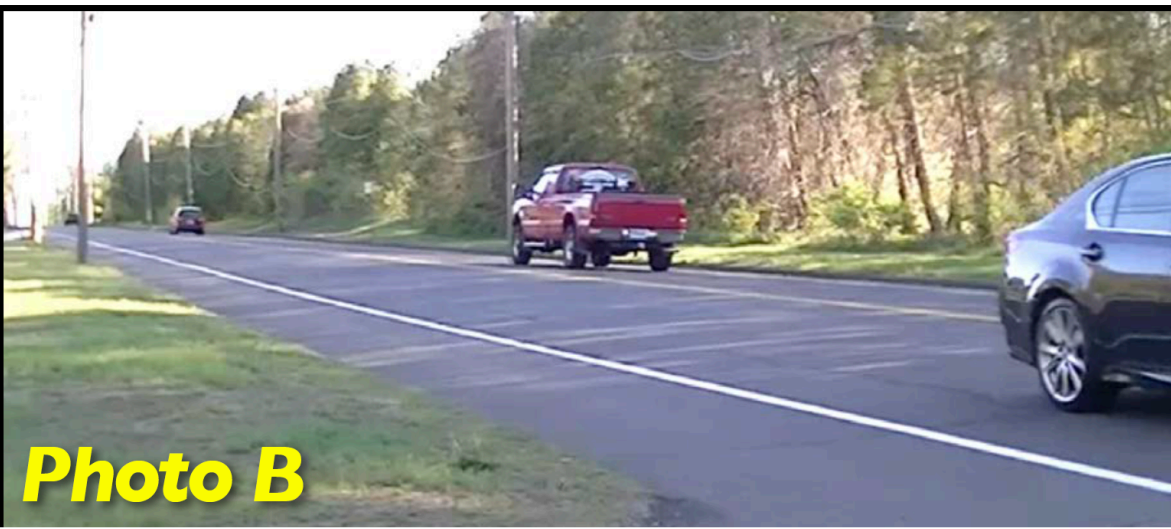


Photo B

Response

1. Photo A shows a **Gap** between the next two vehicles. Photo B show a Hole in the traffic flow.
- 2 a. First find a marker to use. b. Take a guess of the space between two vehicles. c. When the back of the first vehicle passes the marker begin counting by 1000's. d. Stop counting when the the front of the second vehicle reaches the marker.
3. To be aware of the size of the hole needed to safely cross the street.

Separation from 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

4	3
2	1

4	3
2	1

Empower Yourself With 4 Seconds

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

Stay Out of the Inside Lane Except to Pass

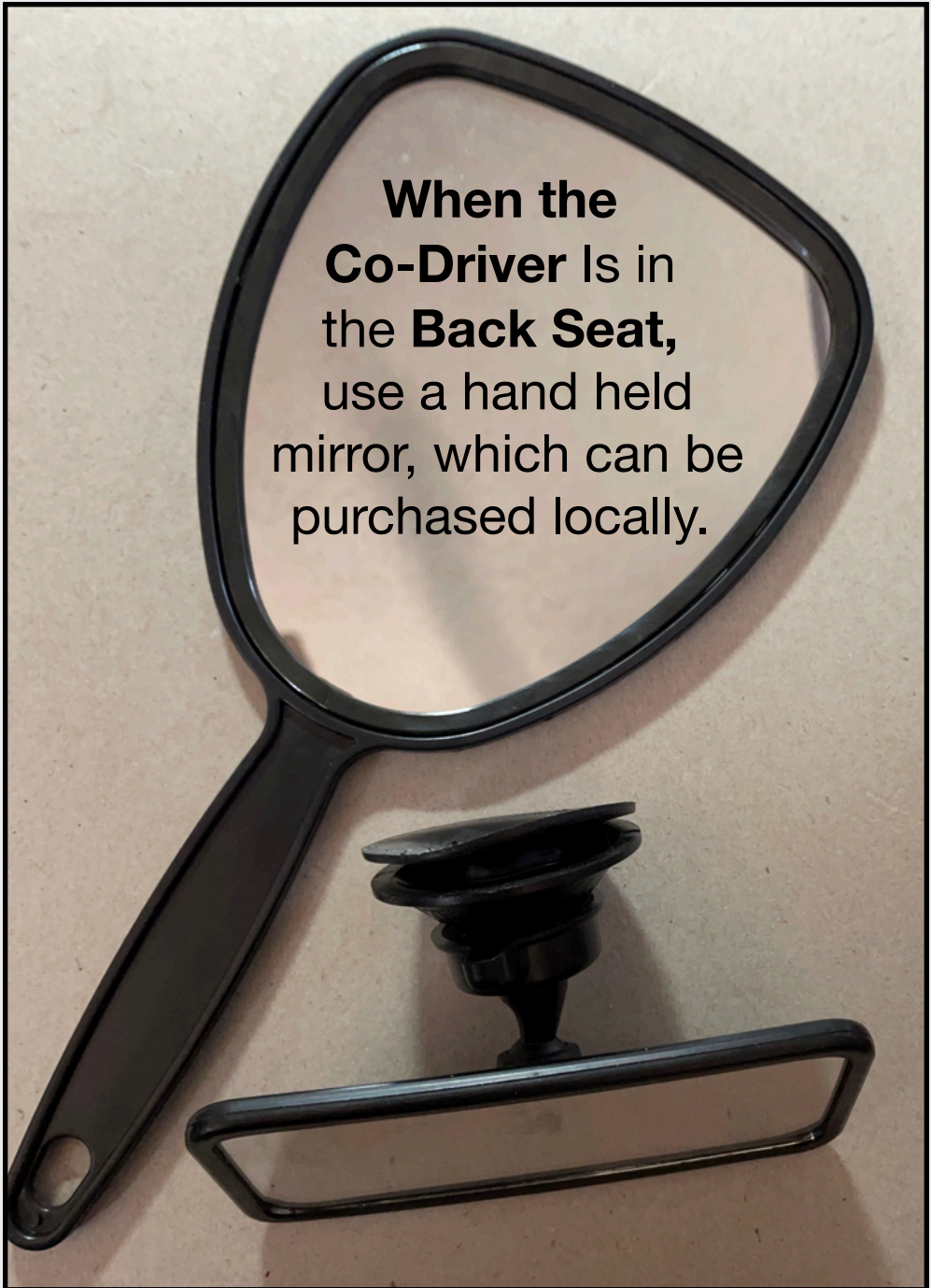
While acquiring the 4-second habit, avoid traveling in the inside lanes (fast lanes) of highways. The most aggressive drivers are usually found there. Whatever speed you travel at, there will always be a vehicle on your tail wanting you to go faster.

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Co-Driver Mirrors



When the Co-Driver Is in the Back Seat, use a hand held mirror, which can be purchased locally.

When the Co-Driver Is in the Front Seat, use a mirror mounted to the windshield, which can be purchased at www.NIDB.org, Safety Products.

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Use a Co-Driver Mirror

Rear Zone Control

1. Use Of Mirrors

4	3
2	1

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

2. Check Blind Areas

4	3
2	1

- Convex-Mirror Check
- Head Movement Check

3. Rear Zone LOS-POT Change

- Fast-Closing Vehicles
- LOS Restrictions

• Tailgater Types

4	3
2	1

- Charger
- One Pacer
- Habitual

4. Awareness Of Rear Condition

4	3
2	1

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

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7

Be able to explain where these Reference Points are on your vehicle.

Reference Points for Co-Drivers

1. Discover Reference points for:

- LP2 • LP3 • LP1
- Side Position Right/Left Turn
- Forward Position for Turns
- Staggered Stop Position
- Legal Stop Position
- Safety Stop Position
- Tpeg for Right/Left Turns

4	3
2	1

Communications

1. Effective Use of:

4	3
2	1

- Signal Lights
- Headlights
- Brake Lights



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You can discover reference points in your driveway, without a need to move the car. Take a broom handle, a length of wood, a length of pipe, or any other straight object and place it to represent the vehicles's side and front limitation.

View the reference point from inside and outside.

See board and pipe in the circle.



This is the Safety Stop Position



Outside View

Front bumper even with curb.



Inside View: Reference Point

Take the Self-Quiz

You're a driver preparing to enter the road.

You're traveling at 30 mph. 1. Which speed control option should you take at this moment? **2.** Is the vehicle ahead a stable or unstable critical second? Why? **3.** What LP is the car ahead in? **4.** Why do you think it is in that LP?



Response

1. Cover the brake or Apply the brake is needed. **2.** This is an unstable critical second because the vehicle is braking. **3.** Car is in LP3. **4.** The driver intends to make a right turn.

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

4	3
2	1

3. Signal Arrows: Gr, Yel, Red

4. Flashing Signal Lights

5. Respond to Traffic Signs

- Regulatory Signs
- Warning Signs
- **See Sign As Traffic Cue**

4	3
2	1

- Check Rear Zone
- Check LOS-POT
- Check Escape Path

6. Respond To Pavement Markings

7. Demo Right-of-Way Laws

Every time you see this sign:

1. Search for deer
2. Check Rear Zone
3. Reduce speed when deer is located.
4. Avoid braking while deer is hit.



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Lane Changes

1. Start in LP1
2. Check outside mirror
3. Move into LP2
4. Check outside mirror
5. Signal light on
6. Check blind area - move head forward and away from mirror.
7. When clear - move to LP3
8. Check outside mirror
9. Move to LP1
10. Turn signal light off

4	3
2	1

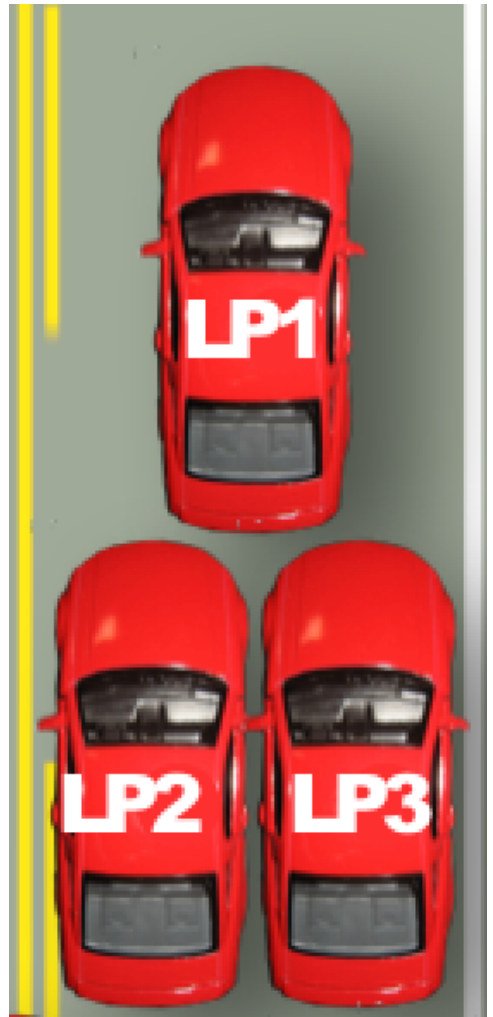


9.

7.

3.

1.



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Take the Self-Quiz

Read an action. Answer to yourself. Then, see the response below.

Precision Lane Change

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

Responses

1. Consider what's to gain.
2. To detect other vehicle that may be there.
3. To see what conditions you have to the rear.
4. The signal light is like asking for courtesy.
5. LP2 for left lane change.
LP3 for right change.
6. Check outside mirror by moving head away from mirror.
- 7/8. Adjust speed to time an opening to enter.
9. LP2 or LP3 provides others with an escape path.

Take the Self-Quiz

You experienced a Lane Departure as your car drifted off road while traveling at 50 mph on this Vermont highway. **1.** Point to where central vision and steering should be directed during this critical second **2.** Should you Brake? If so, explain how and when to brake?



Response

1. Central Vision and steering is directed to a target downslope, as shown in this image.
2. No Brake until the vehicle is downslope in control. Then, a light braking to reduce speed to 5mph to get onto the road.



1. Adjust For Visibility Limits

- **Vehicle Readiness**
- Clean Lights, Windows, Mirrors
- Check brake lights, signal lights
- Keep Dash Lights Low

4	3
2	1

- **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

4	3
2	1

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

3. Interacting With Others

4	3
2	1

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

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Manage C-Zone LOS-POT and Merge Areas

1. Search Future A-Zone Target Area

4	3
2	1

- Find C/B-Zone LOS-POT
- Evaluate Rear Zone
- Evaluate B/C-Zone
- Adjust Speed for Open Zone
- Select best LP
- Control 4-Second Danger Zone
- 100% Focus at 2-Sec PONR

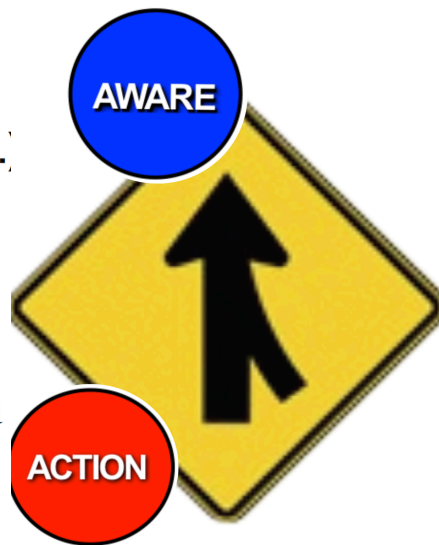
2. Identify Merge Sign in A-Zone

4	3
2	1

- Evaluate B/C Rear Zones
- Adjust Speed for Open Zone
- Control 4-Sec Danger Zone
- Take LP2 or LP3
- Get Open Zone at Merge
- 100% Focus at 2-Sec PONR
- Help vehicles Enter Flow

Challenge: (Repeat this 12 times.)

While being a Co-Driver, pick out any traffic sign and pretend it is a merge sign. Select an imaginary lane on a freeway. When you are even with the sign, you are at the 4-Second Danger Zone. What do you need to do to control the next four seconds?



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